National Development Plan

Vision for 2030

National Planning Commission

National Development Plan

11 November 2011

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Foreword

Masupatsela! We chart a new course, we write a new story.

The Vision Statement and the National Development Plan presented here is a step in the process of charting a new path for our country. By 2030, we seek to eliminate poverty and reduce inequality. We seek a country wherein all citizens have the capabilities to grasp the ever-broadening opportunities available. Our plan is to change the life chances of millions of our people, especially the youth; life chances that remain stunted by our apartheid history.

South Africa has the means, the goodwill, the people and the resources to eliminate poverty and reduce inequality. It is within our grasp. But it will not happen unless we write this new story; a story of people, their relationships, their dreams and their hopes for a better tomorrow. We want our children and young people to have better life chances than we have.

At the core of this plan is a focus on capabilities; the capabilities of people and of our country and of creating the opportunities for both. The capabilities that each person needs to live the life that they desire differs, but must include education and skills, decent accommodation, nutrition, safe communities, social security, transport and job opportunities. The capabilities that the country needs to enable citizens to thrive include a capable state, leadership from all sectors of society, a pact for mutual sacrifice and trust.

The National Planning Commission is not a government department. It consists of 26 people appointed by the President to advise on issues impacting on long-term development. This gives the commission the license to be honest, bold, cut through the silos of government and take on board the views of all South Africans. It also requires us to be humble, never pretending that we have a monopoly on wisdom. This is a proposed development plan, subject to public comment and criticism.

In addition to the sweat of the commissioners who have each made huge sacrifices over the past 18 months, the development of the plan has involved thousands of people who have contributed to the development of the proposals contained herein.

The work of the commission does not stop in 2011. Our term is a five-year one, and requires the commission to deepen the planning process, cover areas that we have been unable to cover in this first plan and provide detailed reports on issues outlined in our mandate.

Trevor Manuel, MP
Minister in the Presidency
On behalf of the National Planning Commission
11 November 2011

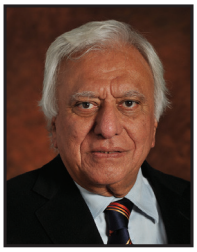
List of Commissioners

Trevor A. Manuel, MP
Chairperson

Cyril Ramaphosa
Deputy Chairperson

Miriam Altman

Malusi Balintulo



Hoosen Coovadia

Anton Eberhard

Tasneem Essop

Bridgette Gasa

Trueman Goba

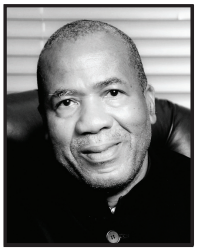
Robert Godsell

Noluthando Gosa

Philip Harrison

Mohammed Karaan

Vuyokazi Mahlati



Malegapuru Makgoba

Christopher Malikane

Vincent Maphai

Elias Masilela

Pascal Moloi

Jennifer Molwantwa

Michael Muller

Joel Netshitenzhe

Ihron Rensberg

Vivienne Taylor

Jerry Vilakazi

Karl von Holdt

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Overview

Introduction

"No political democracy can survive and flourish if the mass of our people remain in poverty, without land, without tangible prospects for a better life. Attacking poverty and deprivation must therefore be the first priority of a democratic government." - The Reconstruction and Development Programme, 1994

The Reconstruction and Development Programme (RDP) formed the basis of government's attempt to attack poverty and deprivation, and to build a united, non-racial and non-sexist South Africa. Informed by the principles of inclusivity, government translated the RDP into policies, programmes and budgets.

The *Diagnostic Report* of the National Planning Commission, released in June 2011, sets out South Africa's achievements and its shortcomings since 1994. In many areas, the country has made remarkable progress since the dawn of democracy. The adoption of the Constitution, the establishment of institutions of democracy, the building of a non-racial and non-sexist public service, and the transformation of many other institutions created the foundation for a new nation. The health of the public finances was restored. Political violence, which had claimed thousands of lives, was brought to an end. Democracy has not just restored the dignity of all South Africans – it has also translated into improved access to education, health services, water, housing, electrification and social security. A significant proportion of schools, suburbs and workplaces are integrated.

In short, today's South Africa looks very different from the one we left behind in 1994. Yet for many poor South Africans, there is still much that looks the same, highlighting serious shortcomings in our development path.

While we have made some progress in reducing poverty, poverty is still pervasive and we have made insufficient progress in reducing inequality. Millions of people remain unemployed and many working households live close to the poverty line. Many of these are young people who feel that the odds are stacked against them, as indeed they often are. It is important to understand why these problems persist – and to fix them. But fixing them will take time and we cannot expect people to wait quietly on the sidelines. We require urgent measures to address our most pressing needs, particularly high levels of unemployment, especially among the youth.

South Africa has the potential and capacity to eliminate poverty and reduce inequality over the next two decades. This requires a new approach – one that moves from a passive citizenry receiving services from the state to one that systematically includes the socially and economically excluded, where people are active champions of their own development, and

where government works effectively to develop people's capabilities to lead the lives they desire. The success of this approach is premised on:

- The active efforts and participation of all South Africans in their own development
- Redressing the injustices of the past effectively
- Faster economic growth and higher investment and employment
- Rising standards of education, a healthy population and effective social protection
- Strengthening the links between economic and social strategies
- An effective and capable government
- Collaboration between the private and public sectors
- Leadership from all sectors in society.

A more prosperous country that is progressively eradicating poverty and inequality will also, over time, eliminate the effects of apartheid and colonial discrimination that have so scarred our society. It will lay the basis for greater social cohesion, unity and opportunity.

This overview chapter covers the high-level targets of the plan, a brief summary of the diagnostic document, a summary of the proposed development paradigm and an account of demographic trends and external drivers of change. It then provides a summary of each of the chapters in the plan.

The chapter concludes with a high-level summary of the key targets in each chapter, followed by key implementable actions in each area.

Creating a virtuous cycle of growth and development

It is possible to eliminate poverty and to sharply reduce inequality by 2030. The commission proposes that these be the guiding objectives of the national plan over the next 20 years. All elements of the plan must demonstrate their effect on these two goals.

But we also need to be frank about the challenges that lie ahead. The majority of South Africans who have remained poor have demonstrated remarkable patience, showing that they understand that centuries of damage cannot be undone in a few decades. While great strides can be made in the next two decades, we will still only be building the foundations for the equitable and prosperous society that we dream of. We need to show that if all South Africans work together, we can get much closer towards that future we all desire.

The national plan has to attack the blight of poverty and exclusion, and nurture economic growth at the same time; creating a virtuous cycle of expanding opportunities, building capabilities, reducing poverty, involving communities in their own development, all leading to rising living standards. Such a virtuous cycle requires agreement across society about the contribution and sacrifices of all sectors and interests. This will translate into greater confidence and a greater field of opportunities for individuals and the country. Growth and development, and reducing poverty and inequality, are the core elements of this virtuous cycle. Strong leadership throughout society, national consensus, social cohesion and a capable state are its key enablers.

We present this proposed plan to society in the full expectation that it will be enhanced and improved through public criticism and dialogue. The plan will only achieve its objectives if it enjoys broad social support and is consensual in character. It will only work if there is strong leadership and focused implementation. Government and society as a whole are responsible for improving and implementing the national development plan.

Success will be measured by the degree to which the lives and opportunities of the poorest South Africans are transformed in a sustainable manner. Presently, the country does not have a standard definition of poverty. The commission recommends using a poverty line of about R418 (in 2009 prices) per person per month. This recommendation is based on a proposal by Statistics South Africa for a poverty line for the country that takes into account the prices of a basket of food and other essential items. Success would mean reducing the proportion of people living below this level from the current 39 percent of the population to zero. This is a mammoth but achievable task. The proposed poverty line should not detract from the fact that poverty is a multidimensional concept, incorporating more than just income, and we have to make progress on all of these dimensions.

A reduction in inequality will be achieved if the Gini co-efficient falls from the current level of 0.7 to 0.6 by 2030.[1] South Africa today has one of the world's highest levels of inequality. While the proposed reduction would mark a significant shift, a high level of inequality would persist in 2030.

While the numbers provide important targets, peoples' views and voices need to be heard, their contributions valued; the poor majority need to be accorded the same dignity and respect as more fortunate members of society.

The central challenges

Our *Diagnostic Report* identified nine main challenges:

1. Too few people work
2. The standard of education for most black learners is of poor quality
3. Infrastructure is poorly located, under-maintained and insufficient to foster higher growth
4. Spatial patterns exclude the poor from the fruits of development
5. The economy is overly and unsustainably resource intensive
6. A widespread disease burden is compounded by a failing public health system
7. Public services are uneven and often of poor quality
8. Corruption is widespread
9. South Africa remains a divided society.

Of these elements, the commission believes that two are critical and interrelated: too few people work and the quality of education available to the majority is poor. While all nine challenges must be tackled in an integrated manner, increasing employment and improving

[1] A measure of the inequality of distribution. A value of 0 equals full equality and 1 maximum inequality.

the quality of education must be the highest priorities. Failure to raise employment and improve the quality of education would signal failure. Both require community involvement, better public service delivery and a higher degree of social cohesion that promotes cooperation between all sectors to support economic growth and job creation.

Failure to address these challenges is likely to result in economic decline, falling living standards, rising competition for resources and social tension. Persistently high levels of poverty will prompt social instability, leading to a rise in populist politics and demands for short-term measures that lead to further tension and decline. South Africa must avoid such a destructive cycle.

In particular, the country's development path has not sufficiently broadened opportunities for black South Africans, especially women and youth. What this means is that – save for political rights, economic benefits for those with access to employment or empowerment programmes - the socioeconomic conditions that characterised the system of apartheid and colonialism largely still define our social reality.

It is important to understand why we failed to meet key targets in the RDP, particularly the reduction of poverty and deprivation. Two lessons from that experience stand out. First, when the RDP was tabled, government had an overly optimistic view of the capacity of the state. The reality was a failure of coordination within government – with different departments working at cross purposes – and a lack of coordination between the public sector, the private sector and civil society. Second, the country as a whole did not anticipate the impact of external shocks and changing international conditions on its fortunes. The effects of the Asian crisis in 1998, the collapse of the rand in 2001, the world financial crisis that began in 2008, and the shifting patterns of global trade and investment have been significant.

Writing a new story for South Africa

The country must write a different story in the years ahead. In this new story, every citizen is concerned about the wellbeing of all other citizens, and the development of South Africa means the development of each and every one of us who lives here. We must build on our social solidarity, which, through history and heritage has demonstrated our aspiration to create a caring South African society.

In this new story, our nation's energies are focused both on attacking poverty and on expanding a robust, entrepreneurial and innovative economy. Over the next two decades and beyond, communities will need the resources and capabilities to become their own engines of development, and government must support this. We have to ensure that poor people have the environment, services and skills to improve their lives. At the same time, government must create the conditions and environment for higher levels of public and private investment to create jobs and ensure rising incomes.

The national development plan proposes to invigorate and expand the economic opportunity through investment in infrastructure, more innovation, private investment and entrepreneurialism. The economy will absorb more labour – especially of new work seekers – and wage moderation at all levels will contribute to rising employment. Broadening these opportunities requires faster, more inclusive economic growth and higher levels of investment.

The well-off need to accept that the old model of consumption is unsustainable, and that progressive taxation, redress measures, higher savings and greater inclusivity are required to develop a prosperous, united country for all South Africans. The drivers of the cost of living must be tackled to enable workers' wages to go further. Young people should have the capabilities and confidence to grasp the opportunities of a brighter future.

This plan advances such an approach. It seeks to develop people's capabilities to be able to improve their lives through education and skills development, health care, better access to public transport, jobs, social protection, rising incomes, housing and basic services, and safe communities. Broadening these opportunities requires faster, more inclusive economic growth and higher levels of investment.

The commission has drawn strongly from definitions of development that focus on creating the conditions, opportunities and capabilities that enable people to lead the lives that they desire. Development is the process of raising continuously the capabilities of all citizens, particularly those who were previously disadvantaged. National capabilities that enable competitiveness include human capital (built through education, health, skills and work experience), physical infrastructure (schools, clinics, ports and power lines), technologies, management skills and the social institutions needed to allow people to live decent lives. It requires shifting from a paradigm of entitlement to a development paradigm that promotes the development of capabilities, the creation of opportunities and the participation of all citizens.

Government's strategy to date has been to provide a range of social services, including social security. Because of the uneven capability of the state, we have excelled at doing the things that are easier, such as paying grants and providing water and electricity, and faltered at doing the difficult things such as improving education, promoting employment and building houses close to jobs. By default, we have had a distorted development effort. A more capable state, in partnership with communities, must build on the platform of social services and social security and contribute towards a more balanced approach by developing the capabilities of people. This is the shift we seek.

Developing and upgrading capabilities to enable sustainable and inclusive development requires a new approach and a new mindset. The story we propose to write involves:

- Creating jobs and livelihoods
- Expanding infrastructure
- Transitioning to a low-carbon economy
- Transforming urban and rural spaces
- Improving education and training

- Providing quality health care
- Building a capable state
- Fighting corruption and enhancing accountability
- Transforming society and uniting the nation.

Leadership, unity and cohesion are difficult in our still-divided society. Yet these are the very things that help to anchor successful nations and development strategies. Leadership is required to win broad agreement for the plan, to implement it and to make sacrifices for a better future. A capable, efficient and fair state is needed to support it. And partnerships, based on mutual trust are vital. Unless we work together, sacrificing short-term gain for longer-term prosperity, no single part of South African society can achieve its objectives.

If we are to eliminate poverty and reduce inequality, we need to engage seriously with the impact of gender on people's life chances and opportunities. The factors that determine the life chances of women are generally worse than for men, and they are also affected by race, geographic location, age and class. We have chosen to treat it as an integrated issue that runs throughout the plan.

Similarly, most aspects of this plan are aimed directly at improving the life chances of today's children and youth. A country with a future orientation is a country that develops the capabilities of its youth. Whether still in school or not, our plan must improve the life chances of young people. This is another key cross-cutting theme of this plan.

Demographic trends

What will South Africa's population look like in 2030? Our country is midway through a demographic transition, where first death rates fall and the population expands, then birth rates fall and the population stabilises. This transition has profound implications for population structure, the rate of growth of the labour force and demand for services such as education and health.

Today the labour force makes up a significant share of the population, and the proportion of children and the elderly comprise smaller shares. Internationally, this demographic window is often associated with rising incomes, faster productivity growth, higher savings and rising living standards. Alternatively, it can lead to a frustrating and destabilising environment where young people cannot get work, contributing to violence, crime, alcohol abuse and other social ills. The key determinant of success is whether a country can harness the advantage of having a large number of young people who are able and willing to work. To do so means providing them with education and skills, and getting school leavers into work that they find stimulating and through which they can fulfil their aspirations.

Birth rates for white South Africans started falling in the 1950s and 1960s, while birth rates for Africans began falling in the late 1970s and early 1980s. In both cases, rising urbanisation and better educational standards were decisive factors. As early as 1991, the birth rate for Africans fell below 2.5 (a rate of 2.1 equates to the replacement rate for a population). In the early part

of this century HIV/AIDS affected the normal trajectory of demographic transition, as the death rate rose and life expectancy plummeted. This is beginning to be reversed through the effectiveness of treatment programmes and the stabilisation of new infections. At present, our population is growing at 1 percent a year, and by 2030, it is projected to be growing by 0.5 percent.

Key demographic observations include the following:

- The proportion of South Africans living in rural areas has fallen by about 10 percentage points since 1994. Today, about 60 percent of the population lives in urban areas and slightly more than half of the poor live in cities. By 2030, about 70 percent of people are likely to be living in urban areas. Gauteng and the cities of eThekwini and Cape Town are the fastest growing city-regions, with implications for planning and delivery of basic services.
- While the precise number of immigrants in the country is not known, going forward immigration will add between 0.1 percent and 0.2 percent to South Africa's population growth each year.
- HIV/AIDS has had a profound effect on population structure, raising overall deaths significantly since 2000. The pandemic has also reduced the proportion of women of child-bearing age (although women are still in the majority). There are, however, signs that the country has begun to turn the corner. The HIV infection rate has stabilised at about 10 percent. New infections among young people (aged 15 to 24) have fallen. Improved treatment has reduced the death rate and life expectancy is rising again.

All of these factors need to be taken into account in national planning.

External drivers of change

International and regional developments affect South Africa's fortunes in complex ways. The plan discusses some of these trends, as summarised below.

International political and economic developments

South Africa's policy-makers did not adequately account for the effects that the world economy would have on the domestic environment. The emergence of fast-growing developing economies, particularly China and India, has already changed global trade and investment patterns, and is reshaping international politics. The relative decline in the economic power of the United States, Europe and Japan will have concomitant effects on their political and military influence. After nearly three centuries of divergence, inequality between nations is decreasing. Urbanisation and industrialisation in China and India are likely to keep demand for natural resources relatively high for a decade or more. The emergence of more global consumers will broaden opportunities for all economies, including South Africa's.

Globalisation

Globalisation has increased the complexity with which all countries must contend. Systemic risks, such as financial, banking, debt and currency crises, will remain ever present. Capital is generally more mobile than labour, resulting in significant implications for wages. And while inequality between countries has fallen in the past decade, inequality within most countries (notably China and India) has increased. At a political level, there may be opportunities to bring about rules-based multilateral systems to shape global governance, making the world a more just place.

South Africa will have to manage the risks that flow from greater complexity and recognise that emerging powers may seek to exploit our vulnerabilities. The rise of emerging markets also increases competition, placing downward pressure on the wages of low-skilled workers in the manufacturing sector. To become more competitive, South Africa will have to confront some difficult choices. Similarly, the pursuit of mineral resources by fast-growing emerging countries holds opportunities and risks. Commodity-producing economies in Africa, including South Africa, can use a period of higher demand for natural resources to generate the returns needed to upgrade capabilities. If mining output does not increase, and if the associated rents are not extracted sensibly and used wisely, it will represent a tragic failure for the people of the continent.

Africa's development

Africa's growth and development increases the size of the continent's economy. This can also provide Africa with a greater voice in global political and economic institutions.

Strong growth on the continent has opened up major opportunities for South African firms and industries, which have contributed to development by investing in telecommunications, banking, mining, construction and retail. One of the biggest exports since 1994 has been management skills, deployed in settings that are common to us, but less familiar to competitors from developed countries.

Several structural weaknesses must be overcome if South African firms are to increase the benefits they can derive from, and the contributions they can make to, growth and development in Africa. Crucially, poor transport links and infrastructure networks, as well as tariff and non-tariff barriers, raise the cost of doing business and hobble both investment and internal trade. Weak legal institutions and, in some cases, poor governance heighten the risks of investing. The picture is improving steadily, but challenges remain. The political uprisings in North Africa are a stark reminder of the risks of poor governance and weak institutions allowing the elite to accumulate at the expense of the people.

The Southern African Development Community (SADC) faces significant challenges on many fronts including infrastructure, trade barriers and governance.

Trade is always a two-way street. While South Africa is a water-scarce country, many of our neighbours have an abundant supply. Securing adequate supplies of water and food must be looked at in a regional context. South Africa should invest in and help exploit the wide range of opportunities for low-carbon energy from hydroelectric and other natural sources in southern Africa.

Climate change

Emissions of carbon dioxide and other greenhouse gases are changing the earth's climate. Rising temperatures, more erratic rainfall and extreme weather events are likely to take a disproportionate toll on Africa, with an increased spread of tropical diseases and growing losses (human and financial), from extreme weather events. Climate change has the potential to reduce food production and make potable water scarcer, with consequences for migration patterns and political conflict.

South Africa faces particular challenges. Parts of what was already a dry country have become noticeably dryer over the past 30 years. Rising temperatures and changing rainfall patterns will have consequences for food production and water supply. While adapting to these changes, industries and households have to reduce their negative impact on the environment. This will require far-reaching changes to the way we live and work. The impact of climate change is global in scope and global solutions must be found, with due consideration of regional and national contexts.

Technological change

Science and technology have brought new treatments to the sick, prolonged the lives of the elderly, connected people across distances and provided clean water to people in remote areas. They have also created new markets, catering for needs that were at the outer edges of the human imagination just decades ago, such as the Internet. Many parts of Africa that have not seen fixed-line telephony are widely served today by efficient cellular phone networks that provide a wide range of services. Today children can get access to the best maths teachers without walking for hours.

The commission is concerned about the high domestic cost of broadband Internet connectivity. All in our society should be able to acquire and use knowledge effectively. Everyone should benefit from important breakthroughs in science and technology. And South Africa should continue to contribute to global scientific and technological advancement.

A summary of the plan

This section summarises each chapter in the plan, focusing on key priority areas.

An economy that will create more jobs

South Africa needs an economy that is more inclusive, more dynamic and in which the fruits of growth are shared more equitably. The plan envisages an economy that serves the needs of all South Africans – rich and poor, black and white, skilled and unskilled, those with capital and those without, urban and rural, women and men. In 2030, the economy should be close to full employment; equip people with the skills they need; ensure that ownership of production is less concentrated and more diverse (where black people and women own a significant share of productive assets); and be able to grow rapidly, providing the resources to pay for investment in human and physical capital.

To eliminate poverty and reduce inequality, the economy must become more inclusive and grow faster. These are twin imperatives. Government's New Growth Path aims to create 5 million new jobs by 2020. It seeks to do so by providing a supporting environment for growth and development, while promoting a more labour-absorptive economy. Its proposals are intended to lower the cost of living for poor households and for businesses through targeted microeconomic reforms, especially in transport, public services, telecommunications and food. Lowering the cost of living is a necessary adjunct to raising the standard of living and encouraging investment.

The commission builds on this approach. The national development plan proposes to create 11 million jobs by 2030 by:

- Realising an environment for sustainable employment and inclusive economic growth
- Promoting employment in labour-absorbing industries
- Raising exports and competitiveness
- Strengthening government's capacity to give leadership to economic development
- Mobilising all sectors of society around a national vision.

Meeting these objectives requires leadership to drive implementation, and to convince South Africans of the need to make mutual sacrifices for longer-term benefits. It will also require a change in the structure of the economy and the pace at which it grows.

The crisp question is how. The economy needs to meet a different set of objectives, beginning with job creation. It needs to become more nimble, responding quickly to opportunities and circumventing risks. Furthermore, patterns of ownership and control have to change. This will not be easy. It requires carefully sequenced actions that transform the economy without destroying its capacities.

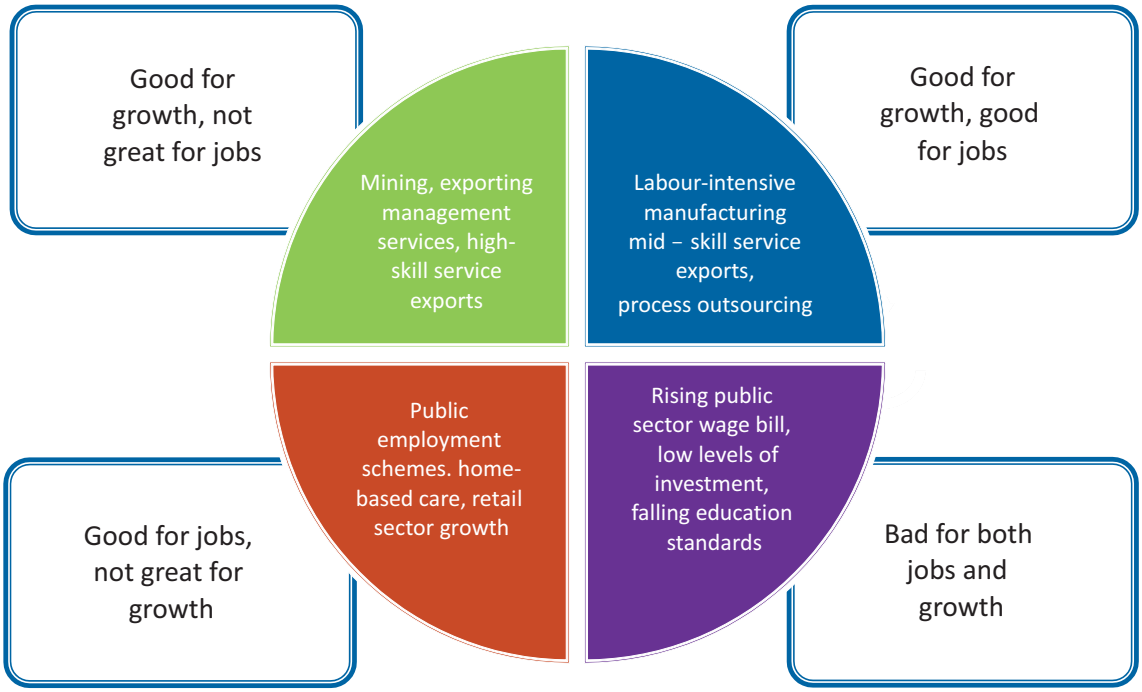
The first step is to act on the fact that South Africa has millions of able-bodied people who want to work. In the short term, the economy needs to create jobs for millions of unemployed South Africans, many of whom are young and low-skilled, while upgrading skills and knowledge

for a different economy in future. Raising employment levels will have benefits beyond the empowering experience of having a job. It will help people invest in their children's education, upgrade their homes and manage life's risks. Work and education will enable citizens to improve their own lives.

Sustainable growth and development will require higher savings, investment and export growth. Yet the country faces something of a quandary. The things that drive growth are not always the things that drive job creation – and the things that are good for job creation are not always good for growth. Because the economy needs both, efforts should focus on growing exports and building the linkages between export earnings and job creation, which often occur in domestically focused small- and medium-sized firms, most often in the services sector.

South Africa has to exploit its existing strengths to increase exports. This means using the country's advantages – its skills, technologies, firms, mineral wealth, underutilised labour and geography. If the economy is less competitive in one area, it will have to do better in others.

Figure 1: The quandary of growth and job creation



In the short term, the world economy is expected to grow at a relatively slow pace. In these circumstances, South African businesses need to think carefully about what they produce, for which markets, using what capabilities. As a small open economy, South Africa can develop niche products. Capturing a small share of global demand in areas where local firms can be competitive will have a big impact. For example, as discussed in the chapter on the rural economy, South Africa produces just 197 tonnes of cherries per year. The global market is 4 million tonnes. The country has the land, weather, skills and capabilities to grow cherry exports substantially to meet a greater share of global demand.

The economy is well endowed with mineral resources, with large global shares in platinum group metals, gold, diamonds, manganese, coal, iron ore and uranium. Yet over the past decade the mining sector has failed to match the global growth trend in mineral exports due to poor infrastructure and regulatory and policy frameworks that hamper investment. South Africa can benefit greatly from Asia's growing demand for commodities. To do so means improving water, transport and energy infrastructure, and providing greater policy and regulatory certainty to investors. This will enable the mining sector to deploy the skills, resources, know-how and capital that are available, and for government to raise much more tax revenue than it does at present.

A contentious issue is whether South Africa can mobilise unemployed people into production for export markets. Some argue that the economy is not competitive in labour-intensive manufacturing because the cost structure is too high, labour laws are not conducive to such industries, and the country lacks the management acumen to manage large, labour-intensive firms. This is probably true in some sectors. But in certain higher-value goods or niche markets, South African firms can compete. These include agricultural and agro-processing, white goods and appliances, and certain niches in clothing and footwear. Keeping costs (especially logistics costs) down is important for these types of exports. There are trade-offs relating to mineral beneficiation, because beneficiation is often energy and capital intensive, both of which are scarce resources.

There are no easy answers. Developing high skills levels and network infrastructure takes time and needs to be paid for, even as the country finds ways to create jobs for millions of unemployed people. Difficult choices will have to be made. To promote large-scale job creation, South Africa will have to find ways to improve the functioning of the labour market. The commission makes several proposals in this regard, broadly within the framework of the existing labour relations regime. The country must also find ways to keep the cost of living low and grow the capabilities of the state.

Our proposals to increase employment and growth include the following:

- Raise exports, focusing on those areas where South Africa already has the endowments and comparative advantage, such as mining, construction, mid-skill manufacturing, agriculture and agro-processing, tourism and business services.
- Increase the size and effectiveness of the innovation system, and ensure closer alignment with companies that operate in sectors consistent with the growth strategy.
- Improve the functioning of the labour market to help the economy absorb more labour, through reforms and specific proposals concerning dispute resolution and discipline.
- Support small businesses through better coordination of activities in small business agencies, development finance institutions, and public and private incubators.
- Improve the skills base through better education and vocational training.
- Increase investment in social and economic infrastructure to lower costs, raise productivity and bring more people into the mainstream of the economy.
- Reduce the regulatory burden in sectors where the private sector is the main investor, such as broadband Internet connectivity, to achieve greater capacity and lower prices.
- Improve the capacity of the state to effectively implement economic policy.

Long-term growth and investment requires trust and cooperation between business, labour and government. In South Africa, levels of trust are low. Similarly, the labour relations environment has become unduly tense and sometimes violent. It is inconceivable that the economy will evolve in a more labour-intensive manner if the present state of tension between employers and labour persists. Promoting more rapid, job-creating growth means tackling these tensions in an honest and open manner.

Improving infrastructure

Investment spending in South Africa fell from an average of almost 30 percent of gross domestic product (GDP) in the early 1980s to about 16 percent by the early 2000s. Similarly, public infrastructure spending is at low levels by historical standards. In effect, South Africa has missed a generation of capital investment in roads, rail, ports, electricity, water sanitation, public transport and housing. To grow faster and in a more inclusive manner, the country needs a higher level of capital spending in general and public investment in particular. Gross fixed capital formation needs to reach about 30 percent of GDP by 2030 to see a sustained impact on growth and household services.

Public sector investment in economic infrastructure crowds in private investment. Private investment is a function of current and projected growth and profitability. Importantly, it is also a function of mutual trust and confidence in economic policies. In recent years, the public sector has favoured consumption over investment. The government's 2011 *Medium Term Budget Policy Statement* acknowledges this and announces a shift in the composition of expenditure towards investment, which is absolutely necessary.

The commission's recommendations on economic infrastructure cover the financing, planning and maintenance of infrastructure.

Who pays for infrastructure? Investment in some types of infrastructure has broad social and economic benefits. But playing catch-up means that charges have to increase steeply in the short to medium term to make services financially viable. The fact that one new power station (producing 4 800 MW of electricity) costs about twice the entire depreciated capital stock of existing power stations (producing 40 000 MW) illustrates the challenge. Moreover, high levels of joblessness and inequality make some of these services unaffordable for most of the population, unless they are subsidised.

The commission's view is that in the long term, users must pay the bulk of the costs, with due protection for poor households. The role of government and the fiscus is to provide the requisite guarantees so that the costs can be amortised over time. The state must also put in place appropriate regulatory and governance frameworks so that the infrastructure is operated efficiently. For infrastructure that generates financial returns, debt raised to build facilities should be on the balance sheets of state-owned enterprises or private firms that do the work. Guarantees should be used selectively to lower the cost of capital and to secure long-term finance. Subsidies to poor households should be as direct and as transparent as

possible. Infrastructure that does not generate financial returns – such as schools or hospitals – should be financed from the budget.

The electricity crisis of 2008 exposed some institutional weaknesses. Averting such problems requires clear institutional arrangements, transparent shareholder compacts, clean lines of accountability and sound financial models to ensure sustainability. We make specific recommendations in each of these areas. As stated earlier, government should appoint the boards of entities and the boards should appoint chief executives, making the lines of accountability clear. Public documents should state the entity's public interest mandate. Laws that govern regulation are often confusing, conflating policy with regulation. We propose ways to fix this.

For infrastructure that supports human settlements (housing, water, sanitation, roads, parks and so on) the picture is similarly complicated. The planning function is located at local level, the housing function assigned to the provincial level, and the responsibility for water and electricity provision is split between those responsible for bulk services and reticulation. In practice, this doesn't work. Human settlements are badly planned, and there is little coordination between those installing water reticulation infrastructure and those responsible for providing bulk infrastructure. Responsibility for housing should shift to the level at which planning is executed – the municipal level. Weak capacity in poorly resourced local authorities does not justify chaos. These problems must be fixed for effective urban development.

Compared with the best international standards, South Africa's information and communication technology (ICT) infrastructure is abysmal. An efficient information infrastructure that promotes economic growth and greater inclusion requires a stronger broadband and telecommunications network and lower prices. The economic and employment benefits outweigh the costs.

After carefully reviewing South Africa's infrastructure plans, the commission believes that the following investments should be prioritised:

- The upgrading of informal settlements.
- Public transport infrastructure and systems, including the renewal of the commuter rail fleet, supported by station and facilities upgrades to enhance links with road-based services.
- The development of the Durban-Gauteng freight corridor, including the development of a new dug-out port on the site of the old Durban airport.
- The construction of a new coal line to unlock coal deposits in the Waterberg, extension of existing coal lines in the central basin and, through private partnership, the upgrading of the iron ore line to Saldanha.
- The timely development of a number of key new water schemes to supply urban and industrial centres, new irrigation systems in the Umzimvubu river basin and Makatini
- Flats and the establishment of a national water conservation programme with clear targets to improve water use and efficiency.
- The construction of infrastructure to import liquefied natural gas and accelerated exploration activity to find sufficient domestic gas feedstocks (including exploration of

shale and coal bed methane reserves) to diversify our energy mix and reduce our carbon emissions.

- Procuring about 20 000 MW of renewable electricity by 2030, importing electricity from the region, decommissioning 11 000MW of aging coal-fired power stations and accelerated investments in demand-side savings, including technologies such as solar water heating.

Transition to a low-carbon economy

South Africa needs to move away from the unsustainable use of natural resources. As water becomes scarcer, and global policy aims to price in the cost of carbon emissions, the country needs a coherent plan to use water more sustainably and to emit less carbon. Similar approaches apply to protecting the oceans, soil and wildlife, which are used unsustainably to the detriment of the country's future.

All of this needs to be done in a way that increases the ability of the economy to employ more labour productively. The way forward is not obvious, nor is it likely to be smooth. Large-scale economic transitions are disruptive and costly. Changes to energy generation, water conservation and the uses of both are likely to be challenging and potentially disruptive for society. Managing this transition in a way that reduces costs – especially for the poor – will require competent institutions, innovative economic instruments, clear and consistent policies, and an educated and understanding electorate.

Key proposals to support the transition to a low-carbon economy include:

- Support for a carbon budgeting approach, linking social and economic considerations to carbon reduction targets.
- Introducing an economy-wide price for carbon complemented by a range of programmes and incentives to raise energy efficiency and manage waste better.
- A target of 5 million solar water heaters by 2030.
- Building standards that promote energy efficiency.
- Simplifying the regulatory regime to encourage renewable energy, regional hydroelectric initiatives and independent power producers.

With a realistic strategy and global partnerships, South Africa can manage the transition to a low-carbon economy at a pace consistent with government's public pledges, without harming jobs and competitiveness.

An inclusive and integrated rural economy

By 2030, South Africa's rural communities should have greater opportunities to participate fully in the economic, social and political life of the country. These opportunities will need to be underpinned by good quality education, healthcare, transport and other basic services. Successful land reform, job creation and rising agricultural production will all contribute to the development of an inclusive rural economy.

The economic and social legacy of colonialism and apartheid mean South Africa's rural areas are characterised by unusually high levels of poverty and joblessness, with very limited employment in agriculture. The apartheid system forced much of the African population into rural reserves. The result was an advanced and diversified commercial farming sector relying on poorly paid farm labour, and impoverished, densely populated communities with limited economic opportunities and minimal government services.

To change this, we propose a multipronged approach. The first is to create a million jobs through agricultural development based on effective land reform, and the growth of irrigated agriculture and land production. Second, basic services that enable people to develop the capabilities they need to take advantage of economic opportunities throughout the country and so contribute to the development of their communities through remittances and the transfer of skills. This includes ensuring food security and the empowerment of farm workers. Last, industries such as agro-processing, tourism, fisheries and small enterprises should be developed where potential exists.

Institutional capacity is integral to the success of this multipronged approach, including the reforms required to deal with contested relationships between indigenous institutions and constitutional ones.

Reversing the spatial effects of apartheid

Apartheid left a terrible spatial legacy. Housing policies since 1994, in some instances, have reinforced the spatial divide by placing low-income housing on the periphery of cities, far from economic activity. Reversing the country's spatial inheritance, even with sound and sensible policies, is likely to take decades.

Settlement patterns should meet the needs and preferences of citizens, taking into account broader social, environmental and economic interests. Travel distances need to be shorter. This means ensuring that a larger proportion of workers live closer to their places of work, and that public transport is safe, reliable, affordable and energy efficient. It means building denser and more liveable cities and towns. In rural areas, settlement patterns must balance the social, cultural and agricultural needs of families with the need to provide cost-effective services to households.

The commission proposes three complementary strategies:

- Increasing urban population density, while improving the liveability of cities by providing parks and other open spaces, and ensuring safety.
- Providing more reliable and affordable public transport with better coordination across municipalities and between different modes.
- Moving jobs and investment towards dense townships that are on the margins of cities. Building new settlements far from places of work should be discouraged, chiefly through planning and zoning regulations responsive to government policy.

We recognise that there are several obstacles to these proposals, including the costs of densification and resistance to new residential patterns. These obstacles can be overcome with sound planning frameworks, political will, clear policies, consistent application and sensible financing arrangements.

Rural spatial planning has its own features. Government's efforts should focus on sensible and sustainable land reform, support to farmers, rollout of household services, and appropriate economic infrastructure such as roads and irrigation schemes. The focus of rural development must be to improve livelihoods through income generation, employment, and household and social services.

To date, rural zoning discussions have centred on the merits of transforming agricultural land into use for game farming, golf estates and townhouse development. While these debates are important, they do not address the bigger economic issue. Farmland is being converted to other uses largely because agriculture is potentially less profitable and more risky than property development. The reasons for low margins in agriculture are beyond the scope of this overview. Higher agricultural output is desirable and the instruments that can promote this are broader than zoning regulations. We make specific proposals to raise agricultural investment, output and employment.

Improving the quality of education, training and innovation

The quality of education for the majority of black learners remains poor. Poor-quality education not only denies many learners access to employment – it also affects the earnings potential and career mobility of those who do get jobs, and reduces the dynamism of South African businesses.

By 2030, South Africa needs an education system with the following attributes:

- High-quality early childhood education, with access rates exceeding 90 percent.
- Quality school education, with globally competitive literacy and numeracy standards.
- Further and higher education and training that enables people to fulfil their potential.
- An expanding higher education sector that is able to contribute towards rising incomes, higher productivity and the shift to a more knowledge-intensive economy.
- A wider system of innovation that links key public institutions (universities and science councils) with areas of the economy consistent with our economic priorities.

Improving the quality of education requires careful management, support from all interested parties and time. According to one study[2] of reform in 20 education systems across the world, sound approaches begin to produce results about six years after reforms are initiated, with the real sustained dividends emerging over the long term.

An urgent start must be made. Action is needed on several fronts simultaneously. The first set of proposals involves households and communities. Proper nutrition and diet, especially for children under age three, are essential for sound physical and mental development. The home

[2] McKinsey (2010). *How the world's most improved schooling systems keep getting better*.

and community environment is critical for the development of children's deductive abilities. The commission makes recommendations on child nutrition, addressing micronutrient deficiencies, supporting parents and families to break the cycle of poverty, and providing the best preparation for young children. We suggest ways in which every child can have at least two years of pre-school education.

The second set of proposals relates to improving the management of the education system. Removing layers of bureaucracy would make more resources available to support schools and teachers. The general rule of thumb is that interventions, both supportive and corrective, need to be inversely proportional to school performance. In this way, better-performing schools can be given the freedom to get on with the job, as long as there is measurable, continuous improvement. We make specific recommendations focused on better support to schools, delivering the basic necessities for a good education and measuring the right things. We propose a campaign to improve infrastructure in poor schools, especially in rural areas.

The third set of proposals aims to improve the competence and capacity of school principals. The common feature of all well run schools is leadership. The Department of Basic Education has recently launched a programme to measure the competencies of principals and deputy principals. This survey will also help identify weak performers, based on learner scores, and allow for appropriate support for principals and teachers. Principals should be selected purely on merit, be given greater powers over school management and be held accountable for school performance.

The fourth set of proposals relates to teacher performance, covering training, remuneration, incentives, time on task, performance measurement (based on learner scores), and appropriate content and pedagogical support. We make recommendations in each of these areas, but the crux of the issue is teacher accountability. Teachers both individually and collectively (at school level) must be held accountable for learner performance, with due recognition of the learning environment.

The further education and training system is not effective. It is too small and the output quality is poor. Continuous quality improvement is needed as the system expands initially at a moderate and later at an accelerated pace. The quality and relevance of courses need urgent attention. When quality starts to improve and the employability of graduates begins to increase, demand for these educational services will rise automatically. Simply increasing the size of the sector without focusing on quality is likely to be expensive and demoralising for young people, further stigmatising the system. By 2030, the sector should cover about 25 percent of the age-relevant cohort, implying an increase in numbers from about 300 000 at present to about 1 250 000 by 2030.

The country's higher education system will make a critical contribution to economic and social progress, but performance of existing institutions ranges from world-class to mediocre. Continuous quality improvement is needed as the system expands at a moderate pace. A major challenge is that poor school education increases the cost of producing graduates, and a relatively small number of black students graduate from universities. Increasing participation

and graduation rates, with the option of a four-year university degree, combined with bridging courses and more support for universities to help black students from needy backgrounds, is likely to yield high returns. Some universities have begun to do this. Though it raises costs, it increases flow-through and reduces dropout rates, and should be expanded on a targeted basis.

A simultaneous focus on research and development (R&D) and on the calibre of teaching would improve the quality of higher education, but inadequate capacity and quality of staff will constrain knowledge production and innovation unless effectively addressed. The country's universities need to become world-class centres of excellence at the cutting edge of technology. They can attract students from abroad generating revenue and increasing the skilled resource pool. The commission proposes that foreign students who graduate from South African universities should qualify for a seven-year work permit to encourage them to stay and work here.

R&D has played an important role in helping middle-income countries such as South Korea advance to high-income status. While South Africa needs to spend more on R&D in general, the institutional set up also needs to improve the link between innovation and the productive needs of business. Government should partner with the private sector to raise the level of R&D in firms. Public resources should be targeted to build the research infrastructure required by a modern economy in line with the country's development strategy.

Quality health care for all

Long-term health outcomes are shaped by factors largely outside the health system: lifestyle, nutrition, education, diet, sexual behaviour, exercise, road accidents and the level of violence. The commission makes recommendations in each of these areas. Priority areas include sex education, nutrition, exercise, and combating smoking and alcohol abuse. These are social responsibilities that deserve to be taken seriously by every citizen, and promoted by families and institutions.

Good health is essential for a productive and fulfilling life. The *Diagnostic Report* demonstrates the starkly interrelated challenges posed by a crumbling health system and a rising disease burden. The public health system must be fixed. While greater use of private care, paid for either by users or health insurance, is part of the solution, it is no substitute for improvement of the public health system. Given the systemic weaknesses in that system today, a root-and-branch effort to improve the quality of care is needed, especially at primary level.

By 2030, the health system should provide quality care to all, free at the point of service, or paid for by publicly provided or privately funded insurance. The primary and district health system should provide universal access, with a focus on prevention, education, disease management and treatment. Hospitals should be effective and efficient, providing quality secondary and tertiary care for those who need it. More health professionals should be on hand, especially in poorer communities.

Reform of the public health system should focus on:

- Improved management, especially at institutional level
- More and better-trained health professionals
- Greater discretion over clinical and administrative matters at facility level, combined with effective accountability
- Better patient information systems supporting more decentralised and home-based care models
- A focus on maternal and infant health care.

At institutional level, health care management is in crisis. The Department of Health has recently launched a programme to evaluate management competence. Complementary reforms should include greater delegation of authority over staffing, shift structures and routine procurement.

A district-based approach to primary health care is part of the pilot phase of national health insurance. For this approach to be successful, the health system needs more personnel (including professionals and paramedics), new forms of management authority, and strengthened statutory structures for community representation in health system governance.

The HIV/AIDS epidemic has illustrated South Africa's ability to make monumental social and political mistakes – as well as its ability to correct them and implement a complex programme effectively. The health system's success in managing the epidemic over the past five years is commendable. Yet there is no room for complacency. There is a continued need for education, prevention, testing and treatment. Reducing the rate of new infections will cut this figure substantially. However, even if there are no new infections, there will still be a sizeable number of HIV-positive people requiring treatment, posing ongoing challenges for the tuberculosis infection rate, and sustaining the risk of drug-resistant HIV strains developing. The HIV epidemic and its implications for public policy are likely to be with us for at least another generation, possibly two.

Building a national health insurance system is an important objective. There are four prerequisites to its success: improving the quality of public health care, lowering the relative cost of private care, recruiting more professionals in both the public and private sectors, and developing a health information system that spans public and private health providers. These reforms will take time, require cooperation between the public and private sectors, and demand significant resources.

Social protection

Effective social protection and welfare services are an integral part of our programme for inclusive economic growth and central to the elimination of poverty and reduction of inequality.

Social protection plays several roles in a society. Firstly, it sets a floor through which, through social solidarity, we deem that no person should live below. At present, given South Africa's extremes of unemployment and working poverty, many people regularly experience hunger and find it difficult to meet the basic needs of their families. Progressively and through multiple avenues, we seek a society where everyone is lifted above this floor. Secondly, it plays an important role in helping households and families manage life's risks. Thirdly, it helps ease labour market transitions, thereby contributing towards a more flexible labour market and economic dynamism.

Our vision is for a social security system that fulfils all these roles. Our vision is that by 2030, South Africa would have a comprehensive system of social protection that includes social security grants, mandatory retirement savings, risk benefits such as unemployment, death and disability benefits and voluntary retirement savings.

Part of our approach to social protection is through a social wage, which includes no-fee schools, free basic services and subsidised public transport. In addition to creating more work opportunities in the private sector, a significant broadening of public employment programmes will also help to ensure that fewer households live below a determined floor.

To achieve the objectives of broader social security coverage, we propose the following reforms:

- An acceptable minimum standard of living must be defined as the social floor, including what is needed to enable people to develop their capabilities.
- The retirement savings and risk benefit gap should be closed through reforms, including mandatory contributions, with consideration given to government subsidising these contributions for low income or periodic workers.
- Social welfare services must be expanded, with more education and training for social work practitioners and a review of funding for non-profit organisations.
- Public employment should be expanded to provide work for the unemployed, with a specific focus on the youth and women.
- The integration of a number of databases in the social security environment with information from public employment programmes will enable communities to conduct social audits of government services, leading to better and more effective targeting of government's social and employment programmes.

Building safer communities

When people feel unsafe it makes it harder for them to develop their capabilities, pursue their personal goals and to take part in social and economic activity. To achieve the goals set out in this plan, South Africans need to feel safe everywhere and have confidence in the criminal justice system to protect them and to act speedily and effectively when required to do so.

By 2030, people living in South Africa should feel safe and have no fear of crime. Women and children and all vulnerable groups should feel protected. They should have confidence in the criminal justice system to effectively apprehend and prosecute criminals who violate individual

and community safety. The South African Police Service and metro police should be a professional institution staffed by skilled, disciplined, ethical individuals who value their work and serve the community.

Achieving this vision requires targeted action in five key areas:

- Strengthening the criminal justice system – This requires cooperation between all departments in the justice crime prevention and security cluster. We believe the correct implementation of the recommendations in the Review of the South African Criminal Justice System will go far in dealing with the system's current weaknesses.
- Making the police service professional – We propose linking the police code of conduct and a code of professionalism to promotion and discipline in the service. Recruitment should attract competent, skilled professionals through a two-track system; one for commissioned officers and one for non-commissioners officers.
- Demilitarising the police service – The decision to demilitarise the police force, moving away from its history of brutality, was a key goal of transformation after 1994. The remilitarisation of the police in recent years has not garnered greater respect for police officers and higher conviction rates. If anything, it has boosted violence in the service. The commission believes that the police should be demilitarised to turn the force into a civilian, professional service.
- Building safety using an integrated approach – Achieving long-term, sustainable safety requires an integrated approach focused on tackling the fundamental causes of criminality. This requires mobilising a wider range of state and community resources.
- Building community participation in community safety – Civil society organisations and civic participation are critical elements of a safe and secure society. Local government legislation provides for establishing community safety centres to enable safe, healthy communities. Establishing these centres should be considered.

To improve the functioning of the criminal justice, the sector has developed a seven-point plan, discussed in detail in the chapter. The commission endorses this plan.

Reforming the public service

A plan is only as credible as its delivery mechanism is viable. A capable state is an essential precondition for South Africa's development. The market cannot resolve all of the country's challenges; many require direct interventions by an effective government that delivers public goods of high quality – education, health services, economic and social infrastructure – guarantees the safety and security of its citizens, and provides an enabling environment for private investment.

In many countries, plans fail either because they are not implemented or because implementation is uneven. There needs to be a uniformity of effort and competence across the entire public service. There is a real risk that South Africa's national plan could fail because the state is incapable of implementation. The commission makes far-reaching proposals to remedy the uneven and often poor performance of the public service.

A capable state does not materialise by decree, nor can it be legislated or created from conference resolutions. It has to be painstakingly built, brick by brick, institution by institution, and sustained and rejuvenated over time. It requires leadership, sound policies, skilled managers and workers, clear lines of accountability, appropriate systems, and consistent and fair application of rules.

There are often blurred and inconsistent lines of overlap.

The plan proposes radical reforms in several areas. Parliament's oversight role should be enhanced, the political/administrative interface stabilised, the public service professionalised, skills upgraded and coordination improved. A more pragmatic approach to the intergovernmental system is required, recognising uneven capacity.

To professionalise the public service, we propose that:

- Heads of departments should report to a head of the civil service on administrative matters.
- A hybrid system of appointing heads of departments should be introduced, incorporating both political and administrative elements.
- A graduate recruitment programme and a local government skills development strategy should be introduced to attract high-quality candidates.
- The Public Service Commission should be given the power to develop and monitor norms and standards for appointments at each level.
- A purely administrative approach should be adopted for lower-level appointments, with senior officials given full authority to appoint staff in their departments.

The link between accountability, leadership instability and political appointments is most critical in state-owned enterprises. The chief executives of state-owned enterprises are appointed by Cabinet on recommendation of the shareholder minister(s). There is clear evidence of political influence by the ruling party in these appointments, creating confusion and blurring lines of accountability. Are chief executives accountable to the political party, to the President, to Cabinet, to the Minister of Public Enterprises or to the board?

The commission recommends that, as shareholder, the government should appoint the boards and the boards should appoint the executives. In this way, it is possible to have a clear line of accountability between government and the board, and between the board and the chief executive.

Policy instability is a concern. The general cause of policy instability is that policies change too often. While there are cases where policy must change, government often underestimates the disruptive effect that adjustments have on service delivery. A balance has to be struck, and at present that balance is missing.

The skills profile of the public service mirrors the national skills profile. Senior managers at the top of the public sector are generally skilled and competent. But there are critical shortages of good-quality doctors, engineers, information technology professionals, forensic specialists, detectives, planners, accountants, prosecutors, curriculum advisors and so on.

Improvements have been achieved in the efficiency of service delivery pockets of government, notably the South African Revenue Service and pilot projects in the Departments of Home Affairs, Health and Justice. At the heart of these reforms have been operations management and systems improvements and these need to be systematically rolled out to more areas of government.

The intergovernmental system requires review. Some argue that this system is too complex, weakening accountability for key services and the ability of national government to intervene at provincial and local level. Others contend that some nationally run services are as dysfunctional as some provincial education departments. The solution they propose is to focus on fixing the problems of leadership and policy instability, and weak skills.

The commission's view is that within the present constitutional framework, it is possible to have more differentiation in the powers and functions of provinces and municipalities, taking capacity into account. The present system can be improved, with clarifications in the areas of housing, water, sanitation, electricity and public transport. We propose regional utilities to provide services on behalf of less resourced municipalities on an agency basis, without undermining the accountability of the services. Large cities should be given greater fiscal and political powers to coordinate human settlement upgrading, transport and spatial planning.

Fighting corruption

High corruption levels frustrate society's ability to operate fairly and efficiently and the state's ability to deliver on its development mandate. In Transparency International's global corruption survey, South Africa has fallen from 38th place in 2001 to 54th place in 2010, out of 178 countries. Corruption often involves both public and private sector participants. The perception of high levels of corruption at senior levels of government makes the fight against corruption that much harder.

Political will is essential to combat this scourge. Political will is measured by assessing the amount of money spent fighting corruption, the legal arsenal that corruption-busting institutions have at their disposal, the independence of anti-corruption authorities from political interference and the consistency with which the law is applied. Being soft on smaller cases, or unusually tough on corruption involving political opponents, implies inconsistency.

In addition to political will, the fight against corruption has to be fought on three fronts: deterrence, prevention and education. Deterrence helps people understand that they are likely to get caught and punished. Prevention is about systems (information, audit and so on) that make it hard to engage in corrupt acts. The social dimensions of corruption can only be

tackled by focusing on values, through education. South Africa has some, but not all, of these elements in place.

Government's procurement policies blur the line in matters of corruption. Multiple and sometimes contradictory objectives lead to poor value for money and make corruption easier.

There are still gaps in the anti-corruption arsenal. First, despite their competence and skill, institutions like the Public Protector and Special Investigative Unit are underfunded, understaffed and subject to external interference. Second, while thousands of cases are investigated, very few get to court. We propose the establishment of specialised teams of prosecutors and special courts to handle corruption cases. Third, the state procurement system has become overly bureaucratised, with an emphasis on compliance by box-ticking, making the system costly, burdensome, ineffective and prone to fraud. We propose centralising large and long-term tenders, making it illegal for public servants to operate certain types of businesses, and making individuals liable for losses in proven cases of corruption. Finally, the country has barely begun to tackle the associated societal factors that contribute to corruption. Attitudes that justify breaking the law to help family members because they are poor, or because they suffered under apartheid, or just because they are family, must be tackled head on.

If the public believes that people will only be prosecuted if they are not politically protected, confidence in the anti-corruption agencies wanes and their efficacy is compromised. No one can be untouchable.

International experience shows that with political will and sustained application of the right strategies, corruption can be significantly reduced and public trust restored.

Transforming society and uniting the country

A united people and a more cohesive society are not only national objectives; they are also means to eradicating poverty and inequality. Our strategy to enhance social cohesion is based on three themes:

- Reducing poverty and inequality by broadening opportunity through economic inclusion, education and skills, and specific redress measures.
- Promoting mutual respect, inclusiveness and cohesion by acting on the constitutional imperative that South Africa belongs to all who live in it, and that all are equal before the law.
- Deepening the national appreciation of the responsibilities and obligations that citizens have towards one another.

The struggle against apartheid was first and foremost about the construction of a non-racial and non-sexist democratic society, in which all people have equal rights. This is embedded in the Constitution. Despite consistent progress since 1994, South Africa remains a divided society, with race still forming the main divide. Individual stereotyping of race and ethnicity is widespread, and pockets of discrimination persist.

Progress is not linear. The nation has its moods, which swing from generosity of spirit to anger. The country's institutional framework – and its broad economic and social trends – have contributed to gradual deracialisation, but progress is not sufficient or deep enough.

Reducing poverty and inequality, eliminating spatial segregation and unemployment, and improving the quality of education are the primary tools to build social cohesion. Unity will deepen and become durable as opportunities expand. But South Africa's own history and the experiences of other countries have taught us that a sense of unity and social cohesion are necessary to meet our social and economic objectives. The preamble of the Constitution captures this balance best. It recognises the obligation of the state to effect redress to reverse the effects of apartheid, in a context where all citizens feel part of the country and its programmes.

Achieving and maintaining this balance requires the confluence of several factors, not all of which are in government's control. A growing economy, rising employment and incomes, falling inequality, an improving education system, fertile conditions for entrepreneurship and career mobility in the workplace will contribute significantly to uniting South Africa's people. Programmes such as affirmative action, black economic empowerment and land reform are proper responses to our legacy, but they contribute much more when the economy is growing and the education system is improving. Without such an environment, these measures can raise the level of social tension.

In good times, nation-building is easier. In bad times, when the environment is less conducive to redress, progress is slower. South Africa cannot afford a downward spiral that frustrates redress and sharpens social tensions. Strong leadership is needed to promote the vision of the Constitution. A formal social compact may help to strengthen the alignment between growth and development and nation-building, generating a virtuous circle.

In addition to measures that promote social equity outlined elsewhere in the plan, we propose:

- The Bill of Responsibility, developed by the Department of Basic Education and others, should be popularised, encouraging all South Africans to live the values of the Constitution.
- A pledge based on the Constitution's preamble should be developed and used in school assemblies.
- All South Africans should be encouraged to learn an African language and government programmes should work to make this a reality.
- The Commission on Gender Equality and the Ministry for Women, Children and People with Disabilities should jointly set clear targets for the advancement of women's rights and report on progress in achieving this in an annual publication each August.
- Employment equity and other redress measures should be made more effective by focusing on the environment within which capabilities are developed.
- A review of black economic empowerment. While this remains the correct approach to broaden ownership and control over productive parts of the economy, the present model is not achieving the desired objectives quickly enough.

- Redress measures in the workplace should focus on enterprise development, access to training, career mobility and mentoring.

Conclusion

To make meaningful, rapid and sustained progress in reducing poverty and inequality over the next two decades, South Africa needs to write a new story. At the core of this plan is a new development paradigm that seeks to involve communities, youth, workers, the unemployed and business in partnership with each other, and with a more capable state. The aim is to develop the capabilities of individuals and of the country, and to create opportunities for all South Africans.

The commission's draft plan is based on extensive research, consultation and engagement. Yet it is neither perfect nor complete. It provides the basis for a detailed and deep engagement among South Africans, based on firm proposals to solve the country's problems.

The key ingredients for success are:

- The active efforts of all South Africans
- Growth, investment and employment
- Rising standards of education and a healthy population
- An effective and capable government
- Collaboration between the private and public sectors
- Leadership from all sectors of society.

The country we seek to build by 2030 is just, fair, prosperous and equitable. Most of all, it is a country that each and every South African can proudly call home.

Key targets and implementable actions in the plan

Each chapter in this plan contains a range of targets and proposals. Some of these are general statements of policy intent. Others are specific policy proposals, actions or processes that need to occur. Below, we summarise the plan's key targets and proposals by chapter. The list is neither even nor exhaustive. Detailed information is provided in each of the chapters.

Overall targets of the plan

- By 2030, the number of households living below R418 a month per person (in 2009 rands) should fall from 39 percent to zero.
- The level of inequality as measured by the Gini co-efficient should fall from 0.7 in 2009 to 0.6 in 2030.

Economy and employment

Targets

- The unemployment rate should fall from 27 percent in 2011 to 14 percent by 2020 and to 6 percent by 2030. This requires an additional 11 million jobs. Total employment should rise from 13 million to 24 million.
- The proportion of adults working should increase from 41 percent to 61 percent.
- The proportion of adults in rural areas working should rise from 29 percent to 40 percent.
- The labour force participation rate should rise from 54 percent to 65 percent.
- GDP should increase by 2.7 times in real terms, requiring average annual GDP growth of 5.4 percent over the period.
- GDP per capital should increase from about R50 000 per person in 2010 to R110 000 per person in 2030 in constant prices.
- The proportion of income earned by the bottom 40 percent should rise from 6 percent today to 10 percent in 2030.
- Exports (as measured in volume terms) should grow by 6 percent a year to 2030 with non-traditional exports growing by 10 percent a year.
- The savings rate should rise from 15 percent to 25 percent.
- The level of gross fixed capital formation should rise from 17 percent to 30 percent.
- The level of public sector gross fixed capital formation should reach 10 percent of GDP by 2030.
- Public employment programmes should reach 1 million by 2015 and 2 million people by 2030.

Actions

Create an environment for sustainable employment and economic growth

1. Reduce the cost of living for households and costs of doing business through microeconomic reforms in the areas of food, transport and telecommunications.
2. Remove the most pressing constraints on growth, investment and job creation, including energy generation and distribution, urban planning approval processes, water supply and wastewater management, logistics, telecommunications, and licensing for water, minerals and environmental permits. Regulatory certainty and institutional reforms will draw competitive outcomes in network industries.

Gain global market share

3. Expand South Africa's positioning for offshore business services, and build on the advantage provided by its telecommunications, banking and retail firms operating in other countries.
4. Increase mining exports by:
    - Giving clear certainty over property rights
    - Increasing rail, water and energy capacity.

Active labour market policies

5. Broaden the expanded public works programme to cover 2 million fulltime equivalent jobs by 2020.
6. Offer a tax subsidy to employers to reduce the initial cost of hiring young labour market entrants. Facilitate agreement between employers and unions on entry-level wages.
7. Give a subsidy to the placement sector to identify, prepare and place matric graduates into jobs.
8. Adopt a more open immigration approach to expand supply of high-level skills.

Labour market regulation

9. An approach to handling probationary periods that reflects the intention of probation.
10. An approach that simplifies dismissal procedures for performance or misconduct.
11. Take managers earning above R300 000 a year out of the Commission for Conciliation, Mediation and Arbitration (CCMA) process.

Small and expanding firms

12. Business incubators should be set up, including private-sector partnerships, with rewards for success. This could include early-stage entrepreneurship training, artisan training and assisting small-scale farmers and construction firms.

Mining and minerals

13. Address major constraints impeding growth of mining. These include uncertainties over ownership, tax treatment and allocation of mineral rights, the availability of electricity and the availability, cost and efficiency of transport networks.

Manufacturing

14. Support local manufacturing demonstrating long-term viability by procuring locally.
15. Focus on reducing transport logistics costs.

Tourism

16. Provide regional tourism packages to increase value for money for tourists. Consider a single SADC visa for some types of tourists. Public-sector employment and public employment schemes.

Institutional capability and culture

17. Address fragmentation in government regarding microeconomic reform strategy and its implementation.

Economic infrastructure

Targets

- The proportion of people with access to electricity should rise from 70 percent in 2010 to 95 percent by 2030, with non-grid options available for the rest.
- We would need an additional 29 000 MW of electricity by 2030. About 10 900 MW of existing capacity would need to be retired, implying new build of about 40 000 MW.
- About 20 000 of this capacity should come from renewable sources.
- Ensure that all people have access to clean, potable water and that there is enough water for agriculture and industry, recognising the trade-offs in the use of water.
- Reduce water demand in urban areas to 15 percent below the business-as-usual scenario by 2030.
- Complete the Lesotho Highlands Phase 2 by 2020.
- The proportion of people who use public transport for regular commutes will expand significantly. By 2030, public transport will be user-friendly, less environmentally damaging, cheaper and integrated or seamless
- Durban port capacity should increase from 3 million containers a year to 20 million by 2040.
- Affordable, widely available broadband.
- Broadband is currently defined as 256 kilobytes per second. By 2020, this definition should increase to at least 2 megabytes per second.

Actions

Coal

18. Ensure domestic security of coal supply for existing power stations through industry compact, more comprehensive coal field planning (and export permits, if necessary).
19. Invest in a new heavy-haul rail corridor to the Waterberg coal field, upgrade the central basin coal network and expand export capacity in the line to Richards Bay.

Gas

20. Enable exploratory drilling to identify economically recoverable coal seam and shale gas reserves, while environmental investigations will continue to ascertain whether sustainable exploitation of these resources is possible. If gas reserves are proven and environmental concerns alleviated, then development of these resources and gas-to-power projects will be fast-tracked.
21. Develop infrastructure for the import of liquefied natural gas, mainly for power production, over the short to medium term.

Electricity

22. Move to less carbon-intensive electricity production through procuring up to 20 000 MW of renewable energy, increased hydro-imports from the region and increased demand-side measures, including solar water heating.
23. Move Eskom's system operator, planning, power procurement, power purchasing and power contracting functions to the independent system and market operator and accelerated procurement of independent power producers.
24. Ring-fence the electricity distribution businesses of the 12 largest municipalities, resolve maintenance and refurbishment backlogs and develop a financing plan, alongside investment in human capital.
25. Revise national electrification plan and ensure 90 percent coverage by 2020 and 95 percent coverage by 2030 (with balance met through off-grid technologies).

Liquid fuels

26. Upgrade refineries to ensure they meet new fuel quality standards and insist on strategic fuel stocks to ensure security of supply.
27. Continue to import refined fuels, ensuring that the growing deficit in petroleum products is met, and defer decision on a new refinery to 2017.

Water resources

28. A comprehensive management strategy including an investment programme for water resource development, bulk water supply and wastewater management for major centres by 2012, with reviews every five years.
29. Create regional water and wastewater utilities, and expand mandates of the existing water boards (between 2012 and 2017).

Transport

30. Consolidate and selectively expand transport and logistics infrastructure, with key focus areas being:
    - Upgrading the Durban-Gauteng freight corridor, including a new port at the old Durban airport site.
    - Expanding capacity of the coal, iron ore and manganese lines, with consideration given to concessioning parts of this network.
    - Building the N2 road through the Eastern Cape.

Information and communications infrastructure

31. Change the regulatory framework to ensure that Internet broadband capacity improves, prices fall significantly and access improves.

Transition to a low-carbon economy

Targets

- Achieve the peak, plateau and decline trajectory for greenhouse gas emissions, with the peak being reached around 2025.
- By 2030, an economy-wide carbon price should be entrenched.
  Zero emission building standards by 2030.
- The installation of 5 million solar water heaters by 2030.
- About 20 000 MW of renewable energy should be contracted by 2030.

Actions

32. Carbon price, building standards, vehicle emission standards, municipal regulations and government solar water heater target to drive scale in stimulating renewable energy, waste recycling and retrofitting buildings.
    - Set target of 5 million solar water heaters by 2030.
33. Broad support for a carbon budgeting approach, allowing social and economic objectives to be balanced.
34. A carbon tax should be introduced as an instrument to incentivise efficiency, coupled with a range of policy instruments targeting specific mitigation opportunities.
35. All new buildings to meet the energy-efficiency criteria set out in South African National Standard 204.

Inclusive rural economy

Targets

- An additional 643 000 jobs direct jobs and 326 000 indirect jobs in the agriculture, agro-processing and related sectors by 2030.
- Maintain a positive trade balance for primary and processed agricultural products.

Actions

36. Rural economies will be activated through improved infrastructure and service delivery, a review of land tenure, services to small and micro farmers, a review of mining industry commitments to social investment, and tourism investments.
37. Substantially increase investment in irrigation infrastructure in Makatini Flats and Umzimvubu River Basin.
38. Create tenure security for communal farmers, especially women. Investigate different forms of financing and vesting of private property rights to land reform beneficiaries that does not hamper beneficiaries with a high debt burden.

South Africa in the region and the world

Targets

- Intra-regional trade in Southern Africa should increase from 7 percent of trade to 25 percent of trade by 2030.
- South Africa's trade with regional neighbours should increase from 15 percent of our trade to 30 percent.

Actions

39. Focus trade penetration and diplomatic presence in fast-growing markets (Asia, Brazil and Africa).
40. Implement a focused regional integration strategy with emphasis on:
    - Road, rail and port infrastructure in the region
    - Reducing red tape, corruption and delays at border posts
    - Using financial institutions to partner with businesses wanting to expand on the continent
    - Developing regional markets for food, energy and water, and putting in place water management agreements with neighbouring states.

Human settlements

Targets

- More people living closer to their places of work.
- Better quality public transport.
- More jobs in or close to dense, urban townships.

Actions

41. Clear strategy for densification of cities through land-use planning. Stop building houses on poorly located land and shift greater resources to informal settlement upgrading, provided that they are in areas close to jobs.
42. Massive investment to ensure safe, reliable and affordable public transport.
43. Provide incentives to move jobs to dense townships.

44. Focused strategy on the housing gap market, involving banks, subsidies and employer housing schemes. In particular, taking steps to ensure that women are not discriminated against in terms of home ownership and financing.

Education, training and innovation

Targets

- Eradicate micronutrient deficiencies in children under 18 months.
- All children should have at least two years of pre-school education. This implies about 2 million places.
- About 80 percent of schools and learners achieve 50 percent and above in literacy, mathematics and science in grades 3, 6, 9.
- At least 80 percent of students should complete 12 years of schooling. We believe it is important to increase learner retention rates to 90 percent, of whom 80 percent successfully pass the exit exam.
- Significantly expanded further education and training sector, with the sector expanding as it improves the quality and relevance of its courses. The sector should reach a participation rate of 25 percent by 2030. This implies an expansion from 300 000 at present to 1 250 000 by 2030.
- We propose improving the further education and training graduation rate to 75 percent by 2030.
- Produce 20 000 artisans a year.
- An additional 1 million learning opportunities a year for post-school workers and the unemployed.
- The department aims to improve its average Southern and East African Consortium for Monitoring Education Quality results for grade 6 languages and maths from 495 to 600 by 2022 and to improve average grade 8 scores in the Trends in Mathematics and Science Study from 264 to 420 in 2023. The commission supports these targets and proposes that by 2030, grade 8 scores in the Trends in Mathematics and Science Study should reach 500. Ideally, South Africa should improve its position by 10 places or more by 2030.
- Increase the higher education participation rate from 17 percent to 30 percent. Enrolments in the higher education sector including private higher education will need to increase to 1 620 000, from 950 000 in 2010.
- Increase the number of students eligible to study maths and science at university to 450 000 per year. The department has set a target to increase the number of learners eligible for bachelors programme to 300 000 by 2024, 350 000 learners who pass mathematics, and 320 000 learners who pass physical science.
- By 2030, 75 percent of academic staff at universities should have PhDs. The present figure is 34 percent.
- Produce 100 doctoral graduates per million per year. That implies an increase from 1 420 a year in 2010 to 5 000 a year.

Actions

Early childhood development and nutrition

45. Design a nutrition intervention for pregnant women and young children, to be piloted by the Department of Health for two years.
46. Achieve universal access to two years of early childhood development exposure before grade 1.

Schooling

47. Expertise is recognised as the only criterion for appointing and promoting personnel within the education sector. Union and political interference in appointment should be removed.
48. Increase teacher training output by expanding Funza Lushaka to attract learners into teaching, especially those with good passes in maths, science and languages.
49. Regularly test teachers in the subjects they teach to determine level of knowledge and competence. Link teacher pay to learner performance improvements.
50. Schools already operating at a high level of efficiency should not be burdened by having to fulfil additional and unnecessary tasks that aim to improve accountability in schools performing weakly. Schools performing very poorly should receive the closest attention.
51. Change process of appointment of principals:
    - Introduce minimum qualifications and formal qualifications
    - Ensure new principals possess the entry qualifications and give old principals 10 years to acquire the qualifications or be retrenched.
52. Gradually give principals more powers to administer schools, including financial management, procurement of textbooks and other educational material, as well hiring and firing educators.

Further education and training

53. Improve the system of skills planning and shaping the production of skills.
54. Develop a set of strong national qualifications and support developing a variety of non-formal programmes.
55. Strengthen and expand the number of further education and training colleges so that the participation rate can grow to 25 percent.
56. Gradually expand adult education offered in colleges reaching 1 million learning opportunities a year.

Higher education

57. Build new universities, one each in Mpumalanga and the Northern Cape.
58. Build a new medical school in Limpopo and a number of new academic hospitals.
59. Consider extending the length of first degrees to four years on a voluntary basis for historically disadvantaged students.
60. Provide full funding assistance covering tuition, books, accommodation and living allowance (in the form of loans and bursaries) to all students who qualify for the National Student Financial Aid Scheme. Students who do not qualify should have access

to bank loans, backed by state sureties and recovered through arrangements with the South African Revenue Service.

61. Grant seven-year work permits to foreign students who graduate from public higher education institutions.

Health care for all

Targets

- By 2030, life expectancy should reach at least 70 for both men and women.
- The under-20 age group should largely be an HIV-free generation.
- The infant mortality rate should decline from 43 to 20 per 1 000 live births and the under five mortality rate should be less than 30 per 1 000, from 104 today.
- Maternal mortality should decline from 500 to 100 for every 100 000 live births.
- All HIV-positive people should be on treatment and preventive measures such as condoms and microbicides should be widely available, especially to young people.
- Reduce non-communicable diseases by 28 percent and deaths from drug abuse, road accidents and violence by 50 percent.
- Everyone has access to an equal standard of basic health care regardless of their income.

Actions

Address social determinants of health

62. Promote active lifestyles and balanced diets, control alcohol abuse and health awareness to reduce non-communicable diseases.

Reduce burden of disease to manageable levels

63. Broaden coverage of antiretroviral (ARV) treatment to all HIV-positive people, provide ARVs to high-risk HIV-negative people and provide effective microbicides routinely to all women 16 years and older.

Build human resources for the health sector of the future

64. Accelerate production of community specialists in the five main specialist areas (medicine, surgery including anaesthetics, obstetrics, paediatrics and psychiatry).
65. Recruit, train and deploy between 700 000 and 1.3 million community health workers to implement community-based health care.

Strengthen the national health system

66. Determine minimum qualifications for hospital managers and ensure that all managers have the necessary qualifications.

Implement national health insurance

67. Implement the scheme in a phased manner, focusing on:
    - Improving the quality and care at public facilities
    - Reducing the relative cost of private medical care
    - Increasing the number of medical professionals
    - Introducing a patient record system and supporting information technology systems.

Social protection

Targets

- Ensure progressively and through multiple avenues that no one lives below a social floor.
- The number of public works jobs should rise from the present level to about 1 million in 2015 and then to about 2 million by 2030.
- Increase the number of social service professionals from about 15 000 to 55 000 by 2030.
- A single national grants payments system by 2030.
- The phasing in of national health insurance.
- The introduction and expansion of a contributory retirement and risk benefit system.
- Establish a national register of grant beneficiaries and introduce community-based social audits to monitor progress.

Actions

68. Determine a social floor that can be progressively realised through a social wage approach.
69. Focus on competition, access, efficiency and costs of transport, food, telecommunications and other goods and services to lower the cost of living, especially for poor households.
70. Enhance food security and nutrition, focusing initially on pregnant women and young children.
71. Urgently rationalise existing benefit payments systems.

Building safer communities

Targets

In 2030, people living in South Africa feel safe and have no fear of crime. They are safe at home, at school, at work and they enjoy an active community life free of fear. Women can walk freely in the streets and children can play safely outside. The police service is a well resourced professional institution staffed by highly skilled officers who value their work, serve the community, safeguard lives and property without discrimination, protect the peaceful against violence and respect the rights of all to equality and justice.

Actions

72. The police service should be transformed into a professional, capable institution with a clear mandate and defined roles and responsibilities. This should be done by:
    - Introducing a code of conduct that is linked to disciplinary regulations and performance appraisal.
    - Setting standards for recruitment, selection and promotion of members by a professional body.
    - A two-track human resource system should be developed for the police: one for officers and one for non-commissioned officers.

Building a capable state

Targets

A capable and effective state, able to enhance economic opportunities, support the development of capabilities and intervene to ensure a rising floor of social rights for the poor.

Actions

Stabilise the political-administrative interface

73. Create an administrative head of the public service to whom directors-general report on organisational and administrative matters. Put in place a hybrid approach to top appointments that allows for the reconciliation of administrative and political priorities.

Make the public service a career of choice

74. Enhance the role of the Public Service Commission to promote and monitor norms and standards to ensure that only competent and suitably experienced people are appointed to senior positions.
75. A formalised graduate recruitment scheme for the public service, skills strategies for senior management, technical professionals and local government staff.

Improve relations between national, provincial and local government

76. Allow greater asymmetry in powers and functions of provinces and municipalities based on competence.
77. Develop regional utilities to deliver some local government services on an agency basis, where municipalities or districts lack capacity.
78. Deal with fragmentation in implementation in two specific areas:
    - Public service reform (Departments of Public Service and Administration, Cooperative Governance and Traditional Affairs, Performance Monitoring and Evaluation, Presidency, National Treasury, Public Service Commission).
    - Microeconomic reform (Departments of Energy, Economic Development, Trade and Industry, Mineral Resources, Labour, Transport, Communications, Agriculture, Forestry and Fisheries, Public Enterprises and National Treasury).

Boost the developmental potential of state-owned enterprises

79. Government (joint responsibility of shareholder and policy ministries) should appoint the boards, and the boards should appoint the chief executive officers.

Fighting corruption and enhancing accountability

Targets

A corruption-free society, a high adherence to ethics throughout society and a government that is accountable to its people.

Actions

Fight corruption

80. Centralise the awarding of large tenders or tenders with long duration.
81. Give greater teeth to the tender compliance monitoring office to investigate value for money.
82. Take steps, both legal and political, to provide sufficient insularity from political interference for anti-corruption agencies.
83. Set up dedicated prosecution teams, specialist courts and judges.

Develop accountability framework

84. Make it illegal for civil servants to operate or benefit directly from certain types of business activity.

Transforming society and uniting the country

Targets

Our vision is a society where opportunity is not determined by race or birthright; where citizens accept that they have both rights and responsibilities. Most critically, we seek a united, prosperous, non-racial, non-sexist and democratic South Africa.

Actions

85. The Bill of Responsibility, developed by the Department of Basic Education and others, should be popularised and used as a pledge by all South Africans to live the values of the Constitution.
86. All South Africans should be encouraged to learn an African language and government should help make this a reality.
87. Employment equity and other redress measures should continue and be made more effective by focusing on the environment in which capabilities are developed.

Vision statement

We, the people of South Africa, have journeyed far since the long lines of our first democratic election on 27 April 1994, when we elected a government for us all.

We began to tell a new story then. We have lived and renewed that story along the way.

Now in 2030 we live in a country which we have remade.

We have created a home where everybody feels free yet bounded to others; where everyone embraces their full potential. We are proud to be a community that cares.

We have received the mixed legacy of inequalities in opportunity and in where we have lived, but we have agreed to change our narrative of conquest, oppression, resistance, and victory.

We began to tell a new story of life in a developing democracy.
We began to share freedom and the uncertainties of living with it and in it.

We felt our way towards a new sense of ourselves:

- Trying, succeeding and making mistakes
- Proclaiming success and closing our minds to failure
- Feeling orientated and disorientated through our own actions
- Affirming some realities and denying others
- Proclaiming openness to the world, yet courting insularity
- Eager to live together, yet finding it difficult to recognise shared burdens
- Learning to recognise and acknowledge shared successes.

Our new story is open ended with temporary destinations, only for new paths to open up once more.

It is a story of unfolding learning.
Even when we flounder, we remain hopeful.
In this story, we always arrive and depart.

We have come some way.

We know:
What we do, and how we do it, is as important as what we want to achieve.
What we are, is because of who we have been and what we want to become.
We will continue to make it to make us, because we are happy with being who we are.

Who are we?
We are Africans.
We are an African country.
We are part of our multi-national region.
We are an essential part of our continent.
Being Africans, we are acutely aware of the wider world, deeply implicated in our past and present.
That wider world carries some of our inheritance.
We have learned a great deal from our complex past; adding continuously to our experience of being African.

Therefore, in 2030, we experience daily how: We participate fully in efforts to liberate ourselves from conditions that hinder the flowering of our talents.

We feel loved, respected and cared for at home, in community and the public institutions we have created.
We feel understood.
We feel needed.
We feel trustful.
We feel trusted.
We feel accommodative.
We feel accommodated.
We feel informed.
We feel healthy.
We feel safe.
We feel resourceful and inventive.
We learn together.
We talk to each other.
We share our work.
We play.
We worship.
We ponder and laugh.

We are energised by sharing our resourcefulness.
We are resilient.

We love reading.
All our citizens read, write, converse, and value ideas and thought.
We are fascinated by scientific invention and its use in the enhancement of our lives.
We live the joy of speaking many of our languages.
We know our history and that of other peoples.
We have clear values.

We create rather than eliminate; value arises from improving through creativity that which we inherited.

I have a space that I can call my own.
This space I share.
This space I cherish with others.
I maintain it with others.

I am not self-sufficient alone.
We are self-sufficient in community.

We all see to it and assist so that all life's enablers are available in a humane way.

Through our service we show our solidarity.
We enjoy the same quality of service.
We are connected through our caring.
The beating heart of our country is a community that has all the enablers of modern life:

- We have water.
- We use a toilet.
- We have food on the table.
- We fall asleep without fear.
- We listen to the rain on the roof.
- We gather together in front of heat.

What we contribute in our taxes, we get back through the high quality of our public services.

That is why we have:

- Good clinics and hospitals with well trained, caring doctors, administrators, nurses who rush to our aid with empathy and expertise
- Affordable effective medicines, because they were made for all of us
- Good schools with well educated, trained and caring teachers.

Each community has:

- A school
- Teachers who love teaching and learning
- A local library filled with a wealth of knowledge
- A librarian
- A police station with respected and upright police
- A clinic with nurses who love caring for people.

In our well-designed community surroundings we feel safe everywhere.
There, we enjoy meeting one another.
We find so much pleasure in one another's company.
Everywhere we go in our country, we hear the laughter of our children.

We all have actively set out to change our lives in ways which also benefit the broader community.

We are a people at work.
We work to create plenty.

Our work brings us ever closer to our dreams.
Work grounds our dreams even the more fantastic they are.
The reality of work connects us to our dreams.

We work towards goals with patience invested in actual effort.
We invest in our efforts and are not waiting in disengaged expectation.
Because we are impatient to succeed, we work with painstaking rigour.

Our efforts, not so much those of others, make us stronger.
Then we are patient for the results of our efforts.
This kind of patience, gives birth to our new work ethic.

In this work ethic we ground our dreams.
We have built our own houses.
We are confident and self-sufficient.

We are traders.
We are inventors.
We are workers.
We create companies.
We set up stalls.
We are studious.
We are gardeners.
We feel a call to serve.

We make things.

Out of our homes we create objects of value.
We invest and reap good returns for our efforts.
We travel to trade beyond our borders, carrying our values with us.

As artists we express and celebrate, we expose and nurture, we explore, shift and change frontiers.
Through sports of all kinds, we push the limits of our possibilities.
Our philosophies and stories have enriched the world.

We respect ability, competence and talent.
Now our economy is growing.
Our prosperity is increasing.
We are energised by our resourcefulness.

We are connected by the sounds we hear, the sights we see, the scents we smell, the objects we touch, the food we eat, the liquids we drink, the thoughts we think, the emotions we feel, the dreams we imagine. We are a web of relationships, fashioned in a web of histories, the stories of our lives inescapably shaped by stories of others.

We love sharing our stories in our schools, places of worship, libraries, in the variety of media whatever they may be.

We are inevitably and intimately implicated in one another.

We all assist the institutions we have creatively redesigned to meet our varied needs; we reach out across communities to strengthen our resolve to live with honesty, to be set against corruption and dehumanising actions.

We have made the rules by which we want ourselves to live:

- We hold the Constitution of our country as the covenant guide to a fair society
- Since 1994 we've changed our laws to obey our Constitution
- Now we live it: justice rules us, because just laws make community possible
- The law enables us to live together fulfilling our mutual obligations and responsibilities in the shared public spaces of our mutual affiliation.

We know that those to whom we have given the privilege to govern our land, do so on our behalf and for the benefit of all the people.

Government begins in the home, grows into the community, expands towards the city, flares toward the province, and engulfs the entire land.
We know our leaders as we have elected them and pledged them into office:

- They are wise in the use of our wealth
- Wise in knowing and understanding our wishes and needs
- Wise in expecting us to express ourselves to them in any appropriate manner we have agreed to be allowable
- Wise in not silencing those who criticise, but enable them, through our rules of engagement, to be even more rigorous in supporting a just society.

Our leaders' wisdom is ours, because we sense our wisdom in theirs.
They do more than respond to us:

- They bring new thoughts and ideas
- They share with us what they think
- They inspire us, because we then seek to aspire with them
- With them we renew our world continuously.

But our gift of leaders extends far beyond politics.
We have them in abundance in every avenue of life.
We have come far with our cultural, religious, and ancestral traditions.
Contemporary citizens that we are, we are conscious of the intimate relationships between tradition and change.

We say to one another: I cannot be without you, without you this South African community is an incomplete community, without one single person, without one single group, without the region or the continent, we are not the best that we can be.

We love the land.
We greet one another again.
We enjoy being visited.
We are courteous and curious.

We love arguing, we debate fiercely, we contest ceaselessly.
We solve our differences through discussion.
We refrain from being cruel, demeaning or hurtful in disagreement.

We feel we belong.
We celebrate all the differences among us.
We are not imprisoned by the roles ascribed to us.

Our family life strengthens the women, men and children who live in it.
The older share their wisdom with the young.
The young invigorate us with their energy, openness, optimism, and questioning minds.

The welfare of each of us is the welfare of all.
Everybody lives longer.
We experience fulfilment in life, living it in the successful society we are creating.
We feel prosperous.

Our connectedness across time and distance is the central principle of our nationhood.

We are a people, who have come together and shared extraordinarily to remake our society.

We ply between our cities and our ancestral origins.
Others' ancestral origins are beyond our country.
Where they go, from time to time, is a piece of our home too.

We discover the country and the world.
We live peacefully with neighbours.
We have good friends in other societies.

We have welcomed people from distant lands, who have chosen to live among us.

We value interdependence and reciprocity.
We feel hospitable.
We are a community of multiple, overlapping identities, cosmopolitan in our nationhood.

Our multiculturalism is a defining element of our indigeneity.
We are, because we are so many.
Our many-ness is our strength – we carry it in us throughout our lives.

We are safe, not so much because we are guarded, but because of the strength of our belonging.

We acknowledge that each and every one of us is intimately and inextricably of this earth with its beauty and life-giving sources; that our lives on earth are both enriched and complicated by what we have contributed to its condition.

South Africa, our country, is our land. Our land is our home.
We sweep and keep clean our yard.
We travel through it. We enjoy its varied climate, landscape, and vegetation.
It is as diverse as we are.

We live and work in it, on it with care, preserving it for future generations. We discover it all the time. As it gives life to us, we honour the life in it.

From time to time it reminds us of its enormous, infinite power.
When rain and floods overwhelm, winds buffet, seas rage, and the sun beats unrelentingly in drought.
In humility, we learn of our limitations.

To create living spaces within this beautiful land is to commensurate with our desired values.

South Africa belongs to all its peoples.

Now, in 2030, our story keeps growing as if spring is always with us.

Once, we uttered the dream of a rainbow.
Now we see it, living it. It does not curve over the sky.
It is refracted in each one of us at home, in the community, in the city, and across the land, in an abundance of colour.

When we see it in the faces of our children, we know: there will always be, for us, a worthy future.

Chapter 1

KEY DRIVERS OF CHANGE

In the next few decades, the world will experience unprecedented change. These include an explosion of urbanisation, which will create wealth and sharpen strains on the ecosystem; revolutionary developments in science and technology that will transform opportunities, introduce new risks, and drive wider social integration; and a rebalancing of economic power from developed to developing countries that will potentially lift another billion people out of poverty.

The cumulative effects of these trends are highly uncertain. Higher levels of connectivity in the global system – engaging a much larger number of actors with different interests and beliefs – makes it difficult to understand how the system will respond in any given scenario.

Deeper integration over two decades has allowed threats in the financial, technological and social systems to spread much more rapidly across the globe. The global impacts of the financial crisis that began with the meltdown of sub-prime mortgage markets in the United States in August 2007 are all too apparent. But greater interconnectedness has enabled globalisation, bringing great benefits and presenting new prospects, not least a reduction in poverty. To navigate these challenges, taking advantage of opportunities while preparing prudently for the risks, it is important to understand the main drivers and develop an educated view of the way they interact.

Increased integration, increased complexity, increased risk

Technology has both deepened and accelerated the world's interconnectedness, enabling higher growth, a leap in trade, and an even larger surge in cross-border investment. It is likely that the pace will quicken further over the next two decades as information flows, capital movements, trade and migration speed up.

Top ten risks by likelihood and impact combined

Ranking	Likelihood x Impact
1	Climate change
2	Fiscal crises
3	Economic disparity
4	Global governance failures
5	Storms and cyclones
6	Extreme energy price volatility
7	Geopolitical conflict
8	Corruption
9	Flooding
10	Water security

Source World Economic Forum, 2011

Economic integration has accelerated in the past three decades. Between 1980 and 2005, real world gross domestic product (GDP) rose about 32 percent. World merchandise imports and exports increased more than seven times, while global foreign investment flows grew 18-fold.[1]

Air transport, container traffic and logistical chains have diminished distance. Better infrastructure has hastened the flow of people into towns and cities. While the world's population has nearly doubled since 1950, the urban share has increased from 29 percent in 1950 to over 50 percent in 2009. The Internet, mobile telephony and the exponential growth of computing power, supported by fibre optic networks and satellite broadcasts, have made virtual proximity almost universal.

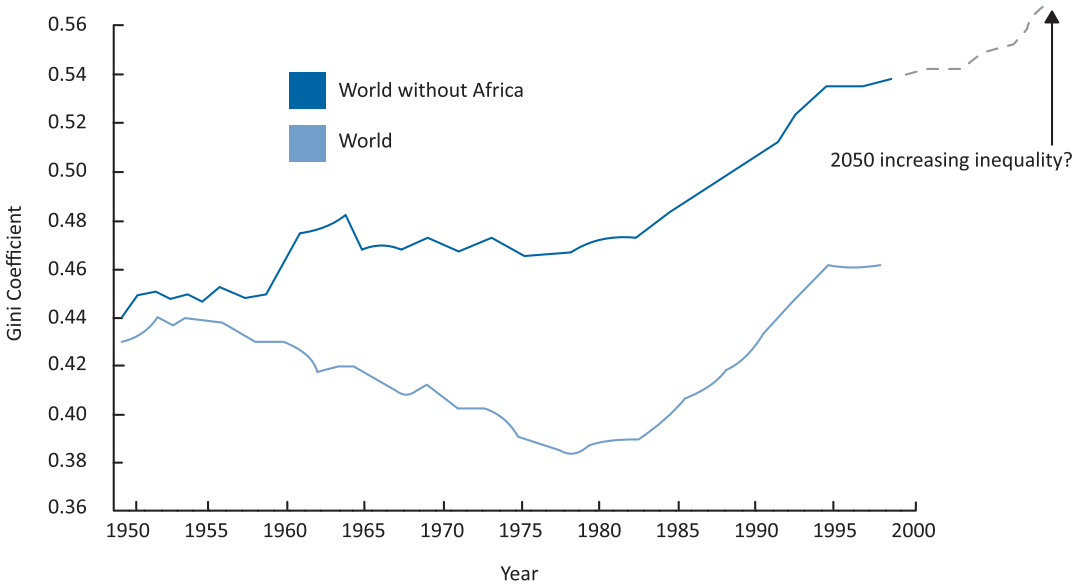
Global integration has brought benefits, spurring sustained growth for a generation. Until the 2008/09 crisis, many developing countries were making good progress reducing poverty. Between 1981 and 2005, the share of the population in the developing world living below US$1.25 a day was more than halved from 52 percent to 25 percent. China cut the percentage of its citizens living in poverty to about a quarter of its 1990 level in just two decades. Between 1997 and 2007, the percentage of Africans living on US$1.25 a day fell from 59 percent to 50 percent. Economic growth, spurred in large part by exports, has been key to reducing poverty in developing countries. Over the past three decades, global trade grew almost twice as fast as GDP, due to revolutions in transport and communications, and a sharp decline in import tariffs.

Globalisation has also been marked by negative trends. Inequality has risen. The gap between the rich and the poor has grown in almost three-quarters of Organisation for Economic Cooperation and Development countries over the past two decades. [2] The Gini co-efficient, which measures inequality of distribution (0 being total equality and 1 being

[1] Goldin I and Vogel T (2010). Global Governance and systemic risk in the 21st Century. *Lessons from the Financial Crisis Global Policy,* Vol 1, Issue 1, January 2010. University of Oxford.
[2] McKinsey (2010). The Market State. *McKinsey Quarterly.*

the widest disparity) worsened globally from 0.44 in 1950 to 0.54 in 2000.[3] A quarter of the population of developing countries still lives on less than US$1.25 a day, 1 billion people lack clean drinking water, 1.6 billion have no access to electricity, and 3 billion do not have adequate sanitation.[4] HIV/AIDS has been devastating in sub-Saharan Africa.

Global inequality



Source: Branko Milanovic (2007) in Goldin and Reinert[5]

Deeper levels of integration have been accompanied by uncertainty and volatility, as shown by the widespread financial – and then broader economic – contagion after the collapse of Lehman Brothers in September 2008. Within two years, the volume of world trade fell by a third as the crisis spread from country to country at staggering speed. The huge sums marshalled by the Group of 20 (G20) in April 2009 to rescue the banks led to a sovereign debt crisis in Europe within a year, with first Greece, then Ireland and Portugal, requiring financial support. The crisis spread across the Eurozone, with Italian and French banks particularly exposed. The three-year recession has been most sharply felt in developed countries, but developing economies also felt the effects. The crisis has worsened poverty, threatened the achievement of the Millennium Development Goals and weakened the middle classes. Global unemployment rose 6.6 percent in 2009, while youth unemployment saw the largest rise in decades. High youth unemployment and food price rises tipped several countries in North Africa – and Syria in the Levant – into revolt against corrupt, authoritarian leaders, raising questions about stability in the neighbouring oil-rich Gulf states.

[3] Milanovic B (2007). *Worlds Apart: Measuring International and Global Inequality.* Princeton University Press.
[4] ibid.
[5] Goldin and Reinert (2011). Presentation made to the National Planning Commission by the Oxford Martin School, Oxford University.

The next two years will continue to be tough, with growth depressed, global imbalances unresolved, and austerity affecting confidence and consumption. Central banks have used up their arsenals, while money pumped into the system has caused inflationary effects in emerging markets. The mismatch between regulatory capability and market behaviour is worrying. The world is unprepared for what is happening. Europe's crisis is due partly to political leaders and finance ministers needing to consult to reach agreement on responses, while markets react instantaneously.

The widespread negative effects of the recession have increased doubts about the viability of the global economic order built over the past three decades, leading to growing pressure for more inclusive, secure and sustainable globalisation.

Wealth and income disparities, both national and international, threaten economic development as well as social and political stability. Despite robust growth in some emerging economies, many are trapped in a cycle of poverty. About 1 billion people, mostly in sub-Saharan Africa and South and Central Asia, survive on less than 2 percent of the world's wealth.

Business and government leaders canvassed by the *Harvard Business Review* (2011) cited increasing economic inequality and the opaque and fragile global financial systems as possible sources of a serious breakdown in the system itself. Many agree, such as the demonstrators occupying Wall Street, forcing the closure of St Paul's Cathedral in London, camping in the main squares and thoroughfares of Madrid and Barcelona, and clashing violently with police in Athens. Around the world, people are indignant at the inequity of a system that passes the cost of failure on to taxpayers and those dependent on jobs, while the benefits of its success are disproportionately enjoyed by traders and senior financial executives.

As economic conditions worsened in the United States in 2010, and the European Union began to face its own crisis, the initial success of a synchronised approach faded, battering market sentiment for most of 2011. Gideon Rachman, writing in the *Financial Times* in September 2011, noted that the gloom in the markets was worrying because there was "little sign of effective international cooperation or global leadership to deal with mounting concern about the international economy".

The inadequate response is partly due to the complex, systemic nature of the challenges. Neither governments nor the relevant international institutions are set up to monitor or assess the risk of systemic contagion, or to deal with systemic failure.

The global effects of the financial crisis are only an example of a potentially much wider problem of complex systems whose workings are not fully understood. Many scientists believe that population pressures, urbanisation and rising consumption and waste are pushing planetary boundaries to breaking point with uncertain, but potentially catastrophic, consequences. The most familiar example is climate change, which poses

huge environmental, social and economic risks to communities in different parts of the world, and potentially to humankind.

Other systemic crises are entirely possible. These include cyber attacks on the Internet that could cripple financial markets, electricity supplies, transportation networks, and supply chains; and the outbreak of a pandemic that could disrupt travel, tourism, trade, financial markets, and domestic and regional order.

Economic globalisation has outpaced political globalisation. The pillars of the international political order suffer from democratic deficiencies as their structure, which dates from the decade after World War II, reflects the interests of the advanced industrial countries that were victorious in 1945. In the International Monetary Fund (IMF), votes are allocated on the basis of economic power that no longer reflects the current economic standing of many countries. In addition, only central bank governors and finance ministers have a say, even though IMF policies have great implications for education, health, employment, growth, and the environment.[6]

Both national and international institutions need to be overhauled. While leading companies are forced to adopt management policies and styles that reflect their global reach, in most countries, the public sector is locked into outdated national models that do not allow it to deal with global challenges. Most domestic regulators have only a national remit, while international institutions have not adapted to the pace of change. Treaties and conventions take too long to negotiate, are often not ratified, and when they are, are rarely enforced. Big intergovernmental conferences are often too ritualistic, long on declarations and short on implementation.[7]

Bodies such as the Group of Eight (G8), G20 and Group of 77 (G77), have severe limitations. The original model of the Group of Seven (G7) was exclusive and did not represent the new world economic order, but extending it has resulted in unwieldy gatherings where form trumps substance. The new institutions have been set up without an overarching structure, resulting in competition and an unbalanced distribution of responsibilities and power.

Global institutions such as the United Nations (UN), the World Bank, the IMF and the World Trade Organisation are rarely able to take central roles in global problem-solving. The inequitable distribution of power in these organisations has made them hostage to power blocs and particular economic policies.

A review of the governance structures of many of these bodies is long overdue. The last four years have underscored the need for urgent action. Developing countries, including South Africa, are in a strong position to advance a reform agenda that had impetus even

[6] Stiglitz J (2010). *Freefall: America, the markets and the sinking of the world economy.* New York: W.W. Norton & Company.
[7] Rischard JF (2002). *High Noon: 20 Global Problems, 20 Years to Solve Them*. Basic Books: Perseus Books Group.

before the financial crisis. These countries need to push for more balanced representation and institutions that are attuned to the challenges of social and economic justice, particularly in developing countries.

The need for reform has long been recognised and the economic and financial crisis has brought some changes to representation and voting rights on the IMF board. But a more fundamental redesign is needed.

Over the next two decades, both governments and companies will need to adapt continuously as they address the risks and opportunities of the evolving global environment. National governments, especially those whose societies are characterised by high levels of inequality such as South Africa, will need to introduce more equitable economic policies to hold on to domestic legitimacy and adjust to a changing and increasingly complex world.

The scales are tipping

Economic policies under review

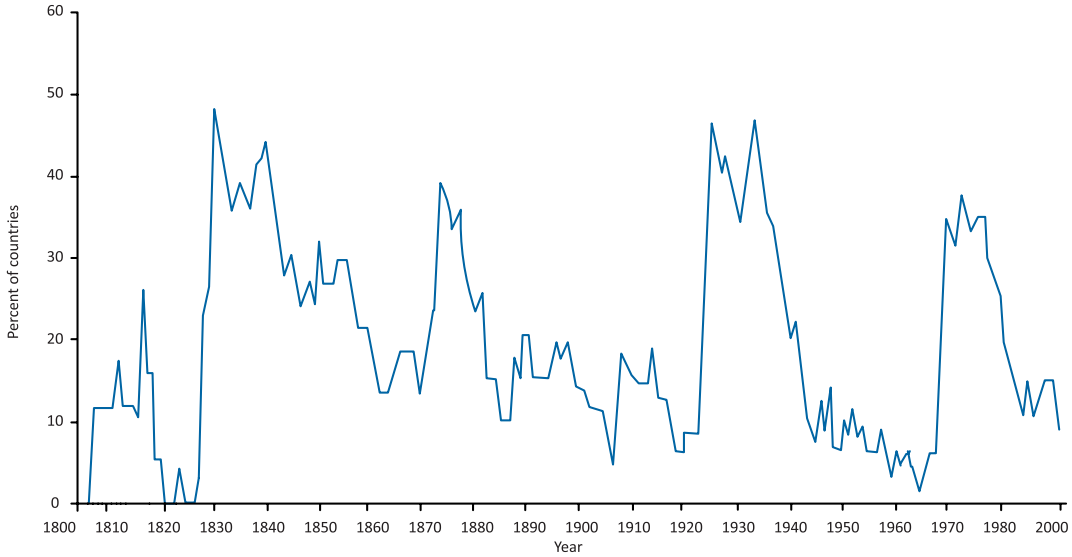
Laissez faire free-market doctrines have dominated global economic policy-making for 25 years. The era of rapid economic globalisation, against the backdrop of the collapse of the Berlin Wall in 1989, led many to believe in the triumph of a particular perspective or model, particularly in the relationship between the state, the market and the citizen. A "unipolar" view dominated by western (and particularly Anglo-Saxon) economic and political norms became dominant. But the global economic crisis has prompted a rethink.

The crisis has increased the focus on the role of government, and in particular on government failure to regulate and prevent systemic collapse.

The "markets are efficient" mindset, which arose in the United States and Britain in the early 1980s and spread rapidly worldwide over the next 25 years, asserted that freer markets are always better. Both traditional economic theory and experience show this is not correct.

Specific conditions make it possible for markets to work efficiently and market failure is common when these conditions are not satisfied. In a 2008 review of eight centuries of financial crises, former IMF chief economist Ken Rogoff and Carmen Reinhart showed that "serial default is a nearly universal phenomenon as countries struggle to transform themselves from emerging markets to advanced economies… [and that] crises frequently emanate from the financial centres with transmission through interest rate shocks and commodity price collapses. Thus, the recent US financial crisis is hardly unique". The graph below highlights the experience of the past 200 years.

Sovereign external debt: 1800 – 2006 – Percent of countries in default or restructuring



Source: IMF, 2008

The crisis has encouraged the search for sound perspectives on economic policy.

The most influential critics are not seeking to replace mainstream economics or eliminate the benefits of globalisation. They focus on the failure of economists and governments to apply much of what used to be standard knowledge and practice about market failures in the last few decades. Rather than a policy lurch to another polar position, the call is for efficient market policies that also embrace principles of social justice, empowerment, and a balance between rights and responsibilities.

A common theme emerging in the debate is the need for a more nuanced balance between the roles of governments, the private sector and the market to achieve dynamic economic growth. Successful countries such as China and South Korea illustrate this.[8]

Credible and sustainable national policies should be based on the specific situation of each country, taking the global context into account. Economic policy-makers must recognise that institutional failures are endemic in the working of markets, and that it is not feasible to eliminate them entirely.[9] Policy-makers should anticipate the risk of failure, and both encourage transparent markets that offer an appropriate balance between risk and return, and be alert to distortions that are likely to lead to market failure.

[8] Lin JY (2011). From flying geese to leading dragons. New Opportunities and Strategies for Structural Transformation in Developing Countries. WIDER annual lecture. Mozambique.
[9] Rodrik D (2009). *One economics, many recipients: Has (neo-classical) economics failed us?* Sir Arthur Lewis Distinguished Lecture, 26 March 2009.

The refusal to abdicate government's responsibilities to the working of the financial markets protected countries such as Germany, Canada, Australia, India, Brazil, Turkey and South Africa from the worst effects of the financial crisis of 2007/08. China's unique blend of market economics and state direction steered it through the turbulent waters, albeit with high inflation and rising social discontent.

