



environment
& tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

People - Planet - Prosperity:

A National Framework for Sustainable Development in South Africa

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Introduction by the Minister of Environmental Affairs and Tourism

As a country we have taken tremendous strides towards the achievement of sustainable development, however, as we increasingly face the impacts of a globalised world, there is still much to be achieved. As the world experiences a food price crisis, high energy prices, the impacts of climate change and escalating levels of poverty, the implementation towards meeting the targets of sustainable development and the Millennium Development Goals is critical.

In Johannesburg, at the World Summit on Sustainable Development (WSSD), held in September 2002, we agreed that the greatest challenge of our time was dealing with poverty, and we agreed on a negotiated outcome, the Johannesburg Plan of Implementation (JPOI). The JPOI sets out targets for achieving sustainable development, inclusive of the Millennium Development Goals. In Johannesburg, countries also committed themselves to preparing and implementing national strategies for sustainable development.

Sustainable development is about enhancing human well-being and quality of life for all time, in particular those most affected by poverty and inequality. Resource use efficiency and intergenerational equity are the core principles. Human welfare and well-being, equity and sustainable living are at the core of many of the MDGs and JPOI targets. The interdependence between people – planet – prosperity is evident in these targets.

The purpose of the National Framework on Sustainable Development is to enunciate South Africa's national vision for sustainable development and indicate strategic interventions to re-orientate South Africa's development path in a more sustainable direction. It proposes a national vision, principles and areas for strategic intervention that will enable and guide the development of the national strategy and action plan.

The national framework for sustainable development seeks to build on existing programmes and strategies that have emerged in the first 14 years of democracy. It aims to identify key, short, medium and long-term challenges in our sustainable development efforts, sets the framework for a common understanding and vision of sustainable development; and defines strategic focus areas for intervention.

The next steps towards the development of a strategy will be informed by phase II, which is about preparing and planning for action, and includes the development of a detailed action plan and the mobilisation of the necessary resources. Phase III will entail the process of roll-out, implementation, monitoring and review.

There is an increasing need for us as a country to collectively implement our national vision for sustainable development, through a multitude of actions across all sectors and stakeholders to ensure that we have sufficiently protected our resources for generations to come.

Glossary of Acronyms and Abbreviations

ABET	Adult Basic Education and Training
AIDS	Acquired Immune Deficiency Syndrome
ASGI-South Africa	Accelerated and Shared Growth Initiative for South Africa
BBEE	Broad-based Black Economic Empowerment
BEE	Black Economic Empowerment
CBO	Community Based Organisation
CDM	Clean Development Mechanism
CH ₄	Methane
CO ₂	Carbon Dioxide
CPI	Consumer Price Index
CSD	Commission for Sustainable Development (of the United Nations)
CSI	Corporate Social Investment
CSIR	Centre for Scientific and Industrial Research
DSM	Demand Side Management
DEAT	Department of Environmental Affairs and Tourism
DME	Department of Minerals and Energy
DoH	Department of Housing
DPLG	Department of Provincial and Local Government
DST	Department of Science and Technology
DTI	Department of Trade and Industry
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EPWP	Expanded Public Works Programme
FDI	Foreign Direct Investment
FEDUP	Federation of the Urban Poor
FET	Further Education and Training
FOSAD	Forum of South African Directors General
GDP	Gross Domestic Product
GEAR	Growth, Employment and Reconstruction strategy
GHG	Greenhouse Gas
GISP	Global Invasive Species Programme
GMO	Genetically Modified Organism
GNP	Gross National Product
GWM&ES	Government-wide Monitoring and Evaluation System
HIV	Human Immunodeficiency Virus
IWRM	Integrated Water Resource Management
ICLEI	International Council for Local Environmental Initiatives
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IDT	Independent Development Trust
IPCC	Intergovernmental Panel on Climate Change
IPP	Independent Power Producer
JIPSA	Joint Initiative on Priority Skills Acquisition
JPOI	Johannesburg Plan of Implementation
JSE	Johannesburg Stock Exchange
Kg	Kilogram
LED	Local Economic Development
LPG	Liquid Petroleum Gas
LTMS	Long-Term Mitigation Scenario
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MTEF	Medium Term Expenditure Framework
MSW	Municipal Solid Waste

MTSF	Medium Term Strategic
MW	Megawatt
N ₂ O	Nitrous oxide
Nox	Nitrous oxides
NACF	National Anti-Corruption Forum
NBSAP	National Biodiversity Strategy and Action Plan
NEDLAC	National Economic Development and Labour Council
NEMA	National Environmental Management Act
NEMPA	National Environmental Management Protected Areas
NEPAD	New Partnership for Africa's Development
NERSA	National Energy Regulator of South Africa
NFSD	National Framework for Sustainable Development
NGO	Non Government Organisation
NSDP	National Spatial Development Perspective
NSDS	National Skills Development Strategy
NSSD	National Strategy for Sustainable Development
NWA	National Water Act
OECD	Organisation for Economic Co-operation and Development
PBMR	Pebble Bed Modular Reactor
PCC	President's Coordinating Council
PGDS	Provincial Growth and Development Strategy
PHP	Peoples' Housing Process
PM ₁₀	Particulate matter of size 10 micron
R&D	Research and Development
RD&I	Research, Development and Innovation
SADC	Southern African Development Community
SAEO	South Africa Environment Outlook
SANBI	South African National Biodiversity Institute
SD	Sustainable Development
SETA	Sector Education and Training Authority
SKEP	Succulent Karoo Ecosystem Programme
SO ₂	Sulphur Dioxide
SOE	State-owned Enterprise
SoE	State of the Environment
SoER	State of the Environment Report
SRI	Social Responsibility Index
Stats SA	Statistics South Africa
TB	Tuberculosis
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNFCCC	United Nations Convention on Climate Change
URP	Urban Renewal Programme
VOCs	Volatile Organic Compounds
WfC	Working for the Coast
WSSD	World Summit on Sustainable Development
WWF-SA	World Wildlife Fund South Africa

A. Executive Summary

Introduction

The negotiated outcome of the World Summit on Sustainable Development (WSSD) held in September 2002, is the Johannesburg Plan of Implementation (JPOI) which sets out 37 targets for achieving sustainable development, inclusive of the Millennium Development Goals. South Africa has numerous strategies and programmes that include sustainable development considerations, however there is no coherent and overarching national strategy for sustainable development. The National Framework for Sustainable Development (NFSD), seeks to address this void by initiating a broad framework for sustainable development in South Africa that can serve as a basis for developing a national strategy and action plan.

The executive summary provides an overview of the rationale underlying the development of a cohesive national vision on, and strategy for, sustainable development, explains the context within which the framework has been developed and sets out the purpose and structure of the document. It also summarises the components of the NFSD.

Context for sustainable development

Sustainable development is about enhancing human well-being and quality of life for all time, in particular those most affected by poverty and inequality. Resource use efficiency and intergenerational equity are the core principles. If this generation leaves the next generation with degraded economic, social and environmental assets and less wealth, then the result will be an unsustainable future. Fundamental to understanding sustainable development is recognising the interdependence of our economic, social and environmental systems. In its draft policy on *a framework for considering market-based instruments to support environmental fiscal reform in South Africa*, the National Treasury notes that:

"As the South African economy continues to develop, it is increasingly important to ensure that it does so in a sustainable way and that, at the same time, issues of poverty and inequality are effectively addressed. It is, therefore, important to appreciate that it's not just the quantity of growth that matters, but also its quality."

Human welfare and well-being, equity and sustainable living are at the core of many MDGs and JPOI targets and many social and economic development targets are dependant upon, and impact on, the health of ecosystems and natural resources. The interdependence between **people – planet – prosperity** is evident in for example MDG targets about halving the proportion of people without sustainable access to safe drinking-water and sanitation, and the proportion of people who suffer from hunger, by 2015; as well as targets on reversing the spread of HIV/Aids and incidence of malaria by the same date. The importance of this interdependence is underscored by the World Health Organisation's estimate that "the economic benefits of investments in meeting these targets would outweigh costs by a ratio of about 8:1. These benefits include gains in economic productivity as well as savings in health-care costs and healthy life years lost, particularly as a result of diarrhoeal diseases, intestinal nematode infections and related malnutrition."¹

The achievement of sustainable development is not a once-off occurrence and its objectives cannot be achieved by a single action or decision. It is an ongoing process that requires a particular set of

¹ WHO Report on *Preventing disease through healthy environments, 2003*

values and attitudes in which economic, social and environmental assets that society has at its disposal, are managed in a manner that sustains human well-being without compromising the ability of future generations to meet their own needs.

The way in which we live in South Africa and the development path that we are currently pursuing, has elements of being unsustainable and consequently not viable, in the long term. Our society and economy are characterised by the inequitable distribution of wealth and resources. A minority enjoy high living standards with access to sophisticated infrastructure and reliable services. On the other hand, too many live in degraded environments, and although access to services (such as electricity, sanitation and water) has improved substantially since 1994, challenges still exist in the delivery of basic services particularly in the poorest communities. This situation is exacerbated in rural areas. Much of the growth in economic activity (measured as a percentage increase in GDP) is achieved by consuming natural resources and degrading our habitat at accelerating rates with the inevitable consequence that future economic growth and development objectives will be prejudiced.

The global environmental crises and the consequential adverse impacts on society and the economy, are symptoms of the weaknesses and failures of current governance systems and industrial practices throughout the world to ensure that people do not progressively consume the ecosystems and resources on which their continued well-being and survival depends.

Purpose of the Strategic Framework for Sustainable Development

The purpose of this Framework is to enunciate South Africa's national vision for sustainable development and indicate strategic interventions to re-orientate South Africa's development path in a more sustainable direction. It does not present detailed strategies or actions, but rather proposes a national vision, principles, trends, strategic priority areas and a set of implementation measures that will enable and guide the development of the national strategy and action plan. It describes in broad terms how the existing activities of government and its social partners will be strengthened, refined and realigned in a phased manner to achieve inter-related sustainable development goals relating to the economy, society and the environment, and how governance systems will be capacitated to facilitate this process.

This Framework provides the basis for a long-term process of integrating sustainability as a key component of the development discourse and shows South Africa's commitment to the principles developed at international summits and conferences in the economic, social and environmental fields, including the 2002 World Summit on Sustainable Development.

How will the Framework be used

The Framework will be used by all social partners and all organs of state within the national, provincial and municipal spheres to progressively refine and realign their policies and decision-making systems in order to establish a coherent and mutually consistent national system aimed at promoting sustainable development. This process will be facilitated by the development of a coherent set of sustainable development indicators; making investments in capacity building, research and development and information technology; and by the development of a national sustainable development strategy which identifies and prioritises specific government interventions.

Key components of the Framework

A national vision for sustainable development

The notion of “sustainable development” is often used in policy and strategy documents to refer to many different things, but it is rarely defined to mean anything specific. We are now obliged by our international commitments, constitutional principles and statutory laws to justify our national policies and development strategies in terms of sustainable development.

Our vision gives effect to the notion that sustainable development should be “an **integration** of governance, multiple voices, processes and action in decision-making towards a common goal within set parameters and a common definition of policy choices for promoting a sustainable development agenda. The national vision for sustainable development is as follows:

Our Vision

South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration.

Our vision is informed by the environmental, social and economic and other fundamental human rights enshrined in our Constitution, and the global and national priorities captured in the MDG, JPOI and the government’s macro socio-economic policies. It is a projection of our nation’s aspirations of achieving a better quality of life for all now and in future, through equitable access to resources and shared prosperity. It places the nation on a developmental trajectory which of necessity must move society towards greater efficiency and innovation in resource use, and the integration of social, economic, ecological and governance systems. The national vision is underpinned by a set of principles that must guide all of us in all decisions and actions taken to achieve the vision. These principles are captured in the box below:

Our Principles

The “first order” or fundamental principles relate to those fundamental human rights that are guaranteed in the Constitution, and underpin the very nature of our society and system of governance. These principles affirm the democratic values of:

- **Human dignity and social equity**
- **Justice and fairness**
- **Democratic governance**

The “substantive principles” address the content or conditions that must be met in order to have a sustainable society and are based on principles already enshrined in legislation and policies. The principles underscore a cyclical and systems approach to achieving sustainable development and are as follows:

- **Efficient and sustainable use of natural resources**
- **Socio-economic systems are embedded within, and dependant upon, eco-systems**
- **Basic human needs must be met to ensure resources necessary for long-term survival are not destroyed for short term gain**

The “process principles” establish a few clear principles that apply specifically to the implementation of the national strategic framework for sustainable development. The most important in this regard are:

- **Integration and innovation**
- **Consultation and participation**
- **Implementation in a phased manner**

➤ Trends

The chapter highlights natural, social, economic, governance and critical cross-cutting global trends that will have an influence on sustainable development in South Africa. The underlying research for this chapter is set out in Annexure 2.

Cross-cutting global trends that will have very specific impacts on our shorter-term social and economic policies include climate change, rising oil prices and globalisation. The next group of trends analysed are natural resource trends. The analysis of these trends clearly indicate that we need to take into account our supply of natural resources and status of our eco-system services as we pursue economic development via shared growth to eradicate poverty. The analysis of economic trends that follows maps the main macro-economic trends and how we intend reaching a 6% growth rate via investments in infrastructure, human capacity development and social development. The analysis of social trends is based on the *Macro-Social Report* published by the Presidency which concludes that the quality of life of the majority of South African citizens has improved. These social trends indicate that while we have made good progress on some fronts, we should take advantage of the current positive trends, and escalate and focus actions to achieve the MDGs. The examination of governance trends indicate that while governance is generally felt to be coherent, particular challenges for government relate to capacity and resource constraints at the local municipal level. There are positive private sector trends regarding building capacity for measuring the sustainability impacts of their businesses. Civil society formations need to be strengthened so that they can match and contest what is happening in the private sector.

➤ Priority areas for strategic intervention

The identification of five priority areas for strategic intervention, and supporting priority recommendations, was based on the analysis of the natural resources, economic, social and governance trends. This chapter contextualises these priority areas against the backdrop of international and national policy goals and commitments in respect of sustainable development. It highlights progress to date and illustrates that concerted efforts have been made to address the MDG and JPOI goals and meet regional objectives, targets and commitments in respect of sustainable development. South Africa has already taken numerous steps in responding to the global goals and targets. This has happened at the level of planning, by developing policies and strategies to establish priorities for action and expenditure, as well as the implementation level by rolling out programmes and projects. These interventions have taken place in all sectors and across all spheres of government. This section lists some of the major strategies and plans put into place in response to specific MDG and JPOI goals and targets. The chapter shows too that despite the considerable progress made, there are still gaps and various challenges to delivery on sustainable development objectives. The most important in this regard is bridging the gap between the first and second economies, eradicating poverty and improving the quality of life of poor South Africans. Another major challenge is changing human behaviour in a manner that promotes sustainable development and reduces unsustainable consumption and production patterns.

The five strategic priority areas for action and intervention that are necessary to reach the desired state of sustainable development described in the national vision reflect a systemic and integrative approach and seek to transcend traditional divisions and sectors. These priority areas, or “pathways” to achieving sustainable development are reflected in the table below:

Our pathways to sustainable development
<ul style="list-style-type: none">➤ Enhancing systems for integrated planning and implementation➤ Sustaining our ecosystems and using natural resources efficiently➤ Economic development via investing in sustainable infrastructure➤ Creating sustainable human settlements➤ Responding appropriately to emerging human development, economic and environmental challenges

➤ **Making it happen**

The final chapter deals with implementation. Implementation calls for decision-making and action at various levels. In order to embark on our journey towards being “a sustainable, economically prosperous and self-reliant nation” we need certain things. The first is the identification of an existing **institutional mechanism** that can facilitate cross-sectoral and multi-stakeholder coordination. Secondly we need an **action plan** to make sense of the directions contained in the five priority areas. The action plan is our “roadmap”. To embark upon this journey we will have to ensure that everyone is on board and stays on board. For this we need **ongoing communication and consultation** on achieving our national vision and strategy. The chapter unpacks the manner in which the national vision and strategy is to be communicated, consulted and popularised, both within Government and society in general. Finally we need a “compass” to measure our progress and check that we are still headed in the correct direction. This requires that we strengthen appropriate **monitoring, evaluation and reporting systems**, including principles and a set of indicators, to monitor and evaluate performance in order to be able to determine success or failure and determine what corrective or adaptive measures are needed.

This chapter describes a three-phased road-map towards achieving the national vision for sustainable development. **Phase I** is the National Framework for Sustainable Development. It sets the framework for a common understanding and vision of sustainable development; describes the South African context, as well as key medium and long term economic, social, and environmental and governance trends that influence sustainable development; and defines 5 priority areas for strategic intervention. **Phase II** is about preparing and planning for action, and includes formalisation of an institutional framework for sustainable development, development of a detailed action plan and mobilising the necessary resources. **Phase III** is about roll-out, implementation, monitoring and review.

Conclusion

To successfully implement this National Framework for Sustainable Development and achieve sustainable development objectives and targets, the nation as a whole must increasingly share in the common vision. All sectors, including all elements of the state plus civil society, organised labour and business, need to take part in the social contract to implement the NFSD and the emergent national strategy to follow. We need to promote simple actions on a large scale. As understanding of sustainable development increases, and it becomes clear that this is the key mechanism for building capacity and governance to achieve human development based on sustainable production and consumptions systems, government and society across all spheres and all sectors will approach and address the issues identified in this strategy with the seriousness they deserve.

In deciding on resource allocation and in making policy choices, the Executive should seek to give effect to the vision of sustainability. Priorities and commitments should be clearly articulated. While sustainability concerns do impact on all facets of life, we should keep our focus on the identified five priority areas for strategic intervention and the importance of mainstreaming these into the Accelerated and Shared Growth Initiatives and related programmes. These priority areas should, over the coming three to five years, serve as catalysts for policy changes that will facilitate the achievement of the desired ideal state as articulated in the national vision for sustainable development.

B. Chapter One : Context for Sustainable Development

1 Introduction

This chapter consists of three parts. The first part introduces the context for sustainable development by clarifying its significance to society in general; defining the term sustainable development within the national context; and explaining the need for a strategy on sustainable development. The second part provides information on the nature of the process followed in developing this Framework and seeks to give some insight into the underlying rationale of the approach put forward in the Framework. The third part sets out the national vision for sustainable development, and expands on this vision by suggesting a "sustainability index" of the desired future state of our society. It concludes with identifying the principles that will guide government and its strategic partners in achieving the national vision of sustainable development.

South Africa is a country in dynamic change and whilst South Africans agree on the broader developmental challenges they face, at present it does not have a common national vision or strategy for achieving sustainable development. This document is aimed at initiating a broad framework for sustainable development that can serve as a basis from which to develop a national strategy and action plan. It does not present detailed strategies or action plans, but rather proposes a framework that includes a national vision, principles, trends, strategic priority areas and a set of implementation measures that will enable and guide the development of the national strategy and action plan.

The notion of "sustainable development" is often used in policy and strategy documents in a broad and generic way. This first section clarifies the history of the concept, what it means and how it should be applied to a developing country context like South Africa.

2 Why sustainable development?

Since the advent of democracy in 1994, South Africa has made a decisive break with the past. Far-reaching political, economic and social changes have reversed many of the long-term trends set in motion by decades of colonialism, apartheid and inequality. Instead of structural economic decline, we have a growing economy and systematically increasing fiscal expenditures to address poverty and development. Statutory racism has been replaced with a human rights-oriented constitutional and legal order. New democratic structures and processes have complemented the overhaul of public sector governance.

An increasing commitment to sustainable development has accompanied these changes. Section 24 of the Constitution obliges stakeholders - in civil society and government - to "secure ecologically sustainable development". The Constitution set in motion a range of policies and procedures to reverse the formal legal right to systematically exploit the nation's natural resources for the benefit of a minority.

South Africa's abundant natural wealth has led to the assumption that all economic growth must of necessity consume more materials, eco-system services, and energy. There is an implicit assumption

that resources such as water, energy, minerals, plant and animal products and air quality will constantly be available no matter how we live, produce and consume.

We have also viewed our rivers, seas, land and air as unending sinks for increasing amounts of solid, liquid or airborne wastes despite the fact that the increasing degradation of our natural resources clearly indicates these sinks can no longer cope. In short, the nature of our economic growth path and key indicators such as rising average household consumption levels is closely correlated to rising levels of resource consumption and waste generation.

The economics of sustainable development, however, starts from the assumption that this correlation is not fixed. Instead, economic growth can be decoupled from rising resource consumption and increased waste outputs via the application of technologies and systems that reduce the so-called "total material requirements" of expanding production and consumption. Such trends are evident across many national economies, such as reductions in the total energy requirement per unit of production. Many leading cities around the world have systematic programmes to reduce health costs by cleaning up air pollution, eliminating waste altogether via recycling, replacing high energy lighting systems with low energy and cheaper lighting, and reducing congestion by replacing private passenger transport via mass public transit systems, etc. It therefore follows that the failure to invest in system and technology change now will gradually result in the accumulation of avoidable costs that will consume large quantities of public, private and household-level funds later on. This, in turn, will diminish the funding pool required to finance the eradication of poverty via improved education, expanded infrastructure provision and more effective health care.

A development strategy that depends on the acceleration of material economic growth will hit increasingly costly resource constraints resulting in *unsustainable development*. This is because increasing resource use and rising levels of unproductive waste result in a waste of money, which means less money is available for investment in economic and social development. By improving our planning tools, developing our human resources appropriately, raising awareness and applying cutting-edge technology for sustainable development, we can counteract the above trends. As this document will reveal, Government already supports a wide range of initiatives at all three levels that are already moving in this direction.

As the ASGI-SA strategy recognises, despite the continued upsurge in economic activity, the twin challenges of unemployment and poverty are now the focus because not enough of the country's citizens are sharing in the benefits of rising economic welfare. There is therefore broad consensus over two economic and social challenges for the second decade of South African democracy to deal with this challenge:

- How to boost economic growth to an average 6% and to make sure that there is a more equitable distribution of economic wealth; and
- How to eradicate poverty, including the achievement of the MDGs.

A commitment to sustainable development means recognising there is now a third challenge facing the nation, namely:

- How to decouple economic growth and poverty eradication from rising levels of natural resource use and waste per capita over time.

If we fail to deal with the third challenge, we will undermine the preconditions required for boosting growth and eradicating poverty. Sustainable development makes it possible to conceptualise ways of decoupling natural resource use from economic growth strategies, thus freeing up scarce financial resources for better use. If all three challenges become the focus of attention of the developmental state, the result will be *sustainable shared and accelerated growth*.

Sustainable development that is appropriate and specific to the South African context will entail shared and accelerated growth, targeted interventions and community mobilisation to eradicate poverty, and ensure the ecologically sustainable use of our natural resources and eco-system services.

2.1 Our definition of sustainable development

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." – Our Common Future – Brundtland Commission

South Africa's definition of sustainable development is influenced by the globally accepted definition provided by the Brundtland Commission and which is entrenched in the Constitution. Section 24 (b) (ii) of the Constitution guarantees everyone the right to having "the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development." South Africa has formalised its definition of sustainable development by including it in law. The definition of sustainable development in the National Environmental Management Act (NEMA), (Act No. 107 of 1998) is as follows:

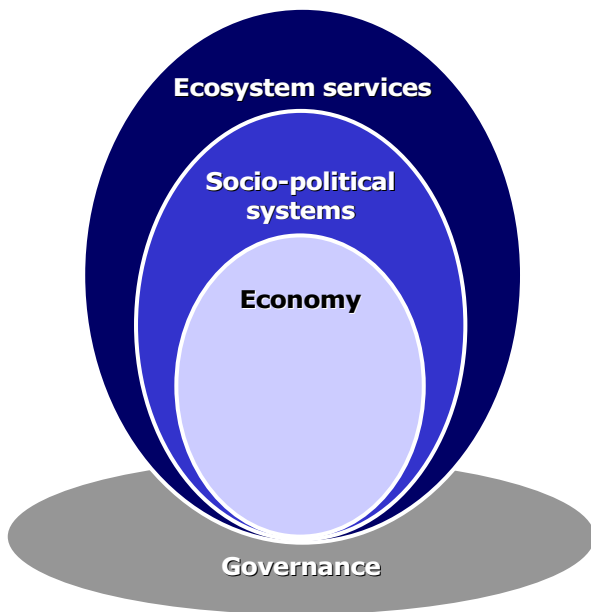
"Sustainable development means the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations."

Thus the traditional concept of sustainable development is based on two major premises – *equity* within generations and between generations, and *maintaining the integrity of* natural, financial and human capital, to ensure that economic and social development is reconciled with environmental protection.²

In South Africa, as in the rest of the world, the situation of continuing inequality, accompanied by a deteriorating resource base, makes it imperative for us to go beyond thinking in terms of trade-offs and the simplicity of the 'triple bottom line'. We must acknowledge and emphasise that there are non-negotiable ecological thresholds; that we need to maintain our stock of natural capital over time; and that we must employ the precautionary principle in this approach. We must accept that social, economic and ecosystem factors are embedded within each other, and are underpinned by our systems of governance.

² United Nations Development Programme (2003)

This definition is universally accepted and best illustrated by the diagram below:



The diagram represents a systems approach to sustainability because the economic system, socio-political system and ecosystem are seen as embedded within each other, and then integrated via the governance system that holds all the other systems together within a legitimate regulatory framework. Sustainability implies the continuous and mutually compatible integration of these systems over time; sustainable development means making sure that these systems remain mutually compatible as the key development challenges are met via specific actions and interventions to eradicate poverty and severe inequalities. This is preferable to the more commonly used image of the three separate intersecting circles which depict sustainable development as limited to a fragile space where all three circles intersect.

