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The Challenge of Sustainable Development in South Africa:
Unlocking People's Creativity

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Overview

The Challenge of Sustainable Development in South Africa: Unlocking People's Creativity

The World Commission on Environment and Development (the Brundtland Commission) identified two issues as fundamentally important to sustainable development. First, overriding priority should be given to combating poverty and providing for the essential needs of the poor in society. Second, the state of technology and social organisations limits the capacity of the environment to meet present and future needs. These two factors signify that sustainable development has a bearing on intra-generational and intergenerational equity, and suggest that maintaining the integrity of a country's natural and social capital is fundamental. This concept of sustainable development reflects a paradigm shift that focuses more closely on the development process, a view that has emerged from the consensus building and consolidating process since the publication of the Brundtland Report in 1987. The concept is premised on the notion that human beings, irrespective of their demographic differences, are born with certain potential capabilities that need to be unlocked if they are to fulfil their aspirations.

The above concept of sustainable development is congruent with the conventional wisdom that economic growth expands the material base for the fulfilment of human needs. However, it emphasises the fact that the achievement of sustainable high growth rates and the eradication of high levels of poverty, inequality, environmental degradation and human deprivation (i.e. human development) depend on the *quality* of growth (growth that is pro-poor, pro-nature and pro-jobs).

The findings in this South African National Human Development Report 2003 indicate that the apartheid regime and its attendant socio-economic policies generated a growth path for the economy that was not based on improving the living conditions of the majority of South Africans, and thus became unsustainable. By exploring the quality of growth beyond the abundance of commodities produced, this report employs Sen's (1989, 1995) central concept of promoting human 'capabilities': that is, a society's standard of living must be assessed by its ability to harness the capabilities of its people to allow them to lead the lives they value. Similarly, access to goods and services becomes a way of enhancing human capabilities through health, knowledge, self-respect and the ability to participate actively in community life. This is the underlying reason for selecting the theme 'Unlocking People's Creativity' for the South African National Human Development Report 2003.

Since the formation of the Government of National Unity (GNU) in 1994, there have been significant strides towards the transformation of the lives of ordinary South Africans, particularly in respect of the provision and delivery of social services such as education, health, housing, personal security and social safety nets for the most vulnerable. A significant proportion of government annual expenditure continues to be devoted to these sectors of the economy. Yet, despite these efforts by government, poverty and inequality have increased.

Chapter 2 provides a summary discussion of trends in socio-economic development in South Africa.

The Human Development Index (HDI) for South Africa moved from 0.72 in 1990 to 0.73 in 1995 and declined to 0.67 in 2003. According to the 2003 Human Development Report, South Africa is ranked far below countries with comparable levels of economic performance (as measured by GDP per capita), such as Chile (ranked 43), Slovakia (ranked 39), Malaysia (ranked 58) and Mauritius (ranked 62). Moreover, major differences continue to exist between provincial Human Development Indices (HDIs) and the HDIs for different population groups. For example, the HDI in the Western Cape is 0.77 compared to HDIs of about 0.61 for the North West and Limpopo provinces. Even though the HDI for the African population has increased slightly since 1990, it has remained significantly lower than the HDI for the White population group.

For the first time, this National Human Development Report presents the Service Deprivation Index. This index has been especially developed for the case of South Africa in order to provide a more encompassing measure of the distribution of progress, and to measure the backlog of deprivation that still exists in several dimensions of basic services. The Index shows that the number of households that are considered deprived of access to 'good' quality basic services increased from 5.68 million to 7.24 million between the 1996 and 2001 censuses. Relative to the size of household population in 1996 and 2001, the percentage of population that is considered deprived of access to 'good' basic services has increased by 2 per cent, from 63 per cent to 65 per cent. The population of households that are not deprived of access to the above seven basic services has increased from 3.39 million (of 9.08 million households in 1996) to 3.96 million (of 11.2 million households in 2001).

Income distribution remains highly unequal and has deteriorated in recent years. This is reflected in the high Gini-coefficient, which rose from 0.596 in 1995 to 0.635 in 2001. Spatially, income inequality has deteriorated among urban households, while it has improved among non-urban households. Racially, there is a rising polarisation of income within all racial groups. However, the deterioration of income equality is more severe among African, Coloured and Indian households than among White households. Despite the unavailability of official household information on wealth distribution, information on land and home ownership, combined with information on company ownership, points to a particularly high concentration of wealth in the hands of a small minority group.