Balance of economic activity

The crisis is expected to lead to a new global configuration, with leading states in the developing world moving centre stage to help shape it. Ideas, not only resources, will influence the outcome.

The world in 2050

The top 30 in 2050

	Order in 2050 by size	Size of economy in 2050 (Bn, Constant 2000 USD)	Rank change between now and 2050	Income per capita (Constant 2000 USD) 2050	2010	Population (Mn)
1	China	24617	2	17372	2396	1417
2	US	22270	-1	55134	36354	404
3	India	8165	5	5060	790	1614
4	Japan	6429	-2	63244	39435	102
5	Germany	3714	-1	52683	25083	71
6	UK	3576	-1	49412	27646	72
7	Brazil	2960	2	13547	4711	219
8	Mexico	2810	5	21793	6217	129
9	France	2750	-3	40643	23881	68
10	Canada	2287	0	51485	26335	44
11	Italy	2194	-4	38445	18703	57
12	Turkey	2149	6	22063	5088	97
13	S. Korea	2056	-2	46657	16463	44
14	Spain	1954	-2	38111	15699	51
15	Russia	1878	2	16174	2934	116
16	Indonesia	1502	5	5215	1178	288
17	Australia	1480	-3	51523	26244	29
18	Argentina	1477	-2	29001	10517	51
19	Egypt	1165	16	8996	3002	116
20	Malaysia	1160	17	29247	5224	40
21	Saudi Arabia	1128	2	25845	9833	44
22	Thailand	856	7	11674	2744	73
23	Netherlands	798	-8	45839	26376	17
24	Poland	786	0	24547	6563	32
25	Iran	732	9	7547	2138	97
26	Colombia	725	13	11530	3052	63
27	Switzerland	711	-7	83559	38739	9
28	Hong Kong	657	-3	76153	35203	9
29	Venezuela	558	7	13268	5438	42
30	South Africa	529	-2	9308	3710	57

Source: HSBC, 2011

Over the next two decades, several emerging market economies will evolve from peripheral players into powerful economic forces. The emerging economies will power global growth as they shed their role as suppliers of low-cost goods and services and become providers of capital, talent and innovation.

China's 12th five-year plan tabled earlier this year showed a striking change in its growth strategy – from a focus on investment-driven, high-energy and low-cost manufacturing, to low-carbon industries, new energy, next generation information technology and high-end manufacturing. China's goal is for these industries to achieve a 15 percent share of the economy by 2020, compared with 3 percent now.[10] If it succeeds, this change of direction will have profound effects on the rest of the world.

Vibrant growth is also expected in India and South East Asia, as well as Eastern Europe, Latin America, parts of the Middle East, North Africa and sub-Saharan Africa.

By some forecasts, China will overtake the United States as the largest economy by 2025; others put the date at 2035, or even 2050. The global bank and financial services company HSBC predicts that by 2050, the United States will be the second largest economy, followed by India, Japan and Germany. Brazil and Mexico will be seventh and eighth, South Africa will be 30th. Small-population and aging countries in Europe will be hard hit – Switzerland, the Netherlands, Sweden, Belgium, Austria, Norway and Denmark are expected to drop out of the top 30.[11] The forecast is not encouraging for South Africa, which ranked 28th in the world in 2010.[12]

While the Euro area, Japan, Britain and the United States will still play a major role in supporting growth in the decades ahead, global growth, demand and aggregate wealth are shifting toward the emerging economies. The World Bank suggests that by 2025, six major emerging economies – Brazil, China, India, Indonesia, South Korea and Russia – will account for more than half of all global growth, growing, on average, by 4.7 percent a year to 2025, by which time their share of global GDP will have grown from 36 percent to 45 percent. The advanced economies will grow by 2.3 percent over the same period. Companies from emerging markets are a rising force in globalisation. As economic power shifts, the emerging market economies are helping to drive growth in lower income countries through cross-border investment and trade.[13]

Trading patterns are starting to reflect this. From 1990 to 2008, Asia's share of Africa's trade doubled to 28 percent, while Western Europe's portion shrank from 51 percent to 28 percent. Europe accounts for 30 percent of Africa's exports and China 17 percent – although Europe will continue to be South Africa's biggest trading partner for some years to come, the gap with China is expected to narrow significantly.[14]

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[10] Stern N (2011). *How should we think about the economics of climate change?* London School of Economics, Leontief Prize Lecture, March 2011.

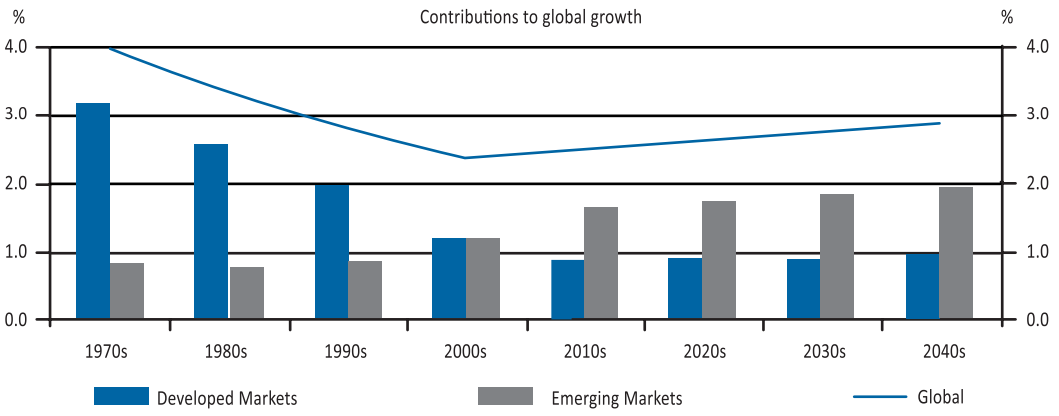
[11] HSBC Global Research (2011). *The World in 2050: quantifying the shift in the global economy.*

[12] World Bank (2010). *Development and Climate Change*. World Development Report. Washington DC: World Bank.

[13] World Bank (2011). *Securing the Present, Shaping the future.* East Asia and Pacific Economic Update, Vol 1. Washington DC: World Bank.

[14] McKinsey (2010). Africa's path to growth. *McKinsey Quarterly.*

Emerging markets and global growth



Source: HSBC, 2011

A number of drivers are behind this economic regeneration, including better education and economic management, and greater openness to international trade, but demographic shifts and urbanisation, stand out as key to improved economic performance.

Declining birth rates over the past decade are changing the demographic profile of most emerging economies, leading to lower dependency ratios – every working person will have fewer very old or very young to support. Partly as a result, 70 million people (mostly in emerging economies) are expected to cross the threshold to middle-class status with annual earnings of between US$6 000 and US$30 000 each year.

The second driver is the largest urban migration in history. Agricultural workers are leaving the land, where they were often engaged only in subsistence farming, for urban jobs. This is leading the development of new mega- and mid-sized cities. This year, for the first time, more than half of China's 1.34 billion people were classified as urban residents.

The ability to plan for these mass migrations will bring enormous pressures. Large slums are already a feature of the world's largest developing world cities. Traditional ideas of slum clearance have been challenged by radical new thinking, driven by the sheer scale of urbanisation and its economic consequences. Architecture for Humanity, which has upgraded slums in Brazil, Kenya and South Africa, argues that modern city design should tolerate slums by learning from them.

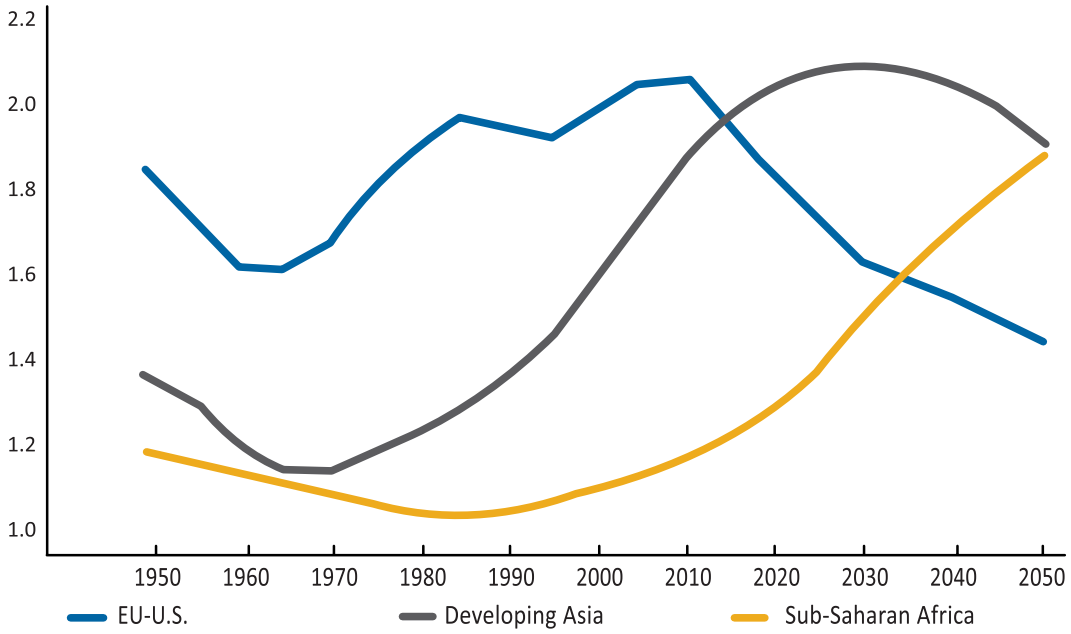
The effects of urbanisation include growth in the wage-earning class (where jobs are available); higher demand for education, consumer goods, health care and transport; a new business class of entrepreneurs and managers; and gains in output per worker. As China and India become manufacturing and service powerhouses, labour productivity is growing at more than five times the rate of most western countries.

Emerging markets are becoming key areas of grow th in consumption, production and, in some cases, innovation. The policies and strategies of all countries and companies will need to address the challenge of a world driven by low-cost, high-growth companies in many different parts of the world. Governments will need to create enabling environments for their business sectors and develop strategic policy frameworks that exploit this reality.

Companies will have to develop new business models and products that match the needs and wallets of the growing emerging market urban populations. Levels of income per capita will still be relatively low – these consumers will wield, on average, just 15 percent of the spending power, in real dollars, of their developed-world counterparts. China's income per capita today is just 6 percent of that in the United States. Even with a sevenfold increase by 2050, it will grow to only 32 percent. In India, income per capita is just 2 percent of that in the United States. To serve these customers, companies will need to focus on innovation and seed new business models.

Demographic dividend in sub-Saharan Africa: 1950 – 2050

dependency ratio: working-age population, 16-64, to the rest of the population.



Source: World Bank, 2011

The expected global economic rebalancing depends on the ability of emerging market countries to maintain their current growth trends. This is not inevitable. Continued economic dynamism will depend largely on policy, steering economies away from low-productivity activities, like subsistence agriculture and informal trading, to sectors that lift the country up the sophistication ladder.

This means wider and deeper investment in education and skills training and enabling employment on high-value jobs. This is essential if developing economies are to reap the benefits of their favourable demographic make-up.

The possibility of China's growth slowing because of excessive investment, credit supply, high wages, land prices and even social unrest cannot be ruled out. However, successful implementation of its 12th five-year plan, aimed at shifting the economy to higher-value manufacturing outputs, increased domestic consumption and less reliance on exports and investment, could mean it will avoid this scenario.

Africa

Africa is the second most populous continent after Asia. Its current population of nearly 1 billion is expected to rise to 2.2 billion over the next 40 years. Between 2000 and 2010, GDP grew at 5.6 percent a year, topping 7 percent in 2002, 2004 and 2007. [15]

The global economic crisis has affected the continent, particularly resource-rich countries. Growth in sub-Saharan Africa slowed to 2.8 percent in 2009, as international banks cut back on letters of credit to exporters, demand for exports shrank and tourism and remittances declined, but recovered to 5.4 percent in 2010, largely due to higher demand from China for commodities. [16] But the future growth path is uncertain.

Africa is a highly diverse continent. The GDP of the 10 largest countries makes up more than 70 percent of the continent's total, and 34 of the world's 48 poorest countries are African. The average annual income south of the Sahara, excluding South Africa, is only US$342, and more than 40 percent of the people in sub-Saharan Africa live on less than US$1 a day. [17]

Africa's poor economic performance began to improve in the mid-1990s. Macroeconomic reforms brought down inflation and opened economies to international trade. Led by the two largest economies, South Africa and Nigeria, many countries built prudent fiscal positions after 1995. Political and macroeconomic stability and microeconomic reforms consolidated the growth path.

Foreign debt as a percentage of GDP and debt service obligations as a percentage of export revenues have both declined dramatically to levels comparable to those of other regions, and sovereign credit ratings in some countries have a positive outlook. More countries are now seen as "frontier emerging economies", with relatively developed financial markets, including Botswana, Cape Verde, Ghana, Kenya, Mauritius, Mozambique, Namibia, Nigeria, Seychelles, South Africa, Tanzania, Uganda and Zambia.

[15] International Monetary Fund (2011). IMF Data Mapper. www.imf.org/external/datamapper.
[16] ibid.
[17] McKinsey (2010). What's driving Africa's growth. *McKinsey quarterly*.

Foreign direct investment has increased dramatically, from US$9 billion in 2000 to US$62 billion in 2008. Total foreign capital flows into Africa rose from US$15 billion in 2000 to a peak of US$87 billion in 2007. Relative to GDP, that is almost as large as the flows into China. The rate of return on foreign investment in Africa is higher than in any other developing region.

In part, this is due to improving the business regulatory environment. A study of publicly traded companies operating in Africa between 2002 and 2007, mostly in manufacturing and services, found that average return on capital was about two-thirds higher than that of comparable companies in China, India, Indonesia and Vietnam. Similar trends were found in foreign direct investment, with American companies achieving a higher return on African investments than on those in other regions.

Interest in Africa's rich mineral resources accounts for much inward investment, but higher investment in infrastructure and better education have laid the foundation for other sectors as well. McKinsey's analysis indicates that all sectors contributed to the growth surge, including resources, finance, retail, agriculture, transportation and telecommunications. Natural resources contributed only 24 percent of GDP growth between 2000 and 2008.[18]

Education needs more attention. Average years of schooling are catching up with those of the rest of the world, after having increased more than fivefold since 1960. Although primary school enrolment rates across sub-Saharan Africa have doubled in the last generation, completion rates are still under 70 percent, compared to over 90 percent for North Africa and East Asia. Education and preparation for employment are both poor in quality.

Opportunities

Minerals underpin the economic strength of many countries. Africa holds 95 percent of the world's platinum group metals reserves, 90 percent of chromite ore reserves, 85 percent of phosphate rock reserves and more than half of the world's cobalt.

There may be a gap between the actual endowments and what has been identified and exploited. Substantial reserves could yet be found.[19] There might be a considerable increase in Africa's commodity exports, changing the economic map as new resource-rich countries emerge, and prolonging and deepening growth.

Most African countries have not used their commodity wealth to reduce poverty. The proceeds of oil or minerals extraction have largely been consumed, rather than invested in people and infrastructure. Ugly and costly political contest for control of revenues is still a serious problem in parts of the continent.

[18] ibid.
[19] Collier P and Warnholz J (2009). *Now is the time to invest in Africa.* Harvard Business Review.

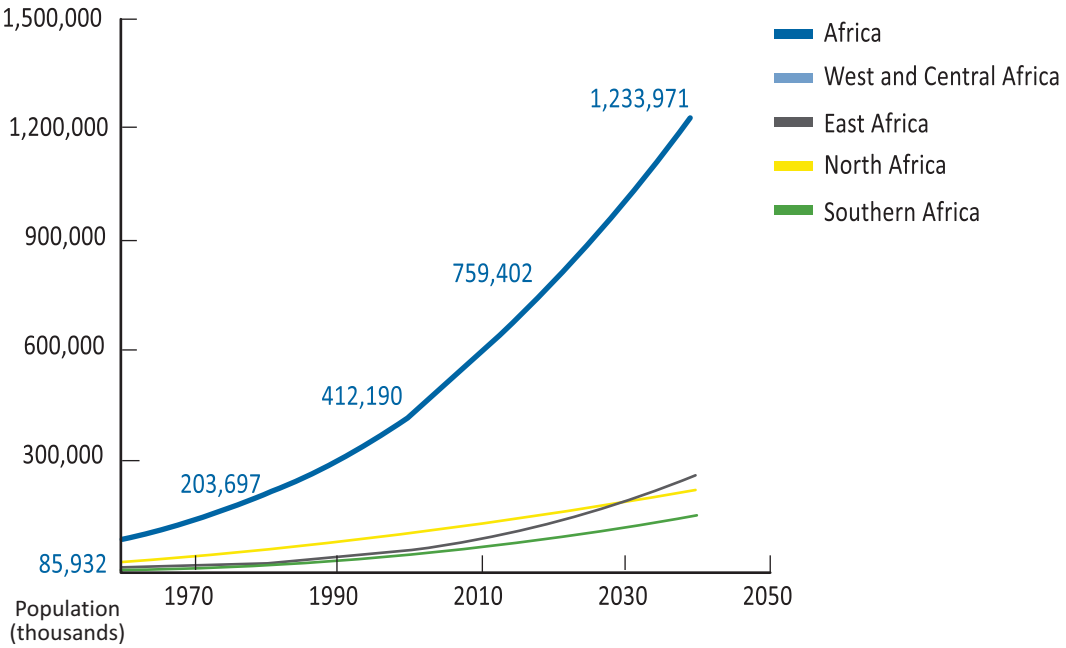
Over the next 20 years, other endowments will come to the fore, including a demographic profile that will potentially boost both productivity and consumption; infrastructure deficits that present investme nt opportunities; and large-scale agricultural and agri-processing development, both for domestic consumption and for export.

Africa has the world's youngest population, and in less than 15 years it will be home to one-quarter of the world's population under 25 years of age. Africa will benefit from a large, mostly youthful, working-age population that will have progressively fewer dependants to support as fertility rates fall further.

This generation of young people can greatly expand the continent's productive workforce, but without education, skills and programmes to promote job creation and entrepreneurship, it also poses a major risk. About 54 percent of Africa's youth are unemployed today, and nearly three-quarters live on less than US$2 a day. Unless this changes, the potential for political instability is great. Recent developments in North Africa have shown the consequences when young people do not find work and feel deprived of dignity.[20]

The rapid growth in the working-age population will be matched by a dramatic rise in the number of people living in cities. By 2030, over 50 percent of Africa's population will live in cities, many of which will be megacities.

African urban population



Source: UN Habitat, 2008[21]

[20] Brenthurst Foundation (2011). *Putting Young Africans to work: Addressing Africa's youth unemployment crisis*. Discussion Paper. Johannesburg, South Africa: Brenthurst Foundation.
[21] UN Habitat (2008). *The state of African cities*.

Massive urbanisation will lead to a fundamental shift in the economic profiles of many African countries. Although 40 percent of Africa is urbanised today, agriculture accounts for 70 percent of employment and 15 percent of GDP. This balance will change, bringing the continent more in line with other developing economies. In Brazil, agricultural output makes up 7 percent of GDP and 12 percent in China. In the G7 countries, agricultural production is now less than 3 percent of all goods produced.

Urbanisation not only reduces the number of people engaged in small-scale agriculture; it also facilitates economic diversification. The combined effects of lower dependency ratios and urbanisation ought to have a further significant impact on the productivity of the labour force. Productivity levels have been growing since 2000 at an average of 2.7 percent a year.

Africa will soon be the last remaining major low-wage region in the world. Per capita GDP in China is already above the global average. China is moving up the industrial ladder, shedding enough manufacturing jobs to double manufacturing employment in other low-income, especially African, countries.

In addition, Africa's extensive coastline and proximity to European and North American markets, puts Africa-based firms in a strong position to displace Asian competitors in labour-intensive manufacturing.

Employment and urbanisation will drive a huge increase in consumer spending. Over 80 million households in Africa now earn at least the equivalent of US$5 000 annually – an increase of 80 percent in eight years. Between 2005 and 2008, consumer spending in Africa increased at a compound annual rate of 16 percent, well over twice the GDP growth rate. In all but two countries, GDP per capita increased. Many consumers have moved from the destitute level of income (less than US$1 000 a year) to the basic-needs (US$1 000 to US$5 000) or middle-income (up to US$25 000) levels.

Mirroring the pattern of urbanisation elsewhere in the developing world, the number of households with discretionary income is likely to rise by 50 percent over the next decade, to 128 million. McKinsey suggests that sub-Saharan Africa's top 18 cities could have a combined spending power of US$1.3 trillion by 2030.[22]

This has particular implications for banks, telecommunications companies and manufacturers of fast-moving goods. McKinsey projects that four groups of industries – consumer-facing industries, agriculture, resources, and infrastructure – could collectively generate US$2.6 trillion in revenue each year by 2020, US$1 trillion more than in 2010.[23]

[22] McKinsey (2010). *Lions on the move: The progress and potential of African economies*. McKinsey Global Institute.
[23] ibid.

The explosion in consumer demand is particularly evident in mobile telephony. In the last 10 years, the number of mobile subscriptions rose from 15 million to 500 million, and is expected to increase to close to 800 million by 2015. Over the next five years, east and central Africa will have the highest mobile subscription growth rates in the world. Nigeria is already the world's tenth largest mobile market.

Internet use has also risen to about 120 million users in Africa. The World Bank estimates that the industry attracted US$56 billion in investment in the decade to 2008, despite challenging market conditions, including high connectivity costs, usage charges and poor electricity supply. According to the International Telecommunications Union, the top five most expensive places in the world for fixed line broadband in 2010 were all in sub-Saharan Africa.

New fibre-optic cables can reduce costs and extend connectivity. A range of mostly privately funded cables on Africa's east and west coasts will allow dramatically better connectivity and will lower costs for users if intra-regional networks are built. Already, Africa's international bandwidth capacity has increased 120 times to over 10 terabytes per second since 2008.

The continent's massive infrastructure deficit, though debilitating, also presents great opportunities. Africa has the weakest infrastructure in the world – average electricity costs of US$0.18 per kilowatt-hour are about double that of other developing countries. The largest infrastructure gaps are in energy, with citizens in 30 of the 47 countries in sub-Saharan Africa facing regular power shortages and power interruptions. Power outages are responsible for a loss of between 1 percent and 6 percent of potential GDP every year. Road density is lower in Africa than any other developing region, with 152 kilometres of road per 1 000 square kilometres of land area. Bridging the infrastructure gap will cost about US$93 billion a year, with about 40 percent in the power sector. [24]

Poor infrastructure and tough market conditions force companies to develop business models and products for price-sensitive consumers. Innovation driven by necessity delivers solutions that may provide useful springboards into other markets. The pioneering work in mobile money transfers is one of the notable innovations in response to poor infrastructure. Safaricom's M-Pesa system has led this sector with a model that combines using small traders and mobile technology. By 2010, 14 million Kenyans transferred US$7 billion through M-Pesa.

The breakthroughs in cell phone banking have not yet extended to easing money flows in and out of Africa, or between countries. The cost of sending remittances to sub-Saharan Africa averaged almost 12 percent of a US$200 transaction, compared with less

[24] ibid.

than 8 percent for most other developing regions. The cost of cross-border remittances within Africa, if permitted at all, tends to be even higher. [25]

Remittance flows into Africa, the largest source of net foreign inflows after foreign direct investment, have quadrupled in the last 20 years, reaching US$21.5 billion in 2010 in sub-Saharan Africa in 2010 (World Bank, 2011). These flows underscore the size and importance of migration both from and within Africa. About 30 million Africans, or 3 percent of the population, have migrated internationally, including within Africa. [26]

Today, 500 million people in sub-Saharan Africa do not have access to electricity, which is a prerequisite for social development, the ability to harness technological opportunity and enable environmental sustainability. Renewable energy sources will become increasingly important. Sub-Saharan Africa is particularly well positioned to develop solar and hydro energy, and to produce bio-fuels. The Grand Inga project could provide sufficient electricity for Africa and allow it to export energy through interconnection links to southern Europe. This would require three major African interconnection projects: the Northern Highway (between Inga and Egypt), the Southern Highway (between Inga and South Africa) and the Western Highway (between Inga and Nigeria).

Angola, Mozambique and Tanzania, among other countries, have the potential to produce ethanol profitably from sugar cane on land that is not used for food crops.

Africa also has the potential to reduce emissions by protecting its forests. The UN's programme to reduce emissions from deforestation and forest degradation is an attempt to create financial value for the carbon stored in forests by offering incentives for the sustainable management of woodlands.

The Greater Inga hydroelectric project has been under discussion for over four decades, with the first studies undertaken in the 1960s. The first phase involved the construction of three power stations in the Nkokolo valley. The project includes Inga I (351 megawatts [MW]), which was commissioned in 1972, Inga II (1 424 MW), which was commissioned in 1982, and Inga III (about 3 500 MW). High voltage lines transmit the power from Inga I and II to Zambia, Zimbabwe, South Africa and the Democratic Republic of Congo (Brazzaville). The Inga III project was to be developed by the Western Power Corridor, a joint venture of the national power firms of the Democratic Republic of Congo, Angola, Namibia, Botswana and South Africa, but progress has stalled. The second phase addressed the development of the Grand Inga power station with a total capacity of 39 000 MW, to be equipped progressively with 52 power generators of 750 MW each.

[25] World Bank (2011). Securing the Present, Shaping the future. East Asia and Pacific Economic Update, Vol 1. Washington DC: World Bank.
[26] ibid.

Agriculture is another area of potential growth. An African "green revolution" could raise agricultural production to US$880 billion per year by 2030. Agriculture, Africa's largest economic sector, is highly concentrated – Egypt and Nigeria alone account for one-third of total agricultural output and the top 10 countries generate 75 percent. Irrigation is critical to agricultural output and underlies these success stories.

Africa's agricultural potential is much larger than its current output. From being a net food exporter in the early 1960s, the continent is now a net importer. While more than one-quarter of the world's arable land is in Africa, it generates only 10 percent of global agricultural output. Over 60 percent of the world's unexploited cropland is in sub-Saharan Africa, compared with 31 percent in Latin America. However, poorly regulated access to agricultural land on the continent by foreign private and state entities can undermine sovereignty and domestic food security, and encourage environmental degradation.

Demand for food will grow by between 30 percent and 50 percent over the next two decades as the world population grows from 7 billion to 8 billion by 2030 (World Economic Forum, 2011). Apart from growth in numbers, hundreds of millions will be wealthier, and demanding a more varied, high-quality diet. Competition for land, water and energy will intensify, even as the effects of climate change will become increasingly apparent.

Hunger remains widespread. More than 900 million people lack access to sufficient carbohydrates, fats and protein, while 1 billion are thought to suffer from "hidden hunger", because vitamins and minerals are missing from their diet. In contrast, 1 billion people are eating substantially too much, spawning a new public health epidemic involving chronic conditions, such as type 2 diabetes and cardiovascular disease. The World Economic Forum's Global Risk network estimates that non-communicable – or chronic – disease (heart disease, stroke, diabetes, some chronic lung conditions and preventable cancers) will increase by 27 percent in Africa, 25 percent in the Middle East and 21 percent in Asia and Pacific in the next decade, if not addressed effectively. [27]

Given its vast untapped agricultural potential, Africa is well positioned to address some of the world's food challenges, especially in the well watered area between the Tropics of Cancer and Capricorn. Attention is needed to address the following: highly fragmented production – 85 percent of Africa's farms occupy less than two hectares (in Brazil, Germany and the United States, only 11 percent or less work on this scale); finance, high-quality seeds, fertiliser, and water; underinvestment, with annual additional investment of US$50 billion required in sub-Saharan Africa alone; and a lack of enabling conditions, such as transport and other kinds of infrastructure, stable business and economic conditions, and trained business and scientific talent.

[27] World Economic Forum (2011). *Global Risks 2011 Sixth Edition.* World Economic Forum, Geneva.

Climate change has the potential to exacerbate these factors and worsen environmental damage, increasing the scarcity and pollution of water, and accelerating soil erosion and degradation. Current climate models indicate that more water will be available for agriculture in Asia and North America, but progressively less in sub-Saharan Africa, Latin America and the Caribbean, compounding present challenges and demanding innovative responses.

African countries have committed themselves to increasing agriculture's share of their budgets to 10 percent, donors are making significantly increased commitments, and private-sector players and investment funds are pouring money into the area.

The Alliance for a Green Revolution in Africa, for example, is working to achieve food security for Africa by promoting sustainable agricultural growth through smallholder farmers. Recognising that smallholders – mostly women – produce most of Africa's food today, with minimal resources and little government support, the alliance supports smallholders with good seeds and better soils, access to markets, storage and transport, as well as finance, while seeking to improve agricultural policies.

Africa must to do more to hold onto its skilled workers. Skilled migration rates are particularly high. In a survey of the top five students graduating from the top 13 high schools in Ghana between 1976 and 2004, three-quarters had emigrated at some point between secondary school and age 35.[28] The UN Economic Commission for Africa and the International Organisation for Migration estimates that 27 000 Africans left the continent for industrialised countries between 1960 and 1975. During the following decade, the number rose to 40 000. Since 1990, they estimate, at least 20 000 have left the continent each year. In 2000, one out of every eight Africans with a university education lived in a country in the Organisation for Economic Cooperation and Development, the highest rate among developing regions, except the Caribbean, Central America and Mexico.[29]

Africa's fortunes will depend largely on how educated and skilled Africans view personal opportunities, and domestic and foreign investors regard returns on investments. Both decisions are strongly influenced by government policies. Less conflict, more transparent regulatory and legal systems, greater openness in trade, and higher investment in infrastructure enabled the stronger economic growth of African economies in the first decade of this century. Future success depends on these trends being strengthened and accelerated. All successful countries are raising their game continuously and the recession is forcing companies to operate more efficiently, cost effectively and creatively.

[28] International Bank for Reconstruction and Development/World Bank (2011). *Leveraging Migration for Africa: Remittances, Skills, and Investments.*

[29] International Organisation for Migration (2010). *World Migration Report: The future of migration: building capacities for change.* International Organisation for Migration.

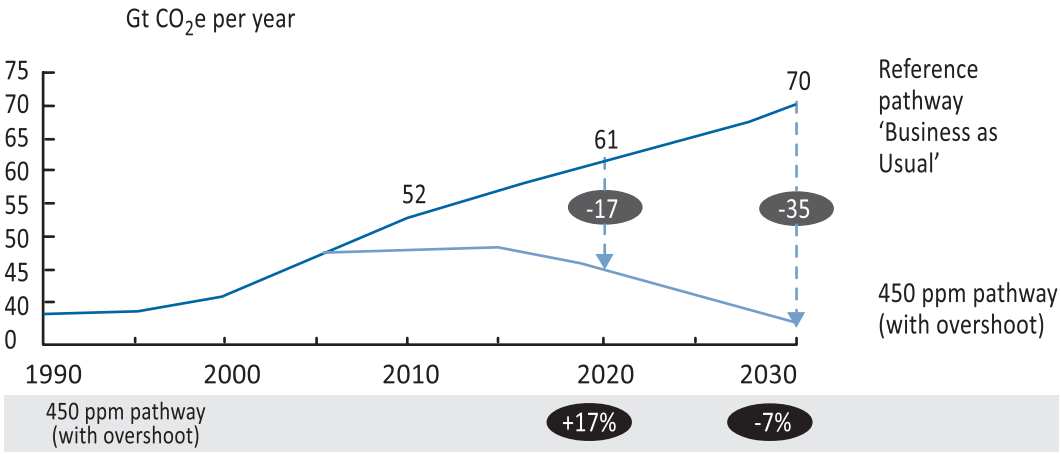
South Africa needs to adjust its focus in light of the changing global economic landscape. This is particularly urgent in trade and industrial policy. South Africa needs to redirect its attention to pursuing export opportunities in the economic power-houses of the future, many of them emerging economies. These opportunities can only be exploited if industrial policy supports sectors and industries that can best produce the goods and services to meet the needs of the new markets South Africa wishes to serve.

The environment

Market and policy failures have resulted in the global economy entering a period of "ecological deficit", as natural capital (ground water, marine life, terrestrial biodiversity, crop land and grazing) is being degraded, destroyed, or depleted faster than it can be replenished. Waste and carbon-equivalent emissions per capita are climbing faster every year in an ecosystem with finite limits.

Human activity is warming the planet. For the past millennium, the earth's average temperature varied within a range of less than 0.7 degrees Celsius (°C). For the past 150 years, there has been an increase of nearly 1°C. By the end of this century, the earth could be 5°C warmer than in the 19th century. To put this into perspective: the planet has not been 3°C warmer than 19th century levels for 3 million years, or 5°C warmer in the last 30 million years. The business-as-usual scenario shown below suggests a probability of about 50 percent of warming of 5°C, or more, in the first part of the 22nd century. Even 4°C would transform the relationships between humans and the planet. Hundreds of millions would have to move, increasing the possibility of severe global conflict sustained over a long period. To have a 50 percent chance of containing the increase to 2°C, greenhouse gas (GHG) emissions need to reduce to no more than 44 billion tonnes per year of carbon equivalents by 2020 and 35 billion tonnes by 2030. [30]

Carbon emissions per year, 1990-2030



Source: McKinsey[31]

[30] Stern N (2011). *How should we think about the economics of climate change?* London School of Economics, Leontief Prize Lecture, March 2011.
[31] McKinsey (2009). McKinsey Global GHG abatement cost curves V2.0.

The effects of the planet's warming are felt mostly through water – storms, floods and inundations, droughts and desertification, and rising sea levels. Experts on the Intergovernmental Panel on Climate Change warn of radical disruption and instability in a very short space of time. Unless emissions are checked soon, development will be reversed in many parts of the world, bringing major economic decline. The risks of delay are also not well understood. Because carbon and other GHGs accumulate in the atmosphere and persist for very long periods, it is quite likely that within five or 10 years, any realistic chance of containing warming to 2° C will have been missed.[32]

Climate change is inequitable. High-income countries, with one-sixth of the world's population, are responsible for nearly two-thirds of the GHGs in the atmosphere, but it is developing countries that will suffer most from the effects of extreme weather.[33]

Since the threat to the world's environment and the challenge of poverty alleviation are closely intertwined, the debate should focus on ensuring that environmental policies are not framed as a choice between growth and mitigating climate change. A low-carbon future is the only realistic option, as the world needs to cut emissions per unit of output by a factor of about eight in the next 40 years. In fact, the energy-industrial revolution now under way offers exciting opportunities. As shown by the agricultural and industrial revolutions, as well as the current information and communication revolution, innovation, creativity and growth can shape quite different futures, with huge rewards for pioneers of new models. The new energy architecture and its relationship to the built environment will spur innovation, and potentially attain energy security and a cleaner and safer environment, while retaining greater biodiversity.

The political challenge in the next two decades will be to develop policies and regulatory initiatives that prompt improved resource management and deliver substantial clean technology industries. This will include policies that help people cope with new risks during the transition, adapting land and water management to protect livelihoods and threatened natural environments, while transforming energy systems.

Although climate change is the chief ecological challenge, others closely linked also pose serious risks, such as water scarcity, pollution, food production and safety, and depleted fishing stocks. The earth and its atmosphere are an integrated ecosystem. Interaction between its different components is not well understood. As Johan Rockström of the Stockholm Resilience Centre has warned, humankind risks triggering dangerous inflection points if it transgresses planetary boundaries. Such points involve interactions between climate, fresh water, biogeochemical loading affecting the nitrogen and phosphorus cycles, the destruction of biodiversity, and ocean acidification.[34]

[32] Stern N (2011). *How should we think about the economics of climate change?* London School of Economics, Leontief Prize Lecture, March 2011.
[33] World Bank (2010). Development and Climate Change. World Development Report. Washington DC: World Bank.
[34] Rockström J et al (2009). 'Planetary Boundaries: Exploring the safe operating space for humanity in the Anthropocene' in *Nature*, 461: 472-475. Nature Publishing Group.

The amount of water being taken from the earth's underground reservoirs, or aquifers, which are essential for agriculture, is over 400 million tonnes a day more than is being replaced by rain. To quantify that another way: it would take 25 million water trucks to carry that amount of water – a convoy 30 times the earth's diameter. In addition, 90 percent of edible fish stocks have already been fished out, while bigger fishing fleets are being built.[35]

Industrialised food production contributes to climate change and the destruction of biodiversity. Damage to the environment includes soil loss due to erosion, loss of soil fertility, salination and other forms of degradation. In many places, water extraction for irrigation is exceeding rates of replenishment.

The threat of climate change has led scientists, academics and policy-makers to explore geoengineering – deliberate, large-scale intervention in natural systems to counteract global warming. Some vehemently oppose geoengineering research, fearing it will be an excuse to delay reducing emissions. Even supporters agree that new technology breakthroughs that can counter the effects, particularly of global warming, are no panacea. Instead, they carry potentially great risks, and should not be seen as an alternative to emission reductions.

Debates continue about managing ecological challenges. For most, the pace of change is dangerously slow and deeply worrying. A common understanding among countries is emerging that low-carbon growth is the desired end state. But this involves investment, change and collaboration. There is still little evidence that the international will is there to overcome differences and conclude an effective global agreement. Change is more likely to be bottom-up, triggered by perceptions at a national or local level, and aggregated progressively in regional and global agreements.

Science and technology

Developments in science and technology are fundamentally altering the way people live, connect, communicate and transact, with profound effects on economic development. Science and technology are key to development, because technological and scientific revolutions underpin economic advances, improvements in health systems, education and infrastructure.

The technology revolutions of the 21st century are emerging from entirely new sectors, based on microprocessors, telecommunications, biotechnology and nanotechnology. Products are transforming business practices across the economy, and the lives of all who have access to their effects.[36] The most remarkable breakthroughs will come from the interaction of insights and applications arising when these technologies meet.

[35] Martin J (2006). *The Meaning of the 21st Century: A Vital Blueprint for Ensuring our Future*. Eden Project Books.
[36] Hall P and Soskice D (eds) (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press.

Through breakthroughs in health services and education, these technologies have the power to better the lives of poor people in developing countries. Eradicating malaria, a scourge of Africa for centuries, is possible. Cures for other diseases endemic in developing countries are also possible, allowing people with debilitating conditions to live healthy and productive lives.

Access and application are critical. Science and technology are the differentiators between countries that are able to tackle poverty effectively by growing and developing their economies, and those that are not. The extent to which developing economies emerge as economic powerhouses depends on their ability to grasp and apply insights from science and technology and use them creatively. Innovation is the primary driver of technological growth and drives higher living standards. [37]

As an engine of growth, the potential of technology is huge, and still largely untapped in Africa. Less developed countries not only lack skilled labour and capital, but also use these less efficiently. Inputs account for less than half of the differences in per capita income across nations. The rest is due to the inability to adopt and adapt technologies to raise productivity. [38]

Computing, for example, through unlocking infrastructure backlogs and managing integrated supply chains, can transform economic performance by enabling affordable and accessible services in education and health. The combination of computers and the Internet, and mobile devices and the "cloud", has transformed human experience, empowering individuals through access to knowledge and markets, changing the relationship between citizens and those in authority, and allowing new communities to emerge in virtual worlds that span the globe.

According to the International Telecommunications Union, by the end of 2010 there were an estimated 5.3 billion mobile cellular subscriptions worldwide, including 940 million subscriptions to 3G services. About 90 percent of the world's population can access mobile networks, with three-quarters of mobile subscribers living in developing economies. Cellular technology has allowed Africa to leapfrog the age of fixed line telephony, bringing affordable access to millions of people.

However, the continued and equitable expansion of information and communication technology (ICT) depends on electricity. The real divide over the next 20 years will be between those who have access to reliable electricity to power these devices and those who do not.

Other technologies under development are interventions for cognitive enhancement, proton cancer therapy and genetic engineering. Revolutionary inventions include small underground nuclear power units called nuclear batteries that will be ultra-safe and maintenance-free; new types of photovoltaics that will make electricity from sunlight

[37] Rodrik D (2009). *One economics, many recipients: Has (neo-classical) economics failed us?* Sir Arthur Lewis Distinguished Lecture, 26 March 2009.
[38] Canuto O and Giugale M (eds) (2010). *The Day after Tomorrow*. Washington DC: World Bank.

cheaper than that from coal; and myriad nanotechnologies, some of which lower the cost and increase the reliability of many products – even in the poorest areas of the developing world.

Managing technological revolutions poses challenges. Certain innovations and discoveries will raise fraught bio-ethical issues, as genetic modification of food crops and cloning of human embryos have already done. There is a risk that their cost, particularly in the early stages of development, will worsen the present inequality by limiting access to wealthy individuals. This already happens in health care in certain G7 countries, where the demand for very high-cost diagnostic equipment and surgical interventions enabling longevity and better quality of life for older wealthy people overstretches public health care budgets, and lowers service quality in poor neighbourhoods. Finally, resource-intensive technologies, focused on satisfying high consumption demand, like holidays abroad in coastal resorts, wilderness areas, or iconic cities, increase carbon emissions and environmental damage.

To promote technological advances, developing countries should invest in quality education for youth, continuous skills training for workers and managers, and should ensure that knowledge is shared as widely as possible across society.

In a world in which the Internet makes information ubiquitous, what counts is the ability to use knowledge intelligently. Knowledge is the systemically integrated information that allows a citizen, a worker, a manager, or a finance minister to act purposefully and intelligently in a complex and demanding world. The only form of investment that allows for increasing returns is in building the stocks and flows of knowledge that a country (or company) needs, and in encouraging new insights and techniques.

Adopting appropriate technologies leads directly to higher productivity, which is the key to growth. In societies that have large stocks and flows of knowledge, virtuous circles that encourage widespread creativity and technological innovation emerge naturally, and allow sustained growth over long periods. In societies with limited stocks of knowledge, bright and creative people feel stifled and emigrate as soon as they can, creating a vicious circle that traps those who remain in a more impoverished space. Such societies stay mired in poverty and dependency.

The investment climate is crucial, as are the right incentive structures, to guide the allocation of resources, and to encourage research and development.

Successful countries have grown their ability to innovate and learn by doing, by investing public funding to help finance research and development in critical areas. There are many examples – the space programme, defence and aerospace in the United States, integrated value chains, just-in-time manufacturing and total quality management in Japan, high-tech manufacturing in Singapore, and almost everything in China today. Everyone is involved – big and small, public and private, rich and poor. And these countries, and their leading companies, constantly benchmark, monitor, evaluate and adjust.

Conclusion

The 21st century presents humankind with exceptional opportunities and unprecedented risks. Systemic risks are a characteristic feature of the global order. The systemic linkages between individual risks can either amplify the impact of harmful events or modulate and disperse their effects.

Interconnected risks are shown by the links between food, fuel and water in the context of climate change; between illicit trade, organised crime, corruption and terrorism in the context of fragile states and cybercrime; and between global macroeconomic imbalances, wide disparities in the growth paths of developed and emerging economies; and weak systems of global governance. It is therefore greatly important what South Africa does to create or modify linkages, regulate and incentivise behaviour and adopt policies on global issues. We are not captives of irrational or irresistible extraneous forces.

The ability of governments to navigate these challenges will be determined by their insight into current circumstances, the foresight they develop about trends and possible futures, and the policies they adopt to fit their countries and economies to purpose.

The unintended consequences of globalisation increase the pressure on government leaders to adjust global institutions to new realities, and to promote a more equitable global order. It is far from clear, however, that the structural tension between the accountability of all governments to their electorates will easily be reconciled with the need to address the challenges of the global commons in a responsible way. Times of austerity tend to narrow the vision of most people, and make them less inclined to accommodate the needs of others. There are signs of this across the developed world.

The next decades will see a rebalancing of the world order, with the power of developed economies shrinking and that of developing economies rising. Africa will be able to play an important role in this transformation if its governments, business communities and civil society groupings cooperate to ensure that the successes of the last decade, in particular in reducing poverty, are maintained and widened.

Threats to the environment are real and growing, driving the world closer to a tipping point. Failure by world leaders to take urgent action to remedy current trends in carbon emissions will lead to dire consequences for future generations.

The benefits that are certain to flow from technological revolution in an increasingly connected and knowledge-intensive world will be seized by those countries and companies that are alive to the rapidly changing environment, and nimble enough to take advantage of the opportunities. Those that succeed will make substantial advances in reducing poverty and inequality.

Chapter 2

DEMOGRAPHIC TRENDS

Introduction

To achieve the twin objectives of reducing poverty and inequality, it is necessary to understand what the country's population looks like today – and what it will look like in the decades to come. Demography is a vital tool in helping South Africa meet the needs and expand the capabilities of the young, the middle-aged and the old; of women and men; and of rural and urban dwellers.

South Africa is a microcosm of international demographic shifts. The global population reached 7 billion in October 2011. Demographers predict that towards the end of this century, another 3 billion people will be added to the planet. Most will be born in developing countries, the majority in urban areas, and many in Africa and the Indian subcontinent. Variations in the growth rate will have significant geopolitical consequences. In 1950, for example, there were three Europeans for every sub-Saharan African, but by 2100 there are expected to be five Africans for every European.

While long-term changes in population profiles may be substantial, over the short to medium term demographic changes tend to be gradual. This gives policy-makers the opportunity to make optimal decisions: if policy interventions are informed by current and projected demographic profiles, then programmes to improve health, education and skills can be properly targeted, and services and infrastructure provided where needed. Ignorance of demographic profiles can result in a serious misallocation of resources and inappropriate interventions.

Responding to demographic shifts is becoming even more important in the face of growing pressure on food, energy and water supplies; greater population mobility; additional demands for jobs and social support; and the uncertain effects of climate change.

Developed and developing countries are at very different stages in their demographic transitions. Like most developing countries, South Africa has an urbanising and youthful population. For the next 20 years, policies should be viewed through a "youth lens", reflecting the rise of a largely youthful working-age population. After about 2026, however, there will be new challenges to address as the proportion of elderly citizens rises.

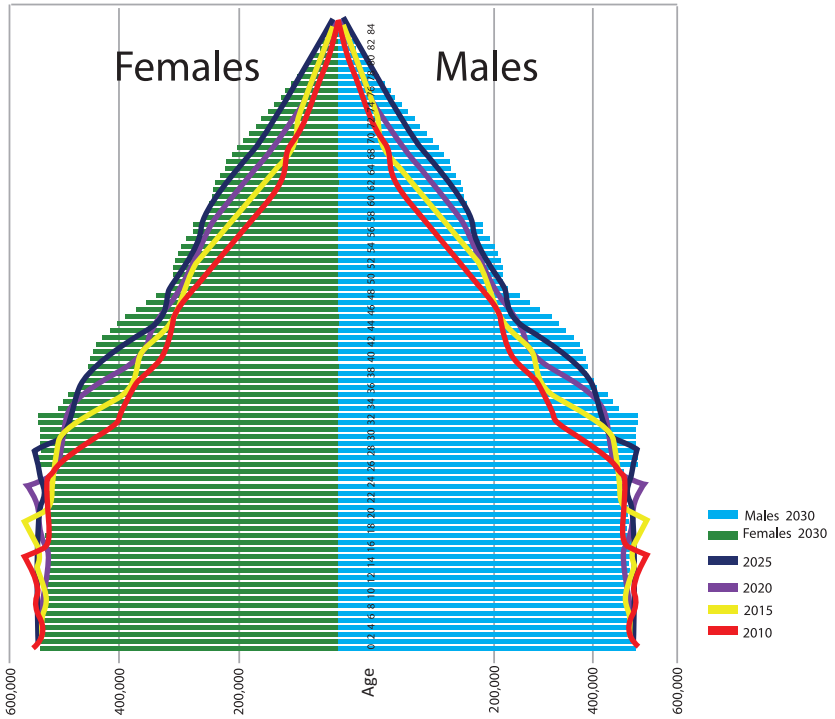
South Africa's transition is different in two key respects. First, fertility rates are much lower than elsewhere in Africa, and are comparable to middle-income countries in Latin

America and Asia. Second, South Africa has experienced a marked deterioration in the population growth rate due to a high level of HIV/AIDS-related mortality.

HIV/AIDS has drastically affected South Af rica's demographic profile, but forecasts suggest that the number of infections has begun to stabilise – a trend expected to continue. This does not mean that the effects of HIV/AIDS are fading. With more effective treatments that increase life expectancy, the number of people living with HIV will continue to grow, and public health systems must be capable of providing for their needs.

Dominant trends

Population pyramid – 2010 - 2030



Source: Actuarial Society of Southern Africa (ASSA), 2011[1]

South Africa's population growth rate is slowing, the birth rate is declining and life expectancy is increasing, though off a low base because of HIV/AIDS. There is a large youth and working-age population and proportionally, but not numerically, fewer very old and very young.

This demographic profile is similar to other middle-income territories such as Brazil, Mexico, India and the Maghreb states. But HIV/ AIDS has caused significant fluctuations in average life expectancy and a rise in mortality figures. Changes to the demographic profile of any country usually take decades to show, but HIV/AIDS has shortened these timeframes.

[1] ASSA (2011). Demographic scenarios. Unpublished report prepared for the National Planning Commission.

There are significant differences in the demographic profiles of South Africa's population groups across the three main demographic drivers: fertility, mortality and migration. Black South Africans generally live shorter lives and have a higher fertility rate than white South Africans, although the fertility rate among the black population is dropping sharply. Immigration is predominantly from other African countries, while emigration is mainly by white South Africans.

If the economy continues to expand at current rates and fertility continues to decline, the population will grow from 50.6 million to 58.5 million by 2030. If the economy contracts, the current fertility rate is likely to stay the same, resulting in the population reaching 60 million.[2]

The table below sets out population trends based on five scenarios of the most important factors affecting the population, loosely structured under potential economic conditions.

Population trend scenarios

Scenarios	Fertility	Migration	HIV/AIDS
1. Rapid economic development	Decreasing faster than current rate	Increased immigration	Faster roll-out of antiretrovirals (ARVs) and increased life HIV+ expectancy
2. Current economic development	Current level of decreases in fertility rates	Constant proportional immigration based on 2005 levels	2010 ARVs protocols and increased HIV+ life expectancy
3. Slowing economic development	Slower decrease in fertility rates	Constant proportional immigration based on 2005 levels	2010 levels of roll-out of ARVs and lower increase in HIV+ life expectancy
4. Negative economic development	Stable fertility rates	Decreasing immigration over time	Slower roll-out of ARVs and 2008 HIV+ life expectancy
5. Current economic development with migration shock	Current level of decreases in fertility rates	Increased immigration	2010 ARV protocols and increased HIV+ life expectancy

Source: ASSA, 2011

[2] ASSA, 2011.

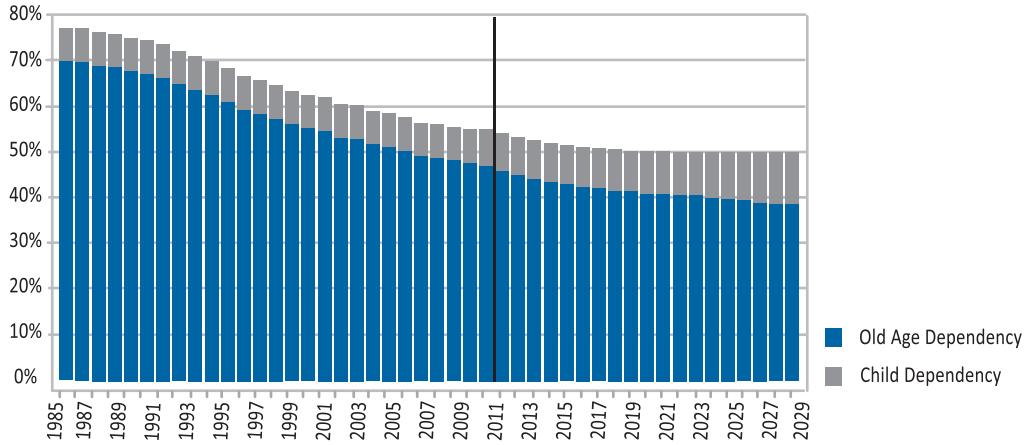
South Africa has arrived at the "sweet spot" of demographic transition. The population has a proportionately high number of working-age people and a proportionately low number of young and old. This means that the dependency ratio – the percentage of those over 64 and under 15 relative to the working-age population – is at a level where there are enough people of working age to support the non-working population. The caveat in South Africa's case is that unemployment and HIV/AIDS have produced many more dependants than would normally be the case. Although statistically South Africa is in a position to cash in on a demographic dividend, the challenges of HIV/AIDS and joblessness are a burden on those who are working.

Nevertheless, a large working-age population presents South Africa with a major asset. If it is well managed there is real opportunity to build a stronger economy, eliminate poverty and reduce inequality. The challenge is putting this working-age population to work.

This window of opportunity will close before 2030, as the over 64s as a share of the population rise from 5.4 percent today to 7 percent by 2023, and to over 8 percent by 2027. According to the United Nations (UN), this is when a country's population in demographic terms is regarded as "old". The number of South Africans over the age of 64 will rise from about 2.5 million now to 4.7 million by 2030.

This aging population will put pressure on the economy, especially as a significant percentage of the older population will be living with HIV/AIDS. Moreover, old age social security will place pressure on the state and taxpayers.

Dependency ratios – base scenario



Source: ASSA, 2011

The perfect window could be the perfect storm. A large number of South Africans are between the ages of 15 and 29. Although the country has not reached the 30 percent mark, viewed as the dangerous "youth bulge" in developing economies, this cohort will make up more than a quarter of the total population until 2030. From 29 percent of the total population in 2010, the percentage of youth will decline slowly to 25 percent in 2030.

A "youth bulge" has the potential to destabilise countries, especially where there is rampant unemployment.

Budgetary implications

South Africa's projected demographic profile will affect government spending. Health care and pension provision will have to be adjusted to accommodate the fact that:

1) People will live longer as life expectancy improves
2) Older people will form a growing percentage of the population
3) A greater number of people will be living with HIV/AIDs as treatments become more effective
4) The number of people requiring ARV treatment will triple.

Several factors will affect the costs associated with these shifts. These include the extent to which pensions are raised to keep up with cost of living, the efficiency of the health care system and the cost of drugs, particularly ARVs.

The number of people eligible for social grants is expected to decline over the next 20 years. How this will affect the fiscus will depend on whether the grant regime remains the same and annual increases in grant payments. The number of South Africans 18 years and younger will continue to rise until 2013, peaking at 19.5 million, and then falling to reach 19.1 million by 2030.

South Africa's demographic profile

Fertility rates

Internationally, fertility levels vary widely, ranging from an average of 1.1 children born to a woman in Singapore to 7.2 in Niger. High fertility rates are generally found in contexts of poverty and powerlessness, where the infant mortality rate is high, and opportunity and education for women is low. Health care, education, old-age security, women's empowerment, economic aspirations and urbanisation generally bring down fertility rates, which can change rapidly. In Thailand, the fertility rate dropped in a decade from about 6 to 2 as secondary school education expanded.

In South Africa, the fertility rate has also dropped, although over a longer period. In the late 1960s, the rate was about 6.7, falling to 2.9 in 2001 and to 2.3 in 2011. It is projected to fall to 2.1 by 2030, which is close to the replacement rate at which a population remains relatively constant in size. As a result, the population is expected to increase by a little over 8 million by 2030.

South Africa's fertility levels differ according to location and socioeconomic characteristics. They are highest in the mainly rural provinces and municipalities, and

lowest in the most urbanised. According to the 2007 Community Survey, the highest fertility rate by municipality was in the OR Tambo district in the Eastern Cape with a level of 4.1, while the lowest was 2.2 in the City of Cape Town, the uMgungundlovu district in KwaZulu-Natal and Sedibeng district in Gauteng.

Mortality

South Africa is simultaneously affected by four epidemics, referred to as the quadruple burden of disease:

- HIV/AIDS
- Injury, both accidental and non-accidental
- Infectious diseases, such as tuberculosis, diarrhoea and pneumonia, which interact in vicious negative feedback loops with malnutrition and HIV
- Growing lifestyle diseases, such as diabetes and obesity, related to relative affluence.

These burdens are reflected in morbidity statistics. Total deaths in the country have increased sharply, with the numbers doubling in the decade to 2008. This increase is accounted for by two groups: the rate doubled for young children under the age of five and trebled for young adults between 30 and 34. Overall, increased mortality sharply reduced the median age of death to less than 45, and to a lower age for females than males.

The highest rates for victims of homicide are seen in men aged between 15 and 29 years (184 per 100 000). In some areas, such as Cape Town's townships, this rate more than doubles. Deaths of men from homicide outnumber those of women by more than seven to one.

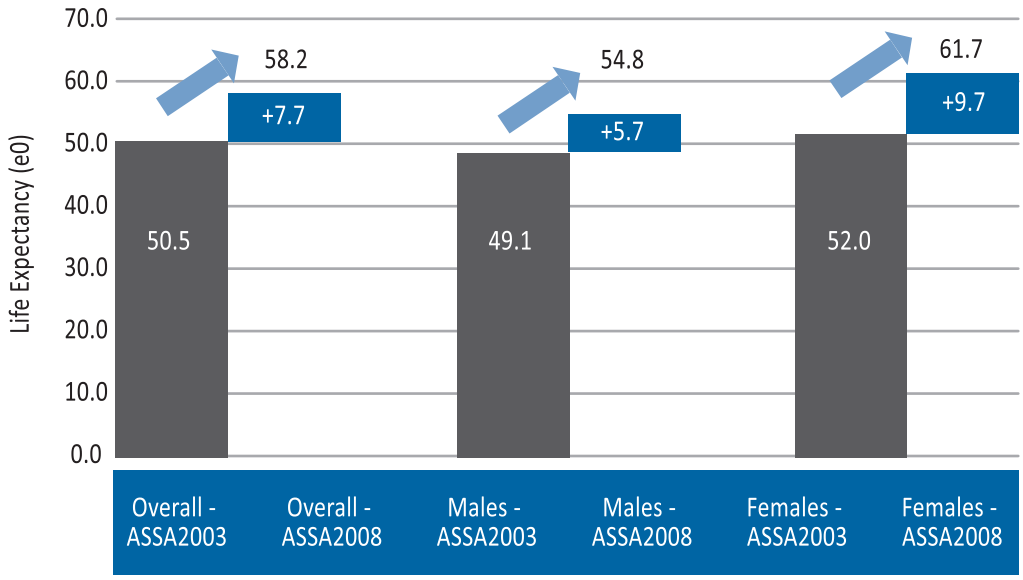
HIV/AIDs has been a powerful shaping factor in South Africa's demographics over the past two decades. The current estimated HIV prevalence rate is about 10.6 percent, with the total number of people living with HIV/AIDS having risen from 4.21 million in 2001 to an estimated 5.4 million in 2011. This number is projected to rise to 7.3 million by 2030.[3] The highest levels are among youth: an estimated 16.6 percent of those aged between 15 and 49 are HIV positive.[4]

The impact of HIV/AIDS is most evident in life expectancy figures. In the second half of the 20th century, South Africans started to live longer, from 45 in the early 1950s to about 65 in the early 1990s. HIV/AIDS reversed this dramatically. Life expectancy for African men fell most dramatically (49 years by 2003), and for African women to 52 years. This rapid decline was followed by some recovery, with 5.7 years being added to male life expectancy and 9.7 years for women by 2008.

[3] ASSA, 2011.

[4] Statistics South Africa (2011). *Mid-year population estimate.*

Live expectancy



Source: ASSA, 2011

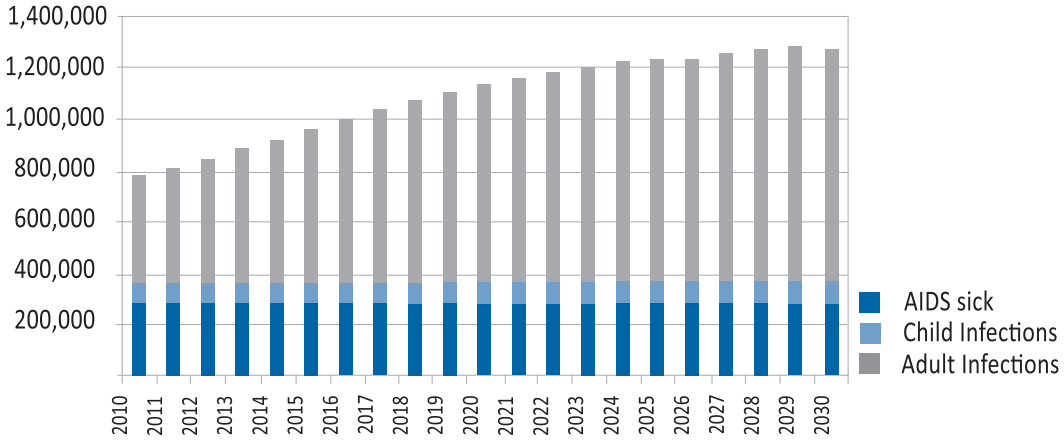
The future demographic effect of this pandemic is an area of some debate. Life expectancy will continue to be affected by HIV/AIDS, but the extent to which this will happen will depend on the efficacy and impact of treatment and prevention. The number of new infections is likely to decrease gradually, or at least to remain stable, but the number of people with HIV/AIDS is expected to continue to rise, reaching 7.3 million in 2030, while the number of those sick with AIDS is also expected to rise from 800 000 to about 1.3 million. The increase will happen as ARVs and other treatments extend the lives of those infected with HIV.

Over the next 20 years, HIV/AIDS will account for a smaller percentage of overall deaths, although it will remain an important factor. The decline in life expectancy has already reversed, and average life-spans will continue to increase, but average life expectancy is still expected to only reach 60 by 2030,[5] significantly lower than other middle-income countries such as Brazil (71.4 years in 2009). Health experts consulted by the commission take a more optimistic view, arguing that if the correct policies are put in place, average life expectancy of 70 can be achieved by 2030.

HIV/AIDS has also exaggerated existing discrepancies between population and socio-economic groups. Although life expectancy for African women is expected to average just over 60 years by 2030, the average for white women is expected to stay at 76 for the next two decades. For African men, life expectancy will average just under 56 by 2030, while the average for white men will increase from over 72 to over 73.

[5] ASSA, 2011.

AIDS sick and new infections – 2010-2030



Source: ASSA, 2011

Population movement

Migration

Data provided by the Global Commission on International Migration suggests that international migrants (changing country of residence over the past five years) make up about 3 percent of the world population, with levels ranging from about 0.1 percent in China to 65 percent in Kuwait. South Africa's figure has been estimated to be about 2.7 percent, which is modest in global terms, although Gauteng, the international migrant gateway to South Africa, has a figure of about 13 percent.

The difficulty, however, is that there is no accurate means to count international migrants in South Africa, as many migrants live below the radar and move regularly between South Africa and their country of origin. At best, there are indicators for the growth in international migration. For example, annual total border crossings have risen by over 2 million since 1996, from 5.1 million to 7.5 million.[6] This reflects growth in tourism, but may also indicate increased transnational movement.

Future migration flows are difficult to predict because they are driven by constantly changing social and economic factors. South Africa's economic position in Africa will affect migration flows, as will the political circumstances of neighbouring states and the livelihood effects of changing weather patterns. International migration will need to be understood as a contingency in the planning process. The scale and nature of its impact should be addressed with flexibility as sources of data collection and analysis are strengthened.

In the past, international migration was primarily a response to poverty or political instability. The scale of migration was often directly linked to the economic and income

[6] Statistics South Africa, 2011.

differential between a country of origin and host country. This remains important, but reasons for migration are becoming increasingly diverse, while the practical risk and emotional costs of moving have reduced with the diffusion of cheap, versatile communications. In future, individuals with skills and greater access to resources, education and networks are more likely to be international migrants than the destitute.[7]

If international trends are reflected in South Africa, migration patterns will become increasingly complex, involving diverse social groups and a combination of permanent and temporary migrants. There will be more youthful and women migrants, and a growing number of migrants moving from regions severely affected by climate change.

If properly managed, migration will serve as an important instrument to fill gaps in the labour market and will contribute positively to South Africa's development. Energetic and resourceful migrant communities can contribute to local and national development, and diverse, cosmopolitan populations are often the focus of cultural, economic and intellectual innovation. If poorly managed, however, the skills and potentials of migrants will be neglected to the detriment of the country. Migration will remain a source of conflict and tension, and migrants will be increasingly vulnerable, subject to continued abuse, exploitation and discrimination.

South Africa's immigration policy has sought to respond to the need for skilled immigrants (for example, the 2004 amendments to the Immigration Act, which facilitate the arrival of scarce skills). The country's political leadership has also attempted to respond to the scourge of xenophobia. In all spheres of government, migration and social policy needs to do more to ease the entry of skilled migrants and to counter xenophobia. It should also more effectively address the rights and vulnerabilities of migrants; support programmes to regularise migrant residence; promote cultural dialogue and language transfer; ensure better and more consistent law enforcement (by protecting victims and prosecuting perpetrators); and strengthen transnational infrastructure (transport, electronic communications, banking services). In addition, more needs to be done to address the specific need of migrants in South Africa, such as education for children and treatment for HIV/AIDS, which has spread at a disproportionately rapid pace among immigrants because of South Africa's history of circular labour migration.

Urbanisation

Consistent with most of the rest of the world, South Africa has experienced rapid urbanisation. In 2008, half the world's population was urbanised and by 2030 nearly three of every five people will live in urban areas.[8] South Africa is slightly more urban than the global average: about 60 percent of the population is urbanised (according to the official definition), and this is projected to about 70 percent by 2030.

[7] Goldin I, Cameron G and Balarajan M (2011). *Exceptional people: How migration shaped our world and will define our future.* Princeton, New Jersey and Oxford: Princeton University Press.
[8] Rockefeller Foundation (2008) *Century of the City: No Time to Lose.* New York: Rockefeller Foundation.

The patterns of urbanisation in South Africa are complex because circular labour migration under apartheid has led to an intricate relationship between rural and urban areas. It is likely that urban populations will become more permanently settled over time, but this could change if the economic climate makes urban residence more precarious. The rate of urbanisation may slow, as it has done in Latin America and parts of Asia, but it is likely that almost all of South Africa's net population growth until 2030 (an estimated 8 million) will take place in urban areas, especially in major cities.

The National Planning Commission's Diagnostic Report showed that differential migration patterns largely reflect national patterns of job creation and job loss. Between 2001 and 2007, for example, Gauteng had a net gain of about 3 million people and the Western Cape just over 1 million. The Eastern Cape had a net loss of about 1.4 million and Limpopo 1.2 million. These trends are likely to continue, although possibly at a reduced rate.

Although rural-urban migration is significant, about 78 percent of migration from rural areas and small towns was to other rural areas and small towns. Consequently, while the growth of large urban centres needs to be properly managed, planning must also respond to changing patterns of population distribution in rural areas.

Informal settlements present a particular challenge. Most job-seeking migrants moving to cities first live in informal settlements, which are an affordable entry to the city. Many migrants cannot break into the urban labour market and find it difficult to move out of shacks into more formal accommodation. The average residence period within urban informal settlements has increased from about two to four years in the early 1990s to 10 years currently.

Policy implications

Opportunities

The decline in birth rates is positively affecting the composition and distribution of South Africa's population, because it creates an opportunity to exploit a demographic dividend.

Changes in population structure can significantly affect national performance, because individual economic behaviour varies with age. The young and the old tend to consume more than they produce, and nations with a high ratio of dependants to workers devote a relatively high proportion of resources to these groups, often limiting economic growth.

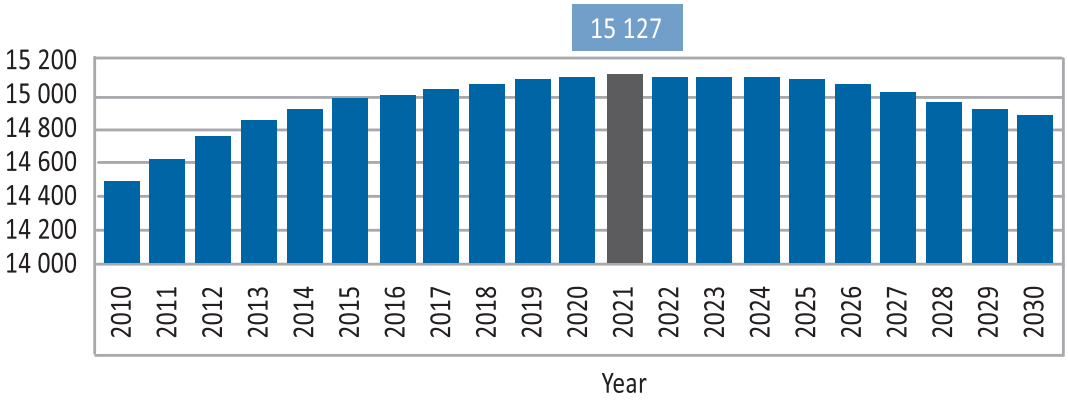
In contrast, nations with a relatively large share of the population in prime working age can experience a boost in income and savings, because the working-age population tends to produce more than it consumes. However, demographic dividends can only stimulate substantial economic growth where there are appropriate economic and

labour policies that allow the young to enter the workplace, investments in health and education, and a stable and effective government.

The key is to identify economic policies that can harness the benefits of a larger working-age population.

East Asian countries have made the most effective use of the demographic dividend. The working-age population of East Asia soared from 47 percent in 1975 to 64 percent in 2010.[9] Some evidence attributes more than 40 percent of the higher growth in East Asia compared with Latin America from 1965 to 1990 to the faster increase in its working-age population – accompanied by a focus on export-orientated economic policies and investment in education and skills development. For the next 20 years, South Africa will have over 14 million young people between the ages of 15 and 29. The number will peak in 2021, reaching 15.1 million.

Population between the ages of 15 and 29



Source: ASSA, 2011

This presents a tremendous opportunity – but it also constitutes a serious risk, given that joblessness mirrors age and race fault lines.

Young black people account for two-thirds of the unemployed below the age of 35. Unemployment rates are highest in the 15- to 24-year-old group (46.6 percent in 2008) and second highest among 25- to 34-year-olds (26.2 percent). For black youth, the unemployment rate is 65 percent. If youths fail to get a job by 24, they are unlikely to ever get formal employment.[10] Unresolved, this trend poses the single greatest risk to social stability.

[9] The Economist. *Working-age Population.* Print edition, 21 July 2011.
[10] South African Presidency (2010). *Human Conditions Diagnostic*.

There is a correlation between demographic bulges of youth and conflict. Young people are more likely to rebel if left with no alternative but unemployment and poverty. Generally, homicides are committed by males between the ages of 16 and 30.[11]

In South Africa, this could translate into social disorder, widespread political unrest and increased crime.

The degree to which the demographic dividend can be banked, and the risks avoided, depends on policy choices and how effectively they are implemented.

In many economies a focus on exports and foreign direct investment expanded the demand for young workers. In addition, employment and labour productivity were boosted by rapid increases in public and private investment in children. These policies, specifically policies that open the economy to free trade, along with sound basic education, are a source of growth that partly explains the success in East Asia.

Government needs to apply a "youth lens" to policies to expand opportunities, enhance capabilities and provide second chances. Areas most commonly identified as unlocking the potential of a demographic dividend are:

- Better health, including food security
- Better health care
- Better education
- Meet demands for higher skill levels
- Easy labour market entry
- Labour mobility.

Access to proper health care for children is critical, as this can have lasting effects on physical and mental development, which can affect children's future productivity, earnings and economic wellbeing.

Although health and education are necessary to take advantage of a youthful population, they are not sufficient. Economic opportunities and jobs are crucial. The demographic dividend can be realised only if gainful employment is created for the growing proportion of people of working age.

Education without jobs carries risks of its own. Expanding opportunities for higher education without a concomitant increase in employment opportunities can be hazardous. High unemployment among educated youth can potentially lead to political upheaval and violence.

[11] Urdal H (2011). *A clash of generations? Youth bulges and political violence* for United Nations expert group, Population Division, 21 July 2011. New York: Harvard University.

Migration solutions

South Africa, like most other African countries, has done little to increase the benefits of migration or reduce the risks migrants face. The potential economic benefits of migration are constrained by the lack of support for migrants in key markets.

International governance structures are not much help. Migratory flows are the orphan of the international system. Policy-makers are asking why people should be confined to nation states, when barriers to the movement of capital and goods have progressively fallen. This is particularly pertinent because the number of workers living in countries linked to international markets rose from 75 percent in 1975 to 90 percent by 2000.[12]

Bilateral agreements between origin and destination countries are increasingly filling the gap. A 2007 survey by the Organisation for Economic Cooperation and Development found that programmes in 57 of 92 countries using temporary employment schemes were managed through bilateral agreements.

A radical policy intervention under consideration in East Asia and the Pacific focuses on enhancing the mobility of skilled workers through a framework of regional accreditation, and supporting the mobility of unskilled workers by encouraging labour-sending and receiving countries to work together.[13]

Conclusion

South Africa's demographic profile could help to tackle poverty and inequality. The country has fewer very old and very young relative to those of working age, and young people make up over 25 percent of the total population. A similar profile proved to be a boon for economic growth in Asian countries. But reaping the benefits will only be possible if sound education and skills training are provided. Jobs must follow. If South Africa fails to do this, its large youth cohort could pose a serious threat to social, political and economic stability.

Given the high HIV/AIDS prevalence, particular attention needs to be given to health care provision to ensure that the large number of people of working age are not debilitated by disease and can participate gainfully in the economy.

[12] International Bank for Reconstruction and Development/World Bank (2011). *Leveraging Migration for Africa: Remittances, Skills, and Investments.*
[13] World Bank East Asia and Pacific Economic Update, 2011.

Chapter 3

ECONOMY AND EMPLOYMENT

"We are a people at work.
We work to create plenty.

We work towards goals with patience invested in actual effort.
We invest our effort and are not trapped in disengaged expectation.
The painstaking rigour of work is driven by impatience.
We wait for the results of our efforts, not for what is given by the efforts of others.
This kind of patience,
gives birth to our new work ethic.
In this work ethic we ground our dreams.

We have built our own houses.
We are confident and self-sufficient.
We are traders.
We are workers.
We are investors.
We create companies.
We set up stalls.
We are studious.
We feel a call to serve.

"Everybody actively has set out to change his or her own life in a way that not only oneself, but also one's family and the broad community, benefits (work)."

Out of our homes we create objects of value.
We invest and reap good returns for our efforts.
We travel to trade beyond our borders, carrying our values with us.

As artists we express and celebrate,
we expose and nurture, we explore and shift frontiers.
Through sports of all kinds, we push the limits of our possibilities.
Our philosophies and stories have enriched the world.
We respect ability, competence and talent.
Now our economy is growing.
Our prosperity is increasing.
We are energised by our resourcefulness."

Vision 2030

Achieving full employment, decent work and sustainable livelihoods is the only way to improve living standards and ensure a dignified existence for all South Africans. Rising employment, productivity and incomes are the surest long-term solution to reducing inequality. Similarly, active steps to broaden opportunity for people will make a significant impact on both the level of inequality and the efficiency of the economy.

This will be achieved by expanding the economy to absorb labour and improving the ability of South Africa's people and institutions to respond to opportunities and challenges.

We can reduce the unemployment rate to 6 percent by 2030. It will require leadership, difficult political choices and effective implementation. It will require a rebalancing and realignment of key areas of government policy alongside some reprioritisation in economic policy.

To achieve full employment, the country needs to create about 11 million more jobs in the next 20 years. We estimate that the economy would have to grow by about 5.4 percent on average every year over this period to achieve this aim. This chapter outlines how the country can both accelerate growth and make it more labour absorbing.

Our goal of decent work and sustainable livelihoods requires that every family has an acceptable standard of living within their reach. That in turn means that the economy must generate sufficient economic opportunities and a supportive system of social protection and services, along with respect for human rights and growing solidarity.

The chapter is based on research work conducted in preparing the commission's diagnostic document and consultations that took place after the release of that document. With regard to current government policies and programmes, the New Growth Path outlines actions that are required to take the country onto a higher growth trajectory. The proposals in this chapter are largely consistent with these policies: however, they span a longer timeframe and the emphasis on catalysts and action steps may differ in some respects.

Objectives for employment and growth to 2030

The high-level numeric targets for sustainable and inclusive growth include:

- The strict unemployment rate falls from 25 percent to 14 percent in 2020 to 6 percent by 2030. The labour force participation rate rises from 54 percent in 2010 to 65 percent. About 11 million additional jobs is targeted by 2030.

Millions	2010	2015	2020	2030
Non-working age population	18	18.2	18.8	20.6
Working-age population (15-65)	32.4	35.1	36.5	38.8
Labour force participation rate	54%	57%	60%	65%
Labour force (million)	17.5	19.8	21.9	25.3
Age dependency	1.6	1.5	1.5	1.5
Employment target				
Unemployment rate	25%	20%	14%	6%
Employment (million)	13	15.8	18.9	23.8
Net new employment needed (million)	0	2.8	3	4.9
Dependency ratio	3.9	3.4	2.9	2.5

- About 41 percent of the working-age population between 15 and 64 would be employed. The aim is to increase this to 52 percent by 2020 and to 61 percent by 2030.
- Real GDP more than doubles (implying average GDP growth of 5.4 percent between 2011 and 2030. At this rate of growth, there will still be substantially more reliance on very low-income employment, survivalist activities and public employment schemes.
- The proportion of the population with income below the poverty measure of R418 per day (in 2009 rands) falls from 39 percent in 2009 to zero in 2030. The level of inequality will fall from 0.7 in 2010 to 0.6 by 2030. The share of income going to the bottom 40 percent of income earners rises from 6 percent to 10 percent.
- On average, the dependency ratio (the number of people depending on one wage earner) will fall from 4 to 2.5. For low-income households, this ratio will fall from an average of 5 to 6 down to 4 to 5. A falling dependency ratio will be a central contributor to reducing poverty and inequality.

Key elements for employment creation

A central message of this plan is that solving South Africa's most pressing problems involves implementing all aspects of the plan. In order to raise employment, we need better educational outcomes, a healthier population, better located and maintained infrastructure, a sound social safety net, a capable state and much lower levels of corruption.

This chapter focuses on efforts to grow the economy faster and to make it more labour-absorbing. The chapter is based on research conducted in preparing the commission's diagnostic document and consultations that took place after the release of that document.

With regard to current government policies and programmes, the New Growth Path is government's key programme to take the country onto a higher growth trajectory. At its core, the New Growth Path is about creating the conditions for faster growth and employment through government investment, microeconomic reforms that lower the costs of business (and for households), competitive and equitable wage structures and the effective unblocking of constraints to investment in specific sectors. The proposals in this chapter are largely consistent with these policies. They do however cover a longer timeframe and the emphasis on catalysts and action steps may differ in some respects.

A critical complementarity between the New Growth Path and this plan is the need to lower costs in the economy, especially as these costs contribute towards limiting employment growth and raising costs for poor households.

In addition to the need to lower the cost of living for the poor, the vision and plan for the economy has five central elements, which are discussed below.

Creating an environment for sustainable employment and economic growth

The capabilities of the workforce need to be developed on a broad scale. In that context, earnings will need to be realistic from the standpoint of long-term competitiveness and sufficient to ensure a decent standard of living. A stable and constructive environment will be needed for bargaining and labour relations that supports investment but also secures human rights.

The rate of investment to GDP is expected to rise from 17 percent to 30 percent by 2030. This will happen incrementally, with substantial contributions from a gradually expanding pool of domestic savings as well as foreign capital. The direction of national resource allocation will be important, with a greater part of this investment supporting productive sectors with competitive advantage.

There are evident binding constraints on growth, investment and employment creation identified in AsgiSA and the New Growth Path. These must be addressed much more rigorously and systematically than has been the case to date. The most urgent examples include: energy generation and distribution, urban planning approval processes, water supply and waste water management, the logistics platform, telecommunications, and licensing for water, minerals and environmental permits. Regulatory certainty and institutional reforms will draw forth competitive outcomes in network industries.

Human development is an essential part of inclusive growth. Lower living costs (through targeted microeconomic reforms in transport, telecommunications, food and spatial planning), better quality public services (especially in health and education) and a more comprehensive social security net will reduce pressure on households, particularly for low-income groups with limited earnings from work. This will improve the ability to respond to labour market opportunities and downturns, reducing the prevalence of crises that many households experience.

Macroeconomic policy helps minimise the impact of external shocks. Combined, these factors should enhance stability in low-income households, enable human capital development and improve the chances of social and class mobility.

Promoting employment in labour-absorbing industries

A large percentage of the jobs will be created in domestic-oriented activities and in the services sector. Some 90 percent of jobs will be created in small and expanding firms. The economy will be more enabling of business entry and expansion, with an eye to credit and market access. By 2030, the share of small- and medium-sized firms in output will grow substantially. Regulatory reform and support will boost mass entrepreneurship. Export growth, with appropriate linkages to the domestic economy will be critical in boosting growth and employment, with small- and medium-sized firms the main employment creators.

Economic participation in rural areas will rise from 29 percent to 40 percent as a result of reformed land tenure, support to farmers, expanded social services, higher agricultural output, mining social investment and tourism.

Procurement by both private and public sectors will enable improved access for small and medium enterprises to opportunities. Human settlements and services will need to be conducive to small and medium enterprise expansion.

Public employment programmes are an essential element of any employment strategy, taking on board lessons from successes and failures in our existing programmes. Up to 1 million opportunities will be created annually by 2015, mostly through community-based services. As market-based employment expands, so these opportunities can be reduced. However, they will be needed in large numbers over the entire period.

Promoting exports and competitiveness

To expand production requires more active promotion of demand for South African products in domestic and foreign markets.

Policy will focus on developing areas of competitive advantage, where there are revealed strengths. In the process of implementation, it will be important to learn from success and failure and to withdraw from sectors where mistakes have been made. Playing a more pivotal role in regional development will be essential. South African companies will be encouraged to participate in regional infrastructure projects but also in integrating regional supply chains to promote industrialisation (see Chapter 7).

The share of exports in South African output will rise and the profile will be more diverse, with a growing portion of non-mineral manufactures and services. A greater proportion of exports will be directed to emerging markets. Opportunities for increased trade and bilateral

investment in Africa will develop. Offshore business services will be attracted, fuelling site developments and employment.

The impact of expanded and diversified exports on employment and incomes includes larger foreign exchange earnings, which enable the purchase of inputs for further industrialisation and infrastructure investments; an impetus for productivity and economic growth throughout the economy; and the creation of new jobs directly plus a more significant proportion of employment generated indirectly as a result of a concerted effort to promote linkages in domestic industries.

The diversification of trade will reduce the strong link to commodity cycles and the associated volatility in the exchange rate and earnings. This will cushion the economy from economic shocks, with sufficient reserves and fiscal space. In turn, a more stable environment for domestically oriented firms, which create the majority of employment, will emerge. Moreover, stability in exports reduces the risk of a foreign debt trap, protecting critical public spending programmes.

Strengthening the capacity of government to implement its economic policy

The South African state will be capable of implementing programmes and policies effectively and consistently, at least in the most critical priority areas. Accountability, combating corruption and professionalising the public service are critical. Strengthening oversight of public entities will be essential.

There must be a change in mind-set across all sectors of society – public, private and civil society – and increased focus on implementation and real change.

Government is responsible for a very wide range of services for citizens and businesses, and functions through a number of spheres, agencies and institutions. Complexity and stretched capacity can blur focus, distracting attention from the critical problems. It is therefore critical that key strategies be appropriately phased. Implementation of the economic policies presented here must be the top priority in the short to medium term.

Demonstrating strategic leadership among stakeholders to mobilise around a national vision

Given the scale and ambition of the task, leadership and vision are needed from all sections of society, with leaders who are able to rally constituencies around long-term goals, recognising that the benefits may be unevenly distributed and take time to realise. Similarly, leadership in government will be crucial in ensuring a more concerted and coordinated effort to implement agreed programmes.

Employment scenarios

The proposals in this plan are aimed at creating about 11 million net new jobs over this period and thus reducing the rate of unemployment to about 6 percent by 2030. This should be attained at the same time as we increase labour force participation rates from the current 41 percent of the working-age population to 61 percent. The specific targets and numbers for each period are outlined earlier in the chapter.

Baseline scenario (scenario 1): We could continue along the current trajectory without any major improvements to the policy environment and with poor global economic conditions. While in this instance the country is able to meet some of its infrastructure commitments, the rate of investment in the economy is not much improved. While more people are absorbed into the economy, the unemployment rate only declines from the current 25 percent to 19 percent by 2030. Given the objective to create 11 million jobs by 2030, there would be shortfall of 3.3 million to meet the target, the deficit would have to be met through more than 5 million public works job opportunities per year in 2030 (compared to the current 500 000 and the targeted 1 million job opportunities).

Solid minerals scenario (scenario 2): In a better global environment and with good performance on infrastructure programmes, the growth rate is much better and more people are employed. However, investment flows mainly to the most profitable activities which are capital intensive, in mining, energy, chemical and metals. As a result, most of the jobs are created in low-paid domestically oriented services such as retail and business and personal services. In this instance, about 2.6 million public works job opportunities would have to be created per year in 2030.

Indicative scenarios – Employment outcomes by 2030

Sectors	2010	2030		
Thousands	**Employment in 2010**	**Scenario 1** mediocre minerals	**Scenario 2** solid minerals	**Scenario 3** diversified
Agriculture	627	514	627	804
Mining	297	269	388	437
Manufacturing	1 556	1 880	2 169	2 289
Leader & high paid services (e.g. finance, transport)	2 025	3 009	3 657	4 188
Follower services (e.g. retail, personal services)	1 927	4 1801	4 875	4 967
Construction & utilities	828	1 054	1 278	1 407
Informal sector & domestic work; excl EPWP	2 922	4 093	4 604	5 012
Public sector, private social services & parastatals	2 529	3 278	3 518	4 225
Expanded Public Works Programme (EPWP)	420	5 483	2 644	431

Sectors	2010	2030		
Thousands	**Employment in 2010**	**Scenario 1** mediocre minerals	**Scenario 2** solid minerals	**Scenario 3** diversified
Total	13 131	23 760	23 760	23 760
Average GDP growth		**3.3%**	**4.8%**	**5.4%**
Percentage working-age population working (excl EPWP)	41.0%	47.1%	54.4%	60.1%
Unemployment without EPWP	25.0%	27.7%	16.5%	7.7%

Indicative scenarios - Sector distribution of employment

Sectors	2010	2030		
		Scenario 1 mediocre minerals	**Scenario 2** solid minerals	**Scenario 3** diversified
Agriculture	4.8%	2.2%	2.6%	3.4%
Mining	2.3%	1.1%	1.6%	1.8%
Manufacturing	11.8%	7.9%	9.1%	9.6%
Leader & high paid services (e.g. finance, transport)	15.4%	12.7%	15.4%	17.6%
Follower services (e.g. retail, personal services)	14.7%	17.6%	20.5%	20.9%
Construction & utilities	6.3%	4.4%	5.4%	5.9%
Informal sector & domestic work; excl EPWP	22.3%	17.2%	19.4%	21.1%
Public sector, private social services & parastatals	19.3%	13.8%	14.8%	17.8%
EPWP	3.2%	23.1%	11.1%	1.8%
Total	100.0%	100.0%	100.0%	100.0%
Manufacturing as a % excluding informal sector & EPWP	15.2%	9.6%	11.3%	12.2%
High-skill services as a % of employment excluding informal sector & EPWP	18.9%	15.3%	19.1%	22.3%

A diversified dynamic economy (scenario 3: The plan)

This plan proposes choices for a path that would lead to more substantial investments are in strengthening municipal infrastructure and services, education systems, and in generating better access to capital for new and expanding firms. The Department of Trade and Industry develops partnerships with the private sector in positioning commercial representation in key export markets. Substantial investment is made in R&D and the commercialisation of South African innovations.

The substantial commitment to reducing the cost of production and living bears fruit, and South Africa becomes a more attractive investment destination. Improved efficiencies and oversight help to get under control the rapid increases in administered price inflation. A move to promote community-based house building with innovative local inputs helps expand housing, supplier industries and related job creation. These actions improve well-being, so that although the majority of jobs created are still in low-skills services, families are able to achieve a decent standard of living.

The fall in production and living costs stimulates local production. As these industries expand, and value added exports become a larger share of sales, so the Rand becomes less subject to global swings.

China and India grow apace, and the demand for commodities continues. South Africa sets up a Financial Centre for Africa to attract project finance and becomes well established as a financial and services platform. Growing support from regional partners for this role is bolstered by substantial South African investment in major energy and infrastructure projects, as well as South Africa playing a greater role in promoting regional supply chains that underpin agricultural and industrial production in the region.

The expansion in offshore business services and related linkages stimulates almost 700 000 jobs especially in Gauteng and the Western Cape.

There is substantial success in promoting supplier industries to the mining industry that have spin-offs in supplying global mining projects and also lateral linkages into other uses such as water purification, electronics, and robotics amongst others. Much progress is made to process some of the minerals in the country, through clusters such as Platinum Group Metals and the production of about 25 percent of the global demand for fuel cells and related technologies.

Some of the preconditions for the growth path are:

- Strengthening commercial transport, telecommunications, energy, and water, especially in servicing municipalities and activities of an expanding small- and medium-sized cluster of firms. The approach to achieving competitive costs and productivity in economic infrastructure are discussed in Chapter 4.
- Education, health and safer communities – the approach to achieving improved education and health outcomes to 2030 are discussed in Chapters 9, 10 and 12.
- Human settlements and transport – improved alignment of human settlements and public transport systems to the emerging forms of employment are discussed in Chapter 8.
- Strengthening the capabilities of the workforce, ensuring that earnings are responsive to industrial demands, but also sufficient to ensure a minimum standard of living, and stabilizing the environment for bargaining and labour relations in a way that is conducive to investment but also to human rights is discussed in this chapter.
- Promoting the expansion of global market share in domestic and foreign markets.

- Playing a more pivotal role in regional development, including infrastructure investment but also integrating supply chains.
- Strengthening public service capabilities and governance of state-owned enterprises, as discussed in Chapter 13.

These improvements have a dynamic effect, where improvement in one year sets off activity with new rounds in subsequent years. A successful diversified mineral exporting economy involves success in exporting our traditional products, and a growing role for activities that are linked to existing industries in new non-traditional sectors. These are expanded by stimulating linkages in dynamic product areas, and by stimulating traded services activities where South Africa has a competitive advantage. In this case, domestically oriented services still play an important role in employment creation, but the proportion is smaller – contributing over 40 percent of all new jobs. Manufacturing employment grows, but its share falls from 15 percent to 12 percent of formal employment. That is, almost a million jobs might be created in manufacturing over the 20 years, but its share falls, although not by as much as in scenario 2. The share of high value services rises to about 22 percent of formal employment, as compared to 15 percent in 2010.

Structural challenges to full employment

In transforming the economy, South Africa faces several challenges, some of them external, some of them as a result of history or geography, and some because of limited capacity. Even where these challenges are external, South Africa can and must plan for them. External drivers, such as global economic development and the economic downturn, economic performance on the African continent, the rise of emerging markets, intensified global competition, technological change and climate change will greatly influence the context in which we operate. Global commodity prices will impact different parts of the economy differently. A global drive to compliance on environmental standards will have cost implications; but it will in turn drive innovation, reduce waste, improve energy efficiency and promote new investment. These external drivers are discussed in detail in the chapter on drivers of change.

There are other structural factors that should heavily influence policy-making in the drive to achieve full employment. The first are those that are common to economies similar to our own. The second are challenges and opportunities specific to South Africa.

Structural challenges in similar countries

South Africa faces certain structural challenges, some of which are not unique to this country. Awareness is key to overcoming these issues.

Resource curse: Mineral-exporting economies tend to have difficulty diversifying their industrial base, and also experience slower than average growth and high inequality. An exchange rate linked to commodity prices, rather than the sophistication of a nation's exports, is one major challenge. In addition to volatility, the exchange rate can become

overvalued in periods where commodity prices rise, putting a brake on non-commodity exports. Activities that are not traded benefit, such as retail, banking, telephony and housing construction. Difficulties arise when the boom is over and the goods producers are left weakened. Some firms have adapted to this cycle by producing for local or export markets depending on domestic market conditions and the exchange rate. This enables survival, but is not conducive to long-term planning and expansion.

Higher commodity prices buffer the economy and create the appearance of growth, leading governments and companies to become complacent and under-invest in people and productivity growth.

If these pitfalls are consciously avoided, and if the mineral endowments are used to facilitate longer term capabilities, these resources can serve as a springboard for a new wave of industrialisation and services for domestic use and exports.

Middle-income trap: Many economies that have achieved middle-income status struggle to shift further upwards. Although there may be exceptions, many middle-income countries experienced substantial, albeit relatively slower, growth over the past decade. The key differentiator is how much the country invests in human capital, product development and technology.

Global economic downturn: The global recession and its aftermath of slower growth have persisted since late 2007. Global growth is unlikely to recover rapidly. Slower growth could persist, because the unwinding of imbalances is incomplete, like excessive current account surpluses and deficits, high levels of government debt and the deleveraging process of businesses and households.

The worst-case scenario is a decade of slow growth, low demand for imports, low levels of employment growth and low interest rates, which fuel currency swings in emerging markets. At worst, slower growth in the United States, European Union (EU) and Japan will negatively affect growth in Brazil, China and India because these richer countries remain major markets for the goods produced in developing countries.

The youth bulge: Many developing economies are experiencing a “youth bulge”. A large active population can contribute to falling poverty rates, though much depends on whether this population is activated. The changes in demography, particularly the increase in the numbers of people in the working-age cohort, can be a dividend or a burden.

The future of work: Manufacturing is becoming a proportionately smaller employer in upper middle income and high income countries, with at least three-quarters of new employment found in services. South Africa is no exception. Most jobs are found in domestically oriented services (such as retail, personal services, security, domestic work, office cleaning), where productivity and wage growth is lower. This may be even more pronounced in sub-Saharan Africa, given the historical context within which the new growth trajectory is taking shape.

Resource-intensive economy: South Africa is the 27th largest economy in the world, but the 12th largest carbon dioxide emitter. This is mainly because the economy is more energy intensive and the energy used is highly carbon intensive. As the world takes steps to cost the negative effects of carbon, South Africa is likely to face challenges (and opportunities) in reducing emissions. South Africa is also a dry country with limited fresh water resources. The country will have to find ways of using water more sensibly and improving both the water and energy efficiency of industry.

South Africa and the current global economic crisis

This plan has a 20-year time-horizon. However, the immediate effects of the deepening global economic crisis cannot be ignored. The United States has been unable to solve its fiscal difficulties. EU leaders are unable find a credible solution to the sovereign debt crisis.

Forecasts for developing economies are more upbeat with growth of 6.3 percent forecast in 2011 through 2013. South Africa's economy is expected to grow by just 3.1 percent in 2011 and 3.4 percent next year. A recession in the EU, South Africa's largest trading partner, could further dampen growth.

What steps can South Africa take to mitigate the risks in the short term?

- Counter-cyclical fiscal policy. Government needs to build in macro-policy cushions to enable South Africa to counteract the effects of the financial crisis. Continued fiscal discipline is important, though a more expansionary stance might be necessary if the EU contracts.
- Monetary policy. A balancing act needs to be struck between the need to curb inflation – which is expected the breach the 6 percent target ceiling in the first quarter of 2012 – and the need to keep the embers of economic growth alive.
- Overvaluation of the rand. The exchange rate has weakened sharply against the dollar and a basket of currencies of South Africa's most important trading partners. Continued accumulation of foreign reserves remains the best way to manage capital inflows and prevent prolonged overvaluation.
- Stronger social security net. A spike in unemployment must be met with interventions to protect the most vulnerable, particularly the young who cannot find jobs.
- Protect sectors with long term prospects. Short-term support measures must be provided to industries hard hit by the cyclical downturn.
- Re-orientate trade to emerging markets. Developing country demand has been at the heart of the recovery in global trade. South Africa must shift its focus to opportunities on the rest of the continent, as well as in other developing countries.
- Social dialogue. A common front to forge joint solutions to the risks facing the economy must be found. South Africa cannot afford dysfunctional relationships between the public and private sectors and civil society. They urgently need to find one another.
- Confidence has collapsed in high income countries. Political systems are unable to come up with decisive actions. This is most evident in the inability of the US Senate to pass a jobs bill and the EU to come up with a solution to the debt crisis. The lesson is stark. Unless all sections of South African society work together across the political and class spectrum we will be unable to weather the effects of the global crisis.

Structural challenges specific to South Africa

There are some structural challenges specific to South Africa:

- High levels of inequality and a relatively small market.
- Skewed ownership and control: The corporate landscape of South Africa has changed remarkably since 1994. However, it remains highly concentrated. This poses a barrier to business entry and expansion in key markets, which is critical to employment creation. Present forms of black economic empowerment are not achieving all the desired objectives.
- Policies and programmes that is not conducive to human development, whether in relation to education, health or safety.
- An extreme pressure on natural resources.
- An energy constraint that will act as a cap on growth and on our options for industrialisation.
- Spatial misalignments whether in reference to urban/rural, or within urban areas and binding constraints posed by poor physical planning and network infrastructure.
- Distance from our main markets globally and limited market access.
- Implementation challenges.

We also have many factors working in our favour, such as growing middle strata, scientific capability and institutions, fiscal resources, capabilities in dynamic sectors that are growing globally, a strong minerals base in a context of a commodity boom, high education enrolments, being located in a high growth region, and the fact that the resolution of many challenges that would influence our success lie within our power to fix.

Some of the implications for South Africa are set out below:

- We need to recognise the importance of investing in the engine of growth (rising outputs from tradable sectors), the sources of jobs (often domestically oriented and services firms) and the linkages between the two.
- Flexible human settlements responsive to changing locations of work (such as available rental stock and good and affordable public transport systems).
- Labour-matching services, transition support and easy access to retraining are critical. These raise the chances of achieving continuous work opportunities.
- In the earlier years, as we expand access to employment on a mass scale, a large proportion of working people will be low paid. It is essential to reduce the cost of living in relation to food, transport, education, health and other basic services.
- The environment must be conducive to taking advantage of opportunities that arise. Create a platform that allows people to respond to opportunities that do not cause trauma or crisis.
- The longer-term solution to skewed ownership and control is to grow the economy rapidly enough and focus on spreading opportunities for black people as it grows. Improving standards of education, better support for entrepreneurs, a focus on career mobility, workplace training and financial inclusion are ways to deal with these structural weaknesses. Government procurement, licensing and other forms of

economic rents should help reduce racial patterns of ownership of wealth and income.

Specific economic policy proposals

The plan's central goals are expanding employment and entrepreneurial opportunities on the back of a growing, more inclusive economy. This will require far greater commitment to deepening the productive base, whether in agriculture, mining, manufacturing or services. By 2030, South Africa should have a more diversified economy, with a higher global share of dynamic products, and greater depth and breadth of domestic linkages. Intensified stimulation of local and foreign markets will be needed, as well as strengthening conditions to promote labour-absorbing activities. Traded activities will act as a spur to growth, as will active stimulation of domestic opportunities and the linkages between the two. Specific actions will need to be taken to break out of the current path dependency. This will require decisive action on the part of the state and the other social partners.

Achieving and sustaining a growth acceleration

The goal is to almost treble the size of the economy by 2030, so that 11 million more work opportunities are created.

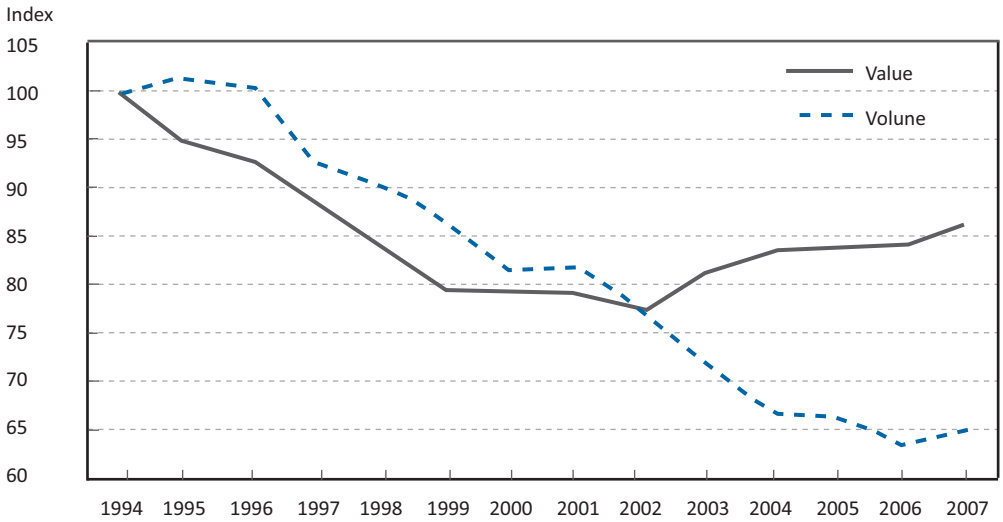
Many countries achieve an accelerated rate of growth, sometimes for eight years. Very few sustain it. Only 13 countries have grown at an average of 7 percent a year for 20 years. There is no consensus on what accelerates growth and how to sustain it. Some economists propose a binding constraints approach: detecting the key constraints and eliminating them, and advancing to newer, more pressing constraints. This entails a state capable of singling out and agreeing on the main restriction, dealing effectively with it and moving on to the next set of issues.

Growth acceleration might arise through an external shock that leads to rising terms of trade.[1] In African economies, this stimulus has come from rising demand and prices of commodities. The external shock can begin such an acceleration, but it will not sustain growth.

Growth acceleration is realised if firms respond to these incentives. The figure below shows rising value of South African exports since 2002, but falling volumes since 1996. This indicates poor responsiveness, cushioned by higher commodity prices. The reasons for this weak response are likely to be the "binding constraints".

[1] Rising terms of trade means the price of exports is greater than the price of imports. In the development process, a country starts with low-priced (commodity) exports, and high-priced (fabricated) imports. Over time, shifting this balance is accomplished by raising the sophistication of production and exports.

South African exports – world market share (1994 = 100)



Source: Organisation for Economic Cooperation and Development financial statistics database[2]

Exchange rate devaluations, in some countries, have had the effect of creating a growth spurt. However, this only works if firms can respond to opportunities and if labour and product markets are flexible enough to prevent the weaker currency from fuelling inflation. In South Africa, these conditions do not exist, though they can be developed over time. South Africa's present economic capabilities do not allow greater control over the exchange rate, although reducing volatility is a critical challenge that requires attention.

In this plan, the proposed approach involves sequencing the identification of a select number of binding constraints to industrial expansion, which are eliminated, then advancing to the next round of constraints.

Lifting constraints to growth that are within our power to influence can be an effective way of spurring growth. These must be factors that have an economy-wide effect on lowering prices or raising productivity, or else a targeted effect on groups of activities that underpin investment in dynamic sectors. Often a combination of actions is required, as one improvement in isolation of others may not be sufficiently enabling for firms.