This Framework seeks to build on the definition of sustainable development set out in the NEMA by highlighting the importance of institutions and systems of governance in implementing the concept, and in oversight activities. However, this must be achieved by recognising our developing country context. Zero growth strategies like those adopted in some developed economies will not work in a developing country context where poverty eradication will of necessity entail substantial investments in material infrastructure, physical development and the material pre-conditions for a decent quality of life for all. In other words, increased household consumption for the poor majority and sufficient rather than over-consumption for the rest is a pre-condition for sustainable living in the longer-term. To achieve this, inequalities will need to be reduced and consumption systems and patterns will need to become more resource efficient and less wasteful.

In practical terms, then, if we wish the pursuit of growth to meet human development needs to become sustainable, we must pursue growth that respects the limits of our ecosystems by making sure that growth strategies are not dependent on intensive/inefficient resource use – efficiency is the key to accelerated and shared growth, otherwise resource based constraints and degraded ecosystem services will undermine growth. We must also prioritise developing sufficient governance capacity to ensure effective implementation of policies, laws and programmes. Through these mechanisms, we can achieve *sustainable shared and accelerated growth*.

South Africa's ecological footprint

Using the increasingly popular quantitative measurement known as "ecological footprinting", it has been estimated that South Africa's footprint is 4,02 hectares per person. "Footprinting" is an accounting tool that measures how much biologically productive land is required to support the living standards of an individual, a city or a country. This includes the land required to produce the physical resources consumed, absorb the wastes generated, and sequester CO₂ emissions associated with energy demand. Using the World Wildlife Fund (WWF) estimate that the global "fair share" is 1,8 hectares per person if we are all to live within the carrying capacity of the planet's ecosystems, this means that we would need two planets if everyone lived like the average South African. This, however, masks gross inequalities. A recent study of Cape Town found that the footprint of some of Cape Town's richest suburbs were so large that 14 planets would be required if everyone lived like people in Camps Bay and Constantia – this is substantially higher than the average United States footprint which is 5.2 planets. The footprint of Cape Town's middle class suburbs is 5 – 6 planets (similar to the United States average), and the footprint of the poor suburbs is 0.5 to 1 planet (similar to China and India). It is highly unlikely that there are sufficient resources to eradicate poverty by increasing the footprint of the poor if the footprint of the rich remains so large.

2.2 Why do we need a National Strategy for Sustainable Development?

The Johannesburg Plan of Implementation (JPOI) that emerged from the 2002 World Summit on Sustainable Development sets out the commitments and priorities for action on sustainable development in specific areas and established 37 negotiated targets, including Paragraph 162:

"States should take immediate steps to make progress in the formulation and elaboration of national strategies for sustainable development and begin their implementation by 2005."

Apart from commitments in the JPOI, countries need to adopt bold, goal-oriented policies and national development strategies to meet the MDG targets.

A sustainable development paradigm is integral to our 2014 vision and beyond, as it defines the social, economic, environmental and governance parameters, and explicitly recognises and acknowledges the context and constraints that decision-makers must take into account when policies are adopted aimed at growing the economy, sustaining our eco-systems and meeting basic social and human needs. The idea behind the commitment to develop a national strategy for sustainable development is *not* to create a 'super institution' or a 'master plan'. More importantly, a national strategy would need to build on existing programmes and strategies that have emerged in the first decade of our democracy.

Despite major advances on numerous fronts, unique challenges remain. As the Ten Year Review argued, there remains a need for a long-term framework "of encompassing interest" that facilitates co-ordinated action within government and with social partners. This involves building a social compact to unite South Africans in an effort to create work, fight poverty, and reinforce national pride. Through a focus on implementation, better integration and alignment across all spheres of government and direct contact with the people, the performance of the state can be further improved. It is with this in mind, and the fact that no preceding national strategy existed, that the *National Framework for Sustainable Development* has been developed. This Framework serves as

“forerunner” of the national strategy and provides a “skeleton” or reference point to guide all South African entities - whether government, state-owned enterprises, civil society, labour or business - on what sustainability means in light of these challenges.

The *National Framework for Sustainable Development* is not, and cannot be, all things to everyone, i.e. it is not the sum of all wishes and aspirations that span the economic, social and environmental spheres. It recognizes that the development of a national strategy for sustainable development is not a once off event, but an ongoing process of engagement on priorities, goals and strategic objectives and interventions necessary to achieve the national vision for sustainable development. Importantly, it is also not an extended environmental strategy. To make sure it can be implemented, it needs a long-term focus on a strategically selected cluster of issues that must be addressed now, if we want to avoid the serious negative long-term predictable consequences for our social development and the sustainability of our ecosystems. There is consensus within government, and supported by the scientific community, about these long-term trends and that many of the appropriate shorter-term policies and strategies are already in place. The challenge is to build a united effort to ensure implementation. The Framework must guide the awareness-raising process that promotes a social partnership to monitor and report on progress with implementation. A critical component of implementation must be the development of a set of high-level indicators to measure progress.

International milestones leading to our National Framework for Sustainable Development

The process to develop a national framework for sustainable development in South Africa is based on a number of key international milestones that signify the increased awareness of sustainability as an important component in development strategies:

- The United Nations Conference on the Human Environment, held in Stockholm in 1972, where the environment was recognised as a development concern;
- The 1992 Rio Earth Summit, where Agenda 21 was agreed upon as a blueprint for sustainable development, reflecting global consensus and political commitment to integrate environmental concerns into social and economic decision-making processes;
- A decade of UN summits and conferences between 1992 and 2002, which focused on the social, economic and environment related fields and widened the concept of sustainable development;
- The 2000 United Nations Millennium Summit where the Millennium Development Goals were adopted;
- The World Summit on Sustainable Development, held in Johannesburg in 2002, which reaffirmed the commitment to sustainable development, placed poverty eradication at the centre of efforts to achieve sustainable development, and reinforced the notion of development that aims for equity within and between generations.

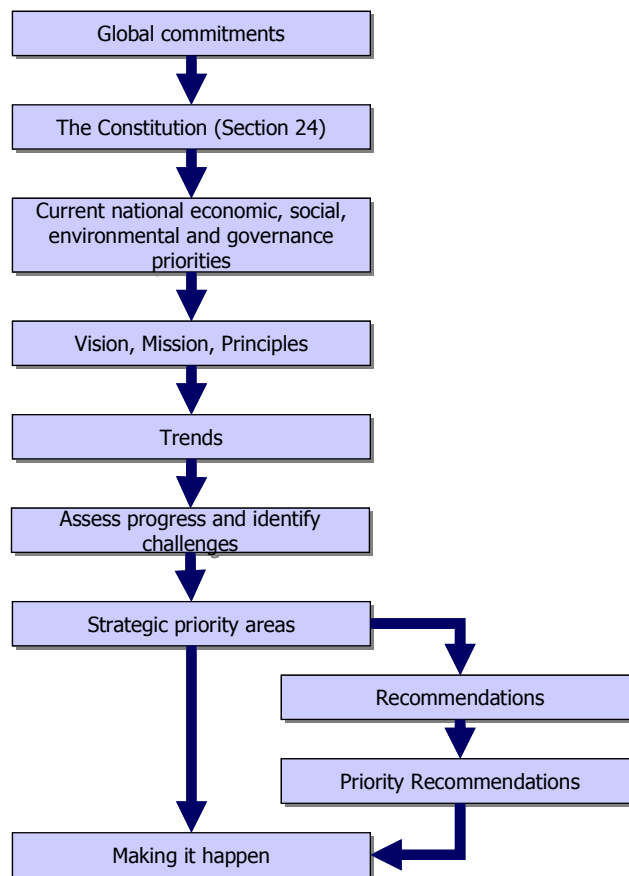
3 An iterative and participatory process

Like any strategy, the national framework for sustainable development will need to be tested, revisited, and regularly updated, for it to remain relevant and responsive to a changing national context. The NFSD provides the basis for a long-term process of integrating sustainability as a key

component of the development discourse and shows South Africa’s commitment to the principles developed at international summits, including the 2002 World Summit on Sustainable Development.

The success of the process of developing a national framework for sustainable development depends on stakeholder participation. Like the strategy that it informs, the consultative process has been multi-faceted and iterative. Participation has occurred through a range of methods, including structured multi-stakeholder workshops, facilitated focus groups, expert research-based inputs, interviews and written submissions, reviews by an Academic Review Panel, and publicity campaigns. Responses have been received from civil society organisations, business, labour, government departments, research institutions and professional associations, and individuals wishing to contribute to change (a detailed methodology that was followed in drafting the framework is attached as annexure 1).

The methodology can be illustrated as follows:



Through this iterative process stakeholders provided valuable information and ideas on what the key issues and concerns were; what sort of vision was needed and what the constituent elements of a national strategy should be; how to approach the development and implementation of a national strategy; linkages with other government programmes and priorities etc. These have all been considered in developing this framework.

4 A National Vision for Sustainable Development

“Everyone has the right to an environment that is not harmful to their health or well-being; and to have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that prevent pollution and ecological degradation promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

Constitution of the Republic of South Africa Section 24

The national vision for sustainable development is informed by the environmental and other fundamental human rights enshrined in Constitution, and the global and national priorities captured in MDG, JPOI and government’s macro socio-economic policies. The national vision projects the nation’s aspirations of achieving a better quality of life for all now and in future. This can only be achieved through equitable access to resources and shared prosperity. It places the nation on a social development and economic growth trajectory which of necessity must move society towards greater efficiency and innovation in resource use, and the integration of social, economic, ecological and governance systems.

Our Vision

South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration.

To achieve this vision of a nation where all people have sufficient food, clean air and water, decent homes and safe neighbourhoods; where there is sufficient work for every body; and where people can live in harmony with one another and their environment, South Africans must take collective responsibility for sustainable and shared resource use. We need to recognise and understand that democracy, prosperity and resource sustainability are inextricably linked. The national vision can only be achieved if we succeed in directing investment and capital expenditure, and orientating technological innovation and institutional cooperation on a course that does not degrade and destroy the resource base and natural ecological cycles of renewal on which we depend. The focus must be on meeting fundamental human needs in a manner that uses our limited resources more efficiently and ensures growth and development are shared equitably. We need to find innovative ways to live and prosper while ensuring an equitable, healthy existence and future for all our people and our environment. This we will only achieve if we adopt an integrative and systemic approach that recognises and functions within the natural ecological cycles of renewal.

- As mentioned in the previous section on the need for a national strategy, a comprehensive set of indicators that can be used to monitor gradual progress over the long term towards our vision of a sustainable South Africa, must be developed. These indicators will need to be coupled to an

effective monitoring and evaluation system. What follows are the kinds of criteria that could be built into a final set of indicators for monitoring progress towards our vision. However when these indicators are formulated, they will need to tell us whether we are making progress or not with respect to the key trends we have identified as critical driving forces for our choice to sustainable development.

The next section sets out the principles that will guide government and its strategic partners in achieving the national vision of sustainable development. These principles serve as the “compass” to ensure South Africa’s development path unfolds in the direction of sustainability. The principles are divided into three broad categories, namely the “first order” or fundamental principles, the substantive principles and the process principles. Each of these three categories of principles is in turn supported by further principles as illustrated below.

Our Principles

The “first order” or fundamental principles relate to those fundamental human rights that are guaranteed in the Constitution, and underpin the very nature of our society and system of governance. These principles affirm the democratic values of:

- **Human dignity and social equity**
- **Justice and fairness**
- **Democratic governance**

The substantive principles address the content or conditions that must be met in order to have a sustainable society. These principles are based on sustainable development principles already enshrined in South African law (notably the National Environmental Management Principles set out in section 2 of NEMA, but also in other legislation such as the National Heritage Resources Act, the National Forests Act and the Development Facilitation Act). The substantive principles underscore a cyclical and systems approach to achieving sustainable development and are as follows:

- **Efficient and sustainable use of natural resources**
- **Socio-economic systems are embedded within, and dependant upon, eco-systems**
- **Basic human needs must be met to ensure resources necessary for long-term survival are not destroyed for short term gain**

The process principles establish a few clear principles that apply specifically to the implementation of the national framework for sustainable development. These include:

- **Integration and innovation**
- **Consultation and participation**
- **Implementation in a phased manner**

The national vision cannot be achieved overnight or by a single action. To reach the desired ideal state of sustainable development described in the national vision, the country will need to map the critical “pathways” to achieving the vision. However, in order to understand the implications of this vision for development and growth in South Africa, and how to “map our critical pathways”, we need first to examine the relationship between economic activity, social interactions, the environment and

the system of governance in this country. These relationships and underlying trends are highlighted in the following chapter.

C. Chapter Two : Overview of Trends

An overview of the natural, social, economic, governance and critical cross-cutting global trends is provided here, whilst the detailed research underlying the trends analysis is provided as annexure 2 to this framework. The analysis highlights critical cross-cutting global trends that will have very specific impacts on our shorter-term social and economic policies. These are climate change, rising oil prices and globalisation.

The next group of trends analysed are natural resource trends. The analysis of these trends clearly indicates that we need to take into account our supply of natural resources and status of our ecosystem services as we pursue economic development via shared growth to eradicate poverty. The review of major trends, risks and opportunities in respect of natural resources reveals that our natural resource base is under pressure and our ecosystems face degradation. This creates imbalances between this resource base and our social and economic development strategies as we pursue shared growth in the drive to eradicate poverty and create employment opportunities.

The analysis further shows that shared growth and poverty eradication strategies are not as effective as they could be in decoupling from unsustainable natural resource use and exploitation. It further confirms that thresholds are now being reached which, if ignored, will generate dysfunctional economic costs that will undermine investments in economic development and exacerbate poverty as poor people experience the loss of supportive ecosystem services. Fortunately, it is also clear that technologies and practices exist that open up opportunities for decoupling unsustainable resource use from material consumption growth and poverty eradication strategies.

The analysis of economic trends that follows maps the main macro-economic trends and how we intend reaching a 6% growth rate via investments in infrastructure, human capacity development and social development. However, we can no longer assume that these socio-economic goals can be attained if the underlying ecosystems and resources are depleted and degraded. It focuses on macro-economic trends; targeted interventions to integrate the second economy; future challenges to macro-economic management strategies and fiscal expenditure patterns; fiscal trends; micro-economic reform trends; and spatial planning.

From this analysis it is clear that economic policy making will need to factor in two fundamental threats to the commitment to a high growth rate, which should be viewed as only one element of a wider notion of qualitative development. Firstly, the negative impact that persistent poverty and inequality will have on development. Secondly, the underlying depletion of natural resources, such as inadequate and inappropriate energy, rising waste levels, soil degradation and poor air quality, will clearly undermine our capacity to meet fundamental human needs and build an advanced economy. In line with the aims of the national vision and Framework, the Environmental Fiscal Reform discussion paper published by the National Treasury in April 2006 (cited above), recognises that fiscal policy decisions must anticipate long-term trends, so that reforms can be introduced to mitigate the consequences of unsustainable development.

The analysis of social trends is based on the *Macro-Social Report* published by the Presidency which concludes that the quality of life of the majority of South African citizens has improved. However, there are significant threats related to economic marginalisation, the impact of the HIV and AIDS pandemic, endemic urban and rural poverty, and natural resource depletion (soils, fisheries, water quality) that contradict these positive trends and could, if not countered, overwhelm these positive trends.

These social trends indicate that while we have made good progress on some fronts, we should take advantage of the current positive trends, and escalate and focus actions to achieve the MDGs.

Positive trends include access to primary schooling and eliminating gender inequalities linked to access to education. The maternal mortality rate is reducing and many additional people have access to water. However, serious challenges over the next decade include making a much more significant impact on poverty and on HIV and AIDS, malaria and TB, all of which continue to spread at high rates; and the need to do more to reduce hunger and unacceptably high levels of child mortality. We also need to improve access to sanitation in a concerted fashion, and to reduce the percentage of people living in informal settlements. Tackling youth unemployment, which shows few signs of improvement despite numerous programmes, is another pressing priority.

The examination of governance trends indicate that while governance is generally felt to be coherent, particular challenges for government relate to capacity and resource constraints at the local municipal level. At all levels, we need to enhance capacity for cross-sectoral coordination and transdisciplinary thinking, as well as the mechanisms for integrating sustainable development considerations into sectoral policy and activities. Performance in respect of integrated planning and coordinated action needs to be strengthened within and across all spheres and requires particular capacity building interventions. Monitoring and evaluation systems need to be consolidated and fine-tuned so that they can better measure progress towards sustainability. There are positive private sector trends regarding building capacity for measuring the sustainability impacts of their businesses, but few independent monitors exist to adjudicate these claims. Civil society formations need to be strengthened so that they can match and contest what is happening in the private sector. All three sectors, however, require considerable education and awareness raising with respect to an understanding of sustainable development and the implications for policy making and action.

Implications of the trends analysis

Major risks to our current development path are posed by the increasing impacts of climate change, and oil price increases related to oil peak. As the trends analysis indicates, further constraints are imposed on economic growth by challenges associated with electricity generation, the potential threat of water shortages, rising levels of un-recycled solid waste, declining soil quality, loss of biodiversity as natural habitat in aquatic and terrestrial ecosystems is degraded or lost, threats to coastal and marine resources, and the nature and impact of qualitative declines in air quality.

Our economy is growing rapidly, and growth rates need to be further escalated in order to eradicate poverty. However, South Africa is likely to face challenges such as: rising household consumption levels that remain coupled to avoidable rising resource use and waste levels; constraints on rising fiscal expenditures caused by capacity limitations; the need to ensure that infrastructure expenditure also increases efficiencies through the use of sustainable resource use technologies; keeping inflation down when oil and energy costs are rising for an economy that is notoriously energy intensive; currency volatility; the selection of sectoral economic strategies that have maximum growth and job creation impacts; the selection, funding and management of 'second economy' interventions that expand employment, create assets, build the skills base and contribute to solving social problems such as water pollution, disaster management and care for child-headed households; appropriate levels of investment in science and technology and research and development programmes; and the alignment of national, provincial and local spatial planning.

Analysis of key social trends indicates that we have made progress in a number of key areas, including provision of water and access to schooling. While South Africa is a society in dynamic change, both materially and spiritually, there are suggestions that there is an improving sense of an over-arching identity and increasing levels of social cohesion. However, we still have much to do to achieve the Millennium Development Goals. Serious challenges over the next decade include making a much more significant impact on poverty and on HIV and AIDS, malaria and TB, all of which continue to spread at high rates; and the need to do more to reduce hunger and unacceptably high

levels of child mortality. We also need to improve access to sanitation, which is currently at approximately 65%, in a concerted fashion. Despite the construction of more than 2.4 million homes since 1994, too many people now live in informal settlements, due to urbanisation and shrinking household sizes. Tackling youth unemployment, which shows few signs of improvement despite numerous programmes, is a pressing priority.

Finally, the analysis of the governance trends would suggest that sectoral governance is coherent and capacity building strategies are in place. Particular challenges however, relate to capacity and resource constraints at the local municipal level. The capacity for cross-sectoral coordination and transdisciplinary thinking is weak. Integrating environmental considerations into sectoral policy and activities remains a key challenge for effective governance for sustainable development.

Civil society formations need to be strengthened so that they can match and contest what is happening in the private sector. The private sector has been rapidly building capacity for measuring its sustainability impacts, but few independent monitors exist to adjudicate these claims. All three sectors, however, require considerable education and awareness-raising with respect to an understanding of sustainable development and the implications for policy making.

As long as our economy remains dependent on depleting increasingly costly (financially and ecologically) natural resources such as fossil fuels, there will be an underlying long-term drag effect that will prevent us from achieving the quantitative and qualitative growth we require to eradicate persistent poverty. Like elsewhere in the world, the challenge of sustainable development means eradicating poverty via government and community-based programmes, private sector investments in fixed assets, and growing an increasingly dematerialised economy in a way that is more socially equitable.

The analysis of major cross-cutting, natural resources, social, economic and governance trends is the basis from which the strategic focus areas were identified and selected for intervention, in order to work towards achieving the national vision for sustainable development.

D. Chapter Three : Strategic focus areas for intervention

The purpose of this chapter is to flesh out the critical pathways that are needed to achieve the desired state of sustainable development described in the national vision and to contribute to shared and accelerated economic growth. These "pathways" constitute the high level strategic focus areas for action and intervention that support the national vision. This chapter is divided into three sections: The first "sets the scene" for the chapter and sketches the background and strategic context against which these strategic focus areas and interventions must be viewed. It then provides a short description of progress made to date in addressing sustainable development goals by highlighting the major achievements and challenges to performance and delivery on commitments. The chapter concludes by proposing and describing certain strategic focus areas that require intervention in order to meet sustainable development objectives and targets. These areas reflect a systemic and integrative approach and seek to transcend traditional divisions and sectors.

5 Background and strategic context

5.1 International and national policy obligations and commitments

There exists a hierarchy of strategic goals and targets in respect of sustainable development. At the global level these goals are included in both the Millennium Development Goals and the Johannesburg Plan of Implementation. The eight MDGs serve as the new framework for sustainable development by setting social equity goals and targets that aim at contributing to economic development while ensuring environmental sustainability. Goal 7 explicitly addresses the issue of ensuring that socio-economic development strategies are environmentally sustainable. The integration of sustainable development principles into country policies and programmes is one of the targets under this goal. Another target relates directly to sustaining ecosystems and natural resources, namely "reverse loss of environmental resources". The last two targets address the link between the environment and human well-being and welfare. These are to reduce by half the proportion of people without sustainable access to safe drinking water; and achieve significant improvement in the lives of at least 100 million slum dwellers by 2020. The sustainable development agenda is also promoted through the MDGs that address health issues, such as the eradication of major diseases (e.g. HIV/Aids and malaria).

The JPOI deals with the topic of sustainable development extensively and has a host of broad objectives as well as specific targets on a range of topics such as biodiversity loss, sustainable fisheries, access to safe drinking water, sustainable agricultural practices, food security, protection of the natural resource base on which economies and societies depend, education, sustainable consumption and production patterns, poverty, energy efficiency and various health targets.

These global goals are supported and augmented at the regional level through multi-/bi-lateral agreements and strategies and at national level by domestic strategies, policies, programmes and

plans which not only give effect to international and regional obligations, but also reflect national priorities and goals.

Objectives and targets that focus on regional priorities and circumstances are captured in various NEPAD strategies and plans such as the Environment Action Plan, Peer Review Mechanism, NEPAD Short Term Action Plan and Health Strategy as well as numerous SADC strategies and protocols.

5.2 Existing national instruments to meet international goals and targets

Concerted efforts have been made in South Africa to address the MDG and JPOI goals and meet regional objectives, targets and commitments in respect of sustainable development. This has occurred at the level of planning, by developing policies and strategies to establish priorities for action and expenditure, as well as the implementation level by rolling out programmes and projects. These interventions have taken place in all sectors and across all spheres of government. This section lists some of the major strategies and plans put into place in response to specific MDG and JPOI goals and targets. The following section provides information on how we have performed as a nation in addressing sustainable development goals and targets by highlight some of the major programmes and projects.

In keeping with the MDG target of integrating sustainable development principles into country policies and programmes, South Africa has incorporated sustainable development principles into various sector policies and programmes. Many initiatives, such as the environmental right in the Constitution, incorporation of sustainable development principles into laws such as the National Water Act and National Environmental Management Act, preceded the MDGs. Subsequently, motivated by both the MDGs and commitments made at the World Summit on Sustainable Development, South Africa developed a strategy that responds to the JPOI at national level and is supported provincially through the Provincial Growth and Development Strategies. The country has continued to include sustainable development principles, objectives and targets into macro level strategies, plans and programmes.

Government has also responded to the MDG targets of reversing the loss of environmental resources; increasing the numbers of its citizens who have access to safe drinking water; improving the quality of life of people living in informal settlements; and health targets pertaining to the eradication of major diseases, reducing infant mortality and improving maternal health. Examples of these endeavours are cited below.

Key strategies have been developed and adopted to address biodiversity loss and development pressures on ecosystems and natural resources, combat the effects of increasing desertification and respond to the effects of an increasingly warmer and drier climate on the environment, communities and the economy, include inter alia the National Biodiversity Strategy and Action Plan (NBSAP), National Climate Change Response Strategy, Energy Efficiency Strategy, Renewable Energy Policy, National Water Resources Strategy, National Disaster Management, Cleaner Production Strategy, National Land Care Programme, the National Action Programme for Desertification and the National Action Programme Combating Land Degradation to Alleviate Rural Poverty. Provinces and cities are also beginning to address issues related to climate, waste and biodiversity. Important strategies and plans to address our developmental challenges within

the economy include inter alia the Black Economic Empowerment Strategy and various BEE Charters (such as those for agriculture, tourism and mining); the BBBEE charter for Agriculture; Integrated Food Security Strategy for South Africa; Advanced Manufacturing Technology Strategy; National Biotechnology Strategy; National Strategy on Sustainable Production and Consumption; National Framework for Local Economic Development (LED), National Industrial Policy Framework, National Spatial Development Perspective, and the Accelerated and Shared Growth Initiative of South Africa. The major existing strategies that focus on social development include the Integrated Sustainable Rural Development Strategy, Project Consolidate, Urban Renewal Programme, National Sanitation Strategy, National Research and Development and Technology Transfer Strategies, and various sector specific plans such as the Strategic Priorities for the National Health System, 'Breaking New Ground: National Policy for Sustainable Human Settlements, and various national policy frameworks for Social Development.