About 48.5 per cent of the South African population (21.9 million people) currently fall below the national poverty line. The Income and Expenditure Survey for 2000 shows that the share of African households in the bottom income quintile increased from 29 per cent to 33 per cent between 1995 and 2000, while their share of total households in the top income quintile declined from 8 per cent in 1995 to 5 per cent in 2000. On the other hand, the average income and expenditure of White households improved during this period. Their share of the bottom quintile declined from 2 to 1 per cent, and their share of households in the top quintile increased from 60 per cent in 1995 to 66 per cent in 2000.

Unemployment continues to rise unabated. While important strides have been made in overcoming the past inequalities in the labour market, employment opportunities remain inadequately low and are, therefore, unable to reverse or even slow the dominant trend of massive unemployment. Thus the economy provided only 11.56 million jobs for 16.81 million economically active South Africans in March 2003, resulting in 5.25 million unemployed, or an unemployment rate of 31.2 per cent. Between 1996 and 2002, the unemployment rate increased from 19.3 per cent to 30.5 per cent (strict definition) or from 33 per cent to 41.8 per cent (expanded definition). While unemployment growth reflects the long-term decline in the generation of employment since the 1960s, the supply of labour has continued to increase at a relatively steady rate, consistent with the annual population growth rate.

The above indices demonstrate the many challenges South Africa faces in terms of translating aggregate national economic affluence into a situation where the majority of South Africans can enjoy a decent standard of living, lead the lives they value, enhance their capabilities and unlock their creativity through health, knowledge and the ability to participate fully in community life. This report identifies five central challenges confronting South Africa's sustainable development prospects: the eradication of poverty and extreme income and wealth inequalities; the provision of access to quality and affordable basic services to all South Africans; the promotion of environmental sustainability; a sustained reduction in the unemployment rate, and the attainment of sustainable high growth rates.

Chapter 3 presents a summary of policy formulation and implementation issues since the early 1990s. The establishment of impressive political and institutional structures to respond to the above challenges implies recognition of significant problems of integration and coordination. At the same time, weaknesses in growth and development outcomes during the past nine years have kept the search for, and the debate on, an appropriate economic transformation policy framework alive and highly contested.

Poverty and inequality

In an effort to delve below the income poverty and inequality statistics that characterise the immediate post-apartheid South Africa, Chapter 4 analyses a number of proximate forces that have engendered poverty and inequality. These include highly skewed distribution of wealth, extremely steep earning inequality, weak access to basic services by the poor, unemployment and underemployment, low economic growth rates and the weakening employment generation capacity of the current growth path, environmental degradation, HIV/AIDS and an inadequate social security system.

Chapter 4 provides the foundation for understanding the sustainable development framework and brings into focus the complex links between the main challenges facing South Africa in this respect. The chapter concludes with a number of policy recommendations aimed at combating income poverty and inequality. These include establishing a comprehensive social safety net, increased support for land reform, and the need for a comprehensive response to the HIV/AIDS epidemic. Policy recommendations on combating poverty through expanded access to services, labour market measures, environmental policies and economic growth are outlined in subsequent chapters.

Chapter 4 also emphasises the importance of harnessing the participation of non-profit organisations, which are an important component in efforts to meet the challenges of poverty and inequality. From skills development and employment creation to mutual aid or the physical development of infrastructure and housing, these organisations assist marginalised communities in gaining access to resources through which standards of living can be improved. The impact of building social capital and fostering the empowerment of the individuals and communities involved in these organisations should not be underestimated. Indeed, the potential for communities to enhance the overall developmental initiatives in the country requires support if their full creative capacity is to be unleashed.

Access to social services

The challenge of providing equal and adequate access to social services stems not only from the needs of a great many South Africans who are poor (as measured by the service deprivation index), but also from the fact that access to these services has become precarious for a variety of reasons discussed in this report. Lack of access to basic services and the infra-structure necessary to sustain basic human capabilities is an indirect measure of human poverty. Inequality of access to social services (such as education) leads to a further widening of the gap between the capabilities and opportunities of social groups. Social development goals are helped or hindered by the quality of the planning, design and implementation of social services, as well as the information upon which they are predicated.