Rapidly rising wages do not usually precede growth acceleration – they are more likely to follow the onset of a sustained acceleration by two to five years. This is particularly the case if the urgent focus is on access to employment opportunities for large numbers of workers, on the back of which qualitative improvements can be attained. This is a critical trade-off that South African society has to address. However, two qualifications should be attached to this: expanding access to new entrants should not be undertaken in a manner that lowers the working and remuneration conditions of existing employees; and the overall dispensation should include some sacrifices by management.

[2] http://dx.doi.org/10.1787/406237323856

In summary, growth accelerations are associated with rising investment, rising productivity growth, increasing exports and rising employment.

Constraints

Labour-absorbing growth will be stimulated by identifying major constraints that hinder investment and production in key sectors. These can be addressed in a sequenced manner. A few significant binding constraints will be lifted through committed action. The first commitments will include constraints in electricity supply, water, business registration, urban planning approvals, mining licensing, and high-skilled labour supply – the elements that stop business in its tracks. The rolling nature of this commitment is intended to support growth acceleration and sustain it over time, with a bias to labour absorption. Many of these are already policy commitments, but require rapid decision-making and stronger institutional oversight.

Raising the rate of investment

A labour-absorbing growth path will rely on improved infrastructure and network services that support traditional industries, such as mining and agriculture and newer dynamic industries and associated linkages. These services tend to account for a large proportion of domestic costs and can make a substantial difference to improving economy-wide efficiency and cost structures. In an effort to promote an accelerated and sustained growth rate, these improvements can generate successive productivity spurts that begin a new round of growth.

Attaining a rate of fixed investment to GDP of 30 percent is a gradual process – perhaps a decade after an initial accelerated growth phase. If these rates of investment are not achieved, growth might be sustained if there is a significant rise in the productivity of capital.

The nature of infrastructure spending is important. Direct benefits from infrastructure investments that lower the real cost of transport services are generally more pronounced in industrial sectors. Infrastructure investment that reduces the real cost of communications network services extends greater direct benefits to the services sector groupings. However, given the links between sectors and sector groupings, the indirect impact of lowering network infrastructure costs generally must be considered. Investments that improve efficiency and reduce the cost of transport and communication to other productive sectors have the potential to enhance competitiveness in a way that boosts labour, rather than displacing it.

Rising fixed capital formation does not guarantee growth or employment. It will only have this effect if output and output per worker (or labour productivity) rises. This in turn implies falling employment per unit of output. Output must rise fast enough to promote net employment growth. Fast rising employment will depend on the expansion of highly labour intensive, domestically oriented activities.

Rising rates of investment will be sourced from:

- Higher levels of public-sector fixed capital formation especially in the earlier years, with an emphasis on infrastructure that promotes efficiency and reduces costs. Public-sector fixed capital formation's contribution to GDP should rise to 10 percent, which is consistent with ratios during high growth phases in other countries.
- Private investment stimulated by expanding consumer markets, rising profitability, natural resources endowments and leveraging our position on the continent. It will be attracted by improved conditions created as a result of policy certainty, infrastructure delivery, efficiency of public services and the quality of labour.
- Foreign investment will have to play a significant role in a context of curbed savings. These investments leads to rising output, incomes and employment growth, savings will rise. Over time, a larger share of investment should be funded domestically, but this will depend on how well resources are used in the short term to raise productivity, incomes and employment.

Investment

Raising the rate of investment will require measures to reduce business costs and uncertainty and enhance profitability, public sector commitment to capital investments and maintenance, and regional integration to expand the consumer base. The savings rate will ratchet up over time.

Gaining global market share

To optimise the impact of expanding exports, it is crucial to stimulate areas where there is a revealed competitive advantage and growing global demand, where the product would contribute to rising terms of trade, and where potential exists to expand domestic linkages.

South Africa has competitive capabilities in a range of minerals and fast-growing goods and service activities, although it is not gaining global market share. There is a high opportunity cost to this that needs investigation.

South African industrial policy will transition from its historical approach of favouring energy- and capital-intensive goods production, sometimes with limited domestic linkages, towards an increasingly diversified industrial base. It is often presumed that substantial employment might be created through trade of light manufactured goods. However, we can only compete in labour-intensive activities on the basis of niche products, processes and know-how.

Trade in services deserve more attention. Some of the fastest-growing global segments are in finance and business services, where South Africa has capability. Tourism is another example, which already receives substantial attention. Demand for goods and services arising from services and other investment abroad by South African firms are not sufficiently exploited.

Promoting structural change and stimulating new industries will require state intervention, including incentives, procurement, research and development, and infrastructure investment to provide the right type of skills and to ease access in those sectors to other markets. If the activity is traded goods, the World Trade Organisation defines subsidies to support only human or technology development, or site or infrastructure. If the traded activity is a service, there are few, if any, limits imposed by global regulations. South Africa has made substantial use of trade-related benefits, especially to promote the automotive and clothing sectors, with tradable duty-free import permits linked to export performance.

A more forceful approach to market access arrangements will be needed, as well as a commitment to commercial presence in key export markets.

Global market share

Opportunities to sustainably raise the share of employment in traded activities will be identified and stimulated. These will be found in clusters centred on agriculture, mining, manufacturing and services where South Africa has proven competitive advantage and initial capabilities in dynamic products with the potential for expanded domestic linkages. Industrial zone developments and trade promotion will rely on competitive logistics, services, skills, product, capabilities and market access. South Africa will find it difficult to compete with low-income economies on the basis of labour cost, unless it focuses simultaneously on lowering the cost of living, lowering logistics costs for these products and considers subsidising some low-skill sectors.

South Africa's positioning for offshore business services will be strengthened, taking advantage of its telecommunications, banking and retail firms operating in other countries.

Strong economic diplomatic presence will be established in countries with the potential for expanded market share. Trade will be diversified towards emerging economies by improving market access for South African exports, working with regional trading partners to lower tariff and non-tariff barriers, and improving transport and logistics networks in the region.

Developing true partnerships between business and government will be essential. Cooperation can support market penetration globally. Domestic cluster development will also be supported.

The tariff structure will be simplified while recognising the need for tariffs in specific areas. In addition, more emphasis will be given to offensive interests by seeking greater multilateral liberalisation from large emerging economies. Protection against unfair trading practices will be an essential barrier to undercutting of domestic producers.

Stimulating domestically oriented activity

The majority of new employment will arise in activities that are domestically oriented, where global competition is less intense, and there is high labour component. It may be

functionally possible to trade in these activities, but in essence, they must take place *in situ*. Examples include: housing construction, retail, personal services such as hairdressing or cleaning, business services such as office cleaning or repair. The environment for small-scale agricultural producers will also be improved. The active stimulation of demand for these goods and services, support for small firms, access to credit, easing of regulatory environment could help to make these activities more labour absorbing. The challenge is that the productivity of these activities is lower than the rest of the economy, and can have the effect of dampening potential growth.

Promoting industrial development through local procurement rules has been used effectively in a number of countries. Two recent policy efforts will form an important foundation for promoting the role of procurement. The Preferential Procurement Policy Framework Act constitutes an important step in stimulating local production through public sector procurement. This effort must be stepped up, alongside strengthened public procurement systems. A Local Procurement Accord, negotiated through the Department of Economic Development and social partners, commits both the private and the public sectors to ambitious targets in respect of the localisation of procurement. However, efforts to stimulate local procurement should not reinforce higher costs for the public sector and business because this will undermine growth and job creation.

Stimulating domestic demand

Domestically oriented industries will be actively stimulated, as they will be the main source of employment creation. Public and private procurement will be important sources of demand, enabling market entry in a highly concentrated environment. Small business support and special sector targeting measures will be pursued and are discussed in sections below.

South Africa as an integral part of regional growth

Leveraging a regional platform will be an essential part of a growth strategy. Each market is relatively small, but together there is a substantial consumer base that can attract foreign investment. Economies of scale and scope could be enabled through this larger market and through regional production chains. South Africa's growth potential will be tightly linked to that of the region.

Currently less than 6 percent of South Africa's merchandise imports are sourced from SADC, while more than 18 percent of the country's merchandise exports are to other SADC countries.

Commodities are an important driver, and currently account for 32 percent of growth. Commodity investments, large infrastructure projects and growing consumer demand are potential opportunities for South African companies, along with consequent growth in consumer demand regionally. The extent to which this potential can be unlocked, will

depend on how the continent deals with barriers to trade and investment, and implement agreements on regional integration.

South Africa will have to develop strategic relationships across the continent and further afield. This will depend on trade negotiating capabilities, as well as the ability to leverage project finance for regional investments. Bilateral agreements are crucial.

The current strategy rests on leveraging African growth, which has been faster than South Africa's.

South Africa therefore needs to fulfil a more active and integrating role within the region. This may entail shifting activities that cannot be produced competitively in South Africa to lower cost environments regionally. In Southern Africa's case, this could include integrating farmers (and intermediate inputs suppliers) within the region into supply chains, and shifting production of some of the more highly commoditised products. Similarly, diversifying the sources of electricity out of South Africa could reduce risks of supply constraints, assist in correcting trade imbalances and help to increase regional demand for South African exports. In the area of tourism, rising costs in South Africa can be partially offset by the packaging and marketing of regional tourism destinations together with South African ones – so that the relative attractiveness of both the local and regional offerings are enhanced and sustained for longer. This could necessitate a different approach towards the development and expansion of regional transport routes and modes.

By 2030, regional cooperation and integration in southern Africa and the continent will have produced demonstrable benefits for South Africa and its neighbours, boosting economic growth and social welfare (employment and incomes), as well as giving the region greater voice and influence in international forums. Progress in relation to regional integration will be reflected in the fact that the share of intra-African trade of total continental trade will more than double from current levels of about 10 percent by 2030. The approach to achieving this result is outlined in the chapter on South Africa in the region and the world.

Regional opportunities

South Africa will act as a spur to regional growth, rather than merely relying on it. This will involve greater commitment to regional industrialisation and supply chain linkages, shifting trade balances, power purchase agreements, the establishment of a Financial Centre for Africa, and substantially more financial resources devoted to funding projects in the region with linkages to South African companies.

National systems of innovation and learning permeate society and business

Continuous learning and innovation are essential ingredients to the success of middle and upper income economies. A substantial R&D sector, with support into commercialisation is essential. However, learning, innovation and process improvements often take place in incremental steps on the shop-floor if there is a conducive environment. Strengthening the system of labour relations and improving shop-floor relations and communication will be essential ingredients in promoting learning feedback loops within existing firms.

Accelerated technological redundancy and reduced product lifecycles create opportunities for new industrial firms to enter new product segments, but they also increase the risk to established firms and product segments. The policies and institutions that will support the formation of new, dynamic market segments will need to be agile, efficient, dynamic and self-correcting. They will need to help firms discover new lines of competitive advantage.

Global experience indicates that while growth in export earnings can encourage higher imports, it does not necessarily generate technological innovation and broad-based export-led economic growth. In shifting to a more dynamic economy, structural change arising from technological redundancy must be allowed. It is unclear how South Africa will manage the implications of such shifts for the output and employment of existing, but no longer viable, firms. The best solution is for the state to play an active role both in funding research and development and in guiding the type of research and development that the private and public sectors conduct. Despite an excellent set of science institutions, research priorities are not always consistent with South Africa's competitive advantage or growth strategy. Often we are looking far afield, when the base for innovation and new product development are linked to existing industries and firms. A well functioning research capacity is critical to sustaining growth and improving productivity. Chapter 9 considers the implications for the education system.

Innovation

South Africa's competitiveness will rely on national systems of innovation, permeating the culture of business and society. Innovation and learning must become part of our culture. This will require interventions from the schooling system, through to shop-floor behaviour to R&D spending and commercialisation. Public policy could focus on R&D in existing areas of competitive advantage, where global markets are set to grow. These include high value agriculture, mining inputs and downstream processing, innovation to meet environmental and energy efficiency objectives and financial services, among others.

A responsive labour market

The labour regime needs to be more responsive to the challenge of simultaneously expanding employment opportunities, raising living standards and reducing inequality. The labour environment operates in a context of slow growth, insufficient levels of employment, and weak skills. Issues that need attention include:

- Improving access to lifelong learning and career advancement.
- Stabilising the labour environment, improving dispute resolution and shop-floor relations.
- Clarifying dismissal and retrenchment provisions in the Labour Relations Act (1995) Code of Good Practice and its management.
- Strengthening the labour courts and resourcing the Commission for Conciliation, Mediation and Arbitration (CCMA).
- Reviewing regulation and standards for small and medium enterprises.
- Addressing public employment labour relations, wage setting, performance and the management of essential services.

Labour relations involve buyers and sellers in a highly contested terrain. In South Africa, there are extreme income and wage inequalities. Achieving desired social objectives is a challenge, particularly given competing interests of reducing mass unemployment, raising living standards and closing the earnings gap. In the earlier phase of the plan, emphasis will have to be placed on mass access to jobs while maintaining standards where decent jobs already exist.

Historically, race-based labour rules entrenched apartheid injustice and increased inequality. The central role of the new labour regime was to define and protect against unfair labour practices; minimise dispute settlement costs, ensuring visibly fair outcomes; promote collaboration between workers and employers to enable industrial expansion, with visibly fair distribution of benefits; and overcome obstacles to skills development and career mobility.

Today, almost 30 percent of those in formal employment are unionised. About 1 million work days were lost to strikes annually in the eight years after the Labour Relations Act was passed. In 2007, 9.2 million days were lost and in 2010, 20 million days were lost, suggesting that the labour relations environment has become particularly fraught.

South Africa needs to ensure better workplace relations, more protection of the rights of vulnerable workers, and promotion of an inclusive development path. With these rights come responsibilities for employer and worker organisations, as well as the state. This new scenario will require leadership, maturity and a commitment to rising employment, living standards and productivity.

Wage determination in the private sector

Wage determination needs to be more conducive to employment and equity objectives. Some considerations include:

- Ensuring a fair division of earnings in a context of extreme inequality
- Determining affordable wages that support economic expansion
- Recognising the need to achieve a social floor, including the social wage (e.g. free basic services, transport costs) and measures to reduce inflation of basic commodities and that of administered prices.

From a 20 year perspective, real wage growth will need to be linked to productivity growth – although it is possible for it to veer off for a few years, it is not feasible to sustain a labour-absorbing path unless both are growing in tandem. This is a sensitive, but critical point. Raising economy-wide and intra-firm productivity will help achieve rising real wages and expanding employment.

The median income from work was R2 800 per month in 2010 overall, and R3 683 per month in the non-agricultural formal sector. The bottom 25 percent earned R1 500 per month, the top 25 percent R6 500, and the top 5 percent R17 000. Within the top 5 percent, there is significant upward variation. The variation by race and gender is substantial. Average earnings for women are 25 percent to 50 percent less than for men. In the bottom 50 percent of earners, the average earnings of African workers is one-quarter to one-fifth that of their white counterparts. With high dependency ratios in low-income households, the majority of working people live near or below the poverty line.

Addressing this tension requires an appreciation of the multi-dimensional relationships among a variety of factors: Mass labour absorption will reduce the dependency ratio and thus lift the pressure on the employed. State interventions and cooperative relations with business will help reduce prices of basic commodities and improve the social wage. Employers will need to commit to higher rates of investment, labour absorption and equitable sharing of the benefits of higher growth and productivity. Measures such as entry-level wage flexibility should be encouraged but should not be exploited to displace experienced workers. In other words, there should be commitment to achieve the objectives agreed upon, within the rules that are jointly developed.

Skills supply

Active labour market policies

In South Africa, low-income households live far from the centre of economic activity. The costs of searching for and getting to work are high, and information about work is often unavailable. In this context, labour market services are critical, including those that prepare and match work seekers with opportunities. Low-cost and efficient public transport is essential – the approach to achieving this is discussed in the chapter on human settlements.

Several labour market experiments will be put into action from 2012. The following proposals will strengthen labour matching and increase skills development and supply:

- Driver training for school leavers.
- Offer a tax subsidy to employers to reduce the initial cost of hiring young labour market entrants; and facilitate agreement between employers and the unions on entry-level wages.
- Give a subsidy to the placement sector to identify, prepare and place matric graduates into work opportunities. The placement company will be paid upon successful placement.
- Extend the non-state sector Expanded Public Works Programme's employment incentive, aimed at increasing employment in non-profit organisations.
- Expansion of learnerships and making training vouchers directly available to work seekers.
- Employee retention schemes, which offers short-time work during periods of low demand.
- Provide access to lifelong learning that improves employability and measures to expand further and higher education throughput and quality (as discussed in Chapter 9).
- Adopt a more open approach to skilled immigration to enable expansion of high-skill supply in the short term, in a manner that obviates displacement of South Africans.

Labour market regulation

To achieve a decent work agenda, a balance is needed between enabling faster expansion in employment opportunities and the protection of human rights. There is evidence that policy intervention is required to improve employment creation and labour protection. The main areas that require attention include:

- An approach to handling probationary periods that reflects the intention of probation
- An approach that simplifies dismissal procedures for performance or misconduct
- An effective approach to regulating temporary employment services
- Monitoring compliance to statutory sectoral minimum wages
- Implementing and monitoring health and safety regulations
- Strengthening the CCMA and the Labour Court in dispute resolution and in support for trade unions and employers in managing shop-floor relations
- Limiting the access of senior managers who earn above R300 000 to the CCMA, given that their employment contracts better regulate dismissal procedures.

Approach to probation and dismissals

Probation allows employers to assess the suitability of employees. It is set for a specified period, often six months, to determine whether a new employee fits in based on capability, performance, personality, culture and other factors. Probation is twofold. It allows the new employee the opportunity to perform, but also gives the employer the chance to avoid undue risk. Uncertainty about the application of current provisions undermines the willingness of firms to hire inexperienced workers.

To ease entry into formal work opportunities, ordinary unfair dismissal protections should not apply to employees on probation, up to a limit of six months of service. This means that the contract is assumed to be limited to the probationary period, unless confirmed otherwise. To prevent the abuse of terminating and re-employing just before the probationary period expires, the period of service could include all previous service with the employer, whether directly or through a temporary placement agency.

Dismissals: misconduct or poor performance

Employers are concerned by pre-dismissal procedures in cases of misconduct or poor performance. The Code of Good Practice has a simple set of guidelines for such cases. However, experience has not reflected this simplicity. The old Industrial Court developed jurisprudence under the old Labour Relations Act that imposed strict procedural requirements on pre-dismissal hearings. Despite the amended act trying to break from this approach; lawyers, arbitrators and judges continue to apply technical and exacting jurisprudence in applying the new act. Rulings from the Labour Court have clarified that the "criminal model" of procedural fairness is not consistent with the 1996 act and arbitrators are required to follow a less technical approach. The procedures, however, remain too strict and formulaic, and are inconsistent with legislation on the statute books. There is also anecdotal evidence showing that there may be excessive reversal of dismissals on procedural rather than substantive grounds.

To reduce the regulatory burden, we recommend that the pre-dismissal procedure requirements be revisited to simplify the procedures. Any appeal or reversal of a dismissal should be ruled on substantive and not procedural grounds, except in the case of constructive dismissal.

Labour regulation for small business

Small businesses highlight the obligations of labour legislation as one of the main regulatory burdens, arguing that they generally do not have the financial or administrative resources to comply with all regulatory requirements. This does not, however, imply that these businesses should be exempt from labour regulatory requirements, as complete exemption may act as a perverse incentive for a race to the bottom among small business and for larger employers to reduce their workforce to circumvent labour regulation.

To reduce the regulatory burden for small and medium enterprises, we recommend that the Code of Good Practice clearly lay out procedures appropriate to small business.

Compliance requirements and reporting to employment equity and skills development regulations for small firms should be simplified, or even eliminated for very small firms.

Dismissal of senior managers

The laws on dismissal apply to all employees, regardless of their level of seniority or skill. This is despite the fact that senior managers and even professionals can be excluded from protection from unfair dismissal as they should be adequately protected in terms of their employment contracts. Evidence suggests that senior managers use free services offered by the CCMA to get large financial settlements or to avoid dismissal, or both – even in a situation of egregious misconduct. This is a concern, particularly for the public service.

To prevent regulatory duplication and to reduce the burden on the CCMA, it is recommended that laws of unfair dismissal apply to senior management, but that private mediation and arbitration services, or the courts, are used, not the CCMA.

Strengthening the Commission for Conciliation, Mediation and Arbitration and the Labour Court

The CCMA is an independent institution overseen by a tripartite governing body. This system was intended to provide cheap, quick, accessible and informal dispute resolution. Cases not settled by mediation or arbitration are referred to the Labour Court. Labour courts are specialist courts with national jurisdiction and have the same status as the High Court of South Africa.

Bargaining councils play an essential role in dispute resolution within their respective sectors. They typically handle about 90 000 cases a year. The CCMA plays a larger role for unorganised sectors, such as domestic workers.

The operational efficiencies of this institution and the labour courts are important for the effective operation of the labour market.

The Labour Court handles only a fraction of all disputes, as intended by the new labour regulatory regime. Even so, the courts are not handling this reduced caseload well. Only 20 percent of reviews lodged with the labour courts in the first 10 years of the CCMA's operation had been finalised. It takes an average of 24 months for a review application to be heard in the Labour Court. In the Labour Appeal Court, it is reported that delays between 12 and 18 months between date of hearing and date of judgment are not uncommon.

A review of the funding model of the CCMA and the operational functionality of the Labour Court and Labour Appeals Court is recommended.

Regulating temporary employment services

Private temporary employment and placement services have significantly contributed to labour market matching in the past two decades. This may partly be explained by formal employers seeking to circumvent labour regulations. It may also be caused by the rapid

expansion of services sectors, which have been the main source of employment growth. Bhorat[3] estimates that 900 000 people have been placed in some work opportunity as a result of the temporary employment services sector. These services are essential given the fragmented labour market, where low-income households are generally far from economic opportunity with weak labour market networks. Most new opportunities are in services activities, which often involve changing jobs periodically. These employment services raise the chance of achieving more regularised employment, as well as access to skills training for new placements. Such a service provides the opportunity for regulation and access to benefits for workers.

The private labour placement sector and temporary employment services need to be effectively regulated to ensure that the opportunity for labour matching is available to vulnerable workers, while protecting basic labour rights. Some basic provisions would ensure that after six months with a temporary employment service and/or client, they would be jointly and severally liable for unfair dismissal and unfair labour practices. The temporary employment service would be responsible for the employment relationship regarding the Unemployment Insurance Fund, the Compensation for Occupational Injuries and Diseases Act, the Basic Conditions of Employment Act and the Skills Development Act.

Labour market

The labour market will become more responsive to the challenge of expanding employment, raising living standards and reducing inequality. The labour environment should become more stable and mature. The most important improvement will involve strengthening the accessibility and relevance of the post-school training system, as well as active labour market policies that enable the matching of seekers and employers, and that bring down the cost of searching and taking on work.

Private sector remuneration underpins income inequality and cannot only be explained by disparities in skill. Approaches to identify a fair division of earnings will receive attention.

Public sector labour relations will become more conducive to delivery and employment objectives, with wage determination aligned to budget processes, clearer rights and responsibilities in respect of essential workers, and greater work opportunity opened up in the lower ranks of the public service.

The labour market regulatory system will be strengthened with a special eye to improving the efficiency of dispute resolution mechanisms. In addition, temporary employment agencies will be regulated. Statutory minimum wages will be more closely monitored and implemented to ensure protection of highly vulnerable workers.

[3] Bhorat H (2011). A labour market position paper for South Africa: Six policy suggestions. Paper prepared for the National Planning Commission.

Spatial dynamics and rural employment

Rural economies
Rural economies will be activated through the stimulation of small-scale agriculture, tourism, and mining investments. Public sector procurement will also be leveraged to stimulate local activity. Much will depend on strengthening local institutions, the flow of infrastructure funding, equitable social service provision, and addressing land tenure reform and regulation in respect of water and mining. The mining charter needs revision to improve the approach to community investment.

As discussed in detail in Chapter 6, it is important to locate poor and unemployed people in better-situated land. This will make it easier and cheaper to access work opportunities, provide cheap and efficient public transport networks from existing townships and encourage business activity (including labour-intensive manufacturing) close to dense townships.

These are costly and complex reforms to implement, requiring clearer planning legislation, including land use management reforms, firm steps to limit urban sprawl and prioritising urban transport networks that are adequately resourced and well run.

It is possible to raise employment in rural areas through a rural development strategy that focuses on raising agricultural output, providing basic services, supporting small farmers, broadening land ownership and investing in water, transport and other network infrastructure. A well implemented strategy to boost agricultural output could create up to 1 million jobs by 2030.

Small and expanding firms will support dynamism and linkages

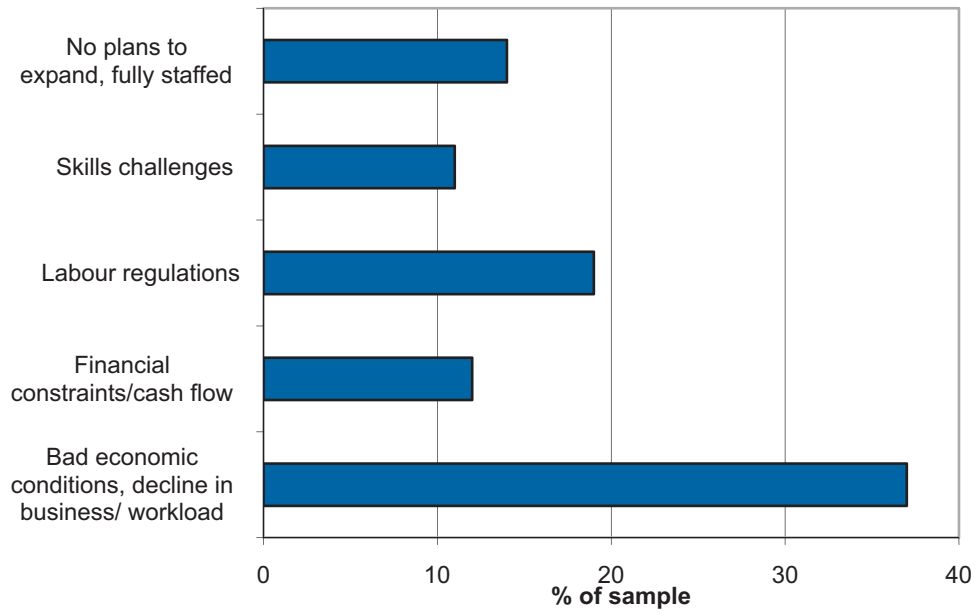
Small and medium enterprises
Small and expanding firms will become more prominent, and generate the majority of new jobs created. They will be stimulated through public and private procurement, improved access to debt and equity finance, a simplified regulatory environment, and support services.

Small- and medium-sized firms will play an important role in employment creation. According to a FinScope survey,[4] 90 percent of jobs created between 1998 and 2005 were in micro, small and medium firms. Despite this, total early-stage entrepreneurial activity rates in South Africa are about half of what they are in other developing countries.

[4] FinMark Trust (2006). *FinScope South Africa: Survey highlights including FSM model*.

The figure below provides the top reasons that prevent small and medium enterprises from growing their employee numbers. The main reason is the current economic environment followed by the labour environment, financial constraints and skill challenges.

Top five factors discouraging expansion of staff numbers



Source: SBP's *SME Growth Index,* 2011

Net new employment is not typically created on a significant scale in existing businesses. This is usually the preserve of newly established business entities, which tend to be smaller in size. We need to foster sustainable businesses with potential for job creation and competition. This will generally require significant access to supply chain opportunities and facilitative buyer-supplier relations.

Aside from creating jobs, there are other advantages to broadening the base of new and expanding firms: reduced levels of economic concentration, higher levels of competition, and increased opportunities for broad-based black economic empowerment. However, there are real obstacles to creating such an environment, including distortions created by South Africa's apartheid past in ownership and access to land, capital and skills for the majority of the population; widespread crime; a policy environment that traditionally favours concentration and large corporations; and a global trade environment that encourages and rewards economies of scale and scope in both production and distribution.

Because they have supply chains across the country, large firms are able to sell their products at prices smaller companies cannot match. A strategy to promote small business cannot succeed without addressing the challenge of accessing established supply chains.

The extent to which small-scale agriculture, microenterprises and artisanship have weakened is a concern. In many developing countries, it is these activities that provide shock absorbers for extreme poverty and platforms for self-employment, with the potential to serve as rungs on the ladder of economic advancement.

By 2030, South Africa will have created an economic environment that is conducive to the dynamic formation and expansion of new businesses. This will be reflected in significant increases in the number of new firms that are established, decreased levels of economic concentration in most sectors, more diversified economic activity, deeper supply chains with more intermediate inputs sourced from local suppliers, and higher levels of innovation. Key proposals are discussed below.

- ***Public and private procurement*** will be an essential stimulator of demand for small and expanding firms. The Local Procurement Accord will be leveraged to promote stronger buyer-supplier relations and deeper localisation. Critically, both public and private sectors must implement commitments to 30 days payments to their small- and medium-sized suppliers.
- ***Access to debt and equity finance will be improved***. The state's role in easing access to finance by emerging businesses needs to be examined. Part of the reluctance of credit providers to lend in this market arises from the high costs of additional monitoring, advisory and support services that are required to manage the risk of default. It may be preferable to establish a subsidy to existing banks that specifically targets these support service costs, rather than underwriting the principal debt. The role of venture capital requires exploration.
- Critically, urgent measures are needed to reform the mandates and operations of development finance institutions, in line with initiatives already being undertaken, and upgrade the skills of those providing business advice and services.
- Measures should also be taken to build research capacity to address the paucity of data currently available on small, medium and micro enterprises and scale up public communication on available opportunities.
- ***The regulatory environment will be simplified.*** An expert panel will be appointed to prepare a comprehensive regulatory review for small- and medium-sized firms to assess whether special conditions are required. This includes regulations in relation to business registration, tax, labour regulation, local government regulations. Regulatory impact assessments will be done on new regulations.
- ***Small business support services will be consolidated and strengthened.*** Action has already been taken to create a unified small business service delivery agency. Public-private partnership can be considered, where the private sector is incentivised to provide small businesses with support, with increased payment contingent on success.
- ***Skills gaps will be addressed.*** There is a need for early-stage entrepreneurship training to draw in younger people. Artisan training and practical experience often lead to the creation of new firms.
- We need to improve the system of identifying critical skills and instituting measures to address the deficit through joint action of government, state-owned enterprises, the private sector and further education and training institutions.

- As reflected in Chapter 9, the system of skills training should be reformed to provide for the needs of the economy (including the sectors and activities identified in the plan) and of society as a whole.
- ***Black and gender economic empowerment will continue to be a priority.*** As indicated in the diagnostic document, besides the fact that many of the empowerment transactions are debt-financed, the demographic distribution of economic assets remains skewed and the benefits of redistribution are shared by a small section of the previously disadvantaged. These and other weaknesses do not detract from the necessity for broad-based empowerment. In addition to intensifying pursuit of broad-based black economic empowerment objectives across the variety of its dimensions, among the actions proposed are:
    - Conduct a comprehensive study to collate data on progress across all elements of broad-based black economic empowerment as well as an analysis of the macro-impact of the policy on the economy and case studies of models of empowerment.
    - Strengthen accountability and enforcement mechanisms to ensure compliance.
    - In addition to small enterprise development, promote black and women's involvement in emergent and expanding industries (referred to in this plan), as active hands-on entrepreneurs. Among others, this would imply for instance that procurement opportunities for black enterprises that rely on cheap imports would be discouraged in favour of building value-addition capacity in the economy.

Providing a stable and enabling macroeconomic platform

Macro economy

A stable and enabling macroeconomic platform will underpin sustainable growth and employment creation. Within the framework of a floating exchange rate, approaches to protecting firms from Rand volatility will be explored. Considerable attention will be devoted to fiscal impact on the development, through improved efficiency in government spending, and an appropriate balance between investment and consumption expenditures.

A stable and enabling macroeconomic platform will underpin sustainable growth and employment creation. Macroeconomic policy serves as a foundation for growth and development. It must support the country's overall development strategy and contribute towards higher growth and employment.

The principal task of macroeconomic policy is to provide a stable and enabling platform upon which firms and individuals invest, work and consume. A crucial role for macroeconomic policy is to minimise the cost of shocks to the economy, especially in its impact on workers and the poor. It does this by ensuring relative stability in prices, and critical variables, such as interest rates and the exchange rate. There is an inherent trade-off

between stable prices, interest rates and exchange rates when the price of leading imports and exports change.

The success of the development plan depends on supporting investment, especially domestic investment, incentivising savings and enabling firms and individuals to take a longer-term perspective of economic opportunity. Given South Africa's economic circumstances, the present approach of a floating exchange rate is the most sensible instrument to protect the economy from external shocks. For example, if the oil price rises by 10 percent under a fixed exchange rate regime, the price of fuel will rise by a similar magnitude. However, under a floating exchange rate, an appreciation of the currency can offset the need for a fuel price rise. Similarly, if the gold or platinum price falls sharply, a weaker exchange rate can smooth out the rand earnings of these commodities.

The rand is a highly volatile currency, militating against a secular expansion in goods production and diversification, and constraining small firms. Policy should focus on minimising the impact of this volatility on the real economy. Higher reserves, higher savings rates, a more diversified economy (and export basket), prudent and countercyclical fiscal management, sensible mineral royalty regimes and macroprudential regulations[5] all help to provide the stable platform for investment, growth and employment creation.

There are additional steps that can be taken to help protect the economy from an overvalued exchange rate when commodity prices are high. Running a budget surplus and faster accumulation of reserves helps to weaken the exchange rate. The mandate of the Reserve Bank gives it the licence to take factors such as the exchange rate and employment into account in conducting monetary policy. Rand volatility poses great difficulty for both exporters and importers, and militates against smaller- and medium- sized firms in particular. An approach will be required to buffer small and medium enterprises from rand volatility, and this will be an issue considered by the commission in 2012.

The balance in expenditure between consumption and investment will be key to delivering higher growth and employment. There are significant choices to be made between public sector wages levels, the size of the public sector and the allocation to investment. In general, the budget should prioritise those investments that raise economic growth and that improves the capabilities of people.

Development finance institutions are part of the overall fiscal armoury of the state. Their role is to partner the private sector in lowering risk, take a long-term perspective towards investment and promote government's development objectives. Development finance institutions in the industrial, infrastructure, agricultural and housing sectors form a critical part of the plan to raise growth and employment. Measures will have to be instituted to ensure that they operate efficiently and have sound balance sheets, in order for them to meet their development mandate.

[5] Macroprudential regulations govern the banking and insurance sectors, compelling these institutions to keep a major portion of their assets in the country.

Sectors and clusters

In order to attain the objective of full employment, decent work and sustainable livelihoods it will be necessary to take firm decisions on sectors and clusters that will serve as a platform to launch onto a new growth trajectory.

There are two related sets of tensions in industrial policy: between government picking and supporting winners and an open architecture approach where support is informed by market-based mechanisms. In practice, most countries try both approaches, but there is an opportunity cost where resources are limited.

The sectors identified below are those with substantial potential for either growth stimulation, or employment or both. They cover areas of existing competitive advantage and our main resource industries. There is evidence that there is substantial growing global demand in these areas, that they will contribute to rising terms of trade and that they have potential to stimulate domestic linkages.

While the sectors identified below contain competitive advantages for South Africa and the possibility for large-scale labour absorption, these and other sectors should be promoted in a manner that allows for a transition to a knowledge economy and optimal usage of information and communication technologies. Research into and initiation of such a transition, and optimal exploitation of capabilities in which South Africa is already a leading player in cutting-edge technologies should happen immediately, because the impact of such initiatives has long lead times.

The agro-industrial cluster

The agro cluster encompasses farming activities, downstream processing of foodstuffs and beverages, upstream suppliers of inputs into food manufacturing (such as packaging, containers and preservatives) and into farming (such as fertiliser, seed and capital equipment). The sector favours large commercial farms, and vertically integrated agro-processing. This constrains entry and expansion of small farmers and manufacturers. South Africa accounts for 0.6 percent of global market share in food sales, increasingly veering away from mass grains towards more diversified products such as edible fruits and nuts, fats and oils, meat, and dairy products.

The falling share of agriculture employment is not unusual in a development process, but is so in the context of a large labour surplus. Agriculture is still one of the most labour-intensive goods production sectors, with substantial employment linkages. Resources are not being used sensibly, which requires urgent attention because this sector is one of the few remaining goods producers with strong direct and indirect economic and employment links to the rural poor.

The neglect of agriculture speaks to the neglect of rural communities. The contraction in formal employment in agriculture is not a recent phenomenon. In 1971, there were

1.8 million people employed, dropping to 1.2 million in 1995, and falling dramatically to just over 600 000 today (or 900 000 if including fishing and food & beverage processing are included). The number of hectares under cultivation has been falling since 1974, and hectares under irrigation have not expanded since the early 1990s.[6] Compared to other regions, South Africa has a very small share of its rural population engaged in agriculture. These longstanding trends show that although it is possible to turn agricultural production around, it will not be easy or rapid.

South Africa's commercial farming sector has had major investments (from the public sector, the private sector, and from public-private partnerships) that have resulted in new growth and jobs. For example, extending the table grape industry along the Orange River and the sugar industry into Mpumalanga (both through partnerships between the Industrial Development Corporation and the private sector), and the more recent expansion of the wine industry. Similar opportunities exist with untapped potential, including the Makatini Flats and the Eastern Cape (Umzimvubu River Basin). New initiatives, such as the role of agriculture in the green economy and conservation efforts in general, can potentially create new employment opportunities in rural areas, although climate change will influence which investments will pay off best, and where they should be made.

Without any major policy improvements, the agriculture sector could continue to shed employment, mostly due to land consolidation and technical change. Of the range of possible employment outcomes in agriculture discussed here, the most optimistic scenario shows that about 1 million direct and indirect jobs can be created. The future depends on whether land can be developed to produce labour-absorbing crops. An additional million opportunities might be created in micro and semi-subsistence farming.

Chapter 6 outlines proposals to stabilise income for farmers, and to stimulate demand for their output.

[6] BFAP (2011). *The contribution of the agro-industrial complex to employment in South Africa.* Report prepared for the National Planning Commission.

Agriculture and agro-processing

Key proposals include in the agriculture and agro-processing sectors include:

- Substantial investment in irrigation infrastructure, including water storage, distribution and reticulation throughout the country where the natural resource base allows, as well as in water-saving technology. A 50 percent increase in land under irrigation would cost R40 billion in off-farm infrastructure over a 10 year period.
- Greater investment in providing innovative market linkages for small-scale farmers in communal and land reform areas.
- As part of comprehensive support packages for farmers, preferential procurement mechanisms should be put in place to ensure that new agricultural entrants can also access these markets.
- Investment by farmers in these areas will only occur if they believe that their income streams from agriculture are secure. Tenure security is vital to secure incomes for existing farmers at all scales, for new entrants into agriculture, and for the investment required to grow incomes.
- Growth in agricultural production has always been fuelled by technology, and the returns to investment in agricultural research and development have always been high.
- Policy measures to increase intake of fruits and vegetables and reduce intake of saturated fats, sugar and salt, as recommended in the South African food dietary guidelines, should accompany strategies to increase vegetable and fruit production.
- Innovative measures, such as procurement from small-scale farmers to create local buffer stocks and community-owned emergency services, could be explored.

The minerals and metals cluster

The minerals cluster encompasses all mining and quarrying activities, supplier industries to the mining sector, and downstream beneficiation of the minerals that are mined.

The collective share of direct mining activities of South Africa's GDP has declined from 21 percent in 1970 to only 6 percent in 2010. Over the same period, the number of people employed directly in mining (excluding upstream and downstream industries) fell from 660 000 to about 440 000 in 2004 and stabilised at that level. Mining, minerals and secondary beneficiated products account for almost 60 percent of export revenue.

The expansion of mining exports mainly depends on global demand, the availability of the mineral, prospecting and mining technology, access to energy and water, and an enabling and transparent regulatory environment. The relative competitiveness of alternative locations is also a factor. In minerals such as platinum or manganese, South Africa has the main global deposits. Despite this clear potential, the mining sector has failed to benefit fully from the commodities boom over the past decade or more. South Africa needs to exploit its mineral resources to create employment and generate foreign exchange and tax revenue.

Given the energy-intensive nature of mining and mineral beneficiation, South Africa will need to invest heavily in helping the industry to reduce its carbon footprint. Similarly, the mining sector needs to use water more efficiently. Concerns about the impact of a resource curse should not be confused with an essential commitment to expanding minerals production and exports. The resource curse will be addressed partly through forward and backward linkages stimulated to expand industrial and services capabilities.

Over the past decade, the South African mining industry has performed poorly. During the commodity boom from 2001 to 2008, the mining industry shrank by 1 percent per year, as compared to an average growth of 5 percent per annum in the top 20 mining exporting countries. The mining industry is smaller now than it was in 1994. This is an opportunity lost, as estimates show the mining sector could expand by 3 percent to 4 percent a year to 2020, creating a further 100 000 jobs (Mining Industry Growth and Development Task Team). The HSRC's most optimistic estimates show that mining employment could expand to 200 000 by 2024,[7] potentially stimulating a further 100 000 jobs through linkages and more if they are actively stimulated. This relies substantially on platinum group metals.

The central constraints are uncertainty in the regulatory framework and property rights, electricity shortages and prices, infrastructure weaknesses especially in heavy haul rail services, ports and water, and skills gaps.

Stimulating mining investment and production, in a way that is environmentally sound, and that promotes forward and backward linkages is urgent, given South Africa's substantial unrealised opportunity and global market dominance in deposits.

Beneficiation or downstream production can raise the unit value of South African exports. In this regard, resource cluster development including the identification of sophisticated resource-based products that South Africa can manufacture will be critical. Electricity is the main constraint, as most of these activities are highly energy intensive. As long as electricity is scarce, there will be a trade-off between beneficiation and other more labour-absorbing activities. In general, beneficiation is not a panacea because it is usually highly energy and capital intensive, contributing little to overall job creation.

Substantially more attention will be devoted to stimulating backward linkages or supplier industries (such as capital equipment, chemicals, engineering services), especially as demand is certain, there is an opportunity for specialised product development, and the product complement is diverse. They are also more labour absorbing than typical downstream projects. Such products have the potential for servicing mining projects globally, an advantage should the commodity boom persist.

[7] Baartjes N, Auchterlonie A, Sorensen P and Goode R (2007). *Mining employment scenarios for South Africa to 2024.* HSRC.

Mining companies have an explicit requirement to participate in local development, and the resources to do so in South Africa and the region. Local economic development could be more substantially stimulated by the mining sector if the mining charter were better aligned to these goals. More could be done on human resource development, local economic development or procurement.

Notwithstanding these challenges, it should be possible to create about 300 000 jobs in the minerals cluster, including indirect jobs.

Minerals cluster

Proposals to grow investment, outputs, exports and employment in the minerals cluster include:

- Address the major constraints impeding the accelerated growth and development of the mining sector in South Africa. The main interventions include: ensuring certainty in respect of property rights, pass amendments to the Minerals and Petroleum Resource Development Act to ensure predictable competitive and stable mining regulatory framework, secure reliable electricity supply and/or enable firms to supply their own plant with an estimated potential of 2 500 MW by 2015, secure reliable rail services, potentially enabling private participation.
- Develop, deepen and enhance linkages with other sections of the economy. This includes: linkages with both manufacturers of inputs (capital goods and consumables) and suppliers of mining-related services; downstream producers, especially for platinum group metals and chrome ore. In this regard, an export tax could be considered.
- Provide focused research and development support to enable improved extraction methods that lengthen mine life, better energy efficiency and less water-intensity, alternative uses of South Africa's extracted minerals, especially platinum group metals, titanium and others that have potential for application in new energy systems and machinery.
- Identify opportunities to increase regional involvement and benefit in the whole minerals cluster. This could include encouraging the establishment and development of alternative providers of partially processed intermediate inputs in other countries in the region.
- Ensure active engagement on, and resolution to, issues raised through the mining industry Mining Industry Growth and Development Task Team process.
- Improve alignment of mining charter requirements to ensure high impact on local communities.

Manufacturing

Currently South African manufacturing strength lies in capital-intensive industries. In a context of high unemployment, growth would ideally be sourced through expanded contribution of labour. However, to compete, the country's cost structure requires an emphasis on productivity, products and logistics.

The most important contributions to manufacturing expansion will be in relation to the business environment itself. Some of the key challenges relate to the availability and cost of electricity, the efficiency of the logistics platform, the quality of telecommunications, and fast rising administered pricing for electricity, transport, fuel, and fertilizer. Constrained skills supply poses great challenges. A volatile and sometimes overvalued currency challenges both imported inputs and exports.

Half of South Africa's manufacturing exports lie in capital-intensive processed minerals, metals and chemicals. Intensive support to the motor industry has had substantial effect on expanding both imports and exports of vehicles, the stimulation of assembly and some backward linkages, but most employment is generated in vehicle retail sales.

Other major opportunities for manufacturing should be considered in relation to clusters of activity and are discussed in other parts of this section – such as supplier industries to construction, the energy sector, waste reutilisation, mining inputs, downstream processing of metals, and others.

Stimulating manufacturing

Stimulation of these sectors will be facilitated through, among others:

- Ensuring a growing share of products that are dynamic, and with potential for domestic linkages.
- Public and private procurement will be leveraged to promote localisation and industrial diversification.
- R&D support for product development, innovation and commercialisation will be intensified.
- Approaches to buffering manufacturers from the effects of currency volatility will be explored.
- Strengthening network infrastructure and skills supply, and bringing administered prices under control.

Construction/infrastructure cluster

The infrastructure/construction cluster includes industries producing new infrastructure and construction assets, the network of suppliers to those industries, and the entities engaged in operating and maintaining this new infrastructure. Infrastructure investment is critical, because it creates jobs for low-skilled people, encourages private investment, lowers the cost of doing business, promotes spatial inclusivity and has strong backward linkages to supplier industries.

The state has committed substantial funding (R808 billion over the next three years) to public infrastructure to address backlogs, but not all of it is spent.

Employment has fallen from 833 000 in 2006 to 712 000 in 2009. Of this, about 60 percent is formally employed. There have been only two years of substantial employment growth in construction over the last decade.

Rising income and employment combined with a stable outlook for interest rates can promote small-scale construction in the residential construction and housing renovation market – a key employment driver. Similarly, more and better quality public housing also has strong linkages to local supplier industries, promoting growth and employment.

There is also scope for export growth – particularly to other African markets – for products that competitively meet customer needs.

Construction/infrastructure

Key proposals to grow this sector include:

- Government's ability to spend its infrastructure budget will be addressed, particularly with regard to project management capacity, long term planning and monitoring and evaluation of both expenditure patterns and construction work.
- The civil construction and the supplier industries will be supported in their export efforts – with the establishment of a Financial Centre for Africa, and more support in commercial diplomatic relations.
- Support to supplier industries such as building supplies, steel, glass and cement will be intensified.
- Conditions will be created for a less cyclically volatile industry by emphasising numerous, smaller scale, regionally dispersed projects to address backlogs that are more accessible to smaller firms and new entrants.
- Public funding will be expanded for alternative types of low-income housing that would generate more demand directly and in supplier industries.
- Promote a simultaneous focus on more energy-efficient buildings and building techniques to reduce demands on electricity supply in the longer term. Home insulation and the installation of solar water heaters are labour-intensive activities that have strong backward linkages to supplier industries.

The green economy

The United Nations Environmental Programme defines the green economy as "a system of economic activities related to the production, distribution and consumption of goods and services that result in improved human well- being over the long term, while not exposing future generations to significant environmental risks and ecological scarcities". Shifting to a green economy, including to a low-carbon economy, is about shifting to a more sustainable economic growth and development path in the long term and therefore has implications for the choices we make about the structure of our economy. This section deals with the green economy in the context of a new and growing sector within the South African economy. Chapter 5 considers how South Africa will shift onto a low carbon-emitting path.

The "green economy" agenda arises simultaneously with South Africa's energy shortages. Aside from intentions to build coal fired plants, South Africa's imperative to dramatically expand renewable energy sources and to promote energy saving is quite consistent with the global agenda. A target to generate 20 000 MWh of renewable energy by 2030 has been set. Progress towards achieving this target has so far been sluggish with about 1 percent of electricity generated from renewable sources.

The green economy agenda will be leveraged to promote deeper industrialisation, energy efficiency and employment. The Green Economy Accord currently being negotiated between social partners will help drive forward this agenda.

The finance sector

The finance sector incorporates all those activities linked to credit and loans, the raising of capital, the trading of financial assets and properties, the investment and management of savings, and the provision of banking and insurance services. Like many other areas, it has undergone significant change in recent decades, mainly as a result of technological change. There is now a far larger foreign presence in ownership as a result of mergers and acquisitions.

Finance sector output tripled since 1994, while the rest of the economy expanded by 67 percent, and was an important contributor to employment expansion. About 300 000 to 400 000 people work in finance, insurance and related activities. Substantial employment is a created indirectly, through property, building maintenance, security, personal and business services.

In addition to its role as a provider of potentially dynamic intermediate services, the finance sector has the potential to contribute towards greater inclusion of historically marginalised groups – by extending access to banking and insurance services, by helping to promote and mobilise household savings, and by easing broader access to credit. While the South African banking and insurance sector is viewed as relatively sophisticated in a global context, banks and insurers find it hard to extend services to this market segment using traditional channels because of their high costs and limited potential for income.

The proportion of the population that is banked or has access to transactional financial services and savings facilities is expected to increase from about 63 percent to about 90 percent by 2030. Developments in ICT have made it possible to establish alternative virtual networks that can be used to deliver financial and other services at much lower cost. Similarly, in the short-term insurance field; alternative, lower cost technology platforms such as the Internet and mobile networks will make it easier for insurers to offer reduced premiums (for commensurately lower levels of cover), which should help to expand access.

It is concerning that South Africa's banks do not extend sufficient credit to businesses, especially small, medium and micro enterprises. Greater access to credit for firms would lead to higher levels of business investment and jobs. Several countries, most notably India,

have specific quotas for credit to the business sector. To reduce lending risks, public-private partnerships in providing advisory and support services should be considered.

South Africa has not used its sophisticated financial services industry sufficiently to foster growth and create employment. With government support, these sectors can expand more aggressively on the continent, with strong linkages to the South African economy. Key obstacles to expanding back office operations include high Internet charges, low bandwidth and skills constraints in managing these types of operations. Making it easier for foreign companies to bring in skilled foreign workers will also help the sector.

The finance sector

Areas that should be prioritised include:

- Continuously broadening access to banking services to poorer people and lowering costs through a combination of competitive pressures and other reducing other infrastructure costs.
- Strengthening credit extension to productive investments especially small and expanding firms and for working capital. Government and the private sector have to work together to find ways of increasing business lending.
- Provision of small business advisory and support services financed partly by the state.
- Conclude discussion to identify and deploy investible capital for productive purposes in labour-absorbing sectors.
- Encourage private firms such as construction firms to partner with South African banks in providing project finance for contracts on the continent.
- Implementing the notion of a financial centre for the continent to support project finance.

Retail and business services

Retail and business services are together the biggest employers in most middle and high income economies. In South Africa, the formal retail sector accounts for almost 2 million jobs in the formal sector and another 3 million in informal activities. Business services account for about 20 percent to 30 percent of gross value added and over 1 million jobs.

A number of retailers have effectively located in the region, and this generates export opportunities for fast moving consumer goods producers if effectively leveraged.

Business services comprise a wide set of activities from office cleaning, computer repair, real estate and back-office processing among others.

Information technology-enabled services transacted locally and across borders have become firmly established over the past decade, and could be seen as a new industry growing very rapidly. It is therefore essential that substantially more effort be invested in drawing this business to our shores.

Retail and business

In support of employment and growth, the following will be pursued in the plan:

- The retail sector will be encouraged to procure goods and services aimed at stimulating local producers, and especially small and expanding firms.
- Further investigation will be conducted on opportunities for the stimulation of sustainable small-scale retail and cooperative buying, with the aim of reducing costs in townships and rural areas, and stimulating related employment.
- South African retail operations in the region will be encouraged to supply stores with South African products, and also be supported to develop suppliers within the region in support of regional industrialisation objectives.
- Information technology-enabled service exports will be promoted, with the aim of attracting United States, United Kingdom and Indian business process outsourcing. South Africa should become a leading provider of information technology-enabled services globally, with services integrated into the region.
- Rising consumption of the lower income groups within South Africa and the region should stimulate retail employment, and demand for supplier industries.

Tourism cluster

The tourism cluster encompasses the range of activities and associated incomes that accompany people visiting our shores. The total contribution of tourism activity to South Africa's gross value added was estimated at over 9 percent in 2008. South Africa has the disadvantage of being far from wealthy consumers, but we have several comparative advantages including natural beauty, well managed national and other parks, the domestic aviation sector, hotel capacity and personal services industry. South Africa has positioned itself as a key conference and sports event destination.

The tourism industry is labour intensive, stimulating of the growth of small businesses. It can develop other spin-offs, such as foreign direct investment and the crafts industry. Further competition in the airlines industry would help lower costs of travel.

Key policy issues include:

- Emphasis will be placed on increasing the total number of tourists entering the country, and an increase in the average amount of money spent by each tourist, or both.
- The ease of doing business, as well as availability of appropriate levels of tourism infrastructure (particularly transport and accommodation), will play an important role in attracting different types of tourists.
- Foreign business tourists arriving by air generate the most significant multipliers. Among others, South Africa will be positioned as business and shopping centre for the region.
- South Africa can do more to develop the region as an international tourist destination by emphasising the broader biodiversity and range of tourism products, and making it easier for tourists to travel between countries in the region. A Schengen-type visa for the region will be considered.

Public-sector employment

The public service typically plays an important role in employment creation. South Africa exhibits a paradox in this regard. The public sector employs about 9 percent of the labour force and accounts for about 18 percent of formal employment. Despite this limited number, the public service wage bill (including local government) exceeds 12 percent of GDP – very high by both developed and developing country standards.

South Africa's public sector is faced with a difficult dilemma. In a skills-constrained economy, the premium for skilled labour is high. This pushes up the salaries of skilled people in the public service. The public service also pays well above the market rate for low-skilled people, inhibiting its ability to create low-skill jobs.

In theory, it should be possible to grow public employment in areas such as health, policing, social welfare and education. This however will need to be balanced against the magnitude of increases in public sector salaries. Furthermore, opportunities need to be identified in entry-level services such as auxiliary nurses, community health workers and day-care services for pre-schools.

Public employment schemes

Public employment schemes will be an essential part of an employment plan to 2030. The main opportunities will lie in community-based services. Realistically, it will be essential to plan and budget for a minimum of 2 million opportunities annually.

It should always be recognised that the emphasis should be placed on generating market-based opportunities where possible.

The problem of unemployment and under-employment has become too big for market-based solutions to solve in the next 10 to 20 years. The problem includes both severe unemployment and very low levels of remuneration from market-based employment. There is no doubt that market-based employment is the most sustainable source of job creation but in even the most optimistic of scenarios, many people are likely to remain out of work. Low productivity, non-market services such as expanded public works projects in government construction, care, self-help projects and survivalist activities are generically called public employment schemes.

The public employment programmes should target the creation of 2 million opportunities annually by 2020 or earlier if possible. The central challenge is to identify institutional approaches that enable the achievement of this scale. Few programmes have succeeded. The Community Works Programme, which decentralises decision making to the ward level, holds this promise. It is probable that most opportunities will be found in community-based care such as early childhood development. These employment schemes should therefore complement social delivery programmes to strengthen community reach.

Role of the state and institutional capability

This plan places a high premium on making specific choices to launch the country onto a higher growth trajectory. It avoids seeking to address all the challenges all at the same time. Firm and focused leadership by government will be critical in this regard. The major institutional challenges in the public sector are dealt with in Chapter 13. In the economic sphere, among the major stumbling blocks to efficient economic services are poor coordination and integration, multiple priorities and an undefined hierarchy of authority among the plethora of government departments involved in the economic sector.

While the outcomes process has helped to foster a degree of integration, South Africa has not yet seen the fruits of this initiative.

The country also needs to clarify its mind, and develop a firm and consistent view on the issue of the role of the state in the economy. The realisation of the economic, and indeed other, objectives of Vision 2030 requires long-term commitments by all sectors of society including the private sector. Policy certainty is therefore critical.

Specific proposals include:

- Strengthen the role of the state as service provider, as the core provider of public goods (such as infrastructure and other public services), as an economic regulator, as a consumer and as a critical player in giving leadership to economic development and addressing market failures.
- Ensure a clear system of hierarchy and decision-making across economic line function departments and spheres of government.
- Responsiveness on the part of the state to anticipate possible crises and respond to them rapidly and appropriately.
- Ensure that there are significant consequences for not reaching targeted impacts, whether in social or economic areas of delivery.
- Measure performance in economic services departments on the basis of success or otherwise in facilitating investment and building partnerships among the economic actors.
- Improve trust between the public and private sectors, and ensure that private actors are treated as partners in policy design and implementation and that the private sector in turn responds to and facilitates the realisation of national objectives.
- Urgently address constraints to public-private partnerships – including the institutional arrangements for regulation and execution of such partnerships as well as relevant capacity in government departments and spheres.
- Any direct state involvement in productive sectors should be informed by the "balance of evidence", in relation to stimulating economic growth and competitiveness, creating jobs and reducing inequality, as well as availability and optimal deployment of public resources.

Conclusion

Achieving full employment and sustainable livelihoods is possible. Moving onto this new trajectory of high, sustained and job-creating growth implies a break from our current path dependency. It requires a commitment by all sectors of society to contribute to the efforts required to meet our common objectives. There will be moments when difficult choices will have to be made.

Trade-offs and choices

Achieving full employment, decent work and sustainable livelihoods will depend on choices that have to be made during various phases to 2030.

The ability to do this is a function of leadership among all social partners.

The achievement of the objectives and targets in this plan will be to the benefit of all. But each sector of society needs to agree on the contribution it will make.

At given moments, some may have to carry the heavier part of the load. At other moments, it would be the turn of others.

Given the fact that many of the proposals in this plan will take some time to register any meaningful impact, it is critically urgently to introduce the active labour market policies proposed in this chapter, to initiate massive absorption of young people and women into economic activity. This will require decisiveness on the part of the state and a strategic approach to negotiations on the part of, and building trust between, business and labour.

Role of the state

The state not only has a role in setting the appropriate macroeconomic framework. It must also provide the right microeconomic conditions, to ensure that the day-to-day decisions and actions of people and companies help deliver the best social and economic outcomes. It is these frameworks and interventions that determine the social and economic climate that we live in, and therefore the level of economic growth and employment.

Among others, the state must enhance regulation of market participation, identify and resolve market failures, provide appropriate public infrastructure and services and help in lowering transaction costs across the economy.

The private sector

Most of the jobs will be created in the private sector. This however will require South African entrepreneurs to be vibrant and seize opportunities when and where they arise; and to adapt themselves to the continuous process of technological change.

Rather than rely on economic rent and endeavouring to accumulate the bulk of the rewards of improved productivity and general economic performance, the private sector should embrace entrepreneurship, innovation and an equitable sharing of the fruits of prosperity.

Worker leadership

Worker-leaders have to advance and defend the interests of employed workers, and with other sectors of society, ensure that inequality is reduced. At the same time, they need to take into consideration those who are presently marginalised from economic activity.

Allowing for greater access to the labour market for those not active in the economy and ensuring that those currently without appropriate voice are adequately catered for is a responsibility of leaders of workers and society at large.

The first phase (2012 – 2017)

Movement towards an inclusive and dynamic economy requires that the country should urgently launch the virtuous cycle that allows it to move to a new growth trajectory.

In the early years, emphasis will be on absorbing the unemployed, especially young people, into economic activity.

Higher mining exports during this period of high commodity prices will help pay for the development of capabilities and endowments to forge a new path in the economy of the future. Urgent investments in rail, water and energy infrastructure, alongside regulatory reforms that provide policy certainty are needed. At the same time, the private sector should commit more investments to supplier industries for the infrastructure programme and in general economic capacity while capital costs are low and the price of imported equipment is cheaper. Opportunities for large exports to sub-Saharan Africa and other destinations in the developing world should be creatively pursued.

Concurrently, policy instruments and agreements on moving to the next phase should be ironed out. The plan identifies a number of steps required to move towards this new path. These include the prioritisation of actions that lift key constraints to economic expansion. While government's responsibility is necessarily broader, there will be an understanding that these actions will receive more priority than others. In the first five years, the commitment will be to:

- Doubling the annual expansion in high skills supply and improving education throughput in primary and secondary levels.
- Improving the labour relations environment.
- Interventions to improve labour market matching.
- Ensuring the supply of energy and water is ensured and sufficient for a growing economy, and that the responsibility of municipal maintenance of distribution systems are appropriately allocated and funded.
- Intensify R&D spending, emphasising opportunities linked to existing industries.

- Develop the arrangements for a Financial Centre for Africa.
- Implement the commitment by government to promote industrial diversification through its procurement programme.
- Change the approach to land tenure systems that stimulates production and economic opportunity, thereby reducing uncertainty.
- Expand public employment programmes rapidly.

The second phase (2018 – 2023)

Subsequent to this, focus should be on diversifying the economic base. This should include building the capacities required to produce capital and intermediary goods for the infrastructure programme and sub-Saharan Africa. It should include resource cluster development for the mining industry combining production of capital goods, provision of engineering services, and beneficiation that targets identified opportunities.

In this phase, the basis must be laid to ensure more intensive improvements in productivity. Innovation across state, business and social sectors should start to become pervasive. Centres of learning should be aligned to industrial clusters with potential for domestic and global linkages. Innovation should also focus on public service improvements and on goods and services aimed at low-income sectors.

Approaching 2030

As the country approaches 2030, the emphasis should be on consolidating the gains of the second phase, with greater emphasis on innovation, improved productivity, more intensive pursuit of a knowledge economy and better exploitation of comparative and competitive advantages in an integrated continent.

Closer to 2030, South Africa should be approaching “developed world” status, with the quality of life greatly improved across the board, with skilled labour becoming the predominant feature of the labour force, with levels of inequality greatly reduced.

Chapter 4

ECONOMIC INFRASTRUCTURE

"Everybody sees to it and assists so that all life's enablers are available in a humane way."

Introduction

To achieve sustainable and inclusive growth by 2030, South Africa needs to invest in a strong network of economic infrastructure designed to support the country's medium- and long-term objectives. Achieving this vision is possible if there is targeted development of transport, energy, water resources, and information and communication technology (ICT) networks.

Challenges

South Africa has a relatively good core network of national economic infrastructure. The challenge is to maintain and grow it to address the demands of the economy effectively and efficiently. In the transport and energy sectors – dominated by state-owned enterprises (SOEs) – the economy has already been constrained by inadequate investment, alongside ineffective operation and maintenance of existing infrastructure. In the telecommunications field, dominated by private operators, the cost of services is prohibitive.

Large investments are needed to propel economic activity, using structured approaches to prevent inappropriate initiatives being favoured over urgent priorities. Poor investment decisions commit the state to continuing costs and subsidies that hinder other priority investments and, ultimately, constrain economic growth. Greater use of public-private financing should bring about improved decision-making and spending discipline, and result in more rigorous assessment, shareholder accountability and reporting. Improved discipline and coherent decision-making will in turn ensure easier access to capital.

Current investment levels are insufficient and maintenance programmes are seriously lagging. Government can achieve better outcomes by improving coordination of integrated development approaches, particularly pivotal development points (such as the Waterberg/Lephalale region, Coega and the strategic freight corridor from Gauteng to Durban) to ensure full benefits for the country. In these cases, collaborative investment involving a range of interested parties, from business to provincial and local governments, will support better results. Precedence should be given to infrastructure

programmes that contribute immediately and practically to greater regional integration. These include the African Union's north-south corridor programme and sector-specific projects (enhancing border facilities, improving energy and ICT connectivity and revising transport links).

To be successful, participants in strategic sectors can use a combination of cooperation and competition to improve the performance of SOEs. Mechanisms to ensure local industry remains regionally and globally competitive, while meeting domestic needs, are also required.

Regulation

While some network industries lend themselves to competition (power generation and ICT services, for example), core components such as electricity grids, gas and water pipelines, and railway lines tend to be natural monopolies. With high fixed costs and decreasing average costs of service provision as more customers join these networks, it is often difficult to stimulate meaningful competition or to encourage multiple market entrants. In such cases, effective economic regulation is essential.

Over the past two decades, independent regulatory authorities have been established worldwide to issue licences, ensure access to networks, set prices, and establish technical and service standards. South Africa has dedicated regulatory agencies for electricity, gas and petroleum pipelines, telecommunications and ports.

These regulators should ultimately safeguard reliable and competitively priced services for consumers, and promote affordable access for poor and remote households. They should ensure that utilities and operators are efficient and financially viable, so that they can invest in maintaining, refurbishing and extending these networks.

After more than 15 years of sector regulation, it is fitting to analyse the effectiveness of these regulators.

Although regulators have succeeded in issuing licences, developing pricing methods and establishing technical and service standards, they have not achieved the positive outcomes initially envisaged. Based on the performance of the ICT, electricity and port sectors, South Africa is slipping down international benchmark rankings. The reliability of electricity supply has deteriorated, and prices that were previously below economically viable levels are now rising at rates that consumers are unable to absorb. Communications quality, speed and cost are significantly worse in South Africa than in comparable nations, with a similar situation in rail and port performance.

Regulators face two key difficulties. First, because they are responsible for ensuring that consumers have access to reliable and quality infrastructure, they are required to play a proactive role in guaranteeing that infrastructure planning consistently promotes adequate levels of investment. Government departments need to work with regulators and utilities to ensure that their licence and price approval processes and other strategic decisions create investor certainty and encourage new investment. Second, because infrastructure investments tend to be capital intensive and require large chunks of investment, associated financing requirements need to be catered for through economically viable pricing levels. If prices fall in real terms during periods of low investment, new investments will demand very steep price increases. Regulators can do more to smooth prices and avoid such economic shocks.

Recently, there has been much rethinking about the institutional arrangements and design of network regulators. Regulation works best where there is sufficient political will to support regulation; regulators are legally independent, publicly accountable and their decision-making transparent; and where the regulator is backed by adequate institutional and human capacity. South Africa faces challenges in all these areas. As a result, it makes sense to restrain the initial decision-making discretion held by regulatory agencies, and to support their roles with clearly defined policy, so that they operate in a more predictable policy environment that is well understood, and supported by detailed decision-making rules.

A far-reaching review of current infrastructure regulators is needed to clarify roles and accountabilities, update legislation and subsidiary regulations, and reform institutional arrangements and design.

An improved regulatory performance is vital for national development. Institutional capacity building remains a core challenge in this area, requiring sustained training to improve leadership and technical capabilities. The quality of regulation, however, is not just about the regulator. The state itself must have adequate capacity and capability to formulate effective policy; support the design, establishment, review and improvement of regulators; and respond to issues identified by capable regulators.

Phasing

The following activities are proposed for the immediate future:

- Institute a far-reaching review of current infrastructure regulators to clarify roles, strengthen accountability, update legislation and regulations, and reform institutional design.
- Establish a unit in the Presidency (Monitoring and Evaluation) to undertake periodic regulatory impact reviews, and to provide advice and support to regulatory authorities.

The energy sector: empowering South Africa

Vision

By 2030, South Africa will have an energy sector that promotes:

- *Economic growth and development* through adequate investment in energy infrastructure and the provision of quality energy services that are competitively priced, reliable and efficient. Local production of energy technology will support job creation.
- *Social equity* through expanded access to energy services, with affordable tariffs and well targeted and sustainable subsidies for needy households.
- *Environmental sustainability* through efforts to reduce pollution and mitigate the effects of climate change.

Specifically, South Africa aims to have adequate supplies of electricity and liquid fuels to avoid disruptions to economic activity, transport and welfare. Although likely to be higher in future, prices for energy services will still be competitive with South Africa's major trading partners. In addition, more than 95 percent of the population should enjoy access to electricity within 20 years.

To realise this vision, South Africa's energy system needs to be supported by effective policies, institutions, governance systems, regulation and, where appropriate, competitive markets.

Storylines

In 20 years, South Africa's energy system will look very different: coal will contribute much less to primary energy needs, while gas and renewable energy resources, especially wind, solar and imported hydroelectricity, will play a much larger role. Electric vehicles will be widely used. The economy's energy intensity will continue to decline, and energy-efficient options will be widely available and increasingly adopted. The country's energy market will be more diverse, with greater opportunities for investors to provide innovative and sustainable energy solutions within credible and predictable regulatory frameworks.

The energy reality

Over 70 percent of South Africa's primary energy derives from coal, as does more than 90 percent of electricity and a third of liquid fuels. The economy is electricity intensive, and as a result, South Africa emits more than its share of carbon dioxide and contributes disproportionately to climate change. The high level of carbon emissions is exacerbated by the size of the energy-intensive mining sector. In the past, domestic electricity has also been underpriced, resulting in energy-intensive beneficiation investments. Energy intensity is one and a half to four times higher than the Organisation for Economic

Cooperation and Development average (depending on whether GDP is measured in nominal or purchasing power parity terms).

Adequate supply is a key concern, especially for electricity and liquid fuels. South Africa experienced multiple power failures between 2005 and 2008, resulting in lower economic growth and widespread inconvenience. While the 2009 recession depressed demand, supply-demand balance remains tight. Similarly, the distribution of petrol, diesel and gas has not always been reliable.

South Africa has a mixed-energy economy, with varying patterns of state ownership and regulation across subsectors. The electricity sector is dominated by the state-owned utility Eskom (accounting for 96 percent of production) and is regulated by the National Energy Regulator of South Africa, which is also responsible for the regulation of gas and petroleum pipelines.

Private petroleum companies (with the exception of PetroSA) dominate the liquid fuels sector, and wholesale and retail prices are regulated. In contrast, coal prices are deregulated and the industry is privately owned. Private firms produce uranium, although the country's only nuclear power plant is owned by Eskom. There is a nuclear regulator (mostly addressing safety and licensing issues) and the National Ports Regulator. Through Transnet, the state also owns and operates most of the ports (except the Richards Bay Coal Terminal and some private terminal concessions), the national rail network, and the petroleum pipelines that transport petroleum crude and product to Gauteng and surrounding areas.

The quality of market competition and regulation in the energy sector has been far from optimal. The economy requires increased competition in electricity generation, along with better regulation of price, supply and quality in electricity and petroleum products.

Ineffective policy-making and regulation in transport, especially rail, has contributed to crippling constraints. Lack of rail capacity has blocked the expansion of coal exports. The privately owned Richards Bay Port has export capacity one-third higher than existing rail capacity from the coal fields.

Perhaps the most successful achievement in the energy sector over the past 15 years has been the National Electrification Programme. In the early 1990s, two out of three South Africans did not have electricity; now nearly 80 percent of the population has access. The prices and supply of paraffin, liquefied petroleum gas and alternative household fuels, including sustainable supplies of biomass and renewable energy sources, are far from optimal, even though paraffin and liquefied petroleum gas prices are regulated. Too many households rely on costly inferior fuels that also pose health risks.

Key policy issues and planning priorities

Policy and planning issues are addressed below in each of the key energy sources, followed by a discussion on trade-offs and phasing considerations to 2030.

Balance domestic coal supply security with growth in exports

Given fixed investment and low direct costs, coal will continue to be the dominant fuel in South Africa over the next 20 years. Internationally, South Africa ranks fifth as a coal producer and exporter. South Africa's largest economically recoverable energy resource is coal, which is also its top mineral export earner. A national coal policy is urgently required, based on a realistic estimate of reserves, the sustainable supply of domestic coal needs for power, synthetic fuels and chemicals, and sustainable expansion of coal export markets. A strategically negotiated way to reduce carbon intensity will help South Africa contribute to mitigating climate change, while responding to the imperatives of growing the economy, creating employment and reducing poverty.

Policy and regulatory uncertainty in the mining sector, too little investment in new infrastructure, and a failure to maintain existing infrastructure have all contributed to the coal industry's stunted development. As coal reserves in the central basin diminish, a new rail corridor to the Waterberg coal field will need to be developed within an overall strategic infrastructure investment plan, which will also address additional water supplies for the Lephalale area. Transport infrastructure for the central coal basin and the coal line to Richards Bay also needs strengthening. With targeted focus, rail capacity will match port export capacity by 2020. Other possibilities include a link with Botswana coal deposits, and a trans-Kalahari rail connection, linked to expanded port capacity at Walvis Bay in Namibia.

More formal structures will foster collaborative action between government, Eskom, Transnet, Sasol, independent power producers and the coal industry to optimise domestic coal use while maximising coal exports. Collaboration in the earlier development of the railway from the central basin to Richards Bay and the development of the Richards Bay port offers a valuable lesson.

Collaboration is also needed to address the coal industry fragmentation that has accompanied black economic empowerment in the sector. As a result, few smaller companies have the financial muscle to sign long-term take-or-pay contracts with Transnet to incentivise investments in initiatives that address railway line capacity expansion. Government and the private sector can work together to solve this impasse and maximise economic value from this industry.

The security of coal supply for some existing coal power stations is increasingly under threat. Coal miners are unwilling to sign new long-term contracts with Eskom, as they can get much higher returns through exports to India and other Asian countries. A balance has to be found between exports and local supply security, with a fair deal

between government and coal industry leaders. Detailed planning will determine the best use of specific resources, backed by conditions set in mining licences. It may be necessary to institute export permits for particular grades of coal as a temporary measure, with future energy investments influenced by coal prices that reflect international market price, and possible carbon taxes.

Cleaner coal technologies will be supported through research and development investments and technology-transfer agreements in ultra-supercritical coal power plants, fluidised-bed combustion, underground coal gasification, integrated gasification combined cycle plants, and carbon capture and storage, among others.

Explore gas as a viable alternative to coal (and nuclear)

Substituting gas for coal will help cut South Africa's carbon intensity and greenhouse gas emissions. Possibilities include coal seam methane, shale gas resources in the Karoo basin and imports of liquefied natural gas. Experiments are under way to assess the potential for using methane gas associated with coal deposits. Underground coal gasification technology is also being developed. These resources and technologies could make a significant contribution to South Africa's energy needs, while reducing greenhouse gas emissions and carbon intensity.

According to the United States Energy Information Administration (2011), technically recoverable shale gas resources in South Africa form the fifth largest reserve globally. Confirmation of recoverable reserves is still necessary through further drilling of test wells. Shale gas has the potential to contribute a very large proportion of South Africa's electricity needs. For example, exploitation of a 24 trillion cubic feet resource will power about 20 gigawatts (GW) of combined cycle gas turbines, generating about 130 000 GW-hours of electricity per year. This is more than half of current production. South Africa will seek to develop these resources, provided the overall environmental costs and benefits outweigh the current costs and benefits associated with South Africa's dependence on coal, or with the alternative of nuclear power.

A global market has developed for liquefied natural gas imports, the prices of which are increasingly delinked from oil prices. With South Africa needing to diversify its energy mix, liquefied natural gas imports and the associated infrastructure could provide economic and environmentally positive options for power production, gas-to-liquids production (at Mossgas) and use of industrial energy.

Diversify power sources and ownership in the electricity sector

Key elements addressed below relate to decarbonising power sources, the need to increase private participation and investment in this field, issues of distribution and pricing, and widening access to affordable electricity services for the poor.

Balance supply security, affordability and climate change mitigation aspirations in the power sector

South Africa will need to meet about 29 000 megawatts (MW) of new power demand between now and 2030. A further 10 900 MW of old power capacity will be retired. As a result, about 40 000 MW of new power capacity needs to be built. Eskom is building two more coal-fired power stations, each with capacity of about 4 800 MW – leaving a clear gap between future needs and committed investments.

Power generation plants contribute about half of South Africa's current greenhouse gas emissions. If the sector follows the proposed carbon scenario of peak, plateau and decline, the balance of new capacity will need to come from industrial cogeneration, gas, wind, solar, imported hydroelectricity, and perhaps a nuclear programme from around 2023. Aggressive demand-side programmes will also be necessary. The Department of Energy's Integrated Resource Plan (2010-2030) lays out these options in a policy-adjusted scenario that seeks a trade-off between least-cost investment, technology risks, water-use implications, localisation and regional imports. The plan includes 21 500 MW of new renewable energy capacity by 2030 – the largest envisaged in any African country to date. Further refinements and regular updates of the plan will be necessary to track demand and energy-efficiency gains, and to assess whether new supply technologies are delivering timely and affordable power. To ensure supply security, a back-up plan is required, with a flexible portfolio of incremental, rapidly implementable response measures. Improved data collection, stakeholder involvement and publication systems will be necessary for more effective planning.

Increasing the diversity of South Africa's electricity production energy mix is important – not just for mitigating climate change – but also for enhanced supply security. For example, combined cycle gas turbines offer flexibility in the power system and complement variable supply from renewable energy sources. Furthermore, in addressing electricity supply security and climate change, South Africa will also explore regional options. Developing the region's hydroelectric resources is a priority, first in countries such as Zambia and Mozambique. Botswana, Zimbabwe and Mozambique have considerable undeveloped coal reserves. The Southern African Development Community (SADC) has very low per capita carbon emissions. This should be weighed against the potential for accelerated economic development that lies in exploiting abundant power resources, coupled with enhanced inter-regional electricity trade.

Ultimately, South Africa's electricity plan needs to balance decarbonisation of the power sector and increased use of new and renewable energy technologies (alongside their associated higher investment costs) with established, cheaper energy sources that offer proven security of supply. As South Africa seeks an appropriate balance between responding to climate change concerns and employing least-cost power generation technologies to propel economic growth, it will adopt a least-regret approach. South Africa needs to remain competitive both in the transition to and in a low-carbon future.

Widen participation and accelerate investment in electricity sector

While it is government policy that independent power producers should complement Eskom's generation investments, South Africa has yet to see the number and scale of private investments in other regions of the world, including other African countries. Given the amount of investment needed, as well as Eskom's stressed balance sheet – and limited fiscal resources – private investment will need to be accelerated.

Rapid progress is critical in linking power expansion plans with clear allocation of new build opportunities between Eskom and independent power producers. It is also important to initiate timely, internationally competitive bidding processes for new capacity. There is a central need to build institutional capacity to run effective procurement processes and to negotiate robust contracts. South Africa could learn from Kenya, which has allocated responsibilities clearly and built appropriate capacity to the extent that it has an enviable record in competitively procuring and contracting independent power producers. Given time constraints and the costs of delayed decisions, government needs to quicken its plans to establish an independent market and system operator, which would address the issues above and, preferably, also incorporate transmission assets. Remaining regulatory uncertainties need to be resolved, including questions of independent power producers selling to customers other than Eskom, issues of wheeling over the grid, and rights to trade electricity.

Electricity distribution

A reliable electricity supply depends on a sufficient number of functioning power stations and a reliable grid network to transport electricity to users. Municipalities distribute about half of South Africa's electricity, with increasing local supply failures. Previous government policy included transferring municipal distribution assets to six regional electricity distributors. Little progress was made in the past 10 years, not least because a constitutional amendment shifting responsibility for electricity distribution from local to national government was abandoned in the face of increasing opposition. During this policy hiatus, municipal investments in infrastructure have been inadequate, with maintenance and refurbishment backlogs now exceeding R30 billion.

Given these realities, a more pragmatic solution would be to invest in human and physical capital in the 12 largest distributors, which account for 80 percent of the electricity distributed by local government. This is a high priority, and the programme needs to be driven nationally in collaboration with these municipalities. Eskom, together with metropolitans and cities, could take over distribution on a voluntary basis from smaller, poorly performing entities. Medium-sized municipalities performing reasonably could continue with delivery.

To enable improved demand-side management and future energy savings, the next 20 years will see smarter management of electricity grids through innovative control systems and smart-meters. More distributed generation systems are likely, both to meet local demand and to feed back into the grid.

Electricity prices

Electricity price increases are necessary to finance Eskom and private investment in new capacity. Government has probably reached the limit of its fiscal and guarantee support for Eskom. Eskom's access to private debt is also becoming more difficult and expensive. Failure to raise electricity prices to reflect costs will result in Eskom being unable to meet debt obligations. Maintenance and investment programmes will be delayed, and, ultimately, the lights will go out.

There are, however, concerns that sharp price increases could dampen economic growth and development. Investments in generation plant and networks are typically capital intensive and lumpy. Management of debt-to-equity and interest cover ratios often requires steep price increases. However, after the majority of the debt is amortised, utilities could receive significant free cash flows. It is important that the regulator establishes appropriate mechanisms to pre-fund capital and to create smooth tariff paths by taking a long-term perspective, so that consumers face more predictable and manageable price rises. There are clear lessons from the way the Trans-Caledonian Tunnel Authority smoothed water tariffs.

Devising and targeting special tariffs for low-income families is a further challenge. Free basic electricity and cross-subsidised tariffs are already available for many low-income households, but need to be applied more consistently and comprehensively to shield poor consumers from high price increases. Since the costs of these subsidies will become significant in future, any increases in their level, or a new subsidy mechanism, should be assessed carefully for fiscal implications.

Electricity prices could also be affected by carbon taxes. However, given the existing structure of the electricity market, together with Eskom's dominant position, carbon input taxes on power generation are unlikely to lower carbon intensity. The regulator and Eskom will be forced to pass these additional costs directly to captive consumers, who do not have the choice of alternative, cleaner electricity supplies. In addition, high electricity prices, unrelated to carbon taxes, are already encouraging consumers to conserve energy.

Nevertheless, it may still make sense to have an economy-wide carbon tax, coupled with conditional exemptions in some sectors (or rebate or recycling schemes), to send a broad signal to the industry and consumers that they are living in a carbon-constrained world. To achieve meaningful shifts in technologies for electricity generation, it is important that this tax is introduced alongside direct low-carbon policy actions. A conditional carbon tax exemption could be applied to the electricity sector, provided it

progressively moves to a lower carbon generation mix, as mandated in the Integrated Resource Plan. This would significantly increase renewable energy and diversify generation sources.

National electrification and energy poverty

The energy needs of poor households are still inadequately met. Between a fifth and a quarter of South Africans still have no access to the grid. The electrification programme has slowed and the original goal of universal access by 2014 is not feasible. The programme will need a thorough review of targets, planning, technology choices, funding and implementation. Subject to costs, South Africa could aim for at least 95 percent coverage by 2030, with alternative "off grid" options offered to households for whom a connection is impractical.

Even poor households with access to electricity can afford to use only modest amounts, and rely on other sources such as paraffin, gas and fuel wood. Useful research in the 1990s around household energy has had little follow-through. This work should be extended to develop integrated programmes to tackle energy poverty, including sustainable production of fuel wood and its safe combustion in efficient stoves in rural areas.

Re-assess the desirability of nuclear power investments

According to the Integrated Resource Plan, more nuclear energy plants will need to be commissioned from 2023/24. Although nuclear does provide a viable base-load alternative, South Africa needs a thorough investigation on the implications of nuclear energy, including its costs, safety, environmental benefits, localisation and employment opportunities, uranium enrichment, fuel fabrication, and the dangers of weapons proliferation.

South Africa will face major challenges in financing the capital costs of a nuclear fleet. Nuclear plants involve massive, lumpy investments (given that a single unit can now be as large as 1 600 MW). It will also be extremely challenging to build the institutional and skills base for running new-generation nuclear plants. All possible alternatives need to be explored, including the use of shale gas, which could provide reliable base-load and mid-merit power generation through combined cycle gas turbines. Developing nuclear power plants requires long lead times. A maximum of one year remains to agree on a decision-making process for new nuclear investments.

Delay investment plans in a new petroleum refinery

South Africa faces several related pressures on liquid fuels over the next decade. Refined fuel products are needed to run the economy. Much of the demand is on the Highveld, far from the coast. Over time, South Africa should improve the standards of fuels, for health reasons and more efficient engines, thereby reducing fuel demand and carbon

emissions. There are constraints on the country's ability to emit carbon dioxide or carbon equivalents. Fuel costs need to reflect all costs related to the market and the external environment. At the same time, undue fuel price increases should be avoided, as these will have a negative impact on the economy through higher costs.

South Africa produces about 5 percent of its fuel needs from gas, about 35 percent from coal, and about 50 percent from local crude oil refineries. About 10 percent is imported from refineries elsewhere in the world. South Africa has a sizeable capital stock and management capacity to produce fuel from gas. However, gas stocks from existing fields are declining and to use this capital stock to the point where it is not commercially viable is not advisable. Instead, feedstocks need to be found to support continued production – and, ideally, to secure sufficient stocks to increase production. Without feedstock constraints, production can increase by about a third through major new investment in the Mossgas plant.

There are several options to secure feedstocks. Investing in gas fields close to or adjacent to existing fields in the Southern Cape is the best option, as marginal costs are lower. This will also allow further exploitation of existing fields, maximising use of existing capital. PetroSA is best placed to lead this investment, given the existing capital it holds and its management abilities and experience. In the longer term, the Mossel Bay refinery could use either liquefied natural gas imports or Karoo shale gas, if it becomes available. Policy-makers face a tough decision, because South Africa has run out of refining capacity. The country now has to import a share of its refined fuel needs. There are five options to deal with this:

- Build a new oil-to-liquid refinery.
- Build a new coal-to-liquid refinery.
- Upgrade the existing refineries or allow significant expansion of one or more of the existing refineries, or both.
- Import refined product.
- Build a refinery in Angola or Nigeria – and buy a share of the product of that refinery.

There are no easy answers – each option has significant disadvantages, risks and advantages. To make a decision, it is necessary to assume where refining margins will be in 15 years. Refining margins are quite low, and are likely to remain so for at least another decade, given a surplus in refined product. If this assumption is valid, South Africa will have to export the surplus[1] product at a loss, covered by local fuel consumers through the basic fuel price. This is unfair, politically risky, and economically reckless. It also highlights the importance of considering alternatives.

[1]A surplus will arise in the early years as a new refinery investment will need to be large enough to capitalise on economies of scale and will initially produce more than needed in the domestic market.

Option	Advantages	Disadvantages
New oil-to-liquid refinery	-A degree of fuel security -The capacity to export -Industrial externalities (especially in plastics) arising from the concentration of refining capacity and expertise -Potential to move to cleaner fuel standards more quickly, and at lower cost	-South Africa would probably have to export the surplus product at a loss (or with local fuel users subsidising exports) -The size of the project leads to increased risk – and the potential for significant macroeconomic implications (this would need to be about 400 barrels per day, to achieve economies of scale) -A greenfields site will need to be found in Durban – or the product will need to be transhipped from Coega to Durban, and then piped to Johannesburg, increasing costs -Some existing refineries may need to be closed, risking loss of skills and managerial know-how
New coal-to-liquid plant	-Would allow for use of indigenous and abundant feed stocks -Scale makes 80 000 barrels per day feasible - South Africa has technology and managerial expertise in this area	-The process is heavily carbon intensive – and with a carbon tax of US$25 a tonne, the economics look less favourable -It is a large capital-intensive investment in a capital-constrained country -This will require significant government subsidies, either directly or indirectly
Upgrade existing refineries	-Will use the present oil companies' capacity and skills set -Will allow South Africa to keep Durban as a petrochemicals hub -Will lower costs, due to new pipeline in Durban -The risk is largely borne by the private sector	-Durban is a densely populated city – and there are already environmental concerns about the site -Oil companies will want to pass both risks and costs on to the public sector and/or consumer -The space for a major upgrade may not exist
Import refined product	-Refining margins are low at present, so this option is cheaper -This will not consume significant capital, in the context of current capital constraints	-Fuel security is lower with this option – given dependencies -If refining margins rise quickly, the import bill and current account deficit will be negatively affected
Partner with Angola or Nigeria	-These countries need refined products and have the input products -South Africa will co-finance, thereby sharing risks	-Political risk associated with these options is high -The cost of building in these countries is high, given limited skills, infrastructure and poor governance

The least risky and most cost-effective option seems to be continued importing of a share of refined product needs, until the country reaches a stage where it can absorb the output of either a new refinery or a major upgrade of an existing refinery. It is envisaged that South Africa will continue to import, taking a decision on the next steps by 2016 or 2017 at the latest. Timing is important, given lead-time requirements to develop a new refinery (estimated at about eight to 10 years – with outputs of a new refinery needed by 2025 to 2028, if no other options are implemented). Decisions need to consider fuel security, employment, the current account, the rand, interest rates, fuel standards and competition.

Bio-fuels are also a possibility, but because South Africa is largely a dry country, production is more likely to be located elsewhere in the southern African region.

If South Africa adopted a consistent carbon price across the economy of about R100 per tonne of carbon, the carbon cost of fuel used for transport would translate into an increase of only 5 percent at the pump compared to 20 percent for the electricity sector. This would send a weak signal to consumers to conserve petrol or diesel. It would be far more effective to tax vehicle sales, based on their carbon emission levels. This would encourage consumers to opt for more fuel-efficient vehicles, cutting emissions from liquid fuels.

Over the next 20 years, South Africa can expect to see a shift towards electric vehicles, making it even more vital to decarbonise electricity generation. Greater use of public transport will also be encouraged, as outlined in the transport section of this report.

Leverage cross-sector synergies for integrated energy planning

The above policy and planning priorities may seem sector-specific and supply-side focused, but the energy industry is still predominantly organised in individual supply sectors. It is therefore necessary and useful to outline actions needed in specific sectors. However, energy and fuels may be substituted – and demand-side measures may substantially reduce energy needs. South Africa's energy planning system needs to recognise these facts and become more holistic and integrated. It is difficult for the Department of Energy to deal effectively with these cross-cutting issues, including institutional capacity, governance, competition, regulation, investment, and economic, social and environmental impacts. The commission may play a convening role in enabling these conversations and actions across different government departments, industry and consumers.

Trade-offs

Key trade-offs to consider when deliberating South Africa's future energy mix include the need to:

- Balance the desire to move to a lower carbon-intensive power generation mix (with more expensive and variable renewable energy technologies) with the imperative of maintaining competitive electricity prices and secure electricity supply to power economic growth and development.
- Manage the desirability of moving to a less carbon- and energy-intensive economy with the priority of maximising the benefits from South Africa's extraordinary mineral resources. The country needs to explore credible ways to improve the energy efficiency of mining and minerals processing, while expanding mineral extraction, beneficiation and exports. What is the appropriate mix of beneficiation versus the less energy- and carbon-intensive export of unprocessed minerals?
- Balance state ownership of energy enterprises and utilities with effective regulation and the structural and market reform necessary to achieve greater competition and private sector involvement.
- Contrast the potential for job creation as the energy system is transformed (both in terms of the nature and volume of jobs) with possible job losses resulting from a move away from the coal mining industry. Jobs created for a new energy system may require more skills, potentially supporting the international competitiveness of locally manufacturing energy equipment.

Phasing

The phasing of necessary activities for the move to a different energy context by 2030 is included below according to short-, medium- and long-term priorities:

Short term (next five years)

- Develop a national coal policy and investment strategy based on a realistic estimate of reserves, the sustainable supply of domestic coal needs for power and industry, and the sustainable expansion of coal export markets within the context of diminishing carbon intensity.
- Invest in a new heavy-haul rail corridor to the Waterberg coal field, within the context of an integrated strategic infrastructure investment plan for the Lephalale area (this will address, among other factors, the additional water supplies needed).
- Strengthen rail infrastructure for the central coal basin and the coal line to Richards Bay. Government will broker a partnership between Transnet and the private sector for these projects.
- Forge a compact between government and coal industry leaders that balances domestic coal needs with export opportunities. Detailed plans will determine the optimal use of specific coal resources, backed by conditions set in mining licences. Export permits for certain grades of coal will be

instituted as a temporary measure if coal supply security for domestic power production is affected by growing exports of lower quality coal to India and other eastern countries.

- Determine economically recoverable coal seam and shale gas reserves through exploratory drilling. Environmental investigations will continue to ascertain whether sustainable exploitation of these resources is possible.
- Eskom will commission the Medupi coal power station and the Ingula pumped storage plant. In addition, at least 3 725 MW of renewable energy will be contracted from the private sector, supported by numerous energy-efficiency improvements.
- The Independent System and Market Operator Act will be passed, following which Eskom's system operator, planning, power procurement, purchasing and contracting functions will be transferred to an independent SOE. Plans will also be established to transfer Eskom's transmission assets into this entity. Capacity will be built to support the development of dynamic, frequently updated, indicative power and transmission expansion plans and the effective procurement and contracting of independent power producers (including those able to provide renewable energy technologies).
- Amend the National Energy Regulator Act (2004) and the Electricity Regulation Act (2006) to ensure a more efficient and predictable regulatory environment.
- Ring-fence the electricity distribution businesses of the 12 largest municipalities, representing 80 percent of municipal distribution. Resolve maintenance and refurbishment backlogs and develop a financing plan, alongside investing in human capital.
- Develop a new and sustainable national electrification plan.
- Investigate the implications of greater nuclear energy use, including the potential costs, safety, environmental benefits, localisation and employment opportunities, uranium enrichment aspects, fuel fabrication, and the dangers of weapons proliferation. A decision-making process to support the assessment of possible investments in nuclear energy (or alternative base-load options) will be defined.
- Upgrade existing refineries to ensure they meet new fuel quality standards. Imports will continue, ensuring that the growing deficit in petroleum products is met. Petroleum refiners and importers will hold strategic stocks of sufficient size to ensure supply security.
- The National Planning Commission, in partnership with the Department of Energy, will convene an interdepartmental process to support developing and regularly updating integrated energy plans.

Medium term (to 2020)

- By 2020, it is envisaged that coal rail capacity will match coal port export capacity.
- Eskom will have commissioned the Kusile coal-fired power station by 2020. At least 7 000 MW of renewable energy will be contracted, mostly from private independent power producers.
- Liquefied natural gas infrastructure will be in place to power the first combined cycle gas turbines.
- Targeting of pro-poor tariff measures will be improved – extending comprehensively to all who qualify.
- Electrification coverage will reach 90 percent, with integrated household energy supply strategies allowing affordable access to complementary energy sources, including solar, water and space heating.
- A decision will be taken on whether South Africa should continue with petroleum product imports or invest in a new refinery.

Long term (to 2030)

- By 2030, more than 20 000 MW of renewable energy will be contracted, including an increasing share from regional hydroelectricity.
- Rail and port capacity will be further enhanced to support increased coal exports.
- About 11 000 MW of old Eskom coal power stations will have been decommissioned, but close to 6 000 MW of new coal capacity will be contracted – some sourced from other southern African countries (subject to South Africa's commitments in climate change negotiations).
- Cleaner coal technologies will be promoted through research and development investments and technology transfer agreements in, among others, the use of ultra-supercritical coal power plants, fluidised-bed combustion, underground coal gasification, integrated gasification combined cycle, and carbon capture and storage.
- The extent of economically recoverable coal seam and shale gas reserves will be understood. Subject to acceptable environmental controls, these gas resources, supplemented by liquefied natural gas imports, will begin to supply a growing share of power production. This could potentially avoid the need for further base-load nuclear generation.
- Rising energy prices, an economy-wide carbon tax, and sector exemptions, coupled with direct action (such as the Integrated Resource Plan in the electricity sector, scaled taxes on the sale of high-emission vehicles, equipment and building standards, and targeted energy-efficiency programmes) will drive South Africa's energy sector on a path of lower carbon and energy intensity.
- By 2030, 95 percent of South Africans will have access to electricity.
- Electric vehicles will be widely used.

Water resources and services

Vision

Before 2030, all South Africans will have affordable access to sufficient safe water and hygienic sanitation to live healthy and dignified lives. Standards of service provision will vary across the country, however, with differentiation between densely built-up urban areas and scattered rural settlements. While local government will retain responsibility for ensuring adequate service provision in its areas, regional utilities will provide services where municipalities have inadequate technical and financial capacities. Water supply and sanitation services (water in pipes) depend on the availability of adequate water resources and, if not managed properly, may damage the natural resource (water in rivers and underground). For this reason, the authorities responsible for water resource management will coordinate their activities with local service providers, and monitor and support them.

In 2030, the country's economic and social development will reflect an understanding of and an alignment with available water resources. As a result, all main urban and industrial centres will have a reliable supply of water to meet their needs, while increasingly efficient agricultural water use will support productive and inclusive rural communities. The natural water environment will be protected to prevent excessive abstraction and pollution. Water should be recognised as a foundation for activities such as tourism and recreation, further reinforcing the importance of its protection. In addition, where rivers are shared, South Africa will ensure that it continues to respect its obligations to neighbouring countries.

The water reality

Changes in the water sector since 1994 are evident in water-related policy, practice, institutional frameworks, role players and outcomes. Policy shifted from a focus on infrastructure development to a more holistic water resource management approach that addresses both the water demand and supply.

The mandate for these reforms came from the priority in 1994 to ensure that all South Africans gained equitable access to at least a safe and reliable basic water supply and dignified, hygienic sanitation. Between 1994 and 2010, the number of South Africans with access to basic water supplies increased from 23 million to 46.3 million (59 percent to 93 percent of the population), while the number with improved sanitation increased from 18.5 million to 39.4 million (from 48 percent to 79 percent).[2]

[2] Department of Water Affairs (2010). *Statistical overview of water sector*. Department of Water Affairs.

Enhanced water resource management and infrastructure development underpinned this progress. Improved infrastructure investments have also formed a key part of delivery since 1994, addressing problems resulting from earlier underinvestment. Changes include establishing institutions to focus on this task, such as the Trans-Caledon Tunnel Authority, and critical partnerships within the region, such as the Lesotho Highlands Project. However, implementing well crafted policies and strategies remains a challenge. Deteriorating water quality is a particular problem. Although much attention has focused on potential mining pollution in Gauteng, more serious and systemic problems are emerging as a result of poorly funded and managed municipal wastewater works, as well as the rapid expansion of mining, notably in the Mpumalanga Highveld.

While significant progress has been made in ensuring greater access to water, backlogs still exist. The commission's *Diagnostic Report* also notes that access to potable water increased from 84.5 percent in 2002 to 89.3 percent in 2009. However, variations between regions are great – only 75 percent of households in the Eastern Cape have access to potable water (although this is up from 56.8 percent in 2002).[3]

While water restrictions due to drought have been limited in recent years, the real test of the resilience of the water resource management system will only come when there is a severe drought. For example, Australia is just recovering from an eight-year drought that highlighted many failings in its supply and management systems.

Storylines

Manage, monitor and protect water resources for growth and sustainability

As water use becomes more intensive, managing this resource must become more effective and should include users so that they understand emerging constraints and opportunities. For effective water supply planning, development and operation, the resource and its use should be monitored regularly. In addition, regulating water's various uses is important (including for waste disposal). To address these needs, the responsible administration needs a clear and coherent legislative and policy foundation, and the support of appropriate scientific and technological instruments, underpinned by a strong research and development capacity. As the nation's water resources are extensively interconnected – often flowing across political boundaries – oversight of its management and administration should remain national. But, because many issues are locally specific, some decentralisation of responsibilities is required. It is at local level that users can best be involved.

The context in which water resources are managed will change over time, both in terms of physical water availability (including changes associated with short-term droughts, floods and long-term climate change) and as a result of societal pressures from urbanisation and economic growth. Given this reality, it is critical that the management

[3] National Planning Commission (2011). *Diagnostic Report.*

approach is regularly reviewed publicly. A statutory process for this already exists, requiring a national water resource strategy to be produced every five years, informed by local catchment management strategies and local government's water services development plans (structured as part of the integrated development plans). If this process is properly implemented, priority areas for intervention will be identified.

Some of these are already evident – there is an urgent need for a coherent plan to ensure the protection of water resources and the broader environment in the Mpumalanga Highveld coal fields, upstream of the Vaal and Loskop dams, as well as in the Lephalale area. Given pressures on the environment and the range of development demands, current water allocations in the Olifants River water management area will also need to be revisited. Local planning should also ensure that groundwater resources are optimally used, before authorities resort to large regional infrastructure projects to supply local needs.

Assure water supplies by investment and reuse

A structured planning process has already identified the actions necessary to reconcile the water demands of major urban and industrial centres with potential supplies up to 2030. These plans need to be translated into programmes of investment that are implemented at the right time, to avoid a situation where supply constraints negatively affect society and its economy. Large investments in regional systems could be undertaken by a specialised public agency – a national water resources infrastructure agency, perhaps modelled on the South African National Roads Agency Limited. This agency would build on the foundation provided by the Trans-Caledon Tunnel Authority, which is already supporting the implementation of several large projects. However, the national Department of Water Affairs should continue to lead the planning process, reviewing and updating these programmes every five years to ensure coordination with other long-term planning processes in economic and infrastructure sectors.

Conservation and demand management

Reducing demand, rather than just increasing supply, is important. Current planning assumes that it will be possible to achieve an average reduction in water demand of 15 percent below business-as-usual levels in urban areas over the period leading to 2030. Specific savings estimates can be made in different localities. Achieving demand reductions on this scale will require active programmes to reduce water leakage in distribution networks, and to increase the efficiency of water use by domestic and commercial water users.

Agriculture uses the largest volume of water (albeit at far lower levels of reliability than urban and industrial uses). As a result, the farming sector will have to increase the efficiency of its water use to expand production and allow transfers to other users in water-scarce areas, as well as for expansion in irrigated agriculture. The commission proposes a dedicated national programme to provide support to local and sectoral

efforts to reduce water demand and improve water-use efficiency. Water-saving and demand-management projects should be considered as part of the overall range of water supply investment programmes. These can be compared with supply expansion projects, and should be prioritised accordingly, based on their merits.

Water reuse and desalination options to meet local needs

One strategy to increase the amount of water available for use, while protecting the resource, is to reuse water. There is extensive indirect reuse of water in inland areas, where municipal and industrial wastewater is reintroduced into rivers after treatment. Significant areas and industries are supplied from this source, with the latter including, notably, the platinum mines of the North West Province. There is, however, considerable scope for further water reuse. In coastal areas, for example, significant amounts of wastewater are discharged into the ocean, instead of being reused. Desalination in these areas is also possible, although this option is often more expensive than reuse. The major constraint on both reuse and desalination is that cheaper solutions have been available, but this is changing. Many municipalities lack the technical capacity to build and manage their wastewater treatment systems, resulting in polluted water resources that are unsuitable for use. As a result, a regional approach to wastewater management may be required in certain areas.

"I have been a blue and green drop assessor for the past three years and visited many treatment plants. One of the biggest problems is lack of routine and preventative maintenance. There is a virtually no preventative maintenance programmes in most small/medium municipalities due to 'lack of funds'. Most maintenance is reactive maintenance on a day-by-day basis. ...I would like to see the South African Local Government Association offer courses to procurement offices on the need for maintenance." – NPC Jam

Water supply investment programmes should include projects to treat and reuse water, selected on their merits. Given the limited technical capacity to design, build and operate such projects, or even to commission private service providers, setting up a structured national research, development and operational capacity to support water reuse and desalination would be helpful, perhaps as part of a national water resource infrastructure agency (discussed below).