6 Performance to date on addressing sustainable development goals

6.1 Highlights and achievements to date

In giving practical effect to the international and national goals and objectives, sector Departments have developed and introduced a host of sector and cross-cutting programmes and projects that are at various stages of implementation. Due to the Constitutional allocation of functional areas of competency and multi-sectoral nature of many of these programmes and projects, most are not implemented by a single department in a single sphere of government only, but jointly with other sector departments, municipalities and public entities within the economic, social or governance clusters and across spheres. Examples of some of these initiatives are outlined below.

Legal and institutional framework: Government has introduced a suite of regulatory and institutional reforms to give statutory effect to sustainable development, regulate resource use and support implementation. Included in this regime of sustainable development laws is provision for the implementation of various interventions that are designed to promote non-consumptive use of natural resources, assessment of the environmental impact of development as well as prevention and management of pollution and waste. This includes the package of environmental laws under the National Environmental Management Act.

Water - Wise water management is greatly enabled by DWAF's progressive orientation that assumes that a sustainable resource use approach needs to be integrated with economic growth and poverty eradication strategies, via cross-sector planning and implementation. Two major programmes that focus on water quantity and quality and combine this with labour intensive job creation, are the Working for Water and Working for Wetlands Programmes. These Programmes are implemented locally by various organs of state and civil society agents.

Biodiversity - Various multi-sectoral bioregional programmes are in place that link biodiversity conservation with socio-economic development such as CAPE, SKEP, STEP, the National Grasslands Biodiversity Programme, trans-frontier parks and world heritage sites, and the

Coastcare and Blue Flag Beach Programmes and world heritage sites. Municipalities and local communities play key roles in many of these programmes and projects.

Environmental planning: The Department of Land Affairs has developed policy guidelines for the integration of environmental planning into the land reform process and DEAT has developed guidelines for incorporating environmental considerations into IDPs. In many of these programmes and projects sectoral objectives are successfully combined with socio-economic objectives such as poverty alleviation and job creation.

Housing - The Comprehensive Plan for the development of Sustainable Human Settlements provides strategic and programmatic shift from housing to sustainable human settlements. The Department of Housing (DoH) has introduced an inclusionary housing framework to accelerate housing delivery and address backlogs which aims to create sustainable settlements. It includes a social contract known as "Breaking New Ground (BNG)" that involves collaboration between the Department and its partners in the housing sector value chain, namely SAPOA, local government, communities, the Chamber of Mines, the Banking Association and the construction sector. One of the commitments in BNG specifically commits government and its housing sector partners to achieving MDG goals in respect of housing and sustainable settlements. The national agreement between the Ministry of Housing and the Federation of the Urban Poor (FEDUP) has already been mentioned.

The Kuyasa housing project, a Clean Development Mechanism (CDM) project has been implemented in Khayelitsha, Western Cape³; and some local municipalities have introduced separation at source and recycling initiatives as part of their waste management programmes⁴.

Cleaner production - A number of government departments and municipalities have implemented various measures for promoting energy and material efficiency, mainly through the concepts of cleaner production and eco-efficiency. South Africa's first CDM project by a major corporate was introduced in 2005 by SAB when it launched its Rosslyn Brewery fuel switching project.⁵

Sustainable construction: Initiatives such as the CSIR's Green Buildings Programme, the Department of Housing's Red Book Guidelines and the Green Professionals Programme of the International Institute of Energy Conservation have had encouraging, if limited, impact in making infrastructure standards and construction practices more environmentally sustainable in the South African construction industry.⁶

Energy: Eskom has initiated the South African Bulk Renewable Energy Generation (SABRE-Gen) project to address renewable energy options in Southern Africa and provide a visible forum for the investigation into renewable energies. The types of renewable technologies currently under investigation are wind energy, solar energy, biomass and wave/tidal energy. The experimental wind farm at Klipheuwel in the Western Cape is one of the SABRE-Gen projects.

³ Solar water heaters, compact fluorescent light bulbs and ceiling insulation were used in this low income housing project.

⁴ For example the residents of Potchefstroom are supplied with green poly propylene bags for the following recyclable items: Paper, all plastic related articles, tins, glass bottles and cardboard boxes.

⁵ The Sustainable Business Handbook, Third Edition, 2006, p29

⁶ National Treasury, comment on NFSD, 15 December 2006

Eskom is also implementing energy efficiency projects such as the Residential Demand Side Management programme which is committed to the conservation and preservation of the environment through various programmes including CFL globe exchanges and solar water heating initiatives. Another of its sustainable development initiatives is the Sustainable Homes Initiative which aims to use the opportunity to build energy efficiency into the future consumption at a construction stage such as Eskom's All Africa Games Village project.

Plans to increase generation capacity have been taken forward through the development of the Second National Integrated Resource Plan for energy, led by the National Energy Regulator. The Central Energy Fund has set up the South African National Energy Research Initiative to channel funds into a long-term national teaching and research programme within the University sector to build South Africa's capacity to develop alternative renewable and sustainable energy resources.

Public Spending and Procurement - National Treasury has introduced various interventions aimed at 'expanding the envelope' and improve the efficiency of public spending. These include an extensive process of budget review and reform to improve budget allocation within and between sectors, establish a regulatory framework for Public Private Partnerships and develop a draft policy on market-based instruments to support environmental sustainability through certain fiscal reforms. In 2007, the Department of Environmental Affairs and Tourism initiated a joint process with National Treasury which will lead to National Budget interventions which support sustainable development, with a long term view of making an economic case for the environment. "Green procurement" policies have been adopted and implemented across various institutions in both the public and private sectors.

Corporate Governance - Good corporate governance is regulated by common law, judicial precedent, the Companies Act, which prescribes Directors' fiduciary duties, Broad-Based Black Empowerment Act, and NEMA, which provides a general duty of care on anyone who causes/potentially causes/has caused harm to the environment. Under NEMA Directors can be held personally or severally liable for any negative environmental impact caused by the company. In addition to this regulatory framework, the code of conduct pertaining to good corporate governance is also influenced by the King Commission's Report on Corporate Governance for South Africa. This report recommended that Directors' responsibilities extend beyond that of financial matters and should include social and environmental performance. "Triple bottom line" criteria have been instilled into various business codes, reporting guidelines and indexes, many of which echo the sentiments concerning good governance in MDG 8 (Target 1) and environmental sustainability in MDG 7. The Johannesburg Stock Exchange's Social Responsibility Investment Index, for example, is a "triple bottom line" index that evaluates companies' policies and practices on economic, social and environmental issues. The SRI Index is the first of its kind in an emerging market. In the retail sector some companies promote sustainability through the supply chain by assessing suppliers' overall environmental compliance and conducting specific audits for suppliers of high-risk products such as fish. Many companies, including financial institutions, have prioritized HIV/AIDS programmes in both the workplace and as part of their social responsibility programmes.

Numerous examples of civil society and the business and industry sector projects and enterprises exist which demonstrate that development, community well-being and environmental sustainability are compatible. These include the nation-wide Food and Trees for Africa Initiative, Marula Natural Products in Limpopo Province, etc.

6.2 Gaps, challenges and constraints on performance

Despite the progress made there are gaps and various areas in which performance and delivery is hampered by capacity constraints, policy tensions and institutional problems. The major gaps and challenges identified through the trends analysis relate to the need for:

- greater integration of governance systems, particularly those in relation to planning and the implementation of programmes that seek to address and meet global and national targets such as the MDG, JPOI and macro economic and social goals and targets;
- ensuring greater efficiency in resource use and equitable access to resources;
- accelerated infrastructure investment in certain sectors in order to grow the economy, particularly the second economy and emerging markets, and speed up the process of poverty eradication;
- settlements that are spatially integrated, and create safe and healthy living environments;
- strengthening awareness campaigns on combating communicable diseases such as HIV/AIDS, TB and malaria and addressing MDG health targets;
- guiding human behaviour in a manner that will facilitate and support the achievement of sustainable development objectives;
- reversing the continuing degradation or loss of biodiversity and functioning ecosystems; and
- identifying appropriate “quick win” projects that focus on responding to the immediate cross-cutting challenges in respect of climate change, rising energy prices, HIV/AIDS, and international cooperation in the field of sustainable development.

In the context of the first and second economies of South Africa, the most important challenge is to bridge the gap between the two economies, eradicate poverty and its associated effects and improve the quality of life of poor South Africans. However, in accelerating economic growth and ensuring that its benefits are shared and sustainable, it is important that we understand the links between growth of the economy, development, improvement of quality of life and the environment, as well as the implications of unchecked growth and development on environmental sustainability and quality of life. GDP and GNP measure the increase in the economy. Both are quantitative measures and neither addresses the issue of wealth distribution or the nature of the economy. Development is a process for improving human well-being through re-allocating resources that involves modification of the environment to a lesser or greater extent. It addresses basic needs, redistribution of wealth and focuses on the quality of life rather than the quantity of economic activity. However, neither growth nor development addresses the sustainable use of ecosystems or natural and social resources over time. If sustainable resource use is ignored, the improvements in overall living standards resulting from growth and development will be short-lived. In the longer term the quality of life for many people, particularly the poor who already face degraded living environments, will deteriorate as the resource base upon which we depend is increasingly eroded and damaged.

Although Government does have monitoring, evaluation and reporting systems in place, it needs to be strengthened to be an integrated mechanism that measures performance in respect of sustainable development targets effectively and across all spheres and sectors. Gaps also exist in

respect of monitoring tools. There is for example no agreed to sustainable development 'score card' (similar to that used by the tourism and agriculture sectors) for measuring performance of social partners and Government's performance is audited only in terms of financial compliance, not qualitatively in terms of ecological sustainability. Collecting and collating reliable and accurate information coherently at different institutional levels remains a major challenge. The various State of the Environment reports provide important inputs in this respect.

The key issue and challenge that government faces is to regulate and guide human behaviour in a manner that promotes the achievement of sustainable development objectives. Environmental policy and legislation is sound and in line with international best practice. It is supported by innovative and in many respects cutting edge programmes and projects, many of these in other sectors such as agriculture, energy, water, and forestry. However there are some policy weaknesses that require attention in the interests of sustaining ecosystems and natural resources which are needed to achieve accelerated and shared growth. These include:

- integrating the regulation and management of, and decision-making pertaining to, water resources, land use and land development. However all of these aspects are regulated in terms of separate statutes and by different authorities, and decision-making and planning of these resources is not integrated;
- progress with the implementation of market-based fiscal instruments for sustainable development;
- the need for resource optimisation in certain sectors such as mining and agriculture and for protection of biodiversity, ecosystems and natural resources on which accelerated and shared growth and sustainable development are dependant;
- the need for more effective mechanisms to reduce waste at source and increased material intensity in production and consumption. The Draft Waste Bill incorporates responses to address rapidly rising waste volumes and wasteful use of resources;
- improved integration of environmental considerations into IDPs, Spatial Development Frameworks, Local Economic Development strategy documents, and the LRAD programme
- achieving the economic growth targets set in ASGI-SA and the ability of the environment to sustain growth that is coupled to intensified use of natural resources. A challenge is the failure to appreciate the value of ecosystem goods and services and the potential environmental and social costs associated with promoting high levels of quantitative economic growth. DEAT has recognised the importance of making an economic case for the environment; and the
- need to adopt new approaches to energy supply and use that focus on renewable energy, decentralised energy supply, and demand management. One of the weaknesses in South Africa's current energy policy is the use of incentives to reduce the difference between the cost of producing fossil-generated power versus renewable sources of power. Alternatives sources of energy, such as increasing our nuclear energy capacity and a considered approach to biofuels are being explored.

6.3 Pathways - interventions to close gaps and achieve targets in strategic focus areas

In the 2008 State of the Nation Address, President Mbeki informed the country that all three spheres of Government: Local, Provincial and National, at both executive and administrative levels had identified 24 Apex priorities which would guide Government's activities towards realising the "all-important goal of a better life for all our people". As appropriate, the NFSD will support the projects identified under each of the Apex priorities.

South Africa and the developing world are faced with a multiplicity of challenges in addressing sustainable development. Foremost amongst these are the systems that create and perpetuate poverty, economic marginalisation and environmental degradation affecting the majority of the nation's people, particularly the rural poor. To overcome these challenges, sustainable development must be an integral consideration in all economic activity, in every sector and for everyone. This can only be achieved through a common understanding and vision of how to achieve sustainable development targets, and through coordinated action. Implementation of a sustainable development agenda is complex and multi-dimensional. Sustainable development therefore requires a coherent approach to planning and management, and a break with sectoral thinking. This has been recognised by Government, and an Apex priority to ensure integrated planning across all spheres has been identified.

To avoid the effects of growth and development that ignore ecosystems, the finite character of non-renewable natural resources and the ecological cycles that sustain renewable natural resources, it is crucial that the NFSD sets the nation firmly on a sustainable development trajectory where the economy does not exceed natural ecological cycles of renewal, and the direction of investments, orientation of technological development and innovation and institutional mechanisms work together towards the goal of sustainable use of resources that will meet present and future needs.

The next section of this document briefly explains the rationale behind the identification of these strategic focus areas and secondly gives a short description of each of the strategic focus areas.

7 Rationale for identification of strategic focus areas

The identification of strategic focus areas for strategic intervention is based on an analysis of the social, economic, natural resource and governance trends, and aligned with the existing policy and institutional context to identify the key actions required. The strategic interventions envisaged in respect of each of the strategic focus areas respond to South African needs, priorities and targets, as well as to key international targets set out in the Millennium Declaration, the Johannesburg Plan of Implementation, and other regional and international commitments. The implementation of these strategic interventions is critical to shifting the nation onto a sustainable development trajectory.

Based on research on trends (annexure 2), their associated risks and opportunities, the strategic interventions required to achieve the nation's vision for sustainable development are grouped into five critical "pathways". These "pathways" constitute the strategic focus areas for action and

interventions that are necessary to reach the desired ideal state of sustainable development described in the national vision. They reflect a systemic and integrative approach and seek to transcend traditional divisions and sectors.

Our pathways to sustainable development

- **Enhancing systems for integrated planning and implementation**
- **Sustaining our ecosystems and using natural resources sustainably**
- **Investing in sustainable economic development and infrastructure**
- **Creating sustainable human settlements**
- **Responding appropriately to emerging human development, economic and environmental challenges**

Strategic intervention is required in each of these focus areas to achieve sustainable development goals and targets, whilst simultaneously responding to national imperatives pertaining to increased economic growth. In order to do so it will be necessary to identify clear development goals and targets towards which all interventions and actions must be orientated. These will be used to guide decisions as to how economic growth is promoted so that the state encourages and facilitates economic growth that contributes to sustainable development and discourages those that do not. It will also be necessary to identify and introduce a suite of interventions and actions that ensure the economy grows in manner which is more equitable, from an ecological and social perspective, and more efficient from an economic and governance perspective.

7.1 Description of critical pathways: Five Strategic Focus Areas

This section briefly describes the main focus of each strategic area and explains why it has been identified as a strategic focus area for intervention. In some instances recommendations reinforce existing interventions and actions, whereas in other cases new interventions and actions are proposed to be initiated and implemented.

7.1.1 Enhancing systems for integrated planning and implementation

This strategic focus area is cross-cutting and attempts to address the many governance and institutional challenges that stand in the way of achieving sustainable development and meeting MDG and JPOI goals and targets. The integrated nature of sustainable development goals (which embrace social, economic and environmental aspects) and the complexity and scale of re-orientating our society from an unsustainable to a sustainable development path, means that the infrastructure of governance (policy, laws, institutions and strategies) must be re-aligned and improved. Cooperative governance is key to ensuring that sustainable development is achieved. Integrating environmental considerations into sectoral policy and activities remains a key challenge for effective governance for sustainable development. Integration of environmental considerations with spatial planning remains a major challenge to achieving sustainable development. At the corporate level monitoring and reporting on environmental performance and

social responsibility needs improvement and strengthening. Interventions and actions that focus on improved integration and implementation cover:

- **Governance and integration for sustainable development:** To ensure the national vision for sustainable development is pursued across government and to promote the successful implementation of interventions and actions that support this vision, it is important that sustainable resource use is embedded into the working of all Clusters and intergovernmental structures in all three spheres, including through the actions of the President's Coordinating Committee (PCC), the Premiers' Coordinating Committees in the Provinces and other inter-governmental forums envisaged in the Intergovernmental Relations Framework Act, the Finance and Fiscal Commission and the Forum of South African Directors General (FOSAD). Consideration should be given to how Parliament can exercise its oversight role in respect of implementing sustainable development effectively..
- **Planning for sustainable development:** ensure greater alignment of sustainability criteria in all levels of integrated and spatial planning, as well as in project formulation and selection checklists by public and private funders. Specific planning frameworks that should strengthen integration of sustainability criteria are the Provincial Growth and Development Strategies, Integrated Development Plans, Local Economic Development strategies, and associated Spatial Development and Environmental Management Frameworks.
- **Monitoring and evaluation for sustainable development:** it will be necessary to formulate an appropriate set of indicators to measure progress towards sustainability, and to integrate these over time into the Government-wide Monitoring and Evaluation System (GWM&ES).
- **Policy integration:** improve the integrated nature of general public policy problem identification, policy design, implementation and evaluation capacity in government.

7.1.2 Sustaining our ecosystems and using natural resources efficiently

This focus area addresses the environmental aspects of sustainable development and responds primarily to the MDG on ensuring environmental sustainability and to the various JPOI goals and targets that focus on the protection and management of the natural resource base of economic and social development. South Africa's biodiversity provides an important basis for economic growth and development: Marine resources provide a basis for our fishing industry; rangelands support commercial and subsistence farming; indigenous species form the mainstay of our horticulture and agriculture industries; our tourism industry thrives on the diversity and abundance of wildlife and heritage; natural landscapes provide sought after backdrops for the film industry; and access to certain indigenous plants are crucial to both commercial and non-commercial medicinal industry. Keeping our biodiversity intact is also vital for ensuring the ongoing provision of ecosystem services such as the production of clean water (through good catchment management); the availability of arable land (by preventing soil erosion); and clean air (by reducing emissions). Trends in respect of natural resources utilisation and beneficiation, and the impacts of many of the current production and consumption patterns on biodiversity and ecosystems, necessitate rapid and decisive action to turn negative trends around and halt threats that undermine attempts to achieve sustainable development. The annexure on trends identifies the key risks to ensuring the protection and sustained use of ecosystems and natural resources. At the macro level these include the increasing effects of climate change, rapidly rising oil prices

and unsustainable patterns of production and consumption of natural resources. The National Industrial Policy Framework identifies four sectoral groupings for our growth potential: (i) the natural-resource based sector (based on our abundant mineral and plant resources); (ii) medium technology sectors (which would include paper and pulp; oil and gas; and chemicals and plastics; (iii) Advanced manufacturing sectors; (iv) labour-intensive sectors (including agriculture, forestry, fishing); and tradable services. The development of these sectors have significant sustainable development implications, and for this reason the NFSD proposes that interventions and actions are undertaken in respect of:

- **Value of our ecosystems:** ecosystem functioning is critical in achieving sustainable development. To maintain ecosystem functioning it is imperative that further loss and degradation of natural habitat in threatened ecosystems and critical biodiversity areas is avoided. This requires various interventions: On the one hand it is important that awareness and understanding of the value of biodiversity and ecosystems is raised and improved in all sectors of society; and the co-dependencies of social and eco-systems is recognized. On the other hand, there needs to be interventions that quantify and monitor the value of biodiversity and ecosystem services to the economy and the lives of people. This value needs to be internalised in production and consumption costs and prices, and incorporated into IDPs, Provincial Growth and Development Strategies, the NSDP and the National budget. This would ensure that economic valuation of ecosystem services becomes an integral part of development planning and decision-making and informs policies, strategies, programmes and actions.
- **Improving aquatic ecosystems, water availability and water quality:** this requires amongst other things improved land management throughout catchments so that it does not compromise the integrity of rivers and wetlands or the viability of underground aquifers.
- **Investing in protecting and enhancing ecosystem services:** investment in maintaining ecosystem functioning will ensure the provision of reliable and good quality ecosystem services and in turn show a positive return on investments.
- **Dematerialising the economy:** this refers primarily to massive improvements in the efficiency of production and consumption systems by reducing the total quantity of materials and energy required per unit of production, and reducing eventually to zero the quantity of waste outputs that are predominantly disposed of in landfills, air, marine and aquatic systems. The promulgation of waste management legislation will be critical in this respect.
- **Air quality:** a multi-pronged strategy is required that should include a national investment in air quality monitoring, a national commitment to decrease oil imports by a certain date, and an acceleration of investments into clean coal technologies, ecologically sustainable biofuels and renewable energy sources.
- **Energy efficiency:** Given the economic implications and potential risks of reducing oil imports and switching to cleaner and renewable energy sources it is important that strategy development and setting of targets is supported by thorough research and consultation on, for example, the costs and benefits of switching to cleaner technologies, alternative energy sources, and the cost of developing sufficient production capacity.

- **Food security and natural resource-based livelihoods:** land reform, food security and employment creation in expanded agricultural sectors (as envisaged by ASGI-SA) can only be achieved if resources are committed to a national soil rejuvenation programme.
- **Economic and fiscal instruments:** a process to make an economic case for the environment has already been initiated by DEAT. This includes a joint project with National Treasury to identify specific budgetary considerations to promote sustainable developments, as was indicated by Minister Manuel in the 2008 Budget Speech.
- **Implementation of international agreements:** South Africa has committed itself to a wide range of international agreements that relate directly to natural resource use and ecosystem management. In line with the Apex priority to integrate planning across all spheres, this will need to be integrated into the work programme of the relevant government clusters.

7.1.3 Economic development via investing in sustainable infrastructure

This strategic focus area addresses the economic aspects of sustainable development and responds mainly to economic development and poverty eradication targets in the MDGs and the various JPOI goals and targets that focus on poverty alleviation, changing unsustainable patterns of consumption and production and the global economy. The annexure identifies some of the key challenges facing our rapidly growing economy. These include the need to promote rising household consumption and ensure that it is more equitable and financially sustainable, the need to identify sectoral economic strategies that can maximise job creation impacts, and identifying appropriate 'second economy' interventions that will expand employment, create assets, build the skills base and contribute to solving social problems such as water pollution and sanitation, disaster management and child-headed households. The analysis of economic trends highlights two fundamental threats to the attainment of high economic growth rates. The first relates to the negative impact that persistent poverty and inequality will have on development. Secondly, the impact of natural resources depletion, rising waste levels, soil degradation and poor air quality will undermine the capacity for sustained economic growth. However, the most significant opportunity that lies before us is the fact that we now have the public and private investment funds to drive a massive multi-year infrastructure investment programme worth nearly R400 billion. This national effort to raise the level of investment in fixed assets will undoubtedly have a positive impact on economic growth and service delivery. The challenge is to make sure that we design and construct this infrastructure in a way that maximises the impact on both economic growth and quality of life by ensuring efficient and sustainable resource use. This will mean incorporating sustainability criteria and cutting edge technologies into the terms of reference for designers and contractors, and linking implementation to pro-poor local economic development strategies. Instead of addressing the entire range of macro- and micro-economic policies and programmes that currently exist, the National Framework for Sustainable Development proposes a limited focus on the infrastructure investment programme that is so central to ASGI-SA.

- **Increasing investment in infrastructure to address poverty and unemployment:** poverty eradication via increased employment in the infrastructure investment programme

has already started, and successes are recorded⁷ where investments are linked to strategies to build the capacity of local governments to guide new construction and manage ongoing operation and maintenance;

- **Mechanisms, methods and criteria to promote sustainable infrastructural investment:** major funders of infrastructure such as the MIG Fund, DBSA, IDC, IDT, the parastatals, Public Works and Transport Departments, and numerous private funders, should be encouraged to learn from international best practice by gradually incorporating sustainability criteria into the way infrastructure is designed and constructed. This has already started to happen. Examples include building sanitation systems that recycle wastes for productive re-use instead of disposal into ecosystems; diversifying investment in new energy generation into wind, solar and biomass sources and coupling investment in coal-fired generation to investments in clean coal technologies; instead of an exclusive focus on water storage via exposed dams, follow Namibia's lead and invest in sustainable aquifer recharge systems; given the rising cost and negative environmental impacts of cement, encourage building systems that minimize the use of cement; focus investments in the transport sector on public transportation, rail-based goods transportation, and integrated bus-rail-taxi systems within the towns and cities; and finally, investing in localities that lead to compact towns and cities rather than low density sprawls that marginalise the poor. It is unreasonable to expect sudden change, but bodies such as the MIG Fund, the DBSA and the parastatals can be encouraged to set aside a portion of their funds for initial small-scale investments in sustainable infrastructure projects for the sake of longer-term learning. Positive examples include the DBSA's 'sustainable communities' programme, Metrorail's multi-billion revamp of Cape Town station in accordance with sustainability criteria, the Central Energy Fund's investment in a new national research programme on renewable and sustainable energy alternatives, and discussions about alternative energy sources and producers, including houses built with roofs made from solar roof tiles that 'store' energy in the grid.
- **Developing skills and capacity for building and maintaining sustainable infrastructure:** an Apex priority related to skills development has been identified in response to the need to increase investment in the training and retention of critical skill sets, such as engineers, project managers and operations and maintenance technicians. This human capital intervention may well be the key link between infrastructure investment and the desired knock-on effects for growth and service delivery, especially if the curricula include an introduction to sustainability thinking and the application of sustainability criteria. To change infrastructure plans, designs and standards in a way that promotes sustainability and the conservation of resources, a national awareness-raising and training programme is needed. Women, and particularly rural women, and youth require special attention in respect of skills development and capacity building. Rural women are still not economically empowered and bear the brunt of poverty and under-development in our society. To ensure that sustainable development interventions have a positive impact on the youth and women, and especially rural women, a gender and youth focus in developing skills for sustainable development agenda is essential. For example, skills development interventions that focus

⁷ See the National Framework for Local Economic Development published by the DPLG

specifically on women can be introduced in respect of the agriculture sector's strategic priorities on integrated food security, disaster management and bio-security.