While acknowledging significant progress towards the goal of sustainable and affordable social services, Chapter 5 shows that far-reaching changes are still needed, mainly because important challenges confront reforms launched since 1994. In broad terms, the *conceptual adequacy* of some of the reforms is not entirely satisfactory. Furthermore, the *resource commitments* to support some of the social services reforms are not only inadequate; they are also poorly managed. Moreover, the *strategic actions* taken to implement the stated reforms are not always informed by the requirements of the long-term institutionalisation of change. The chapter also recognises that overcoming these technical challenges depends on confronting the political challenges facing service delivery. This includes the need for a strategic political intervention that focuses policies on the provision of coherent, comprehensive and sustained support for the objective of delivering sustainable access to quality and affordable social services for all.

An important question is how the various stakeholders can be engaged in enabling a sustainable future for South Africa. Although government is by far the largest investor in social services and infrastructure, the private sector, institutions and civil society are also significant role-players. Inferences are made at various stages of Chapter 5 about the ways in which government and these other groups can interact more effectively in the sustainable delivery of social services and infrastructure.

The Report argues that the South African economy continues to have at its disposal the resources and public structure to adopt a more aggressive approach towards the provision of support to the relevant service sectors. Such support must include the commitment of much greater financial and human resources than is the case at present. This will provide the basis not only for the increased quantitative delivery of services, but also for significant improvement in the quality and affordability of those services. Current fiscal policy has resulted in under-investment in the expansion and quality of services and the maintenance of service infrastructure. Budget targets have been prioritised over the maintenance of important quantitative, qualitative and sustainability criteria and goals.

Long-term resource allocation to achieve the service delivery goals of sustainable development demands the reversal of some of these current approaches. Although the political strategy needs to see the integration of budgetary considerations in policy making, it needs at the same time to avoid policy making by budget – of allowing the budgetary framework to dominate other cross-cutting policy considerations.

The effectiveness of the political centre's high-level support for cross-cutting issues – including the proper reform of social services – depends on its ability to carry out a number of functions. These include: (a) providing a strategic overview of the full range of government policy activities; (b) providing decision-makers with a coordinated view of where new policy proposals stand in relation to existing policies and the government's overall objectives; (c) reducing the risk of policy conflicts by ensuring that all affected interests are involved at appropriate stages of political development; (d) ensuring that policy decisions, once made, are communicated to all players and implemented as intended by the decision-takers, and (e) nurturing collaborative working relations with and among all sectors of the administration.

Environment and sustainable development

A key theme in Chapter 6 relates to the complex relationships between the environment, inequality and economic development. South Africa inherited a devastating legacy of environmental degradation and poverty. The brutal features of apartheid – with forced removals, overcrowding in the so-called 'homelands', discriminatory urban policies and the migratory labour system – alienated people from their land and resources and contributed to inefficient resource flows, inequitable access to environmental services, unjust land-use practices and environmental degradation. The environments in which people were forced to live were extremely inhospitable. The natural assets needed to sustain livelihoods and generate economic development activities were undermined by corrupt land allocation and administration.

More generally, however, apartheid economic development was based on an unsustainable dependence on extractive activities, cheap electricity from coal power and old and/or inefficient use of capital stock. The vicious circle created by these factors has left a devastating legacy of unsustainable development and environmental havoc. Similarly, agricultural production has been resource intensive and environmentally degrading as a result of various policies, such as the use of subsidies for chemicals and fuel, access to cheap water for irrigation (resulting in soil degradation, pollution of waterways and underground water sources), the loss of biodiversity and the inefficient use of scarce resources.

Like other developing countries, South Africa faces the considerable challenge of achieving economic growth and poverty alleviation without environmental degradation. The delivery of services, a fundamental goal of sustainable development, is critical to urban and rural black settlements. Access to water, energy, proper sanitation and waste removal not only diminishes health and environmental risks, but is critical to development. These needs were recognised in the Reconstruction and Development Programme (RDP) as part of a people-centred approach to development that embraced the importance of using resources sustainably to achieve socio-economic goals. Unfortunately, this view of the environment as integral to socio-economic goals was not preserved in the Growth, Employment, and Redistribution (GEAR) strategy, which carries an underlying assumption of a contradiction between environmental integrity and economic progress.

Other aspects of governance since 1994 support sustainable development in which the environment is given due consideration. The Constitution contains principles and clauses that support socio-economic goals, and the environmental clause in the Bill of Rights is linked to the provision of basic services. There are other possibilities for incorporating the environment into the development process. Examples of a people-centred, integrated and participatory approach to development within an ecological framework can be found in the framework legislation for environmental governance as well as other government development programmes. However, the relationship between socio-economic goals and the environment is not fully understood at all levels of government.