Institutional arrangements for water resource management

The institutions that manage and develop water resources should reflect the shared, public nature of water – and the need for users and potential users to understand and respect the limits to its use, while also being involved in decisions about its management and related costs. Although current policy and legislation provides an institutional framework to achieve this, implementation has been slow. This is, in part, because the growing challenges of water constraints, and the need to build institutions to deal with

them, are not fully understood. These institutions are needed to monitor, protect and administer the use of the resource. Institutional development is particularly needed for the Olifants River, Crocodile-west sub-catchments of the Limpopo, the Nkomati River and the upper and middle Vaal sub-catchments, where water supplies have already reached their limit, and where water allocations between users need to be reviewed.

Key policy issues

The following key policy issues guide appropriate actions to improve the management, use and conservation of South Africa's water resources:

- Investments to support economic uses of water, including urban consumption, should be funded by users through appropriate pricing measures, which will include arrangements to ensure that all people can afford access to basic water services. However, it is likely that investments to support rural development (including agriculture and rural settlements) will require large amounts of public funding. Policy is needed to guide such investments.
- Enhanced management capacity will be needed to address the increasing pressures on water resources. This capacity is in decline, partly due to institutional uncertainty. New institutional arrangements should acknowledge limited human resource capacity – and the need to develop it.
- Institutional arrangements need to be finalised, specifically on the number of water management areas to be established, and the mechanisms through which users will be involved in the work of regional institutions.
- A review of existing allocations is needed in areas where water use already exceeds reliable availability and the amounts necessary to secure protection of the environment. If this is not undertaken, illegal use of the resource will rise – and it may be over-allocated (formally or informally). This will lead to reduced supply reliability, which will jeopardise existing social and economic uses, while damaging the environment.
- Because water resource availability and demand varies widely, with many complex external factors, it is not possible to establish a standard economic framework for water resource management. This limits the usefulness of pricing as an instrument of allocation and control, and increases price-setting complexities. The need for an independent economic regulator should be assessed – with potential benefits and drawbacks considered in relation to the current arrangements for rule-based pricing, with stakeholder oversight. This assessment could take place within the proposed cross-sectoral review of infrastructure regulators.
- To guide water management approaches in a number of areas, strategic planning decisions on general economic and social development are needed, as well as environmental protection. Geographic areas where this is needed include:
    - Mpumalanga Highveld coal fields – a balance between environmental protection, agriculture, energy requirements and water resources.

  - Lephalale and surrounds – water requirements and sources for mining and energy investments.
  - Olifants River (Limpopo/Mpumalanga) – careful consideration of the balance between mining, agriculture and nature conservation.
- The norms and standards for basic water supply and sanitation services should guide the allocation of funds. However, in many jurisdictions, new investments routinely exceed these defined norms and standards, resulting in service provision that is financially unsustainable. An urgent review of the norms and standards, together with the financial provisions to meet these, is required.
- Many small and rural municipalities lack the financial and technical capacity to manage water services adequately. Regional utilities could provide these services, with arrangements to ensure that municipalities retain their role as the political authority responsible for service oversight.

Trade-offs

In finalising the steps to be taken, the following trade-offs and issues emerge:

- The costs associated with environmental protection objectives (for example, those associated with enforcement of pollution standards and abstraction restrictions) should be set against social and economic needs. Current legislation allows for different levels of protection, but in many cases water reserved for the environment is already used for other purposes.
- A balance has to be achieved between allocating water for productive needs (industry and urban development) and less productive uses in agriculture and conservation, which have strong social and environmental values.
- Greater water-use efficiency in agriculture tends to be capital and skills intensive, but may in turn support job creation. These gains could be difficult for new entrants to achieve without substantial support.
- Any review of norms and standards for basic water supply and sanitation services should also consider how public service provision takes place outside formal settlement areas, given the high costs associated with serving scattered communities. Household grants for self-supply may be considered in these areas.
- At municipal level, it is important to balance the political autonomy and exclusive service-delivery mandate granted by the Constitution with the realities of limited financial and human resources capacity. An institutional model could allow continued political oversight of local service provision, while taking advantage of the economies of scale that using regional service providers would make possible.
- A balance is needed between allocating financial resources to support investments in higher levels of service, providing services to underserved households, while also maintaining and periodically refurbishing existing infrastructure.

- In some rural areas (for example, around Sekhukhune and Bushbuckridge), water can be made available only through large and costly distribution works. Decisions about such schemes need to be taken in the context of the future of these settlements, given that they are unlikely to be viable without substantial ongoing operating subsidies.

Phasing

Between 2011 and 2015, the following actions are required to achieve the 2030 goals:

- The national water resource strategy should be reviewed by mid-2012, and approved as a roadmap to guide the development of the sector. It should then be reviewed, along with the water resource investment programme, every five years to ensure that it adapts to changing environmental, social and economic circumstances.
- Future institutional arrangements for water resource management will be defined by mid-2012, with implementation by 2015 at the latest, if institutional memory is to be retained and continuity in management ensured. The institutional arrangements could include:
  - A national water resource infrastructure agency (by 2013) that will develop and manage large economic infrastructure systems.
  - National capacity to support research, development and operation of water reuse and desalination facilities by 2013.
  - A dedicated national water conservation and demand management programme by 2012, with clear national and local targets for 2017 and 2022, and sub-programmes focused on municipalities, industry and agriculture.
- A comprehensive investment programme for water resource development, bulk water supply and wastewater management established for major centres by early 2012, with reviews every five years. This programme will include the following major investment projects, with clear target completion dates confirmed and responsibilities for financing and implementation clearly allocated:
  - Complete the Lesotho Highlands Project Phase 2 by 2020 to supply the Vaal system.
  - Augment supplies to the KwaZulu-Natal Midlands region (eThekwini and Msunduzi municipalities and surrounds) by completing the Springrove dam, followed by investments in reuse and the raising of Hazelmere dam on the Mdloti River.
  - Decide on the next major augmentation, either through desalination, reuse or developing a new dam on the Mkomazi River, in time for water to be available in 2022.
  - Complete Western Cape water reuse and ground water projects by 2017.

- Define regional water resource investment programmes (for example, raising Clanwilliam dam in the Western Cape) by 2012, supported by clear implementation targets.
- Cost regional bulk water distribution programmes by early 2012 – and submit for budgetary consideration and evaluation by 2012, so that investment programmes with clear implementation targets can be established and implemented from 2012.

- Create regional water and wastewater utilities, including expanding mandates of existing water boards (between 2012 and 2017).

Transport

Vision

By 2030, investments in the transport sector will ensure that it serves as a key driver in empowering South Africa and its people, enabling:

- Improved access to economic opportunities, social spaces and services by bridging geographic distances affordably, reliably and safely.
- Economic development, by supporting the movement of goods from points of production to where they are consumed, facilitating regional and international trade.
- Greater mobility of people and goods through transport alternatives that support minimised environmental harm.

The state will function as capable navigator. It will oversee a transport system that serves the interests of society; establish a holistic view of national transport realities; and prioritise, plan and provide basic infrastructure where needed. Government should recognise where competing service providers would best meet transport needs, and enable licensing where appropriate, all within a framework of strong, effective regulation of public and private transport.

Crucially, in national, provincial and local government, those responsible for fulfilling mandates in the transport sector must have the competence and the necessary leadership to achieve these goals.

The transport reality

South Africa's modes of transport include road, rail, air, sea (ports) and pipeline. While the country has worked hard since 1994 to overcome its transport problems, its economic geography presents many transport challenges. As a transport-intensive country, the transport component per unit of output is above the global average. About 34 percent of the country's gross value-add is concentrated in Gauteng, far from the ports and end markets. A significant proportion of gross value-add is also concentrated in mineral deposits in the interior, at the end of long corridors that lead to ports. Effective, reliable, economical and smooth-flowing transport corridors are needed.

Existing corridors are serviced by outdated railway technology (prone to operating failures), poor inter-modal linkages,[4] and ports characterised by high costs and substandard productivity relative to global performance. About 96 percent of South Africa's bulk commodity exports are transported by sea.

Although rail is the ideal mode of transport for large, uniform freight travelling further than 400 kilometres, about 89 percent of all freight (measured by total tonnes) is conveyed by road. This strains a road network suffering significant maintenance backlogs. Poor road safety adds a huge cost to society. South Africa suffers from a high accident rate, with high incidence of death and injury and damaged and lost cargo. Education, proactive enforcement and a change in behaviour are an important part of the solution.

Social and economic exclusion caused by the country's apartheid legacy is evident in the long distances many people travel from where they live to where they work. Providing suitable means for people and goods to move as efficiently, safely and cost effectively as possible is important. Mobility broadens social and economic access, alleviating poverty.

A strong infrastructural network supports air travel. Significant investments to date will provide the capacity to handle passenger volumes to 2030. Air transport, however, poses challenges for wider development. Transport costs to destinations within Africa are prohibitive, in contrast to travel beyond the continent, where network density and cross-subsidisation of intercontinental flights keep prices down. In future, the significant levels of carbon emissions resulting from air travel may substantially reduce travel for business and leisure, and may negatively affect the tourism sector.

[4] The facilities where people or goods transfer from one mode of transport to another that is best suited to the needs of that leg of a journey (for example the transfer – from rail to truck – of containers, following their transport by rail for long-distance travel, and by truck, for the short distance to the final delivery destination).

Storylines

The movement from where South Africa is to where it wants to be in 2030 is guided by three considerations:

Not all transport dreams can be fulfilled: priorities are key

Transport decisions involving large long-life systems usually have high costs. Infrastructure investments can lock-in decision-makers and investors, limiting future options. Although many transport priorities exist, careful ranking against clear criteria is necessary. Focus should be placed on reasonable choices that allow safe, affordable and effective transport, rather than trying to achieve all transport dreams, including those unduly influenced by strong interests outside the formal policy and prioritisation process. Planners and implementers need to guard against adopting transport approaches from other nations that are not aligned with South Africa's priorities.

"Last but not least, is the issue of a lack of infrastructure maintenance by all society (government, private big business and every individual of South Africa). I see every day and believe that we South Africans do not look after our assets very well; we have a mindset of buying or building new things all the time instead of maintaining what we have. We must change this mentality, whereby we see government, private business and every individual adopting a renewed mindset in looking after the infrastructure we currently have." – NPC Jam

Transport as an enabler: getting South Africa to work

Moving towards 2030, South Africa's transport system will support economic development, job creation and growth, providing equitable access to opportunities and services for all and reducing poverty. Instead of focusing on the transport mode and categorical positions such as "rail is the future", emphasis will be placed on total system efficiency to maximise the strengths of different modes, cut inefficiencies and reduce disparities, with the least environmental, social and economic cost.

The options identified, particularly public transport and non-motorised modes, may foster a different culture. Modes and infrastructure that encourage social interaction, healthy practices and street-level movement create a sense of space and social inclusion that South Africa needs.

In addition, options may go beyond transport solutions alone. Changes to the spatial economy could provide solutions, for example, establishing more economic opportunities where people live, or creating new settlements close to centres of work.

A modal shift from private transport in the long term

Behavioural change is critical in reducing environmental, social and economic cost, by shifting user and supplier decisions about movement, travel modes and sources of

energy. While some forms of private transport, such as the car, will still be used in 2030, a marked change to public transport will emerge through concerted effort, strong leadership, consistent messages and actions, and public system alternatives that work. By 2030, public transport will be user-friendly, less environmentally damaging, cheaper and integrated or seamless. Better monitoring of emissions – and apportioning cost to origin – is also likely to be a major contributor in moving to a low-carbon future.

Key policy and planning priorities

Create workable urban transit solutions with public and private components

Significant investment in the public transport system is needed to extend bus services, refurbish commuter rail, link high-volume corridor services and integrate all these into an effective service. Government needs to lead changes to the transport system if economies of scale and the environmental and efficiency benefits of public transport are to be maximised.

Private cars provide independence at the cost of congestion and pollution. Workable urban transit combines public and private components. Urban transit solutions in South Africa face major challenges: low-density cities, apartheid geography, and public transport serving commuters who do not have reasonable alternatives or enough income to own a private car. The solutions should extend services to captive transport users, while winning custom from those who do have choice.

It is important to cut through the fragmented and conflicting interests of multiple transport authorities and public and private service providers – each with separate funding sources and mandates. Transport benefits from subsidiaries, where the lowest level of government capable of effective delivery is given authority and aligned funding. Government policy to devolve transport management to local government will succeed if there is a simultaneous strengthening of institutions and alignment of legislation, policy and practice. Where metropolitan municipalities are adjacent, a regional transport authority may be appropriate to support integration.

A balance of incentives, both “carrot and stick”, will provide mobility in cities. Public transport subsidies can effectively increase affordability for low-income commuters. Mounting costs for private car users (tolls, higher fees and projected higher fuel costs), alongside prioritising the movement of public transport vehicles on roads, might push car users into second place. This should encourage increased use of public transport.

To be sustainable, public transport services need to provide users with capacity and convenience. Capacity, coverage, frequency and safety performance of public transport must be improved for existing users before commuters with other options will be prepared to switch to public transport. Even with greatly expanded public transport, city dwellers will still have to use cars. Transport authorities will need to plan and invest in road and transport infrastructure construction, maintenance and oversight – and

integration with public services – while maximising flow and using technology, such as intelligent traffic signalling.

The commuter rail fleet needs to be renewed. It provides the lowest-cost service in metropolitan areas, but it lacks reliability, punctuality and passenger comfort. The service is precariously placed, with the forced retirement of aged rolling stock forcing the operator to withdraw services, placing more pressure on trains in operation. New technology is needed to achieve a noticeable change in service levels. As this would result in incompatibility with the existing network, a trade-off needs to be made – greater safety, reliability and the separation of commuter and freight networks, with much lumpier investments, or compatibility with the existing network and placing new equipment, when available, at its most vulnerable parts.

The Gautrain has shown public transport is an option for commuters who can afford to use cars. The airport link has been quickly and successfully adopted, although this is not evident on the Pretoria-Johannesburg route, which has a small reach and a weaker link with commuters' departure and destination points. Authorities may need to add additional feeder services to make this link work, increasing the already considerable cost.

The bus rapid transport system has demonstrated the potential of high-quality mass transit systems, while also showing it is critically important to align social interests with technical solutions. The Johannesburg bus rapid transport project incorporated taxi owners – a milestone in formalising the taxi industry as a transport operator. During 2011, however, striking drivers halted this transport system. As public transport must be dependable, authorities will have to create reliable services by placing commuters' interests above the sectarian concerns of transport providers, while also allowing these services to be economically sustainable businesses. Bus rapid transport problems are a priority, given the significant financial and spatial investments made to date and the potential such a system represents for public transport.

Public transport investment increased at 15 percent per year from 2006. In the short term, to harvest these investments, future asset management and increased use of existing assets must be a priority, with a focus on doing more with what the country has. It is crucial to strengthen governance of the sector and operational efficiency.

Strengthen and optimise freight corridors

The greater part of South Africa's bulk freight moves on the existing national road and rail networks, from mines to ports or processing plants, from farms to cities and from the coast to the Highveld. Planning should prioritise improving the capacity, efficiency and sustainability of these corridors. South Africa is a transport-intensive economy, with comparative advantages in resources rapidly eroded by high transport costs.

Increasing the capacity of the main corridors and simultaneously improving the performance of the ports and inland terminals is a priority. Considering the importance of freight corridors, future economic activities must be substantially different, allowing for a reduction in climate impact in particular. In the short term, South Africa's mineral sector has a greater ability to drive higher rates of growth than other sectors in the economy – provided that infrastructure bottlenecks and regulatory uncertainties are removed. Limited capacity on existing rail lines moving mineral commodities, particularly coal, manganese and iron ore, is stifling growth.

Policy and planning priorities need to be informed by actual experience and the performance of Transnet's capacity expansion programmes, which have failed to deliver capacity. The capacity expansion for the Richards Bay coal terminal sits idle, because capacity on the link does not match expansion. Given the magnitude of these capacity constraints, and the huge financial and organisational resources needed to improve corridor performance, a new approach is required to coordinate the efforts and interests of multiple role players. Essentially, this means building effective partnerships between the public and private sector. However, if the terms offered by the incumbent SOE are restrictive, partnerships will be no better than outsourcing agreements by publicly owned monopolies, structured at the expense of users. Competition between providers is therefore a key objective.

The Waterberg coal fields need to expand to transport coal for domestic power generation and to connect to existing export facilities in Richards Bay. Planning priorities will need to take account of Botswana's interest in establishing access to the Atlantic Ocean via the port of Walvis Bay.

By 2030, the Durban-Gauteng freight corridor should be a model for how to strengthen and optimise freight corridors. As the corridor that handles most of the country's high-value freight, it is the first priority. It is also the most strategic corridor to achieve a shift of freight from road to rail by overcoming rail's main drawback – lack of flexibility – by improving the performance of terminals on either end. It could demonstrate that the institutional model needed for corridor improvement rests with aligning the interests of cities with authorities across all tiers of government, as well as the transport operators that connect the intervening space. Transnet and its partners in this project are making progress with this emerging institutional model.

Success factors include unrestricted access into the terminals for freight, removing bottlenecks on the road and rail routes, and expanding terminal capacity. Planning priorities include new access routes into the Port of Durban, allowing for segregation of freight from other traffic, and building new hubs or inland terminals around Gauteng for improved road-rail transfers. At least three new Gauteng hubs will replace existing inner-city hubs as they reach full capacity. Higher rail density and throughput to achieve scale economies will require rail alignment, together with upgraded technology to move and control trains. Transnet has developed plans that will address the capacity of Durban's port. Further container capacity to meet South Africa's needs over the longer

term will be provided by constructing a new terminal on the site vacated by moving Durban's airport to La Mercy.

As indicated by the Port Regulator, South African ports perform poorly, operating at levels below comparative operations, with costs that are significantly higher than the global average. These gateways for international trade are hindering the nation's development objectives. Poor performance is largely due to the absence of competition in terminal operations and Transnet's business model, which uses surpluses generated from ports to fund investments elsewhere. The trade-offs obscured within the Transnet group must be addressed if port prices are to be competitive.

Provide long-distance passenger transport options

Urban mobility gets people to work and helps overcome the historical spatial legacies of race and class segregation. Consideration is needed on how this imperative plays out across the country, and what this means for planning priorities. It is critical to recognise that South Africa does not have the luxury of being able to implement all plans. The guiding principle is to give precedence to solutions that support the flow of people and goods where there is unmet demand. Long-distance transport alternatives include travel by intercity bus, taxi, private transport, air travel and limited intercity passenger trains. In this context, where should scarce public resources be directed?

South Africa's largest single public asset is its road network. With a replacement value of R1.7 trillion, preserving it is a top priority. National and provincial roads are the prime means of connecting people and moving cargo from small settlements and secondary towns to the centres of economic activity. In the short term, before expansions are considered, road maintenance campaigns in municipalities and rehabilitating provincial road networks are needed to prevent further deterioration.

While the roads are preserved, institutional capacity should be strengthened to manage road traffic. In addition, a thorough upgrade of road traffic safety is needed, together with enforced compliance with standards by public and private operators, and wide-scale road safety education. Ultimately, success will be evident in road users changing their behaviour.

Over the longer term, and in light of environmental harm caused by many modes of transport, the proposed expansion of passenger rail services will need to be carefully assessed. Rail is costly, and South Africa would have to practically start from scratch due to the age of its long-distance passenger fleet. But, this could be an opportunity for citizens to have a say in transport choices. Focus on the specifics associated with intended users (income and affordability constraints) would be important, together with assessing alternatives, specifically road-based options. This would benefit decision-making on all significant projects requiring public funds or state guarantees, placing the costs and benefits under public scrutiny before finalisation.

Rural access and mobility

To achieve a meaningful level of rural access and mobility, planning should differentiate services according to local requirements. Where population concentrations are located in areas with little productive economic activity, priorities will mostly relate to providing services that enable easy access to basic needs and state support (for example, service points for public health care and grant support). Scheduled public transport services could be provided to ensure access. People tend to move from isolated rural homes, settling at transport nodes or along transport corridors to access services. These movements provide further opportunities for improved economies of scale for public transport. Given limited resources and urban migration, subsidised services should be limited to such places.

Phasing

Leading up to 2030, transport authorities will be challenged to translate the vision for getting South Africa to work into effective transport. Providing sustainable transport services that are efficient and inclusive is inextricably linked to the need for spatial change in South Africa's cities and related transport corridors. Users will adjust to pricing that is supported by greater transparency, with full costs associated with each service, including costs linked to environmental impact. Key themes are discussed below.

2010-2015: Consolidation and selective expansion

Greater emphasis will be placed on asset management, increased use of existing assets, extending economic infrastructure through joint private and public projects and expanding public commuter rail transit services. Given scarce resources, some needs will have to be deferred. The state will need to maintain public confidence that improvements will spread by achieving excellence in meeting priority needs. Decisions on project selection will be driven by tightly focused criteria. Priorities include:

- Improve streamlining of assets and institutional arrangements for public transport (including the powers and functions of role players). Use of assets needs to be consolidated and rationalised, and existing assets should be used better. First, public transport and infrastructure must be managed better by removing duplicated functions, refining powers and functions, imposing accountability and enhancing governance and decision-making processes. Thereafter, streamlining institutional arrangements in metropolitan areas can be achieved by setting up regional transit authorities. It is crucial to ensure that all parts of the existing road-based commuter services function properly, as many commuters depend on bus and minibus taxi services. Large public investments have been made, offering a glimpse of how better performing public transport can improve people's commute. Transport authorities should focus on enforcing sector-wide compliance and encouraging contracted operators and independent

service providers to invest and provide a more commuter-friendly experience.

- Renew the commuter rail fleet, with a region-by-region shift to current generation high-capacity rolling stock, supported by station upgrades and improved facilities to enhance links with road-based services. Stabilising existing services is crucial, because complete fleet renewal could take up to 15 years.
- Expand capacity for mineral exports through targeted focus on metal ores and coal, and strategic freight corridors for southern African and international trade. Private-sector partnerships (primarily with Transnet and the South African National Roads Agency Limited) are essential to upgrade corridors. Where SOEs are unable to meet demand for freight services, the state should vigorously encourage private-sector involvement. The National Ports Act (2005), which stipulates that all new developments should be concessioned, needs to be more stringently enforced so that all operators (public or private) perform or are replaced. Intensive application of information technology to transport systems will increase use and flow rates through new railway signalling and highway traffic control systems. These are strategic investments that can be deployed more rapidly than building new fleets or roads to boost the use of existing infrastructure.

2016-2020: In step with evolving land-use changes

Guided by plans for the urban form, actions will focus on achieving the mutually reinforcing effect of transit-led growth. This will help increase concentration in urban settlements, while improving the economic scale for transport modes. Once the instructional reforms for public transport have been completed, regional transit authorities should be established.

2021-2025: Energy efficiency

Emphasis will be on increasing energy efficiency and the resilience of transport networks, drawing on progress in establishing renewable energy resources.

Use of lightweight materials in freight and passenger vehicles should be increasingly preferred, because of their lower lifecycle energy requirements and greater load-carrying capacity.

2026-2030: Mid-life upgrades

Reviewing real progress towards the 2030 vision should guide the tactical adjustments that stakeholders will need to make to overcome problems. Planning should provide for refits to transport systems to incorporate technological improvements.

Information and communications infrastructure

Vision

By 2030, ICT will underpin the development of a dynamic information society and knowledge economy that is more inclusive and prosperous. A seamless information infrastructure will meet the needs of citizens, business and the public sector, providing access to the wide range of services required for effective economic and social participation – at a cost and quality at least equal to South Africa's competitors.

Within this vision, the underlying ICT infrastructure and institutions (an "infostructure") will represent the core of a widespread digital communications system. This ecosystem of networks, services, applications, content and innovation will support economic growth, development and competitiveness; create decent work, nation-building and social cohesion; and local, national and regional integration. Public services and educational and information products will be accessible to all, and will build on the information, education and entertainment role envisaged for public broadcasting. The human development on which this is premised will have created an e-literate (online) public to take advantage of these technological advances and drive demand for services.

Multicasting and instant online translation, digitisation and ICT applications will make it easier for people to communicate and obtain information using different languages. Mobile government (m-government) services, delivered through mobile devices, will grow and converge with more traditional e-government services. Organisations will have immediate access to data for performance monitoring and improvement, while instant long-distance communication will be as easy as meeting in person. ICT will continue to reduce spatial exclusion, enabling seamless participation by the majority in the global ICT system, not simply as users but as developers of content and applications, business process outsourcing and innovators.

"ICT can be used as a tool to fight poverty, increase employment, education and entrepreneurship. People use broadband for different reasons, but mainly for communication, work and research ... With universal access people will not need to call their municipality, go to home affairs or social welfare, they can do everything online." – NPC Jam

The ICT reality

ICT has changed radically over the past two decades. In 1993, mobile phones had only just entered the general market and computers sat on desks. In contrast, a range of surveys published around 2010[5] suggests a mobile phone penetration rate of about 70 percent, accounting for multiple SIM cards held by individuals. These figures highlight a reality: "More South Africans – 29 million – use mobile phones than radio

[5] ICT Africa household survey indicated a SIM-card penetration rate of close to 65 percent of the population, with at least 10 percent of respondents indicating they had multiple SIM cards (Esselaar et al, 2010). A 2010 survey indicated a mobile phone penetration of 75 percent (Hutton, 2011).

(28 million), TV (27 million) or personal computers (6 million). Only 5 million South Africans use landline phones."[6]

Despite the uptake of mobile phones, growth in South Africa's ICT sector has not brought affordable, universal access to a full range of communications services. According to the Department of Communication, interventions to address ICT gaps since 1994 have included establishing tele-centres (providing access to training, equipment and services) in rural areas, providing Internet kiosks at Post Office centres, funding training for schools, setting up cyber-laboratories at schools, and other related measures. However, the performance of most state interventions in the ICT sector has been disappointing. South Africa has lost its status as continental leader in Internet and broadband connectivity.[7] Pricing of services and equipment remains a significant barrier to the expanded use of mobile phones and fixed lines, with limited network competition further increasing costs. Policy constraints, weaknesses in institutional arrangements, conflicting policies between responsible departments, regulatory failure and limited competition all contribute to this issue. The ability of the regulator, the Independent Communications Authority of South Africa, to enable a more open market has been hampered by legal bottlenecks, limited capacity and expertise.[8] The last comprehensive policy review was in 1996.[9]

Storylines

ICT developments will continue to transform economic and social activities, and how individuals and communities communicate and function. Its impact on each sector of society and each area of service delivery will depend on how uptake is addressed. A single cohesive strategy is essential to ensure the diffusion of ICTs in all areas of society and the economy. Like energy and transport, ICT is an enabler – it can speed up delivery, support analysis, build intelligence, and create new ways to share, learn and engage.

In future, the state's primary role in the ICT sector will be to facilitate competition and private investment and to ensure effective regulation where market failure is apparent. Direct involvement will be limited to interventions needed to ensure universal access, such as the introduction of "smart subsidies" (discussed below), and to help marginalised communities develop the capacity to use ICTs effectively.

[6] Development Bank of South Africa (2011). Communications Infrastructure. Paper commissioned by the National Planning Commission, 4 April 2011. Pretoria: Development Bank of South Africa.
[7] Esselaar S, Gillwald A, Moyo M and Naidoo K (2010). Towards Evidence-based ICT Policy and Regulation. South African ICT Sector Performance Review 2009/10, Volume 2, Policy Paper 6. Available at: http://www.researchictafrica.net/publications/ICT_Sector_Performance_Reviews_2010/South_Africa_ICT_Sector_Performance_Review percent20_2010_-_Vol_2_Paper_6.pdf.
[8] Gillwald A (2011). SA Telecoms – still a way to go. *Engineer IT, January 2011.* Available at: http://eepublishers.co.za/article/research-act-africa.html.

Policies and planning priorities

Implement an enabling, coordinated and integrated e-strategy

The vision will be realised only if it is supported by a coordinated, enabling ICT strategy and plan. A national e-strategy will cut across government departments and sectors. It will aim to create sector growth and innovation through policy coordination that drives public and private investments in areas such as network upgrade and extension, particularly in broadband, service delivery and application development, and local content development. This will require a review of the market structure, and analysis of the benefits and costs of infrastructure duplication, facilities or service-based competition, and options for infrastructure sharing. It will also need a common carrier network, with possibilities of structural separation of the vertically integrated incumbent backbone operator. Carefully applied open-access policies can incentivise sharing and common use of certain layers of the network, without discouraging private long-term investment. It will also require targeted public investment, possibly through public-private partnerships.

The strategy will include plans to develop the specialised institutional capacity required for the policy responsiveness and effective regulation of the sector. In addition, it will focus on demand-side stimulation (by promoting e-literacy, education and training, and examining ICT rebates and incentives, and the needs of key development sectors such as health and education), as well as the supply-side of infrastructure and institutions. The national e-strategy will also ensure that South Africa engages effectively and coherently on issues of regional integration and harmonisation – interacting with various institutions, including global ICT governance agencies, such as the International Telecommunications Union and the World Trade Organisation.

An ICT sector that enables economic activity

ICT is a critical enabler of economic activity in an increasingly networked world. As a sector, ICTs may provide important direct opportunities for manufacturing, service provision and job creation, but their main contribution to economic development is to enhance communication and information flows that improve productivity and efficiency. For this reason, a country that seeks to be globally competitive must have an effective ICT system, as this infostructure provides the backbone to a modern economy. An immediate policy goal is to ensure that national ICTs adequately support the needs of the economy, allowing the participation of parties beyond the public sector. At present, there are effective duopolies in the mobile phone market and the overwhelming dominance of Telkom, the historical incumbent in the backbone and local access markets. This dominance has been relatively ineffectually regulated, and has resulted in very high input costs for business, increasing the costs of services. It has also inhibited investment in growth areas within ICT, such as business process outsourcing and offshore information technology-enabled services.

Affordable, widely available broadband for economic and social development

The inherent efficiency of ICTs – and their ability to circumvent blockages in inefficient systems – already ensures that they are widely used, even under less than ideal conditions, by businesses or individuals that can afford them. If ICTs are also to perform a developmental function, an adequate range of infrastructures, services and content must be available at the lowest cost and highest quality to the wider community. This is not simply a social intervention – it is a necessary condition to grow and stabilise the national economy, given that the link between ICT penetrations with economic growth only takes effect when a critical mass, estimated to be 40 percent with voice and 20 percent with broadband, is reached.[10]

The digital divide – the gap between those who have access to services and the demand from those who are excluded by unavailability or prohibitive service costs – has to be narrowed. Past universal access strategies have failed to distinguish between the real access gap and the market efficiency gap. The real access gap refers to households or individuals who can be reached only by providing permanent subsidies or some sort of support. The market efficiency gap refers to the difference between the share of households reached in an efficient market and what is actually achieved under existing conditions. The digital divide can be partially addressed through more competitive (efficient) markets and effective regulation that enable operators to meet the demand for affordable services, reducing the number of households or individuals requiring support. Further strategies that enable access through "smart subsidies"', which require a once-off intervention, should be favoured over strategies requiring permanent subsidies.[11]

The rapidly evolving nature of ICTs means that it is vital that such projects are regularly reviewed and refocused, which will require the state's investment and support.

Demand stimulation and job development

Improving equitable access to enhanced ICT services will require actions to stimulate demand. At the most fundamental level, strategies need to improve e-literacy through basic and secondary schooling, tertiary, adult education and supplier training. These strategies will support the production of multilingual, relevant and local content for public programming and information services, whether education or entertainment, and develop online and mobile government services and applications. This will increase demand for ICT services, as content and applications become increasingly relevant to the needs and interests of the wider community.

Constructing and maintaining networks will continue to generate a substantial number of lower-level job opportunities, such as digging trenches or spanning cables and

[10] World Bank, 2010.
[11] InfoDev Regulatory Toolkit, 2009.

installing basic hardware, as networks and associated facilities expand. For the ICT sector to grow in the longer term, however, it will require significant numbers of differently skilled people to fill the range of specialised job opportunities created. The education system will need to prepare for this. The state will play a central role in developing a forceful supply-side policy through investment in education – critical to the public's ability to adjust to change brought about by technological innovation and to meet the changing needs of the economy.

The state, market structure and institutional arrangements

Experience elsewhere has demonstrated that private-sector participation and competition, coupled with effective regulation, have generally delivered lower prices and improved quality and speed of services. South Africa needs to express an unambiguous commitment to intensifying competition. As one element of this, local loop unbundling needs to be speeded up.

Spectrum allocation is perhaps the biggest regulatory bottleneck in the proliferation of rapidly deployable wireless technologies to meet the diverse needs of the society and economy. The spectrum that will become available with the shift from analogue terrestrial broadcasting to digital should be swiftly allocated to ensure services expand with emerging technologies in this band.

Mechanisms for allocating radio frequency spectrum need to be smarter (for example, spectrum auctions and reverse bids for underserviced areas), with robust and transparent governance. Spectrum should be fully tradable once allocated. Regulators should not be too restrictive in dictating which technologies should be used with which spectrum, but regulations should be crafted to discourage spectrum hoarding, where licensees buy spectrum and do not use it or exploit it only in certain geographical areas. Spectrum policy should favour competition, but incumbents should not be excluded from gaining access to bands they need to build networks using new technologies. In line with global trends, spectrum licences should be technology neutral, so they can be adapted to meet rapidly changing technological developments within the sector without high regulatory costs.

The state needs to have sufficient institutional agility and competence to deliver in this rapidly changing sector. Government's primary role will be to ensure public policy promotes market access, and to create effective institutions to ensure competition, and regulate operator behaviour and market failure.

Institutional capacity building and competencies

Ensuring institutional capacity and individual competencies is one of the critical success factors to ensure positive policy outcomes. To achieve the goals outlined above, establishing an enabling policy and regulatory environment will depend on adequate institutional capacity and competencies to effectively regulate this dynamic and complex

sector. It will be important to clarify the institutional arrangements to remove some of the tensions in the sector. Most fundamental is the structural conflict of interest that exists between the state's role as a competitive player in the market (through its majority share in Telkom), and as a policy-maker for itself and its competitors. Better distinction of roles and functions, more coherent approaches and clearer strategies will be required to avoid unintended policy outcomes.

The successful development of the sector will also depend on more skilled policy intervention based on more effective public consultation to deal with the dynamic nature of the sector, and mechanisms to ensure required institutional autonomy of the regulator to implement agreed policies independently of state and industry interference or capture. Accountability will be ensured through transparently applying the administrative justice system and through more specialised parliamentary oversight. Agility in governance and regulation ensures that new forms of ICT connectivity can be made available – securing optimal knowledge sharing, communication, and social and economic participation within South Africa and beyond its borders.

Trade-offs

The following trade-offs and choices apply:

- There is a need to ensure sufficient large-scale investment (through both public and private funds) to allow for extension of ICT infrastructure that supports the economy, society and the objectives of greater inclusivity and sustainability. This must be balanced against the need to ensure that specific strategic goals of access and service provision can be met, even in underserviced areas and marginalised communities. Given that the state is capital constrained, with many urgent priorities, willing and capable private investors are needed. Creating a collaborative partnership with defined social responsibilities may be appropriate. Alternatively, where private investment is able to create the connectivity, public investment could focus more on enabling the demand by supporting e-literacy and content delivery or reducing investment risk by becoming the anchor.
- Low thresholds to market entry and competitive markets require less intensive access regulation, which will drive down prices and improve quality and choice for users. But it may threaten the viability of current service providers or SOEs.
- Balancing the effect of greater competition in the sector could reduce prices, but it might constrain surpluses available for services or inhibit new investments.
- Encouraging cost-saving efficiencies in the sector through regulated prices could result in job losses among present service providers. If prices are lowered, however, this could also potentially swell demand and create other jobs elsewhere in the ICT sector and the broader economy.
- Allowing network competition to extend networks and services, with likely duplication of resources and infrastructure in a resource-constrained

environment, needs to be weighed against a single common carrier backbone with fair and open access to the facilities by a competitive services sector. Open Reach and British Telecom are a successful example of structural separation of the incumbent into separate facilities and services components.

- In broadcasting and related information, setting local content quotas that promote local production may also increase costs for information and services provision, and make regulated services unable to compete effectively against content deliverers on unregulated services.
- Making critical spectrum available to operators to deploy new technologies to grow their business, or waiting for a full spectrum audit and conducting comprehensive allocations or auctions of the entire reassigned spectrum with the associated losses that delays bring to growing the economy.

Phasing

Phasing of priorities for a move to an enabling ICT reality by 2030 is discussed below.

Short term: 2012-2015

There is a clear and urgent need for a full policy review, which has not been done in the ICT sector since 1995. In the next five years, South Africa needs to develop a more comprehensive and integrated e-strategy that reflects the cross-cutting nature of ICTs. This should link policy objectives to specific strategies. It would include plans to allocate a new spectrum that will become available with the switch to digital broadcasting, and would set out a strategy for universal access, with clear targets and monitoring and evaluation indicators. In addition, it would outline demand stimulation interventions such as e-literacy programmes, skills development and institutional capacity-building strategies, and other generic demand-side interventions to promote ICT diffusion requiring interdepartmental and public and private coordination.

For sector policy specifically, evidence suggests that national objectives of affordable access to the array of services necessary for effective citizenship, and globally competitive input prices for business, are best achieved through effectively regulated competitive markets.

The following areas require attention:

- Adjust the market structures and remove legal constraints to enable full competition in services.
- Fast-track local loop unbundling.
- Review institutional arrangements to ensure the existence of resourced regulatory agencies able to encourage market entry and fair competition and to regulate market failure.
- Implement a service and technology-neutral flexible licensing regime to allow flexible use of resources in dynamic and innovative sectors, especially

for spectrum that should be made available urgently for next generation services.

- Free spectrum for efficient use, to drive down costs and stimulate innovation.
- Spectrum can be allocated with set asides or obligations to overcome historical legacies and inequalities in the sector, but this should not delay its competitive allocation.
- Ensure access to low-cost high-speed international bandwidth with open access policies.
- Facilitate the development of high bandwidth backbone/backhaul networks.
- Review SOEs to determine if they are fulfilling their purposes, constraining competition, squeezing out private investment or not engaged in efficient expansion.
- Examine the ability of the market to sustain infrastructure (facilities) competition and whether the benefits outweigh the duplication of facilities in a resource-constrained environment.
- Identify alternatives to infrastructure competition through structural separation of the national backbone from the services offered by the historical incumbent to create a common carrier with open access policies to ensure access by service competitors.
- Consider inefficiencies of infrastructure duplication and encourage or prescribe sharing and reduction of expensive trenching by creating common rights of way for competing operators to lay dedicated lines.

The implementation plan derived from this policy review will include a comprehensive short-, medium- and long-term investment strategy based on the needs of the sector:

- Conduct a geographical information assessment of existing networks and future rollout coordination.
- Consider public and private roles.
- Review institutional arrangements to create an environment conducive to investment and to ensure the effective regulation of the sector.

It would also identify the need for specific demand-side strategies in other sectors and identify the institutions responsible for developing and putting them into operation. This will include targeted training to meet South Africa's specific needs, with development of e-workers and e-consumers to grow services and create decent employment, such as business process outsourcing and offshore information technology-enabled services from abroad.

Medium term: 2015-2020

The commission supports the target proposed by the Department of Communication – by 2020, there should be 100 percent broadband penetration. All schools, health facilities and similar social institutions will be connected and individual citizens will have affordable access to information and services, as well as voice communication at appropriate points. Broadband is currently defined as a minimum connection speed of 256 kilobytes per second, but it is expected that by 2020 this will be at least 2 megabytes per second.

Because there is substantial uncertainty about the pace of technological development and the level of services that will be available in 2020, it is appropriate to benchmark South Africa's performance against other countries, rather than to set firm numerical targets. By 2020, through strategic investment and regulatory guidance, the costs associated with access to services by the commercial, public and community sectors should place South Africa's relative costs in the upper quartile of country-specific ICT costs worldwide. With both planning and delivery, South Africa should regain its position as the leader in both quality and cost of ICT services in Africa.

Long term: 2020-2030

The ongoing implementation and refinement of the e-strategy will ensure that ICT supports, rather than limits, the global competitiveness of South Africa and its economic performers. By 2030, government will make extensive use of ICT to engage with and provide services to citizens. All individuals will be able to use a core of ICT services and enjoy access to a wide range of entertainment, information and educational services.

By 2030, the e-strategy collaborations between state, industry and academia will also create innovation systems, including software and applications incubators, local content and multimedia hubs and research and development networks. These systems will be used to plan for and respond to the wider needs of the global ICT ecosystem, of which South Africa will be an integral part.

Chapter 5

TRANSITION TO A LOW-CARBON ECONOMY

"We acknowledge that each and every one of us is intimately and inextricably of this earth with its beauty and life-giving sources; that our lives on earth are both enriched and complicated by what we have contributed to its condition."

Introduction

South Africa has taken major steps to formulate and implement measures to adapt to and mitigate climate change. These steps are informed by the country's commitment to reduce its emissions below a baseline of 34 percent by 2020 and 42 percent by 2025. This commitment will present challenges for the economy, which depends on fossil fuels, and will require the design of a more sustainable development path.

The approach to mapping out the transition to a low-carbon economy is informed by the need to reach broad consensus on the challenges and trade-offs involved in implementing South Africa's climate policy. The commission undertook a year-long process engaging stakeholders on climate change, including three high-level workshops and five roundtable discussions with individual stakeholder groups. These consultations informed this chapter.

There are differences of opinion on how South Africa should move to a low-carbon economy, at what pace and how the costs and benefits are apportioned. However, there are several significant areas where consensus has been reached. We will continue to engage in wide-ranging discussion with all stakeholders to promote further agreement on climate change measures and how to deal with the transition.

Vision 2030

By 2030, South Africa's transition to a low-carbon, resilient economy and just society is well under way. Having undertaken the difficult steps to adjust, all sectors of society are actively engaged in building a competitive, resource-efficient and inclusive future, and the country is starting to reap the benefits of this transition. South Africa has reduced its dependency on carbon, natural resources and energy, while balancing this transition with its objectives of increasing employment and reducing inequality. Development initiatives, especially in rural communities, are increasingly resilient to the impact of climate change, with mutual benefits between sustainable development and low-carbon growth quickly identified and exploited. The state has significantly strengthened its

capacity to manage the ongoing internalisation of environmental costs, and to respond to the increasingly severe impacts of climate change.

Key steps towards the vision

To achieve this vision South Africa will need clear long-term strategies for both adapting to the effects of climate change through adaptation policies and reducing its carbon emissions to a sustainable level through mitigation policies.

Adaptation

South Africa's primary approach to adapting to the impact of climate change is to strengthen the nation's resilience. This involves decreasing poverty and inequality, increasing levels of education, improving health care, creating employment, promoting skills development and enhancing the integrity of ecosystems. This strategy requires ensuring that local, provincial and national government embrace climate adaptation by identifying and putting into effect appropriate policies and measures.

Adaptation policies and measures include: adequate support for the vulnerable; equitable disbursement of financial assistance; significant investments in new adaptive technologies and techniques in the water, biodiversity, fisheries, forestry and agricultural sectors; early warning systems for adverse weather, pest and disease occurrence; disaster relief preparedness; and significant investment in conserving, rehabilitating and restoring natural ecosystems to improve resilience. Gene banks should also be expanded to conserve critically endangered species that are increasingly vulnerable to climate change.

Mitigation

South Africa's level of emissions will peak around 2025 and then stabilise. This transition will need to be achieved without hindering the country's pursuit of its socioeconomic objectives. This can be attained through adequate international financing and technological assistance, and a carefully aligned domestic policy and regulatory environment. Key contributors to stabilising emissions include: a commitment to undertake mitigation actions; an appropriate mix of carbon pricing mechanisms; policy instruments that support mitigation; an expanded renewable energy programme; an advanced liquid and bio-fuels sector; an effective mix of energy efficiency and demand management incentives; proactive local government climate change programmes in areas such as waste management and street lighting; regulation to promote green building and construction practices; investments in an efficient public transport system; and a robust and transparent monitoring, reporting and verification system. Additional investments in research and development, manufacturing, training and marketing are also critical.

These actions will need to take place in the context of an agreed international framework for mitigation that imposes an absolute constraint on greenhouse gas (GHG) emissions internationally from 2030 to 2050. This will help mitigation to become a key component of policy and planning. By 2030 a substantial proportion of the low-carbon infrastructure should be in place or at an advanced stage of planning, particularly in the energy and transport sectors. South Africa will need to allocate research and development resources strategically to low-carbon technologies, building on existing areas of competitive advantage. This will help the country to establish a vibrant market for low-carbon products and services for both domestic use and for export to southern African countries. The country will also need to ensure significant strategic streamlining of carbon-intensive investments.

The transition: storylines

Starting point

There are many medium- and long-term benefits to be gained from pursuing low-carbon growth, particularly given the links between climate change action, job creation, poverty reduction and economic competitiveness. Given South Africa's starting point, however, the country faces a particularly challenging transition to a resilient, low-carbon economy and society. From a mitigation perspective, South Africa is one of a relatively small number of countries with abundant coal, minimal hydroelectricity and little production of natural gas. South Africa's energy emissions account for over 70 percent of its total emissions and coal accounts for the bulk of energy supply. The country also holds some of the world's richest deposits of minerals, with mining and processing demanding substantial energy. The impact of these natural endowments has been heightened through historical policies that created a minerals and energy complex – a political, economic and institutional structure that lies at the heart of South Africa's economy, and creates a fundamental structural challenge in moving towards a lower carbon economy.

In addition, South Africa's apartheid legacy has resulted in unacceptably high levels of poverty and inequality, which also have structural characteristics. The pace and process of moving to a low-carbon and climate-resilient economy must be designed in such a way that it also contributes to the objectives of overcoming poverty and inequality.

South Africa has a systemic shortage of skills and capacity. The structural failure of the education system and continued high levels of poverty and unemployment have resulted in a poorly skilled workforce, which will require decades to transform. In addition, state capacity to administer regulatory processes is low. The transition to a low-carbon and resilient economy requires a capable state to lead, enforce the regulation of GHG emissions, and respond to the impacts of climate change. The transition to a low-carbon economy depends on the country's ability to improve skills in the workforce, at least in the early phases of the transition.

As noted in the *Diagnostic Report* and the Climate Change Response White Paper, South Africa accepts the science used by the Intergovernmental Panel on Climate Change and the resulting goal to limit global warming to below 2°C above pre-industrial levels. It is clear that action to address the causes and impact of climate change by a single country, or a small group of countries, cannot take place in isolation. This is a global problem requiring a global solution, through the concerted and cooperative efforts of all countries. The world is not currently on the right path to achieve this. Given that the effects of climate change will fall most heavily on the poor, South Africa needs to urgently strengthen the resilience of its society and economy, while developing and implementing ways of protecting the most vulnerable.

Mitigation policies and measures

Over the past few years, South Africa has increasingly stated its ambition to act responsibly to mitigate the effects of climate change. Domestic and international statements include, among others: the Long Term Mitigation Scenarios (2006-2008); the Mitigation Potential Study; Cabinet's vision of a peak, plateau and decline trajectory (2008); and South Africa's Copenhagen Pledge (2009). The National Climate Change Response White Paper clarifies this ambition through quantifying the business-as-usual trajectory, against which the efficacy of South Africa's collective actions to reduce GHG emissions is measured. This mitigation effort aims to achieve the peak, plateau and decline trajectory of the Copenhagen Accord, which serves as South Africa's long-term 2050 mitigation vision.

Achieving this is possible only with international support. This is challenging for domestic planning because it is unclear if the necessary financing and technology development and transfer support will be received in full, in part, or not at all. This is problematic as short-term decisions need to be made about large capital-intensive infrastructure investments that will commit the economy to a particular emissions path. It is likely that several such decisions will have to be taken before we know the extent or nature of the support South Africa will receive.

While the Long Term Mitigation Scenarios provided a useful starting point, more detailed analysis is needed to determine the optimal mix of mitigation actions to achieve the desired emission reduction outcomes for each sector and sub-sector of the economy. This work is needed to ensure that actions support job creation and take account of other relevant conditions related to the specific sector, sub-sector or organisation concerned. In the absence of more detailed analysis, certain stakeholder groups are apprehensive about what this commitment will really mean for South Africa in terms of economic growth and jobs. Initial findings from a commission study on the role of the mining and minerals beneficiation sector indicates that even under strong assumptions of energy intensity improvements and full implementation of the Integrated Resource Plan 2010, which covers the period 2010 to 2030, the sector significantly exceeds its emissions levels envisaged for the years 2020 and 2025 (based on current proportional emissions contributions). This sector is currently being

prioritised by economic policy for its contribution to economic growth and employment creation.

Given this and the current realities of international climate mitigation policy, it will be challenging to honour the commitment to reduce South Africa's emissions without compromising the overriding priorities to create jobs, address poverty, improve public health and grow an internationally competitive economy, without substantial international assistance. However, it is in the country's best interests that an absolute global emissions constraint is put into effect sooner rather than later.

Given these variables, more work is needed to understand how best to plan and manage the transition to a just, resilient and low-carbon economy. New and innovative policy approaches will be required, needing flexibility in the short and medium terms, while ensuring alignment with an absolute carbon emissions limit in the long term.

A just transition

The poor and vulnerable are, and will continue to be, disproportionately affected by climate change. Millions of people are employed in energy-intensive industries and the mining sector is a major contributor to South Africa's foreign exchange earnings. A judicious process of transition is therefore non-negotiable. In addition, the poor and vulnerable must specifically be protected from the transitional costs associated with mitigation, such as increased costs of energy, food and transport, job losses in carbon-intensive industries, and demand for different skills.

Build resilience

One of the main challenges of climate change is the high level of uncertainty about the exact impacts, its costs and the outcome of final global agreements. Building the resilience of both the economy and society is one of the best ways to manage this unpredictability. In this context, economic resilience refers to an economy that is competitive internationally, has a high level of energy, water, food and natural resource security, has strong innovative capacity, and is driven by a skilled and flexible workforce. A resilient society will be appropriately healthy, educated and prosperous.

"I think we haven't considered solar power, not solar panels, but heliostats, solar power towers. Together with hydro and wind power it can make a significant impact on our dependency on coal and nuclear resources. I will not give extensive details but I will say if Spain can power 25 000 households using a heliostat in a climate with less intense sunlight, why can't we? I was able to boil water using a heliostat made of foil in my back yard when I was an undergrad at university. The principal works and the resource is beaming down on us everyday whether we choose to harness it or not. To this end I would use the energy generated to split water from the ocean using the Deuterium to power fuel cells rather than use our valuable fresh water. With these changes in place it should actually cut the cost of electricity in the long run.

I am proudly South African, I believe that we as South African have the resources necessary to improve the lives of every South African. We should not wait for the developed world to show us the way forward when in fact we can lead." – NPC Jam

To ensure that the transition is just, resilience should be built into all aspects of planning and policy. A regional perspective is also critical, as South Africa's neighbours face similar adaptation challenges, and their success is integral to our own. Cooperative regional development planning processes should point out possible partnerships that tackle both adaptation and mitigation challenges, to the benefit of all countries involved.

Some government departments have already made significant progress in singling out projects for implementation. Other projects are more difficult and costly, and will require careful consideration of how they should be financed, incentivised and managed. The White Paper singles out a number of flagship projects, including job-generating programmes such as Working for Energy, Water and Fire; accelerating the National Water Conservation and Water Demand Management Strategy; and energy-efficiency interventions in the residential housing sector through schemes such as the National Sustainable Settlements Facility of the Department of Human Settlements. The Department of Energy's solar water heating programme will be expanded with support from the Department of Trade and Industry to increase the domestic supply of parts for solar water heating. There are also initiatives under way to increase renewable energy and enforce mandatory energy-efficiency requirements for industry. In transport, an enhanced public transport and government vehicle efficiency programme will be implemented. Private sector initiatives such as the Carbon Disclosure Project show a similar commitment to taking action.

Structural change, trade-offs and lock-ins

The Long Term Mitigation Scenarios show that South Africa cannot achieve the post-2035 "decline" portion of the peak, plateau and decline vision within its current economic structure, which is centred primarily on energy- and carbon-intensive activities. Structural transformation of the economy is necessary and will require technological and infrastructural innovation and development. Transformation will inevitably necessitate short-term trade-offs and will have implications for industries unable to shift to new production approaches and technologies. Education and training are therefore essential for fostering innovation.

The key challenge is de-linking economic activity from environmental degradation and carbon-intensive energy, while remaining competitive and reducing unemployment, poverty and inequality. To plan for the transition, a better understanding is needed of the nature of competitiveness in the new global economy, as well as impediments to transition, and how to overcome these. How South Africa's existing set of endowments is used in building a low-carbon economy and society is critical. Ideally, economic activity will expand, while consumption of non-renewable natural resources in the form of fossil fuels and negative environmental impacts such as water contamination will be reduced. These changes may require a more radical rethink of the scope of action required to transform the economy.

"A shift to a green economy and more sustainable practices in general should not be seen in opposition to development, job creation and economic growth. Nor should it be seen as a nice-to-have or merely an additional sector of the economy. With all the development challenges in SA the only way to really advance environmental sustainability is to tie it clearly to human and economic development. For some the link is obvious, but sadly many people still see the two as opposing. When making new policy and proposing changes this link should be shown clearly.

Only if people are convinced that it is about people first and foremost will they really be willing to make the necessary changes." – NPC Jam

Money invested in the current economic structure runs the risk of being a sunken cost if spending is not aligned with the country's future goals. There is the additional risk that South Africa is locked into an economic pathway that could undermine its competitiveness and flexibility in taking up future opportunities. Policy instruments and mechanisms will need to factor in the long-term costs. Areas of existing and possible future lock-ins and trade-offs that require investigation include electricity, transport, liquid fuel supply, the coal sector, and expanding energy-intensive industry. Some examples include:

- The extent to which energy intensity needs to be constrained, if at all, during the transition.
- Future energy sources – the extent of the use of coal, nuclear, hydro, gas, bio-fuels and renewables.
- The impact of hybrid technologies, which combine conventional fossil generation with renewable energy.
- The potential role of nuclear power.
- How to best use some or all of the mineral sub-sectors and smelters to facilitate the transition, and whether there is still a role for them in the long term.
- The use of market mechanisms for mitigation.
- The impact the envisaged transition may have on land use.

Manage the transition

The costs of proactively building a just, low-carbon and resilient economy and society are likely to be far lower than the costs of an unplanned response. However, the transition will not be easy. Given South Africa's starting point, it is likely to be both challenging and contested, with difficult choices along the away. Planning must therefore follow rigorous and transparent processes, with full stakeholder engagement, and decisions based on a detailed analysis of the evidence.

The state's guiding role

While the responsibility for the transition should be borne collectively by all stakeholders, the state will have to facilitate and guide the process. It has the constitutional and moral imperative to act in the interests of the nation, finalising a national approach that balances the difficult trade-offs with issues of equity and responsibility to its citizens, future generations and regional and global partners.

Government has a key role to play in developing the necessary skills and institutional and cultural capacity to support this transition. The scale and significance of this role should not be underestimated. Insufficient capacity and poor governance could jeopardise efforts to meet the country's climate commitments. Existing institutions should be restructured and further capacitated to advance key areas of the transition.

The design and implementation of the country's climate change policy would benefit from public input. In many cases, this participation is ineffective or superficial. It is government's role to ensure participation is meaningful and that there is sufficient public support for the chosen policy. Involving business entities in mitigation and adaptation is critical as projects are more likely to succeed if business entities work closely with government in design and implementation.

Government intervention may also be needed to encourage research and development in low-carbon and adaptive technologies. South Africa does not have the resources to support leadership in all possible areas of technological development, so it is important that decisions are informed by the country's natural endowments, skills and areas of existing capacity and competence.

Align and mainstream existing policy

A crucial constraint that affects the state's ability to lead is a lack of coordination between government departments. Information on the availability of measures to support investment in low-carbon and clean technologies, as well as where such measures are needed, is scattered across national government departments, provinces, municipalities and agencies. The relevant mandates of these institutions tend to be loosely defined, often resulting in a duplication of roles. Aligning and coordinating existing and future policy is therefore essential.

The Climate Change Response White Paper proposes a long-term framework for institutional coordination to implement the National Climate Change Response Policy. This oversight and coordination function at a meta-departmental level is critical. Economic policy departments, in particular, should be appropriately represented and involved in future planning.

There is a risk that the government's climate policy may go unimplemented if actions are not understood in the context of addressing South Africa's key challenges of poverty and inequality. Mainstreaming mitigation and adaptation considerations into the activities of all government departments and across local, provincial and national government is necessary to achieve the transition as efficiently as possible.

"The challenge in climate change is more about looking at the integrated system and optimizing the resources within the system. In this system we need to simultaneously think of energy, water, food security, waste management, population growth, land utilization, economic growth, etc. This requires our government to forget the silos and integrate the policies and programmes to manage the system." – NPC Jam

Build an evidence base

Planning for the transition requires a foundation of trustworthy data and analysis, neither of which is reliably and transparently available in South Africa. In particular, there is a need for thorough and in-depth analysis on the economic implications of reaching the country's mitigation ambition, and the options to achieve the required structural change.

Collecting reliable data on all aspects of climate change is a priority. This requires data collection mechanisms, including urgently setting up mandatory monitoring, evaluation and reporting processes for all relevant stakeholders.

Monitor, report and verify

Understanding South Africa's progress against national goals is critical in moving towards the envisaged economy and society – especially given the number of relevant mitigation variables. The Climate Change Response White Paper proposes mechanisms through which this can occur. It is important that South Africa's system of monitoring, reporting and verifying is compatible with systems evolving internationally, to simplify the process of receiving international support for mitigation actions.

Proposed mitigation instruments

Carbon-budget approach

South Africa is one of a community of developing countries actively considering a carbon budget for the economy. A carbon budget sets the amount of carbon that can be emitted in a given amount of time. This would provide direction and certainty to business and government. Given how international and domestic economic and policy environments are evolving, however, it is important that the carbon budget be subject to regular monitoring and review of targets. This flexibility is necessary for South Africa to design and implement policy responsively, in the context of a clear long-term policy direction.

A well-designed carbon budgeting system would:

- Benchmark South Africa's total carbon budget against the national GHG trajectory range.
- Consider the cumulative nature of the carbon budget over the entire period under the national GHG trajectory range.
- Use a bottom-up approach (initially), while still considering the long-term limitations of South Africa's emissions space.
- Provide flexibility for achieving reductions in different sectors of the economy and over time.

The last point is particularly important given that South Africa's energy- and carbon-intensive sub-sectors face the greatest challenge in reducing their emissions. The carbon budgeting approach to mitigation must efficiently and appropriately apportion carbon space to the sectors and activities that add the greatest value, using a transparent set of criteria and indicators that include developmental criteria. This will help to maintain and build South Africa's competitiveness in a low-carbon future. Although this is critical for achieving a sustainable outcome, it will not be easy given the influential interests in some of the most carbon- and energy-intensive sectors.

Commit to a domestically established mitigation target

An additional proposal that emerged from the stakeholder process is for South Africa to commit to a domestic mitigation target to signal the country's resolve to transition to a low-carbon economy and build the confidence needed to unlock further international support and investment. This target would be implemented regardless of the external financial support South Africa receives and would be developed from a sound evidence base and in the context of the long-term 2050 peak, plateau and decline trajectory. It should be sufficiently ambitious to be viewed as a serious contribution to limiting global warming to less than 2°C but would need to take into account the country's socioeconomic and developmental priorities. How this commitment could be expressed is still unclear, but it should be aligned with the carbon-budget approach for policy consistency and implementation.

Carbon pricing

International experience shows that the most effective way to achieve a just and managed transition to a low-carbon economy is to internalise the social and environmental costs of GHG emissions. International best practice has also established that adequately pricing GHG emissions is one of the most effective ways to encourage polluters to change their behaviour.

National Treasury, in its 2010 discussion paper on reducing GHG emissions, proposes a carbon tax approach. The commission supports this. Treasury is also developing a discussion document on potential market-based pricing mechanisms. If South Africa is to manage the transition in the least disruptive way possible it will need to introduce a broad-based carbon-pricing regime that covers all relevant sectors at one consistent price. This approach will need to include a range of temporary incentives and support mechanisms. This regime may need to be aligned with a carbon budget for specific sectors. Some of the revenue could be used to subsidise low-income households and fund rebates for clean technologies, further strengthening the price incentives. Over the long term, the rebates, supporting policies and incentives will be phased out, leaving a carbon price that will be close to the social cost of carbon internationally.

"South Africa's propensity for change in the way it produces and consumes goods is related to the mechanisms we structure to incentivise all sectors of society to work collectively to address environmental sustainability - we need tax breaks for green businesses and for people who minimise their carbon footprint. Government cannot charge people the same municipal rates for recycling collection services as those for sending tons of waste to landfills." – NPC Jam

There is some debate as to whether the tax can be effective when the electricity generation sector in South Africa is subject to regulated pricing. A highly uncompetitive and monopolistic structure challenges the effective application of a pricing instrument. Given that electricity represents the source of most of South Africa's national emissions as well as much of its mitigation potential, it is critical that the sector is subject to an appropriate carbon price, though the effect may only be realised in the medium to long term. A possible way of dealing with this would be to provide a tax rebate to the sector, with the Integrated Resource Plan remaining the primary mitigation instrument. The plan provides for building generation plants that will increasingly incorporate lower emissions technologies because of the carbon price consideration.

"Be brave and tax cars that are heavy on petrol and tax them heavily - don't be shy about it. The tax should be high enough to cause a major swing away from large luxury vehicles, to smaller, lighter (but safe) cars. Sorry, guys, but no one driving in a city NEEDS a 4x4, and unless you're intending to fight in Afghanistan over the weekend, no one needs a Hummer. Ban the importation of "ego" vehicles that chew petrol. In a country suffering massive poverty and inequality, it is not appropriate to flaunt a Maserati." – NPC Jam

As seen in other countries (most recently, Australia), the introduction of a carbon price must be handled carefully. Caution is particularly needed in South Africa's context of rising electricity prices. The carbon price would need to be phased in to protect the economy and consumers from further crippling increases. Ultimately consumers will face an increased cost through the tariff mechanism to encourage a change in consumer behaviour, while the poor would be given relief under the household energy poverty interventions. This mechanism would need to be reviewed as the electricity sector becomes increasingly competitive in structure.

Additional policy instruments should also be considered to support industry to achieve mitigation targets, especially in sectors where the price is insufficient to change investor or consumer behaviour. For example, in the transport sector, accelerated emissions-intensity penalties for motor vehicles at the point-of-sale could be implemented.

Financing

Finance for the transition will come from a combination of measures including re-aligning existing budget line items to the country's mitigation ambitions and its resilience and adaptation priorities; domestic sources such as carbon pricing; and international aid. Using public sources of funding to leverage private investments is critical if adequate resources are to be mobilised. It is crucial that current government spending is aligned with the requirements of the vision for mitigation and adaptation, to ensure sound fiscal management and prevent lock-in through investment in infrastructure that is inconsistent with these objectives. To address this, there is a need to ensure that policy, planning and regulations are aligned to the climate change

response at every level. This includes the phased removal of existing subsidies and incentives that perpetuate a high-carbon economic structure.

It is not clear how the necessary international funding can be accessed or how much is needed. However, some financing has started to flow, and it is important that South Africa positions itself favourably to receive this assistance. The carbon budget process should help and encourage government departments, sectors and firms to access and secure such aid through developing nationally appropriate mitigation actions, the clean development mechanism, and adaptation funds or other mechanisms as they become available. These proposals should be underpinned by South Africa's objectives of reducing poverty and inequality.

It is anticipated that limited domestic revenue sources will be generated by the carbon pricing system. Other climate-related taxes and levies should be applied in alignment with sound fiscal policy and principles on government investment in climate change.

Guiding principles for the transition

The commission proposes that the following principles should augment those set out in the Climate Change Response White Paper and guide all aspects of the transition, from policy, to process, to action:

- **Just, ethical and sustainable** – Recognise the aspirations of South Africa as a developing country and remain mindful of its particular starting point.
- **Global human solidarity** – Protect and promote the interests of South Africa's citizenry, in the context of global human solidarity.
- **Ecosystems** – Acknowledge human wellbeing as dependent on the wellbeing of the planet.
- **Strategic planning** – Apply a systems perspective, while ensuring an approach that is dynamic, with flexibility and responsiveness to emerging risk and opportunity, and effective management of trade-offs.
- **Transformative** – Address all aspects of the current economy and society, requiring strength of leadership, boldness, visionary thinking and innovative planning.
- **Manage transition** – Build on existing processes to attain gradual change and a phased transition.
- **Opportunity focus** – For business, growth, competitiveness and employment creation, and for South Africa to attain comparable equality and prosperity.
- **Full cost accounting** – Internalise externalities through full cost accounting.
- **Effective participation of social partners** – Be aware of mutual responsibilities, engage on differences, seek consensus and expect compromise through social dialogue.
- **Balance evidence-collection with immediate action** – Recognise the basic tools needed for informed action.

- **Sound policy-making** – Coherent and aligned policy that provides predictable signals, while being simple and implementable, feasible and effective.
- **Least regret** – Invest early in low-carbon technologies that are least-cost, to reduce emissions and also position South Africa to compete in a carbon-constrained world.
- **A regional approach** – Develop partnerships with neighbours in the region to promote mutually beneficial collaboration on mitigation and adaptation.
- **Accountability** – Lead and manage, as well as monitor, verify and report on the transition.

Phasing

The transition to a low-carbon, resilient economy and society requires careful phasing of strategic planning, evidence gathering, and investment. While the aim is to reduce emissions immediately and provide relief for those already affected by environmental impacts, important work is simultaneously needed to lay the groundwork for future emission reductions and climate resilience, through investment in low-carbon and climate-resilient infrastructure. Attention to phasing and sequencing will therefore be an important part of the climate change planning process. Certain sectors will require carbon space now while they build the low-carbon infrastructure of the future. The phasing required is outlined below.

By 2015:

- The roles and institutional arrangements indicated by the Climate Change Response White Paper have been established, institutionalised, legislated, staffed appropriately, and have developed processes and systems to carry out their mandate.
- There is a comprehensive, trusted and expanding evidence base for climate change policy-making in relation to adaptation and mitigation.
- South Africa's mitigation commitment is defined and actions are being taken to achieve it.
- A process to understand the implications of mitigation effort between sectors and economic activities within a limited carbon space has been established through the carbon-budget approach. This guides infrastructure spending, anticipation of lock-in investments and business plans for appropriate mitigation actions.
- Policy and regulation are aligned to the common purpose of a just transition.
- Potential policy and investment lock-ins have been identified, the trade-offs managed and sunken costs avoided.
- A carbon tax is in place, and a wider suite of mitigation policy instruments that target specific mitigation reduction opportunities aligned with the carbon-budget approach.

- Flagship mitigation and adaptation projects established in the Climate Change Response White Paper are well under way.
- South Africa is starting to access international assistance for adaptation and mitigation actions.
- Climate change issues are well represented at forums for regional cooperation.
- Two further integrated resource plans are complete and include carbon constraints appropriate to South Africa's overall mitigation effort and the price of carbon.
- Significant investment programmes are in place for climate-related research and development, and skills development.
- Institutional capacity is starting to emerge, based on a just and resilient low-carbon economy and society.

By 2020:

- The carbon-budget approach has evolved into an important and trusted planning tool, informing ongoing policy development and implementation, and feeding into South Africa's international commitments.
- Plans to strengthen state capacity are starting to pay off, and rigorous skills development interventions are active across the country.
- Annual data on emissions levels and climate impact feeds into policy and regulatory processes.
- International assistance has been secured for a number of mitigation projects, setting the path for alignment with global mitigation objectives.
- Resilience planning is integrated into all planning processes in the country.
- Planning is starting for the post-2030 period, with a strong regional perspective.
- A culture of energy efficiency in society is well established.

By 2025-2030:

- Investment in low-carbon and climate-resilient infrastructure in the previous decade is starting to pay off.
- The state is well capacitated and comfortably manages its policy, regulatory and support functions.
- South Africa has secured substantial international assistance and is aligned with objectives defined in its vision of mitigation.
- The transition has been reconciled with South Africa's efforts to address poverty and inequality. Indeed, the benefits of building resilience are evident in the strides towards a flourishing and prosperous South Africa.
- The carbon-budget approach has matured and is aligned with international best practice, guiding the allocation of absolute carbon constraints in the international climate mitigation policy framework. South Africa is well positioned to meet its commitments, given the early adoption of a carbon budget framework.

Chapter 6

AN INTEGRATED AND INCLUSIVE RURAL ECONOMY

"South Africa, our country, is our land. Our land is our home. We sweep and keep clean our yard. We travel through it. We enjoy its varied climate, terrain and vegetation. It is as diverse as we are. We live and work in it, on it with care, preserving it for future generations. We discover it all the time. As it gives life to us, we honour the life in it.

From time to time it reminds us of its enormous, infinite power when rain and floods overwhelm, winds buffet, seas rage, and the sun beats unrelentingly in drought. In humility, we learn of our limitations."

Introduction

Since 1994, the main challenge for rural development has been the need to combat marginalisation of the poor. This required changes in access to resources (land, water, education and skills), rural infrastructure and other government services.

Some progress has been made, with significant shifts in the extent and degree of poverty. The National Income Dynamics Study[1] revealed that the rural share of poverty fell from 70 percent in 1993 to 57 percent in 2008. The improvement in household welfare is generally ascribed to the large increase in social grant expenditure. Farm workers also enjoy greater rights, both as workers and tenants, and receive better wages.

Access to basic services has increased, although at a slower pace than in urban areas, and is not fully realised. Since 1994, about 6 million hectares of agricultural land have been redistributed – 3.4 million hectares through land redistribution and 2.4 million through the restitution process. Of 79 696 land claims lodged since 1994, 95 percent have been settled.

Rural areas, however, are characterised by greater poverty and inequality than urban areas, with many households trapped in a vicious cycle of poverty.

[1] The Presidency (2009). *National Income Dynamics Study*.

Vision 2030

By 2030, South Africa's rural communities should have greater opportunities to participate fully in the economic, social and political life of the country. People should be able to access high-quality basic services that enable them to be well nourished, healthy and increasingly skilled. Rural economies will be supported by agriculture, and where possible by mining, tourism, agro-processing and fisheries.

The vision includes better integration of the country's rural areas, achieved through successful land reform, job creation and poverty alleviation. The driving force behind this will be an expansion of irrigated agriculture, supplemented by dry-land production where feasible. In areas with low economic potential, quality education, health care, basic services and social security will support the development of human capital. In areas with some economic potential, non-agricultural activities (such as agro-industry, tourism, small enterprises or fisheries) will boost development.

Access to basic social and infrastructural services is a high priority for many rural households, and these are addressed in the human settlements and social protection chapters. This chapter focuses on developing rural economic opportunities, without which services are unlikely to be sustained in the long term.

What needs to be done

The commission proposes a differentiated rural development strategy:

- Agricultural development based on successful land reform, employment creation and strong environmental safeguards. To achieve this, irrigated agriculture and dry land production should be expanded, beginning with smallholder farmers where possible.
- Quality basic services, particularly education, health care and public transport. Well functioning and supported communities will enable people to develop the capabilities to seek economic opportunities. This will allow people to contribute to developing their communities through remittances and the transfer of skills, which will contribute to the local economy.
- In areas with greater economic potential, industries such as agro-processing, tourism, fisheries (in coastal areas) and small enterprise development should be developed.

The differentiated strategy should be enhanced by ensuring access to basic services, food security and the empowerment of farm workers. Institutional capacity is integral to success, especially in the reforms required to resolve contested relationships between indigenous and constitutional institutions.

Agriculture

As the primary economic activity in rural areas, agriculture is the main focus of this chapter. Agriculture has the potential to create close to 1 million new jobs by 2030, a significant contribution to the overall employment target. To achieve this, South Africa needs to:

- Expand irrigated agriculture. Evidence shows that the 1.5 million hectares under irrigation (which produce virtually all South Africa's horticultural harvest and some field crops) can be expanded by at least 500 000 hectares through the better use of existing water resources and developing new water schemes.
- Convert some under-used land in communal areas and land reform projects into commercial production.
- Pick and support commercial agriculture sectors and regions that have the highest potential for growth and employment.
- Support job creation in the upstream and downstream industries. Potential employment will come from the growth in output resulting from the first three strategies.
- Find creative combinations between opportunities. For example, emphasis on land could benefit from irrigation infrastructure; give priority to successful farmers in communal areas; and support industries and areas with high potential to create jobs. All these will increase collaboration between existing farmers and beneficiaries of land reform.
- Develop strategies that give new entrants access to product value-chains and support from better resourced players.

The table below depicts how this can be achieved.

The employment creation potential of South African agriculture

Target group	Primary jobs created	Secondary jobs created	Assumption
Subsistence farmers with <0.5 hectares	83 000	41 500	The livelihoods of one in 10 of the farmers in this category are improved.
Small-scale farmers with between 0.5 and 5 hectares of land	165 000	82 500	The livelihoods of half the farmers in this category are improved.
Small-scale farmers with >5 hectares of land	75 000	37 500	These farmers employ themselves and two others.
Better use of redistributed land	70 000	35 000	Redistribution beneficiaries employ themselves and two others; one in 10 restitution beneficiaries become self-sufficient.

Target group	Primary jobs created	Secondary jobs created	Assumption
Labour-intensive winners	200 000	100 000	Critically, this requires investment in irrigation, support to smallholder farmers and their ability to grow their businesses.
Labour-extensive field crops	10 000	5 000	This reflects a "high road" or optimistic scenario and assumes that the current decline in employment in commercial farming is halted.
Labour-extensive livestock	40 000	25 000	This reflects a "high road" or optimistic scenario and assumes that the current decline in employment in commercial farming is halted.
Total	**643 000**	**326 500**	**969 500**

Note: The employment multiplier between agriculture and its upstream and downstream industries has been taken at 0.5 for small-scale farmers (a conservative estimate).

Creating jobs in agriculture will not be easy. It will require credible programmes, sound implementation, significant resources and stronger institutions, such as agriculture departments in local and provincial government. The effectiveness of extension officers depends on performance, capacity and level of priority given by provincial agricultural departments. Whether this service is correctly located should also be considered. Despite these challenges, with the right approach it is possible to reverse the decline in the agriculture sector, promote food production and raise rural income and employment. White commercial farmers, agribusinesses and organised agricultural industry bodies can help bring these objectives to fruition.

Jobs and livelihoods in communal areas

Traditionally, agriculture was a livelihood asset to the rural poor when other sources of income fell away. This role was always under developed because of apartheid, but it is diminishing further owing to increases in social grants and employment opportunities elsewhere. Agriculture, however, has the potential to expand if the necessary environment can be created. Better land use in communal areas has the potential to improve the livelihoods of at least 370 000 people.

The table below shows South African households with access to land. About 300 000 jobs are available, based on the following assumptions. First, assume that 831 871 plots of less than half a hectare are largely vegetable gardens and that the 34 546 farmers with more than 20 hectares farm in commercial areas. This leaves some 440 000 households who farm at some scale. Of these, about 373 500 have access to between half a hectare and five hectares, while about 50 000 have access to between five and 10 hectares. Some farmers with more than five hectares already have access to irrigation infrastructure. Others farm in areas where irrigation is possible. There must be at least 25 000 small-scale farmers in the communal areas with access to more than five hectares of dry land, and who do not farm in areas that can be irrigated. If these each employ two workers, about 50 000 jobs will be created. If half the farmers on between half a hectare and five hectares benefit from better livelihoods a further 165 000 job opportunities will be created. If the livelihoods of one in every 10 of those with access to less than half a hectare improve, a total of at least 300 000 potential new job opportunities will come directly from agriculture.

South African households' access to agricultural land

Hectares	Number (weighted)	%
< 0.5	831 871	64.5
0.5-1	235 454	18.3
1-5	138 196	10.7
5-10	38 146	3
10-20	11 940	0.9
20 +	34 546	2.7
Unknown	17 556	-
Total	**1 307 710**	**100**

Source: Statistics South Africa, 2006.

A further 70 000 livelihood opportunities are created if land reform beneficiaries are properly supported. By 2009, the land redistribution and restitution programmes had transferred land to 185 858 beneficiaries (about 40 000 households) and 1.6 million beneficiaries (270 000 households) respectively.

If about one in three beneficiaries of the redistribution programme farms on a small scale and employs at least two workers, 40 000 jobs are created. Assuming that at least one in 10 beneficiaries of the restitution programme improves their livelihood provides 27 000 jobs, which boosts the livelihoods of almost 70 000 people.

A large number of the beneficiaries, mainly of the restitution programme, have not been able to settle on the land or use it productively. In part, they have lacked infrastructure, inputs and technical support.

To realise opportunities, security of tenure is required. Investment by farmers will occur if they believe income streams are secure. This requires infrastructure and functioning market institutions, including insurance markets.

Land reform beneficiaries in commercial farming areas have to fund land purchase up front, making it almost impossible to farm profitably because of high debt burdens. Alternatively, if the land is given as a grant, the state has to provide the funding through the fiscus. Since the state has limited means to provide post-settlement support, a possible solution would be to use the Land Bank, initially established to address the difficulty of entry into commercial farming. The bank was allowed to use explicit and eventually implicit subsidies from government to provide mortgage loans for up to 40 years.

A stepped programme of financing would address most financing problems of land reform beneficiaries. This can be achieved through giving successful applicants a rent-free probation for two or three years. If farmers prove capable, they will move to a long-term lease of about 40 years with the full commercial rental phased in over four years. Part of the rental fee applied to a sinking fund held at the Land Bank will eventually give them full title.

Land access in communal areas is treated as though land rights and the use of different forms of land are undifferentiated. In practice, land rights for agricultural purposes differ depending on how people use the land. Securing tenure for investment is important when land is used to grow crops. The focus should be on cooperating with traditional leaders in securing tenured irrigable land that will lead to fully defined property rights, which allows for development and gives prospective financiers the security they require.

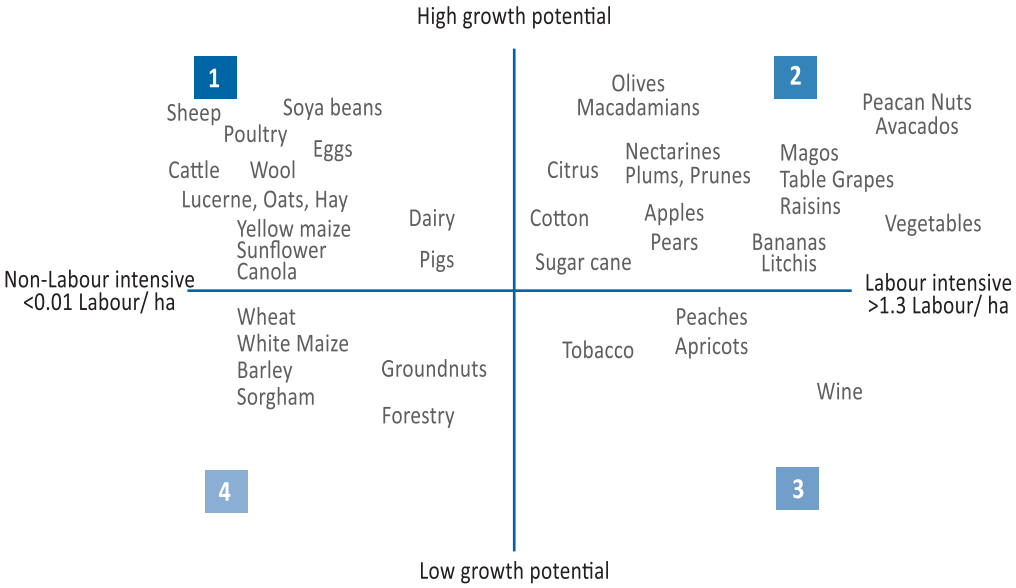
Expand commercial agriculture

Expanding commercial agriculture has the potential to create 250 000 direct jobs and a further 130 000 indirect jobs. This can be achieved by picking winning agricultural sub-sectors where the expansion in production and further value-adding processes are sustainable over the long term. Expansion is not only driven by higher levels of productivity, but also supported by foreign and domestic market demand. Without boosted demand, increased production will depress domestic prices, which is bad for employment creation in the sector.

The section below deals with potential winners, grouped into the following categories: large labour-intensive industries; smaller labour-intensive industries; and large existing industries with significant value-chain linkages. The figure[2] below presents an overview of the industries by mapping the relationship between current growth rates and dependence on labour.

[2] BFAP (2011). *The contribution of the agro-industrial complex to employment in South Africa*. A report prepared for the National Planning Commission.

Agricultural growth and employment potential



Source: Bureau for Agricultural Policy, 2011 [3]

Large labour-intensive agriculture

Citrus

There are about 60 000 hectares of citrus trees in South Africa. The employment requirement to produce citrus fruit is estimated at one worker per hectare, hence about 60 000 workers are employed on citrus farms.[4] Direct downstream labour requirements for citrus are estimated at one labourer per 2 500 cartons packed: with about 100 million cartons packed per year, some 40 000 jobs are created in packing plants for a period of six months, or 20 000 fulltime equivalents. In addition, there are labour requirements for transportation, warehousing, port handling, research and development, and processing.

From 2000 to 2010, the area under citrus increased by 28 percent, from 13 000 to 60 000 hectares. Almost 10 000 hectares of citrus have been redistributed by the land reform programme, but 70 percent of these orchards are in distress. Rehabilitated, they would provide about 7 000 additional on-farm jobs.

[3] BFAP (2011). The contribution of the agro-industrial complex to employment in South Africa. Unpublished report prepared for the National Planning Commission.

[4] In this and subsequent subsections it is important to recall that there are few single-commodity (monoculture) farms in South Africa, hence these employment numbers cannot be aggregated. For example, citrus farms also produce other types of fruit and livestock products, wine farms often also produce wheat or deciduous fruit, and so on.

Table and dried grapes

There are about 23 500 hectares of table and dried grapes planted in the country, with an employment requirement of 1.6 workers per hectare (about 38 000 workers are employed on these farms). This represents an expansion of 4 200 hectares since 2000, indicating that 6 720 additional jobs were created.

Total exports of fresh grapes increased from 37.2 million cartons (of 4.5 kilograms) in 2000 to 51 million cartons in 2010. If this output can be repeated over the next 10 years, it holds significant potential to expand the industry. The single greatest challenge in penetrating new markets remains market access through trade negotiations and sanitary and phytosanitary agreements. As with the citrus industry, South Africa needs to remain internationally competitive to create and maintain its market share.

The opportunity to expand table and dried grape vineyards lies mainly in the Orange River region. At present water rights are available for an extra 8 000 hectares, of which about 4 700 are expected to be planted for table and dried grapes over the next decade.

Subtropical fruit

The critical factor expected to determine the future expansion of subtropical fruit production is land reform. The banana industry is an example. The area under production has declined from 18 000 to 12 000 hectares over the past decade. Farms have either become unproductive or producers are not willing to reinvest, choosing to move production to Mozambique and exporting to South Africa. Although there are no confirmed statistics, industry experts argue that up to half the traditional South African crop is now exported from Mozambique into South Africa by South African producers. With a labour multiplier of two workers per hectare, this industry can make a significant contribution to creating jobs if only one-third of the area now underused can be revived by injecting the necessary technical and financial support.

Similarly, the avocado industry has a lot more to offer in employment creation. While the hectares under banana production have been declining, the area under avocado production has expanded rapidly over the past decade. The high demand for avocados has led to a waiting list of about two years at nurseries. The industry argues that production could expand by a further 70 percent (9 275 hectares) over the next decade. With a labour multiplier of almost two labourers per hectare and upstream and downstream linkages of about 1.3 jobs per hectare, roughly 30 000 jobs can be created over the next 10 years. About 90 000 tons of avocados are now produced, of which more than 50 percent is exported, 10 percent processed and the rest sold into the fresh market.

Vegetables

The vegetable industry could be one of the largest contributors to job creation and the improvement of livelihoods if the potential growth in demand in South Africa and the southern African region is taken into consideration. The demand for vegetables has grown consistently (about 30 percent over the past decade) and as per capita income rises, this trend is projected to continue. However, the rate of increase in demand could be much faster and the production of vegetables could expand significantly if access to rural markets is established, transparent electronic trading platforms are put in place and markets in neighbouring countries are accessible. It is estimated that, apart from potatoes, the demand for vegetables is 25 percent below its potential. This figure can be added to the increasing trend in demand of 3 percent a year, which implies that the expansion of commodities such as tomatoes, onions and carrots could reach roughly 60 percent over the next 10 years.

Small-scale, labour-intensive agriculture

This category includes industries such as macadamias, pecan nuts, rooibos tea, olives, figs, cherries and berries. In sheer size, these industries do not compete with existing labour-intensive industries. However, their potential for expansion is by far the highest. Relative to South Africa's production potential, the size of the export market is vast, assuming that market access can be established in some of the key growing markets. For example, the world production of cherries amounts to about 2.2 million tonnes, of which South Africa produces only 170 tonnes. This implies that market size or demand growth is often a lesser factor.

Despite the huge market potential, the realities of expanding production need to be considered, since these products demand very specific growing conditions. The quality of the fruit is the key issue in export markets. For example, whereas pecan nut yields in KwaZulu-Natal are about 1 tonne per hectare, they reach up to 4 tonnes in the Northern Cape, and the production of cherries is highly dependent on sufficient cold weather during winter.

It is estimated that roughly 80 000 jobs could be created in these smaller, labour-intensive industries under ideal conditions. Smaller or niche industries are attractive because economies of scale, which are found in the big established industries, may not be present. As a result, producers might be more inclined to use labour than invest in machinery.

Large, non-labour intensive industries with significant value-chain linkages

The grain, oilseed and livestock industries can be classified as large and non-labour intensive, yet they have significant upstream and downstream linkages due to their sheer size. A number of these industries have significant growth potential, particularly poultry. Over the past five years, South Africa has imported on average 235 000 tonnes

of chicken meat, or about 15 percent of local consumption. Over the past decade, production has increased by 45 percent and industry experts argue that over the next 10 years, production could grow by a further 40 percent. The demand for chicken meat will continue to grow rapidly. Over the past decade, demand has increased by 68 percent and currently stands at about 32 kilograms per person per year. Industry experts argue that demand could grow to 45 kilograms per person by 2020, bringing the total demand for chicken meat to about 2.3 million tonnes.

The demand for animal feed will grow rapidly over the next decade as more animal protein is consumed. The area under soybeans is projected to at least double from current production levels. Market potential is ample in the animal feed industry and the significant expansion in processing facilities provides the necessary downstream linkages to create sustainable jobs. Using soybeans in the food chain also shows significant potential for expansion. Yellow maize has room to expand given the increased demand for animal feed, followed by sunflower and canola oils. Only a marginal increase in the area under white maize and wheat production is expected over the long term, largely because in the competition for arable land, the expansion of grain and oilseed production will take place where the fastest growth in demand is anticipated, namely animal feed.

Trade-offs and risks for agricultural expansion

The first major risk to the programme is that tenure security for black farmers in the communal areas and under the land reform programme will not be adequately addressed. As long as these farmers (especially women farmers) do not have secure tenure, they will not invest, and agricultural production will not grow at the rate and pattern required for growth in employment.

The second is that government spending, especially on infrastructure and general farmer support services, will not be targeted to small-scale farmers, and will not be increased. At the same time, attention must be given to the bureaucratic systems required to ensure that all farmers in South Africa can access domestic and foreign markets with food that is fresh, safe and socially and environmentally friendly. Bio-security risks and mitigation measures must be given priority.

Third, in most areas, additional water can only be made available if there is a concerted programme that improves the efficiency of existing irrigation, reallocates the water that is made available and supports new entrants to ensure that they can use the water effectively. This will require a substantial support programme that would best be introduced in partnership with existing farmers.

Last, the expansion of agricultural production envisaged in this plan takes place within the current structure of farming by large-scale commercial farming merely being expanded. Under those circumstances, the potential to create additional jobs is limited.

Recommendations

To expand agriculture and create an additional 1 million jobs in the sector, the commission makes the following recommendations:

- Substantially increase investment in water resource and irrigation infrastructure where the natural resource base allows and improve the efficiency of existing irrigation to make more water available.
- Invest substantially in providing innovative market linkages for small-scale farmers in the communal and land reform areas, with provisions to link these farmers to markets in South Africa, and further afield in the sub-continent. This will require infrastructure to improve the time and place utility of farm products through road, rail and communications infrastructure that gets the products from the farm gate through the different stages of the value chain. Information on buying and selling prices and supply and demand trends needs to be provided to farmers, traders, processors and consumers. Linking farmers to markets will also require new forms of intermediaries, such as cooperatives, to assist small producers create economies of scale in processing. This will require infrastructure for processing and all forms of value addition to raw commodities. Finally, it requires the infrastructure to operate cold chains. If this is not achieved, these farmers will be excluded from markets for high-value produce and rural consumers will continue to pay higher prices for food than their urban counterparts.
- Linking farmers to existing markets is not enough. A substantial proportion of agricultural output is consumed in the "food away from home" market in South Africa. While this includes restaurants and take-away outlets, which are hardly relevant in most rural areas, it also includes school feeding schemes and other forms of institutionalised catering, such as food service in hospitals, correctional facilities, and emergency food packages where the state is the main purchaser. As part of comprehensive support packages for farmers, preferential procurement mechanisms should be put in place to ensure that new entrants into agriculture can also access these markets.
- Create tenure security for communal farmers. Tenure security is vital to secure incomes for all existing farmers and for new entrants. Investigate the possibility of flexible systems of land use for different kinds of farming on communal lands.
- Investigate different forms of financing and vesting of private property rights to land reform beneficiaries that does not hamper beneficiaries with a high debt burden.
- There should be greater support for innovative public-private partnerships. South Africa's commercial farming sector is full of examples of major investments that have resulted in new growth, and new job opportunities. These include the expansion of the table grape industry along the Orange River, expanding the sugar industry into Mpumalanga, and the more recent expansion of the wine industry, which led to increased employment as a result of the export boom of the past two decades. More opportunities exist. Examples of regions with untapped potential include the Makatini Flats and the Eastern Cape, while new initiatives such as the role of agriculture in the green economy and conservation efforts in general can

potentially create new employment opportunities, although climate change will affect what investments will pay off best, and where they should be made.

- Increase and refocus investment in research and development for the agricultural sector. Growth in agricultural production in South Africa has always been fuelled by technology, and the returns on investment in agricultural research and development have always been high, partly because South Africa has specialised in adapting technology from all over the world to its circumstances. This should again become the focus of agricultural research for all scales of farming in research councils, universities and the private sector. The consequences of industrialised agriculture and the country's unique ecosystems also demand that serious attention is paid to advances in ecological approaches to sustainable agriculture. This includes greater attention to alternative energy, soil quality, minimum tillage, and other forms of conservation farming.
- Improve and extend skills development and training in the agricultural sector, including entrepreneurship training. This should include the training of a new cadre of extension officers that will respond effectively to the needs of small-holding farmers and contribute to their successful integration into the food value chain. The value of farmer-to-farmer skills transfer and commercial farmers must be encouraged to contribute to developing a new generation of farmers. Every effort must be made to de-racialise the agricultural sector.
- For these extension officers to be successful, it is necessary to investigate whether extension and other agricultural services are appropriately located at provincial level. Innovative means for agricultural extension and training by the state in partnership with industries should be sought.

Making land reform work

Land reform is necessary to unlock the potential for a dynamic, growing and employment-creating agricultural sector. The commission therefore makes the following proposal for a workable and pragmatic land reform scheme.

The proposed model is based on the following principles:

- Enable a more rapid transfer of agricultural land to black beneficiaries without distorting land markets or business confidence in the agribusiness sector.
- Ensure sustainable production on transferred land by making sure that human capabilities precede land transfer through incubators, learnerships, apprenticeships, mentoring and accelerated training in agricultural sciences.
- Establish institutional arrangements to monitor land markets against undue opportunism, corruption and speculation.
- Bring land transfer targets in line with fiscal and economic realities to ensure that land is successfully transferred.
- Offer white commercial farmers and organised industry bodies the opportunity to significantly contribute to the success of black farmers through mentorships, chain integration, preferential procurement and meaningful skills transfer.

Proposed model

- Each district municipality with commercial farming land in South Africa should convene a committee (the district lands committee) with all agricultural landowners in the district, including key stakeholders such as the private sector (the commercial banks, agribusiness), government (Departments of Rural Development and Land Reform, the provincial departments of agriculture, water affairs and so on), and government agencies (Land Bank, the Agricultural Research Council and so on).
- This committee will be responsible for identifying 20 percent of the commercial agricultural land in the district, and giving the commercial farmers the option of assisting in its transfer to black farmers.
- This can be done as follows:
  - Identify land readily available from the following categories: land already in the market; land where the farmer is under severe financial pressure; land held by an absentee landlord willing to exit; and land in a deceased estate. In this way, land could be found without distorting markets.
  - Obtain the land through the state at 50 percent of market value (which is closer to its fair productive value). The 50 percent shortfall of the current owner is made up by cash or in-kind contributions from commercial farmers who volunteer to participate.
  - In exchange, commercial farmers are protected from losing their land in future and they gain black economic empowerment status. This should remove the uncertainty and mistrust that surrounds land reform and the related loss of investor confidence.
- A stepped programme of financing would address most of the financing problems of land reform beneficiaries, give the implementers reassurance that beneficiaries have the necessary skills for successful farming and spread the cost of the programme between the future earnings of the farmer and the pockets of the taxpayer.

Developing non-agricultural activities

Analysis of South Africa's economic development shows that rural areas are mainly locations of primary sector industries. In South Africa, mining is vital for job creation. The spill-over benefits related to trading and services from mining as a source of development and how this can be used to develop local economies needs to be investigated, as too little is known of mining value chains and how they can address spatial developmental inequalities. As the experience of the Free State goldfields and some Northern Cape mining areas shows, however, long-term investments should be carefully scrutinised for closure risks.

The traditional approach to rural development and improving farm incomes in poor countries helps farmers move up the value chain by supporting forms of agro-

processing. But in South Africa, a highly centralised, vertically integrated agro-processing sector already exists for staple foods: maize, wheat, sugar, sunflower oil, tea, flour, peanut butter, cigarettes, beer, fruit juices, canned goods, and so on.

These value chains tend to exclude small, new or black farmers – but there is no point setting up parallel agro-processing initiatives and ignoring existing industry giants. The scope for small-scale manufacturing and agro-processing targeting local consumers in poor communities is limited. This does not mean there are no opportunities, but those that do exist tend to take the form of niche opportunities, rather than those at the kind of scale that can create large numbers of jobs, or at the scale required to sustain group projects or cooperatives. One option may be to engage with businesses, as part of a broader social compact, to gain their cooperation for long-term small-holder development. This has already been done, with some positive results, by the sugar and brewing industries.

Opportunities exist in higher value, higher volume external markets, both national and beyond. And strategies are increasingly targeting these markets. For example, the vertically integrated agro-processing value chains: timber, beans, sugar, horticulture and cotton; the tightly coordinated horticulture value chains tied to supermarkets; and the niche products targeting wealthier markets: designer crafts, essential oils, mushrooms, rooibos tea, goat's milk cheese and so on.

To take advantage of these opportunities, strategies need to be developed for economic cooperation or association that give poor producers greater collective market power in value chains, create synergies and access to information, allow them to achieve the minimum supply volumes required for participation and negotiate improved levels of market access and better terms of participation. Developing partnerships with other commercial players in the value chain is a potential strategy.

In certain rural areas (for example, Wild Coast, Port St John's, Tzaneen, fishing villages, Waterberg) tourism offers opportunities to enhance people's livelihoods. These benefits depend on institutional support and the level of involvement of local communities. Another interesting option is the craft market, because globally and in South Africa, the size of the creative arts industry is projected to grow.

For coastal areas, marine fisheries are an important sector for subsistence and employment. Subsistence fishers rely on marine resources as a basic source of food. They are largely dependent on low-cost resources that are important to the social fabric of their societies, and have a long history of dependency on these resources. There are about 29 000, concentrated on the east and south coasts. Small-scale and artisanal fishers have relatively small, low-cost operations, but often fish high-value resources. Industrial fisheries target large-scale harvesting of mainly offshore resources that are caught using expensive, high-tech boats, gear and equipment. Large-scale industrial fisheries are small in number, but employ about 27 000 people, and their terms of employment are often better relative to other industries.

Most fishing resources are optimally harvested or over-exploited. Accommodating new entrants by increasing the allowable catch of most resources is not viable. Two fundamental issues need to be resolved. The industry is relatively transformed for historically disadvantaged individuals and black economic empowerment in general, but those historically involved in fishing have frequently been ignored. The trend is to favour allocating many rights of small value, rather than fewer rights of substantial value. This increases the number of participants, but also decreases the average gain per participant and increases the difficulties of enforcement. It is fundamental that fishing rights are economically viable and not allocated in a way that threatens compliance. If sustainability is not maintained, the fishery collapses and everyone loses.

Unrealistic expectations have been created by promises of rights. Natural resources are limited and probably already fully exploited or even over-exploited. Small-scale fisheries cannot be regarded as a way to boost employment. Industrial capital-intensive fisheries offer better salaries and better conditions of employment, and are more transformed than small-scale low-capital fisheries. Reducing the rights allocated to industrial fisheries to award them small-scale operations simply cuts jobs. There is a serious need for research to determine the relative values of different sectors in terms of employment, salaries and conditions of service, and contributions to tax.

Recommendations

To expand non-agricultural activities in rural areas, the commission recommends the following:

- Develop strategies for economic cooperation or association that give poor producers greater collective market power in value chains, create synergies and access to information, allowing them to achieve the minimum supply volumes required for participation, negotiate improved levels of market access and/or better terms of participation.
- Identify other potential partners in the agro-processing value chain to support smallholder development.
- As a specific example, encourage supermarkets to open up value chains by partnering with local producers in rural areas.
- Develop and incentivise the development of niche markets to promote smaller producers.
- Allocate economically viable fishing rights.
- Review fisheries policies to determine the best way to allocate rights to maximise employment.

Human capital, social security, food security and basic services

The rural strategy also aims to enable the poor to escape from rural poverty by relocating to cities with easier access to services and secure employment. To achieve

this, specific attention should be paid to improving the human capital of residents in these areas.

See the chapters on education, health, social security and human settlement for recommendations. This section will deal mainly with household food security.

Food security

Malnutrition is the direct outcome of food insecurity. In South Africa, growth faltering among infants and young children is widespread, with one in five young children being stunted. Micronutrient malnutrition, particularly deficiencies of vitamin A, iron and zinc, affects the health, growth and learning ability of young children, and the productivity of the population. At the same time, and often in the same communities and households, obesity contributes significantly to the incidence of chronic diseases, including diabetes, cancer and coronary artery disease.

Food security exists when everyone has access to sufficient, nutritious and safe food at all times. This implies that food is available (nationally and locally) and that people have the means to access it through purchase or other legal means.

It is necessary to make a clear distinction in policy discourse between national food self-sufficiency, food security and access to food by poor people. South Africa is food secure nationally, and has been for a number of decades. This means that it earns a trade surplus from agricultural exports and is able to cover the cost of food imports from those exports. The country has also produced enough of the staple cereal (maize) for all but three of the past 50 years (the exceptions being the devastating droughts of 1984, 1992 and 2007). The composition of the maize harvest is changing, however, with more yellow than white maize planted. This reflects the trend towards higher consumption of animal proteins and of wheat, rice and potatoes as the preferred staple as the population urbanises and becomes more affluent. In this regard, the national food security goal for South Africa should be to maintain a positive trade balance for primary and processed agricultural products and not to achieve food self-sufficiency in staple foods at all costs.

In addition, regional approaches to food security should be investigated. First, as South African agriculture becomes more specialised and efficient, there may be a trend away from the production of staples to higher value crops. As there is only limited correlation between climatic events in South Africa and countries to the north of the Zambezi, regional cooperation may offer greater supply stability and resilience to droughts. Regional economic integration is best served when there are complementary interests and advantages between the parties, which may also be the case in food production. Regional expansion of production, as seen in recent years, is favourable. South Africa should benefit from the opportunities this brings for trade, food stability and value-chain consolidation in the South African market.

Job creation and agricultural productivity is needed to address food insecurity at household and individual level in rural areas. Household food security is determined by the ability to access food, not the availability of food. Other strategies include measures to lessen the impact of retail food price increases on the poorest households; using and expanding existing public works programmes for rural infrastructure development; and ensuring that all eligible households have access to social grants and that the most vulnerable groups (particularly the elderly and chronically ill) have access to nutritional services. Public works programmes and social grants are addressed in other sections of the plan.

Poor households feel the effects of retail food price increases much more severely than better-off households. It is estimated that South African households in the lower income deciles (1-3) spend about 35 percent of their income on food, while in the upper deciles food spending is equivalent to about 3 percent of household income. Furthermore, rural households pay more for a basic food basket than their urban counterparts, because of the low volume of sales and limited competition, high transport costs and lack of adequate storage facilities.

Research shows that while increased agricultural production can contribute to improved nutrition, it is also possible to have significant improvement in agricultural productivity without corresponding improvements in nutritional status. The food security strategy must therefore focus specifically on ensuring that increased agricultural employment and rural incomes translate into improved nutrition. This is particularly important where women of child-bearing age participate in agricultural production and in upstream and downstream economic activities.

Special nutritional services may also be required for households with a shortage of able-bodied persons, child-headed households or households with chronically ill or elderly members. Supplying nutritional services during natural disasters or other emergencies has not received much attention. In urban areas, basic food support activities implemented by community organisations and supported by non-governmental organisations, such as FoodBank South Africa, are in place. Although services are uncoordinated and uneven, the demand for services outstrips supply and emergency services are not well developed.

Recommendations

- The national food security goal for South Africa should be to maintain a positive trade balance and not to strive for food self-sufficiency in staple foods at all costs.
- Opportunities for regional food security strategies that could contribute to greater supply and price stability should be investigated.
- Household food security strategies should include using and expanding existing public works programmes. In particular, the community works programme for rural infrastructure development should be used, ensuring all eligible households

have access to social grants and that the most vulnerable groups (particularly the elderly and chronically ill persons) have access to nutritional services.

- Investigate measures to close the urban/rural food price gap. This will contribute substantially to ensuring greater food security for people in rural areas. Measures that should be investigated: solutions to improve efficiencies, including better access to price information for farmers, effective communication between transport companies and wholesalers, educating packers and retailers on safe food handling, and cost-effective packaging to lessen losses after harvesting.
- Suitable arrangements to ensure safe pregnancy and child birth, and to enable working mothers to breastfeed exclusively for the first six months must be put in place for farm workers.
- Effective nutrition education of health workers, mothers and other caregivers should be a national priority.
- Food fortification should be extended to include home-based fortification of foods for young children, including making fortified mixes (for example, as low-cost spreads or powders) widely available.
- Links between agriculture and nutrition can be strengthened, particularly in producing, processing, preparing and consuming nutrient-rich foods, such as legumes and other vegetables.
- Policy measures to increase intakes of fruits and vegetables and reduce intakes of saturated fats, sugar and salt, as recommended in the South African dietary guidelines, should accompany strategies to increase vegetable and fruit production.
- Special nutritional services may also be required for households with a shortage of able-bodied persons, child-headed households or households with chronically ill or elderly members. Provision for nutritional services during natural disasters or other emergencies has not received much attention.
- Innovative measures, such as procurement from small-scale farmers to create local buffer stocks and community-owned emergency services, could be explored.