- **Second economy interventions:** the application of a sustainability approach has the most positive potential impact within a 'second economy' context across the rural and urban context. The reason for this is that a sustainability approach reveals opportunities within this context that would otherwise remain hidden. Examples include community-based waste collection and re-sale of reclaimed materials; low cost/low input organic farming practices amongst small-scale farmers if they have access to markets via decent roads and communications infrastructure; community-based biodiversity conservation; eco-tourism projects; housing delivery via the 'people's housing process' (PHP); alien clearance and water conservation via the Working for Water programme; and infrastructure maintenance via the Extended Public Works Programme. Government has recognised the link between the 'second economy', infrastructure, poverty eradication by designating an Apex priority with respect to self-/employment in the second economy.

7.1.4 Creating sustainable human settlements

Large numbers of South Africans live in informal settlements or low-income suburbs, while the sprawling suburbs of our cities are designed for households that consume large quantities of primary resources, not least because they are dependent on private passenger transport. As the Breaking New Ground policy for housing proposes, to counteract this we need mixed-use neighbourhoods that are socially diverse. These neighbourhoods should be configured so that people can walk or cycle to work in conditions of better safety and security, and where residential living co-exists with urban agriculture and local food markets. Our buildings should be designed to generate more energy than they consume, use water efficiently and recycle all solid and liquid wastes. The design of our urban infrastructure such as water supplies, energy, wastes, road and storm water drainage should take into account new cutting edge sustainability design criteria. Investments in public transport and non-motorised transport must become the norm, and incentives should be introduced that discourage the use of the private car (e.g. toll roads, special lanes, limits on parking, etc). Improved access to health facilities is an essential component of building more sustainable communities, and will directly influence initiatives aimed at dealing with diseases such as HIV and AIDS and TB, which have broad developmental and economic impacts.

The MDGs in respect of social and health issues and JPOI targets on poverty eradication, health and sustainable development, are largely covered by this strategic focus area which deals with the social aspects of sustainable development within a spatial context. As with the previous strategic focus area, poverty goals and targets are also addressed. The analysis of major social trends indicates that whilst considerable progress has been made in respect of water provision and access to basic education, serious challenges exist in combating major diseases such as malaria, HIV/AIDS and TB, reducing infant mortality, linking sustainable resource use to poverty eradication and sustainable livelihoods, sustainable and safe human settlements, and rural development. For this reason this strategic focus area proposed interventions and actions in respect of:

- **A shared approach to sustainable human settlements:** support the rapidly spreading interest in sustainable human settlement strategies that promote diverse communities via densification; mixed land-use regulations; shortening the distance between home and work;

linking home and work via public transport, pedestrian and safe cycling routes; enhancing the quality of the natural environment; matching the scale and location of settlements to the opportunities, constraints and ecosystem services of the receiving environment so that they can be sustained; changing bye-laws to ensure that building plans include resource efficiency measures (e.g. appropriate insulation, solar water heaters, correct north-south orientation, water saving devices, appropriate building materials, and even locally oriented procurement methods); and improving the safety and accessibility of settlements. Prevent urban sprawl by bringing the poor back into the cities via non-market interventions in the land market, mixing together richer and poorer households in shared suburbs, and by promoting public spaces where food markets, sports and shared cultural activities, and indigenous public gardens and parks can flourish.

- **HIV and AIDS and TB:** strengthen public and private sector campaigns that raise awareness about HIV and AIDS as a major development challenge, and how to reduce the social stigma attached to the disease. An integrated approach has been adopted that links health interventions (ARV treatment) to service delivery, poverty alleviation and food security. Improve the control of TB through improving the Directly Observed Treatment Short Course (DOTS) strategy, paying special attention to the challenges of high case-load and high multi-drug resistance.
- **Linking sustainable resource use, poverty eradication and LED:** in line with the National Framework for Local Economic Development, incorporate sustainability and a livelihoods approach into LED strategies at local level in order to foster sustainable employment creation and anti-poverty projects, including in national priority programmes. Projects should focus on mobilising existing resources, social networks, local savings and skills, and should emphasise livelihoods derived from sustainability priorities, such as housing delivery via the "people's housing process," community-based waste management, and a transition to renewable energy. Particular emphasis should be given to what the National Framework for Local Economic Development refers to as Sustainable Developmental Community Investment Programming (SDCIP). The SDCIP is particularly relevant to the following sectors: crafts, fresh produce, waste collection, street trading and sub-contracted clothing and textiles. Complement (B)BEE oriented procurement procedures with green procurement criteria that aim to reduce consumption of fossil fuels, increase use of renewable energy, reduce water use and minimise waste outputs.
- **Safe and efficient public transport:** significantly increase investments in public transportation, including freight by rail and passenger transportation via rail, bus and mini-bus. The provision of new services, the upgrading of existing services and the gradual conversion to biofuels should be top priorities.
- **Rural sustainable settlements:** rural and urban areas are linked together via value chains that need to be reinforced rather than undermined. This can be done by rebuilding rural economies via soil rejuvenation strategies to support increased food production, the incorporation of cattle owned via traditional mechanisms into the national red meat supply system, but also via the introduction of new market opportunities for the production of inputs for biofuels (sugar cane, sugar beet, sunflower, canola and soya beans) and inputs for clothing and building materials (hemp, cotton, forestry products). For rural settlements to thrive, land reform and creative rural enterprise development will be required.

- **Waste management:** the promotion and adoption by Government of the Integrated Waste Management approach provides for a national public awareness campaign and capacity building programme to promote waste recycling in every urban and rural settlement across the country. A key defining feature of a sustainable society is whether it has managed to transform all solid, liquid and airborne wastes into productive inputs. The promulgation of the Waste Management Bill will be critical in this respect. The mining and construction industries, in particular, will need to actively participate in joint efforts to work out how to deal with mining and construction wastes which account for the majority of solid waste.

7.1.5 Responding appropriately to emerging human development, economic and environmental challenges

As noted in the Trends section in the annexure, there are a range of immediate inter-linking challenges that relate directly to the core focus of a sustainable development strategy. These include climate change, rising energy prices, the HIV/AIDS pandemic, natural and other disasters, and the building and strengthening of international cooperation in the sustainable development field at national, provincial and local levels, and across sectors. South Africa has already developed response strategies to all these challenges. However, it may be appropriate to cluster these cross-cutting initiatives, facilitate strategic focus, ensure sufficient resource allocation, and establish an effective monitoring system. These five so-called "low hanging fruit" could provide the focus for concerted action that triggers and energises the implementation of the NFSD. The five current response strategies that could be more closely coordinated within a focussed sustainable development approach are as follows:

➤ **Climate change**

In its Fourth Assessment Report (AR4), adopted in November 2007, the Intergovernmental Panel on Climate Change (IPCC) presents new evidence on observed and predicted future trends of climate change. The Report recognises that the impacts of climate change are more imminent and severe than previously thought, that it will affect every part of the globe, in particular poor countries and communities, and that the negative impacts of climate change pose an increasingly serious risk to the achievement of sustainable development. Studies confirm that Africa is one of the most vulnerable continents because of the range of projected impacts, multiple stresses and low adaptive capacity.

South Africa will be affected by climate change. Vulnerability and adaptation sector studies show that decreases in precipitation coupled with higher temperatures are likely to have higher impacts in the western areas of the country, with water resources, agriculture and biodiversity likely to be directly affected.

In response to its obligations under the United Nations Framework Convention on Climate Change, South Africa submitted its first National Communication on climate change in 2003. This document synthesised much of the work done under the South Africa Country Study on Climate Change and spelled out a range of objectives and specific interventions. In 2004, a national climate change response strategy was approved by Cabinet, setting out an initial strategic approach to climate change, broadly organised around the concept and principles of sustainable development.

More recently, in response to the increasing evidence and challenge of climate change, in 2007 Cabinet mandated a national process of building scenarios of possible future greenhouse gas mitigation actions by SA, informed by the best available research and information. The Long-Term Mitigation Scenario (LTMS) process is implementing this mandate. Two key outputs are envisaged: firstly a robust approach to mitigation to be incorporated into a national climate change policy; and secondly, a solid basis for South Africa's international negotiating positions. Preliminary results identify a wide range of potential actions which, in some cases, improve the efficiency and/or competitiveness of the economy and yield significant greenhouse gas reductions. Some of these actions are no, or low, cost options, others are tax and/or market based and others would require substantive investment incentives.

Following completion of the LTMS process, work will begin on sectoral climate change response plans, a national climate change policy, as well as a strategic framework on adaptation to guide South Africa's response to the impacts of climate change.

➤ **Rising energy prices**

The Reserve Bank Governor has repeatedly sounded warnings about the impact of rising oil prices for inflation and therefore growth retardation caused by rising interest rates. The ASGI-SA framework identifies biofuels as a national priority. On a global scale, governments from across the spectrum are rapidly developing renewable energy strategies. Global investment in renewable energy was at \$71 billion in 2007, according to the Renewable Energy Policy Network for the 21st Century (REN21)⁸. Technologies such as wind, solar, biomass, geothermal, and small hydro now provide 240 gigawatts of electricity generating capacity, about 5 percent of the world total, the report finds. Government support for renewable energy is growing rapidly. At least 60 countries now have some type of renewable energy promotion policy, including 23 developing countries. Mandates for blending biofuels into vehicle fuels have been enacted in at least 17 countries at national level. Although South Africa has an energy policy which is spelt out in the 1998 White Paper on Energy Policy, this will be updated with the envisaged Energy and Security Bill, which the Department of Minerals and Energy has committed to tabling in 2008. This bill will cover sustainable energy development, making interventions possible with a view to ensuring energy security and uninterrupted availability of energy supplies; as well as put in place regulations pertaining to appliances. The bill would also address environmental requirements on the subject of climate change and water use; in addition to enforcing mandatory co-operation in the development of sector energy plans. Finally the bill is intended to establish a National Energy Efficiency Agency.

A step in the right direction has been taken by the Central Energy Fund in partnership with DST to make available a large grant for a national University-based training and R&D programme in renewable and sustainable energy, with the first grant going to Stellenbosch University to set up the national Centre for Renewable and Sustainable Energy Studies.

➤ **International cooperation for sustainable development**

South Africa is connected into a wide range of global initiatives at all three levels of government, and via business and civil society forums. National government participates actively in the Commission for Sustainable Development, the MDG Process, Climate Change initiatives, the Doha

⁸ Global Status Report 2007. This figure excludes large hydropower, which would account for an additional \$15-20 billion.

Round of the WTO, NEPAD, the AU and numerous related initiatives. Provincial Governments have partnerships with other mid-level government structures from around the world, such as the Western Cape Provincial Government's involvement with the Network of Regional Governments of Sustainable Development of which the MEC for Environment, Planning and Economic Development is the co-chair; and many South African Local Governments are actively involved in ICLEI, and a wide range of similar associations and coalitions.

South African business is actively involved in the World Economic Forum, World Business Council for Sustainable Development, the Global Compact, the Global Reporting Initiative and many similar initiatives. South Africa's Civil Society formations have for years been actively engaged in global civil society coalitions such as the World Social Forum, and many others across the major economic, social and environmental sectors. It may be necessary to reinforce, foster and monitor these growing global associations and forms of cooperation.

➤ **HIV and AIDS**

South Africa is currently experiencing one of the most severe HIV epidemics in the world. By the end of 2005, there were 5.54 million people living with HIV in South Africa, with 18,8% of the adult population (15-49) affected. Women are disproportionately affected, accounting for 55% of HIV positive people. According to the HIV/AIDS Comprehensive and Intersectoral Strategic Plans for HIV and AIDS from 2007 to 2011 (NSP) which builds on the Strategic Plan for 2000 to 2005, it is envisaged that all government departments, organisations and stakeholders would be encouraged to develop their own strategic and operational plans to become actively involved in initiatives designed to address the HIV/AIDS epidemic. An assessment of the NSP 2000-2005 resulted in some key recommendations which have been incorporated into the NSP 2007-2011. These include the need to strengthen government implementation; the need to consolidate and build on existing partnerships; strengthen the co-ordination, monitoring and evaluation at the level of the South African AIDS Council (SANAC); and to increase the contribution of the business sector, in particular SMMEs.

The aims of the NSP are to (i) reduce the number of new HIV infections by 50%; and (ii) reduce the impact of HIV/AIDS on individuals, families, communities and society through the expansion of access to appropriate treatment, care and support to 80% of those diagnosed with HIV.

The NSP continues to be structured with the following four areas of focus: (i) prevention; (ii) treatment, care and support; (iii) human and legal rights; and (iv) monitoring, research and surveillance.

Under each of these priority areas, specific objectives have been identified.

Key Priority Area 1: Prevention

- Reduce vulnerability to HIV infection and the impact of AIDS
- Reducing sexual transmission of HIV
- Reduce mother-to-child transmission of HIV
- Minimise the risk of HIV transmission through blood and blood products

Key Priority Area 2: Treatment, Care and Support

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- Increase coverage to voluntary counselling and testing, and promote regular HIV testing
 - Enable people living with HIV to lead healthy and productive lives
 - Address the special needs of women and children
 - Mitigate the impacts of HIV and AIDS and create an enabling social environment for care, treatment and support

Key Priority Area 3: Research Monitoring and Surveillance

- Implement the monitoring and evaluation (M&E) framework of the NSP 2007-2011
- Support the development of prevention technologies
- Conduct operational research
- Conduct policy research
- Conduct regular surveillance

Key Priority Area 4:

- Ensure knowledge of and adherence to the existing legal and policy framework
- Mobilise society and build leadership of HIV positive people, to protect and promote human rights
- Identify and remove legal, policy and cultural barriers to effective HIV prevention, treatment and support
- Focus on the human rights of women and girls, including those with disabilities, and mobilise society to stop gender-based violence and advance equality in sexual relationships

E. Chapter Four : Making it happen

8 Introduction

This chapter on “making it happen” describes the journey we need to embark upon to reach our “end destination” as described in the national vision.

It covers the different aspects of strategy implementation and explains what we need to do, how we should go about this, and the mechanisms that are needed to ensure that the nation’s key strategy towards achieving sustainable development comes to fruition, and the national vision is achieved.

Implementation calls for decision-making and action at various levels. In order to embark on our journey towards being “a sustainable, economically prosperous and self-reliant nation” we need certain things. The first is the strategic use of the institutional **framework**. Secondly we need an **action plan** to implement the five priority areas. The action plan is our “roadmap”. To embark upon this journey we will have to ensure that everyone is on board and stays on board, for which we need **ongoing communication and consultation** on our national vision and strategy in achieving it.

The chapter unpacks the manner in which the national vision and strategy is to be communicated, consulted and popularised, both within Government and society in general. Finally we need a “compass” to measure our progress and check that we are still headed in the correct direction. This requires appropriate **monitoring, evaluation and reporting systems**.

The chapter is divided into three parts. The first part deals with the institutional arrangements and mechanisms for ensuring the coordinated and integrated roll out and ongoing implementation of the national strategy for sustainable development, and alignment of other strategies, in the quest towards achieving sustainable development and ensuring shared and accelerated growth. The second part explains how we will get to our end destination that is the desired ideal state described in the national vision. This section explains the different phases and processes in bringing our national vision to fruition and identifies the tools needed for this purpose, namely the action plan, monitoring, evaluation and reporting. It also elucidates “quick win” interventions in the roll out of the strategic priority areas. The last section addresses the need for ongoing communication and consultation.

9 Institutional framework for implementation

We have a collective responsibility to implement the programmes needed to achieve the sustainable development national vision and national objectives outlined in this regard. To successfully implement the national framework for sustainable development, we need a coordinated response. Implementation of a national strategy requires the buy-in and support of politicians and champions of civil society and the business and industry sector; and the coordinated participation and involvement of multiple stakeholders. Implementation is not the responsibility of Government alone, or a single agent within Government. It is the responsibility of multiple stakeholders, each with a specific role as defined within the context of the particular

mandate/area of jurisdiction of the relevant stakeholder. The roles and contributions of the different stakeholders in the implementation of the NFSD will furthermore differ according to what the intervention/action is.

In order to successfully implement the National Framework for Sustainable Development and reach the national vision for sustainable development, we need a robust institutional framework that operates within the existing policy context⁹; we must establish partnerships with stakeholders; and all participants must agree on how to co-operate, work together and add value to each others' contributions, rather than duplicate or compete with one another.

As sustainable development covers environmental, economic, social and governance aspects, its implementation will require involvement of all the major sectors in society. The successful roll out and implementation of the Framework necessitates collective action by multiple stakeholders both within and outside Government. Within Government it clearly requires the involvement of all three spheres and virtually every public entity. Government's strategic partners fall within three broad categories namely labour, business and industry, and civil society. Particular attention needs to be given to the role that community structures, such as ward committees and the network of community development workers, and NGO's can play in implementing the NFSD. Their involvement is critical to promoting an inclusive approach to implementation and ensuring broad stakeholder support for sustainable practices at the local level.

The role of Government is governed by the Constitution which determines the functions it must fulfil, whereas the roles and functions of its strategic partners are determined by the way in which society and the economy are structured and operate. Besides allocating functional competencies between the three spheres of Government, the Constitution determines certain principles which are fundamental to the way in which the country is governed. The principles of sustainable development and cooperative governance are fundamental to the system of governance in South Africa. Insofar as achieving global and national goals and targets for achieving sustainable development, Government is tasked with coordinating the activities of its agents, giving direction and leading by example, monitoring and evaluating performance, and reporting to the global community and South African society on progress.

Government has an established and well-developed system of cooperative governance structures across and within all three spheres. Within spheres these structures are based on the cluster management model which groups line departments into three clusters along sectoral lines, namely the economic, social and governance clusters. Cooperation is achieved across spheres at both political and executive levels through various intergovernmental forums such as the PCC¹⁰, ministerial clusters, MINMECs¹¹, FOSAD¹² and those structures established in terms of the Intergovernmental Relations Framework Act.

Established mechanisms that facilitate and promote engagement and interaction between government and its social partners also exist. Examples of such mechanisms include NEDLAC; the

⁹ The policy context is dealt with briefly in the previous chapter under the heading "Background and strategic context".

¹⁰ The President's Co-ordinating Committee comprises the President, the Minister of Provincial and Local Government, and the nine premiers

¹¹ These are fora between responsible line-function ministers at national level and their respective counterparts at provincial government level, which normally meet on a quarterly basis. These fora are supported by technical committees.

¹² Forum of South African Directors-General which promotes programme integration at national and provincial level.

various multi-stakeholder forums established at provincial level to structure engagement on Provincial Growth and Development Strategies and at municipal level on local economic development; Multipurpose Community Centres which serve as primary vehicles for the implementation of development, communication and information programmes and afford communities opportunity to access and engage in government programmes for their own empowerment; sector specific forums ; and an extensive network of non-governmental organisations and community-based organisations across all sectors of society.

The challenge will be to ensure implementation of the NFSD and sustainable practices at community and local level and to create opportunity for ward committees, NGO's and community development workers to make a meaningful contribution to implementing programmes and projects that support the achievement of sustainable development targets. Government's Community Development Worker Programme and the deployment of a network of community development workers throughout the country provides the ideal mechanism for ensuring local support and participation in the NFSD.

In ensuring effective implementation of phase II, it would also be required that an element of sharing of best practices, lessons learnt as well as some capacity building will be required. It is envisaged that this will take place through the steering committee as well.

A key component of successful implementation is ensuring that there is adequate resources and capacity to deal with the task at hand. Particular challenges relate to capacity and resource constraints in municipalities. Civil society organisations, such as ward committees, and NGO's also need to be strengthened to enhance their ability to monitor government and to interact on a more equal footing with the private sector. The private sector has been rapidly building capacity for measuring its sustainability impacts. All three sectors, require some awareness-raising with respect to an understanding of sustainable development and the implications for policy making. For this reason it is important that specific interventions and actions are identified that address capacity building (particularly within the local government sphere as the coal face of delivery and interaction between government and community), education, awareness raising, skills development, as well as research and development in the field of science and technology for sustainable development.

The Department of Environmental Affairs and Tourism is the lead agent for sustainable development. In ensuring effective co-ordination of the implementation of the NFSD, DEAT will continue to serve as the focal point. At a technical level, DEAT will set up a steering committee consisting of various stakeholders to guide the next phases. In doing so, DEAT, through the various mechanisms and existing structures will undertake to facilitate the development and drafting of the strategy as part of phase II. It is anticipated that the existing structures such as the Director-General Clusters, NEDLAC, SALGA, etc will be engaged to facilitate the development of the next phase.

10 Process to be followed in implementing the NSSD: Three Phases

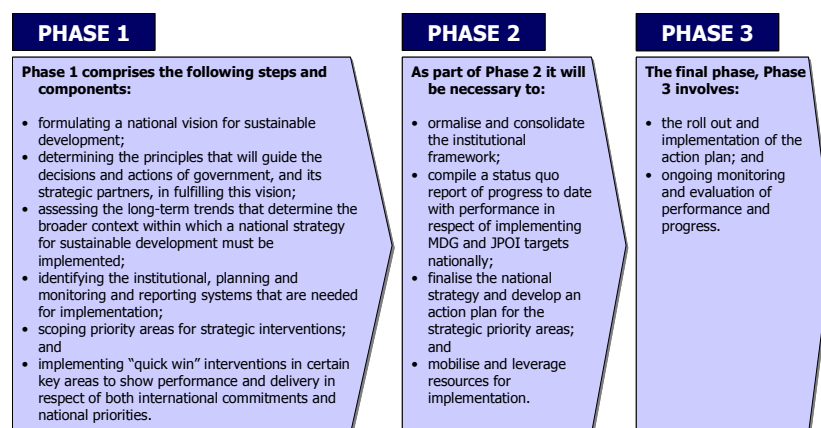
To ensure the rollout and successful implementation of the NFSD it is imperative that the process is simple and clearly defined, well structured, properly coordinated and managed, and meets certain criteria. Experience elsewhere has shown that it is important:

1. to identify the appropriate existing institutional mechanism or mechanisms, to facilitate cross sectoral, interdepartmental and multi-stakeholder participation in the process
2. to have a clear action plan for implementing the NFSD which clarifies the division of responsibilities and follow-up mechanisms as concrete as possible to avoid large-scale, lengthy implementation processes that do not achieve much;
3. to prioritise actions and interventions and focus attention on those that will have best effect with the least effort in respect of meeting objectives and targets;
4. to allow for a phased approach to implementation rather than tackling all interventions and actions simultaneously;
5. to integrate and align efforts to implement the NFSD with macro economic policies and programmes to avoid a situation where the NFSD is pursued as a separate issue;
6. to integrate the implementation of the NFSD into the budgetary process;
7. to implement all interventions and actions locally but to coordinate efforts and monitor results centrally; and
8. to base all actions on a participatory process that engenders the sharing of responsibility for implementation.

The most important lessons are that achieving sustainable development and moving towards a situation of sustainable living, is not a once off activity but a process that requires a phased approach and ongoing communication and consultation with stakeholders. With this in mind a 3 phased approach is envisaged. These phases are illustrated in the following diagram and described in the section below.

10.1 Phased approach

To ensure all stakeholders accept shared responsibility for implementation it is crucial that information dissemination, communication and consultation are an integral part of each phase. Each phase is described briefly below and communication and consultation are dealt with under separate headings.



➤ Phase 1: Visioning and systems

This Framework represents the culmination of the first five steps of Phase 1. It provides us with a common understanding of, and practical approach to, the national vision for sustainable development, and its implications for macro-economic and -social policies.

It is necessary to implement certain key interventions, which focus on delivery of "quick wins/hits" and have a 'big bang' effect in terms of impact, even before the action plan has been finalised and roll out commences. Furthermore, the harvesting of the "low hanging fruits" first will show that it is possible to contribute to government objectives regarding accelerated and shared growth through sustainable development projects and initiatives. Some progress has already been made in respect of implementing "quick win" interventions such as:

- Government's programme of accelerated infrastructure investment to meet basic needs and stimulate economic growth;
- Local economic development initiatives and the massification of government employment creation programmes to bridge the gap between the first and second economies create employment opportunities; and
- The Johannesburg Stock Exchange's Socially Responsible Investment Index which serves to measure corporations' and private companies' commitment to sustainable development.

However, more work is required to implement "quick win" interventions in a coherent manner and optimise their potential to demonstrate Government's commitment to sustainable development on the one hand. On the other hand "quick wins" can, if strategically presented, serve to mobilise wider understanding of, and support for, a national strategy on sustainable development. Once Phase 1 is finalised and Phase 2 commences, the process of converting the current framework (NFSD) into an actionable **national strategy** (NSSD) will have commenced.

➤ Phase 2: Preparing and planning for action

A key step is to formalise the national strategy on the basis of this Framework and develop a **detailed action plan** for implementation. The action plan must be developed through a participatory process to ensure responsibility for implementation is shared by government and its strategic partners. The National Planning Framework and provincial and district growth and development strategies are important vehicles for identifying priorities, targets and timeframes; for promoting alignment; and for ensuring a participative process is followed. Provinces and municipalities should be encouraged to factor the principles underpinning the national vision on sustainable development into the economic growth debates held during the provincial and district growth and development summits.