The explanation of challenges to environmental sustainability in Chapter 6 leads to a number of recommendations, among them the 'mainstreaming' of environmental and biodiversity considerations through the employment of a broad array of approaches and tools. These include raising awareness, capacity-building, garnering political commitment and the reflection of environmental considerations in sectoral budgets; promoting sustainable livelihoods and generating economic opportunities through the clarification of land ownership and resource rights, particularly in the communal areas; strengthening institutions and developing environmental capacity enhancement programmes; shifting accounting procedures so that the real costs of degradation are included in expenditure decisions, and embracing the principles of co-management in order to devolve power and management responsibilities to resource users.

Sustainable development and the labour market

Three important causes of poverty amongst the poor in the labour force are unemployment, under-employment and low earnings from labour. Therefore, a successful sustainable development strategy is inexorably linked to the country's employment generation strategy. This must encompass a substantial reduction in the present high rates of unemployment and under-employment and an improvement in the earnings of workers.

Chapter 7 examines the relationship between sustainable development and the labour market with the aim of identifying the strategies and policy direction required. The exclusion, or marginal inclusion, of large segments of the potentially economically active population is an historic feature of apartheid development. Primary forms of production in mining and agriculture as enclave sectors, and an inward-looking industrialisation strategy, emphasised large-scale and capital-intensive forms of production.

Since 1994, the combined effect of trend increases in labour productivity and the use of capital goods relative to labour have exerted significant negative effects on employment. Moreover, the gap between the economic growth rate and the growth of employment has been increasing, so that economic growth gradually creates fewer jobs over time. At the same time, the weak correspondence between the structure of new employment opportunities and the structure of capabilities within the labour force diminish the poverty effect of employment. The primary challenge for sustainable development in South Africa is thus to reorient the economy so that it becomes labour absorbing through job creation at levels and of a quality that lead to equitable and inclusive development.

Chapter 7 makes recommendations on specific employment policies aimed at raising both the employment intensity of growth (production) and the integrability of the unemployed in the country's growth process. These include policies to increase the labour intensity of production, such as the withdrawal of explicit or implicit subsidies which favour capital-intensive and/or large-scale enterprises; sector-specific strategies aimed at promoting labour absorption; policies to reduce the cost of living; the extension of the Labour Relations Act to the informal economy; the promotion of micro-enterprises, and the extension of social protection mechanisms to those who work informally.

Sustainable development and economic growth

The growth path of the South African economy remains a central theme in the ongoing transformation debate in South Africa. The focus of the last substantive chapter of this report is on the quantitative and qualitative dimensions of growth and their synergy.

The apartheid-era dual strategy of export promotion in the mining sector to support an industrial strategy based on import-substitution within a protective environment is gradually being succeeded by a new strategy of import-dependent and export-oriented industrialisation evolving within an increasingly open market environment. This new growth strategy is supported by a host of policy interventions. These have been analysed in more detail in Chapter 8.

Neither past nor present growth strategies were articulated from the perspective and requirements of a pro-poor growth strategy. While the apartheid-era macroeconomic structure and policies were blatantly anti-poor, the overriding objective of the present strategy is growth based on an implicit assumption that job creation will result naturally from a strategy that produces economic growth.

Other parallel initiatives have been 'added on' to the above core reform in order to respond to the developmental needs of the country. However, despite their contributions, it has become evident that the enormity of the developmental challenges facing the country cannot be satisfactorily addressed by using a 'two-track' approach. Growth on the one track is not pro-poor while, on the other, social development (that is, social services, welfare programmes and support for the small, medium and micro enterprises (SMME) sector) is assigned the burden of addressing poverty and unemployment directly. In practice, the two tracks hardly ever converge, mainly because some elements of the core economic reform and outcomes (e.g. high interest rate, cuts in the budget, low investment) dominate and condition the scope of success for the majority of parallel reforms.

Therefore, the macroeconomic structure of the country (i.e. the underlying social and institutional relationships and arrangements between the parts or elements of the economy), together with the policy framework (i.e. the essential supporting public policy structure for the evolution of the macroeconomic structure) dominates economic outcomes in terms of investment, growth, employment and distribution.

The reorientation of the economy, discussed earlier, depends, among other things, on the ability to achieve and sustain high growth rates that simultaneously reduce unemployment, poverty and income and wealth inequality, while improving environmental sustainability and macroeconomic balances. The Report provides an analytical framework that captures the above requirements of a sustainable development process within an integrated and consistent system of relationships between factors that influence the main sustainable development challenges facing South Africa. An important feature of the approach is that it provides measurable criteria to assess whether the overall working of the economy, and not just policies, begin to become pro-poor.