Farm worker empowerment and labour relations

The relationship between farmers and farm workers is difficult. Far better relations are needed to achieve the benefits of agricultural expansion, higher employment and better living conditions. A threat to normalising labour relations is the link between housing and employment on farms. This means that farm workers remain highly vulnerable to eviction if they demand better wages and conditions, or try to get supplementary part-time work away from the farm.

Government introduced legislation soon after 1994 to protect farm workers from unfair evictions. The legislation failed to slow down evictions, largely because it required workers to go to court to challenge them and because evictions linked to dismissals are permitted. Farm workers did not have the resources to challenge unfair dismissals or illegal evictions. In 2009, the Department or Rural Development and Land Reform

embarked on a three-year programme to provide legal assistance to farm workers facing eviction, to monitor evictions and to mediate solutions.

Labour laws always depend mainly on unions to monitor and report violations. Labour inspectors cannot maintain an overview of all places of employment, and some farm owners in South Africa refuse to allow them access to farms. Only 13 percent of farm workers belong to a union, compared to 40 percent for the rest of the formal sector.

Options should be investigated to empower farm worker organisations to strengthen their ability to negotiate on an equal footing with farmer organisations. Government should investigate the possibility of using the proposed employment (wage) subsidy, by specifying conditions, not only to increase employment on farms, but as a means to strengthen working and living conditions for farm workers.

Inclusive rural development by 2030

In 2030, there will be integrated rural areas, where residents will be economically active, have food security, access to basic services, health care and quality education. Achieving this vision will require leadership on land reform, communal tenure security, infrastructure and financial and technical support to farmers, and building the capacity of state institutions and industries to implement these interventions.

Chapter 7

POSITIONING SOUTH AFRICA IN THE WORLD

"We are Africans.
We are an African country.
We are part of our multi-national region.
We are an essential part of our continent.
Being Africans, we are acutely aware of the wider world, deeply implicated in our past and present."

Introduction

Over the past three decades, the world has become increasingly interconnected. Global trade in goods and services has expanded, knowledge has been more widely disseminated and technology transfer has increased. Activities that were previously considered to be national or domestic in character have become functionally integrated.

This integration has included the harmonisation of national policies; standardisation of banking, financial and legal activities; adoption of common customs and tariffs procedures; and the arrangement of global and regional supply chains within a worldwide production structure. Because of this process of integration, countries have become increasingly interdependent and more exposed to financial, economic or social crises of a global character. Under these conditions, it has become very difficult for any one country, or group of countries, to manage crises or develop policies in isolation.

In light of these developments, public policy-making and the provision of public goods has taken on a more global aspect. Recurrent upheavals in the world economy, especially the current crisis, have forced a need to reconsider national, regional and global policies. According to the World Economic Forum, the financial crisis that began in 2008 may be at least as bad as the depression of the 1930s. The crisis has exposed "the full extent of the world economy's systemic weaknesses and cooperative deficits", underlining how existing regional and international institutions and arrangements have become out of step with global realities.[1]

The World Economic Forum argues that events over the past decade have exposed "a popular and diplomatic consensus on the need to make fundamental changes" to the

[1] World Economic Forum (2010). *Everybody's Business: Strengthening International Cooperation in a More Interdependent World.* Geneva: World Economic Forum.

way in which the world is governed, as well as a marked shift in the balance of power, and a rapidly closing capability gap between developed and emerging countries.

As a result a greater proportion of global production, trade and investment will continue shifting towards Asia, Latin America and Africa. While the European Union (EU) and the United States are still likely to account for more than a quarter of world output by 2020, emerging economies, especially India and China, will experience the most growth. Africa will remain a relatively small but growing contributor, supported by commodity demand and improved policies. The continent will, however, remain vulnerable and reliant on continued growth in China and India.

Opportunities for South Africa

The shift of global power towards developing countries provides South Africa with an opportunity to maximise its regional and international influence over the next 20 to 30 years. Policy-making should be driven by the objectives set out at the inaugural meeting of the National Planning Commission in May 2011: to grow the economy, reduce poverty and improve the quality of life of all South Africans. In other words, government's global and regional policy-making stance should be South Africa-centric. Policy-making should improve the country's functional integration in the region, on the continent, among developing countries – especially with key states like Brazil, India and China – and in the world, with measurable outcomes.

In the context of recurrent crises and global realignment, South Africa will have to reconsider all existing alignments and affiliations, and establish strategic relationships among individual partners based on strategic political and economic priorities. Policy-making should be guided by the following principles and objectives:

- Focus on what is practically achievable, without over-committing to possibilities of regional and continental integration. Foreign policy should be regularly evaluated "to ensure that … national interests are maximised". [2]
- Remain an influential member of the international community, at the forefront of political and economic developments as they influence the politics of the continent and beyond.
- Deepen[3] cooperation with Brazil, Russia, India and China as part of the BRICS group, while promoting regional and global integration. This requires a thorough review of the country's current and future regional and international commitments.
- Stabilise the regional political economy through increased integration and cooperation. This requires communicating the benefits of deeper regional and global integration to the South African and southern African public.

[2] Department of International Relations and Cooperation (2011). Building a Better World: The Diplomacy of Ubuntu. White Paper on South Africa's Foreign Policy. Department of International Relations and Cooperation.

[3] The reference to "deepen" is an acknowledgement that existing agreements on trade in goods and services are at different stages of development.

- Achieve measurable outcomes related to food, water, energy, education, health, transport and communication infrastructure, national defence, adjustment to climate change and economic growth to benefit all South Africans.

To achieve maximum benefits for the people of South Africa, government needs to remain cognisant of the differences between political ambitions, notions of solidarity and domestic realities. Deepening South Africa's integration should proceed on three fronts:

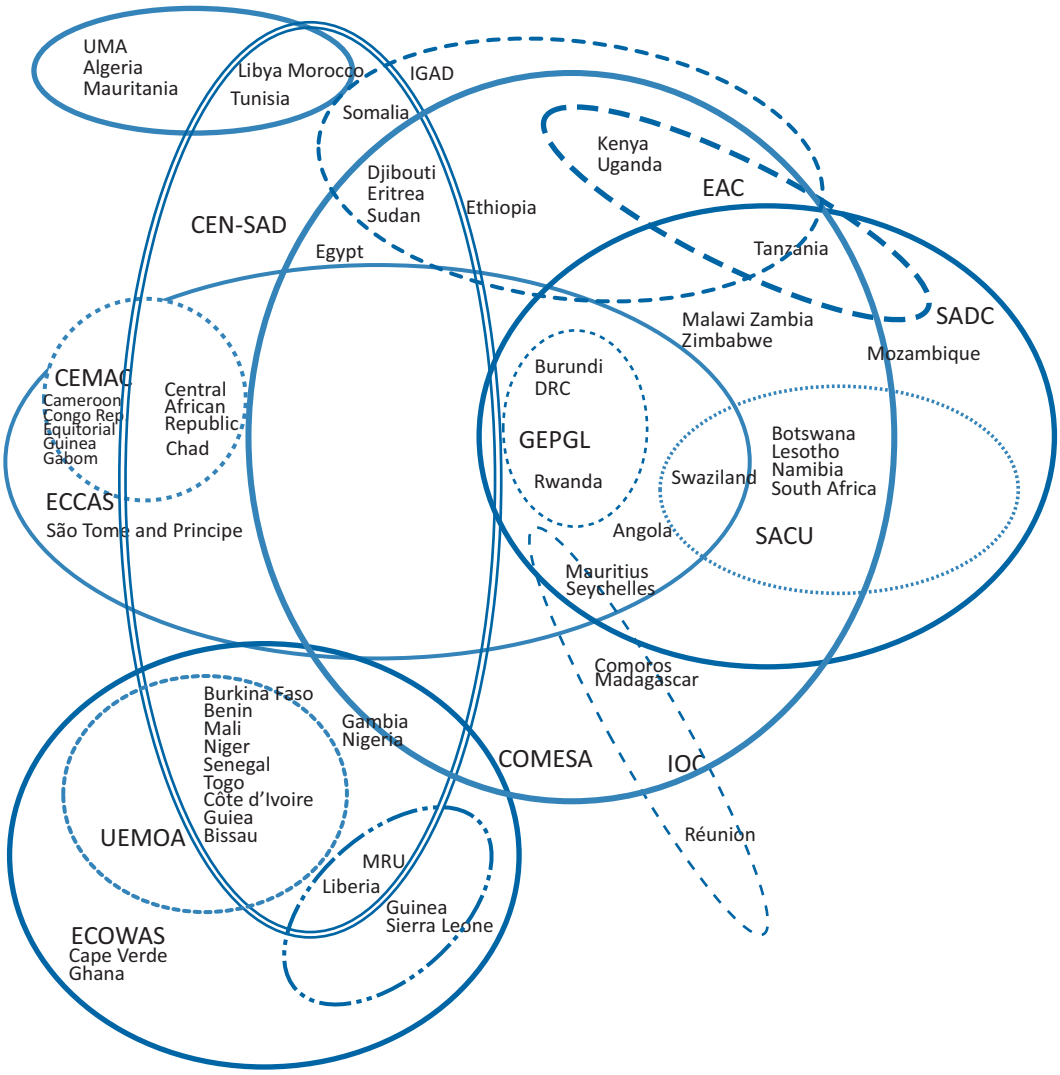
- Regionally, in sub-Saharan Africa.
- Continentally, in the context of Africa's progression towards political and/or economic union.
- Globally, strengthening relations with BRICS and ensuring that Africa remains an important part of global production and value chains – and preventing a re-marginalisation of the continent.

Deepening South Africa's role in the region starts with an honest appraisal of the continent and the world. Policy-makers also need to be clear about the political, economic and intellectual leadership role that South Africa can play in Africa. In this respect, government may have to review some of the original Abuja Treaty proposals, especially the stages of integration envisaged in the agreement.

Sub-Saharan Africa and the global political economy

South Africa's international relations are guided by the promotion of wellbeing, development and upliftment of its people, protecting the planet for future generations and ensuring the prosperity of the country, the region and Africa. To achieve these objectives requires a critical and pragmatic evaluation of existing international relations, and untangling the "spaghetti bowl" of overlapping regional affiliations and commitments.

The "spaghetti bowl" of regional formations in Africa



Source: Economic Commission for Africa

Assessing these entanglements should help government to better manage the dynamics of national interests and global realities in a fast-changing international environment. Policy-makers would then have a clearer sense of the country's international affiliations and commitments, enabling them to better identify areas of responsibility and accountability, and to adjust the country's diplomatic footprint accordingly.

Regional integration is a process that involves both governments and civil society. Although organisations such as the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA) have structures to engage business, labour and other civil society representatives, these are not always fully engaged in negotiating processes. Since both the major beneficiaries and the major opponents of economic integration are often located outside of government, particularly in business and labour, their engagement, while it can slow down reaching an accord, can speed up implementation. In this sense, regional integration is politically

and technically complex, and requires considerable support from a range of interested parties.

South Africa needs to be clear about the types of formations that are necessary for achieving specific national, regional and global objectives. Five types of regional formations stand out:

Political union – The full political and economic integration of two or more states, effectively creating a single entity or country. Germany, reunified after the collapse of the Berlin Wall, is an example of political union.

Economic union – The full integration of the economies of two or more countries. In addition to eliminating internal trade barriers, adopting common external trade policies, and abolishing restrictions on the mobility of factors of production among member countries, an economic union requires its members to coordinate their economic policies.

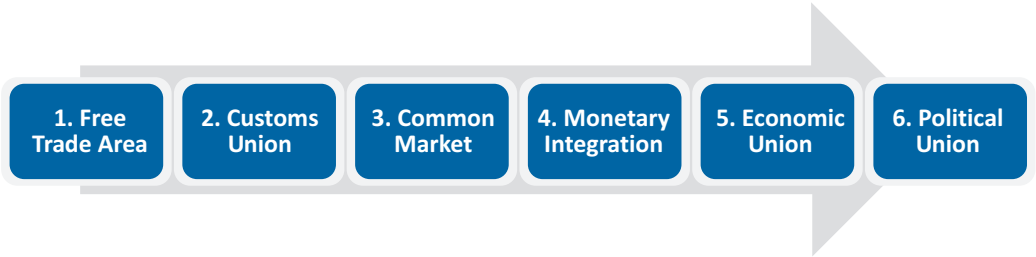
Customs union – The elimination of internal trade barriers among member states and the adoption of common external trade policies toward non-members.

Common market – Member states eliminate internal trade barriers among themselves and adopt a common external trade policy toward non-members. A common market goes a step further than a customs union by eliminating barriers that inhibit the movement of factors of production among its members, especially labour, capital and technology.

Free trade areas and regional trade agreements – The elimination of trade barriers (tariffs, quotas, and non-tariff barriers) among member states. Free trade areas are widespread, with 489 regional pacts in place according to the World Trade Organisation. When the objectives of regional integration are cleared defined, and the process is managed strategically, significant benefits can be achieved through regional trade agreements.

While the creation of such agreements has generally been the main inception point for regional integration, Africa's attempts in this area have had mixed success. A linear path to regional integration, such as the one depicted in the accompanying image, may not be appropriate or workable.

A linear path to regional integration



To take full advantage of the realignment of global politics and trade, South Africa may need to redefine its existing agreements, starting with the Southern African Customs Union (SACU) and SADC partners. These agreements should be tested for their validity and coherence and, for global bilateral and multilateral partners, affiliations and commitments. This may entail hard bargaining and potential trade-offs involving short-term realignments, gains and losses.

At a summit of SADC heads of government in Windhoek in March 2001, there was emphasis on improving the efficiency and effectiveness of SADC policies. The summit also prepared a regional strategic development plan, with proposals to monitor progress towards targets. A critical review of the progress on these commitments is needed. Such a review would inform a discussion of how South Africa sees developments in the region over the next 20 to 30 years.

For South Africa, the SADC remains an important grouping. Current efforts are focusing on the wider COMESA-East African Community-SADC grouping, which promises to bring together 26 countries that account for 58 percent of Africa's GDP and 57 percent of its population.

Trade creation and diversion are key drivers of African integration, and South Africa's continental partners benefit significantly from the country's bilateral trade agreement with global partners, especially with the EU. In general, however, African regional blocs are constrained by several factors, including variation in initial conditions, compensation (who should benefit from what), lack of political commitment, overlapping memberships, lack of harmonisation, and poor private sector and civil society participation.

It is difficult to separate South Africa's role in the global political economy from the country's role on the continent.

The benefits of globalisation and regional trade agreements

Cross-border trade in goods and services tends to enable trading partners to benefit from their own and their neighbours' comparative advantages. Regional trade is best facilitated by a framework that includes physical transportation networks and standardised cross-border procedures. A good road will not help trade that is blocked by

cumbersome or malicious disruption at customs. Functional integration would include the creation of adequate warehousing and logistic facilities; efficient procedures at customs and border posts; and the standardisation of government policies and regulations to avoid duplicated processes and delays. All these factors also contribute significantly to the creation and management of efficient supply chains.

Efforts to strengthen regional trade can draw on international best practice. In the Asia-Pacific Economic Cooperation region, the Australian Treasury created a standard business report programme to reduce regulatory burdens in member countries by eliminating duplicated data entry and maximising the use and reuse of information across government agencies. South Africa, drawing on international and regional experience, should encourage further cross-border integration and cooperation, the harmonisation and standardisation of policies and regulations, and cooperative arrangements between customs administrations and other state agencies.

Trade facilitation frameworks

The Maputo Corridor, a trade route connecting north-eastern South Africa, Swaziland and south-western Mozambique with the port of Maputo, is an example of relatively successful integration and coordination that has involved the public and private sectors. Its direct benefits have included:

- Stimulated trade through adequate infrastructure, and reliable and transparent practices and procedures.
- The opening up of South African markets to Mozambican producers and access to global markets through significant improvements in the Maputo Port.
- Job creation through increased economic activity in Maputo and along the corridor, with the ability to shift to higher value-added industry sectors.
- Increased access to international tourism.
- Improved income generation through the encouragement of private investment.
- Public-sector savings through the use of private investment in infrastructure development.

Such practical transnational cooperation has become a defining feature of globalisation. The Maputo Corridor confirms that the ability to compete in the world economy depends not only on transport systems, but just as much on trade facilitation frameworks. Such frameworks need to:

- Ensure the physical capacity to support trade and its underlying supply chains.
- Provide appropriate regulations, including customs procedures that ensure that trade flows abide by the rules and regulations of different jurisdictions.
- Enable accounts to be settled and mitigate risks through a network of banking, finance, legal and insurance arrangements.

Above all, a trade facilitation framework has to be durable, building traders' trust in its long-term stability and viability.

South Africa needs to take into account the social and historical patterns of conflict, rupture and continuity on the continent. Africa is home to many landlocked countries with small populations, many of which have fragile governing structures. Policy-making should be less concerned by notions of ideological or political solidarity, and concentrate instead on specific gains to reduce poverty and inequality in South Africa. At the same time, South Africa will work to promote greater regionalisation, create supportive institutions and strengthen cooperation, which will promote the growth and development of all economies in the region.

Regional trade agreements are typically driven by three basic objectives to:

- Promote market integration
- Develop regional infrastructure
- Strengthen stability, predictability and transparency in regional governance.

While COMESA and the Economic Community of West African States (ECOWAS) have made significant advances in this area, similar progress has yet to be made across Africa. Policy-making needs to begin with what actually exists, and proceed with a clear understanding of the types of regional formations that South Africa would like to create or be part of. If the ultimate objective is to accelerate continental integration as a step towards a united Africa, then discussions about continental diversity are needed – particularly the differences between South Africa and frail, weak or collapsed states. Such a discussion would raise important questions about leadership.

Challenges for intra-African trade

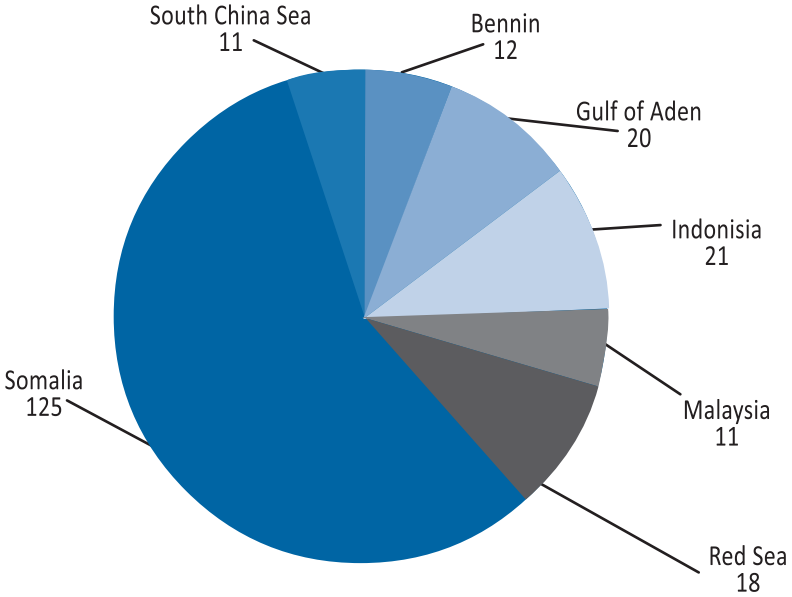
Despite the existence of several free trade areas, customs unions and common markets, the level of intra-African trade remains among the lowest in the world. Only about 10 percent of African trade is within the continent, compared to about 40 percent in North America and about 60 percent in Western Europe.[4] There is widespread acceptance that Africa needs to become more competitive in global markets, and that intra-African trade must grow for there to be a measurable decline in poverty rates and narrowing of inequality. More trade among African countries will lead to more African trade with the rest of the world.

Free trade requires reliable delivery of goods and services, intact and on time. While there is an urgent need to establish durable and trustworthy infrastructure links across Africa, the continent's coasts and ports are coming under increased pressure from maritime piracy. According to the International Maritime Bureau of the International Chamber of Commerce, African coasts are the most vulnerable to piracy. The seven

[4] Ezekwesili O (2010). Can Africa trade with Africa? Meetings Centre. World Bank Blogs. 9 October 2010. Available at http://blogs.worldbank.org/meetings/can-africa-trade-with-africa. Accessed 31 October 2011.

locations shown in the chart below account for 82 percent of the 266 incidents of maritime piracy reported between January and June 2011 – and more than half of these were off the coast of Somalia.[5]

Reported acts of international piracy



Source: International Maritime Bureau, 2011

Given the urgency of the matter, policy-making should address formal legal institutional arrangements, such as the United Nations Convention on the Law of the Sea and the Suppression of Unlawful Acts against the Safety of Maritime Navigation Convention. South Africa should also insist that its trading partners harmonise domestic legislation in accordance with the principles of the latter convention. While significant attention has been focused on the coast of Somalia, there is increased concern over the spread of piracy along the coast of West Africa and specific threats to South African waters. This problem is especially acute in the context of increased port congestion. Africa's shipping volumes have been rising more rapidly than the global average, with increasing direct costs (port congestion penalties or surcharges) and indirect costs (inventory, idle ships, and trucks).

With about 95 percent of South Africa's trade volume seaborne (about 80 percent by value), the country depends on the efficiency of its seven commercial ports. South African ports handle an estimated 200 million tonnes of freight a year. This is equivalent to about 3.5 percent of world sea trade volumes – or 6 percent of global tonne-miles (an industry measure reflecting the weight of a shipment and the distance it is hauled), placing South Africa among the top 15 international maritime trading nations.[6]

[5] Chart and data drawn from International Maritime Bureau (2011). *Piracy and Armed Robbery against Ships.* Report for 1 January – 30 June 2011.

[6] Jones T (2004). *The South African Maritime Industry: An Overview*. Howard College: University of KwaZulu-Natal. *Institut fur Schiffahrtswirtschaft and Logistik* (2002). *Shipping Statistics Yearbook 2002*. Bremen: *Institut fur Schiffahrtswirtschaft and Logistik.*

The First African Union Conference of Ministers Responsible for Maritime Transport, held at Abuja in February 2007, expressed a wide range of concerns about the low level of cooperation among African administrators in the area of maritime safety, security and environmental management. The meeting also highlighted delays in updating maritime legislation, underdeveloped ports and lack of infrastructure investment.

The Abuja Treaty of 1991 prioritised effective economic integration as a major precursor to political union. Regional integration in Africa would benefit from following the precedent set by the Association of Southeast Asian Nations, where economic integration preceded politics – and money followed opportunity. In much of Africa, finance is a major challenge because demand outstrips supply. Financial integration (creating a common currency for the continent) has long been a pillar of African unity and remains a target set by the Association of African Central Bank Governors for 2021. It is probably more feasible to build on monetary union in existing regional economic communities. As the Asian experience has demonstrated, economic integration through regional economic communities, as a first-order priority, will attract finance.

Trade within the SADC is relatively low. Most countries trade more with South Africa than they do with the other member states. South Africa supplies products ranging from agriculture to domestically manufactured or assembled products, and also imports significant volumes of goods from the region. South African firms have a major presence, in the form of foreign direct investment, in most SADC countries. A trade arrangement also exists between South Africa and SACU, whose members are Botswana, Lesotho, Namibia and Swaziland. Of the latter, all but Botswana are also members of the Common Monetary Area, and the rand is legal tender in these countries. Given its relatively advanced infrastructure, roads, ports, and communication networks, South Africa is a convenient link for the land-locked countries in southern Africa with the rest of the world, and an important hub for trade in the region.

If managed strategically, South Africa and its partners in the region can continue to gain significantly from regional economic integration through streamlined trade agreements (following the unravelling of the spaghetti bowl of affiliations and alliances).

Moving from the general to the specific, policy-makers should focus on four key areas to advance the objectives of regional and global integration: macroeconomic coordination, the movement of people, management of natural resources and knowledge-sharing.

Macroeconomic coordination: policy-making and infrastructure development

South Africa's economy is significantly stronger and more diverse than that of its immediate neighbours. South Africa is the epicentre of economic activity in the region. In 2004, South African GDP reached US$150.7 billion – more than half the

US$219.3 billion recorded[7] by all the SADC member states. Consequently, South Africa's economic vibrancy is in the interests of the region as a whole. It is also in South Africa's interests that political and economic relations are deepened with countries in southern Africa by strengthening trade pacts, and expanding or creating infrastructure links.

Policy-making should identify opportunities for cooperative projects in transport, telecommunications, water, energy and other mutually beneficial areas. In many cases, these projects will achieve common goals more effectively through cooperation than they could by relying solely on national interventions. Examples of such cooperation include the Lesotho Highlands Water Project Phase 2 and the further development of the Orange-Senqu River to meet Namibia's water needs. Initiatives such as the African Renaissance Fund, as well as the establishment of more formal arrangements and institutions for South Africa to provide support to neighbouring countries, will contribute to this process.

There is significant scope for greater cooperation in agriculture. Neighbouring states typically specialise in similar crops and share similar climates; good harvests usually result in oversupply, while drier years result in under-supply. There are often opportunities for deficits in one region to be met by surpluses in others, but this requires complementary and cooperative policy approaches. Such steps can promote broader economic integration, including steps toward a common currency.

Current experience in Europe has demonstrated how difficult currency integration can be, but South Africa should also be aware of the potential benefits. Over the past three decades, several states in Africa and in the Eastern Caribbean have used forms of outsourcing (to regional organisations) as a way to reduce cost, and increase the quality of public service and the provision of public goods. In sub-Saharan Africa, the *Banques des Etats d l'Afrique Centrale* and the *Banque Centrale des Etats de l'Afrique de l'Ouest* have pioneered multi-country central banking. The *Organisation pour l'Harmonisation en Afrique du Droit des Affairs* in Central and West Africa has harmonised business law among member countries.

Selective expansion of existing regional monetary unions could serve as useful building blocks towards a continental common currency. However, given the widespread lack of fiscal discipline and stable macroeconomic policies that would advance such a course, no such steps are likely in the immediate future. South Africa's financial system is highly developed, especially when compared with its regional neighbours. This disparity and unevenly developed financial systems in general would produce winners and losers in a common currency system, as suggested by the accompanying table.[8]

[7] Ezekwesili, 2010.
[8] Masson P and Pattilo C (2004). Single Currency for Africa? Finance and Development. International Monetary Fund. Available at http://www.imf.org /external/pubs/ft/fandd/2004/12/pdf/masson.pdf. Accessed 1 November 2011.

Weighing individual gains against costs

Some economics would gain and others would lose from the proposed African regional and subregional monetary unions. Full monetary union among either West African Monetary Zone or Economic Community for West African States' members would be undesirable for most members.

	Gainers	Significant losers
Common Market for Eastern and Southern Africa	Angola, Ethiopia, Malawi, Seychelles, Sudan, Zambia, Zimbabwe	Egypt, Khenya, Madagascar, Mauritius, Namibia, Swaziland, Uganda
East African Community	Kenya	
Economic Community of West African States	The Gambia, Ghana, Nigeria, Sierra Leone	Benin, Burkina Faso, Cote d'Ivolre, Mali, Niger, Senegal, Togo
Southern African Development Community	Angola, Botswana, Democratic Republic of Congo, Malawi, Mozambique, Seychelles, Tanzania, Zambia, Zimbabwe	Lesotho, Namibia, South Africa, Swaziland
West African Monetary Zone	Nigeria	The Gambia, Ghana, Guinea, Sierra Leone

In other areas, there is significant cooperation in the provision of regional public goods. The African Union and ECOWAS have become important providers of security; and the West Africa Telecommunications Regulatory Agreement has promoted harmonisation and integration of telecommunications in West Africa.

The SACU agreement is under review. While the weight of South Africa's economy has effectively reduced potential risks in the customs union, its current structure is not necessarily the best option for South Africa or its neighbours. An immediate priority is the development of more effective financial transaction mechanisms to facilitate physical trade. Bank letters of credit do not operate well between African countries, requiring most trade transactions to pass through a third, non-continental currency. This type of intervention should be led by the private sector and only limited state or interstate action would be needed.

Migration and the movement of people

The relatively unrestricted movement of labour across the region and the continent can contribute significantly to more inclusive economic growth. Migrants have played an important role in South Africa's economic development and regional integration since the late 19th century and it is likely that this trend will continue. While exact figures on immigration flows are elusive, and unemployment on the continent is much higher than commonly assumed, South Africa's relatively stable economy makes the country highly attractive for immigrants.

Immigration is controversial in South Africa and some other countries in the region. A systematic promotion of regional economic growth would result in lower levels of migration driven by desperate economic circumstances.

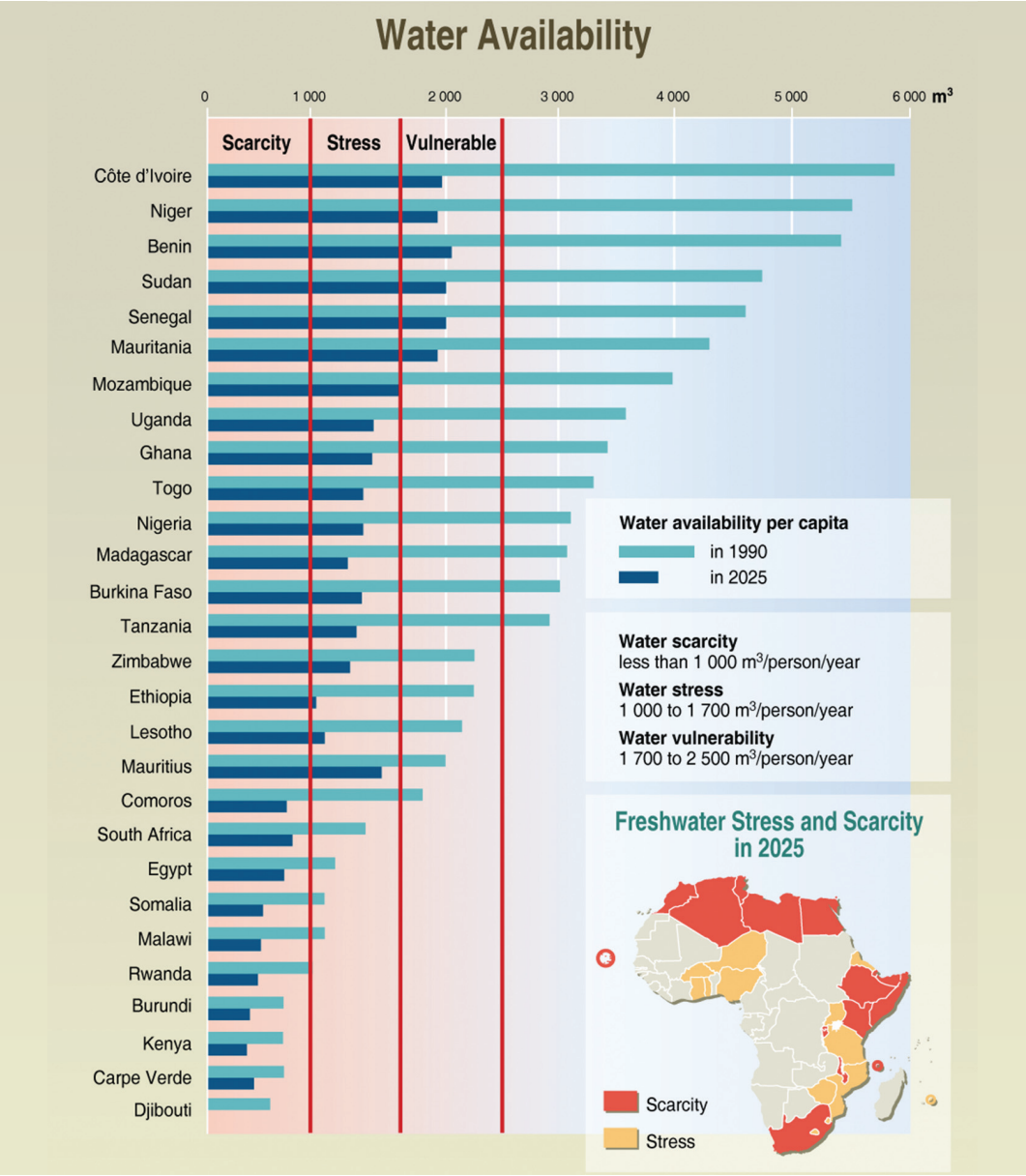
The UN High Commission for Refugees estimates that there are 12 million internally displaced people in Africa as a result of conflict and/or different levels of state failure. In addition, there are many "environmental refugees" who have been forced to leave their homes because of environmental disruption (natural and human) that jeopardises their existence. It has been estimated that by 2020, there will be 50 million environmental refugees, the vast majority of these in the developing world, especially in Africa.[9]

Natural resource management

Africa is richly endowed with natural resources. This endowment is, however, unevenly distributed. There are vast tracts of underutilised land; in many places, resources – especially water – are barely used or are underused. In some places, local natural resources are unable to sustain growing populations and suffer degradation as a result, as shown in the accompanying figure. Over the past several decades, North African migrants have fled to Europe, owing in part to the desertification of the Sahel. Given the weaker economy in Europe and moves to tighten EU immigration controls, some of these migrants may now move south.

[9] *Agence France-Presse* (2011). *50 Million "Environmental Refugees" by 2020, experts say.22* February 2011. Available at http://www.physorg.com/news/2011- 02-million-environmental-refugees-experts.html. Accessed 13 October 2011.

Projected population growth and water stress in Africa, 1990 – 2025



Source: United Nations Economic Commission for Africa, 1999[10]

Much of Africa's natural resource scarcity is economic rather than physical. While most of sub-Saharan Africa uses only a small proportion of its available water, it suffers regularly from droughts, because people have no way to capture and store water for use in dry periods. Economic water scarcity refers to the ways in which human, institutional and financial capital limit access to water to meet human needs. Africa has water, but it will not be used effectively without the appropriate investments in infrastructure. Similarly, while there are extensive areas of unused arable land, this land is unlikely to be developed without capable institutions, financial resources and the infrastructure needed to transport produce to markets.

[10] United Nations Economic Commission for Africa (1999). *Global Environmental Outlook 2000*. London: United Nations Environmental Programme, Earthscan.

A focus on regional integration would address economic scarcity through targeted policy interventions and public investment, as is already occurring under the Comprehensive Africa Agriculture Development Programme of the New Partnership for Africa's Development. An emerging challenge is the extensive interest shown by external investors in acquiring large tracts of land for commercial agriculture. While such investment may reduce economic barriers to the effective use of natural resources and create new market opportunities, capital-intensive agriculture may not address poverty and could result in displacement of poor people, adding to migration pressures. This highlights the need for greater regional coordination and the sharing of information.

Knowledge-sharing

Regional integration and the provision of public goods across national boundaries can be improved significantly by sharing knowledge and information. This is true in areas such as health, climate, natural resource management, research and development, and innovation more generally.

In health, for example, knowledge-sharing can help poor countries that lack medical, technological and financial resources to respond to outbreaks of disease. One of the most important causes of the spread of HIV/AIDS in Africa (and elsewhere, for that matter) is a lack of access to information and knowledge. In general, poor countries lack the resources to prevent the spread of communicable diseases through surveillance, research and treatment. Policy-makers can look at global best practice to find ways of creating early-warning systems. Institutions such as the United States Centres for Disease Control, the United Kingdom's Royal Society for Hygiene and Tropical Medicine, and the French *Instituts Pasteur* play important roles in the sharing of research, knowledge and information. They also help to create transnational early-warning systems.

Policy-making and public debate

The success of regional integration policy hinges on several key factors at each level of engagement.

Domestically, government needs to take the pulse of public opinion concerning greater openness to the region – especially the freedom of movement. The idea of "African citizenship" was raised at the Continental Conference on Accelerating Africa's Integration and Development in the 21st Century in June 2007, which suggested a move towards removing all visa requirements for African citizens. Policy-making has to consider the implications of opening South Africa's border to the rest of Africa given the country's own economic and social development problems.

Among the key questions that need to be addressed through public debate and government policy are:

- What will be South Africa's core areas of advantage within a more integrated region, and what sacrifices will have to be made to support integration?
- How appropriate (and relevant) are South Africa's current regional affiliations, and to what extent do they further the country's national interest?
- What would be a more appropriate relationship between SACU and the SADC? How do the two overlap? How would integrating the two benefit South Africa and its neighbours?
- Although greater regional integration is a policy goal, is there sufficient support in South Africa (or in the other countries of the region) for regional integration, as implemented through SADC and similar organisations?
- What is the most appropriate sequence to follow in the programming of trade, sectoral cooperation, macroeconomic and currency integration?

South Africa may have to make strategic trade-offs to give effect to regional cooperation and integration. For example, it may be necessary to cede certain national opportunities for regional benefit on the assumption that regional growth will benefit the South African economy. But regional growth may benefit only limited sections of the domestic economy, especially in financial and professional services, and possibly at the expense of labour-intensive lower-wage segments. Similarly, freer trade within the region may benefit South African business at the expense of its neighbours. To what extent is South Africa willing to make concessions to protect the interests of its weaker neighbours? Should regional integration place South African interests first?

The role of the National Planning Commission

Regional integration is a long-term objective. Full economic convergence cannot realistically be achieved within 20 years. It is also not clear that more limited macroeconomic policy, monetary and fiscal convergence can be achieved by 2030 – and indeed, whether it would be desirable. However, relatively free trade and movement of people is achievable and should, if properly implemented, bring net benefits. These issues are the subject of ongoing negotiations between countries. South Africa might also want to examine existing commitments, as illustrated by the "spaghetti bowl" analogy, to re-evaluate the depth of the country's commitments to particular national or regional engagements.

The details of international bargaining are outside the mandate of the planning commission. Consequently, the commission will focus on:

- Finding areas of comparative advantage for South Africa in a more integrated region.
- Identifying projects and programmes in sectors where practical opportunities provide incentives for cooperation (such as energy investments and agricultural development).

- Identifying areas, such as the development of effective financial transaction mechanisms, where the private sector may have to take the lead.
- Addressing questions such as:
    - What type(s) of leadership should South Africa provide in the region and in Africa?
    - What implications would such leadership have on notions of sovereignty?
    - What are the sources of power that lend South Africa the authority to lead efforts to promote regional integration and deepen South Africa's presence in the world?

Following this, the commission should:

- Engage with planning authorities with similar mandates in the region to identify areas of commonality and review effectiveness of current regional planning approaches.
- Support existing programmes of regional infrastructure development.
- Restart the "grand debate" of 2007, at least within the commission, on the feasibility of regional economic communities and/or a United States of Africa approach.
- Investigate whether China's ascendancy will result in Africa's further marginalisation.
- Conduct research into intra-Africa trade and what trade-offs may be forced for greater continental good.
- Promote public discussion to improve South Africa's understanding of the benefits and challenges of greater regional integration, and of the appropriate sequencing of integration.

Conclusion

Regional integration is a complex process that requires thoughtful consideration and planning. In deepening South Africa's commitments to the region, to Africa and to engagement in the global political economy, policy-makers need to address the core objectives of growing the domestic economy, reducing poverty and improving the quality of life of all the country's citizens. To ensure that national interests are maximised requires strategic thinking about existing relations with the world around us. It also requires pragmatism concerning macroeconomic coordination and integration, infrastructure development, the voluntary and involuntary movement of people, and effective management of natural resources.

The way forward requires a significant amount of consultation and deliberation at all levels.

Chapter 8

TRANSFORMING HUMAN SETTLEMENTS

"We have received the mixed legacy of disparities in opportunity and in where we have lived, but we have agreed to change our narrative of conquest, oppression, resistance, and victory. In our well designed community surroundings, we feel safe."

Introduction

Where we live and work matters. Apartheid planning consigned the majority of South Africans to places far away from work, where services could not be sustained, and where it was difficult to access the benefits of society and participate in the economy.

A great deal of progress has been made since 1994, but South Africa is far from achieving the goals set out in the Reconstruction and Development Programme of "breaking down apartheid geography through land reform, more compact cities, decent public transport and the development of industries and services that use local resources and/or meet local needs".

For this reason, the commission proposes a strategy to address the challenge of apartheid geography and create the conditions for more humane – and environmentally sustainable – living and working environments.

The inefficiencies and inequities in South Africa's settlement patterns are deeply entrenched. Bold measures are needed to reshape them. By 2030, these measures will have changed the course of development, making it possible to achieve all of the country's goals by 2050.

Human settlements vision for 2030, on the road to 2050

By 2050, South Africa will no longer have: poverty traps in rural areas and urban townships; workers isolated on the periphery of cities; inner cities controlled by slumlords and crime; sterile suburbs with homes surrounded by high walls and electric fences; households spending 30 percent or more of their time, energy and money on daily commuting; decaying infrastructure with power blackouts, undrinkable water, potholes and blocked sewers; violent protests; gridlocked roads and unreliable public transport; new public housing in barren urban landscapes; new private investment

creating exclusive enclaves for the rich; fearful immigrant communities living in confined spaces; or rural communities dying as local production collapses.

Instead, the country will have: productive farms; well managed villages, towns and cities; tolerance, democracy, fairness and respect for the natural environment; citizen-centred services; secure water and food supplies; diverse and cleaner energy supplies; more walking and cycling; security barriers coming down in suburbs as people reclaim their streets; a mix of housing types and tenures to meet different needs; energy-efficient homes; fewer private cars on the roads and decent public transport; public spaces where people from different social groups mix; well maintained infrastructure supporting dynamic businesses and vibrant economies; recycled waste generating renewable energy; young people actively engaged in local decision-making; immigrant communities making a contribution; resilient planning systems that can manage risk and uncertainty; towns and cities with public art, performance and heritage gardens; environmentally friendly lifestyles; rural areas fully integrated into the economy; and new technologies used in buildings for infrastructure and government.

By 2030, most South Africans will have affordable access to services and quality environments. New developments will break away from old patterns and significant progress will be made in retrofitting existing settlements. In rural areas, targeted investment and institutional reform will drive a revival of rural South Africa towards 2050.

This vision is achievable if government builds on its experience and works proactively with people.

The importance of space

The physical and social environment in which we are born and grow up is one of the most important determinants of every person's wellbeing and life chances.

This environment has a bearing on access to opportunities, good schools, useful social networks, public services and safe environments. Separation between social groups, long distances between jobs and housing, and poor public services exacerbate poverty and inequality. Location affects communities, local economies, labour markets and infrastructure networks. Businesses are also affected by where they are situated. Access to markets and suppliers determines their survival and profitability. This is hugely significant for South Africa's society, economy and environment.

Storylines

The commission's *Diagnostic Report* noted five main challenges:

- Dysfunctional settlement patterns across the country
- Challenges facing towns and cities
- Uncertain prospects of rural areas
- Challenges of providing housing and basic services and reactivating communities
- Weak spatial planning and governance capabilities.

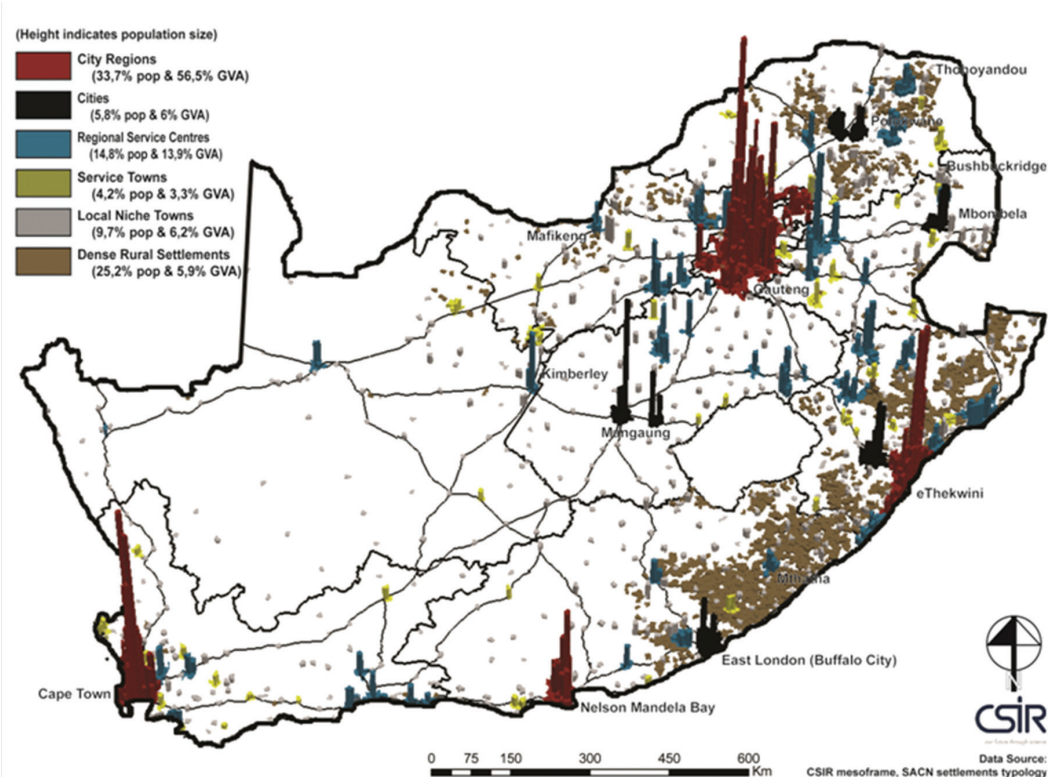
Spatial dislocations at a national scale

South Africa has a reasonably balanced spatial structure, with economic activity distributed across four metropolitan regions and a network of cities, large towns and service centres, all linked by established networks of connecting infrastructure. However, the country also has a dysfunctional and inequitable settlement pattern. Many people still live in poverty traps, including the former homelands, where less than 30 percent of adults are employed (compared with 55 percent in the cities), and one in two households depend on social grants or remittances, compared with one in six in cities. Logistics and communication lines are long because of sheer scale, making infrastructure maintenance difficult and movement of goods and people costly. Some networks are old and unreliable.

A number of interconnected interventions are needed to tackle these issues. These include economic solutions, institutional reforms, changes to land management systems and infrastructure investment. This chapter focuses on the geographic and development aspects of these policies.

The landscape has changed since 1994. The Gauteng city-region has reinforced its national dominance and attracted growing migration. The coastal city-regions have performed less well, especially in terms of job creation, largely because the manufacturing industry has failed to gain traction. The performance of smaller cities has been uneven, depending on their dominant industries. Many small towns and rural areas have stagnated or declined, as agriculture and mining have struggled. Parts of the former homelands are changing their economic structure, supported by increased spending from social grants. This is occurring along major transport corridors, in developing tourism areas, and along national borders where trade and transport are growing.

Population density and settlement types in South Africa

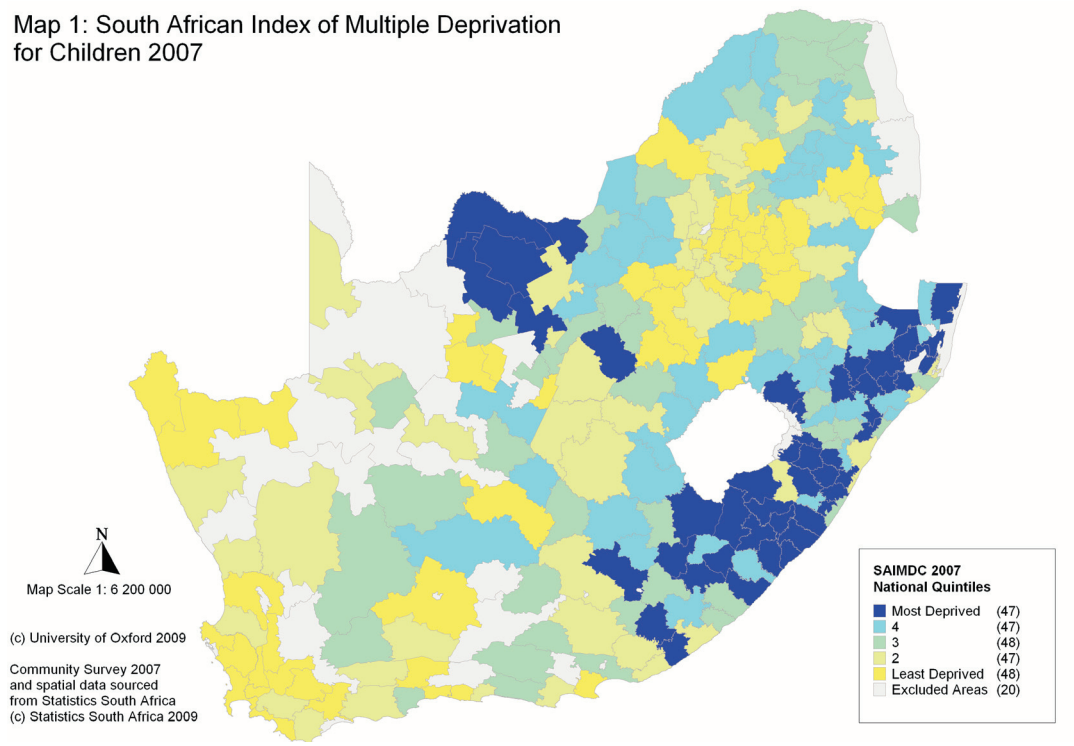


Source: Council for Scientific and Industrial Research

The environmental impact of developments is a concern, particularly the destructive nature of extractive industries, fuelled by cheap and dirty energy sources. The result is severe depletion in soil quality and loss of biodiversity. Low-density development that is spread out is energy intensive and causes pollution. “Green” infrastructure needs to be considered, including sustainable electricity generation and transmission, transporting and storing captured carbon, new transport technologies (networks for charging or fuelling vehicles using electricity, hydrogen or bio-fuels) and natural systems to handle storm water drainage and water recycling. Although some technologies are not cost-effective in the short term, South Africa’s plans needs to take a long-term view and consider the possibility that technology will radically transform infrastructure, mobility and the development of cities, towns and rural areas.

Although the following sections separate rural and urban areas, in reality the distinctions are increasingly blurred. Forced removals and restrictions on migration have led to dense settlements in rural areas, while historic labour controls led to circular migration between rural and urban areas. Although there are specific rural and urban challenges, the interdependencies are considerable, and South Africa needs an integrated approach to these national territory issues.

South African index of multiple deprivation (2007)



Source: Wright and Noble, 2009[1]

Towns and cities

Most South Africans live in towns and cities. Urban areas generate 85 percent of all economic activity. The urban system is a complex network. None are perfect and they all vary in relation to human activity, institutions and resources. It is important that a one-size-fits-all approach is not taken – government and the private sector should understand the distinct challenges and potential of different areas and respond with a location-specific approach.

Towns and cities are connected in varying degrees into wider urban systems and their development reflects global and local forces. Economic activity is becoming consolidated in the largest cities. Other activities are decentralising, partly as a result of information and communication technology (ICT) and lower transport costs, which creates opportunities for smaller urban centres.

A major trend is the development of city-regions that extend beyond individual municipalities. This offers opportunities but also complicates urban planning and management. The Gauteng city-region and embryonic city-regions around port cities are important, requiring new collaborative approaches.

[1] Wright G and Noble M (2009). *The South African Index of Multiple Deprivation 2007 at Municipal Level.* Report prepared for the Department of Social Development.

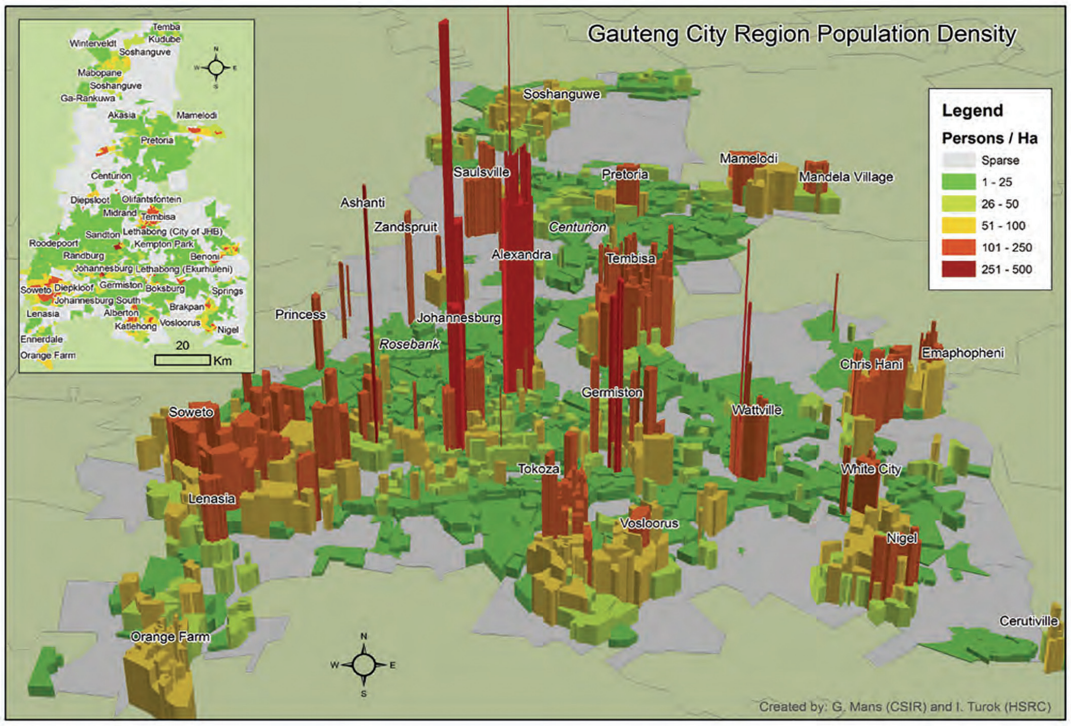
Towns and cities are affected by a range of challenges:

- Despite slower urbanisation than in other parts of Africa, another 7.8 million people will be living in South African cities in 2030 and a further 6 million by 2050, putting pressure on municipalities to deliver services. A large proportion of new urban residents will be poor, reflecting a phenomenon referred to as the "urbanisation of poverty".
- The number of young people in cities is growing particularly rapidly. These youth are largely in the working-age category and mainly unemployed or involved in marginal enterprise. This requires a positive response, as disenchanted youth are both a hazard and a lost resource to society. Recent political discourse refers to a "ring of fire" around metropolitan regions.
- South Africa's towns and cities are highly fragmented, imposing high costs on households and the economy. Since 1994, densities have increased in some urban areas and there has also been partial regeneration of inner cities, but, overall, little progress has been made in reversing apartheid geography, and in some cases the divides have been exacerbated.
- Transportation networks are key to the spatial transformation of South Africa's urban areas. There has been significant progress in some cities in delivering new public transport infrastructure, but the major shift from supporting private cars to incentivising public transport is yet to happen, and insufficient attention has been given to integrating modes of transport and coordinating across municipalities.
- The ecological limits to urban growth are beginning to emerge, with varying degrees of water stress, food insecurity and power shortages. Future development depends on the ability of towns and cities to shift to become less resource intensive. But the concentration of people, industries and infrastructure in urban areas also presents opportunities to use resources more productively. There are also real opportunities to create greener urban spaces, even in the densest areas.
- Towns and cities are not productive enough and do not generate sufficient jobs. While most of the larger cities have performed better smaller cities and towns, their growth has been disappointing. Manufacturing especially has performed poorly. There is also little support for the informal economy, while township economies are unable to retain local spending power.
- Many of the challenges are not a result of a vacuum in policy, but rather insufficient institutional capacity and lack of strong instruments for implementation.

The commuting burden

A single mother of four children aged between three and 12 lives in Tembisa with her mother. She spends nearly five hours each day commuting to and from work in the Pretoria suburb of Brummeria, where she is an office cleaner. The journeys cost nearly 40 percent of her monthly salary of R1 900. She leaves home at 05:00 to be at the office at 07:30, starting with a 2 kilometre walk to the taxi stand, which takes her to the train station. In Pretoria, she takes another taxi to Brummeria. After leaving work at 16:00, she may not get home until 19:00, as the trains are often late. She spends over R700 a month on transport and nearly 100 hours on the road.

Gauteng's spatial fragmentation



Source: South African Cities Network[2]

Rural areas

The national accounting system understates the importance of rural areas to South Africa's future. Despite population shifts from rural to urban areas, the health and wellbeing of the entire population still depends on rural goods and services – food, water, minerals, energy, biodiversity, natural and cultural experiences, labour and land – and this will become increasingly clear in the next few decades, as resources become more constrained.

[2] South African Cities Network (2011). *Towards Resilient Cities: 2011 State of the Cities Report.* Johannesburg.

International experience also shows that rural areas play a role in urbanisation. Early on, cities have limited capacity to deal with large inflows of low-skilled migrants, so it is important to provide security and services in rural areas, and support agriculture. As urbanisation grows, rural areas continue to provide the goods, services and markets essential for the national economy, but they also increasingly provide space for economic activities that cannot survive in expensive urban environments.

In South Africa, these international observations apply, but there are also characteristics specific to the country as a result of South Africa's colonial and apartheid history. Historically, rural populations were able to subsist without support, growing their own food, building their own housing and using local resources of water and energy. Over time, as rural people were crowded into reserves and homelands, the productive base of many rural areas was undermined. Today, 40 percent of South Africa's population lives in rural areas, of which a very small proportion is self-sufficient or significantly involved in agriculture.

Over the past two decades, the productive economy of rural areas has declined further, with a sharp drop in agricultural employment.[3] Agriculture may not have the capacity in the short to medium term to provide sustainable livelihoods on a sufficient scale for rural households and to stem out-migration. However, rural areas cannot be written off indiscriminately as spaces of social reproduction and retirement with no economic prospects. There are rural areas in South Africa that have experienced significant economic growth. In some places, especially near large metropolitan markets or along transportation corridors, agriculture has expanded, and other areas have potential that could be unlocked if policy shifts are implemented. There are also signs of economic vibrancy in parts of the previous homelands, in sectors such as retail, transport and construction, as increased state grants have expanded local circulation of money.

The economic base of rural areas, and whether agriculture can support more people, is examined elsewhere in the plan. This chapter focuses on the spatial aspects of rural development. These cannot be divorced from other critical issues – institutional development, land tenure reform, non-agricultural employment and resource rights. Each needs to be addressed in a comprehensive programme to restore rural areas, clearly outlining the role of the state and local government, as well as capacity requirements.

[3] The reasons for agricultural decline are debated, but it is apparent that the scale of the problem cannot simply be explained by inherent problems with the sector. Since the mid 1980s, government policies have been biased against agriculture to eradicate the privileges afforded to white farmers and the induced inefficiencies of subsidisation. This was not, however, replaced by policies to accelerate growth and development of the sector.

There are at least five spatial issues to be confronted in developing rural South Africa:

Different types of rural settlement – Rural areas are usually divided into different types of villages, towns and informal settlements in commercial farming areas and former homelands. This shows a need for differentiated planning responses, but says nothing about the type of people, level of poverty and economic activity in each category. Typologies should be developed further to support policies that allow for more sensitive and differentiated interventions, responsive to social, economic and demographic conditions and anticipated population shifts, as well as to governance arrangements, particularly to the role of traditional authorities. Over time, institutional arrangements in rural areas should evolve to reflect differences in rural settlements, avoiding the one-size-fits-all approach of local government. Particular attention must be paid to rural densification in parts of the previous homelands, where rural settlements are growing rapidly in areas where access to land is possible and transport services are good. Population densities in these places are approaching those of urban areas, but the economic base and the infrastructure and governance arrangements to manage this change are lacking. Land registration systems, for example, cannot deal with the increasingly complex forms of informal and semiformal tenure in these areas.

The appropriate type and location of infrastructure – Infrastructure unlocks the development potential of rural areas. Appropriate levels, form and location are important, given that infrastructure investment is less cost effective in lower density areas with small economies. The question is not whether infrastructure should be provided, but what levels and forms of infrastructure should be provided, where it should be located and how it should be funded.

Spatial dimensions of land reform – There has been much discussion about why land reform and redistribution since 1994 have failed to achieve desired outcomes, but little attention has been given to spatial location. Successful agricultural production requires suitable land that is well located in relation to major markets and agro-processing chains. While many land reform initiatives have been in areas that are marginal to markets, there are possibilities for more vibrant peri-urban agricultural spaces, with the production of commodities such as flowers, dairy, vegetable and hydroponics. A difficult but important issue is the challenge of land tenure and governance in former homeland areas, where large areas of high-potential agricultural land remain grossly underutilised.

Local systems of food production and distribution – Agricultural production should be prioritised to boost job creation and local economic development, which will gradually develop a sustainable competitive industry. Programmes providing technical, marketing and financial support would strengthen local producers, reduce vulnerability to external shocks and reduce transportation costs, while increasing local jobs and incomes. To develop local systems of food production requires a focus on the infrastructure that connects producers with markets. Local food production could also benefit from the

protection and development of local commonages.[4] Commonages offer advantages for job creation, providing farming incubators and welfare safety nets. However, many are mismanaged, obsolete or controlled by relatively affluent groups.

Spatial conflicts in rural areas – In future, scarce resources will result in more acute conflicts. In some areas, it is likely that tourism, agriculture, mining and biodiversity will be in conflict over access to land and water. The role of traditional authorities in spatial decisions about land use will also come under scrutiny if new agricultural development proposals are implemented. Mechanisms to resolve these challenges need to be found.

Providing housing and basic services and reactivating communities

Since 1994, more than 3 million subsidised housing units have been built for poor families. Access to basic services has expanded – 97 percent of households have access to water and almost 75 percent have access to sanitation and electricity.[5]

Despite these achievements, access to adequate housing, reliable electricity, safe water supplies, accessible public transport and hygienic and dignified sanitation facilities remains a daily challenge for many South Africans, particularly in poor rural and peri-urban communities.

These challenges will only be resolved if their underlying causes are addressed. Priority areas include:

- Affordability of services for poor households
- Poorly managed municipalities, with limited human and financial resources
- Not enough "bulk" capacity to supply all the networks from which households get their services
- Uncontrolled use by some households.

There are particular problems in the distribution of electricity, the quality of water supply, the integration of new public transport networks, and the reduction of waste to landfill, which require urgent attention. Municipal spatial planning is often inadequately linked to investment decisions around bulk infrastructure, and there is an urgent need for municipalities in growing areas to adopt growth management strategies to prioritise infrastructure investment in places where growth is desired (for example, around public transport networks).

The model for service delivery entrenched after 1994 has produced a dependent and inactive citizenry. Households and communities have become passive recipients of government delivery. Many are no longer actively seeking their own solutions or finding ways to partner with government to improve their neighbourhoods. Although government has a clear responsibility to provide services, alternative policies of service

[4] Commonage refers to shared use.
[5] The Presidency (2010). *Development Indicators.*

provision are needed that satisfy popular expectations, while building active citizenship and expanding citizen capabilities.

The problem of dependency is most severely represented in housing. Many households have benefited from houses provided by the capital subsidy programme, but the harsh reality is that the housing backlog is now greater than it was in 1994. New approaches are needed, with individuals and communities taking more responsibility for providing their own shelter.

The capital subsidy programme has had unintended consequences and re-enforced apartheid geography. Financing has mostly focused on individual houses and ignored public spaces. To stretch limited subsidies, public and private developers often sought out the cheapest land, which is usually in the worst location. The capital subsidy regime has also generally resulted in uniform housing developments, which do not offer a range of housing and tenure types to support the needs of different households. It has also failed to meet the needs of a large segment of the population that requires rental houses, forcing many into backyard shacks on private properties.

The commission is of the view that public funding should therefore be directed towards the development of public infrastructure and public spaces that would significantly improve the quality of life of poor communities who cannot afford private amenities. Increasingly, government should take on an enabling role in relation to housing. Some form of subsidy may still be required, as the vast majority of South Africa's population is unable to access private financing, but this subsidy should also support community and individual initiatives and the development of well located sustainable communities.

The commission acknowledges the positive direction that human settlement policy has taken since the introduction of the Breaking New Ground policy in 2004. The policy suggested "utilising housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring". Breaking New Ground argued forcefully for better located housing projects, more diverse housing forms, informal settlement upgrading, accrediting municipalities for housing delivery, and linking job creation and housing. This approach was reinforced recently with the creation of a Department of Human Settlements and with the President's Delivery Agreement on "Sustainable Human Settlements and Improved Quality of Household Life" (Outcome 8). Particularly important elements of Outcome 8 are: the commitment to upgrade 400 000 households in well located informal settlements with the assistance of the National Upgrading Support Programme (NUSP); the emphasis on affordable rental accommodation; and, the mobilization of well located land (especially state-owned land) for affordable housing. The commission believes that the full implementation of Outcome 8 will make a major contribution to shifting housing delivery from its focus on providing a single form of accommodation to meeting a diversity of housing needs.

However, there are further shifts that are needed and there are urgent matters relating to implementation that must be resolved:

- Target setting in municipalities and provinces still focuses mainly on delivering numbers rather than dealing systematically with the deficiencies in the implementation system and producing viable human settlements.
- The capital subsidy remains a very limited instrument for achieving objectives of human settlement strategy, especially the need for better located settlements with a diverse range of housing and tenure types, and high quality public environments.
- Despite the new focus on informal settlement regularization and upgrading at national level, there is still a high level of ambivalence towards informal settlements across spheres of government, and the capacity and implementation mechanisms to achieve the national objectives are still poorly developed locally.
- Despite a BNG emphasis on affordable inner city housing as part of a broader urban renewal strategy, municipalities have continued to focus attention on housing developments on "greenfields" where targets are more easily met. Inner cities have continued to develop as a mix of slum-lording for the low income sector and exclusive developments for the wealthier in scattered pockets of urban regeneration.
- Financing and regulatory arrangements have hindered household mobility, fixing residents within specific places at a time when the spatial circumstances of households (e.g. places of work and schooling) change regularly.

Weak spatial planning and governance capabilities

Renewed effort is needed to ensure that national, provincial and local government work together in reshaping the built environment to achieve smarter and fairer development.

South Africa's intergovernmental system of spatial planning has been slow to develop and coordination has often been poor. The complex division of powers and functions between the three spheres of government has contributed to the problem and, in addition, ambiguities in the Constitution about who is responsible for spatial planning have created uncertainty.

The current planning system has reified municipal and provincial boundaries making it almost impossible to undertake cross-border planning, or to secure collaboration between one province and another, or between municipalities. This has seriously bedeviled development planning as many developmental issues (e.g. environment, transportation, economy) straddle political boundaries.

There are added complications within each sphere of government. Spatial planning is dispersed across national ministries,[6] and is subject to parallel and sometimes conflicting legislation. The legislation that regulates land-use management is largely unreformed and dates back to apartheid. Without a guiding framework for national spatial

[6] These include Rural Development and Land Reform, Human Settlements, Cooperative Governance and Traditional Affairs, Economic Development and Environmental Affairs.

development, ministries and state agencies sometimes operate at cross-purposes. For example, policies on the use of surplus state-owned land are inconsistent.

Provincial land-use management functions overlap with municipalities, creating confusion and conflict. Provinces are largely responsible for overseeing key economic activities, such as agriculture, tourism and environmental management, but lack of capacity has delayed development and reduced the quality of the provincial growth and development strategies that offer an instrument for coordination. The divide between managing development and the environment is a serious design flaw in the planning system, making it difficult to strike a reasonable balance between contending considerations.

Municipal integrated development plans vary in quality. Inefficiencies in processing planning applications have sometimes deterred job-creating investment. The planning system does not distinguish between the procedural requirements of small municipalities that receive only a few large applications and big metropolitan authorities that get many.

Additional difficulties for the planning system include:

- Ambiguity and contest around the developmental role of traditional authorities
- Poor cross-boundary coordination
- Autonomous transport systems
- Lack of municipal powers to acquire and swap land parcels
- Disparate funding streams, which complicate integrated development
- Planners lack understanding of economic principles, market forces and commercial realities to negotiate better outcomes.

Municipal planning responsibilities were recently clarified by a Constitutional Court judgment, but urgent action is needed to bolster the capacity of local government to fulfil these functions effectively.

Sound spatial governance requires strong professionals and mobilised communities. Many municipalities struggle to appoint qualified planners, who are in short supply and are often not considered a priority. As a result, quality standards are sometimes poor, and because opportunities are limited, too few people study planning. The lack of capacity aggravates a lack of citizen engagement in neighbourhood planning and development. There are few examples of communities mobilising to initiate their own planning and problem-solving, and these efforts are often stalled due to government's lack of capacity to engage and respond.

Transforming spatial arrangements and spatial governance

The complexities and scales of spatial change

Transforming human settlements is a large and complex agenda requiring far-reaching policy changes and shifts in household, business and institutional practices. An incremental approach within a long-term strategic vision will prevent organisational overload and political failure. Sequencing will ensure that each set of reforms has cumulative effects for further reforms and provide the basis for systemic change over time.

One of the reasons for the complexity is that planning needs to happen at international, regional, country and local level. The proposals below seek to address this. Before describing specific proposals, however, it is important to set out key principles.

Overarching principles for spatial development

We propose that all spatial development should conform to the following normative principles and should explicitly indicate how they would meet the requirements of these principles:

- Spatial justice – The historic policy of confining particular groups to limited space (ghettoisation and segregation) and the unfair allocation of public resources between areas must be reversed.
- Spatial sustainability – Sustainable patterns of consumption and production should be supported, and ways of living promoted that do not damage the natural environment. Walkable neighbourhoods, for example, reduce the need to travel and limit greenhouse gas emissions.
- Spatial resilience – Vulnerability to environmental degradation, resource scarcity and climatic shocks must be reduced. Ecological systems should be protected and replenished.
- Spatial quality – The aesthetic and functional features of housing and the built environment need to be improved to create more liveable, vibrant and valued places.
- Spatial efficiency – Productive activity and jobs should be supported, and burdens on business minimised. Efficient commuting patterns and circulation of goods and services should be encouraged, with regulatory procedures that do not impose unnecessary costs on development.

These principles need to be incorporated into operational principles that provide guidance on: integrating rural and urban areas; accommodating social diversity within the built environment; creating more dense settlement without raising the cost of land and housing for the poor; integrating transportation systems and land use; broadening the economic base of towns and cities through supply of reliable infrastructure, suitable land and property, connectivity, skills and logistics; building community involvement and partnerships; generally supporting the development of vibrant, diverse, safe, green and

valued places; and ensuring that governance arrangements and leadership deliver equitable and efficient decision-making.

Making the case for a spatial vision

South Africa needs a spatial vision to inform development policy, specifically to:

- Tackle inherited spatial divisions – South Africa's spatial structure perpetuates exclusion. Distorted growth patterns cannot be ignored. They also worsen economic and logistical inefficiencies.
- Unlock development potential – Many places are not growing economically because of a lack of infrastructure, inadequate skills, poor innovation capacity and weak governance. The locked-in potential of these areas could be released through targeted investment in economic and social infrastructure and institutional support.
- Guide and inform infrastructure investment and prioritisation – A spatial investment framework is needed to support growth and inform the long-term infrastructure investment strategy.
- Manage contemporary economic and demographic shifts – Economic dynamics is produced by concentrating productive activity, entrepreneurs, workers and consumers in a place without congestion.
- Facilitate coordination between parts of government and other agents – Spatial policy could be used to bring different actors and interests together to define a common future binding all spheres and sectors.

Develop a national spatial framework

Spatial policy seeks to coordinate and connect the principal decisions that create and shape places to improve how they function. Spatial policy does not operate in isolation – unaided it cannot transform the country's economic geography or promote growth. However, spatial policies can make a significant difference, especially when they are integrated with plans for tangible investment that are sustained over time, and carefully adapted to the needs and opportunities of specific places.

Spatial policy can be used to strengthen ties with neighbouring states by guiding measures to improve cross-border infrastructure connections, ensure better integration and management of a wider network of human settlements and support the sharing of economic assets to secure economies of scale. To achieve this, a transnational spatial framework for southern Africa should be developed, which might eventually be integrated within an Africa-wide spatial framework. This is, however, likely to be a complex process, politically and institutionally, and should not delay the concurrent preparation of a national spatial framework (NSF) for South Africa.

The development of the NSF for South Africa needs to involve government, business and civil society sectors to create a shared perspective. In identifying key elements of a common vision, lessons can be learnt from an earlier attempt to address such concerns – the National Spatial Development Perspective. It focused on the tough choices facing costly public investments, but it took a narrow view of the development potential of different places. Recent data has highlighted some unanticipated trends that illustrate the need for an ongoing process of spatial management. Given the complexity of the task, and the need for a fully participatory process that properly involves departments and agencies with a mandate for spatial development, the commission does not present an NSF in this chapter. We suggest some of the key elements for inclusion in the framework and propose the institutions and processes necessary for the work to start.

The challenge of spatial disparity is one of the most difficult issues that an NSF would have to confront. Economic development tends to be uneven, with some places growing more quickly than others. National spatial policy needs to support the major centres of competitiveness where jobs can be most efficiently produced. However, there are opportunities and growth dynamics to be unlocked within currently lagging regions. It is critical that South Africa: develops governance capabilities and creativity in all regions, and in lagging regions in particular; invests in connective infrastructure (for example, road, rail, ICT, financial and business services) that would enhance the integration of these regions with the economic core; and also invests in infrastructure and services that enhance labour mobility in search of jobs (for example, education, training and transportation).

The development of an NSF, as well as ongoing spatial management, must be supported by a properly integrated system of national spatial data. There are a number of initiatives, in the public and private sectors, to collect and analyse data at national level, but these are not well integrated and there is duplicated effort.

An NSF cannot and should not address the details required within provincial and municipal spatial development frameworks. It can, however, offer broad principles for provincial and local development. An important principle is spatial differentiation. Spatial planning should recognise and respond to differences between places. Spatial typologies used by government usefully differentiate between different categories of settlement, but they are not sufficiently nuanced and do not adequately capture the fine-grained difference within each category. For example, there are considerable differences in informal settlements. Those closer to urban centres often house young unemployed males looking for jobs, while those towards the urban periphery often have a more stable population with a higher percentage of women and a greater need for social services.

The framework should also deal with areas that are of national importance and develop specific programmes to support them. Territorial plans of this nature work best when they are supported by a spatial fund that can direct support to specific areas to address specific spatial objectives. This needs to be seriously considered for South Africa. The

development of such a fund would need to be part of a broader process that interrogates the fragmented fiscal arrangements for spatial development (in housing, infrastructure and neighbourhood development).

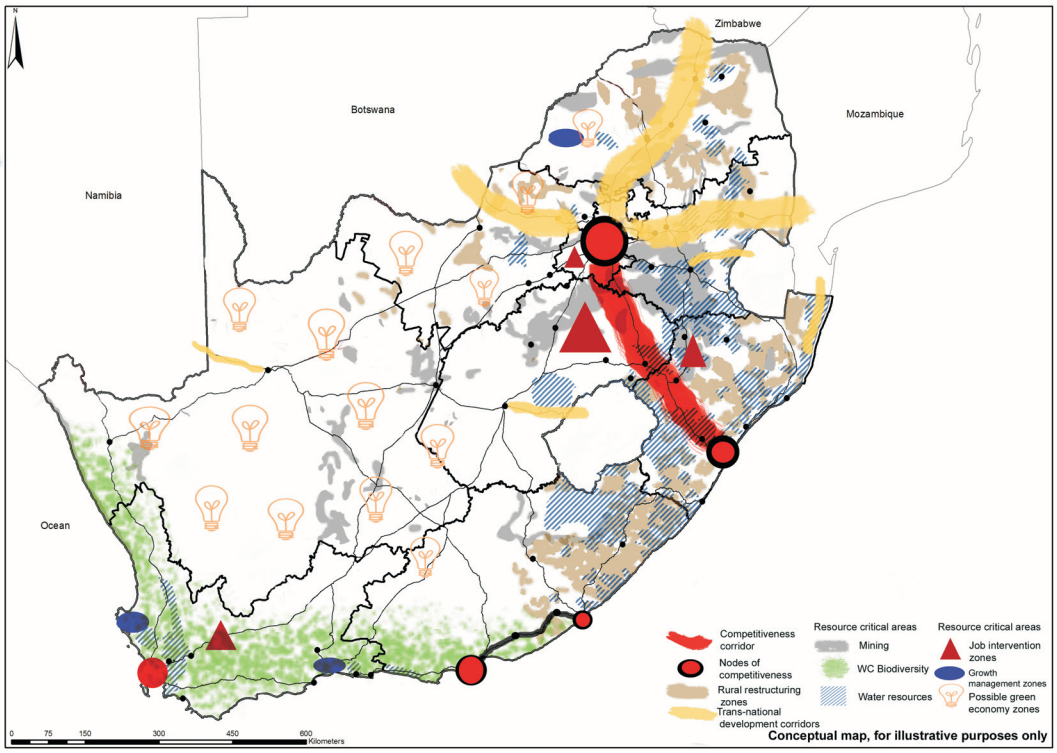
The proposed national schema for spatial targeting (provisionally mapped) is illustrated and discussed below.

National competitiveness corridor – The corridor of logistics hubs, road, rail, fuel and other infrastructure, including and connecting Gauteng and eThekwini, is vitally important to the future of the national economy, and should be designated as a national competitiveness corridor. It accounts for about 46 percent of GDP, and would build on the Department of Transport's 2050 Vision for the Durban-Gauteng Freight Corridor.

Nodes of competitiveness – These include clusters of localities that account for at least 5 percent of GDP or jobs, which have experienced higher than average growth since 1994, or which have the potential for high growth in future. Ensuring their efficient development is of national importance and special attention must be given to creating and retaining economic value. The Cape Metropolitan region, which produces about 11 percent of GDP, and eThekwini, which produces about 9 percent, are obvious candidates (although the latter is already incorporated within the corridor). With their ports and industrial and agro-processing hubs, the Eastern Cape's two metropolitan regions could also enhance national economic prospects. Collectively, these regions contribute about 4 percent of GDP. These regions have not performed optimally since 1994, but with targeted support, their performance and contribution could be improved.

Rural restructuring zones – These rural areas have large populations that are experiencing change (for example, new settlement formation). Such areas need management, institutional development, land and tenure reform, infrastructure provision and economic stimulus. They include the more densely populated parts of the previous homelands, where there is population dynamism and sufficient numbers of people to provide the basis for viable markets. There may also be areas with agricultural, tourism or mining potential. Almost all provinces have areas that fall within this category, but the zones can only be designated after careful consideration against a set of criteria.

Proposed national schema for spatial targeting



Resource-critical regions – These regions have highly valued natural resources that provide ecosystem lifelines to the country and may require specific policies to ensure their sustainability. They may include areas of highly valued mineral resources (the platinum belt); areas of great importance for biodiversity (the Western Cape); and critical water production areas (various catchments along the Eastern Escarpment). Regions with competition between development and environment, or between competing environmental uses (the Mpumalanga Highveld) may also fall under this category.

Transnational development corridors – These corridors are critical to creating an integrated southern African economy, which require specific interventions around economic stimulus and trade and transport networks. The corridors between Gauteng and Zimbabwe, Botswana and Mozambique are likely to be recognised as the primary transnational development corridors.

Special intervention areas – These areas require particular forms of state support for specified periods. They include:

- Job intervention zones – Areas that have lost more than 20 percent of their jobs over the past decade, with significant losses to the national economy. The state may seek to stimulate the growth of new sectors, develop new skills or, in extreme cases, promote out-migration. Areas of concern include agricultural

districts in the Western Cape, the Free State goldfields, the Newcastle-Dannhauser region in KwaZulu-Natal, and the Far West Witwatersrand.

- Growth management zones – areas of rapid anticipated growth that may require special planning and management. For example, rapid new growth is anticipated in the Waterberg region in Limpopo as a result of new mining development and related industry, such as petrochemicals, and around Saldanha in the Western Cape due to resource-related port and industrial development.
- Green economy zones – These are zones with proven potential to create "green jobs", where short-term state intervention could leverage significant private development. For example, areas in the Northern Cape offer potential for solar and wind energy.

Each of these zones should have an integrated programme of related actions to help realise potential or deal with identified problems. Investments will vary in nature and scale between areas, therefore a matrix linking spatial intervention areas with forms of intervention is required. Support is likely to target bulk infrastructure, capital for land assembly, public transport, other connecting infrastructure, business development, skills and capacity building, and programmes to enhance innovation.

The areas for spatial targeting indicated above will be designated by national government. Provincial and municipal authorities should also be empowered to designate areas for special attention, and integrated funding could allow for this. As a confidence-building action to counter scepticism of the government's determination and ability to reshape the county's human settlements, relevant municipalities should establish a few transformation zones, to act as catalysts and demonstration projects for urban integration and densification. Specifically, projects could regenerate run-down inner city areas; develop growth magnets on large vacant sites that have the potential to accommodate job-creating investment and larger residential populations in accessible locations; and cement linkages between peripheral townships and urban cores. The institutional arrangements for supporting these zones need further consideration, but may involve public-private partnerships.

Strengthen the spatial planning system

A plan-led system is needed to bring focus and allow long-term public interests to guide the development of places. It will take time to create this capability, drawing on a fuller understanding of the limitations of current arrangements and incorporating the lessons of good international practice. The short-term priority is to make the existing system work better. This includes capacity building, institutional coordination and legislative changes. At the same time, the process of putting the elements of a more robust planning system in place should begin.

To support an NSF, the following need to be considered:

- A national spatial fund to promote the vision and rationalise existing funding streams for spatial development.[7]
- A national observatory for spatial data assembly and analysis.

Establish an interdepartmental spatial coordination committee in the Presidency with the necessary oversight to:

- Formulate the NSF.
- Resolve the responsibilities for spatial planning within national government, remove duplication, and recommend which department or agency should be responsible for overseeing spatial planning.
- Resolve a mediation process for serious spatial conflicts.
- Create a robust set of spatial indicators as part of a spatial governance evaluation framework to measure the extent to which spatial objectives are being practically achieved.
- Convene the legislative reform process outlined below.

"My concern lies with the cumbersome municipal planning and approval procedures. In some cases, we find a situation where 'normal' land-use applications take between 12-18 months to be discussed at Portfolio Committees – then we only get resolutions from the Council after four to five months. Surely one of the issues to be addressed is to speed up these processes – building more capacity at municipalities – utilising students in need of practical training?" – NPC Jam

Promote spatial planning and land-use management legislative reform:

- Legislation on land-use management, as required by the Constitutional Court, needs to pave the way for a thorough review of the planning system. By 2016, further legislation should be presented to Parliament to address cross-cutting aspects of spatial planning, which will facilitate simpler, more efficient decision-making on development applications. This should resolve the current fragmentation within the planning system, which divides sectors, for example, land-use management, environmental management, transportation planning and heritage.
- Reform the current planning system to require all municipal and provincial plans, including integrated development plans, to be translated into spatial contracts that are binding across spheres of government.
- Make provision in legislation for cross-boundary plans that would promote collaborative action in areas including biodiversity protection, climate change adaptation, heritage and tourism and transportation.
- In developing a more effective system of governance for city-regions, reform the planning system to ensure integrated, city-region-wide coordination of planning.

[7] This would not be a new fund, but a consolidation of the funding streams within the built environment into a more coherent funding strategy to allow proper sequencing and development of elements in the overall built environment.

Promote possible regionalisation of planning and service delivery:
Municipal boundaries are an inadequate basis for planning and service delivery. A national spatial vision should address this through a consultative process, based on a proposed demarcation of regions. In this process, the democratic accountability of regional structures should be given careful consideration.

Start a national conversation about cities, towns and villages

South Africa would benefit from greater public awareness, mutual understanding and discussion of the future of its villages, towns and cities. Unleashing citizen's popular imagination, creative thinking and energies are fundamental to tackling the formidable challenges and opportunities that settlements face.

To achieve this, the media (radio, television, newspapers and new social media) and civil society organisations could stimulate a conversation at national and local levels about neighbourhoods, towns and cities. People from diverse sectors of society will be encouraged to come forward with new ideas, creative designs and alternative proposals to improve and restructure their living and working environments. This should include, for example, young people in townships, artists in inner cities and the elderly in rural areas. Municipalities, provinces and national departments will facilitate and engage in the debate, and incorporate the emerging ideas and suggestions into their strategic plans.

Broad debates around urban and rural futures should be complemented with focused conversations on specific issues, for example, the future of the previous homelands, the development of the Eastern Cape metropolitan regions, the governance of the Gauteng city-region, and green economy potential in the Northern Cape.

"If we ask the majority of young school going people from rural areas where they want to study and be in their adult life, most of them will say Gauteng. The result is over population in urban areas. I think more development need to go to rural areas."

"Urbanisation is good in the sense that cities act as a focal point where public services can be provided easily to a greater number of people at a lesser cost. It also acts as a vehicle by which people can work to bring themselves out of poverty. It is a means by which women can be empowered to make their own decisions as they are free to act as their own agents, whereas in rural areas they have little means of empowering themselves."

"Urban migration is caused by a sense that the grass is greener on the other side and the wish to have a better standard of living, not necessarily that people want to live in the big cities. This, in most cases, ends up being a disappointment." – NPC Jam

Bolder measures to make sustainable human settlements

To fundamentally reshape human settlements by 2050 (with significant progress by 2030), South Africa needs:

- To address inequities in the land market that make it difficult for the poor to access the benefits of life in towns and cities.
- Stronger measures to reconfigure towns and cities towards more efficient and equitable urban forms.
- Housing and land policies that accommodate diverse household types and circumstances.
- Municipalities that put economic development and jobs at the heart of what they do and how they function.

Most state investment goes into household services. Over time, the state should shift its role from a direct housing provider to a housing facilitator, developing public goods through investment in public transport, other economic and social infrastructure, quality public spaces and jobs.

In the first five-year period (2012-2017), we propose the following steps:

Develop a more coherent and inclusive approach to land

- All municipalities should be encouraged to formulate a specific land policy, as part of their integrated development plan, showing how vacant and under-used land will be developed and managed to achieve wider socioeconomic and environmental objectives (within the initial focus on well located vacant and under-used state-owned land to support affordable housing).[8]
- Municipalities should examine how poorer people access land and accommodation, and then develop ways to support and regularise these processes to give people more security.
- Government departments responsible for land and taxation should work together to develop instruments to capture some of the increase in land values resulting from public investment in infrastructure, helping to recoup some of the costs of this investment to use for public benefit.
- Administrative procedures for land development should be scrutinised to eliminate unnecessary inefficiencies, without compromising the need for careful evaluation of proposals. Municipalities should report on turnaround times.

[8] The Housing Development Agency has identified 33 000 hectares of well located land, mainly owned by the state. Assembling even half of this land and developing it at 60 dwelling units per hectare could provide 900 000 housing units, which would accommodate a large portion of anticipated household growth. It would also make a significant impact on the reshaping of cities.

Radically revise the housing finance regime

- Prevent further state support for housing in poorly located areas and prioritise development in inner cities and around transport hubs, corridors and economic nodes.
- Shift state investment from support for top structures to incentivise the acquisition of well located land and support the development of the public environment needed for sustainable human settlement.
- Shift housing funding away from building single houses to supporting the development of a wide variety of housing types with different tenure arrangements (including affordable rental and social housing).
- Encourage housing development as part of a mix of activities and land-use types.

Revise the regulations and incentives for housing and land use management

- Strengthen the link between public transportation and land use management with the introduction of incentives and regulations to support compact mixed-use development within walking distance of transit stops and prioritise higher density housing along transit routes.[9]
- Incentivise new private housing developments to include a proportion of affordable housing.
- Support the growth of housing in the gap market by addressing obstacles in supply (lack of serviced land and delays in regulatory approval) and demand (provision of affordable loans by financial institutions).
- Require all new developments to be consistent with a set of sustainability criteria (to be developed urgently and collaboratively across the spheres of government).
- Require all local spatial development frameworks to incorporate a growth management approach that would align areas of population and economic growth with investment in bulk infrastructure. Introduce a proactive element into land-use management systems by allowing municipalities to proactively rezone land to achieve specific objectives such as densification along transit routes.[10]
- Work towards increased household mobility and greater spatial flexibility by reviewing the restrictions on the sale of government provided houses and giving consideration to alternatives to fixed location subsidies such as housing vouchers or grants for purchasing building materials.

[9] This is generally known as transit-oriented development.

[10] For example, New York undertakes proactive zoning to provide an incentive and framework for private investments to achieve the objectives of local plans.

Recognise the role played by informal settlements and enhance the existing national programme for informal settlement upgrading by developing a range of tailored responses to support their upgrade

- Significantly expand the national programme on informal settlement upgrade and municipalities to introduce local level programmes.
- Develop legal instruments to regularise informal settlements (for example, the use of special zones in land-use management schemes) and to recognise rights of residence.
- Agree on minimum health and safety standards and then progressively upgrade these standards as "regularised informal settlements" are brought into the mainstream urban fabric.
- Focus on developing community organisation to support participatory regularisation and upgrade programme.
- Ensure that funding arrangements and programmes channel resources into community facilities, public infrastructure and public spaces, and not just into housing.

Support the transition to environmental sustainability

Local actions by villages, towns and cities are vital to complement national measures to mitigate and adapt to climate change, reduce greenhouse gas emissions, and use scarce resource more efficiently. Special attention must be given to the protection of poor and vulnerable groups. Specific spatial proposals include:

- All spheres of government should introduce common sustainability criteria for decisions on infrastructure investment to give priority to "green infrastructure", sustainable mobility and to encourage more sustainable development practices. In the immediate future, urgent attention must be given to supporting forms of transport that do not produce emissions (walking and cycling), or that produce low emissions per capita relative to the private motor car (trains, buses and mini-buses).
- Municipalities should introduce more measures to reduce the demand for electricity and water, cut water leakages, and eliminate waste going to landfill, and discourage high-consumption lifestyles (for example, stepped tariffs). National government should consider incentive structures to promote this.
- Within the planning system, standards and instruments to deal with environmental hazards, risks and vulnerability should be strengthened, especially for poor communities in marginal locations.
- All spheres of government should aim for a zero-carbon building standard by 2030, by ensuring that all new buildings meet the energy-efficiency criteria set out in the South African National Standard 204 dealing with energy efficiency in buildings. These regulations would be progressively strengthened until the 2030 target is met.

- Municipalities should be encouraged to explore the contribution of urban areas to food security (for example, home and rooftop gardens), and should also be supported in launching urban greening programmes.

Support rural spatial development

The efficient operation of food production chains is predominantly a rural concern. Providing infrastructure and services in rural areas presents added challenges, because of the extra costs while land-use planning systems for managing growth and development are generally lacking.

Guiding principles for provision of infrastructure in rural areas

- Sensitivity to the differentiated nature of rural areas, with some places justifying high levels of investment because of social need and development potential. Spatial planning processes can assist with such judgements.
- Priority should be given to connective infrastructure that strengthens the linkages between urban and rural areas and to infrastructure that supports the provision of basic universal services (for example, water). Soft infrastructure is also critical to rural development, including support for good governance, enterprise and youth development.
- Innovative forms of service and infrastructure provision should be developed where conventional, fixed infrastructure may be unaffordable.
- Investment in ICT should be given priority, because it has locational flexibility and potential for significant economic and social returns.
- Land reform programmes should reflect the importance of location and connectivity for farm viability.

Investigate and respond to shifting settlement patterns

Shifting settlement patterns should be investigated to align public investment in infrastructure and services with these trends, and to develop appropriate systems of land tenure and growth management. Special attention must be given to areas of densification along transport corridors within previous homelands.

"Take a lead from Brazil. Make no intervention without Internet connectivity as the first priority. Connectivity takes away the need for proximity. As a personal anecdote, the more I have improved my Internet usage, the less I wish to travel. Personally, I now trade actively in 80 countries, but very rarely leave the City of Cape Town." – NPC Jam

Small town development strategy

A strategy should be developed to enhance the developmental role of small towns in rural economies, with a focus on economic viability, sustaining public services, skills development, the green agenda and connecting infrastructure. These strategies also need to

consider appropriate mechanisms to deal with step migration through small towns to larger centres.

Spatial interventions to support agricultural development

Strategies should be developed to support local production networks. These should include attention to the infrastructural requirements in support of value chains, proposals to reactivate a tradition of local commonages, and strategies for intensification of agriculture in peri-urban areas, which could complement the use of urban growth boundaries to restrict urban sprawl.

Build an active citizenry to rebuild local place and community

It is impossible to develop and maintain sustainable human settlements in a participatory way if communities are disorganised and fractured, and if they have little confidence in their municipalities (as is the case in many expanding informal areas). It is important to promote, though collaborative government and community action, a people-centred approach that helps communities and individuals to generate income, improve skills, increase safety, reduce food insecurity and enhance health through improvements in social and economic infrastructure. Communities should contribute to practical problem-solving and upgrading schemes, and hold municipalities accountable.

- The planning system should encourage properly funded, citizen-led neighbourhood vision and planning processes, drawing on methods successful in other countries. It is crucial that young people are involved in the process.
- Public works programmes should be tailored to community building and local needs in at least four broad areas: a) the economy of social care, b) green infrastructure, c) cultural services, and d) public facilities such as schools, clinics, roads, parks, community centres and libraries.
- In the long term, every municipality should promote citizenship education and training to strengthen community organisation, planning and project management skills and competences, perhaps through some kind of “citizenship academy” run by a non-governmental organisation or educational institution.
- Local communities should work with municipalities in developing local arts, culture and heritage precincts. National government should provide a funding flow to support this.
- To promote mutual understanding, community cohesion and integration of people from different national and cultural backgrounds, forums for dialogue and liaison should be established at neighbourhood and municipal levels. They could help local communities benefit from the skills, enterprise and international networks of new arrivals, and reduce xenophobia and migrant exclusion.

Sequencing and conclusion

Spatial transformation is a long-term project. There is massive investment in fixed assets – in all kinds of infrastructure, as well as housing, factories and offices. Shifts in spatial form may proceed at a glacial pace in areas where development pressures are low, and somewhat faster in areas of economic dynamism and population in-migration. However, while spatial transformations are not a quick fix, there are possible solutions if supported by strong policies, consistent implementation and political will. Future generations will benefit if the trajectory of current patterns of development begins to change now. New spatial arrangements could fundamentally transform job and livelihood prospects. Spatial transformation will reduce travel time and cost between home and work, and increase mobility for poor households to access better job and education opportunities. This in turn will reduce poverty and inequality.

The outcomes of spatial change may take decades to be fully realised, but the shift in trajectory can happen relatively quickly. There proposed interventions can be fully implemented in five years. Positive outcomes from these reforms should be evident within 10 years, providing the basis for real transformations in the rural and urban landscape over the subsequent decades.

Chapter 9

IMPROVING EDUCATION, TRAINING AND INNOVATION

"We are Africans.
We are an African country.
We are part of our multinational region.
We are an essential part of our continent.
We feel loved, respected and cared for at home, in community and in public institutions.
We learn together.....We love reading.
Each community has:
a school,
teachers who love teaching and learning,
a local library filled with the wealth of books,
a librarian.
All our citizens read, write, converse, and value idea and thought.
We are fascinated by scientific invention and its use in the enhancement of our lives.
We live the joy of speaking many languages."

Introduction

Education, training and innovation are central to South Africa's long-term development. They are core elements in eliminating poverty and reducing inequality, and the foundations of an equal society. Education empowers people to define their identity, take control of their lives, raise healthy families, take part confidently in developing a just society, and play an effective role in the politics and governance of their communities.

Foundational skills in areas such as mathematics, science, language, the arts and ethics are essential components of a good education system. Lifelong learning and work experience improves productivity, enabling a virtuous cycle that grows the economy.

Quality education encourages technology shifts and innovation that are necessary to solve present-day challenges.

Education, training and innovation are not a solution to all problems, but society's ability to solve problems, develop competitively, eliminate poverty and reduce inequality is severely hampered without them. Schools are the building blocks for learning and socialisation. The values learnt at school permeate society. The quality of the schooling system impacts significantly on further education, college, higher education and society's ability to innovate.

Higher education is the major driver of the information/knowledge system, linking it with economic development. However, higher education is much more than a simple instrument of economic development. Education is important for good citizenship and enriching and diversifying life. Quality higher education needs excellence in science and technology, just as quality science and technology needs excellent higher education. Good science and technology education is crucial for South Africa's future innovation. The humanities are important for understanding some of the difficult challenges the country faces such as transformation, violence, corruption, education, service delivery, innovation, the gap between the rich and the poor, and the issue of race.[1]

Universities are key to developing a nation. They play three main functions in society. Firstly, they educate and train people with high-level skills for the employment needs of the public and private sectors. Secondly, universities are the dominant producers of new knowledge, and they critique information and find new local and global applications for existing knowledge. Universities also set norms and standards, determine the curriculum, languages, and knowledge, ethics and philosophy underpinning a nation's knowledge-capital. South Africa needs knowledge that equips people for a society in constant social change. Thirdly, given the country's apartheid history, higher education provides opportunities for social mobility and simultaneously strengthens equity, social justice and democracy. In today's knowledge society, higher education underpinned by a strong science and technology innovation system is increasingly important in opening up people's opportunities.

However, universities no longer have a monopoly on knowledge production globally. Other organisations, such as science councils, non-governmental and privately funded research institutes, state-owned enterprises (SOEs), the private sector, and even some government departments, have become sites of new knowledge production and application. The framework in which the knowledge production system operates and its relationship to innovation and industry need to be reconfigured. A greater understanding within government is required to acknowledge the importance of science and technology and higher education in leading and shaping the future of modern nations. Government departments need to work together to develop a broad enabling framework and policy that encourages world-class research and innovation.

[1] ASSAF (2011). *The state of the Humanities in South Africa: Status, prospects and strategies*. Pretoria: Academy of Science of South Africa.

A strong educational system spanning early childhood development, primary, secondary, tertiary and further education is crucial for addressing poverty and inequality. The psychosocial wellbeing of learners from early childhood to higher education is also central to the success of a good quality education system. Other government policies, such as the provision of housing, basic services and social security, are therefore critical for building an education system that benefits all learners.

This chapter builds on the vision for education, training and innovation. The proposed actions are based on five cross-cutting, interdependent and implementable themes:

- *Lay a solid foundation for a long and healthy life and higher educational and scientific achievement*. This relates especially to early childhood development, basic education, further education and training, and higher education.
- *Build a properly qualified, professional, competent and committed teaching, academic, research and public service core*. This relates to quality early childhood learning, schooling, further education and training, higher education, and the national system of innovation. It requires a coordinated plan to produce high-level professionals to lead the public and private sectors, and the cutting-edge knowledge capacity needed for increased innovation and socioeconomic development.
- Build a strong and coherent set of institutions for delivering quality education, science and technology innovation, training and skills development. Develop world-class centres and programmes in the national system of innovation and the higher education sector over the next 20 years. The Department of Higher Education and Training and the Department of Science and Technology should lead and consolidate this process.
- *Expand the production of highly skilled professionals and enhance the innovative capacity of the nation*. This relates to higher education, the national system of innovation, SOEs and industry. Create a new national framework of common objectives and operations – recognising that new knowledge and innovation arise from many sites in modern society. Develop a common understanding within government in particular the Department of Higher Education and Training, Department of Science and Technology, Department of Trade and Industry, Public Enterprises, Treasury, Economic Development on how to promote the role of science and technology and higher education in shaping society, the future of the nation and the growth path.
- *Create an educational and national science system that serves the needs of society.* Increase participation rate in higher education to more than 30 percent, double the number of scientists and increase the numbers of African and woman postgraduates, especially PhDs, to improve research and innovation capacity. This will help to accelerate the transformation of South Africa's scientific and academic communities to better reflect the population. Develop African languages and incorporate indigenous knowledge systems in education and research.

The foundations for achieving the above actions should be fully established within the first five years of the plan to allow for expansion in the subsequent period.

Education and training vision

We need to ensure all children can access and benefit from a high quality education. This requires a range of early childhood development services and programmes that support the holistic development of young children. These services need to be flexible, so that they can be responsive to the needs of children, families and communities. Some services will need to be targeted directly at children, others will provide support to their primary caregivers. To overcome our apartheid legacy it is essential that everybody has access to services of a consistently high standard regardless of who they are and where they live. This will require that specific consideration be given to the most vulnerable children – those who are living in poverty or with disabilities.

We envisage schools that provide all learners with an excellent education, especially in literacy, mathematics and science. The education system needs to improve constantly.

The post-school sector needs to meet the wide range of education and training needs of people over 18. Together with the higher education system it will play a significant role in producing the skills and knowledge the country needs to drive its economic and social development. It will also be an inclusive system that provides opportunities for social mobility, while strengthening equity, social justice and democracy.

Key features of the education training and innovation system in 2030

To achieve this vision by 2030, we will need to focus on the following issues:

Early childhood development

Early childhood development is critical for ensuring that children are able to reach their full potential. Measures will need to be put in place to ensure that women are able to plan their pregnancies and that teenage pregnancy is no longer an issue. Pregnant mothers will need access to emotional and material support to ensure a healthy pregnancy. Children will need to be nurtured so that they grow up healthy, well nourished, physically fit, cared for in a stable home environment so that they can learn to interact and communicate with those around them. Measures will need to be in place to eradicate deficiencies in micronutrients among babies younger than 18 months and to ensure all children have sufficient food and nutrition. If these objectives are achieved it will be possible for children to grow up in stimulating environments that support learning and where they are not held back by their gender or the socioeconomic status of their family.[2]

[2] Biersteker L & Motala S (2011). Enhancing outcomes for Children 0-5 years through Early Childhood Development as a Core Component of the National Development Plan. Input paper prepared for the National Planning Commission.

Schooling

Teachers are central to education and teaching should be a highly valued profession. Teachers must have a good knowledge of the subjects they teach. It is particularly important that there are high quality teachers of maths and science. We should aspire to a future where teachers are recognised for their efforts and professionalism. Bodies such as the South African Council for Educators and specialist maths, science and other subject-specific associations need to play a leading role in the continuing development of teachers and the promotion of professional standards.

There needs to be an institutional structure, including bursary programmes for existing teachers, that promotes good teaching by attracting, investing in and retaining the best teachers. Teacher remuneration should be linked to their performance while taking into account mitigating factors such as the school environment and the socio-economic status of learners.[3] To develop and sustain this professional culture, schools need to be well run by skilled and dedicated principals who foster a vibrant but disciplined environment that is conducive to learning.

The curriculum will need to be tailored to the needs of South African society. This will require principals and management teams to fulfil their roles as leaders in implementing the curriculum.[4]

The importance of African languages or "mother tongue" is emphasised and integral to education, to science and technology, to the development and preservation of these languages.

Education institutions must have the capacity to implement policy and, where capacity is lacking, immediate measures need to be taken to address it. The interests of all stakeholders need to be aligned to support the common goal of achieving good educational outcomes that are responsive to community needs and economic development.

Districts should provide targeted support to improve practices within schools, and ensure communication and information sharing between authorities and schools. Schools need to share best practice.