Part of the exercise of developing an action plan should involve the review of existing policies, programmes and targets and aligning these with NSSD objectives. This will ensure that the NSSD forms part of the mainstream of social and economic activity in the country and is not viewed as a separate or parallel initiative. Through this review and the development of an action plan, common national development priorities, targets, time frames and deadlines to elaborate on the identified set of strategic interventions will emerge. The development of an action plan will provide opportunity to review the implications of the various international, regional and national targets in the context of national priorities; compare existing legal instruments and implementation programmes with international goals and targets to identify gaps and areas requiring synergy; and generate a set of specific interventions and actions that support attainment of the high level goals and targets in the NSSD. In other words, the action plan will be the "road map" for implementation and will draw together:

- Government priorities in the Medium-Term Strategic Framework and Programme of Action, as well as in sector strategies and master plans such as those of agriculture and education;
- Business commitments and partnerships for achieving sustainable development;
- Civil society programmes and actions; and
- Implementation plans and strategies for achieving the Millennium Development Goals, the Johannesburg Plan of Implementation, NEPAD and other international and regional commitments for achieving sustainable development and growth.

The challenge will be to ensure that the national vision for sustainable development and its underpinning principles are articulated in sector master plans and strategies and other key plans such as provincial and district growth and development strategies and integrated development plans. To identify shared national priorities and targets in respect of sustainable development, and for implementation to be successful, it is imperative that all such plans reflect a common vision and are directed by common principles. DEAT and its provincial counterparts have an important role to play in guiding the process of institutionalising the national vision of sustainable development within the National Planning Framework and assisting sector departments and municipalities in achieving this integration.

Another key step linked to the development of an action plan entails **mobilising the necessary resources** and means of implementation. This includes leveraging funds, technology and human resource capacity at all levels, and within all sectors, so as to realise the NSSD. The following actions are envisaged as part of this step:

- The financial aspects of implementing the NSSD will have to be taken into account as part of Government's ongoing budget process and medium term expenditure framework. This will provide opportunity for more detailed assessment of the cost implications of objectives and implementation plans of specific programmes; and may require reprioritisation or sequencing over time;
- To further investigate feasibility and implications of introducing economic and fiscal instruments for sustainable development by conducting a thorough impact analysis and engaging in comprehensive stakeholder consultations;
- To review the capacity of existing and proposed structures to coordinate and implement the NSSD action plan.
- To "expand the envelope" for NSSD implementation by leveraging financial support from the private sector. This could involve the forming of a social contract;
- To develop a national Human Resources and Skills Strategy in conjunction with JIPSA, that supports sustainable development objectives and the nation's economic growth trajectory, with particular emphasis being given to ensuring that youth, gender and development issues are also addressed; and
- To develop a National Science and Technology for Development Strategy to ensure that the country's knowledge infrastructure responds appropriately.

It is important to distinguish between the costs associated with developing, finalising and rolling out the NSSD, and the costs associated with implementing operational interventions and actions identified in the action plan. The latter cannot be accurately quantified at this stage, and in any event most of these costs would fall within existing departmental budgets and the budgets of government's strategic partners. The costs associated with developing and finalising the NSSD and the governance mechanisms required to guide its implementation are limited and include some developmental costs (related to refining the strategy and filling gaps); public participation costs; costs for the communication and marketing of the NSSD; and institutional costs associated with establishing an administrative support for the NSSD political champion and the national coordinating mechanism. The institutional costs need not require additional budget allocation and can probably be sourced through budgetary reallocations.

➤ **Phase 3: Roll out, monitoring and review**

Once the action plans are in place, and the process to mobilise resources has commenced, it will be possible to **roll the NSSD**. It is envisaged that this will take place in a phased manner in accordance with priorities and time frames set in the action plan and in line with government priorities in the MTSF and Programme of Action. This phase should include implementing the "quick wins" and pilot projects that demonstrate the commitment to achieving sustainable development, by "leading by example".

Monitoring and review are both necessary to provide government with the management information it needs to conduct quality assurance on its performance in respect of sustainable development; measure the nation's progress towards developing in a more sustainable direction against targets; and to ensure real transparency. In order to do this it is crucial to develop and

apply a set of indicators. The state of the environment and environmental trends and challenges will change over time. Despite our best efforts to choose robust targets based on established values, people's views on what is necessary may also change from one generation to another. Consequently it will be necessary to review and modify the NSSD in a few years' time. In order to do this it is essential to develop and implement a coherent monitoring and review system. For it to be efficient and effective it is necessary first to identify specific activities, tools, policies, measures and monitoring and assessment mechanisms, including, where appropriate, life cycle analysis and national indicators for measuring progress. This will include:

- Engaging in sector policy reviews with the aim of identifying gaps and opportunities in the current policy ; and
- Improving the performance of the state through streamlining various cooperative governance structures
- Secondly it is necessary to ensure that monitoring and evaluation processes are established at the outset of each initiative so that progress with achieving sustainable development objectives and targets can be both quantified and qualified. This will entail:
- Strengthening the Government-wide Monitoring and Evaluation System (GWM&ES) by incorporating sustainable development indicators;
- Developing a range of tools to measure sustainable development (for example to include organ's of state's performance in terms of sustainable development targets in financial audits);
- Improving our capacity to gather and assess statistics to ensure that our decisions are better informed;
- Developing and testing indicators and benchmarks for measuring sustainable development on a continued basis
- Generating a sustainable development 'score card' for measuring performance of social partners and Government
- Developing sector programmes and projects to measure and report on their impact in achieving the objectives set in the NSSD; and
- Continuously and periodically reviewing the NSSD.

11 Communication and consultation

The main message of the national vision is the promotion of a sustainable lifestyle which requires changes in attitudes about resources and certain practices and behaviours. Information and communication on the national vision and NSSD to all stakeholders is important and necessary to ensure that all understand and support its purpose, message and content. Information dissemination and communication techniques are essential tools in spreading and sharing experience and knowledge about sustainable development. Hence it is important that a communication strategy, with a strong and coherent message and information plan, be developed and implemented.

It is envisaged that an intensive stakeholder participation process be undertaken to communicate the NSSD and to consult on the development of the action plan. Such a process will serve not only to broaden understanding of the NSSD, but also to elicit support for, and input into, the implementation of the NSSD and action plan. The participation process will need to promote broad involvement of civil society, organised labour, the business and industry sector as well as experts to ensure it is effective in obtaining long-term buy-in from all stakeholders into the sustainable development trajectory. Individual consumers, organizations and households can all help to drive the change to a more sustainable lifestyle, particularly with regard to food consumption, waste generation transport and energy use in homes. For this reason it is important that communication of the NSSD include a marketing aspect.

To successfully communicate the NSSD, and ensure effective participation by stakeholders, the following actions will be needed:

- strengthen existing forums to facilitate participation and ensure ongoing dialogue and debate;
- Establish mechanisms and networks to disseminate information and provide feedback to stakeholders;
- Run a marketing campaign to optimise the concept of sustainability among consumers
- Generate products to popularise the underlying messages and content of the NSSD;
- Develop a knowledge network to facilitate knowledge transfer through mobilising experts; and
- Develop appropriate feedback mechanisms and provide regular feedback.

The promotion of communication and consultation across all spheres of government, and within all levels of society is needed, to obtain the attention of the nation to these issues, and to the promotion of the vision that puts sustainable growth and development at the core of our endeavours.

12 Conclusion

To successfully implement the NSSD and achieve sustainable development objectives and targets, the nation as a whole must increasingly share in the common vision. All sectors, including all elements of the state plus civil society, organised labour and business, need to take part in the social contract to implement NSSD. We need to promote simple actions on a large scale.

In deciding on resource allocation and in making policy choices, the Executive should seek to give effect to the vision of sustainability. Priorities and trade-offs should be clearly articulated. While sustainability concerns do impact on all facets of life, we should keep our focus on the identified five priority areas for strategic intervention. These should be at the top of the agenda that, in the coming three to five years, will serve as a catalyst to more rapid all-round accelerated and shared growth, social development and the achievement of sustainable development.

Let us all make our national vision happen and become reality!

Annex One: Methodology in drafting the NFSD

The methodology that was followed to formulate this document was as follows:

- On 24 August 2002 FOSAD MANCO mandated DEAT and DFA to formulate a national strategy for sustainable development and to report on progress via the International Relations, Peace and Security cluster and the Employment and Economic Cluster. On 17 September 2002, in response to the JPOI adopted at the WSSD and informed by the review of the implementation of Agenda 21 facilitated by DEAT, the Cabinet resolved that two National Departments will be the lead Departments responsible for the formulation of a national strategy for sustainable development. Preparatory work was done throughout 2003 leading to the submission of a Cabinet Memorandum in 2004.
- The Cabinet Memorandum that was adopted in 2004 specifically mandated DEAT to manage a stakeholder, consultative and research-based process to formulate a national strategy for sustainable development, in order to meet the JPOI target that requires all countries to formulate a national strategy. The mandate referred to the long-term scenarios that were developed to inform the Ten Year Review, and South Africa's need for what the Ten Year Review called a framework of "encompassing interest" that defines a long-term development vision. The Cabinet Memorandum defined the nature of the NSDS¹³ as follows: "It should also be an integration of governance, multiple voices, processes and action in decision-making towards a common goal with a consensual vision to set parameters and define policy choices for promoting a sustainable development agenda. This includes improving the performance of the state through focus on implementation, better integration and alignment across all spheres and direct contact with the people." However, the Cabinet Memorandum also made it clear that "the NSDS is not understood to be a new 'super policy' but rather a framework that builds on existing programmes and strategies."
- On August 5 2005 DEAT and GTZ co-hosted a National Roundtable Workshop on the NSSD. This was attended by numerous National Departments, the Presidency, representatives of key parastatals and investment agencies (Eskom, DBSA), representatives from key public sector research agencies (CSIR, Universities), Provincial and Local Government representatives, officials from international development agencies (UNDP, GTZ), representatives from organised business (NBI) and specific large companies, and various NGOs from the development and environmental sectors. It was this workshop that agreed on the key methodology for formulating the NSSD, namely the formulation of long-term trends (20-30 years) with special reference to resource use and eco-systems and the implications for shorter-term policy choices in the economic, social and environmental policy sectors.
- Following the August 2005 Roundtable, a specialist research team was commissioned to write short research papers that described the long-term trends, related policy initiatives and connections to related policy fields.
- The expert papers on long-term trends were then used to compile a large document which was the long-term trends analysis, which in turn became the basis for the Trends Section in

¹³ NSDS refers to "National Sustainable Development Strategy" – the initial name for the National Framework for Sustainable Development.

the NSSD. The Trends Analysis was extensively discussed at various National and Sectoral Workshops. It was also discussed by the Academic Review Panel made up from representatives of the University sector. The Trends Analysis process was developed to answer one question: what are the long-term resource use and eco-system trends and how will these affect shorter-term social and economic policies?

- In the meantime DEAT initiated three related processes: a series of National Consultative Workshops; the establishment of a Government Steering Committee comprised of representatives from all National Departments, Provincial Governments and other organs of state; and the establishment of the Academic Review Panel.
- Based on a further workshop convened by DEAT and a careful review of key government policy documents, the key economic and social development policies that will be affected by the long-term trends were identified – these documents included the SA Government Report to the 2005 Millennium Development Goals Summit, the ASGI-SA Background document released by the Deputy-President, the National Treasury's Report entitled *Accelerating Economic Growth – A Diagnostic Scan, Accelerating and Sharing Growth to Roll Back Poverty and Unemployment*, and a number of papers by key policy makers in the government and private consultancy sectors.
- After completing the Trends Analysis and receiving feedback from stakeholder workshops, the Government Steering Committee and Academic Review Panel, a review of existing policy initiatives and responses was compiled, followed by a gap analysis. This was the crucial conceptual moment in the formulation of the NSSD because the drafting team came to the conclusion that the traditional "triple bottom line" approach to Sustainable Development was inadequate. Informed by research generated by the Environmental Ethics Unit at Stellenbosch University, the team concluded that the "triple bottom line" approach is still based on sectors (economic, social, and environmental) and locks policy-making into a series of trade-offs between these three so-called "sectors". The end result of this approach is that sustainable development is simply the sum of actions in all three sectors. Instead, sustainable development has been depicted in the NFSD as fields of intervention embedded within each other, and integrated via appropriate governance processes and capacities (see diagram in Section 2.1). This is consistent with cutting edge thinking on a global scale.
- From the gap analysis, and informed by the integrated embedded approach described above, five pathways to sustainable development (initially referred to as Strategic Priority Areas) were identified and articulated as the Mission of the NFSD – these are cross-cutting priority areas rather than sectoral in nature because this more accurately reflects the transdisciplinary and multi-sectoral nature of the sustainable development challenge, and it also reinforces the need for a sustainable development cluster to take ownership of these priority areas. The pathways were generated during the course of a workshop attended by the drafting team and representatives of DEAT. They were tested at the National Consultative Workshops, Government Steering Committee and Academic Review Panel. Numerous written comments from the civil society sector, business, the professions and Government bodies were considered before finalising the description and scope of the pathways. Five separate chapters were written and circulated publicly in the 8th June 2006 version of the NSSD. In line with the streamlining of the framework, the detailed analysis

and recommendations included previously have been slimmed down into the current chapter: "Priority areas for strategic intervention";

- Given the need for government, civil society and business to study the document and engage with each other on the issues and the way of thinking, as highlighted by the Ten Year Review, and the fact that no preceding national strategy existed to build on, this first version was renamed a National Framework for Sustainable Development (NFSD). This ensures that further refinements can be introduced that can guide future versions and subsequent activities emerging from this process. Recommendations for further action within each strategic pathway were formulated, and priority recommendations per area were extracted from a broader set of recommendations as a focus for short-term action. These are included in this document. The final chapter on "Making It Happen" effectively states that a further phase will be required to formulate a detailed and specific action plan with allocated responsibilities.
- The NFSD was published as a draft discussion document called "People – Planet – Prosperity: A Strategic Framework for Sustainable Development in South Africa" and DEAT placed a notice in the *Government Gazette* on 20 October 2006 to solicit public comments on the document. The comment period expired on 1 December 2006. The Department received comments from twenty one stakeholders from all three spheres of government, the major environmental NGO's, public entities such as Eskom and SANBI, the Chamber of Mines, cement producers, the banking sector, one university and one environmental consultancy.¹⁴ All the comments were reviewed, considered and, where appropriate, incorporated into the final version of the NFSD.

¹⁴ A complete list of comments received is included in the NFSD Comments Response Report which is accessible from AT.

Annex Two: Research on Trends and Implications

This annex describes certain key long-term trends that are important to establish the broader context within which a national framework for sustainable development must function, and against which government, and society, will measure the success or failure of such a strategy. The chapter begins with an assessment of the impact on South Africa of the major cross-cutting trends. It then proceeds to assess trends with respect to natural resource use, macro-economic policies, major social dynamics and governance. The question posed in respect of each of these trends is what the projected long term implications are if the current trends were to continue. Both the risks and opportunities of each of the trends are summarised. The annex concludes with a brief summary of the implications of the trends analysis. It is from this analysis that the strategic focus areas for strategic intervention have been identified.

1 Critical cross-cutting trends

For the purposes of achieving the national vision on sustainable development it is critical that we consider the implications of three trends that are of a cross-cutting and global nature, and that will have very specific impacts on our shorter-term social and economic policies. These are climate change, rising oil prices and globalisation. Each is dealt with in detail below. The social, economic and governance impact of extreme events, such as flooding, heavy storms and prolonged and frequent droughts, have cross cutting and long term consequences.

1.1 Climate Change

Climate change caused by human activities is considered the most significant global environmental issue facing humanity today. The increased concentration of greenhouse gases such as carbon dioxide in the atmosphere, mainly caused by emissions from generation and consumption of energy, is driving climate change. Carbon dioxide is the most significant greenhouse gas for South Africa. It contributes more than 80 % of the total of the three greenhouse gas emissions, and nearly 90% is generated by the energy sector. The agricultural sector generates between 70% and 80% of the total nitrous oxide emissions.

Although South Africa is still a developing economy, our dependence on coal-driven energy sources and the energy intensive nature of the economy, due to low energy prices, has resulted in an extremely high carbon emission level per unit of GDP compared to the rest of the world.

Key **risks** of climate change include threats to our water supplies and changing rainfall patterns, which is critical for a water-stressed country. Temperature increases could enlarge the area prone to malaria and other vector-borne diseases; and crop production could be affected by 10-20% by temperature changes either way. Higher CO₂ levels could reduce proteins in grasslands in livestock producing

Global warming is the gradual warming of the Earth's climate as a result of the build-up of greenhouse gases in the atmosphere.

A **greenhouse gas** is any gas (such as carbon dioxide, methane and nitrous oxide) that absorbs infrared radiation in the atmosphere, thus allowing more heat to enter the earth's atmosphere than is able to leave it.

areas, in particular in poorer drier parts of the country; and fisheries will be affected by changes in the sea temperature, thus negatively affecting the livelihoods of fishing communities. The impact of climate change is emerging increasingly as possibly the greatest threat to biodiversity loss; for example, the Cape floral kingdom could be significantly reduced, with negative economic impacts in the tourism sector. A future scenario includes more severe penalties for high greenhouse gas emissions, as global agreements are tightened up.

There are a number of challenges which need to be addressed to make progress on climate change mitigation and adaptation. These include improving climate models and scenarios at detailed regional level, especially for extreme weather events, to reduce the high level of uncertainty; advancing understanding on "good practice" in adaptation measures through exchange and information sharing on feasibility, costs and benefits; enhancing coordination and collaboration both within and between countries to ensure the coherence of adaptation measures with other policy objectives and the allocation of appropriate resources.

While global climate change provides serious challenges to South Africa, **opportunities** to optimise our progress towards more sustainable development lie in a growing awareness of the need to find more sustainable production and consumption processes (in particular in the energy sector), to reduce our high per capita emissions, and to respond to climate impacts through mitigation and adaptation. Harnessing this awareness could drive a gradual shift towards more robust farming methods such as organic farming to build soil quality and the biological capacity of local ecosystems to respond to change. Higher energy prices need not be seen as a growth retardant, but rather as a driver of increased efficiencies across all production and consumption systems. Large-scale investments in renewable energies have proven in other countries to be significant job creators, and major opportunities are generated for technology innovation and skills development. South Africa can also harness financial benefits through global funding mechanisms, including the Clean Development Mechanism, created via the Kyoto Protocol.

Working Group II of the IPCC recently published its Fourth Assessment Report. This Assessment builds on earlier work and incorporates new knowledge gained since the Third Assessment. It captures the scientific community's current knowledge and understanding of climate change's impacts on natural and human systems; the capacity of these systems to adapt to these impacts; and their vulnerability.¹⁵ The Summary for Policymakers¹⁶ sets out the most important policy findings which includes observational evidence from all continents and most oceans illustrating that many natural systems are being affected by regional climate changes, particularly higher temperatures; and a selection of findings on projected impacts, capacity to adapt and vulnerability in each system, sector and region for a range of unmitigated climate changes that the IPCC projects will occur over this century and judges to be relevant for people and the

¹⁵ Climate Change 2007: Impacts, Adaptation and Vulnerability, Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Summary for Policy Makers, April 2007

¹⁶ The Summary for Policymakers was approved at the Eighth Session of Working Group II of the IPCC held in Brussels in April 2007

environment.¹⁷ The table below captures the key findings of Working Group II about the nature of future climate change impacts that are pertinent to Africa.¹⁸

Nature of future climate change impacts projected for Africa
<ul style="list-style-type: none"> • New studies confirm that Africa is one of the most vulnerable continents to climate variability and change because of multiple stresses and low adaptive capacity. Some adaptation to current climate variability is taking place, however, this may be insufficient for future changes in climate. • Agriculture production, including access to food, in many African countries and regions is projected to be severely compromised by climate variability and change. The area suitable for agriculture, the length of growing seasons and yield potential, particularly along the margins of semi-arid and arid areas, are expected to decrease. This would further adversely affect food security and exacerbate malnutrition in the continent. In some countries, yields from rain-fed agriculture could be reduced by up to 50% by 2020. • Local food supplies are projected to be negatively affected by decreasing fisheries resources in large lakes due to rising water temperatures, which may be exacerbated by continued over-fishing. • By 2020, between 75 and 250 million people are projected to be exposed to an increase of water stress due to climate change. If coupled with increased demand, this will adversely affect livelihoods and exacerbate water-related problems. • Towards the end of the 21st century, projected sea-level rise will affect low-lying coastal areas with large populations. The cost of adaptation could amount to at least 5-10% of Gross Domestic Product (GDP). Mangroves and coral reefs are projected to be further degraded, with additional consequences for fisheries and tourism.

The following table provides some information on future predictions concerning climate changes that can be expected in South Africa over this century.

How is South Africa's climate expected to change in the 21st century?
<p>Using the Global Climate Models the following changes to the South African climate within the next 50 years were predicted:</p> <ul style="list-style-type: none"> • a continental warming of between 1 and 3°C • broad reductions of approximately 5 to 10 % of current rainfall, but with higher rainfall in the east and drier conditions in the west i.e. increasing the current rainfall disparities • increased summer rainfall in the northeast and the southwest, but a reduction of the duration of the summer rains in the northeast; overall reduction of rainfall in the southwest

¹⁷ Working Group II Fourth Assessment Report, Summary for Policymakers, April 2007, p5

¹⁸ Ibid

- nominal increases in rainfall in the northeast during the winter season
- increased daily maximum temperatures in summer and autumn in the western half of the country
- an extension of the summer season characteristics

1.2 Rising oil price

Just as many developing economies are starting to grow consistently, and at the point when Africa is integrating into the global economy, the most critical key condition that made it possible to grow the developed economies over the past 100 years is being significantly eroded—namely, low-priced oil. Prices in 2008 have been for the most part over USD100 for the first time since 1980. As highlighted by the UK-based Oil Depletion Analysis Centre, the world currently finds only one barrel for every four we consume from our inheritance of past oil discovery.¹⁹ We might well discover new reserves (e.g. Tar Sands), but no-one can be absolutely certain about this. What is, however, undeniable is that oil prices are on a long-term upward trend (despite short-term price drops) at precisely the moment when demand looks set to grow at unprecedented levels in emerging economies, particularly in China and India.

Imported oil accounts for between 16% and 20% of South Africa's energy needs – around 70% comes from coal and the remainder from biomass, nuclear and other sources.

If the achievement of a growth rate of 6% assumes increasing the consumption of petrol, diesel and jet fuel, and if oil peak means rapid price increases at rates much higher than the average inflation rate, then it follows that either growth rates must be revised downwards, or massive investments are required to substantially reduce the consumption of hydrocarbons, in particular imported oil.

Clear **risks** of the rising oil price are retardation of economic growth potential due to negative effects of high oil prices across a wide range of sectors and increases in the cost of transport. Key industrial sectors with substantial growth potential, such as chemicals, plastics, materials, agriculture, tourism and construction, are at risk of being undermined. Because of South Africa's production of oil-from-coal, the rising oil price could lead to greater coal consumption, which could exacerbate pollution and greenhouse gas emissions, unless cleaner technology is used.

Opportunities available for South Africa to respond to a rising oil price include investments in a wide range of renewable energy technology options (solar, wind, biomass, hydrogen, and mini-hydro) which become financially competitive as the oil price rises; a wide range of *ad hoc* and incremental adjustments that get made by households, businesses and economies to become

¹⁹ (<http://greatchange.org/ov-campbell,outlook.html> Feb 2002)

less oil dependent (including the production of bio-fuels²⁰ and re-use of waste outputs as fuels); the emergence of an entirely new energy sector with decentralised businesses trading in a variety of energy products; the potential for export of these new technologies; and the development of clean coal technologies and higher prices for coal exports.

1.3 Globalisation

Economic globalisation is reconstituting the structure of global economic power relations in ways that are fundamentally transforming the internal economies of developing countries. Economic globalisation creates both opportunities (e.g. export-led growth, technology transfer, information and communication technologies) and threats (global competition from cheap goods, foreign investments with unreasonable expectations when it comes to profits, labour and environmental standards). South Africa plays an active global role with respect to building multi-lateral alliances, compacts and joint positions. This was evident at the World Summit on Sustainable Development with respect to the future role of the Commission for Sustainable Development, the role that the Minister of Finance played in the reform of the World Bank and IMF, the role South Africa's representatives played in the Doha Development Agenda of the WTO negotiations, and the leading role South Africa has played in the formation of NEPAD and the AU. The 'new scramble for African resources' as India, China, France and America seek primary materials and markets in Africa will pose new challenges for South Africa because of the high potential for destabilisation via proxy wars.²¹

Globalisation creates new opportunities for contact between previously separate ecosystems and the integration of societies and cultures. This can have dramatic and unpredictable results such as biological invasions, new diseases or species extinction and the collapse of markets and cultures. If social and ecological considerations are not considered, sustainable development can be prejudiced. However, globalisation also presents potentially positive opportunities to developing economies through opening markets, access to information, and the spread of information and communication technologies. Given its high technological capabilities and information infrastructure, South Africa can benefit from these opportunities by developing innovative solutions that balance developing economy needs with ecological and resource constraints. The key lies in the recognition that economic globalisation is not an incontestable force with no niche spaces for developmental states committed to poverty eradication and authentic development.

1.4 Trade and environment²²

As trade agreements: multilateral, regional and bilateral, proliferate, there is also an increased incidence of higher environmental standards being put in place by importers. These environmental standards, especially private standards, while intending to achieve higher environmental standards in developed countries, put the exports of developing countries, in particular from Africa, at a disadvantage. In this context, the economic and social aspects of

²⁰ Although the chances are high that this will be done in ways that will increase food prices, and result in a zero net energy balance.

²¹ Point made in the Human Science Research Council submission to the Presidency's 2019 scenario workshop in June 2007.