The success of the strategy depends on bold reform initiatives by the government, a positive private sector response to new measures, and support from labour and other civil society organisations. The required initiatives include, first, the adoption of a proactive growth-oriented macroeconomic policy framework. This includes changes in the current aims and utilisation of fiscal and monetary policy tools to ensure that they promote growth, redistribution, poverty reduction and the creation of employment. The second initiative involves the adoption of specific measures to make productivity growth and investment more profitable. This includes firm-level changes that help resolve the difficult relationship between owners and workers, and enhancing the profitability of the private sector by incorporating the critical role of public capital goods and services in private sector production. The third initiative involves the adoption of policies that help increase total investment through higher levels of public investment and/or by policies that induce higher levels of private sector investment. This includes the development of an incentive system that rewards investment by businesses whose activities reflect support for a more broadly based transformation of ownership, improved income distribution and reduced unemployment.

* * * * * * *

The 2003 National Human Development Report presents a set of promising policy options for promoting sustainable development in South Africa. The fact that the recommendations of this report require changes in the current thinking and interventions by the government, the private sector and some civil society organisations underscores the challenging opportunities before us and the scale of political mobilisation that will be needed to realise those opportunities. An important goal of this report is to make a contribution informing the dialogue that will lead to the unlocking of such a process.

Foreword

The third National Human Development Report for South Africa, *The Challenge of Sustainable Development in South Africa*, comes at an important time. In the aftermath of the 2002 World Summit on Sustainable Development, it is the first comprehensive assessment of sustainable development in post-apartheid South Africa. Its aim is to review the progress and setbacks experienced over the past ten years, to identify the main challenges to sustainable development and to offer possible options to address them.

In 1994, the new government made firm commitments to an integrated and sustainable programme of transformation. These were expressed through the Reconstruction and Development Programme (RDP). Its focus was: a people-driven process, peace and security for all, nation building, the linking of reconstruction and development, and the democratisation of the country. Despite these welcome and consistent sustainable development commitments and impressive achievements in several aspects of its ambitious transformation programme, South Africa's development outcomes remain uneven and weak, particularly in the area of pro-poor economic transformation.

Based on literature on the sustainable development framework and relevant trends in socio-economic development and policy-making in South Africa, the Report has identified and analysed five central challenges facing sustainable development. These are the eradication of poverty and extreme income and wealth inequalities; the provision of access to quality and affordable basic services to all South Africans, especially the poor; the promotion of environmental sustainability; a sustained reduction in the unemployment rate, and the attainment of sustainable high growth rates.

The Challenge of Sustainable Development in South Africa has made a special effort to assess the effectiveness of a broad range of interventions in order to draw out the details of the government's strategy and policies for better outcomes.

One finding is clear: the five challenges for sustainable development in South Africa are highly inter-related, cutting across the sectoral responsibilities of government departments. In this context, it is neither an effective strategy nor an efficient use of resources to confine any of the five challenges to a set of small-scale targeted projects. There is a need for a more strategic approach that includes better coordination among government departments and the active participation of civil society and the private sector in a broadly accepted front to achieve sustainable development.

At the same time, overcoming sustainable development challenges in South Africa will depend on a fundamental restructuring of the economy, such that the mainstream of the economy, dominated by the working of the market economy and private sector activities, begins to produce consistent sustainable development outcomes. This requires – as this report argues – a successful reorientation of the economy, such that it becomes more inclusive (broad-based), equitable and sustainable over time. In this context, the Report makes it clear that the challenge of economic growth in South Africa is to achieve high quality growth rates.

The Report sets out a sustainable development strategy for South Africa. It builds on the fundamental commitment to transformation by South African leaders, on lessons from the working and outcomes of the country's economy and of market economies in general, and on its inherited inequalities and poverty. The strategy provides a broad framework for how the South African development process can be both better aligned and commensurate with the scale of its sustainable development challenges. The strategy puts responsibilities on bold reform initiatives by the government, a positive private sector response to new measures and support from labour and other civil society organisations. An important finding of this report is that shifting decision-making closer to communities and their organisations can improve the connection between sustainable development policies and outcomes.