Parents need to be given meaningful information on their children's performance. This requires teachers to carry out assessment practices that enable learners to compare their performance with their counterparts in other schools in the district. It needs to be

[3] Van der Berg S, Taylor S, Gustafsson M, Spaull N & Armstrong P (2011). Improving quality education in South Africa. A report prepared for the National Planning Commission.
[4] Taylor N (2011). A five year plan for South African schooling. A report commissioned by the National Planning Commission.

easy to identify areas where improvements in teaching and learning are required. This means policy-makers and districts need to be able to access information that helps them determine the rate and extent of progress in different sectors of the education system, including the reasons for underperformance and schools requiring intervention. Most importantly, it requires that adequate and appropriate capacity exists to support schools that are performing poorly.

By 2030, the schooling system is characterised by learners and teachers who are highly motivated; principals are effective managers who provide administrative and curriculum leadership; parents are involved in the schools their children attend; schools are accountable to parents; committed and professional teachers have good knowledge of the subjects they teach; schools and teachers are supported by knowledgeable district officials; the administration of education (including appointment and disciplining of teachers) is the preserve of the government, with unions ensuring that proper procedures are followed; learning materials are readily available; basic infrastructure requirements are met across the board; and high speed broadband is available to support learning.

Languages not only carry knowledge, but also create new and better knowledge. Language policy needs to be informed by a greater appreciation of labour market imperatives. Learners need to receive high-quality instruction in both their mother tongue and English from early in the foundation phase.

Infrastructure backlogs need to be addressed so that all schools meet the basic infrastructure and equipment standards set by the national Department of Basic Education. This requires targeted action to address the lack of basic infrastructure, such as libraries, books, science laboratories, sports fields, electricity and running water.

Further education and training and skills development

An expanded system of further education and training and skills development needs to offer clear and meaningful educational and training opportunities for young people who have obtained a low pass in the National Senior Certificate, as well as older people who wish to develop their skills, adults who left school early or had no access to education and young people between the ages of 16 and 20 who have completed grade 9 and left school. Curricula need to be designed to respond to the specific learning needs of these different groups in order to help them develop their life opportunities.

College should provide people between the ages of 18 and 45 with ongoing access to learning opportunities and qualifications, including general vocational certificates, technical or occupational qualifications and awards, higher certificates and other programmes. These courses should correspond with higher education, the National Senior Certificate for adults, and high school for those who have started high school and wish to complete the National Senior Certificate.

Technical high schools have a key role to play in addressing the needs of young people who leave school at grade 9 and wish to pursue a vocation: the National Certificate Vocation is for those who choose not to undertake a technical Senior Certificate.

A diverse set of private, workplace and community-based providers should be supported to offer targeted work-based training, as well as community and youth development programmes. This will require strong regulatory bodies that analyse demand, ensure a suitable range of courses is available, and monitor quality.[5] Sector Education and Training Authorities (SETAs) should play a more effective role in the production of skills that are required to meet the immediate needs of employers.

Higher education

Each university should have a clear mission that sets out its unique contribution towards knowledge production and national development.

Universities are an integral part of the post-school system, but are also the apex of the education, training and innovation system. School and college teachers are often products of the university system. The schooling, colleges and higher education systems should be better articulated and allow for mobility of learners and staff between these different parts of the education system.

Institutions need to be efficient, characterised by higher knowledge productivity units, throughput, graduation and participation rates. In 2030, 75 percent of university academic staff should hold PhDs. PhD graduates, either as staff or post-doctoral fellows, will be the dominant drivers of new knowledge production within the higher education and science innovation system.

Universities need to identify their areas of strength and develop centres of excellence in response to the needs of their immediate environment, the African region and global competitiveness.

There needs to be a coherent national plan for higher education that includes the promotion of innovation and the development of knowledge. This needs to be developed in collaboration with higher education institutions, science councils, SOEs, private industry and research institutes. The plan should be appropriately funded, including funding for poorly resourced institutions. It should also be closely linked to the nation's long-term needs in terms of human resources development and knowledge production.

The higher education system should be diverse so that each institution can build on its strengths and expand areas of specialisation. This differentiation should be enabling and developmental based on a recognition that higher education has to fulfil many functions

[5] Allais S, Lolwana P & Marock C (2011). Further Education and Training and Skills Development. A report prepared for the National Planning Commission.

and no one institution can serve all of societies needs. However, differentiation needs to take place in a context that takes account of social justice and equity imperatives, this means that historically disadvantaged institutions must be given adequate support and incentives to develop their own areas of excellence in both research and teaching.

Universities should be welcoming and supportive environments for black and female students and researchers. They need to make significant progress in gender and racial transformation in order to reduce gender and racial disparities so that women and Africans each make up more than 50 percent of research and teaching staff.

Private higher education institutions can play a greater and better-defined role in the higher education landscape, if the state provides effective and enabling regulation. The regulatory system must ensure these institutions are well run, provide stimulating learning environments for students and adhere to high standards of corporate governance.

We envisage a diverse national innovation system that consists of a range of world-class centres and programmes specialising in areas that address national priorities, including African languages and indigenous knowledge systems. These should draw on the many sites of knowledge and innovation within society. Their staff must be well qualified. Their participation and throughput rates will need to improve. They should provide a welcoming environment for young, black and female staff.

Progress since 1994

Great strides have been made in education. Access to education at various levels has improved and race and gender disparities have been largely eliminated.

- In 1996, 22.5 percent of five-year-olds were enrolled in an early childhood development institution. In 2007, 80.9 percent were enrolled.
- Universal access and gender parity were almost achieved in schooling by 2010. About 99 percent of children complete grades 1 to 9.
- Since 1996, the number of schools without water has decreased from 9 000 to 1 700 and the number of schools without electricity has dropped from 15 000 to 2 800. The percentage of classrooms with more than 45 learners has decreased from 55 percent to 25 percent.
- The infrastructure of colleges received a significant improvement following the infrastructure recapitalisation grant announced in the 2005 budget.
- School funding policies have been pro-poor, resulting in 60 percent of all schools being designated as “no fee” schools.
- The national school nutrition programme feeds about 6 million children in 18 000 schools across the country.
- In historically white schools, about 56 percent of learners are black.
- The race profile of higher education institutions has changed: 32 percent of all students in 1990 were African; by 2009 this had increased to two-thirds.

This is the foundation on which South Africa must build an education system for 2030.

The challenge

Although progress has been made in all subsectors of the education and training system, there are severe problems that must be solved to achieve the vision for education, training and innovation.

Early childhood development

Many South African children grow up lacking food and nutrition, which does not provide a good platform for cognitive development and full participation in society. Nowhere is this more evident than in South Africa's poor schooling outcomes and low skills base.

Children in the 0-4 age group have the highest mortality rates in the South African population and unacceptably high levels of stunting and exposure to violence and neglect. This impacts adversely on their development. South Africa is also one of the 20 countries with the highest burden of under-nutrition. There are 2.8 million households and 11.5 million individuals who are vulnerable to hunger, over 72 percent of whom live in rural areas.

An average South African eats less than four out of nine food groups against the dietary diversity norm of seven out of nine. Children, pregnant and breastfeeding women and those living with tuberculosis and HIV/AIDS are most at risk. Nationally, stunting affects almost one in five children (18 percent), with higher levels of stunting in rural areas (24.5 percent), and urban informal areas (18.5 percent). About one in 10 children (9.3 percent) are underweight, reflecting the severity of child under-nutrition. Micronutrient deficiency is also a problem. One in four women lacks vitamin A and about a third of women and children are iron deficient. A third of preschool children are vitamin A deficient, 21.4 percent are anaemic and 5 percent suffer from iron-deficiency anaemia.

Access to early childhood development centres remains low. In 2009 about a quarter of children aged two attended early childhood development centres compared to nearly 60 percent of those aged four.[6]

Schooling

Despite many positive changes since 1994, the legacy of low-quality education in historically disadvantaged parts of the school system persists. This seriously hampers the education system's ability to provide a way out of poverty for poor children. The grade promotion of learners who are not ready in the primary and early secondary phases leads to substantial dropout before the standardised matric examination.

[6] Biersteker & Motala, 2011.

In the Southern and East African Consortium for Monitoring Educational Quality III (2007) survey of grade 6 mathematics and reading, South Africa performed below most African countries. An alarmingly high proportion of grade 6 learners had not mastered even the most basic reading and numeracy skills. Of the 15 countries in the study, South Africa had the third highest proportion of functionally illiterate learners (27 percent), and the fifth highest proportion of functionally innumerate learners (40 percent).[7]

Most children are in the historically disadvantaged part of the education system, which still serves mainly black and coloured children. Learners in these schools typically exhibit low proficiency in reading, writing and numeracy. The schools that historically served white children produce educational achievement closer to the standards of developed countries. Literacy and numeracy testing within the National School Effectiveness Study demonstrates that grade 5 learners in historically black schools are performing considerably worse on average than grade 3 learners in historically white schools.[8]

Two factors are largely responsible for the failings of the school system. The primary cause is weak capacity throughout the civil service – teachers, principals and system-level officials, which results not only in poor schooling outcomes, but also breeds a lack of respect for government. The mirror image of this weakness in the technical core is a culture of patronage that permeates almost all areas of the civil service. Nepotism and the appointment of unsuitable personnel further weaken government capacity.[9]

Further education, training and skills development

Many parts of this sector are severely underperforming. There are not enough public institutions providing learning opportunities in this sector, despite the millions of young people who are eager to learn. Although there are some strong institutions, the college sector is small and weak. Public colleges enrol an equivalent of one-third (roughly 300 000) of the learners enrolled in higher education when ideally the situation should be the other way round. Private institutions, including non-governmental organisations, struggle to operate in the post-1994 policy environment due to lack of funding and existence of a regulatory system that does not support the development of institutions.

The success rate in FET colleges is extremely low. This is demonstrated by the 4 percent throughput rate in 2009 of the cohort that started the new National Certificate Vocation in 2007. The drop-out rate in colleges is estimated to range between 13 percent and 25 percent per annum, the highest dropout levels are in Level 2 of the National Certificate Vocation.[10]

[7] Van der Berg, Taylor, Gustafsson, Spaull & Armstrong, 2011.
[8] Taylor S (2011). Uncovering indicators of effective school management in South Africa using the National School Effectiveness Study. Stellenbosch Economic Working Papers No. 10/11.
[9] Taylor, 2011.
[10] Department of Higher Education and Training (2011). Green Paper on post-schooling.

Training providers, further education and training colleges have very weak relationships with workplaces, leading to inappropriate or incomplete training. It is estimated that approximately 65 percent of college students are unable to find workplace experience, which is valuable for all students and a requirement for completing N diplomas.

Despite spending large amounts of money, levy-funded institutions – the Sector Education and Training Authorities – have not made a major contribution to resolving the problems in skills development. Further problems include fragmented data systems, which lead to poor planning, and the lack of reliable information on the number of private providers and their output. There are also governance problems in further education and training colleges, and some of the sector education bodies.

The qualifications framework has proved inappropriate for the sector's learning and training needs. This has resulted in formal education and training institutions using their old qualifications, which have officially been rewritten into an outcomes-based format.

Higher education

The Shanghai JiaoTong Academic Ranking of World Universities 2008 placed South African higher education between 27 and 33, along with the Czech Republic, Hong Kong, New Zealand and Ireland. For a developing country, this is an exceptional rating, but it can do better and is underperforming in a number of key areas. There are some institutions within the system that continue to show signs of instability and dysfunction.[11]

Studies have shown that while the South African higher education system functions relatively well, higher education faces major challenges: low participation rates, high attrition rates, a curriculum that does not speak to society and its needs, the absence of an enabling environment that allows every individual to express and reach full potential, and poor knowledge production that often does not translate into innovation. While knowledge production is the rationale of higher education, high-quality knowledge production cannot be fully realised with a low student participation rate, a curriculum or environment that is alienating and does not articulate the vision of the nation, and an academic staff that is insufficiently qualified (only 34 percent of academic staff hold PhDs).

[11] Badsha N & Cloete N (2011). Higher Education: Contribution for the National Planning Commission's National Development Plan.

Institution	Enrolment	Institute for Scientific Information publications	PhD output	% Academics with PhDs
University of Sao Paulo	90 000	9 000	2 400	98
South Africa	899 000	8 200	1 420	34

Source: Badsha and Cloete, 2011

The World Bank characterises the South African higher education system as mid-level performer in terms of knowledge production, with low participation and high attrition rates and insufficient capacity for the level of skills production that is required.

Globally, Africa's proportion of publication output is declining, although South Africa is still the dominant producer on the continent. However, as is the case with ICT connectivity, South Africa's lead is being eroded, particularly by North Africa. [12]

Percentage share of publications in Africa		Global competitiveness ranking	
South Africa	37	South Africa	54
Egypt	27	Russia	63
Nigeria	12	Brazil	58
		India	51
		China	27

Source: Web of Science, Thompson Reuters, 2010; World Economic Forum, 2010

National system of innovation

In comparison to its population, South Africa's science and innovation system is small by international standards. The natural sciences produce the most accredited research outputs (36 percent of the country's total output), followed by the humanities (21 percent) and medical and health sciences (20 percent). From 1995 to 2007, the proportion of all scientific output produced by universities increased from 80 percent to 86 percent, which means that universities are increasing their dominance as knowledge institutions in South Africa.

Local research and development spend against GDP in 2007 was 0.92 percent; by comparison, Norway spends 1.62 percent.

[12] Gillwald A (2010). The poverty of ICT policy, research and practice in Africa.

Field/ discipline/ category	Norway	South Africa
Full-time researchers	25 000	19 000
Scientific publications	6 815	5 045
PhDs per million people	151	28

While South Africa has excelled in some areas such as registering plant cultivars, there has been little increase in public sector research personnel, PhD graduates and research outputs. The following statistics from Higher Education Management Information Systems, however, show that South Africa has been making progress in some key areas but needs to accelerate the development of key skills.

Degree type	2001	2009
Natural science	7 215	11 909
Engineering	1 912	4 068

African students made up 48 percent of the 2009 engineering graduates. These statistics are encouraging – over time and with adequate investment in the respective programmes, there will be an increase of students from master's to doctoral studies.

Knowledge production capacity is not evenly distributed in South Africa. The higher education sector can be differentiated into three groups: high knowledge-producing, medium knowledge-producing and low knowledge-producing institutions.[13] New knowledge is also produced in many other sites, for example, the science councils, SOEs and private industry. It is critical for these components to work together in the national interest.

Massive investments in the higher education system have not produced better outcomes in the level of academic performance or graduation rates. While enrolment and attainment gaps have narrowed across different race groups, the quality of education for the vast majority has remained poor at all levels. The higher education therefore tends to be a low-participation, high-attrition system.

South Africa's participation rate[14] of 17 percent is significantly lower than that for comparable middle-income countries, although much higher than the average of six percent for sub-Saharan African countries. African student numbers grew by an average of 6.2 percent per year between 2000 and 2009, against 1.1 percent for white students. Two-thirds of all students in higher education in 2009 were African, compared to only 32 percent in 1990.

[13] Knowledge production is measured by a combination of input and output variables, consisting of indicators such as master's and doctoral enrolments and graduates, proportion of staff with doctorates, proportion of PhD graduates to permanent staff and Institute for Scientific Information-accredited publication output.

[14] Enrolment as a proportion of the 20-24-year-old cohort.

Notwithstanding this significant progress, the participation rate for African and Coloured students is still only at 13 percent. The National Plan for Higher Education[15] set a goal of 20 percent participation by 2016. Graduation rates remain unacceptably low and below the benchmarks set in the National Plan for Higher Education. At postgraduate level, graduation rates are declining.

Achieving the 2030 vision for education, training and innovation

The challenges outlined above and in the National Planning Commission's *Diagnostic Report* are not new. In the education sector, the respective departments are aware of these problems and have plans in place to address many of them. The aim of our proposals is to acknowledge and build on departmental plans and, where necessary, to recommend a different way of approaching the problems. We propose a set of quantifiable targets for 2030, followed by an outline of critical reforms necessary to achieve the set targets.

Quantifiable targets for 2030

Early childhood development

Early childhood development is defined in the Children's Act (2005)[16] as the process of children developing their emotional, cognitive, sensory, spiritual, moral, physical, social and communication capabilities from birth to school-going age.

Delays in cognitive and overall development before schooling can often have long-lasting and costly consequences for children, families and society. The most effective and cost-efficient time to intervene is before birth and in the early years of life. The 1 000-day window from conception to two years is a particularly sensitive period in child development. Investment in early childhood development should be a key priority. Research shows well planned and targeted early childhood development initiatives to be a cost-effective way of ensuring that all children have a childhood that is free of factors that impede their physical and cognitive development. The focus should be on children under the age of five. By 2030, all children should start their learning and development at early childhood development centres. These centres should be set up and properly monitored.

Eradicate child under-nutrition

The benefits of investing in early intervention programmes include improvements in school enrolment rates, retention and academic performance, decline in antisocial behaviour and higher rates of high school completion. Eliminating anaemia has been shown to increase adult productivity by between 5 percent and 17 percent. Attention should focus on establishing the most effective intervention and appropriate delivery

[15] Department of Education (2001). National Plan for Higher Education. Pretoria: Department of Education.
[16] Republic of South Africa (2006). Children's Act, 2005. Government Gazette, No. 28944. Vol. 492.

mechanisms. The feeding schemes at schools have contributed greatly to reducing under-nutrition. In 2030, feeding schemes in schools should cover all children in need and provide food that is high in nutritional content and rich in vitamins, particularly vitamin A.

Eradicate vitamin A deficiency among children

Reliable research is needed to understand the extent of the vitamin A problem. The 2007 Lancet Series highlighted the 1 000-day window of opportunity from pregnancy to 23 months as a critical period in the development of the child. There is a need for a pilot initiative to identify an effective delivery mechanism for a programme targeted at this age group.

Universal access to two years of early childhood development

Different kinds of interventions are required for different age groups. Capacity needs to be developed to provide relevant development activities to the total projected 4 million children in the 0-3 age cohort and nearly 2 million in the 4-5 age group by 2030. Capacity needs to be developed to effectively monitor and regulate the sector as well.

Schooling targets

About 80 percent of schools and learners achieve 50 percent and above in literacy, mathematics and science in grades 3, 6, 9

The Department of Basic Education understands the need to improve the quality of outcomes at different grades for mathematics, literacy and science. It has set ambitious targets for 2024. For language and numeracy in grade 3 and grade 6, the target is that 90 percent of learners should perform at the required level.

However, the performance standard is ambiguous, referring only to minimum competencies in different subjects. We propose that the acceptable level of performance be defined as 50 percent and above, and the target of learners and schools performing at this level by 2030 be set at 80 percent. If 80 percent of schools and learners achieve results above 50 percent on average, it will demonstrate considerable improvement.

Secondary school completion rate is 77 percent in the United States, 87 percent in the United Kingdom and 93 percent in Japan.

Increase the number of students eligible to study maths and science at university to 450 000 per year

The department has set a target to increase the number of learners eligible for bachelors programme to 300 000 by 2024, 350 000 learners who pass mathematics, and 320 000 learners who pass physical science. These targets are very ambitious, more than doubling the results achieved in 2010. We propose a target of 450 000 learners eligible for bachelors programme with maths and science by 2030.

South Africa improves its position in international education rankings

The department aims to improve its average Southern and East African Consortium for Monitoring Education Quality results for grade 6 languages and maths from 495 to 600 by 2022 and to improve average grade 8 scores in the Trends in Mathematics and Science Study from 264 to 420 in 2023. The commission supports these targets and proposes that by 2030, grade 8 scores in the Trends in Mathematics and Science Study should reach 500. Ideally, South Africa should improve its position by 10 places or more by 2030.

About 80 percent of every cohort of learners successfully completes the full 12 years of schooling

South Africa loses half of every cohort that enters the school system by the end of the 12-year schooling period, wasting significant human potential and harming the life-chances of those concerned. We believe it is important to increase learner retention rates to 90 percent, of whom 80 percent successfully pass the exit exam.

Further education and training and skills development

The Department of Higher Education and Training has identified the need to massively increase learning opportunities after school. The Green Paper on post-schooling proposes creating different types of institutions to meet the high demand for education and training. The department proposes to establish Community Education and Training Centres which will incorporate the current public adult learning centres. The commission supports the vision for an expanded post-school sector. We also believe that improving the performance of the post-school system will result in far greater gains than merely increasing the number of learners.

Increase graduation rate of further education and training colleges to 75 percent

Throughput in the National Certificate Vocation programme was as low as 4 percent in 2009 and the graduation rate was about 40 percent in 2010. This is unproductive and frustrating for learners. We propose improving the graduation rate to 75 percent by 2030. This would have a major impact on the nation's skills profile. Lifelong learning also needs to be promoted to complement further education. All sectors of society need to

set up lifelong learning initiatives to ensure that citizens have ample opportunities to develop their skills and gain a deeper understanding of the ever-changing environment in which they live.

Produce 30 000 artisans per year

One of the targets set for 2014 in the delivery agreement signed by the Minister of Higher Education and Training is to produce 10 000 artisans per year. This target can be met with concerted effort and adequate funding. We propose a target of 30 000 by 2030, subject to demand. The Department of Higher Education and Training has recently signed a Skills Accord with unions and the private sector. One of the elements of the accord is a commitment by businesses to provide more internship opportunities. This is one of the areas that have constrained the production of artisans. The commission welcomes this development.

Increase participation rates in further education and training colleges to 25 percent

About 3 percent of 20 to 24 year olds participate in further education and training. This is very low given the large number of young people who are neither employed, nor in education or training institutions. There is high unmet demand for learning opportunities. A participation rate of 25 percent would accommodate about 1.25 million enrolments compared to the current 300 000.

An additional 1 million learning opportunities per year

Private providers already play a significant role in post-school education and training. The Department of Higher Education and Training proposes establishing Community Education and Training Centres which will incorporate the current public adult learning centres. These institutions, combined with enrolment in workplace-based programmes, should meet the target of 1 million learners. This will increase the participation rate in post-school education and training (excluding higher education) above 40 percent.

Higher education, science and technology

The following targets are proposed for the higher education, science and technology sector.

Increase university science and mathematics entrants to 450 000

By 2030, science and mathematics should be revitalised through the increased number of school leavers who are eligible to study science and mathematics-based subjects at university. The number of people embarking on careers in science and technology should be at least three times the current levels.

Increase graduation rates to more than 25 percent by 2030

Achieving a 25 percent graduation rate will require an increase in the number of graduates from the combined total of 167 469 for private and public higher education institutions to a combined total of 425 000 by 2030. As part of this target, the number of science, technology, engineering and mathematics graduates should increase significantly.

Increase participation rates to more than 30 percent

Enrolments in the higher education sector including private higher education will need to increase to 1 620 000, from 950 000 in 2010. This is a 70 percent increase. The planned new universities in Mpumalanga and the Northern Cape and the new medical school in Limpopo will contribute to the expansion of capacity in the higher education sector.

Produce more than 100 doctoral graduates per million per year by 2030

South Africa produces 28 PhD graduates per million per year. This is very low by international standards. In comparison the University of Sao Paulo has 90 000 students and produces 2 400 PhD graduates per year. To achieve the target of 100 PhD graduates per million per year, South Africa needs more than 5 000 PhD graduates per year against the figure of 1 420 in 2010. If South Africa is to be a leading innovator, most of these doctorates should be in science, engineering, technology and mathematics.

Portugal produces 569 PhDs per million, the United Kingdom 288 per million, the United States 201 per million, Australia 264 per million, Korea 187 per million and Brazil 48 per million. South Africa produces just 28 per million.

South Africa needs to increase the percentage of PhD qualified staff within the higher education sector from the current 34 percent level to over 75 percent over 20 years; double the number of graduate, postgraduate and first-rate scientists and increase the number of African and women postgraduates, especially PhDs to improve research and innovation capacity and normalise staff demographics. A learning and research environment needs to be created that is welcoming to all, eliminating all forms of discrimination and other intolerances within the system.

A few world-class centres and programmes should be developed within both the national system of innovation and the higher education sector over the next 20 years. These should be in areas of comparative and competitive advantage, including indigenous knowledge systems.

Efforts should be made to establish South Africa as a hub for higher education and training in the region capable of attracting a significant share of the international student population.

Policy proposals

These targets are indicators of what South Africa should achieve by 2030. Many incremental, yet bold, steps will need to be taken between now and 2030 to achieve these targets.

This section outlines actions necessary to overcome the challenges discussed earlier. Commitment from government, teachers, unions, the private sector and the rest of society will be vital for success.

The proposals are organised according to the five themes, and detailed actions are outlined for each.

Lay a solid foundation for a long and healthy life and higher educational and science achievement

Early childhood development is one of the most underdeveloped sectors of education. There are many areas that need attention, including infrastructure, planning, advocacy, human resources and funding. We propose that the following be given priority attention:

- Design and implement a nutrition intervention for pregnant women to prevent low birth weight and put in place targeting mechanisms for women at risk. The health sector is a possible delivery mechanism for this initiative. This should be first piloted over two years before national rollout.
- Implement an 18 month postnatal support programme for vulnerable caregivers to ensure positive nutrition, micronutrient provision, immunisation and care. A similar initiative to the nutrition intervention discussed above should be initiated and piloted. This initiative could be implemented through the health system or early childhood development structures. The most appropriate delivery system should be identified through a pilot.
- Introduce a school readiness programme for children between three and five to encourage their early development by promoting school readiness, health and nutrition. The centres should be urgently created and their activities increased incrementally so that by 2030, all children have access to two years of quality pre-school learning exposure.
- Pilot home and community-based early childhood development interventions in selected districts. Progressively expand if these prove to be successful over a period of five years.
- Develop and implement norms and standards for the funding and management of early childhood development sites.

- Implement a strategy to improve the qualifications of early childhood development workers and develop training for new types of extension workers. And address career-pathing and conditions of service for all early childhood development workers.

Build a properly qualified, professional, competent and committed teaching, academic, research and public service cadre

Three broad categories of action are needed to improve our education system. They all require unprecedented mobilisation and collaboration across society.

Build a political consensus

In the first instance, to build technical capacity in education requires a political consensus. There should be a national education pact, ideally mobilised by the President. Participants should include political parties, government, unions, the private sector, professional bodies including the South African Council for Educators and subject-specific associations, student organisations, associations of governing bodies and community groups.

The pact needs to be built on the idea that all parties stand to gain, but only if all parties are willing to make concessions, all parties need to be able to mobilise those they represent behind this principle.

Parties to the pact should commit themselves to work together to advance the goals of improving the quality of education in South Africa.

- The goal of the pact should be to build a professional civil service for the school sphere in which:
  - There are clear career paths for educators – two paths beyond the level of deputy principal: 1) Management, which starts with a principalship and proceeds to district institutional management and governance advisor, senior management in the district, provincial institutional management and governance advisor, senior manager in a provincial or national office. 2) Academic, which starts from school head of department, to deputy principal, to district curriculum advisor, senior curriculum management in the district, provincial curriculum advisor, and to senior curriculum manager in a provincial or national office.
  - Expertise is recognised as the only criterion for appointing and promoting teachers and principals.
  - The appointment and promotion of teachers and district officials are accepted as the responsibility of government. Unions' role should be in ensuring that proper processes are followed, not who gets appointed.

- The following are achieved within five years:
  - Competency standards for all educator jobs
  - Competency assessments for entry into all educator jobs
  - Training programmes for all educator jobs
  - Organisational development and staff training in nine provincial offices, district offices, and poorly performing schools.
- This pact has benefits for everyone. Teachers would benefit from:
  - A clear system of career pathways, marked by competence standards.
  - Leadership in provinces and districts able to help school principals manage schools more effectively, and to support classroom teachers in improving their teaching skills.
  - All officials and teachers will receive continuous training.
  - Principals and teachers in underperforming schools will receive training, mentoring and support.

The concessions that teachers will have to make for this scheme include:

- Entry into the profession and promotion will depend on passing competency tests.
- Principals and teachers in underperforming schools will receive training during the June vacation, and on-site mentoring and support for a full year.
- Training courses will be followed by competency tests.
- The results of these tests will lead to one of three outcomes: certified competent, identified as being in need of further development, or removed through formal procedures.
- All strikes must occur within the law. Criminal behaviour will be prosecuted, and teacher indiscipline will be punished. There will be no "political solutions" to incidents of lawlessness and indiscipline.

Government will have to commit to improving the management of the education sector, ensure policy stability, a better working environment (including security in schools) and ongoing support. Government will have to agree to respect teachers' professional expertise and seek their opinion on educational matters, invests more in the support services teachers need such as libraries/classroom assistants in return for teachers attending training during vacation and the training being linked to assessments.

The pact restates elements of good education administration and includes proposals already under consideration by the Department of Basic Education. Once signed by all stakeholders, no aspect should be subject to further negotiation in the Education Labour Relations Council. Government should play a leading role in implementing the pact.

Technical mobilisation

It is estimated that approximately 80 percent of our schools are underperforming. This translates to about 20 000 schools. International experience shows that system wide improvements in education systems can be implemented in a number of ways, including putting together multi-disciplinary teams that assess the functionality of a school, develop a turnaround plan and oversee its implementation.

As a nation we need to mobilise our technical capacity to support the improvements in education along the following lines:

- Assemble a 5 000 - 6 000 member group of professionals with different areas of expertise and task them with assessing the levels of functionality in each school, develop a plan for addressing the weaknesses, and oversee the implementation of the turnaround plan for each school.
- Professionals from different government departments with appropriate expertise, national and provincial departments of education, education researchers / specialists, retired principals and teachers from better performing schools where this can be done without disrupting learning, will be part of the team.
- Each underperforming school will be assigned a team of three to five highly skilled professionals for a period of six months, and one mentor thereafter to work with the school management team to implement the turnaround plan over a three year period.
- The team of three to five per school will be made up of a mixture of skills sets ranging from financial managers, accountants, education specialists, management consultants, engineers, and academics. Members of the team will be drawn from public and private education institutions, management consulting firms, businesses, training providers, unions and professional bodies, non-profit organisations and faith-based groups. The mentors will either be retired principals, local business persons or specially recruited organisational development specialists.
- After the initial six months follow-up work overseen by the mentors will include infrastructure development, in-service training for teachers and principals, and implementation of new management systems.
- The group of professionals assembled needs to be large enough to cover all targeted schools within a period of five to six years. Each team will work with two schools in one year, meaning that, in total, up to 3 000 schools could be covered each year.
- For this initiative to work and be affordable, the different professional services firms across the disciplines, non-government organisations, training providers, professional bodies and other companies would need to agree to deploy their staff to work with government on this initiative free or at reduced rates of between 40 and 50 percent of their normal charge out rates in exchange for a commitment from government to provide work on this initiative for a period of six years.

- This initiative should be led by the national Department of Basic Education working with provincial departments of education. As far as possible officials of the national and provincial departments of education should be part of the schools teams.

Given the amount of work and the numbers of people involved, and to prevent corruption, this scheme cannot be managed by government negotiating with individual firms and professionals. Broad terms of the scheme will be negotiated with representative bodies of the different professions to make sure that design is broadly acceptable and firms would have to sign up to participate and be allocated to schools.

Consolidation of improvements

The third category of actions is intended to consolidate and ensure sustainability of the improvements. These actions are long term in nature. They recognise that teachers and principals are central to the functioning of a school. These actions focus on improving the quality of teaching and school management.

Expand Funza Lushaka Bursary Scheme

Funza Lushaka is an important new strategy to attract learners into the teaching profession, especially those with good passes in maths, science and languages. It should be strengthened and expanded. In addition, measures are needed to ensure that Funza Lushaka graduates are immediately absorbed into schools.

Provide more support to professional bodies

To enhance teachers' subject knowledge and their pride in the profession, greater support should be given to teacher associations that specialise in specific subjects, such as the Association for Mathematics Education of South Africa. The Eastern Cape has recently established an association of English teachers. Other countries have associations of computer science, science and English teachers.

These organisations could provide professional development opportunities, disseminate information about best practices and provide updates on cutting-edge research. South Africa would benefit immensely from having such organisations in key subject areas.

Change the pay structure to attract and retain good teachers

Bursaries alone will not attract enough top-achieving candidates into teaching. The flat wage gradient in teaching deters highly skilled people from entering or staying in teaching.

The performance of teachers is only one of the things that impacts on the performance of learners. As a result, performance-based incentives often prove highly controversial.

However, it is possible to identify some indicators of improvements in teachers' performance that can be used to reward teachers for enhancing their skills. Remuneration and promotion systems should take such indicators of a teacher's level of expertise and commitment into account. Each year, there should be an opportunity for teachers to take an examination focused on the curriculum that they teach. Within each education band, there should be a test for every subject. Teachers taking part should write the test corresponding to the subject and highest band in which they teach. For foundation-phase teachers, a more generic test will be appropriate. For accurate budgeting, a fixed number of teachers should receive a financial bonus, paid out over about three years, so that teachers are tested regularly, but not too often. It should also be recognised that there are non-economic ways of rewarding good performance, ranging from public awards to exchange programmes and sabbaticals.

School management for instructional leadership

A targeted approach will need to be taken to the application of the recommendations, as not every proposal will be appropriate for every school. Schools that are already performing well should not be expected to fulfil additional tasks that are designed to deliver improvements in poorly performing schools. Very low-performing schools should receive the closest attention. This principle is accepted by the Department of Basic Education. Visible indicators of the quality of school leadership should be monitored. For example, in schools where curriculum coverage is a problem, principals should report regularly on this issue.

Ensure that appropriately qualified and competent people become principals

High-quality principals need to be attracted, trained and supported. Changes should be introduced to appointment processes for principals including administering a competency test for all candidates. Minimum qualifications for becoming principals should be introduced and recruitment processes should ensure that candidates meet these criteria. Serving principals should be given a period of 10 years to acquire the qualifications, failing which they should face retrenchment or demotion.

Principals should gradually be given more powers to administer schools, including financial management, procurement of textbooks and other educational material, as well as hiring and firing educators. These delegations are necessary so that principals can be accountable for the performance of their schools. The commission supports the Department of Basic Education initiative to introduce performance contracts for principals. These contracts should be used as a means to help principals who strive for excellence to find ways to improve their performance year on year, including being used as a way of identifying training needs. However, if principals repeatedly fail to meet performance targets, monitoring information indicates poor performance, and investigations based on interviews with school stakeholders confirm that the principal is ineffective, then the principal should be replaced.

Clarify the role of districts and improve their capacity to support schools

A clearer understanding of the functions of districts is required. Lack of capacity may limit what can reasonably be delegated to district offices. Since it takes time for professional capacity to be built up in districts, the focus should be on improving the availability of intervention tools that can be used by district officials and other bodies that support schools.

Promote constructive partnerships

Teacher unions are crucial to improving the education system. Government should look at effective ways of working with unions to reach their members. Experience in other countries shows that without a critical level of professional expertise among union leaders, it is difficult to get unions to move beyond the issue of salary increments to the core professional concern of improving the quality of education. Sponsoring advanced studies for union leaders could form part of the constructive partnership.

Generate and draw support from civil society

School governing bodies have a strong legislative mandate to fulfil the governance function of schools, including extensive responsibility in finances and setting internal school policies. Many governing bodies are significantly hampered by parents' lack of expertise and social status relative to school staff. Additional support should be given to governing bodies to enable them to fulfil their mandate in promoting the effective management of schools. School governing bodies should attend compulsory courses once elected.

Externally administer and mark the annual national assessment in one primary school grade

In a minimum of one primary school grade (perhaps grade 6), the annual national assessment should be externally administered and marked to ensure that there is at least one reliable system-wide measure of quality for all primary schools.

Present the annual national assessment results in an accessible format

The assessment results should be made accessible to parents and the community in a way that makes the data easy to interpret.

Ensure high-quality language instruction in the foundation phase

High-quality teaching of students' first language and English is vital during the foundation phase. Effective support materials need to be available for teachers and learners during the transition to English as the language of learning and teaching. The

Department of Basic Education should actively participate in the international market for skills, including recruiting teachers from other English-speaking countries.

Build a strong and coherent system for delivering quality education, science and technology innovation, training and skills development

Putting strong systems in place for developing skills will help to improve the quality of life, human capital development and competitiveness. It will be necessary to develop world-class institutions and programmes within the national system of innovation and the higher education sector over the next 20 years.

Improve systems for skills planning and shaping the production of skills

In the Delivery Agreement with the President, the Department of Higher Education and Training has committed to improving skills planning. This should both inform funding allocations and improve the supply of relevant skills to the labour market. The commission supports this initiative. The education and training system should be able to respond to the skills needs that are identified. This requires improved capacity, drawing on both public and private providers of training. It should include a focus on building relationships with workplaces, and the development of both training curricula and skilled trainers.

The following are central to improving skills planning:

- Establish a national skills planning system to conduct labour market research and produce different skills scenarios, which should inform training providers. It is important to understand the country's long-term human resource needs. The focus should be on improving general education with an increased percentage of learners attaining grade 12 with good passes in mathematics, science, and English. A greater number of individuals should be able to access post-school education, and attain qualifications at an intermediate or higher level. There should be an increase in science and technology graduates, as outlined in the National Human Resource Development Strategy.
- Develop the capacity of the levy-grant institutions. The scope of the Sector Education and Training Authorities must be refined to remove overlaps in government institutions. The authorities should focus on skills development for existing businesses, including skills development for people working in the sector and unemployed people who wish to obtain employment in the sector. Training should cover levels of the National Qualifications Framework required by the sector.
- Training for start-ups and emerging businesses, rural development, adult basic education and training, and community development should be supported by money from the National Skills Fund and managed by relevant departments or agencies, such as the Small Enterprise Development Agency, Kha Ri Gude and the National Youth Development Agency. This would enable the National Skills Fund to focus on large skills development programmes that form part of a broader

programme. This would simplify the grant funding mechanism by supporting fewer but larger programmes.

- Increase linkages between post-school education and workplaces building on the commitments in the Skills Accord. Linkages between institutions of learning and the workplace need to increase. This should help with lecturer development, curriculum development, external assessment, and placement of learners. However, as placement opportunities will be limited, careful consideration should be given to which qualifications require work experience. Sector authorities should play a more active role in enabling these linkages by briefing further and higher education and training providers, fostering relations between institutions of learning and of work, and funding internships and other work experience programmes.
- Improve funding modalities and systems. The recommendations above have implications for what should be funded by the fiscus and the levy-grant. A single system, with a single funding formula, should incorporate both sources of money.
- Increase access to career guidance and placement services. A key area that requires further development is how individuals can access the information and support they need to make appropriate subject choices. Initiatives such as life orientation and career fairs should be expanded and linked to student support services in the college sector. Further effort is needed to demonstrate to employers the benefit of participating in these activities, particularly in recruitment opportunities and raising the profile of their sector.

Develop a diverse range of providers of further education and training

The state needs to develop and support a coordinated system for providing a diverse range of further education and training opportunities, through a range of state providers complemented by private providers. The starting point must be strengthening existing institutions, with a focus on the college sector, public adult learning centres and technical high schools.

A one-size-fits-all model is inappropriate at this point. Not all institutions can or should offer all types of training. We propose a highly differentiated system. A careful analysis is needed of all further education and training colleges, as well as the stronger public adult learning centres and colleges that fall under departments other than the Department of Higher Education and Training. Placing unrealistic expectations on these institutions will only make it harder for them to perform. However, some do have the capacity to expand and diversify.

Critical actions to achieving the objective of an expanded, strengthened and diversified institutional landscape include:

- Develop a set of strong national qualifications and a variety of non-formal programmes.
- Strengthen and expand further education and training colleges by addressing their infrastructure and other institutional challenges chief among which is the training of college lecturers.
- Gradually expand adult education offered in colleges.
- Build new public colleges.

Build a strong and streamlined quality assurance and qualification system

A strong and simple quality assurance and qualification system is essential to support public provision and to enable and regulate private provision. Improvements need to be made to the configuration and roles of regulatory institutions, including the three quality councils and the South African Qualifications Authority. The quality councils are the primary bodies with a direct role in governing curricula, assessment and certification. The Council for Higher Education, Umalusi, and the Quality Council for Trades and Occupations are responsible for defining three sub-frameworks of the National Qualifications Framework, and checking the quality of the provision, assessment and certification of qualifications, as well as maintaining a database of learners' achievements.

The levels on the National Qualifications Framework cause ongoing confusion. They could be simplified by replacing the framework's levels with clearly designated qualifications, such as national certificates, diplomas and degrees. The relationships between key qualifications could be clarified by mapping the qualification types against each other. This could be done without substantial changes to the three current sub-frameworks.

A simpler organisation of qualifications would make it easier to clarify the configuration of quality councils, which is problematic and needs to be re-examined. If levels on the National Qualifications Framework are removed, there should be no problem with Umalusi quality assuring post-school qualifications that are not part of the university system. If levels on the National Qualifications Framework remain, the demarcation of quality assurance bodies does not need to be confined to these levels.

Regardless of the configuration of quality councils, the approach to quality assurance needs to change. There should be external assessment for all national qualifications. The state should continue to assess the National Certificate Vocation and Nated courses, as well as the courses that replace Nated. The state must also take responsibility for assessing the National Senior Certificate for adults, and the Further Certificate Vocation. Quality councils should provide quality assurance for this assessment, and accredit assessment bodies where appropriate. Quality councils should not accredit or register

individual assessors, nor should they use individual moderators and verifiers to provide quality assurance for assessment decisions.

Expand the production of highly skilled professionals and enhance innovation capacity

A common policy framework should be developed on the critical role of science and technology and higher education in shaping society, the future of the nation and the growth path. This should be done with the involvement of the Departments of Higher Education, Science and Technology, Trade and Industry, Public Enterprises, Treasury and Economic Development.

Enhance the innovative capacity of the nation

The science and innovation system is small but becoming more racially inclusive. The key challenge lies in building the base of science, technology, innovation and skilled human resources. South Africa should invest in people and acquire the best equipment available.

Higher education is one of the main contributors to developing science, technology and innovation, which in turn improves national development. School teachers, as well as staff and programmes in Dinaledi schools, should be evaluated to ensure they have adequate knowledge of science, technology, engineering and mathematics. All science and mathematics teachers should have access to in-service support to ensure continuous professional development. Higher education institutions should extend the length of their science, technology, engineering and mathematics degrees to four years, and redesign the first-year of the course to make it more accessible. Where necessary the extension of length of degrees should be widened to other disciplines.

Immigration requirements should be relaxed for highly skilled science and mathematics teachers, technicians and researchers. One way of doing this is to grant 7 year working permits to all graduates from foreign countries. The movement of people, ideas and goods should be encouraged across the East and Southern African Community region.

The National System of Innovation needs to function in a coherent and coordinated manner with broad common objectives aligned to national priorities. The National System of Innovation, the higher and further education system, SOEs and private industries should create a common overarching framework to address pressing challenges. Special consideration should also be given to dedicated programmes in water, power, marine, space and software engineering, in which South Africa has both comparative and competitive advantage. Companies that focus on such programmes should provide internship programmes for experiential learning specifically in manufacturing and services.

Addressing the decline of the humanities

One of our country's greatest comparative advantages is in the humanities. Our emerging identity, languages, ethics, morality, indigenous systems, struggle for liberation, Codesa, constitution, the creation of a non-sexist and non-racial society and the discovery of humankind are major humanist projects which link our heritage and our future as a society. Our education from basic to tertiary and through the science and innovation system should invest and build capacity and high level expertise in these.

Enhance the entrepreneurial capability of the nation

Courses should be designed, introduced and taught to promote and instil a culture of entrepreneurship in society. In this way, entrepreneurship complements the innovation system.

Coordinate and steer a differentiated system

In the past, differential treatment of universities was used as a policy of racial discrimination. Today different universities have different strengths in terms of teaching, research, and the students and communities they serve. Within the next five years, ways need to be found of building on these different strengths to develop a differentiated system that allows all universities to build on their own areas of strength and respond to the needs they identify. Government and higher education institutions will need to reach formal and binding agreements on the principles that guide and underpin the coordination and funding of this differentiated system. Differentiation should be enabling and developmental for all institutions. This will form the basis of agreements and compacts at a system-wide and institutional level. Agreement should also be reached on the sanctions to be applied to institutions that do not adhere to agreements. Based on these agreements, a ministerial statement should be issued on the agreed scope of activities of each of the 23 universities for a five-year period.

South Africa should set participation rate targets at five-year intervals to promote increased university enrolment. We propose aiming for participation rate of over 30 percent by 2030. This target will need to be translated into institution-level targets and broken down into five-year intervals, taking into account the lead time required to build infrastructure, funding and staff capacity.

Agreements should be reached on a planning model that builds and strengthens the current enrolment planning approach. Targets for enrolments and graduates will cover a range of skills, from high-level research training at doctorate level, to shorter term, career-focused diplomas and certificates. Decisions will need to be taken about which type of institution contributes most effectively to which skill level. Specific plans for priority professional sectors such as health, engineering and built environment, and teaching need to be included, along with major infrastructure needs, including provision for new facilities to train medical and other health professionals.

The model should also address South Africa's need to increase training in a number of scarce skills. There need to be closer links between economic and education planning, stronger incentives for developing scarce skills and an expansion of the public sector with private post-secondary sectors focusing on education and training in niche areas. Plans and resources are needed to increase career-focused higher education certificates and diplomas.

There needs to be better coordination between the Departments of Higher Education and Science and Technology to support knowledge production.

The low output rate from doctoral programmes will make it difficult for higher education institutions to replace the aging cohort of researchers. A new future scholars programme aimed at attracting younger researchers needs to be developed. This is necessary for research and development, but also to increase the proportion of academic staff with doctorates and meet the increasing demand for "professional" PhDs in the financial and services sectors.

Government will need to provide an overarching policy framework to coordinate the effective and efficient production of knowledge across universities, science councils, SOEs and the private sector. This will ensure that knowledge production is in line with national priorities.

Build an enabling and high quality differentiated system

South Africa needs to strengthen research excellence through performance-based grants. More weight should be given to building departments, and centres or networks of excellence. Given that performance-based grants, can entrench historical privilege and disadvantage, capacity-building grants should be provided with clear targets for improvement in five-year intervals.

The role of science councils should be reviewed in light of the worldwide tendency to align research councils with universities.

Progressive differentiation requires that all higher education institutions provide high quality education and skills training, underpinned by common standards for student facilities, libraries, laboratories, computer access and staff qualifications. Adequate resourcing will be needed to enable historically disadvantaged institutions to achieve these standards and overcome historical backlogs.

The current high student dropout rates highlight the need to focus on improving the quality of teaching and learning support throughout the higher education system. The response needs to focus on improving the quality of higher education, through flexible curricula, encouraging excellence in teaching, providing technology to support teaching and learning, continued support for academic development and the professionalisation of teaching in higher education. Specific attention should be given to making the higher

education environment more welcoming for black students, students from poor backgrounds and women.

A differentiated system can only fulfil its promise if it provides students with a range of flexible pathways for developing their skills and opportunities. This requires national guidelines to facilitate student mobility.

The quality assurance framework will need to be reviewed in light of an expanded and diversified system. The Higher Education Quality Committee should develop and manage a core set of quality indicators for the higher education system. A national graduate tracking system should also be considered as a proxy for quality.

A differentiated system guided by evidence-based planning and performance monitoring will require maintaining and strengthening the current Higher Education Management Information System, and the additional capacity to analyse national trends and changes between and among institutions and institutional groups.

Fund an enabling, high quality differentiated system

The *Ministerial Committee for the Review of the Funding of Universities* is considering revisions to universities' funding framework. Such revisions should be based on the needs of a differentiated system, with adequate provision for both teaching and research. As the quality assurance and monitoring system matures, greater emphasis should be placed on incentivising graduate output. Such a shift would be in line with the international trend towards greater emphasis on output-based funding. The higher education department would have to put measures in place to ensure that the risk of this approach discouraging universities from taking students from deprived backgrounds is reduced.

All students who qualify for the National Student Financial Aid Scheme should have access to full funding through loans and bursaries to cover the costs of tuition, books, accommodation and other living expenses. Students who do not qualify should have access to bank loans, backed by state sureties. Both the National Student Financial Aid Scheme and bank loans should be recovered through arrangements with the South African Revenue Service. Service-linked scholarships should be available in areas such as teaching and social work.

Consideration should be given to extending the National Student Financial Aid Scheme to qualifying students in not-for-profit registered private colleges as an incentive for private sector expansion. When resources allow, access to financial aid and bank loans could be extended to students qualifying for other registered private colleges.

Funding for higher education as proportion of GDP has declined marginally over the last few years from 0.76 percent in 2000 to 0.69 percent in 2009. To preserve the quality of

higher education, additional funding will be needed to support an increase in participation and knowledge production.

Support institutions in chronic distress

The higher education department should identify institutions that are facing ongoing crises despite earlier recovery interventions. Dedicated support should be provided to these institutions to develop and implement comprehensive renewal plans over five years. The plans should identify a viable and sustainable academic path for the institution, with an appropriate programme and qualification mix. If measurable progress towards achieving the objectives is not evident after five years, consideration should be given to reviewing the status of the institution.

The sequencing of proposals

First five-year period

The overarching goal in the first five years is to increase the system's effectiveness. Increasing the schooling success rate, and improving throughput in further and higher education will deliver far more positive results than merely expanding access.

Within the first five years of the plan, the foundations on which to implement the above actions should be established. During this period, there will need to be research and experimentation on different delivery models within the early childhood development sector, together with training programmes for early childhood development practitioners.

In schooling, the focus will need to be on negotiating a pact and mobilising popular support behind it. There will need to be professional support available to help underperforming schools develop and implement turnaround plans. There will need to be a broader approach to building capacity by training district officials, principals and teachers to address gaps in both subject knowledge and administrative skills. There will also need to be a focus on institutionalising the annual national assessments, and investigating and then introducing new incentive structures for teachers.

In further education and training, institutions will be strengthened by improving training for college lecturers, establishing satellite colleges and building new colleges where necessary. The mandates of SETAs should be clarified and given more focus, with their physical, financial and human resource capacity being developed to enable expansion. In higher education, attention will need to be focused on building the capacity and quality of the national system of innovation, as well as increasing the numbers of higher education staff qualified with PhDs. Extension of degrees to four years and support measures for undergraduate students, including a structured bridging programme, will need to be introduced.

Second five-year period

At the beginning of the second five-year period, an evaluation process must take place to inform decisions for the next phase. Activities from the first phase will continue, with focus on increasing enrolments in early childhood development, and further education and training, intensifying support for undergraduate students, and addressing funding issues in the national system of innovation and higher education.

Third and fourth five-year periods

All activities from the previous phases continue. The remaining proposals should be implemented during this phase, but attention should now focus on massively expanding enrolments in all parts of the education and training system including FET and higher education at both undergraduate and postgraduate levels.

Conclusion

Helping people to develop their skills and enhance their capabilities is an essential part of a sustainable strategy for tackling poverty. Education, training and innovation are central to this. Highly educated and trained individuals have much better chances in the labour market and a nation with highly educated citizens, particularly in science, engineering and technology, and the humanities is more competitive and will be able to participate in the knowledge-driven economy of the future. The national economy benefits when there is a critical mass of highly skilled people as the current skills shortages have raised the cost of many vital skills.

Chapter 10

PROMOTING HEALTH

"Health policy was once thought to be about little more than providing and funding medical care – only academics discussed the social determinants of health[1]. This is changing. While medical care can prolong survival and improve prognosis, the social and economic conditions that make people ill are critically important for the health of the population. Universal access to medical care is clearly one of the social determinants of health."[2]

Introduction

There are three major perspectives to be considered in assessing the South African national health system and offering recommendations to promote health and prevent and manage problems.

- Demographics and health – trends in demography, vital statistics and the burden of disease-specific morbidity and mortality.
- Health systems – issues such as health finance, workforce, infrastructure, information, technology and governance. This provides insight into the capacity of the health system to respond to challenges presented in the first perspective.
- The environmental/social determinant perspective, which involves the social and ecological determinants of health, including climate change and global trends.

Underpinning the national health system philosophy are two interlinked ideas: the equalising principles of primary health care and the decentralised, area-based, people-centred approach of the district health system. Primary health care emphasises globally endorsed but widely neglected values, such as universal access, equity, participation and an integrated approach. It emphasises the importance of prevention and using appropriate technology.

Primary health care principles continue to be important considerations for health policy-makers. South Africa has a long history of commitment to primary health care. The first

[1] The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system.
[2] Wilkinson RG and Marmot M (eds) (2003). *Social Determinants of Health: Solid Facts*. Geneva: World Health Organisation. Second Edition.

attempts to establish a community-oriented primary care approach, based on a network of decentralised health centres, dates back to the 1940s. Although these efforts were never fully realised because of apartheid policies, the importance was recognised in the African National Congress (ANC) National Health Plan of 1994. The key components of primary care include enhanced access to and use of first-contact care, a patient-focused (rather than disease-focused) approach, a long-term perspective, comprehensive and timely services, and home-based care when necessary.

According to the World Health Organisation, the six elements of the district health system include: service delivery, health workforce, health information, medical products, vaccines and technologies, sound health financing, and good leadership and governance. These elements aim to achieve better health outcomes in terms of equity and quality, responsiveness, social cohesion, financial risk protection and improved efficiency.

Attention throughout this chapter has been paid to measures which prevent ill health and death. In particular we focus on identifying the social determinants of disease as a critical prevention strategy.

Health promotion and wellness are also critical to the prevention and management of lifestyle diseases, in particular the major non-communicable diseases among the poor. These diseases are likely to be a major threat over the next 20-30 years and require careful attention.

The monitoring and prevention in the public health services of other common diseases such as breast and cervix cancers in women, and prostate and lung cancers in men, require more consideration by the state.

Government, aware of the deficiencies in many sectors, has recommitted itself to transformation. Government has adopted an ambitious outcomes-based strategy that seeks to improve the effectiveness in relaton to key national objectives. The formal i expression of this is in a national charter: The Negotiated Service Delivery Agreement, which reflects the commitment of key sectoral and intersectoral partners involved in the delivery of identified outputs to achieve a long and healthy life for all South Africans.

As part of this commitment, the national Department of Health's strategic plan for 2009 to 2014 adopted a "10 point plan" to improve the performance of the national health system. The department has identified four strategic outcomes for the health sector: increase life expectancy, decrease maternal and child mortality, combat HIV/AIDS and decrease the burden of disease from tuberculosis.

This chapter outlines the vision for health in 2030 and a set of quantifiable targets to be achieved. The vision is rooted in our analysis of the current challenges and proposed actions to overcome these.

Vision for health 2030

We envisage that in 2030, South Africa has a life expectancy rate of at least 70 years for men and women. The generation of under-20s is largely free of HIV. The quadruple burden of disease[3] has been radically reduced compared to the two previous decades, with an infant mortality rate of less than 20 deaths per thousand live births and an under-five mortality rate of less than 30 per thousand. There has been a significant shift in equity, efficiency, effectiveness and quality of health care provision. Universal coverage is available. The risks posed by the social determinants of disease and adverse ecological factors have been reduced significantly.

This vision will only be achievable if the major problems that currently exist in the three perspectives are addressed effectively.

Targets for 2030

Average male and female life expectancy at birth increased to 70 years as a consequence of progressive improvement in evidence-based preventive and therapeutic interventions for HIV

The achievement of this target requires the following:

- All HIV-positive individuals on ARVs
- Consistent condom use
- Effective microbicide routinely available to all women 15 years and older
- Universal availability to pre-exposure prophylaxis with ARVs.

As a result, mother-to-child HIV transmission rates should drop below 2 percent nationally, and new HIV infections reduced more than four times among young women aged between 15 and 24 years in the period leading to 2030. To monitor progress, health authorities should set mid-term targets towards the 2030 objectives.

Progressively improve tuberculosis prevention and cure

Progress should be monitored by tracking the following indicators:

- Tuberculosis rates among adults and children compared with global targets for sputum conversion
- Successful treatment completion
- Progressive decline in latent infection rate among school-age children
- Tuberculosis contact indices decrease
- Number of latently infected people receiving six months isoniazid treatment – first-line antituberculosis medication in prevention and treatment.

[3] Refers to four disorders that contribute mostly to morbidity and mortality in South Africa namely, HIV/AIDS, Tuberculosis and sexually transmitted diseases maternal and child mortality, non-communicable diseases, and violence, injuries and trauma.

Reduce maternal and child mortality

- Reduce maternal mortality from 500 to less than 100 per 100 000 live births
- Reduce infant mortality from 43 to below 20 per 1 000 live births
- Reduce under-five child mortality from 104 to below 30 per 1 000 live births.

Reduce prevalence of non-communicable chronic diseases by 28 percent

- Cardiovascular diseases
- Diabetes
- Cancer
- Chronic respiratory diseases.

Risk factors linked to these non-communicable diseases include tobacco smoking, physical inactivity, raised blood pressure, raised blood glucose, obesity, and raised cholesterol.

Reduce injury, accidents and violence by 50 percent from 2010 levels

- Motor vehicle accidents
- Violent crimes
- Inter-personal violence
- Substance abuse.

Factors to monitor and control include roadworthiness of vehicles, driver behaviour, alcohol and substance abuse, gender based violence, access to firearms and weaknesses in law enforcement.

Complete health systems reforms

- There is a a revitalised and integrated health system
- Evidence-based public and private health delivery system
- Clear separation of policy making from oversight and operations
- Authority is decentralised and administration devolved to lowest levels
- Clinical processes are rationalised and there is systematic use of data incorporating community health, prevention and environmental concerns
- Infrastructure backlogs addressed including greater use of ICT.

Primary health care teams provide care to families and communities

- Primary health care teams are established throughout the country with requisite complement of doctors, specialists, physicians and nurses
- Each household has access to a well-trained community health worker
- Schools receive health education provided by teachers and primary health care teams

- Primary health care teams have adequate resources for the services they need to deliver.

Universal health care coverage

- Everyone has access to an equal standard of care regardless of their income
- A common fund enables equitable access regardless of what people can afford to pay or how frequently they need to make use of health services.

Fill posts with skilled, committed and competent individuals

- Increase capacity to train health professionals
- Train more health professionals to meet the requirements of the re-invigorated primary health care system
- Link training of health professionals to future diseases, especially different categories of non-communicable diseases
- Follow the lead of the Municipal Systems Act 2000 (as amended) and set procedures and competency criteria for appointments of hospital managers
- Set clear criteria for the removal of underperforming hospital managers.

The challenge

Challenges in the health system fall under three broad perspectives: demographics and health, health systems, and social determinants and ecology.

Demographics and health

The health challenges facing South Africa are well known. The country faces a quadruple burden of disease (HIV/AIDS and related diseases such as tuberculosis; sexually transmitted diseases; maternal and child morbidity and mortality; violence and injuries and many non-communicable diseases mainly related to lifestyle). In 2007, South Africa represented 0.7 percent of the world's population, but accounted for 17 percent (about 5.5 million people) of the global number of HIV infections. Life expectancy declined from 1994 to 2009, from about 54.12 years to 53.9 years for men and from 64.38 years to 57.2 years for women. South Africa is also one of very few countries in which maternal and under-five child mortality have increased since 1990.

In 2000, the leading causes of morbidity in terms of disability-adjusted life years[4] lost were: HIV/AIDS (31 percent), interpersonal violence (7 percent), tuberculosis (4 percent), road traffic injury (3 percent) and diarrhoeal diseases (2.9 percent). The leading risk factors were: unsafe sex (32 percent), interpersonal violence (8 percent),

[4] An index that measures the disease burden in terms of the number of years lost due to disease, disability and morbidity.

alcohol harm (7 percent), tobacco smoking (4 percent) and excess bodyweight (2.9 percent).

Trends in death notifications increased rapidly, doubling over a decade to 700 000 per year by 2008. This trend was most serious among infants and young women, trebling in the 0-4 and 30-34 age groups to nearly 60 000 per year over the same period, mostly due to HIV. It has also contributed to the mortality of men, particularly in the 35-39 age group. In young men, there was also a sustained increase in excess mortality due to injury. Communicable diseases such as tuberculosis escalated, imitating the HIV epidemic, with an up to six-fold increase of death rates among young women and four-fold increase in young men. There was also a similar rise in non-communicable disorders, such as cardiovascular disease, and predisposing factors such as obesity, hypercholesterolemia (abnormally high levels of blood cholesterol) and diabetes mellitus. As a result, it is likely that cardiovascular disease will become an increasing, if not the leading, cause of death by 2030.

Evidence points to a decline in unsafe sex, resulting largely from the increase in condom use among youth. Safe sex and the widespread adoption of antiretroviral treatment suggest that the increasing prevalence of HIV has begun to level off and may significantly decline by 2030. Interpersonal violence, however, is not showing signs of long-term decline. It is about twice the global average and particularly severe among women – the homicide rate of intimate partners is six times the global average. Road traffic accidents contributed to about a quarter of all injury-related deaths in 2000 and continue to rise. These risks are exacerbated by social determinants, such as widespread poverty, unemployment and income inequality; patriarchal notions of masculinity that emphasise toughness, risk-taking, and defence of honour; exposure to abuse in childhood and weak parenting; access to firearms; widespread alcohol misuse; and weaknesses in law enforcement.

There has been an encouraging decline in the prevalence of self-reported tobacco smoking by over 40 percent since 1995, which is expected to continue. However, diet-related non-communicable ailments such as obesity, diabetes and cardiovascular disease account for a large proportion of South Africa's disease burden and may rise further, especially among poorer African women. Studies have shown that dietary transition is linked to increases in non-communicable diseases as a result of increased intake of foods high in sugar, salt and trans-fats. There have been marked changes in diet among the majority black African population in South Africa, with a rapid transition from a "traditional" diet based predominantly on unrefined maize with vegetables and occasional animal protein, to a diet consisting largely of refined and processed foods with high concentrations of sugar and salt.

In South Africa, 25 percent of the country's health care spending is devoted to cardiovascular disease. The World Health Organisation estimates suggest that non-communicable diseases have caused 28 percent of South Africa's total disease burden. Although there are no reliable calculations of costs incurred by non-communicable

diseases in South Africa, comparative data from other middle-income countries suggest that total costs are very high, as are costs imposed on the health sector.

Childhood malnutrition is another major challenge affecting many children (see section on early childhood development in Chapter 9 dealing with improving education, training and innovation).

Health systems

The overall performance of the health system since 1994 has been poor, despite the development of good policy and relatively high spending as a proportion of GDP. Services are fragmented between the public and private sectors, which serve 83 percent (41.7 million) and 17 percent (8.3 million) of the population respectively. Imbalances in spending between the public and private sector have skewed the distribution of services, which has been detrimental to both sectors and has led to cost escalation. Evidence suggests multiple system failure across a range of programmes, including maternal and child health, HIV/AIDS, tuberculosis and others, with a devastating combined impact. At the heart of this failure is the inability to get primary health care and the district health system to function effectively.

The fundamental importance of full community participation and the role of civil society has been underplayed and the focus on "people first – Batho Pele" has diminished. The culture of valuing and respecting the expressed needs of communities has faded, replaced by a top-down approach. The health system is fractured, with pervasive disorder and multiple consequences: poor authority, feeble accountability, marginalisation of clinical processes and low staff morale. Centralised control has not worked because of a general lack of discipline, inappropriate functions, weak accountability, lack of adherence to policy, inadequate oversight, feeble institutional links between different levels of services (especially hospitals) and defensive health service levels increasingly protective of turf and budgets.

Good policies are frequently not implemented in remote health facilities and district facilities, partly due to weaknesses in the relationships between medical staff and their patients. The essential values of primary health care have either not been practised or given low priority. Many health professionals have become less concerned about carrying out their responsibilities and duties to their patients, their profession and society, than about personal benefits such as pay and working conditions. Resources have been inequitably distributed and crises and curative services are responded to rather than prevented.

To address these issues, in 2009 the Department of Health recommitted itself to a revitalised primary health care approach based on a reinvigorated district health system.

A comprehensive health service requires that primary and district health systems are linked to regional and central hospitals. Given that the core business of the health sector

is clinical services that are both preventative and curative, it is important to provide the necessary environment for this to take place. This means the bureaucratic process needs to support the clinical process, and not operate at the expense of the clinical process as it does at the moment. The integrated management team should ideally be led by a practising clinician, particularly at the level of health care delivery. Critical to this management model is decentralisation of authority with enhanced budgetary control.

Social determinants and ecology

The weaknesses in South Africa's health systems are exacerbated by the burden imposed by multiple epidemics of communicable and non-communicable diseases. Health and health services have been shaped by powerful historical and social forces, such as vast income inequalities, poverty, unemployment, racial and gender discrimination, the migrant labour system, the destruction of family life and extreme violence. Progressive policies were formulated in the first years of the democratic dispensation and the public health system was transformed into an integrated, comprehensive national health system. However, poor leadership, inconsistent management and inadequate capacity meant that implementation and health outcomes fell short of expectations. There was a misguided attempt to change everything simultaneously, when many aspects of the system were not faulty. There are crucial issues that have never been satisfactorily addressed, such as the substantial human resources crisis facing the health sector and massive unemployment.

It is internationally recognised that societal risk conditions are more important than individual risk factors in the spread of a disease. The World Health Organisation Commission on the Social Determinants of Health report, made three major recommendations that are especially relevant for South Africa given the challenges we face:

- Improve the conditions of daily life – the conditions in which people are born, grow, live, work, and grow old.
- Tackle the inequitable distribution of power, money, and resources – the structural causes of those conditions of daily life – globally, nationally, and locally.
- Measure the problem, evaluate action, expand the knowledge base, develop a workforce trained in the social determinants of health, and raise public awareness.

Critical actions

In this chapter we propose actions around seven broad areas that are central to the attainment of the vision and targets set out earlier. They are: addressing the social determinants affecting health and disease; strengthening the health system; preventing and reducing disease burdens and promoting health; financing the health system; improving quality by using evidence; addressing human resources issues; and implementing effective partnerships in the health sector.

Address the social determinants affecting health and disease

The 2008 World Health Organisation Commission on Social Determinants of Health, *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health*, provides action areas that are used to guide the proposals below.

Implement a comprehensive approach to early life

Efforts should build on existing child survival programmes and extending interventions in early life to include social/emotional and language/cognitive development. Detailed proposals are presented in the early childhood development part of this plan.

Collaboration across sectors

The health sector should engage with partners and departments to ensure that the negative impact of other policies on health outcomes is understood and minimised, while promoting policies that result in positive health outcomes.

The linkages between policies dealing with human settlements, urban planning and urban design, transport, basic services, education, energy, trade, agriculture and food security, rural development, social protection, and neighbourhood policing should be fully assessed and understood, and their design should take into account their impact on health.

Poverty is a significant health determinant. Successfully addressing poverty will have a positive impact on the nation's health.

Promote healthy diets and physical activity

We need to ensure that there is a lifestyle change in behaviour in South Africa, with healthier diets and more exercise. The best place to instil this culture is at school.

We propose that by 2020:

- Physical education should be compulsory in all schools.
- Every primary and high school in South Africa should employ a qualified physical education teacher.
- Every primary and high school should have access to adequate facilities to practice school sport and physical education.
- All schools should be supported to participate in organised school sport activities at local, district, provincial and national level.
- Health department officials should conduct regular visits to schools in which healthy dietary practices are taught and encouraged.

To ensure that a culture of wellness is also established in communities and at work, we propose that by 2025:

- Every ward across the country should have adequate facilities for communities to participate in basic exercise and sporting activities.
- Employers should be incentivised to provide opportunities to employees to engage in physical exercise and to have access to information about healthy dietary practices.

Strengthen the health system

The Development Bank of Southern Africa facilitated a consultative process to draw up a roadmap for health in 2008. Its main recommendations were to:

- Establish a coherent and vision-based executive decision-making process.
- Promote quality, including measuring and benchmarking actual performance against standards for quality.
- Define an appropriately specialised, more accountable operational management model for health service delivery, including revised roles and responsibilities for the national department, provinces, districts and public hospitals. This should also cover governance and capacity requirements.
- Bring in additional capacity and expertise to strengthen a results-based health system, particularly at the district level. This should include revised legislation to make it easier to recruit foreign skills, partnerships between the private and public sector, deployment and training for district health management teams.
- Implement a national health information system to ensure that all parts of the system have the required information to effectively achieve their responsibilities.
- Establish a human resource strategy with national norms and standards for staffing, linked to a package of care.
- Develop an implementation strategy and partnerships to leverage funding, increase health sector efficiencies and accelerate implementation of the national strategic plan.

We agree with these recommendations and support the Minister of Health's efforts to implement them. In addition, we propose that the following be given attention to strengthen health systems.

Leadership and management

Health services need to be revitalised so that they are specifically directed to patient needs. To improve services for communities and patients, roles and responsibilities need to be revised for the national department, provinces, districts, public hospitals and primary health care facilities. National, provincial and district organisational structures should also be reviewed to better support the renewed focus on primary health care. Technical capacity at national and provincial level should be strengthened to provide overall guidance on activities that improve levels of health, such as effective implementation, monitoring and assessments of policies, as well as active engagement

in the community to address social and economic factors that act as barriers to achieving good health.

Functional competence and commitment to quality service need to be a priority. Communication and coordination mechanisms should be improved within departmental spheres, across clusters and with private partners to prevent "silo" funding and operation.

Accountability to users

There should be an effective governance and management framework from national to local levels with emphasis on user/community-level accountability. Centralised guidance, technical support and monitoring should be aligned with responsibility and effective decision-making that are devolved and decentralised. Greater attention should be given to collaboration within and between national, provincial and district or local strategies and plans. Appropriate delegations can consolidate the responsibilities of chief executive officers and district managers.

Additional capacity and expertise

To strengthen a results-based health system, particularly at district level, partnerships with the private and non-profit sectors need to be boosted. Mentors and trainers should be used to improve capacity in district health management, health clinics and hospitals, and community-based outreach primary health care. The key focus of the training and mentorship should be on rolling out best practice.

Office of Standards Compliance

Maximum support is needed for the Office of Standards Compliance in promoting quality, including measuring, benchmarking and accrediting actual performance against standards for quality. There should be a specific focus on achieving common basic standards in the public and private sectors.

Health information systems

Several actions are needed to achieve maximum potential synergy between national, district, facility and community health information systems:

- Credible data is necessary to inform decision-making and regular monitoring across the system. The development and management of effective data systems should be prioritised.
- The national health information system should seamlessly integrate with the provincial, district, facility and community-based information systems. These systems should link to secure online electronic patient records and other data structures, such as financial, pharmacy, laboratory and supply chain management

systems. It should also link with other government, private sector and non-profit databases.

- Establish national standards for integrating health information systems. Challenges experienced in integrating data between differing software and financial systems highlight the importance of establishing national standards for health data.
- There should be regular independent data quality audits, possibly by the Office of Standards Compliance.
- Develop human resources for health information. The national health information system skills audit highlighted the need for continuing training and development of staff in this field to replace existing ad-hoc training.
- Strengthen the culture of information use. At community level, mobile phones (m-health systems) can improve community-based data collection by professional teams, including community health workers, to make reliable data instantly available. At facility level, the flexibility of the district health information system software should allow data to be added according to local need, to track and monitor local priorities.
- Accommodate expansion of data reporting through an innovative approach. The increasing demands on health workers for data should be addressed through a structured approach using sentinel sites; complementary use of routine data and regular inexpensive annual facility surveys to update basic information data on staff, infrastructure, equipment, maintenance, and other information that does not change often. A national task team should discuss, revise and approve the national information data system every two years, encouraging districts and provinces to take part and make submissions. Two areas requiring urgent incorporation into the data system are reports on human resources and finances.
- Improved access to digital information should focus increasingly on web-based and mobile data entry and retrieval linked to the existing district health information system, which should be continuously and incrementally modernised.
- Invest in improving data quality. This depends on the continuing allocation of full-time staff at national and provincial level, as well as commitment from district information officers and supervisors.

Prevent and reduce disease burdens and promote health

Although it is important to provide comprehensive care, particularly quality primary health care and community outreach, there is a need to have an integrated focus on three main interventions to reduce the major disease burdens.

- Prevent and control epidemic burdens through deterring and treating HIV/AIDS, new epidemics and alcohol abuse.
- Improve allocation of resources and availability of health personnel in the public sector.
- Improve health systems management by improving calibre of care, operational efficiency, devolution of authority, health worker morale and leadership and innovation.

Financing the health system

In 2005, the World Health Assembly passed a resolution on sustainable health financing, universal coverage and social health insurance. The resolution noted a wide mix of financing mechanisms across countries, but asked countries to commit to progressively extending a pre-payments system. This measure was aimed at increasing security of services, protecting against financial risk, preventing catastrophic health expenditure and moving towards universal systems.

Health system typologies

Occasionally, policy-makers and countries relook at the long-term direction and nature of their health systems and chart a fundamentally different approach for the road ahead. South Africa is at such a juncture, where the proposals for a national health insurance (NHI) system represent a profound break with the past and the potential evolution of a substantially different system. Changes we make now may set the foundations for a new health system for the next 50 years.

South Africa has a transitional or pluralist health system, consisting of a tax-funded health system for the majority and a system of medical schemes for a relatively small proportion of the population (17 percent, 8.3 million beneficiaries).[5] However, given the large inequities in income, spending within the private system amounts to about half of total health spending. This high level of spending in the private sector attracts scarce skills away from the public sector: a large proportion of South Africa's specialists, pharmacists, dentists, optometrists and physiotherapists work in the private sector. South Africa's level of public health spending (4.1 percent of GDP) is fairly average in global terms, but its high level of HIV/AIDS and burden of disease[6] gives the country an additional cost burden that has been estimated at around 0.7 percent of GDP.[7]

It is unusual for middle-income countries to spend more than 6 percent of GDP on health, while countries with higher income, such as the United Kingdom, spend about 8 percent of GDP on health services. As countries become more developed and richer, their health systems and financing systems typically move away from these transitional systems towards more universal systems, in which a large proportion of health funding is public. In advanced countries, there are three main types of health system:

- National health service: United Kingdom, Spain and Sweden. Services are predominantly tax funded and delivery is mainly through the public sector.
- National health insurance: Financing is predominantly public, but delivery is typically by a mix of public and private providers. There is a range of sub-options

[5] Council for Medical Schemes (2010). *Annual Report 2010/11*. Pretoria: Council for Medical Schemes.
[6] World Health Organisation (2009). *Mortality and burden of disease estimates for WHO member states 2004*. Geneva: World Health Organisation.
[7] Guthrie T, Ndlovu N, Muhib F and Hecht R (2010). *The long run costs and financing of HIV/AIDS in South Africa*. Cape Town: Centre for Economic Governance and AIDS in Africa Cape Town.
Haaker M (2011). *Fiscal implications of HIV/AIDS in South Africa*. Washington: World Bank.

here, but one of the main differences lies between the single-payer models (Australia and Canada) and the multi-payer models, which typically emerge and build on occupational social health insurance scheme arrangements (Holland and Germany).

- Private health insurance: The United States model of private health insurance is generally considered one of the most expensive and inefficient, and is being reviewed under the Obama health reforms.

When social insurance systems reach universal coverage, the distinctions between health insurance and health service systems may become blurred. In South Africa, the term NHI may be open to misinterpretation, as it will not be a typical insurance system. It will be predominantly based on public provision at first, and mainly funded through general tax revenues.

Evolution towards NHI

NHI is a common end-point for health financing reforms across the world and over 100 countries either have or are moving towards such systems. In many countries, NHI has evolved over decades through the progressive elaboration of social health insurance. As economies strengthen and a growing proportion are employed in the formal sector, a relatively low percentage of remaining uninsured people are subsidised to bring the entire population into the insurance system. South Africa is working towards this objective of achieving universal coverage. This approach has to be tailored to the South African context:

- Progressive inclusion of private providers into the publicly funded system is likely to be much more gradual given their substantially higher unit costs. The Green Paper already talks of a transition of 14 to 15 years. In the early years, the system will have to focus substantially on strengthening the public health service, similar to a national health service-type system.
- The system will involve substantial cross-subsidisation in the early decades, due to high levels of unemployment and income inequality.

South African health financing numbers

South Africa will spend about 8.7 percent of GDP on health services in 2011/12 (R255 billion), of which about 4.2 percent (R122 billion) will be in the public sector, 4.3 percent through private financing streams (R126 billion) and 0.2 percent through donors. The largest public stream is through provincial departments of health (3.8 percent of GDP) and the largest private stream is through medical schemes (3.6 percent of GDP).

Health expenditure in SA public and private sectors

Rand million	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Annual real % change 07/08 -13/14
Public sector								
National Department of Health Care	1,210	1,436	1,645	1,736	1,784	1,864	1,961	2.2
Provincial departments of health	62,582	75,120	88,593	98,066	110,014	119,003	126,831	6.1
Defence	1,878	2,177	2,483	2,770	2,961	3,201	3,377	4.0
Correctional services	261	282	300	318	339	356	374	0.1
Local government (own revenue)	1,625	1,793	1,829	1,865	1,977	2,096	2,221	9.4
Workmens Compensation	1,287	1,415	1,529	1,651	1,718	1,804	1,894	0.6
Road Accident Fund	764	797	740	860	980	1,029	1,080	-0.1
Education	1,833	2,134	2,350	2,503	2,653	2,812	2,981	2.2
Total public sector health	71,439	85,154	99,468	109	122,427	132	140,721	5.6
Private sector				769		165		
Medical schemes	65,468	74,089	84,863	96,482	104,008	112,120	120,866	4.4
Out of pocket	14,694	15,429	16,200	17,172	18,202	19,294	20,452	-0.3
Medical insurance	2,179	2,452	2,660	2,870	3,094	3,336	3,596	2.5
Employer private	1,041	1,172	1,271	1,372	1,479	1,594	1,718	2.5
Total private sector health	83,383	93,141	104,994	117,896	126,783	136,344	146,632	3.6
Donors or NGOs	3,835	5,212	6,319	5,787	5,308	5,574	5,852	1.2
Total	158,657	183,507	210,781	233,4 52	254,518	274,083	293,205	4.4
Total as % of GDP	7.6	7.9	8.6	8.8	8.7	8.6	8.3	
Public as % of GDP	3.4	3.7	4.1	4.1	4.2	4.0	4.0	
Public as % of total government expenditure (non-interest)	13.9	14.0	13.8	14.1	14.7	14.7	14.6	
Private financing as % of total	52.6	50.8	49.8	50.5	49.8	49.7	50.0	
Public sector real rand per capita 10/11 prices	2,131	2,300	2,512	2,635	2,766	2,812	2,816	4.8
Public per family of four per month real 10/11 prices	710	767	837	878	922	937	939	4.8

The next table compares South Africa with a selection of middle-income countries using World Health Organisation data.[8] Using 2007 data, South Africa's public spending on health services was close to the global average (3.2 percent for upper-middle income countries). Upper-income countries spent on average 6.1 percent of GDP on publicly funded health services. However, the government share of the total in South Africa (41.4 percent) was significantly below average (55.2 percent for middle-income countries and 62 percent for upper-income countries), meaning that health spending in South Africa is more unequal than in most other middle-income countries.

[8] World Health Organisation (2010). *World Health Statistics 2010*. Geneva: World Health Organisation.

Government health expenditure in selected middle-income countries

Country	GDP per capita (current US$)	Gov health expenditure as % of GDP		Per capita gov health expenditure (PPP int $)		Total health expenditure as a % of GDP		Gov health expenditure as % of total health expenditure		Life-expectancy
	2007	2000	2007	2000	2007	2000	2007	2000	2007	2008
Chile	9,877	3.4	3.6	320	507	6.6	6.2	52.1	58.7	79
Mexico	9,741	2.4	2.7	236	372	5.1	5.9	46.6	45.4	75
Russia	9,146	3.2	3.5	247	512	5.4	5.4	59.9	64.2	68
Turkey	8,865	3.1	3.5	272	467	4.9	5.0	62.9	69.0	72
Venezuela	8,252	2.4	2.7	199	324	5.7	5.8	41.5	46.5	74
Uruguay	7,206	6.1	5.9	500	678	11.2	8.0	54.6	74.0	76
Brazil	7,185	2.9	3.5	202	348	7.2	8.4	40.0	41.6	72
Malaysia	7,028	1.7	2.0	159	268	3.2	4.4	52.4	44.4	74
Argentina	6,604	5.0	5.1	452	671	9.0	10.0	55.5	50.8	75
Botswana	6,545	2.7	4.3	218	568	4.4	5.7	61.0	74.6	54
South Africa	5,933	3.4	3.6	223	340	8.5	8.6	40.5	41.4	51
Costa Rica	5,891	5.0	5.9	360	656	6.5	8.1	76.8	72.9	79
Namibia	4,216	4.2	3.2	174	196	6.1	7.6	68.9	42.1	61
Peru	3,771	2.8	2.5	134	191	4.7	4.3	58.7	58.4	73
Thailand	3,689	1.9	2.7	89	209	3.4	3.7	56.1	73.2	69
China	2,651	1.8	1.9	42	104	4.6	4.3	38.7	44.7	73
Morocco	2,373	2.0	2.3	32	68	4.2	5.0	46.6	45.4	71
Nigeria	1,123	1.5	1.7	20	33	4.6	6.6	33.5	25.3	48
India	1,096	1.1	1.1	16	29	4.4	4.1	24.5	26.2	64
Vietnam	804	1.6	2.8	23	72	5.4	7.1	30.1	39.3	74
Low income		1.8	2.2	14	28	4.7	5.3	37.6	41.9	
Lower middle-income		1.6	1.8	35	76	4.4	4.3	37.0	42.4	
Upper middle-income		3.2	3.5	243	419	6.2	6.4	52.0	55.2	
High income		6.1	6.9	1,631	2,492	10.2	11.2	59.4	61.3	

Government spends about R922 per month on health services per family of four, which is roughly 14.7 percent of the main budget (excluding interest costs). A similar family covered by a medical scheme spends between four and five times as much per month. South Africa has not quite met the Abuja declaration health spending target of 15 percent of government spending.

Health financing system components

Although the broad description of a national health system is important, of more significance are the detail and design of the financing system through which varied options emerge. The costs of NHI depend on the type of system, for example, the nature and type of benefits, the extent to which private providers (private hospitals) are used, the nature of reimbursement mechanisms, how much purchasing is active or passive, the degree of genuine competition, the relative power of purchasers and providers, usage levels of services and how successfully demand is managed.

Revenue collection
Sources of funds: households, firms, government, donors (tax base)

Mechanisms of health care financing/contribution mechanisms: (type of revenue stream)

- Tax – direct/indirect, personal income tax, value added tax, borrowing
- Social insurance, NHI
- Private insurance, medical schemes
- User fees – out of pocket
- Community financing
- Donations/grants.

Types of collecting agency: Government, parastatal, private

Pooling
Risk pools

- Coverage and composition of risk pools and degree of fragmentation
- Number and nature of purchasing authorities.

Resource allocation

- Degree to which need based (risk equalised)
- Needs-based resource allocation formulae (e.g. risk-adjusted capitation).

Purchasing

- Transfer of pooled funds to providers
- Active vs passive purchasing; contracting; information systems
- Benefit package
- Budgeting, allocative efficiency
- Payment mechanisms.

The rough cost estimates provided in the Green Paper on the NHI are briefly portrayed in the table below. Public health spending will increase from R100-R110 billion at baseline to R255 billion in real terms by 2025 (R574 billion in nominal terms). As a percentage of GDP, this is an increase from about 4.2 percent to 6.2 percent.

However, the actual costs will vary depending on the way in which the NHI is implemented, and wider health system isssues, such as increasing the supply of doctors.

Green Paper cost estimates of NHI

R million	Real					Nominal				
	Baseline narrow*	Baseline broad	NHI	Gap1	Gap 2	Baseline narrow*	Baseline broad	NHI	Gap1	Gap 2
10/11	99 802	109 769			99 802	109 769				
11/12	106 171	116 265			111 798	122 427				
12/13	109 006	119 196	125 359	16 353	6 163	120 867	132 165	140 279	19 412	8 114
13/14	110 099	120 295	134 763	24 664	14 467	128 793	140 721	159 523	30 731	18 803
2,014	111 199	121 498	144 408	33 209	22 910	136 520	149 164	180 826	44 305	31 662
2,015	112 311	122 713	156 196	43 885	33 483	144 711	158 114	203 993	59 282	45 880
2,016	113 435	123 940	166 726	53 291	42 785	153 394	167 601	229 654	76 260	62 053
2,017	114 569	125 180	177 666	63 097	52 486	162 598	177 657	258 165	95 567	80 508
2,018	115 715	126 432	189 083	73 368	62 651	172 353	188 316	289 932	117 578	101 616
2,019	116 872	127 696	200 966	84 095	73 270	182 695	199 615	325 278	142 583	125 663
2,020	118 040	128 973	213 636	95 596	84 663	193 656	211 592	365 124	171 468	153 532
2,021	119 221	130 263	227 097	107 876	96 834	205 276	224 287	409 974	204 698	185 687
2,022	120 413	131 565	236 001	115 588	104 436	217 592	237 745	449 847	232 255	212 103
2,023	121 617	132 881	245 284	123 667	112 403	230 648	252 009	493 773	263 125	241 764
2,024	122 833	134 210	254 987	132 153	120 777	244 487	267 130	542 236	297 750	275 107
2,025	124 062	135 552	255 815	131 754	120 264	259 156	283 158	574 362	315 206	291 204

* Narrow refers to national provincial Departments of Health

Broad includes all other health-related services in other departments and entities

The financing of a health care system does not depend solely on its cost projections. It is subject to many other factors, such as relative prioritisation of different sectors (health services versus education, income support, infrastructure, job creation), the overall fiscal stance of the country, its economy, the ability of the sector to convincingly show value for money and political choices.

Examining international comparisons suggests that certain countries provide inadequate levels of funding for health services. For example, in India, until fairly recently, the level of public sector health funding was close to 1 percent of GDP, despite very high levels of maternal and child mortality. At the other end of the spectrum, poorly conceived health systems can bankrupt companies and governments. The United States health care system costs close to 14 percent of GDP, yet many people are uncovered and the country has comparatively poor health outcomes. In Germany, mandatory contributions cost 15 percent of payroll and have, at times, been considered unaffordable for the country and the economy. Cost spirals in health systems are easily set off and can be very difficult to control. It is important to design health systems with long-term sustainability.

Cost controls

Many mechanisms need to be put in place within health systems to improve efficiency and control costs. For example, primary care gate-keeping; demand management strategies such as appropriate self care, user fees; rationing, diagnostic and therapeutic protocols, preferred providers; managed care; reimbursement strategies (capitation or

global budgets instead of fee-for-service) and others. The *World Health Report*[9] estimated that between 20 percent and 40 percent of health spending globally is wasted through inefficiency and made diverse recommendations for greater efficiency.

Financing mechanisms

Distinct financing mechanisms could be used to generate funds for the health system and for NHI. Some common financing mechanisms for health care internationally include:

- Tax – direct/indirect, personal income tax, value added tax, borrowing
- Social insurance, NHI – often via proportional payroll contributions/taxes
- Private insurance; medical schemes
- User fees – out of pocket
- Community financing
- Donations/grants.

Typical criteria used for assessing financing mechanisms are: feasibility, effectiveness, efficiency, equity, sustainability, structuring of contributions (which can be more progressive or regressive depending on the model used), extent of coverage, and fiscal decentralisation versus centralisation.

General tax income

General tax revenue is a source of financing for health care in many countries, particularly in countries with advanced national health service systems (the United Kingdom, Sweden, Spain and Italy). Types of taxes that underlie general tax income include personal income tax, value added tax and company tax. Taxes on alcohol and tobacco also contribute to the general revenue pool.

General taxation tends to be effective and equitable. In South Africa, the South African Revenue Service is a competent national revenue authority. Personal income tax is a particularly progressive form of raising revenue as the level of income determines the amount of the contribution, with the poorest not being taxed. It is therefore more progressive than collecting comparable resources through NHI contributions as these are based on fixed contributions according to the requirements of the NHI and not by income. Value added tax is a key source of general tax in most countries. In many countries with universal health care systems, value added tax is at a higher level than in South Africa. However no firm decision has been taken on including VAT as an additional source of funding for the NHI.

[9] World Health Organisation (2010). *The World Health Report: health systems financing: the path to universal coverage*. Geneva: World Health Organisation.

Private health insurance

Private health insurance is not an effective system for providing universal health care financing because it is voluntary, uses risk rating meaning that some people may be excluded from access or charged prohibitive fees, excludes many persons and because contributions are not linked to income.

South Africa's medical schemes are not typical private health insurance vehicles, and have already been through several sets of reforms. They are non-profit entities and risk rating is prohibited.

Medical schemes in South Africa are a well established financing mechanism used by 8.3 million beneficiaries. Government itself has three schemes for government workers – the Government Employees Medical Scheme is the second largest medical scheme in the country, with 1.4 million beneficiaries and annual contributions of R13.2 billion. Occupationally linked restricted medical schemes cover 3.1 million beneficiaries and have gross contributions of R37 billion in 2010/11.[10]

Social health insurance

Private health insurance contributions are voluntary, often risk rated and not linked to income, while social insurance contributions are typically mandatory, income linked (typically as a percentage of income) and not risk rated. They are therefore more progressive than private schemes, although they typically provide a more limited set of benefits.

Payroll taxes

In some countries, NHI is funded predominantly through payroll taxes. However, once coverage becomes universal, the advantages of payroll taxes against general taxes become less significant and the more progressive nature of general taxes make them a preferable revenue-raising instrument.

User fees

Out-of-pocket payments are a regressive form of health financing and can seriously detract from access to health services. The World Health Organisation recommends that out-of-pocket payments should not constitute more than 15 to 20 percent of health financing revenue,[11] advising that the risk of catastrophic health expenditure where health costs seriously damage a households financial situation becomes minimal below these levels. In South Africa, user fees contribute about 8 percent of revenue, mainly for

[10] Council for Medical Schemes, 2010.
[11] World Health Organisation, 2009.

private services. The public sector derives only 1.8 percent of its expenditure from revenue and has exemptions for various groups.

Although user fees should not be a major component of health care financing, it is not yet clear where they should be applied. One view is that there should be no user fees at all (except for minimal exceptions such as non-South Africans, services outside the package). Another view is that user fees do have some role in controlling unnecessary demand for discretionary services, and this can be designed to avoid catastrophic health expenditure (defined as more than 10 percent of household income).

We support the broad principle of universal coverage outlined in the Green Paper on NHI and the process under way in government to investigate the most appropriate mechanisms for financing NHI to achieve universal coverage. The success of national health insurance will depend on the functioning of the public health system. The commission supports attempts to improve how the health system operates, starting with the auditing of facilities.

Measures also need to be put in place to reduce inefficiencies in the private health sector to reduce costs. This includes revisiting the Health Professions Council's decision to bar private hospitals from employing doctors. This decision has led to a private hospital model in which hospitals use incentives to attract doctors and specialists to establish practices within hospital premises.[12] Hospitals invest in infrastructure and equipment to attract doctors and generate demand for doctors' services by referring patients, while doctors generate demand for hospital beds. This model leads to over-servicing that drives the cost of private health care.

Human resources in the health sector

There is a disparity in the distribution of health personnel, driven by differences in service conditions between the public and private sectors. This issue is linked to the funding of health. There are further difficulties in planning for human resource development, because the PERSAL system in the public sector and the health council registration system in the private sector are not providing accurate statistics. The commission proposes a number of actions to overcome the human resources challenges at different levels of the health sector.

Community-based health care

A core component of the re-engineering primary health care strategy is the proposal to place much greater emphasis on population-based health and health outcomes. This includes a new strategy for community-based services through a primary health care outreach team, based on community health workers and using advocacy on major

[12] Matsebula T and Willie M (2007). 'Private Hospitals' in Harrison S, Bhana R and Ntuli A (eds) *South African Health Review*. Durban: Health Systems Trust.

health campaigns such as the provision of health information and responding to issues identified by communities.

Community health workers can successfully undertake a range of interventions in maternal, neonatal and child health (MNCH), as well as acute and chronic disease management. Although community health workers' activities in South Africa have been limited to a few areas, especially HIV/AIDS care and prevention, community workers are performing a wide range of tasks in a growing number of countries , especially in relation to maternal, neonatal and child health. Research has accumulated evidence of the effectiveness of community health workers in providing comprehensive health care, including treatment of common, acute, mainly childhood illnesses.

Policies permitting community-level workers to use antibiotics to treat pneumonia have been controversial, because health professionals are concerned that antibiotics might be misused or over-used. However, in Ethiopia and Nepal, the quality of care has remained high. Supportive national policies are needed to allow community health workers to administer antibiotics for specific childhood diseases, along with strengthened regulatory and quality controls for the distribution and appropriate use of antibiotics.

Community health workers have been successful in various capacities, from approaches that emphasise community-controlled, part-time workers (Thailand, Rwanda) to those where community health workers are formal members of sub-district health teams (Iran, Brazil). In all the countries where community health worker programmes enjoy success, community participation occurs through structures that are integrated into the wider health system.

The number of tasks a community health worker can reasonably perform depends on a variety of factors, the most important being the ratio of community health workers to families, the duration and quality of their training, and the extent and quality of their supervision.[13] The Re-engineering Primary Health Care policy proposes six community health workers for each primary health care outreach team, each community health worker covering 250 households, or about 1 000 people. Lessons learned from low- and middle-income countries suggest that the necessary ratios for community health workers to families should be as many as 1:500 families for full-time workers, or 1:10-20 for part-time workers. The shortage of trained staff and community workers to provide health-promoting, disease-preventing and curative services is a major hindrance to service delivery. These workers also need supervision. In the early stages of a community health worker programme, when total numbers are small, it may be most cost-effective to prioritise recruitment and allocation of community health workers to the neediest areas.

As in other countries (Brazil, Rwanda, Thailand, Bangladesh), this model should rapidly increase the poor's access to health care and result in improved health outcomes. This

[13] World Health Organisation, 2010. Guthrie et al, 2010.

would be especially so if the ratio of community health workers to population increases to ensure that all households are regularly visited and health problems detected early. In several countries, high ratios are achieved through a "two-tier" system, where the ratio of full-time community health workers is 1:250-500 households, and full-time community health workers supervise part-time community health workers with more limited training.

The ratio of full-time to part-time community health workers averages 1:10 to 1:20 in countries where this system operates successfully. We propose serious consideration be given to this two-tier system. If we opt for a ratio of 1 full-time community health worker for every 20 part-time community health workers, we will need just over 700 000 community health workers. And if we opt for the ratio of 1 full-time for every 10 part-time community health workers we will need over 1.3 million.

This cadre of community-based workers would undertake a range of health care activities, spanning the full breadth of rehabilitative/palliative care, treatment, preventive and promotive interventions. They would form the base of the health pyramid. In addition to rendering health care more accessible and equitable, this primary health care system will create more jobs and indirectly improve health by reducing the prevalence and depth of poverty.

To achieve this model of community-based health care, the power of conservative professional councils will need to be curtailed. The scope of practice for non-doctors, especially community health workers and nurses, will have to be enlarged.

Accelerate production of appropriately skilled nurses

The core of the primary health care outreach team will consist of a professional nurse, staff nurse and community health workers. This will require substantially increased numbers of trained nurses and significant strengthening of their skills to carry out and support primary health care. Because primary health care includes promotive and preventive components, the key activities of public health, these nurses (or at least the professional nurse leading the outreach team) will need to be substantially competent in public health. Indeed, in several countries, community nurses (professional nurses with public health training) lead many aspects of district health work.

Prioritising the training of more mid-wives and distributing them to appropriate levels in the health system could have an immediate positive impact on maternal, neonatal and child health, which would reduce maternal and child mortality.

The above requirements demand a rapid expansion and reorientation of nursing training. The policy decision to reopen and expand nurse training colleges is a welcome step in the right direction. However, revitalising these institutions must be accompanied by curriculum review that includes advisers external to the current nurse training bodies (Nursing Council and Sector Education and Training Authorities), with expertise in public

health and experience in countries that have implemented a comprehensive, district-based approach.

Doctors and specialist support teams

According to the Re-engineering Primary Health Care document, "family physicians as part of the district specialist support team in line with national policy and guidelines, should take the primary responsibility for developing a district specific strategy, implementation plan for clinical governance and provide technical support and capacity development for the implementation of clinical governance tools, systems and processes for clinical service quality in the district health system that includes the community-based services, primary health care facility services and district hospital services. Family physicians should also take overall responsibility for the monitoring and evaluation of clinical service quality for the entire district." [14]

In many countries, the emphasis of family physician training and practice has been on individual patient care in a well-resourced context. In several countries that have promoted doctors as leaders of the district health team, these professionals have undergone training in five speciality areas (medicine, surgery including anaesthetics, obstetrics, paediatrics and psychiatry) and are also encouraged to obtain a public health qualification or training, or both. This arrangement should be considered, rather than employing orthodox specialist family physicians.

Recently, the Minister of Health announced the formation of district specialist teams. It is clear from several assessments and research studies that patient care in many district hospitals is poor. There is too little emphasis on prevention, primary health care and quality of care in district hospitals and clinics. The current output from specialist training schemes is out of step with what South Africa needs. Such training encourages continued production of system specialists, most of whom will seek and find employment in teaching institutions or the private sector (or overseas), but does not address the needs of the majority of the population, who live beyond the reach of the major city teaching centres, often in remote rural areas. Priority should also be given to developing specialists who improve the quality of care in their speciality area in district hospitals and surrounding health centres and clinics, as well as improving the planning, management and monitoring of district services in their field.

To address this challenge, there needs to be a major change in the training and distribution of specialists. It will require the accelerated production of community specialists in each of the five specialist areas. Training would include compulsory placement in regions under the supervision of provincial specialists. Those in placements would be based at a regional hospital, but would examine and improve the standard of health care across a system or within a region – including preventive work, quality of

[14] Department of Health (2011). National Health Insurance in South Africa. Policy Paper. Government Gazette No. 34523. Government Notice No. 657. 12 August 2011.

care at primary care clinics and district hospitals, and supporting the referral and transport network.

Rapidly increase investment in health personnel development

Brazil's health system has inspired some of South Africa's key policies, particularly Re-engineering Primary Health Care. Brazil has more than 2.5 million workers employed in the health sector. For direct employment in formal skilled jobs, this represents about 10 percent of the workforce – a far greater proportion than South Africa's. These numbers have been achieved by significant investment in health research and development, including expansion of training, especially for nurses and technicians, up-skilling of public health and auxiliary personnel (problem-solving and reflective thinking), and attractive incentives to promote curricular reform in undergraduate programmes.

In stark contrast, there has been stagnation in South Africa's production of doctors and, until recently, a decline in the number of nurses. Training in public health, a core component of primary health care, is minimally supported by government funding, with most schools of public health relying heavily on external donor and research funding. Most categories of health professionals – with the exception of nurses – are disproportionately located in the private sector.

To implement policies that are more appropriate to the health and health care needs of South Africa, there needs to be a massive and focused investment in training health personnel. Government could incentivise the production of appropriate trained personnel in sufficient numbers within a realistic, but short, time frame.

Review management positions and appointments and strengthen accountability mechanisms

Evidence suggests that, notwithstanding stagnation in public health personnel numbers from the late 1990s, national and provincial management has grown. The percentage growth of management posts has greatly exceeded that of posts for service delivery. Recently, reviews have been undertaken of management personnel and their competencies to strengthen and rationalise health service management. Statutory structures need to be bolstered and resourced for community representation in health system governance – it is widely acknowledged that these structures mostly function poorly. If greater accountability to communities could be secured through such mechanisms, it is likely that the quality of management and service delivery would improve.

Equip health personnel to lead intersectoral action

The Re-engineering Primary Health Care policy states that: "It is well recognised that many of the factors that impact on health are outside of the health sector. Much of the work of the community-based services team is linked to improving social determinants

at the community level. However there are many other factors that need intervention at other levels."[15] Intersectoral action is a feature of most successful community health worker programmes, although its implementation takes several different forms. In Iran, community health workers are the key players in intersectoral activities, while in Brazil, community health workers act primarily as health care workers and refer clients where necessary to other sectors for assistance.

The Re-engineering Primary Health Care document suggests that there should be "align(ment) (of) the intersectoral programme at district level through the municipal integrated development planning process with that of the provincial and national clusters with specific time bound targets."[16] However, it is not clear who will assist community health workers and lead this work in districts and wards. This could be the role of environmental health officers, yet the current training and activities of these officers suggests that they are ill-equipped to lead such work in disadvantaged communities. This is an area for priority consideration.

Ensuring that this important aspect of re-engineering primary health care is successfully addressed requires identifying the key categories of health and health-related personnel, their respective roles, and the elaboration of appropriate and practical training programmes for them, combined with a facility for ongoing mentoring and support in the field. These actions are likely to require active enrolment of the skills of non-governmental organisations with good credentials in this type of work.

It is critical for the health sector to play an active advocacy role in other key sectors with policies that affect the social determinants of health, such as safety and security, trade, water affairs, education, and so on. Some European countries have successfully pursued integration by ensuring that the highest level of government actively promotes health-friendly policies by insisting on a "health in all policies" approach.

Strengthen human resource management

Human resources need to be strengthened at all levels by increasingly ensuring accreditation of this function, continuously reviewing remuneration and putting into operation incentive schemes such as the occupation-specific dispensation to boost services in underserved areas. Effective performance management frameworks are an important aspect of human resources management. Fulfilling these frameworks and retaining staff should receive as much attention as producing new professionals. Poor management at facility level is the most cited reason for doctors leaving the public sector, so fixing management will help address this retention problem. Recruiting skilled professionals from abroad is very difficult in South Africa, owing to considerable red tape in being granted a work permit and registering with statutory bodies. In a worldwide knowledge-based economy, South Africa is struggling to compete for this scarce resource. This matter requires urgent attention.

[15] Department of Health, 2011.
[16] Department of Health, 2011.

Collaborate with traditional healers

With more than 28 million consumers of traditional medicine in South Africa and about 185 500 traditional medicine practitioners, African traditional medicine is one of the major service industries in this country. Raw medicinal plants, prescriptions and herbal medicines add up to an industry worth R2.9 billion. The Traditional Health Practitioners Act (2007) provides for national policy on traditional medicine, although there has been limited actual integration of traditional medicine into the national health care system and structured relationships with the African pharmaceutical industry. It is important for the Department of Health, particularly its human resources directorate, to develop a policy framework for how traditional medicine fits into the health workforce.