²² The section on trade and environment relies on a report commissioned by the Global Invasive Species Programme to assess the potential impact of regional and sub-regional trade agreements on the spread of invasive alien species in Africa. The report was prepared for GISP by EnAct International in January 2007.

sustainable development are not being taken into account, and many developing countries now see sustainable development as a ploy by developed countries to block the market access of their products.

On the other hand, the increased risk of invasive alien species has also been increased through the facilitated trade as a result of international trade agreements, and risks to biodiversity as well as some international environmental legal principles are being increasingly taken into account in trade agreements.

Chapter V of the JPOI deals with sustainable development and the global economy and recognises the challenges to sustainable development within the global economy, particularly those faced by developing countries and countries with economies in transition. The chapter includes various objectives which require urgent action to address these challenges: For example, actions that promote open and equitable multilateral trading and financial systems that benefit all countries in the pursuit of sustainable development; enhance the delivery of coordinated and effective trade-related technical assistance and capacity-building programmes which examine the relationship between trade, environment and development; and actively promote corporate responsibility and accountability, based on the Rio principles, including through the full development and effective implementation of intergovernmental agreements and measures.

2 Natural resources trends

The long-term trends discussed in this section clearly indicate that we need to take into account our supply of natural resources and status of our eco-system services as we pursue growth and seek to eradicate poverty. While this section discusses long-term trends with respect to a range of natural resources, the most urgent trends to address currently relate to energy, water, soils, waste and biodiversity. While there are risks associated with the natural resource trends discussed in this section, major opportunities also exist, which should be harnessed to promote our transition to sustainability.

2.4 Energy

The last months of 2007 started a period characterised by “load shedding” or rolling blackouts across the country. President Mbeki, in his 2008 State of the Nation speech, noted that the South Africa is facing a “national emergency represented by current power outages”²³. At the heart of this emergency is the rapid growth in demand, which has exceeded the supply, even with increased capacity.

We derive just over 70% of our energy from coal, and will more than likely continue to do so well into the future. The result of cheap electricity and abundant coal supplies is an energy intensive economy, especially vulnerable to electricity shortages. The low prices for electricity are a key component of the situation: the gap between South Africa’s prices and the “next cheapest” increased from 30% in 2006 to 74% in 2007²⁴. Infrastructure capacity cannot be sufficiently augmented in the absence of price increase, but on the other hand, there is a conflicting need to keep prices low so that electricity becomes the preferred alternative to domestic coal burning

²³ President Thabo Mbeki, State of the Nation Address, 8 February 2008.

²⁴ National Response to South Africa’s Electricity Shortage, January 2008. <http://www.dpe.gov.za/home.asp>

and paraffin, to reduce household risks and hazards and improve health impacts related to indoor and ambient air pollution. In March 2008, Eskom made public their application to increase electricity tariffs by 60%. The impact on “poor, low income households and small businesses” is acknowledged, and measures to mitigate this are proposed²⁵.

With regard to electricity prices, the ageing nature of the infrastructure indicates the need to increase electricity prices to finance new infrastructure, which is required in order to ensure a stable supply of electricity. On the other hand, there is a conflicting need to keep prices low so that electricity becomes the preferred alternative to domestic coal burning and paraffin, to reduce household risks and hazards and improve health impacts related to indoor and ambient air pollution.

Early in 2008 DME has made public the Draft Electricity Regulations for the Prohibition of Certain Practices in the Electricity Supply and Compulsory Norms and Standards for Reticulation Service, specifically aimed at minimising load shedding and blackouts. They further indicated their intention to table an Energy and Security Bill during 2008. This bill would cover sustainable energy development, making interventions possible with a view to ensuring energy security and uninterrupted availability of energy supplies; as well as put in place regulations pertaining to appliances. The bill would also address environmental requirements on the subject of climate change and water use; in addition to enforcing mandatory co-operation in the development of sector energy plans. Finally the bill is intended to establish a National Energy Efficiency Agency.

Since 2005, several major initiatives have been taken that demonstrate the potential of energy efficiency interventions and renewable energy initiatives. The Minister of Minerals and Energy announced the launch of a major energy efficiency initiative (including legislation to enforce the use of energy efficient applications), investments in renewable energy, and the restructuring of the electricity distribution industry. The commissioning by Eskom of a 100 MW wind farm and related support for solar power suggest that there is new appreciation of the potential role for renewable energy in the South African economy. Eskom has collaborated with the Department of Minerals and Energy and the National Energy Regulator of South Africa (NERSA) to promote energy efficiency by implementing a Demand Side Management (DSM) programme. This programme has grown from a small research programme with pilot projects in the early 1990’s to a national energy-saving programme that was launched in late 2002. The programme comprises a dual approach of reducing electricity demand at peak periods by shifting load to off-peak periods and overall electricity consumption reduction by installing energy efficient equipment and optimising industrial processes. The success of DSM to improve energy efficiency is illustrated by the phenomenal savings achieved during the winter 2006 energy shortages in the Western Cape: during June 2006 the deployment of DSM resulted in an average saving of 500MW for weekdays, which was more than two-and-a-half times that of the annual national DSM target.²⁶

Other key energy-related **risks** include the expansion of the inefficient transportation sector, which is partly due to the spatial structure of our towns and cities but also due to a dependence on oil-based fuels. Positive trends to mitigate these problems include the gradual increase in investments in public transport and bio-fuels. Cognisance must also be taken of the persistence of non-electrified rural and urban housing, and related problems of affordability; the viability of

²⁵ Eskom’s application for a tariff increase, Media Statement, 19 March 2008, <http://www.dpe.gov.za/home.asp?id=931>.

²⁶ Energy Efficiency and Demand Side Management, ESKOM

introducing a 'feed-in tariff' to incentivise market opportunities for Independent Power Producers (IPPs) who want to invest in renewable energy. Underpinning a number of the risks is the weak knowledge for the potential for renewable energy, in particular from wind, biomass and solar sources. In December 2007, Cabinet approved the Biofuels Industrial Strategy.

Key energy-related **opportunities** include a wide range of new investment and employment opportunities for renewable energy in four markets, namely power generation, hot water and space heating, transportation fuels, and rural (off-grid) energy supplies; introduction of a feed-in tariff; redirection into renewable energy alternatives of a portion of the huge surpluses generated by the application of the import parity price mechanism that pegs the price of natural gas and fuel-from-coal (supplied by SASOL) to international dollar prices for oil; extensive research and development initiatives to support renewable energy, energy efficiency and distribution alternatives; a strategy to better manage and reduce oil imports in the near future; and support for the ongoing assessment of the viability of nuclear options (in particular the Pebble Bed Modular Reactor).

2.2 Water and sanitation

Currently South Africa's most limiting natural resource is water. Most of the 22 major rivers have been dammed or have water abstraction schemes in place, to supply the growing number of industry, agricultural, and domestic users. The average annual rainfall is approximately 500mm (considerably less than the world average of 860mm). Water is also unevenly distributed across the country with approximately 80% of the country's runoff being towards the east. Groundwater research has indicated that there are few groundwater aquifers resulting in low river flow. Water resources are further stressed by the increasing pollutants, which include industrial effluents, domestic and commercial sewage, acid mine drainage, agricultural runoff, and litter.

Nevertheless, there have been improvements in terms of provision of sanitation services: an estimated 52% of the 1994 population of 38 million had access to at least basic sanitation services and this number has now improved to around 69% of a total population of around 49 million with such access.

In summary, by 2025 water requirements will exceed availability.²⁷ The growth in water requirements will essentially be in the urban domestic and industrial sectors. This highlights the connection between economic growth, poverty eradication and sustainable resource use.

The South Africa Environment Outlook 2005 notes that water quality is variable, with an overall deterioration since the 1999 State of Environment Report.²⁸ The quality of our water resources is impacted by human activities, particularly industry and mining, increased urbanisation, agricultural drainage, waste disposal and land use.

The key **risks** include water shortages due to a combination of climate change and increased demand if existing technologies and management practices remain unchanged; declining quality

²⁷ The 2005 National Water Resources Strategy states that there should be sufficient water to meet all needs in the near future, provided there is careful management. However, allowances for the ecological component of the reserve are not currently being met in many cases, and the effects of climate change on water availability have not been factored into these calculations. Thus, as noted in the *South Africa Environment Outlook 2005*, this prognosis may change.

²⁸ *South Africa Environment Outlook 2005*, Department of Environmental Affairs and Tourism.

of water supplies and resultant cost increases if infrastructure design and expenditure do not take into account the need to mitigate pollution impacts from human systems; serious future supply constraints relative to demand; pricing structures that do not incentivise water saving and efficiency measures in the agricultural and industrial sectors; inflationary pressures that could push up prices for domestic households beyond the affordability levels of poor communities; impact of climate change on both water supplies and irrigation requirements of the agricultural sector in certain critical river catchment areas; rising levels of sewerage output as middle class settlements expand and pit latrine systems are installed in low-income areas where soil structures are inappropriate, with limited efforts to re-use and recycle these flows of nutrients and chemicals.

Opportunities include, the most significant of which is offered by the Integrated Water Resource Management (IWRM), which includes initiatives to:

- Develop and implement national/ regional strategies, plans and programmes with regard to integrated river basin, watershed and ground water management;
- Programmes for mitigating the effects of extreme water-related events;
- Diffusion of technology and capacity-building for non-conventional water resources and conservation technologies to developing countries and regions facing water scarcity;
- Programmes for energy-efficient sustainable and cost-effective desalination of sea-water, water recycling and water harvesting;
- Establishment of public-private partnerships and other forms of partnerships that give priority to the needs of the poor; and
- Support regional, sub-regional and capacities for data collection and processing and for planning, research, monitoring, assessment and enforcement.

2.3 Solid waste

Solid waste includes all residential, mining and industrial waste. As of 2005, the solid waste system managed the disposal of 20 Mt (Mt=1 million metric tonnes or 1 billion kg) of municipal solid waste (MSW), 450 Mt of mining related wastes and 30 Mt of power station ashes. In some cities, the quantity of solid waste from residential sources is rising above the daily average of 2 kg/person, which is 3-4 times the quantity disposed of by the average household in most European cities. People who live in informal settlements generate on average 0,16kg per day. MSW quantities are growing faster than the economy in many cities – for example, at 5% per annum in Cape Town. This highlights the need to minimise waste and increase recycling – the ‘reduce, re-use and recycle’ approach that is central to our integrated waste management policy. The growing minerals and coal-based energy sector immediately translates into increased industrial wastes with limited productive recycling and re-use. This is an issue that needs to be taken up in local-level Integrated Development Plans.

Although many other countries have for many years now moved away from disposal to landfill as the primary means of solid waste management, the large bulk of MSW in the early 1990s was disposed of in 4000 disposal sites spread out across the country. Of these, only 200 met minimum environmental standards. The current situation is not much different.

The greatest **risk** concerning waste is weak capacity at local government level to implement sustainable solid waste management strategies and methodologies. Other risks include the limited number of landfill sites and inadequate planning to establish new ones by the time the old ones reach capacity; the leaching of toxic residues into underground water resources that often happens around landfill sites; and landfill sites that do not have permits or do not conform to legal requirements. Change processes will require the cooperation of the mining sector given that cleaner production approaches require investments; the restructuring of the recycling sector which is dominated by a handful of large recycling businesses that restrict opportunities for the inclusion of (B)BEE operators, community-based non-profit initiatives and informal sector waste pickers; improved incentive frameworks; and a more appropriate legislature to ensure a successful transition away from the current dispose-and-forget approach.

Opportunities include the emergence of recycling as a major economic sector and job generator; the rapidly diminishing spare landfill capacity creates the financial incentive required for a shift into recycling; the Cleaner Production Strategy formulated by DEAT could provide the basis for establishing incentives and legal requirements aimed at the adoption by the business sector of Cleaner Production Systems; if the organic waste stream could be separated out from non-organic waste streams, it could be used to produce methane gas via biogas digesters, possibly in combination with sewerage; the relative simplicity of the legislation required at local government level to foster a transition to waste separation at source approach - as proven by working systems around the world; and opportunities conferred by incentive options presented in the National Treasury's recent policy paper on environmental fiscal reform. The promulgation of the Waste Bill will be important with respect to harnessing many of the opportunities identified above.

2.4 Soils

South Africa is dominated by very shallow sandy soils with severe inherent limitations from an agricultural point of view. Only 3% of our land is considered high potential land. If we use the international norm of 0.4 hectares of arable land to feed a person, then South Africa's 14 million hectares would feed at most 35 million people. The result is over-exploitation as we try to exceed the carrying capacity of our soils. The vulnerability of our soils to degradation, coupled to a tendency to over-exploit the limited carrying capacity to meet growing food requirements by using inappropriate farming methods, has resulted in far-reaching nationwide soil degradation.

Key **risks** include continued soil degradation which is a threat to food security, land reform and therefore the shared and accelerated growth programme; the low priority given to soil reclamation measures such as natural and organic farming practices; inadequate University-based education and R&D funding support for soil science education and research; continued destruction of high value arable soils as the cities and towns expand; the impact of rising oil

prices on the cost of off-farm inputs that are used in conventional farming and how this will affect, in particular, emerging farmers and the land reform programme. Soil degradation has a negative impact on farming, particularly for emerging farmers and land reform projects that are dependant upon farming.

Opportunities include the triggering of a major organic farming revolution (following the example set by Cuba), supported by whole system science and a national horizontal learning programme of farmer-to-farmer visits; declaring soils revitalisation a national priority, linked directly to the shared and accelerated growth strategy and the land reform programme; inclusion in all integrated development plans and the National Spatial Development Perspective of severe restraints on the conversion of high value agricultural land for purposes of urban development; the promotion of urban agriculture, with a specific focus on (B)BEE-based production within city boundaries and along the urban edge; and allocation of major research and development funds for boosting soil science research.

2.5 Biodiversity

While conditions differ for different ecosystems and parts of the country, in general South Africa's biodiversity and ecosystem health are declining, and climate change is predicted to have a severe impact on biodiversity. Some 34% of South Africa's terrestrial ecosystems are categorised as threatened, mainly due to loss and degradation of natural habitat, through, for example, cultivation, deforestation, urban and coastal sprawl, mining, and invasion by alien species. 82% of our main stem rivers are classified as threatened; it is estimated that 50% of our wetlands have already been destroyed; and 36% of freshwater fish are threatened. River ecosystems are under pressure from over-abstraction of water, for a range of uses, including agricultural, industrial and residential. Poor management of land also directly impacts river biodiversity. 65% of marine biozones are threatened, and eight of the 13 estuary groups are threatened. Climate change leading to changes in the Agulhas and Benguela currents is likely to have enormous implications for marine biota along the South African coast. In the marine environment, unsustainable harvesting of marine living resources is the biggest cause of biodiversity loss.

People are ultimately fully dependent on living, functioning ecosystems and the services they provide. Loss of biodiversity leads to ecosystem degradation and subsequent loss of important services, which tends to harm the rural poor more directly - poor people have limited assets and are more dependent on common property resources for their livelihoods, whilst the wealthy are buffered against loss of ecosystem services by being able to purchase basic necessities and scarce commodities.²⁹

The prediction in the 2006 *South Africa Environment Outlook* that drivers of change in biodiversity will stay the same or increase means that South Africa like the rest of the world will not reach the Johannesburg Plan of Implementation goal of significantly reducing the rates of biodiversity loss by 2010.

²⁹ South African Environment Outlook (2006).

Risks include the absence of adequate quantitative information about historical or long-term trends in the state of our biodiversity. Failure to address this opens us to the risk of further loss of biodiversity, which will reduce our potential to protect ourselves from and recover from disasters. The various trends analysis puts the economic value of the fishing industry - commercial, recreational, and subsistence – which is estimated at R4.5 billion per year, at serious risk.

Opportunities to enhance the status of our biodiversity lie in making an effective case for the role and benefits of biodiversity to socio-economic development. To minimise further biodiversity loss, it will be necessary to foster working relations between the biodiversity protection agencies and production sectors such as major land users (including agriculture, infrastructure and property development, forestry, fisheries and mining) in order to develop and implement sector-specific initiatives to prevent further loss and degradation of natural habitat in threatened ecosystems. This can best be achieved by simply enforcing the existing environmental legislation. A major opportunity lies in building the capacity of local governments to include biodiversity considerations into their IDPs. The protected area network can be expanded using the Protected Areas Act in innovative ways.

2.6 Coastal and marine resources

Concerning climate change, sea surface temperatures off southern Africa are reported to have increased by 0.25°C per decade over the past four decades. Socio-economic impacts are expected to be most severe in the subsistence and small-scale fishing sectors. As much as 40% of South Africa's population currently (2006) lives within 100 km of the coast, resulting in substantial development pressure for infrastructure, housing, and roads. The increasing population and development pose severe threats to sustainability of resources in the coastal zone. There is a consensus that South Africa's living marine resources are either maximally or over-exploited. Small-scale fishers (including those who combine subsistence with limited commercial selling) are contesting the constitutionality of the fishing quotas that favour large commercial operators.

The key **risks** posed to the sustainability of our coastal and marine resources are changes brought about by climate change; pollution of coastal waters from shipping activities, land-based sources and atmospheric gases; and loss of coastal and marine habitat due to the growth of coastal cities and over-fishing. High international demand for produce and continued strains on our enforcement capacity to control transgressors are also having a negative impact on fish stocks.

Key **opportunities** linked to coastal and marine resources include boosting support for research into and monitoring of the effects of climate change in order to better prepare South Africa; monitoring of key atmospheric, oceanographic and biotic parameters for early warning of changes; development of alternatives to marine resources; and establishment of rigorous control measures for development in the coastal zone, including more effective implementation and monitoring of management plans of environmental impact assessments (EIAs). As far as marine pollution is concerned, there are opportunities to coordinate and administer the comprehensive legal framework that already exist. The development of a small-scale fisheries policy presents an important opportunity.

2.7 Minerals

Minerals development is often seen by many as an engine of economic development at a national level, while locally, communities look to the sector to provide employment, infrastructure and skills development to compensate them for the risks and impacts associated with mining. The mining industry makes a substantial direct contribution to development through wages, development of infrastructure and through taxes and royalties paid to communities. While the total number of employees in the mining industry has declined over the last decade, average remuneration has increased and the fraction of mining revenue going to wages has decreased only slightly.

Key **risks** include settlement issues, with local authorities unable to accept full responsibility for managing expanding settlements caused by mining operations; and loss of jobs through downscaling and mechanisation. Principal biophysical challenges include managing large waste volumes, internalising the costs of acid mine drainage, improving impact assessment and environmental management systems and ensuring effective closure planning, minimising further loss of natural habitat in threatened ecosystems, and land degradation.

Recent legislative changes, such as the Mineral and Petroleum Resources Development Act and the new Environmental Impact Assessment Regulations, governing both mineral exploitation and environmental management create major **opportunities** for transforming the ecological and social impact of mining activities. The mining industry, in co-operation with government and trade unions, has begun to put in place sophisticated planning systems that anticipate mine closures, and post-mining rehabilitation and social re-organisation as the economic base created by mining disappears. Success stories on the West Rand where disused mining infrastructures are now used for flower production for export are a case in point. Mineral resources do not last forever – the challenge is how to allocate a portion of profits for investment in sustainable livelihoods.

2.8 Air quality

Air quality in South Africa is decreasing in general, with high sulphur dioxide and particulate (PM10) levels. South Africa Environment Outlook (2006) notes that there is yet to be a comprehensive human health-risk study conducted in South Africa. A study by NEDLAC on 'Dirty fuels' does provide useful indicators, showing that if conditions remain the same, health effects will increase by between 19-26% in different regions over the next decade³¹. Emerging air pollution issues are closely associated with road transport, with the number of vehicles on South African roads growing by 2% per year. In the absence of an implemented strategy to control vehicle exhaust emissions, vehicle emissions are expected to increase by 20% by 2007, and by up to 44% by 2011 (relative to base year 2002)³².

Particulate matter: dust, soot and other tiny bits of solid materials that are released into and move around in the atmosphere

Key **risks** for dealing with air pollution include inadequate air quality monitoring system and therefore an absence of reliable data; continuation of energy production systems that are responsible for high levels of emissions that negatively impact on social, economic and ecological

³⁰ *South Africa Environment Outlook 2005*, Department of Environmental Affairs and Tourism.

³¹ *South African Environment Outlook (2006)*

³² *South African Environment Outlook (2006)*

systems; rising health care costs as air quality continues to deteriorate; acidification of soils, and incorporation of harmful substances into the food chain.

Opportunities to control emissions include various measures such as tailpipe modifications using catalytic converters; installing emission control devices (gas scrubbers, electrostatic precipitators, filters, etc.) on industrial stacks to substantially reduce nitrous oxides (Nox), sulphur dioxide (SO₂) and particulate matter emissions; and applying more stringent technology standards on volatile organic compounds (VOCs) storage and distribution facilities to reduce emissions by up to 70%. Opportunities for mitigating the effects of fossil fuel use include increasing provision of public transport; rationalising freight transport with a greater emphasis on rail transit; introduction of energy efficiency modifications in all buildings; promoting cycling and walking for recreational and non-recreational purposes; replacement of the use of wood, coal and paraffin in houses by LPG, electricity and ethanol gel; and a major programme to subsidise research and development for renewable energy production. Government's work programme on developing air quality regulations are an important opportunity in this area.

2.9 Summary analysis of natural resources trends

This review of major trends, risks and opportunities reveals that we can no longer take our endowment of natural resources and existing functional ecosystems for granted. It is clear that our natural resource base is under pressure and our ecosystems face degradation as we pursue growth and seek to eradicate poverty. Indeed, it is the poor who often experience the economic costs of ecosystem degradation most directly because the majority of poor households depend on natural resources and ecosystem services such as good soils and productive seas containing sufficient fish for sustainable harvesting. Similarly, poor people often pay the heaviest price in urban areas when it comes to air pollution, expensive water, and long travel distances. Our natural resources are not only primary physical resources such as water, coal, fish and soils, but also include natural resources that can be degraded, like air quality, rivers, seas, and aquifers (if these lie below landfills or mine dumps or areas where pit latrines/septic tanks are predominant, or are abstracted at rates higher than recharge). Growth and poverty eradication strategies are not decoupling from unsustainable natural resource use and exploitation. We need to act rapidly and decisively to change this. The analysis confirms that thresholds are now being reached which if ignored will generate dysfunctional economic costs that will undermine investments in growth and exacerbate poverty as poor people experience the loss of supportive ecosystem services. Fortunately, it is also clear that technologies and practices exist that open up opportunities for decoupling unsustainable resource use from growth and poverty eradication strategies.

3 Economic trends

The analysis of economic trends that follows maps the main macro-economic trends and how we intend reaching a 6% growth rate via investments in infrastructure, human capacity development and social development. However, we can no longer assume that these socio-economic goals can be attained if the underlying ecosystems and resources are depleted and degraded.

3.1 Macro-economic trends

The success of macroeconomic policy is generally measured on five distinct objectives, namely economic growth, balance of payments stability, price stability, equity, and total employment levels. There has been substantial progress in achieving the first three objectives, but as the

ASGI-SA makes clear, we have a long way to go before we see greater equity and the reduction of unemployment levels to single digits.

The South African economy, as measured by standard macro-economic indicators, is relatively stable. The economy is also experiencing the longest period of economic expansion in the country's recorded history³³.

South Africa's expanding economy

The average economic growth rate from September 1999 until June 2005 was 3.5%, compared to less than 1.0% in the decade before 1994. Real growth accelerated to 5% in the second quarter of 2005, a record for post 1994 South Africa, but average when compared to other emerging market economies. During the past five years, employment has increased at a faster pace than at any point in the past twenty years, adding over 1.5 million jobs³⁴. The targets set by ASGI-SA for real growth are as follows: average of 4.5% growth pa for the period 2005-2009, followed by an average growth of 6% pa for the period 2010-2014.

This growth has to date been largely achieved through increased household spending, which currently amounts to almost two-thirds of total expenditure. Relatively low interest rates, an increase in disposable income and rising value of assets such as real estate continue to support buoyant consumer spending. However, private household debt is also on the rise, at 76,5% of disposable income by mid 2007³⁵. Government recognizes that growth driven by household consumption is inherently limited and must be supplemented by increased investment in fixed assets. As already demonstrated, many of the households that are driving growth via spending are also extremely inefficient when it comes to energy and water use, and waste disposal.

The moderate depreciation of the Rand saw export demand increasing once again benefiting sectors such as manufacturing and mining. It is projected that government revenues will continue to exceed budgeted income, despite a commitment to a more expansionary public expenditure policy.

Despite the continued upsurge in economic activity, unemployment and poverty remains at persistently high levels. Several high-level plans have been put in place to accelerate economic growth to 6%, widely seen as the level at which the country's unemployment problem can be addressed in a more structural manner. President Mbeki's 2008 State of the Nation speech introduced the Apex Priorities. These priorities include the further work on the Industrial Policy Action Plan; the resolution of organisational issues on skills development; self/-employment interventions in the Second Economy, including expanded public works programmes (EPWP); and assistance to SMEs including procurement activities. Other Apex priorities include the "War against Poverty"; the speeding up of land and agrarian reform; resourcing poor schools and

³³ IMF 2005

³⁴ Minister Trevor Manuel, 2008 Budget Speech.

³⁵ South African Reserve Bank, 2007 Annual Economic Report.

monitor outcomes; speeding up community infrastructure; and intensifying the campaign on communicable diseases. Investment in the economy is still at relatively low levels at around 16 - 17 % of GDP. South Africa has not been successful in attracting a sustained flow of foreign direct investment (FDI) in fixed assets over the past ten years, but has outperformed other emerging markets in attracting more short-term portfolio flows, mainly thanks to the depth and liquidity of its financial markets. The sustained economic growth and targeted government and private investment in infrastructure bottlenecks are expected to create a more favourable investment climate in South Africa. One of the Apex priorities is to set up an investment call centre.