The policy recommendations of this report provide measurable criteria to assess whether the overall working of the economy, and not just policies, begin to become pro-poor

The Report draws from a broad development literature to substantiate its analysis, findings and recommendations. The strategy seeks to highlight the key areas for intervention that should guide national efforts towards sustainable development. The point is to offer concrete ideas on how to ensure that sustainable development goals are matched by real plans that make these goals a reality. In a very real sense, the policy recommendations of this report provide measurable criteria to assess whether the overall working of the economy, and not just policies, begin to become pro-poor. It thus seeks to hold the country's stakeholders accountable for achieving sustainable development.

There are good technocratic reasons for adopting this approach. As this report clearly shows, sustainable development is achievable with the right policies and sufficient resources. However, the real prospect for sustainable development in South Africa also depends on confronting political challenges: that is, strategic political interventions that focus policies and support measures on achieving the goals of sustainable development.

Every South African National Human Development Report has been the result of a collective effort by a dedicated core team and a wide range of national expertise assembled for the project. This report is no exception. Moreover, as with previous reports, this is an independent analysis seeking to advance the debate on human development in South Africa, and not a formal statement of UN or UNDP policy. Nevertheless, as an outline of the central developmental challenges facing South Africa, we believe that it helps frame an ambitious agenda for South Africa in the months and years to come.

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UNDP, South Africa

The analysis and policy recommendations of this report do not necessarily reflect the views of the United Nations Development Programme, its Executive Board or its Member States. The Report is an independent publication commissioned by UNDP South Africa. It is the fruit of a collaborative effort by a team of eminent consultants and advisers. John Ohiorhenuan, the Resident Representative, led the effort.

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Acronyms

ANC	African National Congress
BEE	Black economic empowerment
BOP	Balance of payments
CMIP	Consolidated Municipal Infrastructure Programme
COSATU	Congress of South African Trade Unions
DALA	Department of Agriculture and Land Affairs
DP	Democratic Party
DPSA	Department of Public Service and Administration
DTI	Department of Trade and Industry
EIA	Environmental impact assessment
EIP	Environmental implementation plan
EMP	Environmental management plan
ESKOM	Electricity Supply Commission
ESTA	Extension of Security of Tenure Act of 1997 (ESTA)
FABCOS	Foundation for African Business and Consumer Services
GATT	General Agreement on Tariffs and Trade
GDI	Gender-related development index
GDP	Gross domestic product
GEAR	Growth, Employment, and Redistribution
GEM	Gender empowerment measure
GNU	Government of National Unity
HDI	Human development index
HPI	Human poverty index
HRD	Human resource development
IDP	Integrated development plan
IES	Income expenditure survey
ILO	International Labour Organisation
IMF	International Monetary Fund
ISRDP	Integrated Sustainable Rural Development Programme
IUCN	International Union for the Conservation of Nature
JSE	Johannesburg Securities Exchange
LBSC	Local business service centres
MDG	Millennium Development Goals
MERG	Macroeconomic Research Group
MTEF	Medium Term Expenditure Framework
NAFCOC	National African Federated Chamber of Commerce
NECC	National Education Coordinating Committee
NEDLAC	National Economic Development and Labour Council
NEMA	National Environmental Management Act of 1998
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organisation
NP	National Party
NPO	Non-profit organisation
NQF	National Qualifications Framework
OECD	Organisation for Economic Co-operation and Development
OHS	October household survey
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Papers
PSC	Project steering committee
RDP	Reconstruction and Development Programme
SACOB	South African Chamber of Business
SACP	South African Communist Party
SANCO	South African National Civics Organisation
SD	Sustainable development
SDI	Service deprivation index
SHD	Sustainable human development
SMME	Small, medium and micro enterprises
SRN	School Register of Needs
TB	Tuberculosis
UNDP	United Nations Development Programme
UNV	United Nations Volunteers
WEHAB	Water and sanitation, energy, health, agriculture and biodiversity
WSSD	World Summit on Sustainable Development

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Sustainable development

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Sustainable development

Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs

The concept of sustainable development gained prominence with the appearance in 1987 of the report of the World Commission on Environment and Development (the Brundtland Commission). The notion was further consolidated at the UN Conference on Environment and Development, held in Rio de Janeiro in 1992, and strongly asserted at the World Summit on Sustainable Development (WSSD), held in August 2002 in Johannesburg. In furtherance of the themes that were highlighted at the Rio Conference, the Johannesburg Summit reaffirmed a global commitment to sustainable development. It reinforced the idea of collective responsibility in advancing the interdependent and mutually reinforcing pillars of sustainable development – economic development, social development and environmental protection – at local, national, regional and global levels.