Improve quality by using evidence

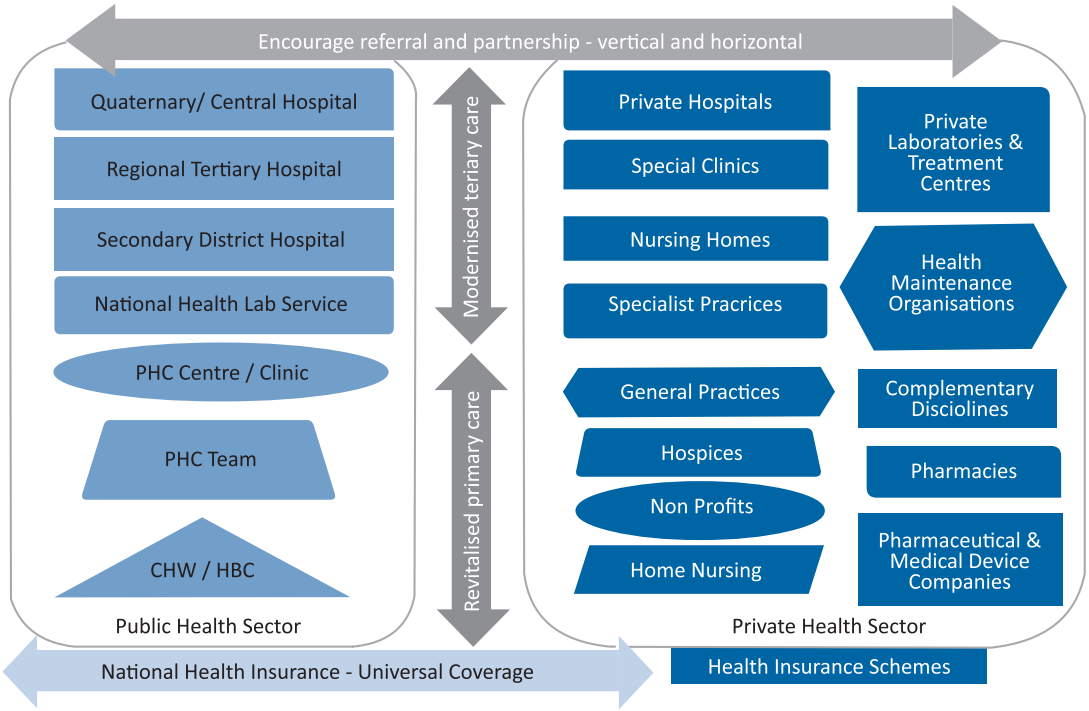
Given the escalating costs of services in both the public and private sector and the high proportion of GDP that goes to health service funding, it is essential to create a culture of using evidence to inform planning, resource allocation and clinical practice. The quality of planning can be improved through evidence-based evaluation, planning and implementation. The health workforce, and particularly those in leadership, needs to be encouraged to become familiar with using evidence in all aspects of practice.

Empirical evidence on which to base predictions for specific health plans and targets should be regularly reviewed, and data and scenarios to refine targets for 2030 continuously updated. At district level, this implies effectively using the district health expenditure review and planning process.

Meaningful public-private partnerships in the health sector

Meaningful public-private partnerships in the health sector are important, particularly in the context of the NHI. To achieve this, South Africa needs robust debates between public and private sector partners, including civil society organisations. Key issues would depend on when and how partners approach this debate in the short to medium term, and it is likely that they will need to include legal and governance frameworks, the public-private partnership policy environment, the socio-political dimension of such partnerships, public-sector capacity, and the business and financial implications of partnership implementation. The principles to manage these partnerships should guide best practice purchasing, provisioning, procuring and sound financial management of health services to create incentives for improving access, greater equity, higher quality, more innovation and serving the poor with efficiency.

Integration between and within public and private sectors



Summary of main proposals

Central to the proposals in this chapter is greater inter-sectoral and inter-ministerial collaboration.

Address social determinants of health

- Most of the recommendations relating to the social determinants of health are dealt with in other chapters and relate mainly to provision of quality services.
- Introduce school health education.
- Promote an active lifestyle, balanced diet, control alcohol abuse and health awareness to reduce non-communicable diseases.
- Reduce exposure to harmful environments by managing greenhouse gas emissions at acceptable levels.

Reduce disease burden to manageable levels

- Ensure all HIV positive individuals are on antiretroviral treatment
- Promote consistent condom use
- Effective microbicide routinely available to all women 15 years and older
- Universal availability to pre-exposure prophylaxis with antiretroviral treatment
- Reduce maternal mortality to appropriate target levels
- Reduce mother to child transmission of HIV-1 rates to below 2 percent nationally
- Increase prevention and successful treatment of tuberculosis
- Reduce violent crime and injuries from car accidents

- Provide quality pre-birth and postnatal services through a primary health care approach.

Build human resources

- Accelerate the production of appropriately-skilled nurses by reopening nursing colleges, accompanied by curriculum review.
- Accelerate production of community specialists in each of the five main specialist areas (medicine and surgery, including anaesthetics, obstetrics, paediatrics and psychiatry.
- Recruit, train and deploy between 700 000 and 1.3 million community health workers to implement community-based health care.
- Introduce polices to allow community health workers to administer antibiotics for specific childhood diseases and strengthen regulatory and quality controls for the distribution and appropriate use of antibiotics.

Strengthen national health system

- Put in place appropriate delegations – ensuring that management teams delivering services are led by a practising clinician.
- Determine minimum qualifications for hospital managers and ensure that all managers have the necessary qualifications.
- Improve governance by resourcing and strengthening statutory structures for community representation in health system governance.
- Eliminate health infrastructure backlogs and increase the use of ICT to treat and manage health conditions.

Implement the NHI scheme

- Implement the NHI scheme in a phased manner
- Improve the quality and care at public facilities
- Reduce the relative cost of private medical care
- Increase the number of medical professionals
- Introduce a patient record system and supporting information technology systems.

Chapter 11

SOCIAL PROTECTION

"We live in a country where everybody feels free, yet bounded to others.
The welfare of each of us is the welfare of all."

Introduction

As the world's 27th largest economy, with abundant natural resources, South Africa has great potential. It is the world's 24th most populous country, with the number of young people expected to grow from 32 million in 2010 to 39 million in 2030. This youthfulness is an asset, because the labour force will continue to make up a significant share of the population, though the proportion of the elderly is expected to increase marginally. Such demographic conditions are often associated with rising incomes, faster productivity growth, higher savings and better living standards.

South Africa's level of human development does not reflect its natural wealth and abundance of labour. Too few people in South Africa have work, and the levels of poverty and inequality are very high. Why is it that South Africa is not able take advantage of its natural resource endowments and positive demographic features?

There is no single explanation for all South Africa's problems. The inequitable distribution of income is partly due to low levels of formal employment that exclude a large section of the population from actively taking part in the economy. The root cause of income inequality is the socioeconomic distortion introduced by apartheid, which constrained the development of skills for the majority of the population and kept them trapped in poverty.

The mismatch between the skills of the majority and the type of work available means that South Africa is not using its greatest resource: its people. Economic exclusion has dire consequences for the welfare of individuals, communities and the country.

Unemployment exacerbates inequality, because the majority of those without work are in the poorest two deciles of the population.[1] The youth are disproportionately affected, as are women. Even education is an unreliable hedge against unemployment:

[1] Klasen S and Woolard I (2008). Surviving unemployment without state support: unemployment and household formation in South Africa. *Journal of African Economies* 18(1): 1-51.

unemployment levels are high among matriculants and even among those with tertiary education.

Structural factors make job creation difficult. Addressing structural constraints is a priority, but structural change takes time. In the interim, large numbers of South Africans will remain unable to participate meaningfully in the economy – yet have no access to other means of support.

The National Planning Commission's *Diagnostic Report* discusses nine interconnected but distinct problems facing the country. To address these, the commission focuses on two overarching goals: to eradicate poverty and reduce inequality. These goals can be achieved by building capabilities that enable individuals to take part in the formal economy and in other parts of society. Working towards this would enable a better appreciation of how social security, social welfare, education, health, housing, energy and transport policy can coordinate to benefit individuals and communities, as well as the economy.

In this chapter, we review achievements since 1994, outline a conceptual framework for social protection, offer a comprehensive vision for 2030, discuss gaps in the current system including looking at welfare services, and propose actions that need to be taken.

Post-1994 achievements

By developing country standards, South Africa has built up a comprehensive social protection system. Elements of the system include: social assistance cash grants; statutory social insurance arrangements; access to free basic services, such as water and energy for poor households; free housing for people below a specified income bracket (currently R3 500 per month); subsidised housing for those earning between R3 500 and R7 000 per month; free education in 60 percent of schools in poor communities; a school nutrition programme; and free health care for pregnant women and children under six years of age. Millions of South Africans benefit from these programmes.

These policies enable South Africa to enjoy relative stability. Although service delivery protests and xenophobic attacks against foreign nationals do occur, poverty would be deeper and social unrest more widespread if these programmes did not exist. South Africa needs to pay careful attention to the design of policies between now and 2030 to ensure that the country is kept working, individuals are engaged in meaningful activity, and citizens are protected from the worst effects of poverty.

If apartheid destroyed opportunities for the majority of the population and trapped them in poverty, the challenge for the next 20 years is to rebuild the opportunity structure and help individuals develop the capabilities to live the life they wish to lead. At the centre of our social policy is the need to enable individuals to earn an income, look after themselves and their families, and build an asset base.

Conceptual framework for social protection

Employment creation is the most effective form of social protection. Efforts should always focus on creating jobs. Our social policy must create a bridge between our 2030 vision of an economy close to full employment and the current problem of high unemployment. The main thrust of social policies should be to enable and support labour market participation and provide protection against labour market risks including loss of employment. Social protection is also essential to protect the old and the young, as well as adults of working age who are unable to work because of structural unemployment, illness or disability.

The current reality is that labour markets do not work for many people in South Africa and we should not underestimate the length of time it will take to fix the problem. We should also be mindful of the fact that, given the low skills base from which we are starting, many jobs are likely to pay low wages. Social protection policies will have to enable and support participation in the labour market by narrowing the gap between wages and the cost of living for those employed in low wage jobs. It should enable a degree of security in normal times and serve as a safety net in times of crisis. For this to happen, we need to determine the type and level of support needed to keep everyone above a minimum threshold. If people fall below this threshold it will become increasingly difficult for them to build their capabilities and expand their opportunities.

For this strategy to work and enable people to build their capabilities, other policies have to work and reinforce each other. Social protection is broader than the traditional concept of social security. It "incorporates development strategies and programmes designed to ensure, collectively, at least a minimum acceptable living standard for all citizens".[2] In particular, we need to ensure that education and training, health, transport, human settlements, land use management and economic policies work together more effectively. The world is not standing still. As discussed in the chapter on the drivers of change, the economy is being reshaped by globalisation, climate change, technology and the rebalancing of the world. This means we have to accelerate the process of building capabilities if we are to become more competitive.

Five functions of social protection

- Protective – Measures are introduced to save lives and reduce levels of deprivation.
- Preventive – Acts as an economic stabiliser that seeks to help people avoid falling into deeper poverty and reduce vulnerability to natural disasters, crop failure, accidents and illness.

[2] Taylor Committee (2002). *Transforming the Present - Protecting the Future.* Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa. Pretoria: Department of Social Development.

- Promotive – Aims to enhance the capabilities of individuals, communities and institutions to participate in all spheres of activity.
- Transformative – Tackles inequities and vulnerabilities through changes in policies, laws, budgetary allocations and redistributive measures.[3]
- Developmental and generative – Increases consumption patterns of the poor, promoting local economic development and enabling poor people to access economic and social opportunities.

These functions and objectives fit well with South Africa's developmental approach to eradicating poverty and reducing inequality.[4]

Social protection as a right

Under Section 27 of the Constitution, South Africa recognises social security as a basic right: all South Africans "have the right ... to social security, including, if they are unable to support themselves and their dependants, appropriate social assistance."[5] A human rights approach requires that an understanding is reached of what constitutes the "social floor", or minimum social protection below which no one should fall. The floor of essential goods and services can vary between individuals, depending on their age, gender, socioeconomic status, health and abilities.

Vision for social protection

By 2030, the majority of working age South Africans are employed. Everyone enjoys a high standard of living. There is a defined social floor and households who have not achieved the basic standard of living are assisted. Problems such as hunger, malnutrition and micronutrient deficiencies that affect physical growth and cognitive development, especially among children have all been addressed. Vulnerable groups such as poor women and people with disabilities enjoy the full protection provided under the Constitution. Social protection also serves to protect against short-term shocks and chronic vulnerabilities caused by labour market failures.

This vision will be attained through a combination of public and private provision of services. The state will continue to bear primary responsibility for ensuring this is achieved. It will also develop an enabling environment, create conditions for social partners to contribute, and ensure vulnerable groups are protected.

[3] Devereux S (2010). *Building Social Protection Systems in Southern Africa*. Paper prepared in the framework of the European Report on Development 2010.

[4] Taylor V (2008). Social Protection in Africa: An Overview of the Challenges. Research Report prepared for the African Union. Unpublished Report. Available at http://www.eprionline.com/wpcontent/uploads/ 2011/03/Taylor2008AUSocialProtectionOverview.pdf (Accessed 2 June 2011).

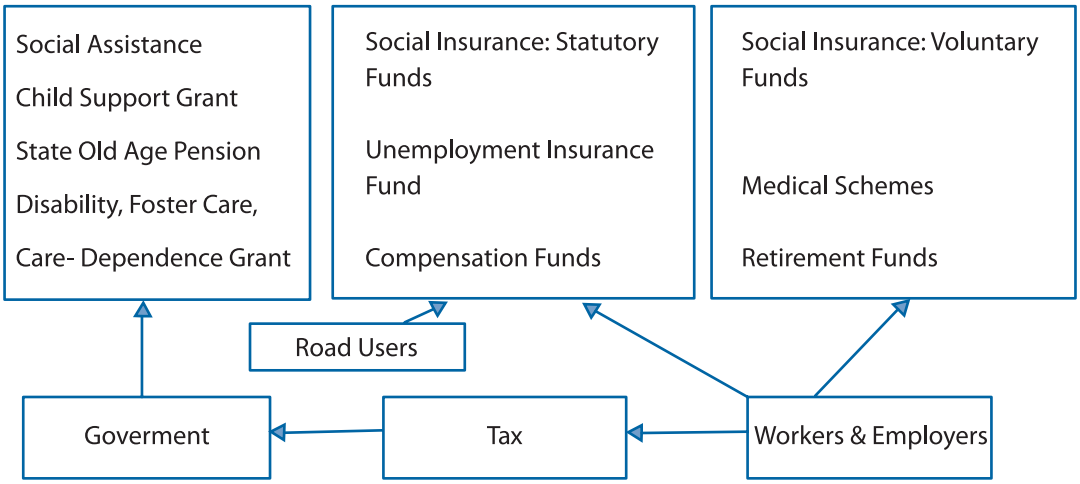
[5] RSA (1996) Constitution, Chapter 2, Section 27 (1)c.

Overview of South Africa's social protection and welfare services[6]

Social security system

The figure below shows the basic architecture of South Africa's current social security system. There are five major social assistance grants: the Child Support Grant, the State Old-Age Pension, the Disability Grant, the Foster Care Grant and the Care Dependency Grant. The eligibility criteria for the grants differ. Government is also responsible for three primary social insurance mechanisms: the Unemployment Insurance Fund, the Compensation Funds and the Road Accident Fund. The state regulates voluntary funds, including voluntary insurance schemes, such as medical schemes and retirement funds.

Social security in South Africa



In South Africa, social assistance grants refers to non-contributory and income-tested benefits provided by the state to certain categories of people, such as people living with disabilities, the elderly, and children in poor households. Benefits are financed by general tax revenues.

The elderly in South Africa have two main sources of income: state old-age pensions and private pensions. Many people are not able to save adequately for retirement because of low earnings during their working life and rely on government pensions.

The main goal of the Child Support Grant is to ensure that the primary caregivers of children living in poverty are able to finance the basic needs of those children. Based on the number of beneficiaries, the grant is the largest cash transfer programme in South Africa. Grant conditions include income criteria and children's school attendance. On average, the grant accounts for 40 percent of household income in the poorest quintile,

[6] Leibbrandt M & Woolard I (2011a). A conceptual framework for Social Security in South Africa in the light of the current situation as well as future trends. Unpublished paper prepared for the National Planning Commission.

and about 5 percent overall. Evidence shows that, in the absence of social assistance, South Africa's poverty and inequality would be higher.

The Compensation Funds provide medical care and income benefits to workers who are injured at work or who develop occupational diseases. These are statutory funds with mandatory membership and contributions, but they are effectively restricted to the formal economy. The Road Accident Fund provides compensation for the loss of earnings, loss of support, general damages, and medical and funeral costs for the victims of road accidents caused by the negligent or wrongful driving of another motorist. Membership is mandatory for all vehicle owners. The Unemployment Insurance Fund provides short-term unemployment insurance. It pays benefits in the event of unemployment, illness, maternity, adoption and death. Benefits are only paid in the period immediately after the loss of employment, with a maximum benefit length of 238 days. All formal-sector workers and their employers must each contribute a levy of 1 percent of the employee's salary (up to a certain income threshold, currently R149 736 per year) to the fund. Credits are accrued at the rate of one day of benefits per six days worked. This social insurance mechanism is effectively limited to the formal sector and the 1 million domestic workers employed by private households.

In addition to the statutory funds, there are voluntary funds providing social insurance, including private health insurance (medical aid) and private retirement funds. These are generally linked to formal sector employment as a benefit of many formal employment contracts. While the medical schemes involve some sharing of risk by redistributing from the healthy to the sick, there is no redistributive component in private retirement funds.

Social assistance

After the end of apartheid, policies on social grants evolved in a way that maintained and modified some inherited grants such as pensions, disability and foster care. The state maintenance grant was removed and replaced with the Child Support Grant. The Old-Age Pension and the Disability Grant are regarded as quite generous, equating to 1.75 times the average per capita household income. The Child Support Grant is much smaller than the adult grants or the Foster Care Grant.

The immediate objective of cash transfer programmes is to alleviate hardship among vulnerable groups. Woolard and Leibbrandt[7] and Bhorat and van der Westhuizen[8] demonstrate that such grants are critical for reducing poverty. The grants also reduce inequality in an environment where unemployment worsens inequality. In terms of coverage and gaps, simulations based on survey data suggest that about three-quarters

[7] Woolard I and Leibbrandt M (2011). The role of cash transfers in reducing poverty and inequality in South Africa over the post-apartheid period. Unpublished paper produced for the National Planning Commission. Southern Africa Labour and Development Unit, University of Cape Town.

[8] Bhorat H and van der Westhuizen C (2011). Pro-Poor Growth and Social Protection in South Africa: Exploring the Interactions. Unpublished paper produced for the National Planning Commission. Development Policy Research Unit, University of Cape Town.

of the elderly are eligible for the Old-Age Pension, almost all of whom are receiving it. About 6 percent of the working-age population receives disability grants. While 60 percent of children who are within the age and income bracket covered by the Child Support Grant receive a child grant of some form. A 2008 survey estimates that 70 percent are eligible for the Child Support Grant on the grounds of household income. This indicates that there are many children who are not receiving grants to which they are entitled: some estimates put the number at 2.9 million.[9]

Orphans are among the most "at-risk" segments of the child population. A high proportion of paternal orphans are receiving grants, particularly the Child Support Grant, but a low proportion of maternal orphans are receiving grants. This supports evidence found in Case, Hosegood and Lund[10] that the probability of a child receiving a grant decreases when the mother is absent. Unsurprisingly, orphans who have lost both parents are the most likely to be receiving the Foster Care Grant. What is unexpected is that, aside from paternal orphans, orphans are less likely to receive the Child Support Grant than children with both parents. This may be a result of the more complex documentation required without the child's mother as caregiver.

Social insurance

The central planks of the current system of social insurance are the Unemployment Insurance Fund and the public works programmes.

The Unemployment Insurance Fund provides essential support to workers who have lost their income. For the first nine months of 2010/11, the fund received an average of 63 260 new claims per month. Average monthly benefit payments amounted to R466.8 million to 207 646 beneficiaries, according to the *Budget Review* 2011. The fund currently has a large and growing surplus. In 2010/11, fund expenditure was about R8.1 billion, while revenues were R14.4 billion.

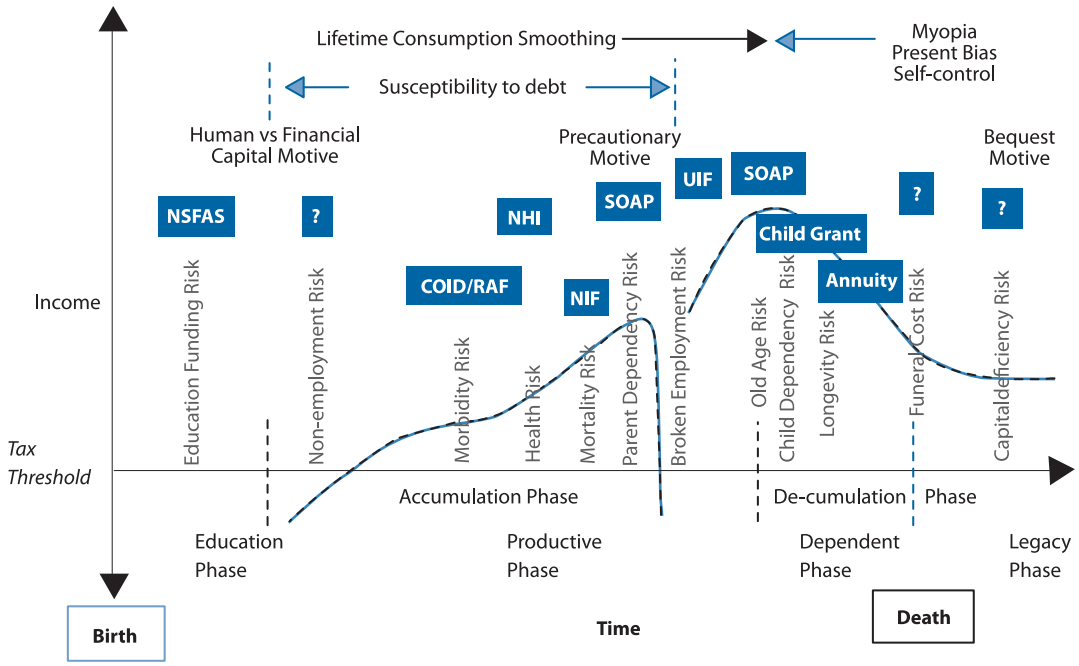
Despite this, the fund's coverage is limited. Given that there were 4 538 000 unemployed in early 2011, the implication is that less than 5 percent of the unemployed were receiving unemployment benefits at any given time. Part of the explanation lies in the fact that 55 percent of the unemployed report that they have never worked and thus have not contributed to the fund. Furthermore, 44 percent of unemployed people who have previous work experience have been unemployed for more than a year and would have exhausted their benefits if they were ever eligible for them. While the fund clearly has an important role to play in providing replacement income and a degree of security to the short-term unemployed, the vast majority of the unemployed fall outside

[9] Leibbrandt M, Woolard I, Finn A and J Argent (2010). *Trends in South African income distribution and poverty since the fall of apartheid*. Organisation for Economic Cooperation and Development Social, Employment and Migration Working Papers No. 101. Paris: OECD.

[10] Case A, Hosegood V and Lund F (2005). The Reach and Impact of Child Support Grants: Evidence from KwaZulu-Natal. *Development Southern Africa* 22 (4): 467-82.

this system. The fund is currently focused on giving benefits to members, but to ensure its sustainability the focus should be on helping people return to active employment.

Proposed state coverage of lifecycle risks



Source: Smith, 2011[11]

A comprehensive social security system should cover people at different phases of their lives. Although South Africa has many of the necessary elements, there are critical gaps, as shown in the figure above, most notably the lack of protection for many working-age people.

South Africa's social protection gap

Despite the strengths of South Africa's social grants system, grants target people who are not expected to be economically active: children, the elderly and those with disabilities. For those who are willing and able to work, but who are locked out of the economy, there is no meaningful level of social protection. Only 3 percent of the unemployed have access to unemployment benefits at any given time.[12]

This means that able-bodied unemployed people in South Africa have little choice but to depend on "goodwill transfers" from those with access to income through employment or some form of social grant.

[11] Smith S (2011). "Towards integrated and comprehensive social security in South Africa" critique of the Social Security and Retirement Reform.

[12] Klasen S and Woolard I (2008). Surviving unemployment without state support: unemployment and household formation in South Africa. *Journal of African Economies* 18(1): 1-51.

In effect, the massive economic burden of unemployment in South Africa is being borne primarily by workers and by those who have access to social grants meant for other purposes. Dependence on wage earners compounds existing wage pressure in the economy, and dependence on social grant recipients dilutes the anti-poverty effects of such grants, pushing households that are already poor even further into poverty.

Lack of social protection for the able-bodied unemployed is a critical social protection gap, exacerbating poverty and inequality and diluting the effects of other forms of social protection. The critical policy question is how to address this gap. There are a range of complementary instruments for doing so, but the focus in this section is on the vital role of public employment.

Absence of contributory coverage of the informal sector

The most significant omission in the reform proposals being considered by government is that the informal sector does not have a way to make payments towards contributory schemes through savings. The formula for determining contributions and benefits needs to take account of volatile and broken contribution patterns and develop an equivalent co-contribution incentive to the contribution subsidies for formal workers. A social security system that does not allow everyone the opportunity to participate in improving their basic social security entitlements through contributions implies that these individuals are denied access and left outside the ambit of essential benefits – unless they are able to migrate to the formal economy. This is inappropriate in an economy in which government tries to encourage entrepreneurship and small business initiatives. The problem cannot be addressed by formalising the informal labour market.

Occupational schemes use employer matches in South Africa, but little is known about their effectiveness, as most employers make retirement scheme membership a condition of employment. The current proposals envisage a contribution subsidy for low-income formal sector employees. This incentive should be extended to the informal sector too.

Public employment programmes[13]

Income support is a vital part of social protection for the unemployed, but in South Africa's particular context there is a bigger picture. The deeply structural nature of unemployment means that large numbers of the unemployed have never worked, or have not worked for long periods of time. This has devastating social and psychological effects and completely disrupts established social patterns.

[13] Philip K (2011). Addressing a key social protection gap: support for the unemployed. Unpublished paper prepared for the National Planning Commission.

Where possible and appropriate, public employment programmes should provide opportunities to work. Work provides people with an earnings floor and the dignity of being productive, rather than dependent. For many, it provides the first experience of employment, introduces them to the skills and disciplines of work, provides structure in their lives, validates their ability to contribute to their communities, and provides access to social networks. For young people, working and earning is also part of the transition to adulthood.

Access to public employment opportunities provides a bridge between social grants and the sustainable employment envisaged in the New Growth Path, creating a mechanism that allows unemployed people to become a productive part of the economy while structural changes required to create sustainable employment take effect. Without this mechanism, the social tensions arising from high unemployment are likely to hinder medium- to long-term growth and development objectives.

At the same time, the impacts of the assets and services provided also contribute to wider social policy goals, particularly if there is a strong focus on food security, care and educational support.

In many parts of South Africa, the established pattern was that when young men started working they saved to pay ilobolo, got married and started families. With current levels of unemployment, this is no longer possible for many young people. This has profound implications for the family as an institution, as well as for parenting. Unemployment potentially contributes to the growing phenomenon of absent parents, especially fathers. It is estimated that less than a third (32 percent) of children live with both their biological parents and a quarter of children do not live with either of their biological parents.

The role of public employment in social protection

Despite its importance in addressing the social protection gap for unemployed people, public employment has not always been considered part of social protection. It has been thrust into the policy arena by India's National Rural Employment Guarantee Act in 2005, through which the state guarantees 100 days of work to every rural household that needs it. Over 55 million people are now part of the scheme, which has become a central pillar of India's social protection system.

The introduction of an employment guarantee has systemic implications:

- Introducing a right to work changes power relationships, enhances the agency of citizens and their ability to hold government accountable, which strengthens democracy.
- An employment guarantee contributes to the "social protection floor" in society providing income security to households, as well as creating a floor in labour

market standards that gives workers a real alternative to exploitative conditions of work. This is a substantive contribution to the progressive realisation of decent work in society.

Chapter 3 argues that unemployment will be a challenge for many years, even if the best scenarios are achieved. The extent of marginalisation, especially amongst the youth, tears apart the social fabric. The public employment programmes to date reach between 3 and 6 percent of the unemployed. These programmes need to be expanded to reach an average of 30 to 50 percent of the unemployed by 2014, and to cover about 2 million people per annum by 2020, or earlier if possible. This will require effective measures to expand the programme.

Existing strategies to scale up public employment

South Africa has an existing commitment to public employment in the Expanded Public Works Programme. In phase one, from 2004/05 to 2008/09, it exceeded its target of achieving 1 million work opportunities. The target was cumulative over five years. This was low relative to the numbers of unemployed people. However, the evaluations showed that the first EPWP created very short term opportunities, with falling stipends. The evaluations also called into question the highly complex set of objectives, such as training, that were largely not achieved.

A new expanded public works programme (EPWP II) was introduced in 2009. The EPWP II kept to the objective of intensifying labour use on infrastructure projects. However, the overall approach was to simplify the objectives of the programme, and to decentralise decision making. Employment incentives were introduced for municipalities and for non-profit organisations. The EPWP II targets were raised to reach 2 million opportunities per annum by 2014. This would translate into 4.5 million work opportunities, averaging 100 days per opportunity, over five years to 2013/4. The infrastructure component of EPWP is meant to double from about 185 000 opportunities in 2009 to 383 000 by 2014.

EPWP social sector and related activities, such as home-based care and early childhood development for children under five are meant to expand from about 20 000 opportunities to about 400 000 by 2014. Most of these will be stimulated by the EPWP employment incentive, bolstered by grants offered by provincial departments of social development. Non-profit organisations can apply for support to cover labour costs up to a value of an EPWP wage (approximately R60 per day in 2011).

In the new phase, a new component called Community Work Programme was added. The new programme has been simplified and decentralised. The focus of the programme was initially on testing approaches so that they could be scaled up quickly and target areas of greatest need. The Community Work Programme is very cost effective with a mandatory 65 percent labour-intensity at site level. The programme is also designed as a response to the structural nature of unemployment, and offers

participants regular access to part-time work to provide an ongoing earnings floor, which allows greater security than income from once-off, short-term employment.

Key features of the Community Work Programme

- Provide an earnings floor through regular part-time work – two days a week or eight days a month – on an ongoing basis.
- As a government programme put into effect by non-profit agencies, it avoids further burdening local government while strengthening developmental capacity in civil society.
- Work must be "useful work" that contributes to public goods and services in the community. The work is identified and prioritised by communities in ways that build community participation and contribute to community development.
- These assets and services contribute to poverty reduction and local development through their impact on food security, care for vulnerable people, schools assistance, and environmental rehabilitation.

The programme aims to have a presence in every municipality by 2013/14. At the July 2011 Cabinet Lekgotla, the target was increased to 1 million participants by March 2014.[14]

Developmental social welfare services

Statistical indicators paint a disturbing picture of rising violence, increasing numbers of low-income households and other social determinants requiring urgent attention. Among these social concerns are heightened levels of addiction, increasing criminality among young people, high levels of gang-related violence in schools and communities, and sexual violence against children and women, especially in economically deprived areas. Demographic trends and human development indicators point to a country with significant levels of social fragmentation, unacceptable levels of social alienation and the breakdown of social institutions. In the absence of fully functioning families, households, communities and neighbourhoods, social welfare institutions in most countries step in to provide services to improve social functioning and integration.

The combination of poor and inadequate state social welfare services and high levels of poverty and inequality produces social problems and high-risk behaviour that undermines human development and social cohesion. High levels of domestic violence are often amplified by poverty and unemployment. Alcohol abuse is another factor that is both a cause and manifestation of stresses in households and communities. Poor social services and ineffective policing reinforce the sense of powerlessness in poor communities. Poor-quality education limits social mobility, further straining basic social

[14] Philip K (2011). Addressing a key social protection gap: support for the unemployed. Unpublished paper prepared for the National Planning Commission.

relations that many societies take for granted. The impact of youth unemployment and HIV/AIDS has worsened matters.

Given the challenges of dealing with social fragmentation and the demographic context, government has adopted a developmental social welfare approach to social service provision, in line with the Constitution and the 1997 White Paper on Social Welfare. It includes a focus on the social and economic development of individuals, families and communities. This approach incorporates raising community awareness of social concerns and introducing strategies to reduce and prevent social pathologies. Responses in the social welfare field include early intervention through community development strategies and statutory intervention, including residential and alternative care arrangements for those in need, such as orphaned and vulnerable children, victims of violence and people with mental health conditions. It also includes treating perpetrators of crime and those with alcohol and substance addictions, and rehabilitating and reintegrating them into family and society. Services for victims of crime – especially crimes against children, youth and women – are inadequate, as are services for people with a range of mental health conditions.

The distribution of both public and private social welfare services remains skewed along racial and income lines, with the wealthy having access to private services. In social welfare services, the state has adopted a partnership model of service provision and relies mainly on non-governmental welfare organisations to provide professional social services. However, the funding of these organisations has declined steadily since 1994, reducing the range and compromising the quality of services at the same time as demand for such services has increased. Such organisations are unable to respond to the scale and complexities of South Africa's poverty, social fragmentation and lack of social support systems. Increasingly, the burden of care has fallen on the poorest communities and on women and the elderly, often leading to a sense of powerlessness and social isolation.

Responding to the social breakdown of families, communities and society requires a range of generic and specialist education and training that is not available to poor communities. The inadequacy of South Africa's social welfare services to provide the quality of care required is reflected in the inadequate supply of social work, community development, and child and youth care professionals. It is estimated that the country requires close to 55 000 social service professionals to respond to the country's social welfare needs. Currently, there are approximately 15 000 qualified social workers registered with the South African Council of Social Service Professions. Problems in the supply of qualified social service professionals are also linked to poor working conditions and a lack of funding for social services. Efforts to increase the supply of professionals led to government declaring social work a scarce skill. However, structural conditions in the education and health sectors affect the ability of tertiary institutions to produce

social work, community development and social development professionals, as well as specialists such as school psychologists.[15]

South Africa needs to confront the reality that social services are critical for improving social integration and human development. The current model of shifting the burden of care, treatment and rehabilitation to the non-governmental sector and the poorest communities is not working. The scale of social fragmentation and loss of purpose requires more systematic engagement with both governmental and non-governmental social service providers. Statutory services for children, young offenders, the elderly, people with mental health problems and people living with disabilities need well-conceived state and community interventions. Complex social problems require professional interventions to deal with the symptoms and underlying causes of social pressures, most evident in schools, workplaces and neighbourhoods that are plagued by gang warfare and households afflicted by violence, including the abuse of women and children. Urgent and systematic attention is required to deal with these issues.

The status and wellbeing of children in South Africa

An estimated 3.6 million children are maternal, paternal or double orphans. This is expected to peak at 5 million in 2020. The number of double orphans – children who have lost both their parents – has nearly doubled from 352 000 to 701 000 in the past five years.[16] Only 27 percent of African children live with their biological parents, compared to 48 percent of coloured children and about 80 percent of white and Indian children. Children not living with their parents are cared for almost entirely by relatives, highlighting the importance of extended kinship networks in providing family care in a context of high rates of mortality and labour migration.

The distance between biological parents and their children may have an influence on the extent to which resources such as remittances and social grants are used for their wellbeing. These children may also be at greater risk of physical, emotional and sexual abuse.[17] The increasing morbidity and mortality rates among adults as a result of social ills, poverty, violence, crime and car accidents has resulted in growing numbers of orphans and vulnerable children. These children are society's responsibility. The complexity of caring for this group requires a holistic approach that involves building partnerships with all individuals and organisations that can help in caring for them.

[15] Taylor, V (2009). Meeting the Demand for Social Service Professionals in South Africa, Concept paper prepared for the Cape Higher Education Consortium, Cape Town

[16] Department of Social Development (2011). Green Paper National Family Policy for South Africa.

[17] Statistics South Africa. Social Profile of South Africa 2002/09.

Child-headed households

Child-headed households make up only 0.6 percent of all households in South Africa, a proportion that remained virtually unchanged from 2002 to 2009. More than half of these households had one or more of their parents living, which may indicate that such households develop due to labour migration.[18] The spatial distributions of adult and child populations in South Africa are strikingly different, with children disproportionately represented in rural and non-metropolitan areas. The National Information Data System shows different distributions of children in households across different area types, with a greater proportion of children situated in "traditional authority areas" (42 percent of children compared to 29 percent of adults), and a smaller proportion of children living in urban formal households (41 percent of children compared to 53 percent of adults).[19]

Child poverty

Using a poverty line of R515 per person per month reveals that 67 percent of children are defined as poor, while 54 percent of the total population is defined as poor. Child poverty rates differ greatly by population group: using the upper threshold of R949, about 88 percent of African children are poor, 60 percent of coloured children, 29 percent of Indian/Asian children and 10 percent of white children.

Child sexual abuse

Child sexual abuse is a significant problem. In later life, there is a considerable burden of disease from frequent childhood abuse. However, there is inadequate incidence or prevalence data on child abuse, because no reliable national representative surveys have been conducted. Data from the South African Police Service is not reliable, as it is only based on reported cases, in an area where there is significant under-reporting. This lack of data makes it difficult to know what services are needed.

Child protection

Alternative care refers to services and protection of orphans and vulnerable children outside their parental homes. These children become wards of the state. Alternative care encompasses temporary safe care, foster care, and child and youth care centres.

According to the Social Pension System, there were 510 766 foster children receiving foster care grants in March 2010. Foster care cases have to be supervised to support foster parents and ensure that children are well cared for. Guidelines and protocols have been developed to ensure that children receive effective foster care services.

[18] Hall K and Wright G (2010). A profile of children living in South Africa in 2008. *Studies in Economics and Econometrics.* Volume 34(3): 45–68.
[19] Ibid.

Child and youth care centres include government and privately operated children's homes, temporary places of safe care, shelters for street children, secure care facilities, schools of industry and reform schools. There are 345 established and registered centres accommodating about 18 783 children under the age of 18.

Funding for services

All provinces rely heavily on not-for-profit organisations to deliver services. The average percentage of the total social welfare programme budget transferred to such organisations for 2011/12 is 51.3 percent, slightly down from 51.8 percent for 2010/11, using adjusted estimates. By 2013/14, this percentage is set to fall further, to 50.8 percent.[20]

The subsidies provided by provincial departments to not-for-profit organisations do not cover the full cost or scope of the services. *The Children's Bill Costing Report* recommended a shift to a child-centred services model of full funding rather than the existing model of partial subsidisation, especially for not-for-profit organisations such as child and youth care centres that provide services to children placed in their care by a court order. The national Department of Social Development has completed a revision of the policy on financial awards for service providers, however it does not commit to full funding, even for services mandated by legislation.

Policy and planning priorities

There are five gaps in the system that require attention:

- General shortcomings in coordinating and implementing a number of government policies. Underperformance in education and health is among the most documented, leaving people worse off despite the existence of policy. Another example is the number of children who are eligible for income support but not receiving it.
- Lack of protection for unemployed people of working age (18 to 59).
- The need to promote youth employment.
- The social insurance system, in particular the retirement savings aspect.
- The neglect of social welfare services.

Policy coordination

Policies that affect the lives of citizens should be planned with a full understanding of their linkages and how they affect daily life now and in future. Failure to coordinate results in each department producing different plans based on their priorities without taking into account other complementary policies. This leads to further fragmentation

[20] Budlender D & Proudlock P (2011). Funding the Children's Act: Assessing the adequacy of the 2011/12 budgets of the provincial departments of social development.

and wastes resources, and it is frustrating for those who have to implement policy and deliver services.

Better coordination of policies is needed. For example, the impact of good nutrition on a child's physical and cognitive development has long-term impacts on health, educational performance and labour market participation. Health is also influenced by the type of dwelling people live in, access to clean water and sanitation, the type of energy they use, the levels of pollution they are exposed to, and their lifestyles. The provision of services such as water, sanitation and energy depends on infrastructure planning, but impacts on social development. The lack of coordination is often cited as a major impediment to speedy and efficient delivery of services.

Policy implementation

Government programmes involve both explicit and implicit transfers to households and individuals. Cash grants are examples of the former, while education, health care and security are examples of the latter. While cash grants involve a concrete transfer that can be measured, in-kind benefits depend on the quality and efficiency of a service and not on the financial cost. Poor implementation can therefore devalue the true benefits of any financial transfer far below its actual budgeted cost.

Achieving a social floor

Concepts such as a social wage and social floor have been used in South African debates to adjust crude distributional indicators to reflect a more balanced picture of distributional fairness. It is generally recognised that there is a need to identify a crucial "package" of social benefits capable of generating the levels of social inclusiveness to radically transform economic development in South Africa. South Africa needs to work towards defining a social floor below which no one should fall. More importantly, the country needs to make sure that policies that make up the social protection package are implemented effectively and efficiently. To achieve the required objectives, the package should be prioritised to achieve allocative efficiency and enable social inclusivity within available resource constraints. Measures should also be taken to promote operational efficiency and ensure effective and efficient implementation. Effective implementation of existing policies on school nutrition, education, health, basic services, social security, housing and transport would go a long way to provide social protection to vulnerable individuals. When one or more of these fail, the results are often devastating. The principal task in achieving the vision for 2030 is to ensure that policies are fulfilled. Those entrusted with policy implementation should be held accountable for policy failures.

Policy proposals

The commission makes eight key policy proposals:

1. Commitment to achieving a social floor – a social floor should be defined outlining an acceptable or decent standard of living.
2. Informal sector contributory scheme – Social security reforms currently considered by government should include measures to bring the informal sector into the mandatory contributory scheme.
3. Close the social insurance gap – The commission supports the social security reforms being considered by government, especially relating to mandatory retirement contributions.
4. Public employment – Expand public employment programmes that have the capacity to absorb large numbers of unemployed people.
5. Promote opportunities for youth employment.
6. Social welfare services – Expand social welfare services, review funding to not-for-profit organisations, and train more welfare professionals and community workers.
7. Social audit – Use social audits to enhance accountability in the welfare system.
8. National register – Consider integrating all databases of people who receive different forms of social security services.

Commitment to achieving a social floor

A social floor should be defined and a first measurement introduced. This will involve technical analysis and public consultation. It is envisaged that the social floor measure will be simple, and reflect the ability of households to achieve a minimum standard of living through their ability to access items such as nutritious food, public transport, shelter, educational and health services. The gap will be identified, and policy implications of closing the gap assessed. Progress will be measured by the experience of households, rather than expenditure.

This will involve:

- Specification of an acceptable social floor – in terms of outcomes in respect of health, education, transport, shelter, food and other central living costs.
- The ability of households to achieve this standard.
- The minimum package of publicly delivered transfers, goods and services that are needed to enable households to develop their capabilities and access opportunities.

Informal sector contributory scheme

Government is considering a progressive proposal to include low-income workers in the contributory retirement scheme. The proposal does not include people in the informal sector. A simplified arrangement for self-employed individuals is mentioned, but no details are given. We cannot afford to exclude this sector of the economy and modelling of the likely uptake needs to be done. One of the inherent weaknesses in any policy

decision concerning matching contributions is the lack of data to determine the impact that changes in the effective rate of return will have on contribution levels.

Close the social insurance gap

Government has embarked on an ambitious social security reform process that has been under way for some time. The reforms cover the following areas:

- Improve the non-contributory social assistance system, including better governance; higher means test thresholds; and alignment with tax benefits associated with old age, disability and child support.
- Enhance administrative coordination and benefit alignment of the Unemployment Insurance Fund, Road Accident Fund and Compensation Funds. A consolidated institutional framework should support coherent policy implementation, integrated social security administration and effective regulation and oversight of the system.
- Adopt a mandatory arrangement providing pension, death, disability and unemployment benefits, supported by compulsory contributions by all workers earning above a minimum income threshold.
- Regulatory reform of the pensions and life insurance industry to improve customer protection, strengthen financial soundness, and achieve better value for money for lower-income contributors, women and people living with disabilities.

The commission broadly supports these proposals, particularly those dealing with mandatory savings for retirement, death, unemployment benefits and disability. This will close a conspicuous gap that has led to many working people having to significantly lower their standard of living at retirement.

Public employment: a social protection measure for the working-age group

The commission proposes that the scale of public employment should be benchmarked against the scale of unemployment, achieving a countercyclical effect similar to an employment guarantee. The target should be to achieve 100-days of work opportunities for 50 percent of the unemployed, per year using the expanded definition of unemployment. The sectoral programmes in the Expanded Public Works Programme should continue to be implemented wherever the relevant outputs are required, while the Community Work Programme target should be based on a ratio of unemployment levels to population levels per municipality, so that it is targeted towards areas of greatest need.

These targets have to be assessed in relation to the absorptive capacity of public employment. If unemployment levels are extremely high, it is possible that a ceiling will be reached beyond which it is not possible to absorb greater numbers in meaningful ways. There will need to be scope for innovation in identifying forms of work that contribute to the public good, and to expand the range of work over time. Key opportunities exist in care work, where there are still high levels of unmet demand; food

security, as part of a zero-hunger approach; developing a more integrated approach to environmental rehabilitation and environmental services; and community safety.

There are many untapped areas in which public employment can significantly contribute to improving the lives of citizens. Proposals from the health sector have shown the need to massively increase the number of community health workers to between 700 000 and 1.3 million for effective primary health care. Similar proposals are made in the early childhood development sector, where the scope of expansion is much larger if the needs of children from early childhood to school-going age are to be met. Public employment can also play a role in providing security guards in schools and other community facilities. Appointing two administrators per school would lessen the administrative burden on teachers and allow them to spend more time teaching. The social welfare sector has also identified the need for auxiliary workers to undertake some of the work performed by highly trained professionals.

The 50 percent target should be phased in, with the 2013/14 targets as the first milestone. Assuming that over the period to 2030, wider economic policies start to bring unemployment levels down, the absolute numbers of people that constitute the 50 percent target should also drop.

The first priority is to achieve the current targets for 2013/14. If the recent target of 1 million for the Community Work Programme is included, the revised goal for the Expanded Public Works Programme is about 1.75 million work opportunities per year, which is close to 50 percent of unemployed people.

To achieve this target would require the institutional presence of a community work programme in every municipality. This would create an implementation platform that could expand and contract in response to the scale of need. The implementation model for boosting public employment is a crucial factor – and has been a critical constraint in the sectoral Expanded Public Works Programme. The community work model's importance lies not only in its scalability, but also in the way social mobilisation is made integral to the rollout process, using non-profit agencies to implement the programme and creating new forms of partnership between government, civil society and communities.

The type of public employment that the commission advocates is not just income transfer in disguise. It is about inculcating a new mindset that empowers people to contribute to their communities.

Youth employment

Policies aimed at tackling youth unemployment need to address its specific causes. The general aim to reduce unemployment is aimed at the entire working age population. The unemployment rate for youth tends to be significantly higher than for the rest of the population. This is due to:

- The formation of a queue in a context of high unemployment: older work-seekers tend to get jobs before new entrants to the labour market.
- Young people lack experience and the skills needed to search for jobs.
- Young people may lack the foundation skills and capabilities sought by employers.

Policies to reduce unemployment will differ depending on the location, educational attainment and age group. A large number of unemployed youth have less than a matric certificate, and our proposals focus on this group, as well as those who stopped studying after completing matric.

The central policy proposals include:

- Improve access to quality education (details are in the education, training and innovation chapter).
- Expand work opportunities and internships in the lower grades of the public service.
- Expand opportunities in community care services and public employment programmes.
- Support small-scale agriculture – already half of the subsistence producers are under the age of 29. They should be supported to expand this production to a small marketable yield.
- Financial support should be made available for social mobilisation programmes that draw young people into positive group activities.
- Some active labour market policies should be implemented over the coming years to test their impact.

Address the skills deficit in the social welfare sector

In the immediate and medium term, we need to increase the supply of four categories of social service professionals to respond to the demand for appropriate basic social welfare services. These categories include social workers, auxiliary or assistant social workers, community development workers, and child and youth care workers.

Current estimates of qualified social workers registered with the South African Council for Social Service Professionals (SACSSP) and approved to practice are set at 15 000. Universities should increase the numbers of students admitted to study social work by 5 percent each year until 2030 and provide support to assist social work graduates in obtaining employment and developing professional experience.

Auxiliary social workers require adequate levels of education and training to work under the guidance of qualified social workers. Tertiary institutions providing such training should be required to comply with the minimum standards and requirements set by the SACSSP. The accepted ratio for auxiliary social workers to social workers is 5 to 1: a social worker should not have more than five auxiliary social workers providing assistance. This is to avoid compromising the quality of supervision and the quality of care provided by the auxiliary social workers. Increasing welfare service provision to

meet current needs and demands requires a phased approach to bring approximately 75 000 auxiliary social workers into the system.

Auxiliary social workers could be recruited from unemployed youth who have passed grade 12 but not qualified for entry to university. A system needs to be designed for auxiliary training and practice as part of a credit building system that could from the basis for a social work degree after a minimum of five years practice as an auxiliary. This would help to address the shortages in social work capacity in the medium term, and also provide a career path through which the numbers of professional social workers could be increased in the longer term.

Community development professionals are needed to ensure efficient service delivery at local community levels with regard to building community structures, responding to crime prevention, youth and adult continuous learning, and the promotion of sport, recreation and the facilitation of community cohesion. It is estimated that 10 000 community development workers are employed in provincial and local government settings across South Africa. The quality of their education and training needs to be assessed and aligned with the minimum requirements for professional service delivery. Research is needed to determine the future demand and supply side issues related to community development practice.

The current supply and employment of child and youth care workers is inadequate to meet the statutory requirements required by the Children's Act of 2005. Child and youth care professionals who meet the minimum requirements are needed to provide statutory and non statutory services. The Children's Act of 2005 (as amended) makes provision for residential care arrangements where there are more than six children outside the child's family environment and a range of programmes that must be offered. These include the reception, care and development of children; the reception and temporary safe care of children; the reception, development and secure care of children; the reception and care of street children; and early childhood development programmes. Training and education of child and youth care workers is necessary to ensure appropriate care and development of children with disabilities or chronic illnesses, therapeutic and development programmes, treatment interventions for addiction to dependency-producing substances and treatment of children with psychiatric conditions.

Social audits

An essential feature of any well functioning democracy is the ability of citizens to hold government accountable for its efficient and equitable delivery of public services, including social protection. Many social protection programmes have a grievance procedure or a complaints mechanism, which allows both beneficiaries and non-beneficiaries to raise concerns and have them addressed. Without encouraging a culture of complaint, it is important that legitimate errors are corrected, bad practices are exposed, and the rules and procedures of each programme clearly explained to avoid

unnecessary confusion. An independent complaints or grievance mechanism is recommended for all social grant programmes to improve transparency, efficiency and equity, and expose corrupt practices.

A social audit is a mechanism for decentralised, collaborative and democratic governance that involves communities directly in programme monitoring and evaluation activities. The simplest form of social audit is a public assembly where all the details of a programme are read out. More elaborate social audits include inviting citizens to scrutinise programme documents and payment records, collaboratively investigating discrepancies and following up on grievances raised, and reporting back on remedial actions taken to a specially convened community meeting.

This not only ensures greater transparency and collective accountability, but also empowers poor and vulnerable people by giving them a voice in the implementation of programmes and delivery of services. Citizens are empowered through social audits, by being included in the management of social programmes, by having access to information that is usually concealed, and by influencing the design and improving the implementation of social protection programmes.

Social grant programmes in South Africa could benefit from social audits, not only because this would enhance the effectiveness of these programmes, but also because it would empower poor and vulnerable citizens and deepen the process of democratic inclusion.

Establish a national register of welfare and social service recipients

A system that is integrated and captured onto one database, with all individuals and households on some form of state-supported welfare, appears to be an ideal system worth implementing. Brazil and India have developed universal information systems. We propose that such a system be developed for South Africa.

South Africa already has a significant advantage of possessing a unique identifier for almost all state administrative support systems – citizens identity numbers. This unique identifier can be used as a mechanism for capturing an individual's information across a range of state services. For example, the following systems could form part of an initial attempt to merge the different state databases:

- Labour Centre data on Unemployment Insurance Fund claimants and new job-seekers.
- South African Social Security Agency data on all grant recipients.
- Unemployment Insurance Fund data on all employed contributors and unemployed claimants.
- Sectoral Education Training Authority data on all learners benefitting from skills levy funds for training.

- Participants in Expanded Public Works Programme and Community Work Programme projects since inception.
- Indigent registers used by municipalities to provide free basic services.
- National Housing Subsidy Scheme database.

Using the identity number of the individual recipient of any of these state services, the process of identifying the scale, magnitude and reach of social protection offered by the government can begin. Although this will potentially be a fairly costly and labour-intensive exercise, it will streamline and increase the efficiency of the country's social assistance programme and welfare provision.

Conclusion

If South Africa is to make real progress in eliminating poverty and reducing inequality, it will need to provide its people with the secure foundation from which they can expand their capabilities and improve their life opportunities. Social protection has a critical role to play in providing this minimal security, as do a range of social welfare services designed to provide targeted support to vulnerable groups.

Chapter 12

BUILDING SAFER COMMUNITIES

"In our well designed community surroundings we feel safe everywhere... Each community has a police station with respected and upright police... The law enables us to live together fulfilling our mutual obligations and responsibilities."

Introduction

Safety is a core human right. It is a necessary condition for human development, improving quality of life and enhancing productivity. When communities do not feel safe and live in fear, the country's economic development and the people's wellbeing is affected, hindering their ability to achieve their potential.

The National Planning Commission's *Diagnostic Report* (2011) underlined the reality that high crime levels have slowed South Africa's social and economic development. "Violent crime, contact crime and property crimes are so common that many South Africans live in fear. When people feel unsafe it makes it harder for them to pursue their personal goals, and to take part in social and economic activity."

Although recent crime statistics released by the South African Police Service show a downward trend, especially in murder rates, the figures are still unacceptably high. While the police service is commended for the decline in murder rates, the cause of the overall trend needs to be analysed, and strategies that produce results in general, and specifically in contact crimes, should continue to be used. For people living in South Africa to feel safe, this trend needs to be escalated.

Safety and security are directly related to socioeconomic development and equality, affecting the development objectives of economic growth and transformation, employment creation, improved education and health outcomes, and strengthened social cohesion.

Although there are links between South Africa's high poverty rate and high crime levels, crime is linked to more than poverty. Most poor people do not resort to crime. It is organised syndicates that launder money, deal in drugs and smuggle guns. These mob-like criminals are not necessarily from poor communities, as is evident from the Palazzolo, Agliotti and alleged fraudster Krejcir cases.

Vision 2030

In 2030, people living in South Africa feel safe and have no fear of crime. They are safe at home, at school, at work and they enjoy an active community life free of fear. Women can walk freely in the streets and children can play safely outside. The police service is a well resourced professional institution staffed by highly skilled officers who value their work, serve the community, safeguard lives and property without discrimination, protect the peaceful against violence and respect the rights of all to equality and justice.

How to achieve it

Achieving this vision requires a well functioning criminal justice system, in which the police, the judiciary and correctional services work together to ensure that suspects are caught, prosecuted, convicted if guilty, and securely incarcerated. There are five priorities to focus on to achieve a crime-free South Africa.

- Strengthen the criminal justice system – A safe South Africa will not be achieved without a strong criminal justice system. This requires cooperation between all departments in the justice crime prevention and security cluster. We believe the correct implementation of the recommendations in the *Review of the South African Criminal Justice System* will go far in dealing with the system's current weaknesses.
- Make the police service professional – A professional police service is essential for a strong criminal justice system. We propose linking the police code of conduct and a code of professionalism to promotion and disciplinary regulations. Recruitment should attract competent, skilled professionals through a two-track system.
- Demilitarise the police service – The decision to demilitarise the police force, moving away from its history of brutality, was a key goal of transformation after 1994. The remilitarisation of the police in recent years has not garnered greater respect for police officers and higher conviction rates. If anything, it has boosted violence in the service and seen an increase in murders of police. The commission believes that the police should be demilitarised to turn the force into a civilian, professional service.
- Build safety using an integrated approach – Achieving long-term, sustainable safety requires an integrated approach focused on tackling the fundamental causes of criminality. This requires mobilising a wider range of state and non-state capacities and resources at all levels and active citizen involvement and co-responsibility.
- Build community participation in community safety – Civil society organisations and civic participation are critical elements of a safe and secure society. Local government legislation provides for establishing community safety centres to enable safe, healthy communities. Establishing these centres should be considered.

Strengthen the criminal justice system: The seven-point plan

Public confidence in the criminal justice system is a necessary and important step in preventing crime and increasing levels of safety. The likelihood of crimes being committed is increased if the system is regarded as inefficient. Confidence is eroded by perceptions that criminals escape the law, arrests will not lead to convictions, or prisoners escape easily from the courtroom or correctional facilities. The most effective deterrent to criminality is an efficient and effective criminal justice system.

The 2007 review of the criminal justice system, led by advocate Johnny de Lange (then Deputy Minister of Justice), recommended a seven-point plan that was adopted by Cabinet. The plan set out how to establish a new, modernised, efficient and transformed system. It included setting up a new coordinating and management structure at every level, from national to local; greater cooperation between the judiciary and the magistracy, the police, prosecutors, correctional services and the Legal Aid Board; and other initiatives such as empowering community police forums. The Office for Criminal Justice System Reform began implementing the plan as recommended. The plan contains seven fundamental and far-reaching transformative changes to the criminal justice system and requires full implementation in an integrated and holistic manner to achieve the stated outcomes. The plan contains seven critical change areas:

- Adopt a single vision and mission leading to a single set of objectives, priorities and performance measurement targets for the criminal justice system by the justice crime prevention and security cluster.
- Establish, through legislation or by protocol, a new and realigned single coordinating and management structure for the system, flowing seamlessly from cabinet to each court. Appoint a person from the executive as head of the structure with coordination and management functions, but not executive powers.
- Make substantial changes to the present court process in criminal matters through practical, short- and medium-term proposals to improve the performance of the courts, especially the regional courts.
- Put into operation key priorities identified for the component parts of the system, which are part of (or affect) the new court process, especially as it pertains to improving capacity.
- Establish an integrated and seamless national criminal justice system information and technology database or system, or both, containing all information relevant to the criminal justice system. Review and harmonise the template for gathering information relating to the criminal justice system.
- Modernise, in an integrated and holistic way, all aspects of systems and equipment. This would include fast-tracking the implementation of current projects and modernisation initiatives.
- Involve the public in the fight against crime by introducing changes to community policing, including expanding its role to deal with all matters in the system, such as policing and parole boards. According to the Department of Justice and

Constitutional Development in 2008, financial and administrative infrastructure should be provided to give community police forums "teeth".

The de Lange review committee referred to the plan as a package that must be implemented as a whole. The Department of Justice and Constitutional Development has been reporting on the plan to Parliament as part of its annual performance plan report. The plan is included in the department's strategic plan and the Medium Term Expenditure Framework. However, the South African Police Service, Correctional Services and Home Affairs did not make specific reference to the seven-point plan in their strategic objectives, although they referred to some aspects of it. The police service highlighted enhancing information systems and information and communication technology (ICT), including integration of systems across the justice, crime prevention and security cluster. This partial implementation does not give effect to the strategy as intended by the de Lange review. The seven-point plan cannot be left to one department to put into action. It must be coordinated, with dedicated budgets and an implementation plan involving all departments in the cluster. It needs to be executed in tandem with stipulated timeframes and intended outcomes. Without coherence, the seven-point plan's purpose will be defeated and resources wasted.

The commission therefore recommends the following:

- Departments in the justice, crime prevention and security cluster align their strategic plans with the seven-point plan immediately.
- A project manager is appointed urgently to the Office for Criminal Justice System Reform to coordinate the plan's activities and programmes.
- Dedicated budgets for each participating department be established and outcomes reported on in relation to the plan.
- The cluster should monitor and report on the plan's implementation.
- An evaluation of the implementation of the plan should be done annually and assessed against the overarching objectives of the plan.

A professional police service – a key component of the criminal justice system

The South African Police Service aims to develop professionalism and discipline among its members. This approach should be welcomed and supported. Professionalising requires very clear steps, some of which have already been taken, such as developing a code of conduct. This code should be integrated with police human resource systems and non-adherence should have consequences for police members. The professional obligations of the police should be spelt out more clearly to avoid blurring of roles and functions. For example, police perform functions that should be the responsibility of the Department of Social Development (mediating domestic disputes and relocating homeless people). While these social challenges have a security dimension, the primary responsibility for addressing them should lie with social workers, with police playing a supporting role.

Professional police conduct themselves in a way that upholds the integrity of the police service. They are knowledgeable about the law and their roles, carry out their functions competently and understand their responsibility to serve communities. In this way, they will earn the respect and support of South Africans.

The commission recommends the professionalisation of the police by enforcing the code of conduct and a professional police code of ethics, appointing highly trained and skilled personnel and establishing a professional body to set and regulate standards.

Code of conduct

- In the short term, the code of conduct should be included in the disciplinary regulations and performance appraisal system of the police. The police service and the metropolitan police authority provide all their members with a copy of the code of conduct. Members are required to sign a copy of the code, which is kept in their personal file.
- Disciplinary cases involving a breach or breaches of the code should be dealt with as a priority.
- Police service members charged with misconduct under the code should be required to leave their station immediately until allegations are tested and cases finalised.
- A professional police code of ethics dealing with police functions should be developed and prescribed through regulations. The South African Police Service and metropolitan police should be viewed as professionals, working in a skilled occupational group with a prime function to protect the public. They are the only agencies mandated to use necessary coercive force. Ethics and ethical conduct should play an important role in maintaining the public perception of policing as a professional institution.
- The ethics code should state that the officer's fundamental duties are to the Constitution, to serve the community, safeguard lives and property without discrimination, protect the peaceful against violence and the weak against intimidation, and respect the constitutional rights of all to equality and justice.
- The code should also prescribe the off-duty obligation of police officials to honour the badge as a symbol of public trust. Internal and external oversight bodies can request a review of the professional ethics of an individual, unit or section of police and law enforcement agency. Sanctions could be imposed, including the withdrawal of commission.
- Mandated oversight bodies will monitor adherence to professional ethics and recommend appropriate sanctions where necessary. The Independent Police Investigative Directorate and the policing board would also play a role.
- Police officials and law enforcement members should be trained and tested in applying professional ethics.

National policing board

A national policing board should be established, with multi-sectoral and multidisciplinary expertise. It will set standards for recruiting, selecting, appointing and promoting police officials and police officers. The board will also develop a professional code of ethics and analyse the professional standing of policing, based on international norms and standards.

Selecting for excellence and professionalism

A professional police service conforms to minimum standards, set by a professional body, for recruitment, selection, appointment and promotion. Provision can be made for a two-stream system of recruitment.

- As soon as possible, all officers should undergo a competency assessment and be rated accordingly. This rating differs from police rank. For example, if you are a captain, you remain a captain, but the competency test determines if you meet the competency standard for a captain. Officers who do not meet the standard should not be promoted or appointed to a higher level until they meet the required level of competence.
- A two-stream system should be developed in the next five years to create a high calibre of officers and recruits who are capable of being trained for effective professional policing. The basic police stream would allow for the recruitment and selection of non-commissioned officers, who could progress through training and competence gained from experience to a warrant officer or inspector, or any level below a commissioned officer. There should be objective testing against set standards to reward experience and competence. Non-commissioned members should be supported and mentored by commissioned officers. Peer sanction will promote professional norms and standards, and is an effective counter to corruption and unprofessional behaviour. Such outcomes are possible only if officers are respected and command mutual respect. In the officer stream, commissioned officers are selected on criteria and standards set by a professional body. Direct recruitment to the officer's stream is based on set criteria, followed by further training and testing for candidate officers. Officers are commissioned when all criteria are met. The basic stream and officers' stream can be flexible to allow aspiring officers to work towards meeting the criteria for consideration to the officers' corps. Similarly, officers can lose their commissions if they fail to live up to standards.
- The National Commissioner of Police and deputies should be appointed on a competitive basis. A selection panel, established by the President, would select and interview candidates for these posts. Clear and objective criteria should be established to ensure that the incumbents are respected and held in high esteem by the police service and the community.

"The whole thrust of my suggestion is to turn the SAPS into a successful organisation that is an employer of choice among South Africans (aim for recognition as number one sought after employer amongst South Africans). People need to aspire and study/work hard to achieve a place in the SAPS and then be richly rewarded for their good service and sacrifice as an SAPS member." – NPC Jam

Training for professionalism

- Renew focus on strengthening the capacity and standing of detectives and specialised investigators, particularly in the fields of forensics, ballistics and crime-scene investigations. These specialised units should be deployed when and where they are most needed – during peak crime periods and in high-risk areas.
- Re-establish specialised units, staffed with highly trained and professional police officers, to respond to changing crime trends (cyber crime, human trafficking, crimes against women and children, international crime syndicates and so on). Technology development has greatly influenced crime patterns and the commission of crime. Bank robberies can now also be committed using computers anywhere in the world. Social networks lure victims and people are drawn into Ponzi schemes through intricate and sophisticated international schemes. Police training needs to keep abreast of these developments. Superior instruction standards and partnerships with the private sector and universities will increase police competence.
- Deploy officers according to crime patterns and trends. Officers should be available to direct operations, investigate crime and supervise staff outside office hours. Office hours should not apply to policing to ensure that senior staff are always available to resolve crime matters with speed and efficiency.

Civilianising the police

Civilianising a highly militarised and politicised police force was a key objective of transformation immediately after the 1994 elections. It was considered necessary to professionalise the police, establish a rapport with communities, develop confidence and trust in the police and promote positive community-police relations. Civilianisation of the police required the changing of police insignia, military ranks and force orders.

From 2000, the police service gradually started reverting to a semblance of a paramilitary force. This process was formalised with the reintroduction of military ranks in 2010. This took place against the backdrop of increasing violent crime, high levels of community frustration and fear, and a police perception that they would command greater respect from communities if they had military ranks. However, not only are these arguments inconsistent with the case for professionalising the police service, but they are also undermined by evidence of an increase in murders of police since the remilitarisation of the service.

The police will earn the respect of communities if they are efficient and effective. Military ranks might create fear, but they do not instil respect. Critically, they do not lead to a greater rate of arrests and convictions. Instead, militarisation can contribute to increased violence by police and undue heavy-handed conduct, deterring effective investigations. This was evident in the Independent Complaints Directorate 2011 report, which showed an 800 percent increase in torture by the police. The police should not be conflated with the army. They should discharge their functions with confidence and with regard for civil and criminal law and, above all, the Constitution.

The commission recommends that the police are re-civilianised. Demilitarising the police should be done immediately. Police culture should be assessed to increase a professional response to the public. Competence, not military ranks, will command respect.

An integrated approach to building safety

The commission's diagnostic made it clear that "an effective, integrated strategy is needed to address the pervasive problem of violence". It added that, "in discussing crime, there is always the danger of focusing too much on policing as the only solution. There is no doubt that more visible policing gives citizens a sense of protection, but reducing crime will require a combination of interventions, including those originating from outside the criminal justice system."

"We need an integrated solution to achieve safety and security in South Africa. All agencies should be part of a national working group to identify impact areas, plan, implement, and monitor innovative responsive solutions." – NPC Jam

It is necessary to move from a narrow law enforcement approach to crime and safety to a focus on identifying and resolving the root causes of crime. To achieve this, a wider range of state and non-state capacities will need to be mobilised at all levels, which requires shifting to an integrated approach, with active citizen involvement and co-responsibility.

A holistic view of safety and security

Crime results from several interrelated societal elements that predispose some individuals or groups to certain types of crime. A study by the World Bank in 2010 confirms that "there has been a growing consensus among policy-makers that violence is not simply a security issue but that it has deep social and economic roots and consequences". An effective and efficient response to violent crime requires a holistic approach to community safety that takes the causes of crime into consideration and responds to specific triggers or causal factors. This approach is often considered too complex, time consuming and long term. There is no known quick fix, however, because sustainable community safety is long term, it requires coordinated efforts, high levels of analysis of crime patterns and trends using crime intelligence and leadership to

command and direct policing responses. Other departments, local government and civil society also need to intervene.

Crime prevention and community safety are demanding – the temptation always exists to fall back on a "more police, bigger guns" approach. Short-term results are neither sufficient nor sustainable in the long term. To develop a framework for community safety and crime prevention, the interrelated factors set out below need to be considered:

- Underlying root causes, such as poverty, inequality, unemployment, and a variety of temptations and motivations to engage in criminal activity. Although research has shown the complex relationship between these factors, it is clear that the higher their confluence, the more likely people are to be motivated to commit criminal offences.
- Lack of social cohesion, inadequate care of children, and a failure to accept and internalise "good" societal norms.
- Crime and victimisation often arise when there is opportunity and motive. For example, the availability of targets (vulnerable people or properties), the availability of weapons (tools of criminal trades), situational factors (such as spatial or environmental design) and the availability of accomplices (organisational requirements).

An effective safety strategy will need to take a systems view of all these factors and pinpoint the interventions that will have the greatest impact in improving safety, with the best return on human, technical and financial resources. Crucially, it is also necessary to identify which agencies and institutions across government departments, civil society and the private sector are best placed to lead and contribute to these interventions.

Integrated strategies and plans have been mooted before and several attempts have been made to implement a more holistic approach to community safety and crime prevention. This includes the National Crime Prevention Strategy of 1996 and its variations. Although this strategy incorporated cutting-edge international thinking and was widely recognised as sound, it was never fully institutionalised as a holistic and comprehensive strategy that focused on all factors that produce crime and insecurity. In March 2000, the National Crime Combating Strategy superseded this policy and advocated a very different approach, focusing more on criminal justice resources. As a result, police were inappropriately envisaged as an all-purpose agency, rather than a highly specialised resource to be deployed strategically. This has led to a police agency that is stretched beyond its capacity, with a mandate that is impossible to fulfil, and disenchanted police officers with fragile authority and legitimacy. The challenge is to ensure that an integrated strategy is followed from planning to consistent implementation, with monitoring by, and support from, all relevant role players. Leadership, coordination, monitoring, reporting and accountability are key elements for success. The criminal justice system is currently the primary focus, concentrating on existing and would-be offenders. It functions primarily through punishment, which aims

to deter future criminality and, in the case of imprisonment, prevent further criminality by putting offenders out of action.

The police play a vital role in protecting citizens by intervening, using reasonable coercive force where necessary, to stop harmful actions, support victims and bring offenders before court. An effective criminal justice system improves safety, while other departments address socioeconomic conditions of human development. This is emphasised in the commission's diagnostic, which points out that an effective criminal justice system is a necessary condition to effectively promote safety and security, but it is insufficient on its own. More is required for sustainable and effective solutions to crime and insecurity. The coordination of these multi-agencies is critical to sustain the gains of an integrated strategy. A significant decline in crime should be evaluated and the reasons examined, so that it can be sustained, repeated and increased.

The commission recommends the following:

- Community safety designs should address the safety of women, children and vulnerable groups. The police service should develop safety plans that deal with safety risks and account for the increase in safety and reduction of fear alongside crime statistics reports. Crime statistics will provide the quantitative basis for reporting by the police service and metropolitan police, and community safety levels will provide the qualitative safety indicators.
- Independent service providers need to conduct context studies and opinion surveys to gather information on perceptions of safety and fear of crime. These findings should be factored into policing plans, local government development plans and the criminal justice system as a whole.
- The relationship between drugs, alcohol and violence requires an in-depth study. Specific projects should be developed by the JCPS cluster to address these issues in a comprehensive and decisive way.

Implement strategies known to work

A coordinated and holistic approach to safety and security is achievable. Some aspects of this approach were seen during elections since 1994 and the 2010 soccer World Cup. Safety and security strategies for these events involved successfully aligning resources with appropriate solutions across the security spectrum. Furthermore, the roles of the agencies involved in safety and security were clearly defined and mandates and protocols understood. Equally important was the recourse given to citizens for inefficiencies or delivery gaps. Community cooperation and support for any safety strategy are extremely important.

Community participation in community safety

Civil society organisations and civic participation are critical elements of a safe and secure society. Community problem-solving during the xenophobic violence of 2008 is an example of non-state interventions and mobilisation resolving conflict and potential

criminality. At the time, the state police acted as the stabiliser, while civil society and other state departments were the problem-solvers. The partnership was negotiated through coordinating structures at various levels of the state, including community-based agencies (church organisations or civic associations). A sustainable strategy requires greater clarity on various roles and a resourced coordinating mechanism that will bring state and non-state policing agencies together to secure community safety and build community cohesion. The state is best placed to play this role and account to citizens.

The Municipal Systems Act (2000) provides for local government to promote a safe and healthy municipal environment. Community safety centres, promoted by the Secretariat for Police and provincial departments of community safety, should be revisited to give effect to this provision. Local municipalities need to work closely with all state and non-state bodies to establish their safety needs and, within their mandates, develop strategies to increase safety. Safety audits or safety barometers should be developed with communities, especially the vulnerable, to inform a local government response to safety. This could include better street lighting, removing rubbish dumps and hazardous waste, and municipal by-laws to increase community safety and wellness.

"We should be more involved as community in crime prevention!" – NPC Jam

These initiatives should involve the youth and could be run by sectors, such as education, sports, arts and culture, and social welfare, coordinated by community safety centres. Local government should use its mandate more creatively and innovatively to achieve community safety. It is at local level that communities feel empowered to take part actively in making their environment safer and more secure. Spatial planning of the physical environment should be developed by consulting communities, and designing for safety and crime prevention should be regulated at local level. Specialised skills for safety design could be sourced where capacity is lacking.

Universities and technical colleges should develop courses to promote urban design that will take account of safety in future housing developments and carry out corrective designs in established housing developments.

The Community Safety Volunteer Programme has been implemented in Gauteng, the Western Cape and KwaZulu-Natal with some success. The programme uses volunteers as marshals at schools, clinics, railway stations and parking lots. In the Western Cape, volunteers were also highly effective in the Child Safety Programme. The programme developed a rapid response system to track missing children. When the Department of Community Safety in the Western Cape wanted to shut the School Safety Volunteer Programme, principals, teachers and learners protested because the community felt safer with the volunteers.

The commission recommends the following:

The police service and metropolitan police should further develop the Community Safety Volunteer Programme as part of a community empowerment programme for safety. Volunteers should be deployed to at-risk schools, health clinics, pension and grant payment points, taxi ranks, parking spaces and areas with poor street lighting, public congestion, open fields or generally unsafe areas. These volunteers are not substitutes for visible policing and they do not carry out any police functions. They only provide safety to the public through visibility and safety in numbers – and where they themselves are not put at risk. The volunteers are also contact-points for the police and other departments, providing up-to-date accounts of community needs, fears and feedback.

The programme should be included in the budgets of local governments, the metropolitan police and provincial departments of community safety. Existing capacity, skills and experience in some provinces like Gauteng, the Western Cape and KwaZulu-Natal should be extended. The capacity to deliver this programme needs to be developed in all nine provinces.

Conclusion

As part of an overall safety strategy, these proposals should be implemented alongside carefully considered and effective law enforcement interventions driven by the criminal justice system. Continuing to strengthen the cost-effectiveness of the system – including the police, prosecutors, courts and prisons – is a core part of any safety strategy.

Law enforcement provides the institutional mandate required to improve safety. However, it does not, and cannot, provide a total response. Communities need to be mobilised to play an active role in community safety. The private sector plays an important role, and already supports local initiatives, providing technological support with closed-circuit television cameras or information technology. Private security initiatives have been carrying out joint operations with police and taking part in joint patrols and check points with neighbourhood watches. These initiatives should be supported and extended.

The proposals will need dedicated budgets and regular cost-benefit analysis to ensure that the public get the necessary return on investment of public resources. Accountability checks should be undertaken by community police forums to ensure the police are accountable to the community they serve. The community forums should provide feedback to the police on public perception of safety and fear of crime.

The proposals to mobilise and integrate the knowledge and capacity needed to shape and implement safety solutions require overall leadership, which will allay public fears and increase perceptions of safety. Government will need to increase reporting on safety outcomes and progress to instil confidence in its ability to protect the public and

create conditions for everyone to enjoy freedom of movement and safety. Such initiatives, as part of an integrated strategy, can reverse the cycle of crime that has become such a constant feature in South Africa, skewing the narrative about our capabilities and our potential as a nation. Safety involves the criminal justice system, local government, the community, private sector and role players involved in economic and social development. Achieving a safe and secure society in 2030 will require an integrated approach to make safety and security a reality for all South Africans in 2030.

Chapter 13

BUILDING A CAPABLE STATE

"We feel loved, respected and cared for
in public institutions.
What we contribute in our taxes, we get back
through the high quality of our public services
that is why we have:
good clinics and hospitals with well trained, caring doctors and administrators, nurses who rush to our aid with empathy and expertise;
affordable effective medicines, because they were made for all of us;
good schools with well educated, trained and caring teachers.
Each community has:
a school,
teachers who love teaching and learning,
a local library filled with the wealth of books,
a librarian,
a police station with respected and upright police,
a clinic with nurses who love caring for people."

Introduction

In this chapter, we identify critical interventions to build a professional public service and a state capable of playing a transformative and developmental role in realising the vision for 2030. South Africa's National Development Plan will require collaboration between all sections of society and strong leadership by government. In a society with deep social and economic divisions, neither social nor economic transformation is possible without an effective state. The state provides the institutions and infrastructure that enable the economy and society to operate. Its ability to carry out these functions has a profound impact on the lives of all South Africans.

Progress so far

Since 1994, South Africa has made significant progress in building the structures of a democratic state. The fragmented governance structures of apartheid have been consolidated into a system designed to serve developmental objectives. The composition of the public service and local government has been transformed to better represent the entire population. The introduction of democracy provides a basis for greater accountability of the state to its citizens. The state has successfully restructured public finances, created an effective tax system, and built an independent and credible reserve bank. The state has made significant progress in the provision of basic services such as housing, water and electricity. The foundations for a capable state have been laid, but there are major concerns about the weaknesses in how these structures function, which constrain the state's ability to pursue key developmental objectives.

The challenge

In the diagnostic documents, the National Planning Commission highlighted the unevenness in state capacity, which leads to uneven performance in local, provincial and national government. The uneven performance of the public service results from the interplay between a complex set of factors, including tensions in the political-administrative interface, instability of the administrative leadership, skills deficits, the erosion of accountability and authority, poor organisational design, inappropriate staffing and low staff morale. The weaknesses in capacity and performance are most serious in historically disadvantaged areas where state intervention is most needed to improve people's quality of life. There have been many individual initiatives to address these problems, but there is a tendency to jump from one quick fix or policy fad to the next, rather than pursuing a long-term sustained focus on tackling the major obstacles to improving the performance of the public service. These frequent changes have created instability in organisational structures and policy approaches that further strain limited capacity, exacerbating the problem of uneven performance.

The temptation of quick fixes has diverted attention from more fundamental priorities, particularly the deficit in skills and professionalism affecting all elements of the public service. At senior levels, reporting and recruitment structures allow for too much political interference in selecting and managing senior staff. The result has been unnecessary turbulence in senior posts in the public service and reduced confidence in the leadership, which undermines the morale of public servants and citizens' confidence in the state. At junior levels, there has been insufficient focus on providing stimulating career paths that ensure the reproduction of skills and foster a sense of professional common purpose. The state lacks a clear vision for where the next generation of public servants will come from and how specialist professional skills will be reproduced. Weak managerial capacity and a lack of leadership prevent these issues being addressed promptly.

South Africa has struggled to achieve constructive relations between the three spheres of government. A lack of clarity about the division and coordination of powers and responsibilities together with the lack of coherent and predictable mechanisms for delegating or assigning functions has created tensions and instability across the three spheres. There is no consensus on how this is going to be resolved and there is a lack of leadership in finding appropriate solutions. These coordination problems are not unique to South Africa. They are made more difficult by gradual mission creep as each government agency is expected to fulfil multiple objectives. The key issue is how they are dealt with. At present, there is no clarity on who has responsibility for mediating disputes and overcoming coordination problems.

2030 vision

If we are to address the twin challenges of poverty and inequality, a state is needed that is capable of playing a transformative and developmental role. This requires well run and effectively coordinated state institutions staffed by skilled public servants who are committed to the public good and capable of delivering consistently high-quality services for all South Africans, while prioritising the nation's developmental objectives. This will enable people from all sections of society to have confidence in the state, which in turn will reinforce the state's effectiveness.

What needs to be done

South Africa is a long way from this desired end-state, and some fundamental steps need to be taken or South Africa is unlikely to achieve many of the other objectives set out in the rest of the plan: high-quality public services, improving and maintaining infrastructure, and the conditions for economic development all require a professional public service and a capable state.

South Africa needs to focus relentlessly on building a professional public service and a capable state. The experience of other countries shows that this cannot be done overnight. Measures will have to be strengthened over time. There are five key areas where targeted action is particularly important:

- Stabilise the political-administrative interface – A focus on skills and professionalism will be ineffective unless the political-administrative interface is clarified to ensure a clearer separation between the roles of the political principal and the administrative head. The current emphasis on "political deployment" needs to be replaced by a focus on building a professional public service that serves government, but is sufficiently autonomous to be insulated from political patronage.
- Make the public service and local government careers of choice – South Africa needs to focus on building a skilled and professional public service from both the top and the bottom. At the top, recruitment and management should be based on experience and expertise, while at junior levels, the state needs to focus on

producing the skills and expertise that will be necessary for future public service cohorts.

- Develop technical and specialist professional skills – The state needs to reinvigorate its role in producing the specialist technical skills that are essential to fulfil its core functions, and provide appropriate career paths for technical specialists.
- Improve relations between the three spheres of government – South Africa cannot afford to continue with the current level of confusion about how responsibilities are divided, shared and monitored across local, provincial and national government. We need to recognise the wide variation in capacity, particularly at municipal level, and devolve greater responsibilities where capacity exists, while building capacity in other areas. Where capacity is more limited, particularly in many rural municipalities, municipalities should be allowed to focus on their core functions and not be burdened with too many extra responsibilities. These challenges can only partly be resolved by clarifying roles and functions. It is inevitable that there will be disagreements about how responsibilities are divided or shared, but national government needs to intervene to mediate disputes and enable consensus to emerge.
- State-owned enterprises – The major state-owned enterprises (SOE) need clear public interest mandates, and straightforward governance structures that enable them to balance and reconcile their economic and social objectives. This includes ensuring there is greater stability in SOE boards and that the chief executive is clearly accountable to the board.

New initiatives have often been ad hoc, with responses to individual problems being implemented without adequate consideration of the cumulative effect. This has resulted in public servants becoming increasingly overburdened with paperwork and new initiatives. Initiatives targeted at preventing malfeasance often focus on restricting the scope for discretion, but this has the unintended consequence of limiting the scope for innovation. The danger is that the principal objective of public servants becomes following rules, whereas it should be about getting things done. We need reforms that will enable people to do their jobs by strengthening skills, enhancing morale and clarifying lines of accountability.

Stabilise the political-administrative interface

All democratic regimes have to balance the need for public servants to be responsive to the priorities of the government of the day with the need for the public service to treat citizens equally and not discriminate on grounds of political allegiance. There has to be a clear demarcation between the roles and responsibilities of public servants and their political principals. Where the public service is too insulated from political pressures, this is likely to lead to concerns that it is failing to serve the interests of the government and is therefore not fulfilling its democratic mandate. However, where the public service is insufficiently insulated, standards can be undermined as public servants are recruited on the basis of political connections rather than skills and expertise, or access to state

resources and services becomes defined by political affiliation rather than citizenship. Countries have sought different ways to balance these two extremes.

Following the end of apartheid, there was good reason to give political principals wide-ranging influence over the public service to promote rapid transformation of a public service that had become closely associated with the apartheid regime. Having achieved significant improvements in the representivity and focus of the public service, attention now needs to shift to ensuring the public service is adequately equipped to play its part in transforming society. The 2011 Municipal Systems Amendment Act introduced a prohibition on municipal managers or those directly accountable to a municipal manger holding political office in a political party, suggesting there is growing recognition of the need to achieve a clearer demarcation between the administrative and the political.

Many of government's best-performing institutions are characterised by stability of leadership and policy approach. However, the lack of clarity about the division of roles and responsibilities between political principals and administrative heads often serves to undermine this stability. Although public servants work for elected leaders, their role is non-partisan and the potential to forge a collective professional identity as public servants requires that this distinction is kept clear. In South Africa, the current approach to appointments blurs the lines of accountability. The requirement for cabinet to approve the appointment of heads of department makes it unclear whether they are accountable to their minister, to cabinet or to the ruling party. Where the minister makes appointments below the level of director-general, it becomes unclear whether these officials report to the director-general or to the minister. This makes it overly difficult for directors-general to carry out their day-to-day responsibilities in running the department. Reforms are needed to simplify and clarify the lines of accountability, to ensure that directors-general are accountable to their minister on policy matters, and that departmental staff are accountable to their director-general. This includes responsibilities for human resources functions, which currently reside with ministers and are either reluctantly delegated to the director-general or not delegated at all.

In many other countries, a clearer distinction is drawn between the powers and responsibilities of political principals and administrative heads. This demarcation needs to be clarified in South Africa to stabilise the political-administrative interface. This can be done either through a designated head of the public service or an independent public service commission, or a combination of the two. In South Africa, we recommend a combination, with certain functions allocated to a career public servant in his/her capacity as head of the public service and others being allocated to a strengthened Public Service Commission. The commission should promote the skills, values and ethos of the public service, while operational accountability for administrative functioning falls to the head of the public service. Senior officials should continue to be accountable to their political principals for policy matters. This would make it easier to distinguish clearly between the head of department’s accountability to the minister for policy issues and non-political accountability for issues relating to the administrative functioning of the department.

This approach will be most successful as part of a broader commitment to building a public service based on skills and professionalism. This requires elected leaders to shift their attention away from operational details towards their core strategic function of ensuring their department fulfils its objectives. In the longer term, a focus on attracting and recruiting the best candidates to build a skilled and professional public service will benefit elected leaders, because their departments will be better equipped to pursue key policy objectives.

To stabilise the political-administrative interface, we propose the following:

- A strengthened role for the Public Service Commission in promoting norms and standards, and monitoring recruitment processes.
- Create an administrative head of the public service to whom directors-general report on organisational and administrative matters.
- A hybrid approach to top appointments that allows for the reconciliation of administrative and political priorities.
- A purely administrative approach to lower-level appointments, with senior officials given full authority to appoint staff in their departments.

Strengthen the role of the Public Service Commission

In many Organisation for Economic Cooperation and Development countries, public service commissions fulfil an advisory and oversight role, ensuring that norms and standards are followed correctly, without themselves being involved in selection processes. In other cases, the public service commission plays a more active role. For example, in the United States, the commission is responsible for appeals, while in much of South Asia it has direct responsibility for recruitment. In South Africa, the Public Service Commission is assigned an advisory and oversight role, which includes promoting the values of the public service and investigating breaches of procedures and practices. The role of the Public Service Commission should be strengthened to make it a robust champion of a meritocratic public service by promoting and monitoring key norms and standards. Consideration should also be given to whether its mandate should be extended to include the primary responsibility for setting key norms and standards, especially for recruitment processes.

The powers of the Public Service Commission are set out in Chapter 10 of the Constitution where, like the Chapter 9 institutions, its mandate is outlined in terms of the contribution it can make to protecting and supporting democracy. This gives the commission the independence that comes from reporting to and being accountable to parliament. However, the *Report of the ad hoc Committee on the Review of Chapter 9 and Associated Institutions* chaired by the late Professor Kader Asmal raised the concern that the reports produced by the Public Service Commission could only be as effective as the will of the executive to act on those proposals.

It would be counterproductive to give the Public Service Commission a far-reaching direct role in recruitment, because an overly centralised recruitment system would

make it more difficult for departments to recruit their staff and would undermine the ability of departmental heads to formulate a strategic direction for their own departments. However, consideration should be given to whether the commission should play a direct role in the recruitment of the most senior posts. For example, the chair of the Public Service Commission, together with the proposed head of the public service, could convene the selection panel for heads of department and their deputies. This would allow for a transparent process that could reinforce confidence in the way heads of department are appointed. Proposal 3 suggests how such a role could be reconciled with the need to ensure senior public servants continue to be accountable to their political principal for policy issues.

Strengthening the role of the Public Service Commission would help ensure that recruitment into the public service is based on merit. However, its credibility will depend on the commission being seen to have a strong, independent chair who carries cross-party support and commissioners who are appointed on non-political grounds. The appointment of commissioners becomes a litmus test for the government's commitment to retaining the independence of the Public Service Commission. Unfortunately, in many countries it becomes a battleground, with the independence of the public service commission having to be defended repeatedly. This will be easier to achieve if politicians are confident that the recruitment processes are delivering high-calibre staff. The model is unlikely to succeed if it achieves the objective of preventing inappropriate political interference in appointments, without also attracting the best people into the public service.

An administrative head of the public service

The role of the Public Service Commission should relate to the promotion or setting of norms and standards, not oversight of daily operational matters. We propose the creation of an administrative head of the public service to whom directors-general would report on operational and administrative matters. Many countries have such a post, including Singapore, Kenya, Ghana and the United Kingdom. A senior public servant could be assigned as head of the public service in his/her capacity as the head of an existing government department, most likely either the Department for Public Service and Administration or the Presidency, with the heads of other government departments reporting to this official on organisational and administrative matters. Measures have already been taken to foster stronger coordination through bodies such as the Forum of South African Directors-general, cluster meetings and the creation of the Department of Performance Monitoring and Evaluation. It would therefore be a natural progression to align the administrative oversight of senior public servants with these existing structures by locating the function within the Presidency. Heads of department would report to the head of the public service on administrative matters, while reporting to their minister or political principal on policy matters. At provincial level, an equivalent post could be located in the Office of the Premier. Consideration should also be given to whether the responsibility of the provincial head could extend to

playing an oversight role in relation to the recruitment and performance of municipal managers in that province.

A hybrid approach to top appointments

While directors-general and heads of department should report to an administrative head on routine organisational matters, it is still essential to ensure they are accountable to their political principal on policy issues. Political principals need to be able to have confidence in their head of department, while the administrative head of the public service has confidence in their managerial abilities.

To ensure an ongoing role for political accountability, a hybrid model could be considered. A selection panel convened by the Public Service Commission and the administrative head of the public service would draw up a short-list of suitable candidates for senior posts, from which the political principal would select a preferred candidate. This model has been used in Belgium. While it does lengthen the selection process, it allows independent oversight to ensure that candidates are suitably qualified, while also ensuring that the final selection is compatible with the priorities of the political principal.

In the longer term, this process could be combined with greater job security for directors-general and heads of department. The current short-term three year contracts are necessary when heads of department are political appointments, but they do contribute to organisational instability and make it more difficult to build an experienced senior management cadre, as some experienced people are lost to the public service unnecessarily. However, greater security of contract is only desirable if people can be removed if their performance does not meet the required standard. This means greater job security should only be considered once there is confidence that performance management mechanisms are robust.

Give senior managers authority over operational matters

The Public Service Act (1994) situates a number of human resources functions with political principals. This includes matters relating to organisational structure, appointment, promotions and transfers, performance management, and the obligations, rights and privileges of employees. Political principals are able to delegate these functions to their director-general or head of department at their discretion. In many cases, the political principal chooses not to delegate these powers. This creates a tension with the Public Finance Management Act (1999), which holds the accounting officer responsible for financial issues, meaning managers are answerable for issues over which they have limited control. It also leads to instability, as the degree of delegation can vary with each change of minister. This means senior managers cannot delegate authority to their line managers on a sustainable basis – if a future minister recentralises powers, the director-general's scope to delegate will also be undermined. We therefore recommend greater and more consistent delegation of authority for administrative

matters from political principals to their heads of department, and from the head of department to managers.

This devolution of powers should include delegating greater authority for appointments to the appropriate line managers. It is not uncommon for a department to take nine months to fill a vacancy, as the bureaucratic process has been made far too complicated – the approval of the head of department is often required at five different stages, rather than simply once at the beginning and once at the end. As a result, departments often avoid recruiting altogether, particularly for more junior posts, which leads to an increased reliance on consultants and stymies the development of a new generation of skills and experience. These overly complex procedures have not been effective at preventing inappropriate appointments. Indeed, they may have made the problem worse – overly complex procedures make it harder to attribute responsibility and increase the temptation to circumvent official processes. An effective recruitment process gives line managers the scope to recruit the people they need into funded posts within a reasonable timeframe. It also has to ensure that recruitment processes are geared towards recruiting the best people. The more rigorous approach to appointing heads of department, together with the proposed strengthening of the role of the Public Service Commission in shaping norms and standards for recruitment, provides adequate protection to allow managers the freedom to recruit within those norms and standards.

Make the public service and local government careers of choice

A professional public service is one where people are recruited and promoted on the basis of merit and potential, rather than connections or political allegiance. The public service should attract highly skilled people, binding them together by cultivating a sense of professional common purpose and a commitment to working towards developmental goals. To achieve this, South Africa needs a two-pronged approach to building a more professional public service from the top and the bottom – an approach that places the development of skills and professionalism at the heart of the plan for improving the public service. It needs to increase the pool of skilled people by ensuring that the public service and local government become careers of choice for graduates who wish to contribute to the development of the country, and high-level staff are recruited on the basis of their suitability for the job.

"If we are to develop and maintain a professional, people and service orientated public service we need to ensure that the public service becomes a calling of excellence and a career which should be sought after not for its financial gains and security but because it is the haven for passionate patriots who want to serve ALL South Africans."
– NPC Jam

The public service will not be effective if it is elitist and aloof. Public servants need to have an in-depth understanding of the sections of society with which they work. A highly

skilled public service should also be representative of, and connected to, the communities it serves.

There is a serious ambivalence towards skill in the public service. The skills that staff possess are not always valued, and status or connections are often prized more than expertise. The Department for Public Service and Administration has highlighted as one of its 10 strategic priorities the need for "effective entry into the public service and human resource development standards to ensure cadre development". This will require a shift from isolated training initiatives to a long-term approach that focuses on recruiting people with relevant aptitude and developing their skills over the course of their careers. It also requires mechanisms for anticipating shortfalls in specialist and technical skills, so that the state can take a proactive role in developing professional expertise.

The tendency has been to value people who already have relevant experience and expertise. Where these skills are not available internally, departments often rely on outside consultants. This is a short-sighted approach that does not address where the next generation of senior public servants will come from. Departments need to place greater emphasis on potential. Recruitment should focus not just on the skills people have today, but also those they could develop while working for the department. This requires a recruitment and on-the-job development strategy that is more closely linked to a vision of how public servants' experience and expertise will develop during their careers. While graduates with potential struggle to identify how they can embark on a career in the public service, departments have become top heavy because of their inability to fill more junior posts. This is an unsustainable situation.

To build a skilled and professional public service, we need to attract talented people from a diverse range of backgrounds. Jobs should be sufficiently stimulating and challenging to ensure people are constantly developing their skills. Recruitment and promotion processes need to place an overriding emphasis on skill and experience; and the state needs to focus on its role in producing and enhancing skills. This requires a clear vision of public service career paths. Below, we set out key proposals for how this can be achieved through:

- A formalised graduate recruitment scheme for the public service
- A career path for local government
- Making adequate experience a prerequisite for senior posts
- A long-term perspective on training and management.

A formalised graduate recruitment scheme for the public service

South Africa needs a strategy for recruiting dedicated young people and ensuring that their skills are developed, with career progression linked to performance. Graduates leaving university in 2011 are part of the pool from which middle and senior managers will be drawn in 2030, while children starting school in 2011 will form the cohort of aspiring entrants into the public service in 2030. To improve capacity and performance,

we need a strategy that will not only attract young people with potential, but also retain them by developing their skills and sustaining their morale. Vital to achieving this is the need to develop a sense of professional common purpose, so that public servants feel motivated by working together in the public interest.

The public service has pockets of excellence, where recruitment is highly competitive and people aspire to work, but in general, it is not the employer of choice for many graduates. The best entrants tend to be concentrated in a few departments, while many departments struggle to recruit the best people. Multiple internship schemes have been introduced. In the best cases, these provide an entry point for promising people and can be the start of fruitful careers. However, these schemes are linked to specific departments and, inevitably, they will work best and be most attractive in departments that are already performing well. In addition, because each internship scheme employs small numbers of people, they are not widely known and are too small-scale to transform perceptions of the public service as a career opportunity. There needs to be a mechanism for recruiting high-calibre applicants into all government departments.

We recommend initiating a formalised graduate recruitment scheme to attract talented graduates into government by offering stimulating and rewarding career paths. This scheme should coexist with, rather than replace, other routes into the public service.

Many countries have formalised systems for entry into the public service. These schemes vary in their level of centralisation. Some, such as the Indian Administrative Service, pursue an overly centralised approach, with emphasis on a mobile cohort of elite civil servants who can be deployed anywhere across government. The difficulty with this is that public servants are moved too often and never manage to build a detailed knowledge of how things work in a particular department. This has contributed to the formation of a state that produces elegant policy documents, but struggles with implementation.

The United Kingdom's Civil Service Fast Stream places recruits in specific departments. This has two major advantages. Graduate recruits can gain experience from a range of jobs within one department. As they progress through their career, they develop a stronger understanding of how the department works. It also allows greater autonomy for departments and graduate recruits: recruits can be given an opportunity to shortlist their preferred departments and offered a post in a particular department, rather than having to accept the uncertainty of being posted anywhere in government.

South Africa needs to ensure that it not only recruits high-calibre people, but that these people develop experience in the early stages of their career – not just of high-level policy formulation but also of the challenges faced in implementation. A formalised graduate recruitment programme should not only expose recruits to a range of posts within the national department, but also involve an extended placement in the equivalent department at provincial level. Provincial departments would benefit from the secondment of staff with knowledge of the policy priorities and operating methods

of the national department, while the national department would benefit from its staff developing a detailed knowledge of the workings of provincial government and the challenges faced at provincial level. In time, as the scheme develops, consideration should also be given to placing recruits directly with provincial departments.

A graduate recruitment programme recruits people on the basis of potential, and therefore needs to provide adequate mechanisms for learning and support. The most important skills will be learnt on the job and it is vital that graduate recruits are given focused areas of responsibility that enable them to develop specific expertise and take responsibility for particular projects early in their career. Those going into divisions and departments that function well may need no further support. If the scheme is to work in those departments where it is currently needed most, however, there needs to be a central strategy for providing training, mentoring and support throughout the first years on the scheme. A common approach to recruiting and training graduates across departments would also enable new entrants to share experiences, providing a neutral forum in which they can discuss challenges. Over time, a centralised graduate recruitment programme could help improve coordination between government departments by enabling staff to form networks across departments. In other countries, such networks have been vital in creating an ethos of public service.

The diagnostic documents highlighted the importance of a public service that is both skilled and representative. There is no inherent tension between these two objectives, between a meritocratic recruitment system and a representative public service. Affirmative action has already achieved a great deal in terms of producing a public service that is broadly representative of the country's population, although Africans are better represented in more junior posts. The difficulties with affirmative action are not with the policy itself, which is an essential if limited tool in the project of transformation. Rather, problems have arisen in circumstances where other aspects of the public service are operating imperfectly. Affirmative action places greater emphasis on potential rather than just prior performance, such as formal qualifications and exam results, making it particularly important that there are strong managerial and human resources processes for selection, mentoring, training and career development. A formalised graduate recruitment scheme linked to coordinated systems of training, mentorship and on-the-job learning could provide a strong mechanism for improving the effectiveness of affirmative action and realising its full transformative potential.

For the scheme to succeed, departments must have confidence in the calibre of applicants recruited. It should begin with a select number of outstanding recruits in the first years and the pool could be increased gradually. Recruitment should be based on a rigorous meritocratic process. It will be beneficial to look at mechanisms used in other countries, which frequently include a range of assessments such as exams, group exercises and interviews.

A formalised recruitment scheme could be marketed widely with targeted recruitment programmes at universities. These should include recent recruits talking to students at

their alma mater about their experience of being a public servant. These recruitment drives should also be linked to the promotion and extension of existing internships to provide students and recent graduates with experience of working in government. Internship schemes could also target people from disadvantaged backgrounds to promote the objectives of affirmative action.

A career path for local government

A distinct strategy is needed to ensure high-calibre people are recruited into local government. It is in the interests of all spheres of government to ensure sufficient capacity exists to implement core government priorities and responsibilities, particularly ensuring everyone has access to high-quality basic services. Yet, skills shortages are most critical in local government, especially in rural municipalities. Like national government, municipalities also require a flow of promising graduates if they are to manage their core functions. Tackling this deficit should be a priority for national government, but imposing a solution on local government will not be effective.

Internship programmes have been set up to deal with specific skills gaps. For example, internship schemes exist for both financial and engineering posts in municipalities. However, there is no overarching mechanism for recruiting graduates into local government. The autonomy accorded local government means such a scheme would need to be different to a programme for national government. This is not unusual – many countries allow local government significant autonomy in recruiting staff. In the United Kingdom, difficulty in getting high-calibre graduates interested in joining local government resulted in the National Graduate Development Programme for local government as a parallel to the Fast Stream for the national civil service. The scheme is run centrally, but local governments can choose to participate. Recruits are employed by the local government they work for but receive training over a period of two years through the central scheme.

An advantage of this approach is that it could start gradually, with a small number of municipalities and a small number of recruits. The scheme would develop on a demand-led basis – if it provides people who are valued by municipalities, the demand for graduates will increase. Similarly, if graduates have a positive experience, more recruits will be attracted.

Municipalities will need to provide adequate training and support for recruits. However, given that the need for the scheme arises partly from the current shortfall in the performance and capacity of municipalities, there also needs to be a realistic strategy to provide external support and training. As with the national equivalent, it will be important to have regular events to bring the recruits together to share experiences. A graduate recruitment scheme for local government could help build this sphere's capacity.

Make adequate experience a prerequisite for senior posts

Skills, motivation and a professional ethic should be recognised and valued at all levels of the public service and local government.

It is essential that talented people are recruited into the public service, but it is also essential to recognise that many skills are developed on the job. The public service has become increasingly top-heavy, with staff being promoted rapidly and a shrinking proportion of staff in more junior posts. As a result, staff are often promoted too rapidly, before acquiring the experience needed for senior posts.

Where the authority and experience attached to posts has been downgraded over time, salaries are high for the work required. For example, deputy director used to be considered a senior post, but today it is often treated as a junior post people can enter almost straight out of university – and on a salary higher than that of the best new entrants in many developed countries. Starting salaries are also significantly higher than equivalent entry-level posts in the private sector.

This creates three mutually reinforcing problems. It increases the pressure on more senior staff and, in turn, increases the proportion of work that is contracted out to highly paid consultants. This hinders the scope to develop capacity, because policy work becomes about commissioning consultants and managing contracts, not engaging directly in policy analysis. This is likely to lead to a widening gap between policy formulation and implementation.

The downgrading of mid-level posts also increases the ambition of middle management to be promoted to senior management levels as rapidly as possible. This creates serious problems. Rapid promotions mean people are thrown into management positions when they are still getting to grips with their policy brief. Talented young people who are promoted too quickly are likely to become frustrated. In this environment, the ability to supervise junior staff and nurture their professional development is also lost, limiting the ability of the public service to reproduce the skills it needs.