Key aspects of future economic trends

- Private household consumption, the current engine of economic growth, is likely to come under pressure in the short to medium term as debt levels reach key thresholds and as interest rates rise to cool down consumer spending.
- Domestic demand is on a broader basis as an emerging black middle class continues to be included in the formal economy and as an increasing number of non-South African middle class households (especially from other parts of Africa) set themselves up in South Africa.
- The economy remains vulnerable to short term outflows of portfolio capital. It is expected that government expenditure on infrastructure projects will attract both more direct domestic and foreign capital. The government wants to increase fixed investment from the current 16-17 % to 25% of GDP by 2014, thereby elevating the growth rate in the economy to 6% if all other key factors remain stable (e.g. labour costs, business confidence, global growth, and the exchange rate).
- The volatility in the exchange rate remains a key risk and may deter higher rates of private sector investment. There is a limited scope for government to fully stabilise the floating and relatively unstable exchange rate.
- Exports are dependent on international demand and prices. The European Union as South Africa's main trading partner performs at lower levels of economic growth than world averages. There is policy space for South Africa to benefit more from international economic expansion. Several bilateral and multilateral trade agreements, notably the Doha Development Agenda in the World Trade Organisation, as well as a programme of sustained trade liberalisation support the integration of South Africa into the rest of the world. However, a meltdown in the US economy caused by massive over-indebtedness could drastically affect global growth.
- Inflation has recently been above desired levels mainly due to high and rising international oil prices and brisk domestic demand. It can be taken for granted that the South African Reserve Bank will exercise its mandate and use the policy instruments at their disposal to keep inflation within the 3-6% target range.
- Customised Sector Programmes (CSPs) are being drafted that map out bottlenecks in several primary (e.g. mining, agriculture), secondary (e.g. manufacturing, construction) and tertiary (services) sectors and propose sector interventions (e.g. tourism, business process outsourcing, chemical beneficiation industries, agri-processing industries such as bio-fuels, and mariculture). The recently published *National Industrial Policy Framework* and *Industrial Policy Action Plan* by the Department of Trade and Industry (DTI) provide a key perspective on the future in this regard. There is a developing commitment to R&D support in these sectors, to reduce the volatility of the Rand (while recognising that exchange rate targeting is an inherently risky

business), to deregulate telecommunications and to continue with small business regulatory reforms.

- The vitality and vibrancy of local economies will determine to a large extent whether the 6% growth targets can be reached at the national level. The Department of Provincial and Local Government's 2006 *National Framework for Local Economic Development* has put in place a strategic, policy and institutional framework for stimulating local economies, with Local Government agencies playing a key role. However, at the moment, none of the 52 local districts are growing at 6%, and only a few are growing at higher rates than the national growth rate.

3.2 Targeted interventions to integrate the second economy

The "second economy" refers to the exclusion of a large part of South Africa's poor from the mainstream financial flows of the economy, while providing services to the "first economy". Although the focus on service provision directly targeted this part of the population, it did not set the basis on which participation in the economy was guaranteed.

In the identification of Apex priorities in early 2008, Government has identified making self-employment interventions in the Second Economy as one of the 24 priorities. This will include a massive campaign for creation of self-/employment through micro-enterprises and co-operatives by organising and training women particularly in rural areas. In addition to work being done through SETAs, FET institutions, EPWP and NIPF/IPIP, facilitate entry into labour market for young people through 'massification' of learnerships and special PWP programmes for youth will also be implemented, under the responsibility of the economic cluster. In his 2008 Budget speech, Minister Trevor Manuel noted that government's spending plans again allow for a progressive extension of public services, as informed by the "apex priorities". Budgetary trade-offs between such direct intervention and the ability of the economy to finance such programmes will therefore be an essential part of future macro-economic planning. This trade-off is evident as the focus is not only on stimulating the second economy, but also nurturing the first economy to continue to supply the goods.

These shifts are further evident in the changed stance on the restructuring of state assets such as Eskom, Transnet and a portion of Telkom as BEE levers and the various (B)BEE charters negotiated and implemented in the financial and mining sectors come into effect. It is also evident in state regulations in the health sector as a mechanism to extend the social safety net. BEE has been criticised for only benefiting a certain segment of the population, resulting in the extended meaning attributed to the "Broad-Based BEE" (or BBBEE) approach.

A policy of targeted government spending can only be seen as a start to a longer-term solution to the country's unemployment and poverty eradication challenges. For this to be successful on a macro scale there is no doubt that private (domestic and/or foreign) knowledge and capital is needed. If private and foreign investment does not materialise, pressure on the social security net will further increase. In the mean time and as a consequence of the limited depth of the EPWP it can be expected that pressure for a more streamlined grant system to reach the poorest of the poor will continue and even intensify, placing more pressure on budgetary trade-offs. Government has recognised these challenges, and the Apex priorities reflect action taken to respond appropriately.

It is therefore certain that other strategies will be sought to reach the desired integration of the second and first economies. One strategy discussed widely is not to only focus on income as a

means out of poverty, but to increase the access to and quality of assets. There is a good chance that pro-poor policies focused on subsidised housing, education, property and land will become more prominent as poverty eradication strategies, this time not only packaged as a basic needs approach, but with an increased emphasis on the ability of these assets to sustain livelihoods and/or the owner's asset's. The National Framework on Local Economic Development attempts to package these elements into a coherent micro-economic approach that takes local institutions and organisational cultures seriously.

It is important to also consider ways to shift components of the second economy in a more sustainable direction. For example, while many largely unsupported street traders undeniably provide a positive service, others trade in (often illegal) imports from countries like China at the expense of South African manufactured goods of quality that create local jobs. (The same applies to major clothing stores who have resisted trade union demands to 'buy locally'.)

There is a range of second economy programmes related to biodiversity and resource use. The most well known is the award winning Working for Water programme; but others include job creation via waste recycling, the integration of traditional communally-owned cattle stocks into the mainstream meat markets, community-based tourism projects, urban agriculture, semi-commercial artisanal fishing, and cultivation of indigenous plants for health remedies.

Another strategy is specifically focused on addressing the skills shortage in the country. In March 2005 the government launched the second National Skills Development Strategy (NSDS) aimed at training initiatives and learnership programs. A fundamental trend to monitor is therefore the success at which the second economy is "pulled into" the first economy, and shifted in a more sustainable direction, through these targeted interventions. Much will depend, however, on whether the commitment to being a developmental state can translate into practices at the local level that embed state programmes into the everyday life of poor communities. The successful implementation of the National Framework for Local Economic Development will determine how this happens in practice. This needs to happen by empowering communities to take ownership of state programmes from the ground up.

3.3 Future challenges

Although the macro-economic management strategies and fiscal expenditure trends (referred to in greater detail below) are set to continue into the foreseeable future, growth acceleration will require more purposive and strategic interventions to overcome what the Treasury defined in a presentation entitled *Accelerating Economic Growth – A Diagnostic Scan* (June 2005) as the six major constraints:

- Strength and volatility of the Rand;
- Inefficient urban landscape and under-development of low-income residential areas;
- Internationally uncompetitive wage costs, but workers face high living costs;
- System design and infrastructure backlogs in network industries;
- Professional and technical skills shortages in infrastructure sectors;
- Weak industrial R&D, technology support and sector development capacity.

Significantly, the second, third and fourth bullet points intersect directly with resource-based sectors, in particular the inefficient urban landscape, which is inefficient because urban sprawl and apartheid spatial patterns cause high transport costs. These will get higher as energy costs rise, thus further undermining living costs with implications for wages. Resolving infrastructure backlogs will only translate into economic growth if sustainable resource use technologies and densification within compact urban forms are built into the specifications from the start. If this is not done, increased funds will be required to mitigate the negative consequences that will emerge later on from current investments - the classic example being investments in road infrastructure to cater for increasing number of private motor vehicles which results in congestion later on, which requires massive expenditures still later on to effect a transition to public transport. A related point is what is referred to as "silo planning" in the restructuring of parastatals and other organisations, where restructuring focuses on "core business" and cost cutting, and not necessarily on resource efficiency or socio-economic equity via cross-cutting strategic partnerships. The need to ensure integrated planning across all spheres has been identified as an Apex priority by Government.

3.4 Fiscal trends

As far as fiscal trends are concerned, the general picture is one of rising revenue, expenditure and deficit levels until roughly 1997/98. With the introduction of the Growth Employment and Redistribution (GEAR) strategy revenue and deficit levels declined and remained at lower levels. Expenditure increased overall as a percentage of GDP from 1998/99 onwards. It was estimated that national government revenue as a ratio of GDP for 2007/08 would average 27,6 per cent over the medium term after taking into account the effects of the February 2007 tax proposals. The net result of the higher-than-budgeted revenue and lower-than-budgeted expenditure in fiscal 2006/07 was a cash book *surplus* of R10,4 billion, compared with a *deficit* of R5,6 billion recorded a year earlier. This surplus – the first ever recorded at national government level.³⁶

Social services expenditure increased by an average of 6.4% per annum over this period. In fact real growth in this sector outstripped overall expenditure growth by 1.9 percentage points. The result of this trend is that the relative share that social services take of consolidated expenditure increased from 45.4% in 1995/96 to 50.9% in 2004/05. While all four social services functions benefited from these increases, increases to Education and Welfare account for more than two thirds (69%) of this growth. However, evidence suggests that education and health expenditures are levelling out, but welfare may still continue to rise for some time. There is now evidence that fiscal expenditures in the social sectors have not only mitigated poverty, but may – according the University of Stellenbosch Bureau for Economic Research - in fact be contributing significantly to poverty reduction.

In 2007, the Minister of Finance recognised that moving towards a "Green Budget" should be an objective for South Africa. Taking up the challenge, the Department of Environmental Affairs and Tourism embarked on a project to identify those areas in which budgetary responses could contribute towards sustainable development. This work was reflected in the 2008 Budget speech, and a multi-year work programme is being pursued to continue the work towards a Fiscal Framework for Sustainable Development.

³⁶ South African Reserve Bank, 2007 Annual Economic Report.

3.5 Micro-economic reform - sectoral trends

The National Industrial Policy Framework³⁷ objectives are:

- (i) facilitating the diversification of the economy beyond the current reliance on traditional commodities and non-tradable services;
- (ii) the intensification in the long-term of the industrialisation process and moving towards a knowledge economy;
- (iii) promoting a more labour-absorbing industrialisation path, putting particular emphasis on tradable labour-absorbing goods and services as well the economic linkages which facilitate the creation of jobs;
- (iv) promoting a broader-based industrialisation path which reflects greater levels of participation by historically disadvantaged people and marginalised regions into the mainstream of the industrial economy; and
- (v) contributing to African industrial development, with emphasis on building its productive capabilities. The vehicles of implementing this vision are thirteen strategic programmes.

The Industrial Action Plan (IPAP)³⁸ sets out the key actions and timeframes for the implementation of initial round of industrial policy. In line with the Apex project 1, the NFSD will contribute to the ongoing finalisation of Customised Sector Programmes (CSPs) and the implementation action plans for these sectors. Spatial planning

Given the commitment across state structures to building a developmental state, the reduced emphasis on privatisation, and renewed significance given to state-led investment, it is necessary to consider the question of the spatial dimensions of investment strategies. The National Spatial Development Perspective (NSDP) articulates a commitment to focussed state-led investments that simultaneously reduce poverty and promote growth, in particular infrastructure investment. The NSDP's priority areas constitute a mapping of the state's vision of where investments in fixed assets will be made and who will benefit from them. Whether the private sector follows the state into these areas will depend on a number of factors, including whether businesses can reconcile quarterly reporting of profits with long lead times between investment and break-even points. From a sustainable resource use perspective, the twin criteria of social need and growth potential to guide spatial location decisions will need to be complemented by a sustainable resource use criterion. This may well result in a three-way decision support system, which might, for example, favour areas with better public transport systems, energy efficiency programmes, waste minimisation projects, and urban densification strategies.

At the provincial level the Provincial growth and development strategy provides a strategic planning instrument that provides an overview of the key priorities for the province within the context of the resources and needs. The strategy also provides information on spatial planning at the provincial level. Likewise, at the local level the Integrated Development Plans (IDPs), have also followed a similar trend.

3.6 Risks and opportunities of economic trends

³⁷ Department of Trade and Industry, 2007.

³⁸ Department of Trade and Industry, 2007.

From a sustainability perspective, economic policy-making faces the following key **risks**:

- In a developing economy like ours, rising household consumption for the majority of South African households must be – and is – a key concern for Government. However, if economic growth relies too heavily on household consumption of the expanding middle and upper classes as a primary driver of growth, especially if this is underpinned by rising debt, then it can be economically unsustainable over the longer-term. It can also be socially unsustainable because while some households enjoy substantially higher consumption levels, this does not apply to the majority. 20% of households at the poorest end of the spectrum may be experiencing material improvements (in particular since 2001), but they also experience relative deprivation as the inequalities between the poorest and richest 20% are exacerbated by what the Macro-Social Report refers to as South Africa’s “market-based highly competitive social system” that fosters – according to this report - the gradual replacement of racial self-identification with class self-identification. Where production systems are energy intensive and waste recycling largely non-existent as is the case in South Africa, then rising household consumption correlates with rising resource consumption and waste – this avoidable correlation is therefore also ecologically unsustainable and financially wasteful.
- State-led infrastructure investments as the catalyst for increasing total investment levels to 25% of GDP could exacerbate unsustainable resource use if technical specifications that guide the detailed design of physical structures are not brought into line with international best practice. This applies in particular to improving the levels of energy efficiency, waste reduction, improved water use, urban densification rather than further low density sprawl, and a transition to transportation systems that are less dependent on fossil fuels and on the use of privately owned vehicles for passenger transportation. Moving freight from road to rail is an important mechanism to achieve improved transportation efficiency.
- Spatial planning via the NSDP, Provincial Growth and Development Strategies and IDPs will need to gradually integrate sustainable resource use criteria. This will help prevent the marginalisation of rural development and it will foster the evolution of more sustainable towns and cities.
- Sectoral intervention policies and strategies will gradually be linked to what Chinese Economic Policy makers refer to as the “circular economy”, namely “cleaner production and consumption” systems whereby, for example, waste outputs are regarded as productive inputs, efficient resource use is prioritised, and renewable energy gets built into industry’s energy planning – quite a number of industries are already doing this voluntarily because it makes financial sense.
- The new emphasis on agriculture as an employment generator and the re-prioritisation of land reform is directly threatened by the unrecognised degradation of our soils and the negative impact of the over-use of oil-derived chemical inputs, erosion and inappropriate irrigation policies.

The following **opportunities** arise from the analysis taking into account sustainability perspectives:

- The most significant opportunity is the inclusion of sustainable resource use criteria into the specifications that will guide the nearly R400 billion worth of investments in infrastructure over the coming years. Instead of designing infrastructures that many governments elsewhere are trying to dismantle, state-led infrastructure investments to catalyse private investments could trigger a massive fundamental shift away from unsustainable resource use approaches. For example, investments in sewerage treatment capacity could emphasize new ecological approaches such as biogas digestion; instead of investing in pro-private car transport systems invest in public transportation; structures such as dams and harbours and public buildings could have in-built energy efficiency and renewable energy systems; and the definition of infrastructure could include investments in wind power or the direct subsidisation of a million solar roof tops (which is happening in California, Japan and China). All these measures improve household consumption and infrastructure provision while saving money due to more efficient use of resources via technology innovation.
- The immediate need to prevent rolling blackouts as supply outstrips peak demand could translate directly into investments in internationally proven wind, solar, biofuels, mini-hydro, hydrogen and biomass energy strategies, starting with specific local projects that feed energy directly into the grid. A precondition for this would be the implementation of a 'feed-in tariff'. Policy work within the Department of Minerals and Energy is ongoing with respect to a 'feed-in tariff'.
- As soil degradation becomes an increasing obstacle to growth in the agricultural sector, there is an opportunity to develop a national capacity in soils analysis coupled to investment in know-how (e.g. organic farming, bio-dynamic farming and bio-mimicry) that could result in reduced dependency on oil-based and expensive chemical inputs.
- Fiscal expenditures on social and economic services must clearly continue their upward trend, but partnerships with communities to ensure effective capture and developmental use of these resources will be necessary. The 2006 Eradication of Slums Conference organised by the Department of Housing and the Federation of the Urban Poor (FEDUP) sets the example by demonstrating that it is viable for the state to work directly with organised communities to fund community-driven development projects – in this case, the Minister pledged R185 million in direct transfers to local community trusts. In particular, fiscal expenditures should contribute to the capacity of poorer households to effectively engage in a wider set of entrepreneurial activities that improve household incomes. Extending credit through various means, with a special focus on women's savings groups, is clearly a major opportunity and is already promoted by various government strategies.
- Science and technology investments need to take into account the need for greater funding for technology improvements that can both improve sustainable resource use and contribute to poverty eradication.
- Biodiversity conservation must continue to be a key focus, not least because this is a resource that the growing tourist economy and many rural communities depend on. The economic value of eco-systems and natural resources must be recognised, including the development of a method for future valuation of these services. However, non-tourist related resources need greater attention, such as marine resources and fresh water supplies. Biodiversity is not just a 'green policy' issue; rather, it should be a focus of our economic policy, including through measures that serve to increase demand for eco-friendly goods and

services, thereby reducing prices and making them popular and affordable. An example might be small-scale localised biomass energy strategies that increase the usage of local resources and minimize the outward flow of cash from local economies.

3.7 Summary analysis of economic trends

It is clear that economic policy making will need to factor in two fundamental threats to the commitment to a high growth rate, which should be viewed as only one element of a wider notion of qualitative development. Firstly, the negative impact that persistent poverty and inequality will have on development when the existing relatively small number of households start reaching their consumption limits as debt levels and higher interest rates kick in. Reductions in inequality and poverty have direct economic development benefits as markets for mass goods enlarge. Secondly, the underlying depletion of natural resources through unsustainable energy uses, rising waste levels, soil degradation, water scarcities and poor air quality will clearly undermine the capacity for sustained economic growth if it is all 'business as usual'. It is noteworthy therefore that in his 2008 State of the Nation address, President Mbeki therefore called for "business unusual", and that in the same year, the Budget speech reflected for the first time specific work being done on budget measures which will support sustainable development.

4 Social trends

4.1 Major social trends

The Millennium Development Goals Mid-Term Country Report (September 2007), by the government's social development cluster reports on progress made in achieving the Millennium Development Goals (MDGs). This report builds on the Macro-Social Report which suggested that South Africa is a society in dynamic change, both materially and spiritually. It also suggested that there is an improving sense of an over-arching identity and that there are increasing levels of social cohesion, measured in terms of unity, coherence, functionality and pride among South Africans.

A survey conducted by the Government Communication and Information System (GCIS) shows that 90% of our population is proud of our country, our flag and National Anthem, while 60% consider Freedom Day, April 27th, as the most important national day.

The Macro-Social Report concluded that the quality of life of the majority of South African citizens has improved. However, there are significant challenges related to economic marginalisation, the impact of the HIV and AIDS pandemic, endemic urban and rural poverty, and natural resource depletion (soils, fisheries, water quality) which need to be tackled to maintain and strengthen the positive developments.

Notwithstanding South Africa's focus on accelerated and shared growth, and job creation programmes, the social wage plays a vital role in our continuing efforts to address the challenge of poverty. As noted in the 2008 Budget Speech, 7 million children now receive the child support grant, and just less than 12 million citizens receive social grants.

Given these social trends, activities identified to deal with the social challenges set out in the Macro-Social Report and other sources include: building a people's contract in all social activity; speeding up programmes of transformation, especially job creation; encouraging social solidarity and the role of the community and the family unit in improving social cohesion; dedicated programmes to address youth aspirations; intensification of the programme to build a non-racial and non-sexist society; and steps to promote multilingualism.

Changes in Household access to Basic Services by poverty group, 1995 and 2000				
		Percentage of households with access within each poverty group*		
Basic Service	Year	Less than US\$1/day (household per capita expenditure)*	Less than US\$2/day (household per capita expenditure)*	All households
Public electricity	1995	20	26	60
	2000	31	42	70
Piped water	1995	45	52	76
	2000	48	59	82
Sanitation facility	1995	57	68	85
	2000	57	67	85
Telecommunications	1995	1	3	26
	2000	5	10	36

Source: 'A Poverty Profile of South Africa between 1995 and 2000', Statistics South Africa (based on the 1995 and 2000 Income and Expenditure Surveys, 1995 October Household Survey and the September 2000 Labour Force Survey). Poverty groups are categorized as households with per capita expenditure of less than (Purchasing Power Parity Equivalents) PPP US\$1/day or PPP US\$2/day.

The following four major social trends characterised the first decade of democracy:

- The number of households has been growing considerably faster (30% for the period 1996-2001) than the rate of population growth (11% for same period). This implies that the servicing obligations of the state grew faster than the initial estimates, which were linked to projected population growth rates and not the growth in the number of households.
- While the actual number of new jobs created annually rises steadily, the combined impact of the labour force participation rate within a society that comprises a large proportion of young people and the ongoing loss of jobs in traditional industrial sectors (e.g. textiles) prevents unemployment levels from dropping significantly.
- The changing structure of the economy, with many more jobs now available or potentially available in the service sectors of the economy than in traditional sectors like agriculture, mining and construction, requires a labour force with different skills to those available to the bulk of the unemployed labour force.

- There has been rapid migration into the urban areas, as well as shifts in the demographic distribution and profile of the urban population. Rural-urban migration, in particular, is rapidly changing demographic profiles and service delivery targets in cities like Cape Town, Port Elizabeth and Durban. However, rural-urban migration is transforming the smaller towns that are least equipped to handle the new challenges.

The implementation of special crime combating and security initiatives has been identified as an Apex priority. This would include initiatives to (i) revamp the criminal justice system; (ii) have police stations identify and focus on two/three serious crimes in their precinct, the combating and prevention of which would impact on other crimes, including crimes against women and children; and (iii) intensifying action on organised crime and corruption. The 2008 Budget speech recognised the importance of addressing crime effectively by noting that over the next three years, resources going to the SAP is set to rise by 34% from R33 billion in 2006/07 to R44 billion in 2009/10. In addition, while the budget for the Department of Justice increased by 41% in the past three years, and will rise by a further 52% over the next three years.

4.2 Progress in meeting the Millennium Development Goals

The Millennium Development Goals are eight goals that address the world's main developmental challenges. They were agreed to by world countries and leading developmental institutions in September 2000 and it is envisaged that they are to be achieved by the year 2015. They are drawn from the actions and targets that are contained in the Millennium Declaration that was adopted during the United Nations Millennium Summit. The goals are significant in that they recognize the interdependence between growth, poverty reduction and sustainable development. The goals include the development of a global partnership for development as well as ensuring environmental sustainability.

Table: Millennium Development Goals and Targets

Goal	Target	Responsibility
Goal 1 Eradicate extreme poverty and hunger	<p>Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day</p> <p>Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger</p>	<p>Department of Labour; all organs of state indirectly responsible</p> <p>Departments of Agriculture, and of Social Development; relevant provincial departments</p>
Goal 2 Achieve universal primary education	<p>Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</p>	National and provincial departments of Education
Goal 3 Promote gender equality and empower women	<p>Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015</p>	National and provincial departments of Education

Goal	Target	Responsibility
Goal 4	Reduce child mortality Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	National and provincial departments of Health
Goal 5	Improve maternal health Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	National and provincial departments of Health
Goal 6	Combat HIV/AIDS, malaria, and other diseases Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	National and provincial departments of Health National and provincial departments of Health
Goal 7	Ensure environmental sustainability Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers	All national and provincial departments, municipalities and other organs of state Department of Water Affairs and Forestry; municipalities National and provincial departments of Housing; Department of Provincial and Local Government: provincial departments of local government; municipalities

Goal	Target	Responsibility
Goal 8 Develop a global partnership for development	Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development, and poverty reduction—both nationally and internationally)	National Treasury; Department of Trade and Industry
	Target 13: Address the special needs of the least developed countries (includes tariff- and quota-free access for exports enhanced program of debt relief for HIPC and cancellation of official bilateral debt, and more generous ODA for countries committed to poverty reduction)	National Treasury; Department of Trade and Industry, and of Foreign Affairs
	Target 14: Address the special needs of landlocked countries and small island developing states (through the Program of Action for the Sustainable Development of Small Island Developing States and 22nd General Assembly provisions)	
	Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	National Treasury; Department of Trade and Industry, and of Foreign Affairs
	Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth	Departments of Labour, Social Development and relevant provincial departments
	Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries	Departments of Trade and Industry and of Health
Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	Departments of Science and technology, Government Communications	

Source: United Nations General Assembly (2000)

South Africa has committed to achieving the targets set out in the UN's Millennium Development Goals, which include amongst others, halving unemployment and poverty by 2014. The full set of MDGs is reflected in the Table above.

Using the Millennium Development Goals to assess our levels of social development, the core trends suggest we continue to face challenges over the coming decade³⁹:

- Halve the proportion of people living in poverty: South Africa's approach to poverty eradication is premised on the need for an integrated approach that includes social security grants, free access to basic services, free basic education, local economic development, and sustainable job creation. According to the Mid-Term Country Report, there are significant signs that the number of people living in poverty is starting to shrink. Using the Poverty

³⁹ This assessment is based on the contents of the South African Millennium Development Goals Mid-Term Country Report (2007).

Head Count Index as the base, the percentage of the population living on less than R3000 p.a. has dropped from 51,7% in 1995 to 43,2% in 2006.