Also, building on other major UN conferences of the last ten years, the Johannesburg Summit provided an excellent platform for constructive engagement and partnership building, particularly on strategies to tackle poverty. An important distinguishing feature of the Summit was the multi-layered dialogue around the issues of water and sanitation, energy, health, agriculture and biodiversity as the concrete requirements for a sustainable development strategy. It was clear from the discussions, however, that while global solidarity is essential, the primary responsibility for translating the sustainable development agenda into action lies at the national and local levels. This report analyses the challenges of sustainable development in the specific context of South Africa.

THE SUSTAINABILITY OF DEVELOPMENT

The roots of the concept of sustainable development can be traced back to the writings of Mary Wollstonecraft (*A Vindication of the Rights of Women*) and Thomas Paine (*Rights of Men*), which both appeared in 1792. These writers were concerned with giving everyone power over their lives and opportunities to live according to their own values and aspirations. In modern literature, the concept emerged in the 'Limits to Growth' literature of the early 1970s, with the concern that planetary resources cannot accommodate indefinitely the high rates of economic, and particularly industrial, growth of the times. Towards the end of that decade, the International Union for the Conservation of Nature emerged as a strong advocate of sustainable development.[1] However, it was the Brundtland Commission that brought sustainable development to the fore of the development literature.

The Brundtland Report defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.[2] The Report identified two issues as fundamental to sustainable development. The first was the concept of needs – in particular, the essential needs of the poor to which overriding priority should be given. The second was the idea of limitations imposed by the state of technology and social organisations on the capacity of the environment to meet present and future needs.[3] In essence, therefore, two ideas are fundamental to sustainable development. The first is equity in both intra-generational and intergenerational terms. The second is the imperative of maintaining the integrity of a country's natural and social capital.[4]

Since the publication of the Brundtland report, a lively debate on aspects of sustainable development has emerged among researchers and policy makers. Beyond the initial emphasis on environmental sustainability, sustainable development is now fully accepted as multidimensional: encompassing economic, social, political, cultural and environmental dimensions. Perhaps the best example of this is Agenda 21, which was adopted at the Rio Summit.

The Agenda 21 blueprint for sustainable development emphasised the social and economic dimensions of poverty, consumption patterns, population growth, health and human settlement; the need for conservation, and proper management of all natural resources. It stressed, in addition to governments, the active participation of major groups such as women, children and youth, civil society organisations and business. It also addressed the necessary means of implementation.

Since the Rio Summit, a series of major UN conferences have resulted in the further elaboration of the different aspects of sustainable development.[5] In particular, the (Copenhagen) World Summit for Social Development in 1995 pledged to make the conquest of poverty, the goal of full employment and the fostering of a stable, safe and just society the overriding objectives of development policy (Box 1.1, p. 4). Five years later, at the so-called Copenhagen + 5, a joint UN, World Bank, International Monetary Fund (IMF) and Organisation of Economic Co-operation and Development (OECD) report was launched. Entitled 'A Better World for All', the report outlined what it called 'International Development Goals': seven interrelated development goals were drawn from the UN Conferences of the 1990s which, if achieved over the next fifteen years, would improve the lives of millions of people. The significance of the report arises from the fact that the donor community as a whole pledged itself to fostering sustainable growth that favours the poor, and to providing more resources for health, education, gender equality and environmentally sustainable development worldwide.

In September 2000, at the 55th General Assembly of the United Nations (or the Millennium Summit), the Millennium Declaration was adopted to strengthen peace, development and human rights, and to improve the UN's ability to act on behalf of human priorities. At the 56th Session of the General Assembly, 'Follow Up to the Outcome of the Millennium Summit', in September 2001, the Millennium Development Goals (MDGs) were adopted. Thus world leaders committed to eight goals, to be attained by 2015:

- eradicating extreme poverty and hunger;
- achieving universal primary education;
- promoting gender equality and empowering women;
- reducing child mortality;
- improving maternal health;
- combating HIV/AIDS, malaria and other diseases;
- ensuring environmental sustainability, and
- building a global partnership for development.

The International Conference on Financing for Development[6] marked a highly significant first step in translating the MDGs into action. Stressing mutual accountability between developed and developing countries, the outcome of the

Sustainable development is now fully accepted as multidimensional: encompassing economic, social, political, cultural and environmental dimensions

Box 1.1

Copenhagen Declaration on Social Development

Principles and goals

'We heads of State and Government are committed to a political, economic, ethical and spiritual vision for social development that is based on human dignity, human rights, equality, respect, peace, democracy, mutual responsibility and cooperation, and full respect for the various religious and ethical values and cultural backgrounds of people. Accordingly, we will give the highest priority in national, regional and international policies and actions to the promotion of social progress, justice and the betterment of the human condition, based on full participation by all.