It is essential that a formalised graduate recruitment process is linked to a clearer and more graduated approach to career development. Overly rigid recruitment criteria can make recruiting and retaining good staff unnecessarily difficult, and so it is counterproductive to place strict requirements for particular grades. It will be more constructive to focus on increasing the attractiveness of mid-level posts. Promotions need to be made more difficult, but mid-level and junior posts need to be more fulfilling, so that staff can build their skills, experience and understanding before rising to more senior posts. Those with a clear aptitude for management should not be prevented from rising rapidly, but such cases should be exceptional, with promotions placing much greater emphasis on experience and depth of expertise.

Gradual promotions are more likely to be accepted where staff feel stretched and valued in their current job. They are also more likely to be accepted if staff are confident that consistent and transparent criteria are applied to promotions, with a clear career path to which they can aspire. This will be difficult to achieve as long as the perception exists that senior posts are not always allocated on the basis of relevant expertise and experience. If skills and professionalism are to improve, it is essential that the way senior public servants are appointed and managed is addressed. These appointments must not only be based on merit, but also seen to be based on merit.

A long-term perspective on training and management

To get career paths right, training and management need to address shortcomings in routine aspects of the public service. The public service lacks a vision for how promising graduates who join in their mid-20s will become skilled and experienced public servants by their mid-30s. The public service cannot expect its new recruits to have all the necessary skills, so it must incorporate a vision of how public servants can develop their skills over the course of their career. Greater clarity about career paths and a less hierarchical approach will be beneficial, but training and good management will also be essential.

Good training serves multiple objectives. It fosters a sense of professional common purpose and a shared understanding of basic principles, provides a way to communicate specific information, gives people a chance to develop specific skills or knowledge, and allows a reflection space and a neutral environment in which workers can discuss and share challenges they face in the working environment. A one-size-fits-all approach to training will not be able to achieve these objectives.

Done well, investing in people's skills is an excellent way to make them feel valued and improve staff morale. When done badly, it becomes a bureaucratic burden. To be effective, training must be empowering and led by demand. Training should be tailored to the needs of the individual, with a minimum core that focuses on building a common understanding of the role of the public service. We envisage a minimal core training function with a degree of standardisation, followed by a much broader range of options allowing individuals to take training that suits their specific needs.

Implementing an effective training programme requires good management and strong human resources capability with specialists who understand their role and, critically, its limitations. Human resources is principally an advisory function designed to provide managers with expert support and enable them to do their job. It is in this enabling role that human resources functions are currently weakest.

Effective management is about making things work. Too often, policies are formulated without adequate consideration of how they will be implemented. Good management should turn aspirational policies into implementable strategies. Good managers do not impose standardised solutions, but work closely with their staff to develop a common

understanding of how processes work and how they can be simplified to ensure that everybody knows their responsibilities and how these contribute to the wider objectives of the department. This helps staff feel more empowered, with a better understanding of their own role. Good managers seek ways to delegate responsibilities and, where necessary, work to build the capacity of their staff to fulfil those functions. Yet, the daily routines of good management are often missing. To address this, consideration should be given to how managers can become more accessible to their staff. This is particularly important for managers with direct responsibility for service delivery who should ensure that they are regularly interacting with staff at the coalface, in order to develop an understanding of the challenges faced at the point of delivery and to enable the routine flow of information.

There can be no doubt that good management is essential for making optimal use of the financial, human and physical resources that are available. However, there is no quick or easy solution for improving management standards. The quality of management depends, in part, on the production line of skills to create an adequate pool of experienced people from whom managers can be drawn. It also requires that managers are clear about their roles and the powers available to them, and that they are adequately supported in carrying out their job. Managers are rarely empowered and encouraged to use the discretion and flexibility that is potentially available to them. Greater clarity about the division of responsibilities between political principals and senior managers will make it easier for managers to understand and exercise their powers effectively.

For managers, minimal core training should include understanding their powers and the degree of discretion that is available to them within the rules. This requires targeted training to ensure that managers understand the responsibilities of their grade and the tools and support mechanisms that are available to them in fulfilling their responsibilities. Beyond this core minimum, there needs to be a diverse range of training provided. This could include leadership training for top managers, including a coaching or mentoring function that allows managers to draw on the experience and expertise of retired managers, as well as peer review mechanisms through which managers are able to support one another. It should also include access to a wide range of courses from external providers, including academic and other sources.

Making it work[1]

Making it work – the importance of improving management and operations systems

- In January 2008, the Department of Home Affairs began a reform process that reduced the time a citizen would wait for an identity book from over four months to less than six weeks. This was achieved by promoting greater collaboration, clearly outlining achievable and relevant targets, frequently measuring performance, and ensuring employees understood the entire process and the importance of their role in it. The identity document production process was simplified. Senior staff became more visibly involved, which boosted morale and fostered a culture of unity and service. The result was a clean audit, improved service and citizens' growing recognition of the department's achievements.
- The South African Revenue Service is a leading government institution. Its transformation from an unwieldy set of internal directorates to an integrated and autonomous body greatly increased revenue collection. Its successes in widening the tax net and ensuring tax compliance can be attributed to high-level support, and building a motivated and skilled staff base. The institution was quick to realise that collection would improve if they were seen as proficient at catching tax evaders, while providing an efficient service to those who complied. It simplified procedures and tailored its actions to local conditions. The South African Revenue Service now has a consulting division which is assisting other government departments in improving their systems.
- The difficulties faced by public hospitals are well known, but there are important lessons from reform processes in individual hospitals. These have been most effective where they were inclusive and focused on achieving visible improvements. Without changing resource levels or staffing, processes can be refined by addressing centralised control and silo structures, and focusing on key health objectives. Pilot programmes have shown that relatively simple changes to operational systems in outpatient departments and pharmaceutical dispensaries can significantly reduce waiting times.

[1] These examples are based on:

-Hausman D (2010). Reforming without hiring or firing: identity document production, South Africa 2007-2009. *Innovations for Successful Societies*, Princeton.

-National Planning Commission (2011). *Institutions and Governance Diagnostic.*

-Smith L (2003). The power of politics: The performance of the South African Revenue Service and some of its implications. *Policy: Issues and Actors* 16(2).

-von Holdt K, Smith M & Molaba M (2011). Transforming hospital functioning: an assessment of the surgical division transformation project at Chris Hani Baragwanath Hospital, *Service Delivery Research*

Develop technical and specialist professional skills

Government's strategy for administrative and policy skills needs to be accompanied by a strategy to ensure the availability of key technical and specialist professional skills. Services cannot be delivered without people with the necessary specialist skills – whether it is nurses, doctors, engineers, planners or artisans. Government lacks many key professional skills, and is suffering the consequences of its inability to reproduce expertise. This shortage is particularly severe at municipal level, where municipalities require engineers to build, maintain and operate infrastructure. Even when these functions are contracted out, municipalities still need to have the technical expertise to commission and oversee contractors.

Efforts to extend access to basic services have not been accompanied by a comparable focus on ensuring the emergence of skilled professionals. This problem has arisen partly because the state has retreated from its core role in training and producing professionals. This contrasts with the apartheid era, when government played an active role in producing professionals. In the past, graduate engineers and trainee technicians could enter the public service and obtain sufficient recognised experience, under the guidance of a qualified professional, to enable them to qualify for registration as engineering technicians and professional engineers. The public sector's position as the initiator of many major infrastructure projects meant it was best placed to plan such recruitment and training programmes. Many of the country's technical professionals were trained in this way and supplied not just the public sector but also broader industry. Many of these entrants were on public sector bursaries, with an obligation to work to pay them back. Although such bursaries may still be funded, they can no longer be provided with the required professional training post-graduation, and graduates are often lost to the public service as a result. This route is virtually non-existent now, because so much work is contracted out, and there are too few qualified professionals able to provide the necessary direction and supervision. This has a negative impact on the entire economy.

Simply focusing on the production of key skills is insufficient if professionals are not empowered to do their jobs. The wider problem of ambivalence towards skill in the public service is particularly acute when it comes to professionals. Too often, professionals in government institutions feel undervalued. Tensions arise because professional conduct cannot easily be monitored through standardised systems for performance management. In fields such as engineering where public safety and related financial risks are involved, it is important that only professionally registered persons are permitted to undertake certain tasks in the implementation of projects. The profession needs to play a strong role in monitoring, regulating and maintaining its professional standards through professional councils and associations. It is essential that this role is protected and promoted.

We propose the following:

- Strengthen the state's role in developing technical skills
- Career paths for technical specialists.

Strengthen the state's role in developing technical skills

These specialist skills will never be produced in adequate numbers without a clear strategy for training and recruitment. This requires a proactive strategy to produce and develop skilled professionals combined with a work environment in which professional expertise is recognised and valued. The production of technical skills is a long-term commitment. Government needs to be proactive in anticipating skills shortages and ensuring there are appropriate training programmes with adequate capacity to produce the technical skills required in future. This will need coordinated planning by government, in conjunction with training institutions and professional councils and associations.

Increased outsourcing has resulted in a reduced emphasis on more junior posts, yet without these, there can be no production line for producing experienced professionals. This is a major problem. The solution needs to start with apprenticeships, where new entrants can learn practical technical skills to alleviate shortages of artisanal skills. Bursaries should be made available on a competitive basis for those apprentices with the aptitude and inclination to engage in further formal training. Graduate training schemes for those who lack necessary experience should be linked to the longer-term staffing needs of departments, so that trainees have a clear sense of how their career could develop if they perform well.

For apprenticeships and graduate training schemes to work effectively and reproduce expertise across generations, experienced professionals in the same field need to mentor trainees. Where there is a shortage of such professionals within relevant departments, innovative steps will need to be taken to locate suitable mentors. This could involve partnerships with professional associations and firms, or employing retired professionals on a part-time basis.

Career paths for technical specialists

To retain experienced professionals, it will be important to have a specialist technical career path that enables individuals with high levels of expertise to continue as practitioners, without having to divert into management careers. This will enable retention of experienced professionals who can focus on project work and training less experienced staff.

Those appointed to management positions that require professional expertise should have sufficient technical knowledge, along with relevant management experience, to understand the technical challenges faced by technical specialists and to secure their respect. At the same time, support divisions such as human resources, supply chain,

stores and systems should play a supporting and enabling role to operational line management driven by professionals.

Getting the basics right: delegating and simplifying routine tasks

South Africa's focus has been on devolving responsibility to departments and municipalities, so that ministers, premiers, mayors, departmental heads and municipal managers can make, and take responsibility for, key decisions. If this model is to be effective, greater attention needs to be given to the support functions, particularly in the areas of management and human resources. In the absence of effective support functions, this model has centralised responsibility at the top of government departments and municipalities. As a result, many are over-centralised, with central management seeking to retain control of operational units, and reluctant to delegate functions like procurement and supply chain management, hiring and firing, and human resources services to managers lower down in the system. This is partly because many political principals have not fully taken advantage of the opportunity to delegate responsibility for administrative matters.

This has several perverse results: it slows down decision making and implementation of decisions, poor decisions are often made that are out of touch with operational realities, support services become unaccountable because they operate at a remote centralised level and their poor functioning undermines the ability of managers lower down the line, who cannot hold those support services to account and properly manage their domains. Accountability is weakened, when paperwork has to be signed by multiple people or at multiple stages in the process. It should be clear who has taken a procurement decision and on what grounds. It is important that responsibility can be traced to the person who made the decision. Streamlined processes could still maintain checks and balances, while clarifying accountability and making it easier for departments to take decisions.

Procurement guidelines, issued by the National Treasury in line with the Public Finance Management Act, provide scope for an accountable and straightforward process. While they define certain responsibilities and lines of accountability, authority for procurement can still be delegated where efficient supply chain management systems have been put in place.

A well designed and effectively supported control system allows front-line managers to have some procurement authority and to take responsibility for the impact of supplies, equipment and maintenance. Support service functions, such as human resources, procurement and finance, should be accountable to the appropriate operational line managers. This will enable line managers to take responsibility for operations, including staffing, discipline, expenditure against budget, equipment and supplies. The control framework informs the degree of delegation, with, for example, strict expenditure limits for supplies and procurement at different levels of the organisation. In addition, procedures and controls should be more transparent. This helps to make wastage and

corruption more visible to the direct users of supplies and services, which is an important deterrent to corruption or nepotism. Delegation needs to be accompanied by effective audit mechanisms.

South Africa's approach of decentralising maximum authority to ministers and their heads of departments will not be effective unless it is accompanied by greater delegation within departments. For this delegation to be effective, departments need good managers and high-calibre employees in key support functions such as finance and human resources. These support functions are often constraining when they should be enabling. Human resources officers need to provide expert advice to managers to help them do their jobs effectively, ensure they follow appropriate procedures and get the most out of their staff. These functions are not just about the enforcement of rules, but also about using discretion. Staff need to have sufficient confidence in their own abilities to trust their judgement and delegate. Effective delegation makes it easier for everyone to do their jobs and enhances staff morale, particularly for middle management who are given the authority to make day-to-day decisions.

Harness the energy and experience of citizens

Delegation and simplification of authority presents an opportunity to strengthen mechanisms of routine accountability, enabling the state to be more responsive to citizen concerns. The spate of service delivery protests across the country stems partly from citizens' frustration that the state is not responsive. There is a disjuncture between the communication of community grievances and the state's ability to address them. This is unfortunate, as citizens are best placed to advise on the standard of public services in their communities and to suggest possible interventions. To build a state that is both capable and serves the needs of citizens, the energy witnessed in service delivery protests and the expertise that comes from the daily experiences of using public services must be harnessed to ensure that problems with service delivery are recognised early and the state knows how to respond.

In its diagnostic chapter on institutions and governance, the National Planning Commission set out two forms of accountability. In the standard hierarchical model, junior civil servants are accountable to their superiors; the public service is accountable to its political principals, who are in turn accountable to the electorate. In the bottom-up approach, mechanisms exist for citizens to hold public officials accountable at the level at which services are delivered. These approaches are mutually reinforcing and work best in tandem. Bottom-up approaches are only likely to be effective where there is high-level commitment to citizen engagement. Citizen groups cannot be expected to have the time or resources to fulfil a complete monitoring role. They can, however, draw attention to shortcomings, highlighting issues that require attention. Senior public servants and ministers cannot realistically know everything, and citizen engagement can play an important role in bringing issues to their attention.

The Department of Performance Monitoring and Evaluation has primary responsibility for the first form of accountability – each minister is held accountable to the President through a performance agreement, the implementation of which is monitored by the department. This top-down accountability would be enhanced by an improvement of everyday bottom-up mechanisms of accountability that would enable citizens to communicate their grievances and seek redress at the point of delivery. This routine accountability would enable citizens to provide ongoing insights on service delivery, not only during formal public participation processes.

It is vital that citizens know their rights, and have the ability and inclination to claim these rights. The Batho Pele principles were introduced in 1997 to encourage public participation and promote responsive governance. Notable among these principles is that "government departments should inform citizens about the level and quality of public services they will receive so that they are aware of what to expect" and that "citizens should be given full and accurate information about the services they are entitled to". These principles emphasise transparency and information as key to accountability. Translating transparency into responsiveness, however, can only work if the information is available at the point of delivery and if the officials are empowered to act.

Delegating authority can make procedures more transparent to direct users. In addition, it empowers officials to take up grievances. Officials with operational management authority will be better able to resolve many of the basic, everyday concerns of the people they interact with. If they are faced with a problem they cannot take responsibility for, they can advise citizens on where best to take up their complaint. Simplified processes help facilitate communication between citizens and the state. This does not take away from the importance of top-down accountability structures; on the contrary, effective routine accountability to citizens should strengthen these as it provides an effective information channel.

To achieve this, basic information about what citizens can expect should always be available. When entering a public building, citizens should be able to see what service they can expect, and where to go and to whom they can talk if they do not get that service.

Strengthen the ability of parliament and provincial legislatures to play an oversight role

In any democracy the link between the legislature and the executive is important for ensuring that the executive is held to account, that policies are subject to rigorous debate and that questions get asked when things go wrong. Section 55(2) of the Constitution states that the National Assembly should maintain oversight over the executive and hold it to account.

In modern complex societies parliamentarians inevitably face difficulties in assimilating enormous quantities of information. However, there are serious concerns about whether parliament is currently fulfilling its role adequately in the building of a capable, accountable and responsive state that works effectively for its citizens. Parliament needs to provide a forum for rigorous debate and parliamentarians need to be bold in championing the concerns of citizens. It needs adequate support, particularly in the form of specialist policy and research staff to support parliamentary committees and brief parliamentarians. The functioning of parliament is not helped by the separation of the administrative and legislative capitals, which creates inefficiencies in the use of time and financial resources. It also makes it more difficult for ministers to divide their time between their ministries and parliament.

Given their limited legislative capacity, provincial legislatures need to be particularly robust in their accountability function to ensure provinces perform their core function in the delivery of basic services equitably, effectively and honestly. Provincial legislatures need to shine a light on issues of poor and uneven performance. This will not happen as long as provincial legislatures are seen primarily as a rung on the way to the national level. If provincial legislatures are not seen to fulfil this accountability function, it is inevitable that questions will be asked about their utility to the governance of the country.

At both the national and provincial level more could be done to provide adequate support for our elected representatives, but these measures will not fulfil their objectives unless legislatures show a genuine will to hold the executive to account. This requires parliamentarians to embrace their leadership role, and political parties to encourage and empower them to do so.

Improve relations between the three spheres of government

South Africa's intergovernmental framework is still relatively new: the nine provinces were formed in 1994 and the current local government system of wall-to-wall municipalities was established in 2000. South Africa is still coming to terms with this set-up, not least because the provincial system was the result of negotiation and compromise. As a result, a great deal of attention has been focused on debating whether the basic structures set out in the Constitution are the right ones, or whether fundamental restructuring is required. This has deflected attention from the much more pressing question of how to make these structures work effectively. While it is true that the governmental system is the result of compromise, this is not unique to South Africa. No country can expect to draw up its governmental framework independently of the politics of the time. Furthermore, South Africa's basic approach of decentralising responsibility for implementation while maintaining national oversight and using centralised funding mechanisms to achieve redistribution is not out of line with the approach taken by many other countries.

Following the transition to democracy, the system of local government required a major structural overhaul to move from a system designed to serve the interests of a minority to one that could serve all South Africans. As part of constitutional negotiations, municipalities were given a comparatively high degree of autonomy. The challenge is to ensure that these structures deliver for all South Africans, but there is concern that the way responsibilities are divided is creating new forms of fragmentation rather than serving national developmental objectives.

The Constitution sets out the distribution of powers and functions between the three spheres of government, but no written document can lay out every feature of the intergovernmental system. The Constitution provides a set of high-level principles for how the government system should operate, not a manual for turning those principles into reality. It takes time and experience to identify the best way of realising these principles. It is therefore unsurprising that South Africa has frequently witnessed distrust and conflict between the different spheres. This has replaced efforts to collaborate on overcoming obstacles. The costs of such chronic uncertainty are enormous. This paralysis has led to key decisions not being taken, as a wait-and-see approach takes hold. For example, the protracted debate on whether to transfer responsibility for electricity distribution from municipalities to regional electricity distributors resulted, unsurprisingly, in municipalities under-investing in the maintenance and upgrading of infrastructure for electricity distribution.

The experience of other countries does not suggest that there is an optimal approach to dividing powers and functions, but it does suggest that building effective relations between the different spheres of government requires considerable time, effort and will. The current arrangement of the three spheres of government provides foundations on which to build, but the country will need to focus on issues that require urgent and sustained attention if the spheres are to work together more effectively. There are five particular issues that need to be addressed if South Africa is to move its intergovernmental relations onto a more constructive plain:

- Improve clarity in a differentiated system
- Regionalisation as a response to capacity constraints
- A more coherent set of powers for metropolitan municipalities
- A more focused role for provinces
- A proactive approach to identifying and resolving problems.

At the heart of these different priorities is the need to clarify the division of roles and functions, and ensure disagreements are resolved quickly and effectively. This will make coordination and cooperation easier, reducing the number of areas of potential conflict. There is no doubt that the three spheres of government need to cooperate with one another, but the system currently relies too much on cooperation without paying attention to the conditions needed for effective cooperation to emerge. This makes it extremely difficult to achieve constructive intergovernmental relations. Cooperation requires a basis of trust and mutual understanding.

The proposals we make here focus on this question of how best to improve performance within the existing system as this is where we believe gains are most likely to be achieved. However, as long as the current levels of conflict persist, it is inevitable that more fundamental questions will arise, particularly with regard to provinces and district municipalities. These are issues that may need to be revisited, and South Africa will need to tread carefully in order to strike a balance between stability and evolution.

Improve clarity in a differentiated system

South Africa's local government system has significant powers and responsibilities. However, the system has to meet very different needs in different parts of the country with different levels of capacity, ranging from metropolitan municipalities with substantial financial, administrative and technical resources to rural municipalities that have limited scope to generate their own revenue and lack the capacity to carry out complex tasks. A coherent approach to local government cannot be a one-size-fits-all approach.

The trend in South Africa has been towards greater differentiation in the treatment of municipalities. In recognition of these realities, the Constitution allowed for differentiation in the assignment of powers and functions to municipalities through the distinction between Category A and Category B municipalities: the former being the metropolitan municipalities that are responsible for all local government functions and the latter being local municipalities where powers and functions are shared between the local municipality and a district municipality that encompasses several local municipalities.

There has also been differentiation in the powers assigned to Category B and C municipalities; for example, in the provision of bulk infrastructure and network services such as water and sanitation. The funding model for local government is based on a differentiated approach that recognises the wide variation in revenue-raising capacity at local government level, as well as levels of access to basic services. The increased use of conditional grants has allowed for further differentiation through the targeting mechanisms developed for each grant. This suggests that the intergovernmental framework allows for the allocation of powers and functions to evolve over time within broad constitutional principles. This allows for a pragmatic approach to differentiation that is a necessary response to the wide variation in local government capacity, but the opportunities this provides have not always been used effectively.

The way in which differentiation is done has often created confusion, instability and conflict. The allocation of responsibilities to local government is determined by the provincial member of the executive council for local government, although powers and functions can only be taken away from municipalities where they lack the necessary capacity and where the Municipal Demarcation Board has assessed that capacity. This inevitably results in instability, because it creates an ad hoc approach to the assignment of powers and functions. A future member of the executive council, or even the same

person at a later date, is able to reassign powers and functions. This illustrates the need for a more systematic and predictable approach to assigning powers and functions.

A more systematic approach to dealing with the variation in the levels of capacity that exist within local government needs to take into account two possible reasons for uneven capacity:

- The first set of reasons is external to the government system and relates to the economic, demographic and geographic conditions of the locality. For example, urban and rural municipalities need to carry out different functions because of their different economic and population patterns.
- The second set of reasons relates to administrative capacity. The capacity of local government to accomplish its core objectives has been most restricted in some of the poorest areas where effective local government is urgently required to play its transformative and developmental role.

This distinguishes between areas where a differentiated role is necessary because of long-term economic, demographic or geographic features and cases where differentiation is necessary as a time-bound measure because of capacity constraints within the municipality. In the latter case, differentiation needs to be accompanied by a realistic long-term strategy to build the municipality's capacity. This requires that the capacity exists to provide targeted support. In some cases, this may need to be linked to short-term mechanisms to ensure adequate service delivery in the interim. It is essential that districts and provinces have the capacity to play this role; capacity that they too often lack.

Differentiation is not without risks. It could formalise second-class municipalities, which would be concentrated in the most historically deprived parts of the country. This is why it is essential to distinguish between long-term and time-bound capacity constraints and, in the case of the latter, have a realistic strategy for building capacity together with a graduated devolution of powers and functions. This requires that other spheres of government have the capacity to take on these functions where necessary, but also the ability to build capacity in the municipality to engage in a phased handover of powers and functions. If this is to be accomplished successfully, it is also essential that the approach to differentiation does not overcomplicate the intergovernmental system. A coordinated and cautious approach to differentiation should make the roles of all spheres of government easier by allocating powers and functions that better reflect the capacity levels that exist.

Regionalisation as a response to uneven capacity

The wide variation in the challenges faced by local municipalities and their capacity to meet those challenges means there is a vital role for other levels of government. Indeed, the two-tier system of local government was designed to address the limited capacity of many newly created rural municipalities, with district municipalities providing support to local municipalities. Originally, district municipalities played a role in redistribution,

coordination and planning, as well as the delivery of bulk services for rural municipalities.

According to the 1998 Municipal Structures Act, the functions of district municipalities related to: planning, bulk infrastructure, supporting local municipalities and providing services where a local municipality lacked the capacity to do so. Their role has subsequently been extended to give districts responsibility for key municipal services such as water, sanitation, electricity and health, while their redistributive role has been reduced. The 2000 amendment to the Municipal Structures Act made districts responsible for key municipal services, but with the option of devolving responsibility to local municipalities. This has created confusion, uncertainty and sometimes resulted in stalemate. In some cases, the local municipality has the relevant infrastructure, but the district is receiving the funds and is no more willing to transfer the funds to the local municipality than the local municipality is to transfer control of the infrastructure to the district. This results in a situation where funding is being paid to the wrong tier, adversely affecting the quality of basic services. Even where district municipalities have undisputed responsibility in technical areas such as water supply, they have often failed to put in place the capacity needed to undertake these roles.

Where district and local municipalities are both providing the same service, despite only one of them being authorised to do so, it will be necessary either to ensure that one stops performing the function and transfers its staff and assets to the tier that is authorised to provide the service, or to allow both municipalities to perform the function with funding shared between them. This would require agreement on the division of service jurisdictions and funding.

The two-tier system of local government is clearly not operating as smoothly as it could. District municipalities have frequently lacked the skills and capacity to provide the forms of support to local municipalities that were originally intended, and lack of clarity about how powers and functions are divided between the two tiers of local government has created scope for confusion and conflict. However, the basic logic for the two-tier system remains relevant in many parts of the country where local municipalities lack the capacity to carry out key functions and are unable to recruit the necessary technical expertise.

District municipalities play their most important roles in areas where the capacity of local municipalities is weakest, and those local municipalities are poorly equipped to take on extra functions from the districts. There is a much more limited role for districts in secondary cities and consideration should be given to establishing single-tier municipalities in these areas. In such cases it is possible either to consider a local municipality operating as a single authority with planning and bulk services responsibilities separate from the district, or the majority of municipalities in a district being amalgamated into a single authority. South Africa needs to move towards a more differentiated approach to districts that will better accommodate the gaps they need to fill in different parts of the country.

A differentiated approach to local municipalities entails a differentiated approach to the role of district municipalities. The Municipal Structures Act (1998) allowed scope for flexibility in the division of responsibilities between districts and local municipalities, depending on specific local circumstances. For example, in the former homeland areas, local municipalities fulfil fewer tasks with more functions being carried out by the districts and Eskom, while secondary cities assume a large range of functions that, elsewhere, are carried out by the district. In rural areas, water boards, the regional equivalent of Eskom, could play a greater role where districts struggle to develop the capacity required. However, if utilities are engaged as service providers, which is allowed for in current legislation, care must be taken to ensure that political accountability remains with municipal structures. Greater attention should also be given to the role they could play in providing specific types of technical expertise. For example, if local municipalities are unable to recruit their own technical specialists, specialists could be recruited at district level or from a regional utility to provide services to a set of local municipalities.

A more coherent set of powers for metropolitan municipalities

Metropolitan areas play a vital role in driving economic growth and development. The clustering of physical infrastructure and financial, academic and socio-cultural institutions in metropolitan municipalities makes urban governance vital for shaping the pace and trajectory of broader national development.

Metropolitan municipalities contain some of the highest levels of wealth in the country, but also high levels of poverty and service delivery backlogs. These municipalities produce much of the country's economic wealth, and therefore need to protect and enhance their economic status. They also need to protect the interests of the poor and marginalised. This challenge is made particularly pressing due to the impact of apartheid on the spatial pattern of South Africa's cities – many of the poor are located far from places of work in historically deprived areas with limited access to basic services.

Inward migration puts strain on physical infrastructure and basic services, but it also presents an opportunity. Urbanisation requires new housing, extended services and improved public transport. The way in which metropolitan municipalities respond to these challenges can either tackle or reinforce the spatial divisions of apartheid. However, the scope for creating sustainable human settlements depends on the availability of well located land, a commodity that is scarce in most South African cities. As a result, the fragmented spatial legacy remains, making it more difficult for metropolitan municipalities to provide services.

To develop cities that are more liveable, more economically dynamic and more responsive to the needs of all sections of society, metropolitan municipalities need to take a more integrated approach to the challenges of development. The potential economic dynamism of a metropolitan municipality cannot be fully achieved without also considering where people live and how they get to work. This means that these

municipalities need to think holistically about issues such as housing, transport and spatial planning. If this is not done, housing will continue to be built on poorly positioned land on the edge of cities, without adequate access to public transport. It is important that metropolitan municipalities are given more comprehensive control over the core built environment functions that lie at the heart of urban planning.

Different spheres of government have not cooperated effectively around built environment functions relating to housing, state-owned land and transport infrastructure. Despite the need for metropolitan municipalities to take an overarching view of these built environment functions, none have been given full accreditation for housing, while only five metropolitan municipalities and two districts have received level 2 accreditation. This shows that the Constitution and relevant legislation allow for the necessary shifts in powers and functions, but these shifts are not being done. The problem is lack of leadership and imagination on how best to overcome the stalemate. As discussed in the next section, there is a lack of a positive vision for the provinces that encourages them to devolve greater responsibilities to the local level by increasing their responsibility for strategic coordination and policy oversight.

Transferring more functions to metropolitan municipalities is a necessary step towards improving the coordination of urban governance, but it is not sufficient. These municipalities tend to have greater administrative and financial resources than other municipalities, but they also risk being overloaded with additional functions and larger boundaries if changes are implemented too swiftly. As a result, a coherent approach is required to phase in extra functions together with a long-term plan for developing the necessary administrative and financial capacity. In the longer term, consideration needs to be given to the variation between metropolitan municipalities, as what is appropriate for the largest metropolitan municipalities may not be appropriate for the smaller ones. For the largest metropolitan municipalities, it may also be appropriate to consider their current positioning in relation to the provinces.

Expanding the powers and functions of the metropolitan municipalities should be an integral part of a differentiated approach to local government. The complex set of challenges faced by these municipalities means that careful consideration needs to be given to ensuring that they have a coherent set of functions enabling them to take a holistic approach to economic and social issues. This involves deepening their role to make it more comprehensive. Metropolitan municipalities need a broader set of powers to be able to take a coordinated approach to the built environment functions of housing, transport and spatial planning. This requires greater devolution of powers and functions from provinces, including full assignment of responsibilities in areas such as housing and public transport. This would allow the provinces to focus on priorities outside metropolitan municipalities, while concentrating on their core service delivery functions and playing a more strategic role in the province's overall development trajectory.

A more focused role for the provinces

Provinces have been a perpetual issue in debates about the governance structures in post-apartheid South Africa. This controversy arises because the function of provinces was negotiated as part of the interim constitution, and is fuelled by wide variations in living standards and government performance – provinces that incorporated substantial former homelands consistently perform worse than others. However, unequal access to services and uneven government capacity would have been an issue under any system of government and any institutional arrangement. Even if provinces did not exist, implementation would still have had to make use of the same structures.

Provincial demarcations make the persistent legacy of apartheid on both living conditions and institutional capacity highly visible, but they are not the cause of these differences. The real issue is how provinces can best contribute to building more constructive intergovernmental relations. It is this question that is the most pressing priority, and one that requires urgent and focused attention. Intergovernmental relations will not improve without a positive vision for the role of the provinces.

A differentiated approach to assigning powers and functions to local government requires that provinces devolve responsibility to local government, where organisational, financial and human capacity exist. Section 156(4) of the Constitution requires that responsibilities be devolved where functions are best administered locally and municipal capacity exists. Yet, provinces are often reluctant to reassign functions to the local level. Constant debate about the role and relevance of the provincial sphere of government has led to chronic levels of instability and uncertainty. In this context, it is unsurprising that the provinces have been reluctant to devolve their powers and functions. This has made it more difficult for provinces to focus on their core role in the delivery of essential services, especially education and health. There is also little clarity on the role of the provinces in relation to the task of economic development. While in recent years, more effort has been expended in the provinces in attending to this issue, there is little clarity on how this should be done and how it should relate to national initiatives. Devolving more authority to municipalities with adequate capacity would enable provinces to concentrate more effectively on these key areas that constitute some of the most pressing challenges facing the country. Provincial government would also be better able to focus on providing support to those municipalities where capacity is weakest. The capacity of provincial governments therefore needs to be strengthened, so that they can play this capacity-building role for local government.

As with the relationship between provinces and municipalities, differentiation in the allocation of responsibilities from the national to the provincial sphere, that takes into account capacity, would stand government as a whole in good stead.

A proactive approach to identifying and resolving problems

Clearer mechanisms are needed for the allocation of powers and functions. This cannot be done with a one-size-fits-all approach, but rather by ensuring the powers and functions of local government are consistent with its levels of capacity. This means that the flexibility allowed for in the Constitution is appropriate – it is essential that the allocation of powers and functions is allowed to evolve over time, and is tailored to the pace of capacity development. However, the current levels of uncertainty are seriously damaging the capacity of local government to fulfil its developmental mandate.

The challenge is not to try to eliminate all coordination problems overnight, but rather to ensure that there is an adequate way of addressing these problems as and when they arise. This requires leadership from national government, particularly from the Department for Public Service and Administration, the Department of Cooperative Governance and Traditional Affairs, National Treasury, and the Department of Performance Monitoring and Evaluation. These departments need to work closely together to ensure there is alignment between powers and functions, planning processes and budgetary allocations. In many cases, these departments will not be able to resolve assignment issues on their own, but will need to work with the relevant sector or provincial departments. They also need to work together to identify coordination problems and use their collective influence to ensure disagreements are resolved promptly.

Where there is lack of clarity about the respective responsibility of different national departments and how they coordinate with one another, this can create knock-on effects on the other spheres of government. These questions have to be judged on a case-by-case basis. In general, a more streamlined approach is preferable to having large numbers of ministries and agencies with overlapping mandates, but stability is also important as this allows more scope for departments to find ways of cooperating and working together. For example, there are multiple departments with responsibility for micro-economic issues, and more could be done to improve clarity about their respective roles and how they relate to one another.

The developmental potential of state-owned enterprises

State-owned enterprises have a vital role to play in advancing key national objectives, particularly through providing economic and social infrastructure. If this is done in an equitable and cost-effective way, SOEs can contribute to both economic growth and overcoming spatial inequalities. In 2030, South Africa needs to be served by a set of efficient, financially sound and well governed SOEs that address the country's developmental objectives in areas where neither the executive arms of government nor private enterprises are able to do so effectively. These enterprises must deliver a quality and reliable service at a cost that enables South Africa to be globally competitive. To live up to these expectations, SOEs will require clear public interest mandates, which are consistently enforced.

To improve the performance of SOEs, their task needs to be simplified. Asking enterprises with limited capacity and resources to address too many different priorities at once is setting them up to fail, particularly when they have to work through complex or unpredictable governance structures. SOEs need to focus on their main policy priorities. Efforts to improve the performance of SOEs have not been particularly successful. Instead, they have been burdened with overly complex objectives and governance structures and, in many cases, perpetual uncertainty about their long-term trajectory. SOEs need a stable and straightforward governance structure that allows them to focus on their long-term objectives. The challenge is to develop better ways of working, so that the multiple and competing priorities that are recognised in formal documents can be prioritised more effectively in practice.

Three broad sets of reforms will ensure sustainable improvements in the performance of SOEs:

- A clear mandate – Each SOE needs a well defined and transparent mandate that sets out its role and how its activities serve the public interest.
- A clear and straightforward governance structure – This involves clearly identifying and managing government's different roles in policy making, ownership of utility assets, and regulation of prices and quality of utility services. Careful consideration needs to be given to how these different roles are allocated to ensure a sustainable balance between short-term and long-term priorities and coordination between different policy priorities.
- Deal with capacity constraints – Where all parties are operating within severe capacity constraints, models are needed that are tailored to existing levels of capacity, even as capacity is built over time. This requires a long-term strategy to develop the forms of policy and technical expertise that SOEs need to carry out their mandate.

Mandates – clarify the role of SOEs

While considerable attention has been given to the transformation of SOEs, less attention has been given to the transformative or developmental role that they can play. As these are publicly owned bodies, any analysis of how to improve their governance arrangements should build on a clear understanding of what each enterprise needs to achieve. SOEs need to have a mandate that is clearly understood and effectively enforced. The closest thing to this mandate at the moment is the stakeholder compact required by the Public Finance Management Act. The most important function of the mandate is to specify why the SOE is needed. Given that these enterprises exist to serve the public interest, it is important that the mandate is precise about the nature of the public good that the SOE provides and how it serves the public interest. For the large SOEs involved in economic infrastructure provision, their mandate should also clearly include the imperative of financial viability and sustaining their asset base and balance sheet in order to maintain and expand services. Attention also needs to be given to the range of development finance institutions. Greater clarity about the respective niche

filled by each development finance institution and improved coordination between these agencies could help to maximise their developmental impact.

In formulating a public interest mandate for an SOE, it is important to recognise that:

- The reason some SOEs were created may not be relevant today, because the character of both government and the market changes over time. This would arise if the gap they were set up to fill has either ceased to be of policy significance or can now be dealt with in an equitable and sustainable way without public sector involvement.
- The focus of an SOE's activities may have shifted, expanded or contracted over time. This may be an appropriate adaptation to changing circumstances, but it may also be mission creep, where an SOE expands into activities that may not serve the public interest or distract from its core purpose.

The mandate of each enterprise should be reviewed periodically. This is an important internal exercise for each SOE to ensure there is clear consensus about its principal objectives and how these are to be met. It is also an important external exercise for the state to ensure that individual SOEs are held accountable for how they use public resources in promoting the public interest. The renewal, refinement or revocation of each SOE's public interest mandate will enable a clear consensus about what constitutes success. Review processes should also allow for the possibility that new enterprises may need to be created to attend to unmet public interests. While such reviews are important, they should not be done too frequently, as the activities of many SOEs require predictability to make long-term investment decisions. These review processes will ensure that consensus emerges between individual SOEs and their respective policy departments on how the enterprise furthers the public policy objectives of the relevant department.

The mandate of each SOE should be scrutinised by the appropriate policy ministry and parliamentary committee. The final version should be publicly available on the websites of the SOE, the relevant policy ministry and the shareholder ministry, so that each entity can be assessed on how it is fulfilling its public interest mandate. This will help to strengthen other stakeholders with an interest in improving performance. Other reforms could include improved transparency and flow of information, such as comprehensive annual reports and financial statements, making performance contracts available and publishing results, investment and coverage plans, prices, costs and tariffs, service standards, benchmarking and customer surveys. Information needs to be credible, coherent and timely.

A clear mandate can provide the basis for a more detailed assessment of the SOE's performance. A shareholder compact or performance contract usually lays out the shareholder ministry's objectives for the utility. Performance contracts are negotiated agreements, clarifying objectives and addressing tariffs, investments, subsidies, and non-commercial (social or political) objectives and their funding. Performance contracts are widespread, but their effectiveness is not guaranteed. They have not always reduced

the information advantage that managers enjoy over owners, which often allows managers to negotiate performance targets that are easy for the utility to achieve. Contracts can also be incomplete and fail to anticipate events and contingencies. Government can renege on commitments, including promised budgets for social programmes. Performance contracts are not a panacea and should only be used if government is willing to deal with the challenges of information asymmetry, effective incentives and credible commitments.

Clarify and simplify governance structures

It is essential that SOEs have clear governance arrangements. Clarifying the existing governance arrangements could help SOEs operate effectively and make it easier to recognise when they are not fulfilling their mandates.

The governance structure of SOEs arises from the need to treat these enterprises differently to executive government departments or privately owned commercial enterprises. They exist to serve the public interest, but they are also expected to generate at least some of their own revenue through their business activities. The governance structure needs to reconcile their commercial objectives with their public interest objectives.

There is no single model currently applied. Some large SOEs involved in economic infrastructure and identified pre-1994 for privatisation were separated from their policy-making ministry and placed under what became the Department of Public Enterprises as the SOE shareholding ministry. In these cases, the Minister of Public Enterprises represents the interests of government as the shareholder, while the relevant policy ministry has the main interest in the services delivered by the SOE.

The division of responsibilities can help to create a healthy tension that ensures adequate attention is paid to both the services provided by the SOE and its financial sustainability. Designing effective shareholder compacts and monitoring the performance of large SOEs is not a simple task. This professional competence is best located in a central department, either the Department of Public Enterprises or a division within the National Treasury. The joint ministry model requires that:

- The shareholder ministry should be responsible for ensuring SOEs are viable and financially sustainable, and that their assets are maintained and renewed.
- The policy ministry should be concerned with whether the SOE is serving key policy objectives.

Smaller SOEs, with no substantial commercial purpose or base, could report directly to their policy ministries.

For this division of responsibilities to be effective, there needs to be coordination and clarity around policy priorities and sound financial management. The policy and shareholding ministries need to work together to frame the objectives and performance

measures embedded in the shareholder or performance compact. However, effective coordination is not easy to achieve and, where it is missing, split reporting lines can easily confuse the lines of accountability. If the split reporting model is to work effectively, it will need to start from a clearer delineation of each department's responsibilities, to make it easier to determine the specific issues that need coordination and how this should take place. In some countries, including New Zealand, the two departments are joint shareholders with joint responsibility for appointing the board. This could help to institutionalise coordination and ensure more effective reconciliation of different priorities, especially if the performance contract is designed jointly by the two ministries.

Effective governance also requires stability in the powers and appointment of the boards of SOEs. Unfortunately, many of South Africa's SOEs have seen frequent change in board composition and leadership. Given that the powers of ownership are exercised by politicians, there is a risk that appointments, both to boards and senior management, will be politicised, potentially destabilising the performance of the SOE. The chief executives of SOEs are appointed by Cabinet on the recommendation of the Minister of Public Enterprises. This undermines the powers of the board. To achieve greater stability in the governance of SOEs, it is essential that there is more stability of SOE boards and clearer accountability lines of chief executives to the board. The shareholder and policy ministries should jointly appoint the boards and the boards should appoint their chief executives. This enables a clear line of accountability between government and the board, and between the board and the chief executive.

The relationships between SOEs and independent regulators have frequently proved problematic. Sector regulators need to be drawn into the process when shareholder and policy ministries design performance contracts. The conditions for a regulator to be effective have tended to be onerous and adequate regulatory capacity cannot be built overnight. For independent regulators to be effective, they must have clearly defined powers and adequate human and financial resources to fulfil these powers.

Address capacity constraints

Clearer governance structures and more focused mandates will reduce the burden on limited human and financial resources. However, there also needs to be a coherent long-term strategy to develop the forms of policy and technical expertise required by SOEs and to ensure that they are financially sound.

SOEs require a range of skills, including administrative, policy, managerial and technical. Government needs to have a clear strategy for how these skills are going to be produced and developed over time. To develop this strategy, the skills needs of individual SOEs need to be identified. Alongside reviewing and clarifying the mandate of individual SOEs, it is essential that there is a skills audit and an assessment of whether current approaches are adequate for developing the necessary skills. Where gaps exist,

government needs to develop training strategies to ensure a new generation of skills is developed.

Salary levels have risen rapidly in many SOEs, particularly at senior levels; but there is no evidence that high salaries enable these entities to obtain and retain the best people. Indeed, excessively high salaries can create perverse incentives, including increasing the temptation to use senior posts for political deployment, rather than identifying the best person for the job. High salaries are a costly and ineffective alternative to developing the skills base and ensuring working environments recognise and value professional skills. Instability in policy approaches and organisational structures aggravates the difficulty of attracting and retaining appropriate people to address the challenges of strategic direction (typically the role of the board) and of operational effectiveness (senior management). In most cases, leaders lay the foundation for future success in their first three years in office, and only deliver that success subsequently, meaning that stable leadership will be important if major improvements in performance are to be achieved.

SOEs need a long-term funding strategy that is reliable and consistent to ensure they are able to recover their operating costs, and provide for the capital replacement and expansion needs required to enhance their public interest mandate. However, there is often a mismatch between the funding dynamics of government and the enterprises it owns. Nowhere is this mismatch clearer than in the case of Eskom. From its establishment in 1923, Eskom has repeatedly faced funding challenges in replacing and expanding existing infrastructure. Some SOEs can look to private investment. Mixed-capital enterprise arrangements also encourage increased stakeholder involvement. These can be established either by selling a minority or non-controlling equity stake to private investors or through private debt markets. Shareholders and bond-holders can provide additional pressure to perform well. Credit agencies provide financial discipline over managers, who fear a credit downgrading and an increase in capital costs. Even where private finance is used, government has a critical role to play in creating the necessary conditions to attract and secure investment.

SOEs that provide goods and services for which a charge can be levied should ideally recover their operating costs through some form of full-cost pricing. However, the pricing of these goods and services has public consequences, because they are provided for a public purpose and government may have an interest in subsidising the provision of some goods. Commercial responsibilities should be clearly separated from social goals through transparent mechanisms, such as fiscal transfers and subsidies for service provision to poor households. For example, Eskom has a mandate to provide reliable and competitively priced electricity to mining, industry and business, but it also has a mandate to extend affordable access to electricity services to poor households. The former should generally pay a tariff that reflects the full cost, whereas the latter may be eligible for subsidies for their connection fees and possibly a portion of their energy consumption costs. It can be disastrous to the financial sustainability of SOEs to mix up these mandates and provide services at below cost if the gap is not covered by an explicit subsidy. Clarity on how social mandates will be funded or subsidised is essential.

Non-commercial and social programmes should be clearly separated from the core economic services provided by the SOE. The former require transparent public funding flows, while the latter should be funded through cost-reflective tariffs.

Capable, professional, responsive: the state in 2030

Between now and 2030, we need to move towards a state that is more capable, more professional and more responsive to the needs of its citizens. Progress needs to be pursued most rapidly in those areas where state capacity is currently at its weakest. We have set out key proposals to unlock opportunities, tackle major problems and put South Africa on the right path for building a state that is capable of promoting the key national objectives of eliminating poverty and reducing inequality.

Chapter 14

PROMOTING ACCOUNTABILITY AND FIGHTING CORRUPTION

"Everybody assists the institutions we have creatively redesigned to meet our varied needs; we reach out across communities to strengthen our resolve to live with honesty, to be set against corruption and dehumanising actions."

Introduction

As the *Diagnostic Report* of the National Planning Commission notes, poor governance can fatally undermine national development. Evidence gathered by the commission indicates that South Africa suffers from high-levels of corruption that undermine the rule of law and hinder the state's ability to effect development and socioeconomic transformation. The performance of state systems of accountability has been uneven enabling corruption to thrive. Corruption is not specific to the public sector; the private sector has been tolerant of and engages in corrupt practices. Although the entire country is harmed by corruption, the costs fall most heavily on the poor through the impact on the quality and accessibility of public services. Overcoming the twin challenges of corruption and lack of accountability in our society requires a resilient system consisting of political will, sound institutions, a solid legal foundation and an active citizenry that is empowered to hold public officials accountable.

What has been achieved since 1994?

Corruption, which is often perceived as a post-1994 phenomenon, was also widespread in the apartheid era. Research by the Institute for Security Studies provides extensive evidence of "grand corruption" before 1994, concluding that "when the apartheid state was at its most repressive, it was also at its most corrupt".[1] This in no way excuses corruption today, but South Africa cannot hope to tackle corruption without understanding its origins.

In the democratic era, several significant steps have been taken to counter corrupt practices and put in place accountability mechanisms. Appreciative of the role of transparency in creating an accountable, responsive government, the drafters of the Constitution included the right to access information and the right to administrative

[1] Van Vuuren H (2006). *Apartheid grand corruption.* Report prepared for the second National Anti-corruption Summit. Cape Town: Institute for Security Studies.

justice in the Bill of Rights. These rights are crucial to enabling the achievement of the other socioeconomic rights enshrined in the Constitution. To give effect to these rights, the Promotion of Access to Information Act and the Promotion of Access to Justice Act were passed in 2000. These laws provide a foundation for open, transparent and accountable government and, together with the Prevention and Combating of Corrupt Activities Act (2004), form a solid legislative basis to fight corruption.

In addition to progressive laws, South Africa has created a number of institutions that play an important role in combating corruption. These include the oversight institutions established in terms of chapter 9 of the Constitution to strengthen constitutional democracy, such as the Auditor-General and the Public Protector, which have played an important role in combating corruption and holding public officials to account. Several anti-corruption agencies are operating with solid skills and political commitment.

Vision 2030

Our vision for 2030 is a South Africa which has zero tolerance for corruption, in which an empowered citizenry have the confidence and knowledge to hold public and private officials to account and in which leaders hold themselves to high ethical standards and act with integrity. This South Africa has a resilient anti-corruption system in which anti-corruption agencies have the resources, credibility and powers to investigate corruption, and their investigations are acted upon.

How will South Africa achieve its Vision 2030?

The commission has singled out four areas of focus in which policies should be implemented to move towards an accountable state and zero-tolerance of corruption:

- Building a resilient anti-corruption system – The focus of anti-corruption efforts should be on creating a resilient anti-corruption system that can operate freely from political interference and is supported by both public officials and citizens. A resilient system is one where the designated agencies have the capability and resources to investigate cases of corruption, leaders take action when problems are brought to their attention, citizens resist the temptation to pay bribes because they recognise that their individual actions contribute to a bigger problem, the private sector does not engage in corrupt practices, citizens are empowered to speak out against corruption and the media fulfils its investigative and reporting function to expose corruption in the public and private sector.
- Strengthen accountability and responsibility of public servants – South African public servants should be made legally accountable as individuals for their actions, particularly in matters involving public resources.
- Create an open, responsive and accountable public service – State information, including details of procurement, should be made openly available to citizens. Furthermore an information regulator should be established to adjudicate appeals when access to information requested is denied.

- Strengthen judicial governance and the rule of law – Reform aspects of the judicial governance system to ensure the independence and accountability of the judiciary. Establish clear criteria for the appointment of judges and scale up judicial training to improve the quality of judges in our courts. Consideration should be given to the extension of community service to law graduates in order to increase legal representation for the poor and speed up the administration of justice in the lower courts.

Building a resilient anti-corruption system

The commission proposes the following:

- Strengthening the multi-agency anti-corruption system
- Strengthen protection of whistle-blowers
- Centralise the awarding of large tenders or tenders with long duration
- Give greater teeth to the tender compliance monitoring office to investigate both corruption and the value for money aspect of tenders.

Strengthen the multi-agency anti-corruption system

South Africa has a number of agencies mandated to fight corruption. These include the Special Investigations Unit, the Public Protector, the Public Service Commission, the Auditor General, the Assets Forfeiture Unit, the Directorate for Priority Crimes Investigation, and the Independent Police Investigative Directorate. Some have argued that the multiplicity of anti-corruption agencies undermines the fight against corruption by dividing resources and has resulted in an uncoordinated approach to tackling corruption.

There has been much debate about whether South Africa should have a single anti-corruption agency.[2] Hong Kong's Independent Commission Against Corruption is often cited as a model for a single-agency system because of its well-publicised success in fighting corruption. The Independent Commission Against Corruption model has been adopted in a number of countries including Australia, Botswana and Singapore. While Independent Commission Against Corruption has been a great success in Hong Kong, there are doubts about whether the model can be transposed to South Africa. Its success has largely resulted from the specific conditions existing within Hong Kong, including "a relatively well-regulated administrative culture alongside a large, and again, well-resourced police force under a political and legal framework which supports anti-corruption activities".[3] While there are ongoing efforts to develop South Africa's administrative capacity and improve the criminal justice system, as detailed in other chapters in this plan, the country does not have the institutional foundation in place to make the ICAC model a viable option.

[2] Camerer L (1999). *Tackling the Multi-headed Dragon – Evaluating prospects for a single anti-corruption agency in South Africa.* Institute for Security Studies Occasional Paper 38.
[3] Ibid.

Rather than focusing on the number of anti-corruption institutions, the emphasis should be on strengthening the anti-corruption system. A functioning anti-corruption system requires "sufficient staff and resources with specific knowledge and skills; special legislative powers; high level information sharing and co-ordination; and operational independence"[4]. Independence entails insulating institutions from political pressure and interference. A single agency approach is less resilient in this respect because if the lone anti-corruption body faces political capture, the independence of the entire system is compromised. A multiplicity of agencies provides checks and balance, that are essential in the South African context, and develops a systemic resilience against interference.

Strengthening the anti-corruption system requires increasing the specialist resources of anti-corruption agencies, improving coordination and cooperation between agencies and ensuring that the independence of each of the agencies is maintained. There should be greater emphasis on preventing corruption through public education drives. This should cover how it affects the delivery of services essential to citizen's daily lives and the mechanisms through which cases of corruption can be reported. While South Africans are highly aware of the evils of corruption they must be encouraged to make the connection between the seemingly petty incidents of corruption they participate in daily, such as the "cold drink" to a police officer to avoid a traffic fine, and the grand corruption they see reported in the Sunday newspapers. The aim should be to create a shift in attitudes towards corruption. Greater citizen participation in anti-corruption efforts should be encouraged by amongst other things strengthening the protection of whistle-blowers. An independent media also has a role to play in public awareness by investigating and reporting on cases of corruption.

No effort to tackle corruption can succeed without political will and support for anti-corruption agencies. Political will refers to more than public statements of support, and includes a commitment to acting on that support by providing sufficient resources and taking action against corrupt officials. Political parties must strive to maintain a high-level of ethical conduct amongst their members. Political leaders must remain conscious of the impact of their behaviour on the honour and integrity of the political office they hold.

Strengthen protection of whistle-blowers

Protection for whistle-blowers is essential to create a culture of disclosure of wrongdoing. While the Protected Disclosures Act (2000) provides some protection for whistle-blowers, it does not do enough. In fact, the percentage of people who identify themselves as prepared to "blow the whistle" has dropped by 10 percent over the last four years.[5]

[4] Ibid.

[5] Ipsos Markinor (2010). *Whistle blowing, the Protected Disclosure's Act, accessing information and the Promotion of Access to Information Act: Views of South Africans, 2006-2010*.

Several weaknesses need to be addressed:

- The scope of protection in law is too narrow. For example, the Protected Disclosures Act is limited to whistle-blowers in a formal permanent employment relationship, excluding citizen whistle-blowers. It excludes all persons in other commercial relationships with the relevant organisation. This needlessly restricts the scope of protection to the employment relationship. Consider an employee who makes a disclosure about a client to her employer, and the employer transfers the employee rather than antagonising the client. Such an employee would not be protected.
- The range of bodies to which a protected disclosure may be made is too narrow.
- There is no public body tasked with providing advice and promoting public awareness, and no public body dedicated to monitoring whistle-blowing.
- The possibility of conditional amnesty for whistle-blowers implicated in corruption is not clear.
- Adequate security for whistle-blowers has not been established. Physical and economic protection may be required in some cases. Opinions vary on what constitutes "adequate protection".

In response to these gaps, the commission recommends the following:

- Expand the scope of whistle-blower protection under the Protected Disclosures Act to include those outside the traditional employer-employee relationship.
- Permit disclosure to bodies other than the Public Protector and the Auditor-General and strengthen measures to ensure the security of whistle-blowers.

Centralise the awarding of large tenders

The law governing public procurement in South Africa has become increasingly complicated over the past decade. It is now so complex that there is reason to believe that it is impeding effective government. When even honest and competent bureaucrats find it difficult to understand what their legal obligations are and how to comply with them, the law requires simplification. The award of any tender is governed by numerous layers of law. Which of these layers applies in any given case depends on the context and the circumstances.

The complexity of procurement law also frequently works to the detriment of those who win contracts to provide goods and services to the state. Organs of state seeking to escape contractual obligations now frequently argue that the process resulting in the contract did not live up to the standards set by procurement law. It is often alleged by such organs of state that a competitive tender process did not occur, that the relevant signatory to the contract was not properly authorised, or that the process was inconsistent with the law. The law of procurement in such instances provides an expedient route of escape for those wishing to dodge their obligations.

The commission proposes a review and reform of procurement procedures. This would include legal reforms to simplify procurement, which ensure that accountability

mechanisms remain in place and that the law retains proper safeguards for detecting corruption and maladministration. The need for swift, effective service provision and a functioning oversight mechanism must be carefully balanced.

In addition, a tiered system of review for tenders, depending on their value, with differentiated safeguards and procedures should be considered. Such a system could have automatic safeguards built in, so that tenders above a certain amount are subjected to special review by the Auditor-General and the Parliamentary Standing Committee on Public Accounts, with a public hearing to exercise oversight over the tender award process.

Give greater teeth to the tender compliance monitoring office to investigate both probity and the value for money aspect of tenders

The practice of outsourcing and tendering for services has increased considerably in the last decade. The vast range of tender opportunities in the public service has also come with increased opportunities for corruption as both officials and contractors use the tender system to enrich themselves. The government is conscious of these challenges and has put in place some measures to introduce greater accountability in supply chain management practices. The Office of the Accountant General in the National Treasury is responsible for promoting and enforcing the effective management of revenue and expenditure in departments, as well as monitoring the proper implementation of the Public Finance Management Act (1999) and the Municipal Finance Management Act (2003) by state institutions. This includes setting and monitoring norms and standards with respect to procurement practices.

While this monitoring function is vital, the commission proposes strengthening the office to investigate the value for money of tenders. This would entail, for example, being empowered to audit the bill of quantities for projects to ensure that the unit costs of materials is not excessive and that the state institution in question derives the maximum utility from the service procured.

Strengthen accountability and responsibility of public servants

There are three generally accepted principles of the state's liability to pay the litigation costs of a functionary. The *first* is that the litigation costs are paid in circumstances where the state or the functionary is being sued or charged – in other words as a defendant or an accused. The *second* is that the conduct of the functionary that is the subject matter of the litigation is conduct that falls within the course and scope of the functionary's employment or state function. The *third* is that if the state does fund the litigation and the court determines that the conduct was not in the course and scope of the functionary's employment or state function, it is entitled to recover those costs from the functionary. In practice, there have been serious departures from these principles that have resulted in the state paying unnecessarily for costly litigation involving functionaries.

The State Liability Amendment Act (2011) makes provision for the principle of accountability of public servants.

The commission recommends that:

- The provisions in sections 13 (a) and (b) of the act be strictly enforced and monitored by the Public Service Commission.
- An accountability framework should be developed linking the liability of individual public servants to their roles and responsibilities and job descriptions in proportion with their functions and seniority. It should be made illegal for civil servants to operate or benefit from certain types of business.
- Restraint of trade agreements should be considered for senior civil servants and politicians in all spheres of government. Exit interviews and proper record keeping would enable this practice.

Create an open, responsive and accountable public service

The importance of transparency to public accountability has been demonstrated in theory and in practice. Dissatisfaction about lack of access to information on service delivery has emerged as a factor in public protests. In developing countries such as India, Bangladesh and Mexico, the right of access to information is used as leverage by communities to help them claim socioeconomic rights.

Section 32 of the Constitution enshrines the right of access to information. In practice, requests for information are routinely ignored, despite the existence of the Promotion to Access to Information Act, which aims to give effect to this section. There is endemic lack of compliance.[6]

There are many reasons for the lack of effective implementation of the Promotion of Access to Information Act, including wilful neglect, lack of appreciation of the importance of the right, an institutional culture of risk averseness and/or secrecy and a lack of training. The Asmal report on Chapter 9 institutions identified this as a serious challenge and diagnosed the absence of a useable enforcement mechanism as one of the primary obstacles.[7] Unlike most modern access to information laws, the act does not create a specialist adjudicatory body, such as an information commissioner or commission. The Asmal report recommended that such a body be established to dispense quick, accessible and inexpensive access to justice for those appealing decisions to withhold information, or so-called "deemed refusals" where no answer comes in response to a request.

[6] The South African Human Rights Commission's 2009/10 report states that "An analysis of compliance with section 32 reports for multiple levels of government over the decade since PAIA's passage into law has provided clear evidence of poor levels of compliance with its provisions. These levels of compliance point to a low level of awareness, a lack of accountability for non-compliance and the importance (or lack thereof) accorded to PAIA in the sector." (Page 158).

[7] Asmal et.al. (2007). *Report of the ad hoc committee on the Review of Chapter 9 and associated institutions*. Report to the National Assembly of the Parliament of South Africa.

The commission proposes the following:

- The Protection of Personal Information Bill that is being discussed in Parliament seeks to establish an information regulator covering certain aspects of information and personal data. This body should be equipped with the necessary resources to do its job properly and independently. The body should strike the right balance between its responsibilities to protect personal data, while providing recourse to those claiming their right of access to information.
- More "open data" should be made available. Open data is information that is made actively available without a request from an individual. This is also provided for in the Promotion of Access to Information Act, but generally not implemented due to lack of expertise. Some departments and municipalities have made an effort to make some information available. The Department of Mineral Resources has attempted to put all new order mining licenses on its website. Although many links are broken, the site attempts to make the data generally available. In addition, companies that hold those rights should make the information available. Other examples of information that should be made available would be beneficiary lists for housing projects, often a source of deep tension in communities, tender information, and environmental impact assessments.

Strengthen judicial governance and the rule of law

Without a reliable, honest, efficient court system, there can be no access to justice – as enshrined in the Constitution – no confidence on the part of investors and other major players in the economy, and little prospect of holding powerful private and public actors to account.

South Africa's rule of law is generally in good shape, although more could be done to realise the transformative promise of the Constitution. Challenges such as inefficiencies in the court administration that denude people of the right to access to justice, and judicial appointments that call into question the impartiality of selection processes, must be addressed.

For the Constitution, and the law in general, to be an agent of change, rather than an obstacle to socioeconomic transformation, the law must be interpreted and enforced in a progressive, transformative fashion. This requires a judiciary that is progressive in its judicial philosophy and legal inclinations. The selection and appointment of judges is of crucial importance, not just to the rule of law and the independence of the courts, but to socioeconomic transformation. At present, there is little or no consensus in the Judicial Service Commission (JSC) or in the legal fraternity more generally, about the qualities and attributes needed for the bench.

Judicial governance concerns both the independence and the accountability of the judicial branch of government, and encompasses issues such as judicial selection and appointment, and judicial ethics, the leadership and management of the judiciary, and the administration of the courts. The selection and appointment of judges is the

responsibility of the JSC, a body established under the Constitution; the administration of the courts falls under the Department of Justice. The previous chief justice established a body to examine judicial reforms, and its forthcoming report will deserve serious consideration.

It is important for the JSC to lead a process to build consensus on the qualities and attributes of the "ideal South African judge".[8] The criteria should encompass a range of qualities and attributes, including a progressive judicial philosophy and an understanding of the socioeconomic context in which the law is interpreted and enforced. While the JSC published a list of criteria for judicial appointments in September 2010, these criteria are quite broad and will require further development, and a clearer understanding of their meaning and application.

The training of judges also requires attention. The Judicial Training Institute is yet to get off the ground. It needs to be launched soon to improve the lives of South Africans, and to ensure that the South African Constitution and jurisprudence retain their international standing. Further reforms that can be considered include the composition of the JSC itself, which is argued by some to be too large to function effectively, and to be hamstrung by political interests. The JSC's increasing role in enforcing the Judicial Code of Conduct is one example of how its role is expanding, and consideration should be given to whether it is optimally structured to fulfil its various roles and responsibilities.

Access to justice and speedier resolution of court cases require more attention. This is particularly important for working people who struggle to get time off from work to attend court. In addition to the burden of long court rolls, which lead to unnecessary delays and postponements, many poor people cannot afford the costs of transport to courts. The cost of justice for the poor can present a major barrier to accessing justice; it can also lead to unintended miscarriage of justice when bail cannot be afforded and the accused not adequately represented. Law graduates should be viewed as a resource for the promotion of the rule of law. An audit of unemployed graduate law students should be done to ensure proper placement in much-needed areas.

The commission proposes the following:

- Accelerate reforms to implement a judiciary-led independent court administration.
- The JSC should lead a process to establish clear criteria for appointment of judges, with emphasis on the candidates' progressive credentials and transformatory judicial philosophy and expertise.
- Scale up judicial training dramatically and as quickly as possible.

[8] Cowen S (2010). Judicial Selection: A Timely Debate. Available at http://www.dgru.uct.ac.za/usr/dgru/downloads/Judicial%20SelectionOct2010.pdf (accessed 3 August 2011).

- Consider whether the current form and structure of the JSC is adequate to allow it to fulfil its constitutional mandate.
- Consider the extension of community service to law graduates. This will increase access to legal representation – especially for the poor – and speed up the administration of justice in the lower courts.

Conclusion

Accountable governance requires leadership. For institutions to be transformative and capable, they must be well led at all levels. Leadership in the public service is essential for the national development plan and for South Africa. Leadership that is devoted and dedicated, capable and committed, and self-sacrificial and not self-serving. South Africa needs a national conversation about the qualities of leadership that are required in all areas of public life. The first national plan provides an excellent opportunity to provoke that conversation and to identify the leadership attributes that are essential to build a just and equal nation.

Chapter 15

TRANSFORMING SOCIETY AND UNITING THE COUNTRY

"We feel we belong.
We celebrate all the differences among us.
The welfare of each of us is the welfare of all."

Context

The success of this plan will be judged on its ability to change relationships between people, between people and the state, and within the state itself by drawing attention to the way in which decisions are arrived, seeking justice in each decision. The plan is about physical change, brought about by focusing attention on policy and implementation, but it is equally about relationships.

The fundamental relationships that define us as South Africans are vitally important. These relationships will bind us together in moving towards a shared future. The first element that binds South Africans together is a shared history. Our rich Constitution is a testament to that history. It is a social compact that carefully defines our togetherness and accords rights and exacts obligations from each of us.

South Africans have made significant progress in uniting the country since 1994. The end of apartheid restored the dignity of all South Africans. Free and fair democratic elections are held regularly. The legal framework that underpinned apartheid has been abolished. South Africa is a unique country, whose people walked away from the precipice of war and bloodshed to create a democratic state based on a Constitution that is respected.

In addition to the legal and institutional underpinnings of an inclusive state, we have also made significant progress in extending services such as education and housing to millions of South Africans. The economy has performed better, with rising incomes and employment, though not as fast as desired. Many schools, suburbs and places of worship are integrated.

Problem statement

South Africans have made progress since 1994 in uniting the country, yet society remains divided. Inequality and inequity continues. Opportunity continues to be defined by race, gender, geographic location, class and linguistic background. "Inequality hardens society into a class system, imprisoning people in the circumstances of their birth. Inequality corrodes trust among fellow citizens, making it seem as if the game is rigged."[1]

That these differences exist is not surprising. That they remain so stark 17 years after the end of apartheid is disturbing. The dominant explanation has two dimensions:

- The economy has not performed as well as expected, and implementing government policy in education, housing, transport, health and social welfare services has not reversed the inherent privilege attached to race.
- Historic privilege and deprivation continue to define opportunities. The generations of investment in the skills and opportunities of white people give many a deep reserve of human and social capital on which to draw. While the black middle class has recently been able to develop these reserves, many black South Africans living in historically deprived areas have been denied this opportunity.

South Africa's Constitution is a social compact. The essence of this compact can be found in Chapter 2 of the Constitution, which declares that "everyone is equal before the law and has the right to equal protection and benefit from the law" and, in the following clause, that the country may pass laws that protect or advance people disadvantaged by unfair discrimination. These two clauses form the nub of the complex compromise that brought democracy and freedom in 1994. In trying to navigate this complex challenge, the following markers are useful:

- South Africa belongs to all who live in it and we seek to build a society where opportunity is not defined by race or gender, class or religion.
- Some form of redress is essential to help solve the problem of unequal opportunity. There is broad acceptance of the logic that without correcting the wrongs of the past, we cannot unite around common goals. Interventions have included affirmative action, black economic empowerment, progressive taxation, preferential procurement and land reform.
- Removing the shadow of apartheid means developing the capabilities of the historically disadvantaged to take advantage of the opportunities that democracy, openness and the economy afford. This means that education, training and skills development are critical, as is work experience, because it affords the opportunity to learn, progress, earn an income, access credit and make a home. Other basic services such as health, water, sanitation, public transport, safety and social security are all vital to address deprivation.

[1] Packet G (2011). *The broken contract: Inequality and American decline*. United States of America: Council on Foreign Relations.

Resolving these divisions will take but are a necessary process, because a united and cohesive society is a critical precondition for peace, security and prosperity. To that end, South Africans should:

- Foster a feeling of belonging, with accountability and responsible behaviour.
- Ensure that different cultures are respected and equal citizenship for all is guaranteed, thus reversing the apartheid legacy of devaluing and erasing the heritage of black South Africans. Build trust, which is associated with stronger economic performance.
- Craft and implement a social compact based on mutual benefit and mutual sacrifice. Societal division impedes forming a consensus to develop, change or even implement policy.

Nation-building and social cohesion matter – both as an end-state and as a facilitator. A balance needs to be found between healing the divisions of the past, broadening economic opportunities (particularly to black people) and building a sense of inclusion and common purpose among all South Africans. The aim is not to create a melting pot where individual, religious, cultural and other differences disappear, but rather a society with a shared South African identity, without detracting from our diverse multiple identities.

The objectives in this plan can be attained only if South Africans appreciate the difficulties and opportunities, and commit to working together.

The starting point is the Constitution. There is concern that society does not live up to constitutional obligations, giving a particular interpretation to the relationship between the state and the people, perhaps premised on an interpretation of the Bill of Rights. Many clauses in the Bill of Rights (Chapter 2 of the Constitution) are styled: "Everyone has the right to …" followed by "the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights". The interpretation that has developed from these clauses is that the people demand and the state delivers. Inaction on the state's part invites mass protests. It is important that the government is expected to fulfil its responsibilities. But, equally, South Africans must not forget their responsibilities and roles as responsible and active citizens that shape society.

The value that citizens attach to rights and responsibilities are directly related to whether they perceive the society to be just and fair. All institutions in society, especially government, must be seen to be fair and just at all times. The behaviour and conduct of those in the public eye sends a clear signal of the bounds that define community. When a person gets away with drunk driving or soliciting a bribe, the social contract breaks down. People are likely to conduct themselves ethically if they see justice served on those who break the law. Too often, government failures, such as inability to protect a spouse from abuse or failure to deliver school books on time, creates a climate that

makes lawlessness acceptable. Justice and the feeling of being treated justly are critical elements of inclusion and nation-building.

There is a growing scourge in South African society of open displays of opulence. The offensiveness of this behaviour is particularly marked because of South Africa's high levels of inequality. High levels of unemployment, a feature that skews income distribution even more, exacerbate the effects of conspicuous consumption. This indicates a need to focus on incentive systems in society.

Successful societies are balanced and their incentive systems appropriate to the contribution of individuals in society. Great displays of wealth by people not known to be productively employed, or honestly entrepreneurial, distort incentives in society. The ability to engage other people, especially unemployed youth, at reasonable incomes is rendered futile. In the interests of sustainable democracy, every South African, especially those able to influence public discourse, should disclose the origins of their income and wealth. Failure to take part voluntarily or lying should be socially unacceptable.

Nation-building vision for 2030

In 2030, South Africans will be more conscious of the things they have in common than their differences. Their lived experiences will progressively undermine and cut across the divisions of race, gender and class. The nation will have and will be more accepting of multiple identities. This South Africa will include the following:

- A sense of inclusiveness that touches all South Africans, including the poor. This means tackling the factors that lead to unequal opportunity and taking extraordinary measures in education and skills development, especially of black people and the poor. To redress the past requires increasing the rate of economic growth, increasing the labour absorption of the economy, promoting entrepreneurialism and providing stimulating and rewarding career paths for all workers, including those at the bottom of the income spectrum.
- Increased interaction between South Africans from different social and racial groups.
- Broad-based knowledge and support for a set of values shared by all South Africans, and those embedded in the Constitution.
- A mobilised, active and responsible citizenry.

The proposals that follow flow from the premise that developing capabilities requires partnership and cooperation between communities, government and places of work. A capabilities approach to development is critical to broadening opportunities, an essential element of the nation-building process. The development of capabilities, either of individuals or of the country as a whole, requires a mindset change towards government delivering services to active citizens involved in their own empowerment.

Government does provide parts of the foundation, but there are other requirements too. A government can build a soccer field, but it needs a community to organise the football league, coach children and cheer on the players.

As a country we invest in skills and opportunities of individuals and communities because we want people to live together as equals. When we seek to make it easier for people to access employment, we do not just want to ensure that they have access to the means of subsistence, but also that they can develop the sense of empowerment that comes with a degree of economic security and the sense of contributing actively to society. To build a truly inclusive nation, the country needs to find ways to promote a positive cycle, where an effective state and active citizens reinforce and strengthen each other.

This positive cycle began for the majority of the population in 1994, when South Africa started to grapple with the legacy of unequal access to services and opportunities. The Reconstruction and Development Programme embarked on the daunting task of extending basic services to all South Africans. Access to electricity, water and housing make it easier for people to live healthy lives, and allows children more time to study and develop socially through play. Education endows a nation with skills and makes it more productive. These services matter, not only for their own sake, but also for what they enable citizens to do. Knowing you can access quality health care not only enables a healthy life, it also removes the fear and insecurity that could come from suddenly being thrown into debt by medical expenses. Education opens up new opportunities, not just in terms of employment, but also through the increased confidence that literacy brings.

South Africa's experience since 1994, however, has demonstrated that providing quality public services is not easy. Historically, the relationship between the state and the majority of South Africans has been one of adversity, and the post-1994 public service has not always played its role in helping to dispel old perceptions. Government needs citizens to speak out when things are going wrong. This accountability mechanism is most effective where everyone depends on the same public services. Where the middle class opts out of public services, it no longer takes an interest in improving their quality.

Investing in people's capabilities makes them more empowered. As people's skills and opportunities develop, they are able to play a meaningful role in society, and are better able to strengthen the work of the state by speaking out against malpractice or poor performance.

Creating equal opportunities

Equal opportunity is about nullifying factors such as gender, ethnicity, place of birth, and family background, so that these do not influence life chances. Success in life should depend on people's choices, effort and talents, not their circumstances at birth. The discrimination suffered by black people in the past crucially influences their life chances

in the present.[2] The Constitution lays the basis for equalising life chances and for redress. This should begin with ensuring that everyone has access to quality basic services, quality healthcare and quality education (see the chapter on education for proposals to address inequity by improving the quality of teaching and learning and infrastructure).

Chapter 9 on improving education, training and innovation, includes a fuller set of proposals for improving the quality of teaching and learning infrastructure. These include:

- Specific proposals to deal with infrastructure backlogs and the provision of an enabling environment at all educational institutions, particularly those in historically disadvantaged schools.
- Clear proposals to improve school performance in poor schools, focusing on teacher development, school accountability and parental involvement.
- Continuing to skew funding in education to schools in poor communities and to students from poor families.

Righting the wrongs of the past

South Africa is highly unequal in outcomes and opportunity. There is a range of reasons for this failure. The economy has not grown rapidly enough to ensure that all of society can progress. Education problems and low labour absorption has resulted in failure to create an environment for an adequate share of the benefits to accrue to the poor or historically disadvantaged. In addition, certainties have not been provided that are necessary to give those with capital the comfort to take long-term investment decisions.

How does South Africa break this cycle and enter a more virtuous one of rising confidence, investment, employment and incomes, and falling levels of inequality? Given the country's history of lacking confidence, government needs to provide the catalyst for the virtuous cycle to begin. It can do this by making sure that what is in its own power works better. Removing the obstacles to faster economic growth, increasing the pace of investment in infrastructure, improving service delivery (especially quality education) and building confidence would provide the impetus for the private sector to invest and to take a long-term perspective when it invests. This will not be rapid. Building trust and confidence are always long-term goals and the result of painstaking efforts. The quality of leadership is critical to spark and accelerate change in areas that government controls, to induce behaviour change in others.

Only by reducing poverty and inequality through broadening opportunity can the country achieve real unity and cohesion. The resources, skills, talents and assets of all South Africans need to be used to achieve social and economic objectives. The country has much more to gain if a win-lose debate shifts to a win-win debate, focusing simultaneously on growing the cake and redistributing it. Most of the policy

[2] Bentley K & Habib A (2008). *Racial redress and citizenship in South Africa*. Cape Town: HSRC Press.

recommendations to achieve a virtuous cycle of confidence and trust, a growing economy and a broadening of opportunities are dealt with in other parts of the plan.

The rest of this chapter deals with specific issues about implementing employment equity, black economic empowerment and land reform. It also discusses broader proposals to support nation-building and ways in which the values enshrined in our Constitution can be popularised.

Employment equity and workplace opportunity

Employment equity in the workplace is a key element of the country's plans to broaden opportunities for the historically disadvantaged. Since 1994, it has also been one of the more successful programmes, contributing to a rising black middle class. It is a policy premised on the fundamental acceptance that opportunity was distorted by apartheid and so has a firm moral and constitutional basis.

For at least the next decade, employment equity should focus on providing opportunities to younger people from historically disadvantaged communities. More specifically, race should continue to be the main determinant of selection. The Employment Equity Act (1998) states that if two candidates have the same qualifications, similar competencies and experience, then the black person or woman should be selected. The act does not encourage the appointment of people without the requisite qualifications, experience or competence. The act would enjoy broader support and appeal among citizens if these provisions were implemented more consistently and fairly.

The intent of the act is for firms to develop their own human potential, spending time and resources mentoring and developing their staff. Staff training, career-pathing and mobility in the workplace will grow both the person and the firm. South African employers spend too little on training their staff and investing in their long-term potential. The Skills Accord, facilitated by the Department of Economic Development and signed recently, is a step in the right direction. If more firms train staff, the economy does better and the incentive to job-hop is reduced. Short-term solutions, such as overpaying for scarce skills, are counterproductive to the longer-term development of both the individual and the firm. The present incentive structure embodied in the Skills Development Act (1998) may need to be reviewed to ensure higher spending on staff development.

Career mobility and rising incomes are more likely in an economy that is growing rapidly. Selecting good quality black and female candidates will be easier if the education system is producing ever greater numbers of skilled black and female work entrants.

Black economic empowerment

Black economic empowerment largely focuses on broadening ownership and control of the means of production. It aims to de-racialise the top echelons of the business community. A thriving economy creates more opportunities for entrepreneurs and for the growth of small businesses.

The present model of black economic empowerment has not succeeded to the degree that was intended in broadening the scope of ownership and control of large firms. The model is flawed, largely because black people in general do not have the capital to acquire ownership or control of major parts of the economy. This has encouraged debt-driven deals that are only likely to work when the economy is growing rapidly and firm profitability is expanding significantly. Because this has not been the case, many debt-driven deals provide a veneer of empowerment.

Even in cases where black people are preferred in the awarding of licences to extract rents, such as in the mining or telecommunications sector, lack of capital raises the cost of capital for other participants or leads to an excessive reliance on debt, thereby undermining investment in capacity and production.

South Africa faces a difficult dilemma. It is a savings-shy country. To raise investment in, for example, mining, to boost employment and exports, private capital is used. The owners of private capital are largely still white, or foreign. While the preferential awarding of licences is a useful technique to force the entry of black people and women into the economy, on its own it is insufficient to make a substantial difference to broader ownership patterns in the economy.

Similarly, development finance institutions use black and female ownership as criteria in awarding loans to business. This is a correct approach, but it comes at a cost, because it potentially reduces the net investment in firms and industries, which reduces overall growth and job creation.

Although black economic empowerment is a sound policy instrument, it poses significant challenges in sustainably meeting the objectives of the programme. Solutions are not easy to find.

Despite these difficulties, the broad policy approach should continue, evolving to find better models of empowerment. In implementing black economic empowerment, policy has to remain true to its intent to broaden ownership and control of production to black people and women, without undermining overall levels of investment or employment creation.

Land reform

The Constitution protects property rights and prevents confiscation of property without due compensation, but it also provides a legal, political and moral basis for redress measures such as land reform. Flowing from the Constitution, the White Paper on land allows for land redistribution, land restitution and tenure reform. The principles underpinning land reform are three-fold:

- De-racialising the rural economy
- Democratic and equitable land allocation and use across race, gender and class
- A sustained production discipline for food security.

Overall progress has been slow. In 1994, the target for redistribution based on all three pillars was 30 percent of land redistributed in five years. In 2011, only 4.1 percent of land has been redistributed, most of which was state land. Land reform is as much about redress as it is about improving livelihoods and dignity. Unfortunately, the redistribution of productive land is even slower. Since 1994, only 3.7 percent of agricultural land has been allocated through land redistribution.

Chapter 6, dealing with an integrated and inclusive rural economy, provides specific proposals to raise agricultural production and effect land reform in a way that focuses on the capabilities of farmers and communities to earn an income, rather than just redistributing land. The chapter also makes specific recommendations on land tenure in communal areas, which balance traditional authority with greater certainty for female-headed households to invest in farming.

Living free from discrimination

The Constitution stipulates that neither the state nor any person may discriminate against anyone else on the basis of race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language or birth. However, the historical legacy of discriminatory legislation means that there is much work that still needs to be done to turn these constitutional principles into reality. The relatively comprehensive legislation on non-discrimination means that in many cases, the problem is ineffective implementation and enforcement.

Non-sexism

Gender discrimination remains a major problem in several social and economic settings, including the workplace, the family and educational institutions. This exists in spite of a large set of state institutions – including a dedicated ministry and legislation devoted to ensuring women's equality – alongside vibrant gender activist organisations. Reported incidents of "corrective rape" show that, in spite of legal protection, gays and lesbians are subject to widespread discrimination.

The institutions dedicated to promoting gender equity have not been functioning optimally.

The mandate of the Commission of Gender Equality overlaps with that of the Ministry of Women, People with Disabilities and Children, for example, the monitoring and evaluation function that is the mandate of the ministry and the statutory mandate of the Gender Equality Commission, which results in role confusion and political conflicts over authority.

The National Gender Policy does not set clear priorities and targets from which a programme of action could be developed. The gender mainstreaming approach is proving too difficult to put into operation, because it demands a high level of gender expertise and high-level political commitment to carry through.

The National Planning Commission calls for clarity on the roles and responsibilities of the different components of national gender institutions. In addition:

- There is a need for sustained campaigns that focus on changing attitudes and behaviour in relation to racist, homophobic and xenophobic tendencies, as well as strengthening the campaigns for non-racialism and gender equity and against gender violence.
- The Commission of Gender Equality and the ministry need to develop joint targets, indicators and timelines for monitoring and evaluating progress towards gender equality. These will need to be realistic and appropriate, and should be shared and accomplished through proper gender mainstreaming in departments. Gaps and problems in legislation need to be addressed. The Traditional Leadership and Governance Framework Act (2003) entrenches patriarchal values and limits women's participation in traditional governance. Rather than a separate Gender Equality Bill, the Electoral Act (1998) could be amended to require political parties to ensure gender parity in electoral lists.
- Local government needs to be strengthened in its capacity to include women at representative level, as well as in shaping budgetary priorities. Women are frequently marginalised in local politics and excluded from decision-making processes. Women's participation in integrated development plan processes is uneven.

Non-sexism will be enabled through the role of families, schools and media in empowering people to question and challenge prejudice and discriminatory practices.

Non-racialism

All South Africans need to accept that it is not possible to have grown up in the country before 1994 without developing racial lenses. Not admitting to racism in South African society would be sweeping it under the carpet. Sustained campaigns need to focus on changing attitudes and behaviour in relation to racist and xenophobic (Afrophobic) tendencies. This could include holding dialogues at community (ward) level, where

communities discuss their experiences of racism, and how they propose the problems can be addressed. The Department of Arts and Culture, in partnership with civil society bodies and non-governmental organisations operating in this area, could run such an initiative.

The Constitution recognises 11 official languages, and promises them equal status and use. In the South Africa of 2030, English will be the general language of learning, commerce and administration. Given the inevitably growing importance of English, lines of inclusion and exclusion will be shaped by the degree of competence that individual South Africans possess in this world-dominant language. Within a generation (by 2030), every South African should be functionally literate in English. Most South Africans will continue to make daily use of languages other than English. It is absolutely vital that these languages, used in family and social networks, also grow and flourish. This will only happen if other languages are cherished by their language communities, and continue to be vital in both the spoken and written word. If stories are still told, poems written, songs sung, then the language will live, and its speakers will become multilingual citizens. Both government and society will need to take active steps to ensure that this happens, as set out in the section on policy measures below. For example, government would fund arts and culture programmes that seek to promote South Africans' knowledge of one another's cultures.

A second challenge is to encourage those for whom a Bantu language is not a mother tongue to develop at least a conversational competency in one of these languages. Since few non-African South Africans speak any African language, this will enrich the experience of the language learners. Both government and society should promote and celebrate this form of multilingualism. The role that knowing each others' languages can play in promoting understanding and developing social cohesion is vitally important. The commission therefore proposes as policy that every South African should study one of the nine official black languages at school. Attention could also be given to encouraging adults who do not speak an African language to learn one.

Equality before the law

The Bill of Rights states that all South Africans are equal before the law. Yet in practice, people experience the law differently. Upper middle-class households are often better served by municipal, provincial and national government than their working-class counterparts. Schools provide a better education to middle-class learners; streets and parks in middle-class areas are better maintained; and refuse collection and other municipal services are superior. The wealthy and those whose legal expenses are sponsored experience better equality before the law, because they can afford better lawyers. The chapters on accountability and building a capable state have practical proposals that will help poor people access justice. The suggestions include:

- Extend community service to law graduates. This will increase access to legal representation – especially for the poor – and speed up the administration of justice in the lower courts.

- Train civil servants, especially those in the front line, to improve their ability to do their job. Develop an accountability framework that directly links individual public servants to their roles and responsibilities and job descriptions in proportion to their functions and seniority.

Fostering constitutional values

The Constitution, which is the supreme law of the land, not only established a new South Africa but "also has a transformative function unusual in comparative founding documents. Unlike most constitutions, it does not simply intend to stabilise the country, securing existing patterns and power relationships. Its project is to transform South Africa. In other words, the Constitution demands change ... 'If each of us chooses to select the value system adopted in our Constitution, we shall be making a brave and bold choice that will enable us to overcome our history and to attain the constitutional vision of a society based on equality, freedom and dignity' ... the 1996 Constitution lies in human beings understood as individual, moral agents who are the bearers of both rights and responsibilities".[3]

Indeed, key ingredients in building a South Africa that has a unity of purpose are these common constitutional values that include human dignity, non-sexism, non-racialism, supremacy of the Constitution and the rule of law. These principles and fundamental convictions should act as:

- General guides to behaviour
- Enduring beliefs about what is worthwhile; ideals for which one strives
- Broad standards by which particular actions are judged to be good, right, desirable or worthy of respect.[4]

It is important to lay down a political philosophy that goes beyond political offices, institutions and laws, and instead focus on creating attitudes, beliefs, habits and practices of the civic community that are the cultural bedrock for the collective exercise of power.

The Constitution and its values are important, because it:

- Creates a new South African identity.
- Enables South Africa to overcome its history and to attain the constitutional vision of a society based on equality, freedom and dignity.
- Enables South Africans, thrown together by history into this shared geographical space, to have a common currency that makes life meaningful, and provides normative principles that ensure ease of life, lived side by side.

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[3] James W and Hadland A (2002). *Shared aspirations: the imperatives of accountability in South Africa's electoral system.* South Africa: HSRC.

[4] Halstead JM and Reiss MJ (2003). *Values in sex education: from principles to practice.* London: Routledge Falmer.

The values in the Constitution cannot be legislated. Laws not understood and owned by people are always perceived to be an imposition. As a consequence, one of the general weaknesses is a climate of lawlessness, shown by the way people drive, the levels of interpersonal violence, and theft and other crimes. In this context, it is to be expected that legislation that is corrective, especially regarding equality provisions, is likely to be observed either cynically, or not at all. This challenge must be met, because it relates to equity, but perhaps even more importantly because it relates to mutual respect and respect for the law. This impasse will clearly not be resolved by passing more laws. The family, communities, schools and the media all have a role to play in bringing up people who respect the rule of law and abide by constitutional values.

A partnership between Lead SA and the Department of Basic Education has produced the Bill of Responsibilities, which simply shows the responsibilities that come with the rights outlined in the Constitution. The Bill of Responsibilities urges young people to "accept the call to responsibility that comes with the many rights and freedoms that I have been privileged to inherit from the sacrifice and suffering of those who came before me. I appreciate that the rights enshrined in the Constitution of the Republic of South Africa are inseparable from my duties and responsibilities to others." This Bill of Responsibility is designed to change behaviour. Although this bill targets youth, government should broaden the campaign to all South Africans, including adults.

Bill of Responsibilities

My responsibility	What it means
My responsibility in ensuring the right to equality	Treat every person equally and fairly, and do not discriminate unfairly.
My responsibility in ensuring the right to human dignity	Treat people with reverence, respect and dignity.
My responsibility in ensuring the right to life	Sanctity of human life, protect and defend my life and that of others.
My responsibility in ensuring the right to family or parental care	Honour, respect and help my parents, and my family.
My responsibility in ensuring the right to education	Attend school regularly, to learn, and to work hard, cooperate with and respect teachers and fellow learners.
My responsibility in ensuring the right to work	Work hard and do our best in everything we do. Living a good and successful life involves hard work, and anything worthwhile only comes with hard work.
My responsibility in ensuring the right to freedom and security of the person	Solving any conflict in a peaceful manner, no bullying.
My responsibility in ensuring the right to own property	Not to take what does not belong to me without permission, giving generously when able to.
My responsibility in ensuring the right to freedom of religion, belief and opinion	Respect the beliefs including religious beliefs and opinions of others.

My responsibility	What it means
My responsibility in ensuring the right to live in a safe environment	Conserve and preserve the natural environment, protect animal and plant-life, prevent pollution and no littering.
My responsibility in ensuring the right to citizenship	Obeying the laws of our country, ensuring that others do so as well, and contributing in every possible way to making South Africa a great country.
My responsibility in ensuring the right to freedom of expression	No spreading of lies, and to ensure others are not insulted or have their feelings hurt.

These values flowing from the Constitution should form the common basis across all communities and in all areas of life to empower families and communities that are able to be critical, democratic, non-sexist, non-racist and tolerant. Such values will help people to celebrate diversity as a matter of course and to actively engage with the pressing development needs and challenges of South Africa's societies.

"Everyone must be given an opportunity to unleash their full potential and enjoy their rights as they practice their responsibilities."
– NPC Jam

The role of family

Family can be defined as a social group related by blood, marriage, adoption or affiliation. This definition allows for all forms of families, including single-headed families, cohabitation, multigenerational families and the nuclear family.

The family in general is responsible for the reproduction of independent, productive, good and responsible people. The pressures put on many families mean they cannot be expected to fulfil this role on their own:

- Apartheid spatial geography means that people live far away from work. This limits the time available to perform all the functions of the family.
- There is a high incidence of HIV/AIDS and increasing numbers of orphan-headed households.[5]
- Interpersonal violence, ranked as the second highest cause of morbidity in South Africa, is more prevalent in poor households.[6]
- In a patriarchal society, families may not necessarily assert the non-racial and non-sexist values of the Constitution.

The commission suggests that a full review of the state of the South African family should be undertaken by 2015. From the review, legal and social measures can be crafted to make families "functional" and able to foster constitutionally based values of democracy, tolerance, diversity, non-racalism, non-sexism, equity, and so on. The review must also explicitly consider gender relations in economic, parenting and family

[5] National Planning Commission (2011). *Diagnostic Report*.
[6] Ibid.

roles, draft gender charters for both men and women, and raise the role and number of social workers (see the chapter on social protection).

Fostering constitutional values using schools and the school curriculum

"The real difficulty is that people have no idea of what education truly is. We assess the value of education in the same manner as we assess the value of land or of shares in the stock-exchange market. We want to provide only such education as would enable the student to earn more. We hardly give any thought to the improvement of character of the educated." - Mahatma Gandhi

Schools have an important role to play in building social cohesion, particularly given near universal school enrolment. Schools, unlike families, can enable the fostering of common values across language, culture, religion, race, class and space. Together with teaching arithmetic, reading and writing, schools should help to produce inquiring minds – people who are empowered to question and challenge prejudice whenever and wherever they encounter it. It is therefore important that children learn at school to:

- Appreciate diversity through respect and tolerance
- Know how to cope in an ever-changing environment
- Help transform the national character of South Africa by teaching that rights come with responsibilities.

The question is not whether values should be taught in schools, but "which values, or whose values, should we teach".[7] In a democratic South Africa, schools should promote the values embedded in the Constitution. The constitutional value of human dignity – achieving equality and advancing human rights and freedoms equity – informs the South African Schools Act (1998). The widely consulted 2002 *Schools Values Manifesto* further articulated which values should be taught and how. Values flowing from the Constitution that should permeate the education system are: democracy, social justice and equity, equality, non-racism and non-sexism, ubuntu, human dignity, an open society, accountability, responsibility, the rule of law, respect and reconciliation. The manifesto and the Bill of Responsibilities outline methodologies to further foster values in school children.

To effectively integrate these values, all teachers must apply them in their everyday practice and interactions with colleagues, learners, the school management team and parents. Teachers should have continuous school-based professional development and teacher support programmes must be instituted. The latter aim to develop teachers' content and pedagogical knowledge necessary for teaching values in their learning areas and across the curriculum. Pre-service teacher education should develop syllabuses that promote internalising democratic values in the curriculum, as well as encourage inspirational leadership qualities in the trainee teacher, and the understanding that actions speak louder than words.

[7] Kohn A (1997). *How not to teach values: a critical look at character education*. Phi Delta Kappan.

In addition, teachers and students who live these values must be rewarded. Those who do not, or who resist, should be punished or expelled if necessary.

All schools should use democratic principles and be guided by the Constitution and the Bill of Responsibilities to develop and implement a school-specific, all-encompassing value policy and communicate it widely. The process is as important as the outcome, because it will help the school and the school community develop a common understanding of what values are mandated by the Constitution and the national curriculum system. The values that the local school community wants taught to learners are paramount, and stakeholders, including teachers, department officials, school governing boards, communities and parents, should be consulted.

All schools should be required to recite the Preamble of the Constitution at assembly, in a language of their choice. The preamble embodies the values that need to be fostered:

"We, the people of South Africa,
Recognise the injustices of our past;
Honour those who suffered for justice and freedom in our land;
Respect those who have worked to build and develop our country; and
Believe that South Africa belongs to all who live in it, united in our diversity.
We therefore, through our freely elected representatives, adopt this Constitution as the supreme law of the Republic so as to:
Heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
Lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law;
Improve the quality of life of all citizens and free the potential of each person; and
Build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations."

Promoting values using media

The media has an impact on the values that people hold and the lives they aspire to. "Radio, television, film, and the other products of the culture-industries provide the models of what it means to be male or female, successful or a failure, powerful or powerless. Media culture also provides the materials out of which many people construct their sense of class, of ethnicity and race, of nationality, of sexuality, of 'us' and 'them'." [8]

[8] Kellner D (1995). *Media culture: Cultural studies – Identity politics between the modern and the postmodern.* London: Routledge.

Media should be harnessed, so that it plays a positive role in nation-building, but strong measures should exist to ensure that content does not tilt towards propaganda. This is a real danger. Previously in South Africa, as in other countries, the ruling elite have used media as a tool to drive particular agendas.

At present, some researchers suggest that the South African Broadcasting Corporation is subverting its mandate and inculcating values that oppose those in the Constitution. "In South Africa, many locally produced television programs portray a black middle class focused on material consumption and individual gain ... The construction of the nation put forth by some South African television programming can mask enduring racial and economic inequalities ... These material effects play a role in reasserting hierarchical relations of power, especially along race, class, and gender lines."[9]

The legislation does enable electronic media to promote progressive values. The challenges, however, include:

- The legislation and policy regime has been developed over 17 years. It is no longer comprehensive.
- There is minimal regulatory pressure on the commercials and advertising industry – undermining values and re-enforcing consumerist stereotypes. The industry has a self-regulating body, the Advertising Standards Authority. The self-regulating body must therefore ensure that all advertisements also drive appropriate values, as dictated by the Constitution.

In response to these problems, the commission suggests the following:

- To ensure there is no abuse in the form of propaganda and that the value- and nation-building attempts are effective, the Independent Communications Authority of South Africa's monitoring and compliance division must be strengthened. Currently, by the authority's own admission, it lacks capacity. This should be put in place before the agenda on deepening value inculcation can even be explored.
- The current broadcasting policy review process should ensure that the nation-building and value inculcation mandate is strengthened, beyond ensuring language and accessibility. This all-encompassing values framework within the broadcasting policy review process must cover advertisements and private, commercial and satellite services. The reproduction of stereotypes must be challenged.
- Media drives Constitution Friday on the first Friday of every month. Media (including social media) can spread understanding and knowledge of shared values. It can also act as a platform for South Africans to celebrate, engage with each other and volunteer contributions to "create their South Africa".

[9] Ives S (2007). *Mediating the neoliberal nation: Television in post-apartheid South Africa.* ACME Editorial collective.

- Entertainment should become edutainment. In both radio and television, it must drive a theme of active and responsible citizenry and have constitutional values as a base. Edutainment need not be boring.
- Empower the media to continue holding government and other public figures to account through informing citizens, and to continue challenging rather than enforcing stereotypes. Media must also be at the forefront of sending the correct incentives for citizens living constitutional values.

Promoting social cohesion across society

Daily interactions on an equal basis build social cohesion and common understanding. This will be promoted effectively when South Africans share more public spaces, as we did briefly during the 2010 soccer World Cup. At the moment, the country is divided by services, with economic wealth gradually replacing race as the key driver of differentiation. Improved public services, including public transport used by all, will make it easier for South Africans to break out of their communities and share common experiences.

The work of schools, media and families in creating actively engaged, critical citizens, with a culture of tolerance and commitment to human rights, will come to nothing if society – particularly public figures – continues to send the wrong signals. It will fail, too, if government does not increase opportunities for people to engage with one another. This is linked to the need for local government to provide green spaces and community sport and recreational facilities to enable interaction.

Unity in diversity

The key to the country's unity is embracing the reality that all South Africans have many identities, and yet are South African. The Constitution recognises 11 official languages, all of which must be promoted – no other constitution goes as far in recognising diversity. The Constitution, and the values it sets out, is based on South Africa's diversity. In pursuit of this, and as a reminder of shared roots, government opted to take three very important steps in adopting a coat of arms. All the imagery used is distinctly South African and the motto, in a distinct break with the Latin that is so frequently used, is from one of the extinct San languages. It says, "!KE E: /KARRA //KE", meaning "united in our diversity".

Being South African has never been premised on the notion of a melting pot that fuses everybody into some amalgam. With diversity as a foundation, South Africans need to work continually to bring this diversity into unity. This united nation will not be created automatically, nor will it remain in a state of unity if its fault-lines are forgotten or papered over. The fostering of constitutional values and the Bill of Responsibility through schools and the media will help ensure that South Africa celebrates its diversity and multiple identities.

Active citizenry and the social compact

For these and other proposals in the plan to become reality, all South Africans must contribute and work towards realising the vision. Active citizenry requires showing inspirational leadership at all levels of society. Leadership here does not refer to one person, or even a tight collective of people. In every aspect of life, dynamic leadership should be encouraged. In particular, parents, leaders of the community and public figures should demonstrate leadership qualities that include:

- Ability to lead by example and to follow rules that apply to everyone
- Honesty, integrity and trustworthiness
- Capacity to manage change and drive a "new" agenda, communicating with people, keeping them interested and informed
- Ability to make unpopular decisions.

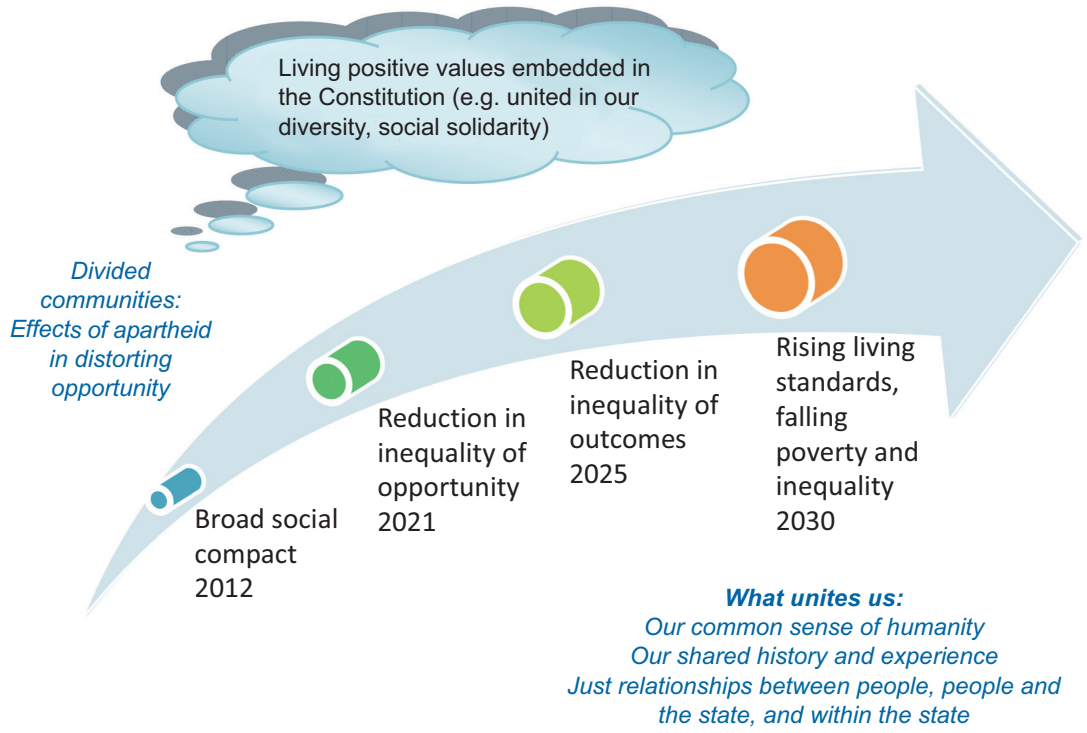
Leadership should mobilise communities, or parts of communities, to take charge of their future, raise grievances and assume responsibility for outcomes. Government needs to enlist community-based organisations to re-energise South Africa.

There are important questions that need to be raised as part of the challenge of nation-building. For example, the state is obligated to provide housing and community infrastructure, services such as water, electricity and refuse removal, as well as community facilities. Government is expected to deliver and the people to wait. Would democracy not be better served, for example, by government focusing on the overall environment, with communities actively involved through social housing programmes? The focus needs to shift from housing to communities.

In the interests of shared responsibility for development, South Africa must pay attention to the way that disputes are settled. It is vital to promote values of responsible citizenship and solidarity. Linked to active citizenry and solidarity is the recognition that for the vision to be attained, sacrifices may be necessary.

Transformation does not depend on highly technical processes, but rather on the participation of citizens. Citizenship must be activated in every area of public service. In a number of instances, this is provided for in legislation (for example, education and local government). In addition, there are informal arrangements in policing (community police forums) and health (oversight committees). South Africa will enjoy the full benefits of democracy when there is full and dynamic oversight and participation by communities.

Road to transforming society and changing relations



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