- Halve the proportion of people who suffer from hunger: Interventions have included school feeding schemes, community gardens, and food parcels for the destitute. Using malnutrition amongst children as an indicator, evidence suggests that progress is being made, as the number of 5 year old suffering from severe malnutrition has dropped from 88 971 in 2001 to 30 082 in 2005. Many government agencies and NGOs are building up the capacity and resources required to meet the challenge.
- Access to primary schooling: Apart from basic access, the government has committed to a programme to improve all the physical conditions of primary schools, including elimination of open veld schools. There are positive enrolment trends, but many schools require improved infrastructure. According to the Mid-Term Country Report, in 2002, 96.72% of all children were enrolled in education institutions. This percentage increased to 98.16 in 2006.
- Eliminate gender inequalities with respect to access to education: Trends in this regard are very positive, with the ratio of girls enrolled at secondary and tertiary level being greater than that of boys. There are programmes aimed at targeting skills development for women in the ABET sector, higher education sectors, and through learnerships and specific programmes for women in science and technology.
- Reduce the child mortality rate: Immunisation coverage has increased from 78% to 83% between 2002 and 2006. The early childhood mortality rate in South Africa has also been decreasing in recent years, but there is still much to be done to achieve the MDG target.
- Reduce maternal mortality rate: Similarly, while our maternal mortality rate remains high, considerable interventions have been made to reduce this number.
- Halve and reverse the spread of HIV and AIDS: The disease continues to spread at high rates despite commencement of various education and treatment campaigns. Some inroads are being made to lower the spread of HIV and AIDS, the Mid-Term Country Report noting that national prevalence rates did drop from 30.2% to 29.1% between 2005 and 2006. A Comprehensive Plan for HIV and AIDS, as well as the intersectoral Strategic Plan for HIV and AIDS for 2007 to 2011 have been put in place by Government to respond to this challenge.
- Halve and reverse incidence of malaria and TB: South Africa is one of the few Sub-Saharan countries that will meet the target⁴⁰. Challenges include treatment completion for TB and Malaria vector control, particularly given that climate change is expected to lead to an increased spread of malaria. The advent of extreme drug resistant TB in 2006 has posed another serious challenge.
- Halve the proportion of people without access to safe drinking water and sanitation: Access to safe water is on the increase at more than 84%, but access to safe sanitation is still around 71%, although improving each year. Strategies and programmes are being developed to integrate sanitation provision into new human settlement and rural development strategies.

⁴⁰ The Mid-Term Country Report indicates that Malaria cases in South Africa dropped from 51 444 in 1999 to 7 755 in 2006.

- Eradication of informal settlements: According to the Marco-Social Report, shrinking household sizes has resulted in an increase in the percentage of people living in informal settlements despite the construction of 1,7 million homes. Between 1995 and 2000, the number of people in deciles 1 and 2 of the population that gained access to formal housing increased by 42% and 34% respectively. For the same period, the percentage of poor households with a supply of electricity increased from 34,9% to 58,4%, water supply increased from 59,3% to 77,2%, access to telecommunications increased from 5,9% to 16,1%. Access to sanitation, however, declined from 74,6% to 71,7%.
- Reduction in youth unemployment: Improvement is slow despite numerous programmes. South Africa has released its first draft of the Youth Enterprise Strategy and the Joint Initiative on Priority Skills Acquisition (JIPSA) identifies youth employment creation as an area needing intervention. However, the Macro-Social Report suggested that overall there is evidence that unemployment has started to drop since 2001, from 34,9% amongst Africans to 31,5% in 2005.
- The Macro-Social Report made it clear that the programmes that have the greatest positive impact on poor households are school education, access to water, cash transfers, and access to health care. It is noteworthy that two of these – access to water and health – are directly dependent on effective eco-system management.

4.3 Summary analysis of social trends

Analysis of key social trends indicates that while we have made good progress on some fronts, we should take advantage of the current positive trends and escalate and focus actions to achieve the Millennium Development Goals. Positive trends include access to primary schooling and eliminating gender inequalities linked to access to education. The maternal mortality rate is reducing and many additional people have access to water. However, serious challenges over the next decade include making a much more significant impact on poverty and on HIV and AIDS, malaria and TB, all of which continue to spread at high rates; and the need to do more to reduce hunger and high levels of child mortality. We also need to continue to improve access to sanitation in a concerted fashion, and to reduce the percentage of people living in informal settlements. Tackling unemployment amongst the youth remains a pressing priority.

5. Governance Trends

5.1 Trends in government

With the transition to democracy in April 1994 came a paradigm shift in values underpinning South African society. These are encapsulated in the founding democratic values of human dignity, equality and freedom, as well as a rights-based approach underpinned by accountability and transparency in governance, as set out in the 1996 Constitution.

The paradigm shift introduced after 1994 resulted in the concept of sustainable development and principles of cooperative governance becoming entrenched in our Constitution and underpinning much of our legislation. Sustainability lies at the core of many of the socio-economic rights to shelter, clean water and health care, contained in the Bill of Rights in the South African Constitution (1996). This concept and that of intergenerational equity also underpins the right to

an environment that is not harmful to human health and well-being and is protected for the benefit of future generations⁴¹. Government has a constitutional duty to respect, promote and fulfil these rights and to ensure that reasonable measures are in place that: "... prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development." Government therefore has a legal duty to act as a responsible custodian of the nation's environment. The Constitution specifically places a duty on municipalities to discharge their obligations of service provision to local communities in a manner that is sustainable and promotes a safe and healthy environment.⁴² A host of legislation regulating the use and management of resources such as water, land, air and biodiversity, as well as the delivery of infrastructure and services to local communities have been promulgated with this Constitutional imperative uppermost in mind. Examples of these laws are the National Environmental Management Act and the suite of environmental Acts promulgated under it subsequently, the National Water Act, Water Services Act, National Forests Act and the Veld and Forest Fires Act.

The principle that different organs of state and spheres of government must co-operate is captured in chapter 3 of the Constitution. This chapter defines the nature of cooperative governance, inter-governmental relations, obliges organs of state to assist and support one another, and provides for structures to facilitate intergovernmental relations and resolve conflicts. Chapter 6 of the Constitution regulates provincial government, its powers and the manner in which provincial government must operate. The developmental duties, powers and functions of local government is spelt out in Chapter 7. The Intergovernmental Relations Framework Act is mandated by the Constitutional imperative of cooperative governance. This Act establishes a framework for national, provincial and local government to promote and facilitate intergovernmental relations and provides for mechanisms and procedures to facilitate the settlement of intergovernmental disputes.

A far-reaching process of institutional transformation to promote non-racialism and effective governance accompanied the complete re-writing of almost all policy and legislation in South Africa that took place in the first decade since the 1994 elections. Governance systems at all levels have undergone profound changes away from the inequities and fragmentation of apartheid towards co-operative systems that promote participation and integration.

Cooperative governance is a key organising principle to ensure that the legacy of racially fragmented governance is overcome. The result is the establishment of a range of cooperative governance institutions including the President's Co-ordinating Council (PCC) comprising the President, Minister of Provincial and Local Government, and the nine Premiers; the Ministerial Clusters; the Forum of South African Directors-General (FOSAD); Ministerial fora known as "MINMECs" to coordinate actions at National and Provincial Levels; plus a wide range of special purpose coordinating fora and mechanisms.

The Ministerial Clusters are an important component of South Africa's policy-making process, and comprise groups of Ministers clustered around specific themes, i.e. Social Policy, Economic Policy, Security and Justice, etc. The Committee for Environmental Coordination that was set up in terms of NEMA is supposed to ensure cross-departmental coordination on environmental policy issues.

⁴¹ Section 24 of the Constitution of the Republic of South Africa, 1996

⁴² Section 152(1)

Similarly, while South Africa has a range of special institutions for supporting democracy, including the Public Protector, the Human Rights Commission, the Commission for Gender Equality and the Auditor General, there is as yet no specific high-level mechanism to coordinate and ensure implementation of the Constitutional commitment to sustainable development.

Sophisticated performance management systems have been introduced and a raft of public financial management laws and regulations implemented to streamline and rationalise the state system. However, by 2005 it was acknowledged that the state was facing capacity challenges in realising many key objectives. Indeed, state capacity was defined as a 'binding constraint' in ASGI-SA. Project Consolidate was initiated by the President to assist in resolving the operational and delivery challenges facing Local Government. National level programmes initiated after 2001 to build the capacity required by a developmental state include the revitalisation of the Batho Pele (People First) programme to build a culture of service; the establishment of the National Anti-Corruption Forum (NACF); the launch in 2002 of the Human Resource Development Strategy to promote skills development and training across the board; and the establishment of the Centre for Public Service Innovation. All of this suggests that there are networks of activity and expertise that span the entire government system, which are testing many different ways to integrate the coordination and management of government institutions. This ongoing process of trial and error contrasts significantly with government structures in most other parts of the world, which are characterised by rigid bureaucracies.

Thus considerable progress has been made to restructure state organisations and build governance capacity with respect to social policies (welfare, education and health), local governance, economic policy and environmental governance. However, there is concern that cross-departmental coordination and policy integration towards achieving sustainable development, across sectors, needs to be strengthened. This is driven both by strong vertical flows of information within particular sectors with weak flows across sectors.

5.2 Using technology to improve government operations

A recent positive trend is the increasing use of technology to improve government operations. Government has accepted in principle that e-government should become a mainstream vehicle for service delivery and development in South Africa. This means that not only should more external public services be provided to the public online, but also that internal management services be upgraded to an electronic standard. This implies that internal government operations like problem identification, planning, budgeting, human resources management, policy design, implementation, monitoring and evaluation should all increasingly be undertaken electronically through integrated enterprise resource management approaches. This is not yet the practice, but the green light has been given to move in that direction.

These technological developments are linked to a positive trend towards integrating and synchronising government activities in different sectors, tiers and across staff functions like human resources, finance, operations, and strategic management. This will facilitate cooperative governance and a sustainability perspective in future. A more dedicated programme to establish integrated back office electronic resource management systems should be encouraged in government. This is formally the responsibility of the Department of Public Services and Administration. The Treasury has taken up this programme and an inter-departmental working group has been established.

5.3 Provincial and local government trends

The implementation capacity of the state has systematically been devolved from national to provincial and local government levels since 1994. These increased functions have been transferred to these lower spheres of government, in many cases with weak accompanying resources to implement these functions effectively and efficiently. This has resulted in major implementation capacity constraints at these sub-national levels of government. At local government level, where there is real potential for embedding the developmental state via practices such as participatory budgeting and the People's Housing Process (PHP), much depends on capable staff with training in facilitation and community mobilisation. Under the auspices of the Social cluster, recognition has been made of a need to focus on "sustainable human settlements" which has been done through the creation of a task team. The Integrated Development Plans and Local Economic Development Plans at local level and the Provincial Growth and Development Strategies already provide working frameworks for integrated planning and strategy formulation. Lessons need to be learned and shared from positive initiatives, and there should be improved monitoring and synchronisation with this National Framework at national level. In particular, there is a need to ensure that the National Framework for Local Economic Development and the National Framework for Sustainable Development are connected and even integrated in order to make sure that the numerous local economic opportunities that flow from sustainable resource use activities are factored into LED strategies at the local level.

An important trend in the regulation of land use and development control has been the introduction of environmental impact assessments in 1997 to regulate activities that may have a detrimental effect on the environment. The functional competence in respect of authorising activities which require EIA's, is shared between DEAT and its provincial counterparts.

One of the main issues to arise from the IDP review undertaken in 2005, was that many municipalities blamed the lack of delivery on infrastructure, housing and services projects, and townships development, on delays experienced with EIA's. Whilst EIA's did lead to some delays, the issue is more complex than simply that of an inefficient regulatory regime. Time frames for processing EIA's are influenced by various factors. These include the complexity of issues being assessed; controversy surrounding the proposed development; the sensitivity of the receiving environment; pollution potential; quality and reliability of reports submitted to the authorities by consultants; poor management of public participation process; and capacity constraints within both provincial and municipal authorities. Despite the criticism of delays, EIA's have added value to decision-making on land use and the development of infrastructure. Their most important contribution has been in respect of mitigating impacts on resources such as underground water, air quality, and ecosystems (wetlands, sensitive biomes, landscapes).

The amended EIA regulation has addressed the issues of timeframes and has resulted in a much more streamlined process. The widening environment and sustainability agenda has since made EIA's become a far more inclusive process as is reflected in the NEMA definition of environment that incorporates the triple bottom line concept of economic, social and biophysical issues. EIA now includes issues like heritage and public health. In many ways this is a good thing, as it makes the EIA process more robust and complete and allows a single process to take account of almost a comprehensive suite of possible impacts from proposed developments. The decision and conditions that flow from the environmental authorisation ensure that all affected elements are awarded adequate protection while due consideration is upheld to view impacts holistically and

make sure incorporation of these new additional facets does not overshadow the assessment of impacts on the natural environment.

5.4 The relationship between state and society - civil society trends

NGOs and labour unions have played a central role in the transition to participatory democracy in South Africa, including a valuable contribution in all sectors, including human rights, adult education, skills training, health care, land reform, water and sanitation, small scale agriculture, small enterprises, organisational development, conservation, environmental health and environmental justice. This continues to this day. NGOs, CBOs and elected local government representatives remain a key link between “people on the ground” and government bureaucracy. It is generally accepted that there are approximately 100,000 non-profit organisations in South Africa spread out across all the major sectors. The largest sectors are the social, education and housing sectors. Altogether the non-profit sector employs more people than a number of key formal sectors (e.g. mining) and more people than the number employed by National Government Departments.⁴³ Significantly, 53% of these organisations are CBOs that are locally-based, informally structured and rooted in local communities across all sectors (in particular culture, sport, welfare, and housing).

It has been noted that since the 1994 transition in South Africa, the relationship between the state and civil society, while still complementary, has gradually become more confrontational and less complementary.

This is due to a number of factors, including the re-direction of donor funding to government, non-distribution or belated distribution of such funds, general lack of a coherent development vision and delays in developing a properly structured working relationship between NGOs and government at all levels, and major organisational challenges in many NGOs. Nevertheless, civil society, largely through a few established NGOs and CBOs, has played a watchdog role in monitoring the implementation of the regulatory framework for environmental rights, and some social movements continue to be on the forefront of both dialogue and confrontation with government on issues like HIV and AIDS, social security, and land reform.

While NGOs have continued to play a significant role in the post-apartheid era, that role has been marked by a lack of clear direction as NGOs are torn between working with and for government on the one hand and organising communities on the others. Increasingly, the policy involvement of NGOs has been reduced to reactive rather than proactive responses to policy discussions. Yet government often relies on civil society to carry out analytical and research work, in recognition that the sector has insights and experience.

Declining funding has meant many NGOs have been unable to survive and the sector is currently characterised by a lack of strong leadership at the grassroots level of CBOs, internal conflict and shortage of human and financial capacity amongst many service NGOs, exacerbated by the exodus of human capacity from NGOs to government and the private sector. While government is often frustrated by the lack of effective co-ordinating structures and a shared vision, civil society

⁴³ See Swilling, M and Russel, B. 2003. *The Size and Scope of the Non-Profit Sector in South Africa*. Durban: Centre for Civil Society, University of KwaZulu-Natal.

is by nature a highly diverse grouping – indeed, this diversity and plurality was supposed to be the basis for participatory democracy.

Labour has long been recognised as a major group in South Africa and is represented on a number of participatory forums, as well as being a major constituent of NEDLAC. Labour organisations play a central role in economic issues in South Africa, and also actively participate in action programmes on HIV and AIDS. Despite these initiatives, labour has generally been slow to embrace the concept of sustainable development and has maintained a more narrow focus on health and safety issues. Governance trends in business and industry

Corporate environmental governance has gained momentum and the first Socially Responsible Investment Index was launched on the Johannesburg Stock Exchange in 2004. However, most companies are still struggling to report on the environmental and social impact of their activities to the public. A growing number of companies now implement environmental management systems. Economic upliftment, social responsibility, and health and safety programmes are becoming more widespread, as are voluntary business-led initiatives aimed at addressing sustainable development and building partnerships with government. Examples include the application of the UN Global Compact approach advocated by BUSA⁴⁴ and the National Business Initiative (NBI). There is also scope to significantly expand the extent and quantity of so-called Type 2 Partnerships between business and government to implement sustainability initiatives.⁴⁵ The OECD Guidelines for Multinational Enterprise also provide an important framework for building partnerships with European investors.

The financial sector has taken steps to include sustainable development principles in banking policies and practices, through involvement in initiatives such as the Equator Principles⁴⁶, the Financial Services Charter, the Department of Trade and Industry's Codes of Good Practice and the World Bank Group's environmental and social Safeguard Policies. In spite of these positive shifts there is some friction between commercial banks and public funding institutions regarding the risks associated with funding. Public institutions appear able to accept higher risk, but the role of commercial banks in development partnerships is less clear. A co-ordinated approach by financial institutions (private and public) to finance sustainable development projects, especially those involving multiple stakeholders, is required. A number of initiatives, led mainly by the private sector and academic institutions, are strongly advocating for the integration of triple bottom line accountability into core business imperatives. This has included moves to revise South African company legislation to extend fiduciary duties to social and environmental issues.

Despite significant Corporate Social Investment (CSI) in South Africa, perceptions regarding the contribution of business and industry are mixed, depending on people's past, and whether they are impacted on by industry in their day-to-day lives. Given the capacity constraints of the public sector, and the need for shared responsibility for sustainable development, business has a greater role to play in social and economic development.

⁴⁴ Business Unity South Africa

⁴⁵ . Type 2 Partnerships are voluntary joint ventures between government, multilaterals and business.

⁴⁶ Only one bank has currently formerly adopted the Equator Principles.

5.6 Participation and partnerships

As a general trend, there has been substantial public participation in policy development since 1994, although participation has been uneven between sectors, but there has been less direct participation in decision-making and implementation.

Despite the enormous demands from all sides for consultative processes, the financial resources to support participation are limited. It is probable that funding for participation at local level, and particularly for acquiring researched opinion, for example for the development of IDPs, is a key barrier to effective integrated local development.

Equality with respect to participation of major groups has not yet been achieved in South Africa, where better-resourced groups such as industry and business are able to participate more meaningfully than the most disadvantaged sectors of society, including rural people, whether women, youth, indigenous peoples or farmers. Limited access to media and communications, low education levels and geographic isolation from the centres of government, and the constraints of time and money, preclude meaningful participation by much of society. To enable this will require a considerable transfer of resources and economic empowerment.

NEDLAC

The National Economic Development and Labour Advisory Council (NEDLAC) is South Africa's primary institution for social dialogue. It provides a forum for debate between government, organised business, organised labour and communities.⁴⁷ Despite allowing for community participation, and having "development" as a specific chamber, NEDLAC's primary focus to date has been on issues such as economic growth, job creation and labour relations. Sustainable development has not been on the agenda to the same extent.

5.7 Monitoring and evaluation trends

Monitoring and evaluation (M&E) are key areas requiring urgent attention at all levels, in order to improve the governance for sustainable development. The need for regular, systematic policy assessments in the public sector to measure progress towards good governance has been explicitly accepted in principle by the South African government. Lessons learnt from international best practice in measuring sustainable development should be applied in South Africa. Currently, various uncoordinated and overlapping cross-sectoral policy assessment initiatives exist in national departments and other agencies. They include the National Monitoring System of the Public Services Commission, the National Provincial and Local Government Monitoring and Evaluation System of the Department of Provincial and Local Government, the National Environmental Monitoring System of the Department of Environmental Affairs and Tourism and the National Statistics System of the StatsSA. While relatively few departments have specialised M&E units, most have introduced some kind of quantitative monitoring and many still rely on staff reports of varying quality. More effective co-ordination between the

⁴⁷ NEDLAC has four chambers, which deal with the labour market, trade and industry, public finance and monetary policy and development.

abovementioned initiatives and all other government departments and agencies is crucial. The goal should be to develop a systematic, integrated database that can serve as a knowledge repository available to all stakeholders, for policy assessment.

Towards meeting this goal, the development of a Government-wide M&E System (GWM&ES) has been initiated. This is an attempt by the public sector to monitor internal government performance and evaluate the nature of external outcomes and impacts on South African society. This system will monitor and coordinate progress with the implementation of government policies and improve effectiveness and efficiency in government operations by ensuring that strategic governmental policy goals are directly linked to departmental operational action plans and to the national budget. The Presidency has exercised control over and coordinated the design and implementation of the Ten Year Review. The objectives of good governance identified by the Presidential Review Commission in 1998 appear to be now formally adopted in principle by the Government's conclusions in its Ten Year Review. As part of the process to implement the NFSD, these objectives should be translated into a more comprehensive long term national vision linked to an internationally benchmarked indicator to measure the outcomes with sustainable development. The NFSD must build on (rather than duplicate) these systems when developing a system for monitoring progress towards sustainable development.

5.8 Information, reporting and indicators for sustainable development

Our progress on sustainability-oriented information and reporting includes developing over 25 state of the environment (SoE) reports in the last seven years, completing the second national State of Environment report, as well as SoE reports for the majority of the provinces and the largest cities (Cape Town, eThekweni, Johannesburg, Pretoria, Ekurhuleni). A growing number of local authorities have recently initiated SoE reports. Coupled to this, several sectoral status reports, such as the State of Rivers and State of Coasts reports have been released. While there is a range of mechanisms for reporting on sustainable development, these need to be rationalised and opportunities enhanced for participation by groups such as business, labour and civil society in these mechanisms.

Gaps in environmental data remain which impact on efforts to make better policy decisions. The latest national state of environment report had to rely on inventory data for greenhouse gases that are out of date. Critical indicators for which we have no adequate data include current land cover, fine-scale spatial information on habitat and land degradation, some aspects of water quality, air quality and carbon emissions. We also do not have reliable data on genetically modified organisms, human vulnerability, or groundwater use and recharge, and limited knowledge of some aspects of biodiversity.⁴⁸

Indicators of sustainable development need to measure changes in social, economic, environmental and institutional conditions in society over a relatively long period of time. These indicators should therefore not provide only static pictures of different sectors but should reflect the state of dynamic relationships among these sectors, which will affect longer-term integrated development outcomes in a positive or a negative manner. While much work has been done at the national level regarding the development of core set of environmental indicators, there is still the need for these to be comparable with a core set of economic and social indicators as

⁴⁸ *South Africa Environment Outlook 2005*, Department of Environmental Affairs and Tourism.

articulated in the GWM&ES. The goal is a coherent set of sustainability indicators that are broadly accepted and understood, and systematically monitored to track progress. They should be integrated into the GWM&ES's indicator, a key step to be undertaken when developing the Action Plan for the NFSD, as discussed in the *Making it Happen* Section. Where necessary, these indicators should be customised and applied to reflect the South African context at national, provincial and local levels, while still retaining their comparability with international initiatives such as the UN Commission on Sustainable Development, the UN Millennium Goals Initiative and the Millennium Ecosystem Assessment.

Private sector reporting for sustainable development

Two notable initiatives are the Socially Responsible Index (SRI) run by the JSE Securities Exchange and the Sustainability and Transformation Report prepared by the Chamber of Mines. Launched in May 2004, the SRI was the first index in an emerging economy that attempts to measure 'triple bottom line' performance of companies on FTSE/JSE All Share Index. The SRI is built on four pillars of sustainability: corporate governance, the economy, the environment, and society. Currently there are 49 companies listed on the SRI Index. The mining sector has recently developed its first Sustainability and Transformation Report for the South African Mining Industry based on both the reporting guidelines of the Global Reporting Initiative (GRI) as well as the Mining Charter scorecard.

5.9 Regional governance through the AU and NEPAD

South Africa and the African region are faced with multiple challenges in addressing sustainable development. Most notable are the extremely high levels of poverty, economic marginalisation and environmental degradation affecting the majority of the world's population, in the face of unprecedented economic growth and prosperity in the developed world. Recent efforts to define the policy for sustainable development at a regional level, including the New Partnership for Africa's Development (NEPAD), the Southern African Development Community's Vision and Regional Indicative Strategic Development Plan (RISDP), and the Commission for Africa have resulted in a considerable improvement in the policy for the continent.

By adopting the NEPAD, African leaders agreed, based on a common vision and a firm and shared conviction, that they have a pressing duty to eradicate poverty and to place their countries, both individually and collectively, on a path of sustainable growth and development, and at the same time to participate actively in the world economy and body politic. South Africa's vision for NEPAD continues to be to support and champion sustainable development through integrating natural resource, economic and social issues, with the aim of contributing to poverty eradication and sustainable growth and development in Africa.

In terms of our NFSD, institutional challenges with respect to NEPAD include maintaining the momentum of NEPAD within the government and to all sectors of South African society; improving coordination by determining a lead focal point whilst strengthening partnership amongst departments and exploring ways to involve local governments in NEPAD programmes; and ensuring coordination between tertiary institutions, stakeholders and government departments.

5.10 Summary analysis of governance trends

While governance is generally felt to be coherent, particular challenges for government relate to capacity and resource constraints at the local municipal level. At all levels, we need to enhance capacity for cross-sectoral coordination and transdisciplinary thinking, as well as the mechanisms for integrating environmental considerations into sectoral policy and activities. Monitoring and evaluation systems need to be consolidated and fine-tuned so that they can better measure progress towards sustainability.

There are positive private sector trends regarding building capacity for measuring the sustainability impacts of their businesses, but few independent monitors exist to adjudicate these claims. Civil society formations need to be strengthened so that they can match and contest what is happening in the private sector. All three sectors, however, require considerable education and awareness raising with respect to an understanding of sustainable development and the implications for policy making.