To this end, we will create a framework for action to:

(a) Place people at the centre of development and direct our economies to meet human needs more effectively;

(b) Fulfil our responsibility for present and future generations by ensuring equity among generations and protecting the integrity and sustainable use of our environment;

(c) Recognize that, while social development is a national responsibility, it cannot be successfully achieved without the collective commitment and efforts of the international community;

(d) Integrate economic, cultural and social policies so that they become mutually supportive, and acknowledge the interdependence of public and private spheres of activity;

(e) Recognize that the achievement of sustained social development requires sound, broadly based economic policies;

(f) Promote democracy, human dignity, social justice and solidarity at the national, regional and international levels; ensure tolerance, non-violence, pluralism and non-discrimination, with full respect for diversity within and among societies;

(g) Promote the equitable distribution of income and greater access to resources through equity and equality of opportunity for all;

(h) Recognize the family as the basic unit of society, and acknowledge that it plays a key role in social development and as such should be strengthened, with attention to the rights, capabilities and responsibilities of its members. In different cultural, political and social systems various forms of family exist. It is entitled to receive comprehensive protection and support;

(i) Ensure that disadvantaged and vulnerable persons and groups are included in social development, and that society acknowledges and responds to the consequences of disability by securing the legal rights of the individual and by making the physical and social environment accessible;

(j) Promote universal respect for, and observance and protection of, all human rights and fundamental freedoms for all, including the right to development; promote the effective exercise of rights and the discharge of responsibilities at all levels of society; promote equality and equity between women and men; protect the rights of children and youth; and promote the strengthening of social integration and civil society;

(k) Reaffirm the right of self-determination of all peoples, in particular of peoples under colonial or other forms of alien domination or foreign occupation, and the importance of the effective realization of this right, as enunciated, inter alia, in the Vienna Declaration and Programme of Action* adopted at the World Conference on Human Rights;

(l) Support progress and security for people and communities whereby every member of society is enabled to satisfy his or her basic human needs and to realize his or her personal dignity, safety and creativity;

(m) Recognize and support indigenous people in their pursuit of economic and social development, with full respect for their identity, traditions, forms of social organization and cultural values;

(n) Underline the importance of transparent and accountable governance and administration in all public and private national and international institutions;

(o) Recognize that empowering people, particularly women, to strengthen their own capacities is a main objective of development and its principal resource. Empowerment requires the full participation of people in the formulation, implementation and evaluation of decisions determining the functioning and well-being of our societies;

(p) Assert the universality of social development and outline a new and strengthened approach to social development, with a renewed impetus for international cooperation and partnership;

(q) Improve the possibility of older persons achieving a better life;

(r) Recognize that the new information technologies and new approaches to access to and use of technologies by people living in poverty can help in fulfilling social development goals; and therefore recognize the need to facilitate access to such technologies;

(s) Strengthen policies and programmes that improve, ensure and broaden the participation of women in all spheres of political, economic, social and cultural life, as equal partners, and improve their access to all resources needed for the full exercise of their fundamental rights;

(t) Create the political, legal, material and social conditions that allow for the voluntary repatriation of refugees in safety and dignity to their countries of origin, and the voluntary and safe return of internally displaced persons to their places of origin and their smooth reintegration into their societies;

(u) Emphasize the importance of the return of all prisoners of war, persons missing in action and hostages to their families, in accordance with international conventions, in order to reach full social development.

We acknowledge that it is the primary responsibility of States to attain these goals. We also acknowledge that these goals cannot be achieved by States alone. The international community, the United Nations, the multilateral financial institutions, all regional organizations and local authorities, and all actors of civil society need to positively contribute their own share of efforts and resources in order to reduce inequalities among people and narrow the gap between developed and developing countries in a global effort to reduce social tensions, and to create greater social and economic stability and security. Radical political, social and economic changes in the countries with economies in transition have been accompanied by a deterioration in their economic and social situation. We invite all people to express their personal commitment to enhancing the human condition through concrete actions in their own fields of activities and through assuming specific civic responsibilities.'

Notes

See Report of the World Conference on Human Rights, Vienna, 14–25 June 1993 (A/CONF.157/24 (Part I)).

conference was a strong expression of political will to mobilise and deploy financial resources for development and poverty eradication. According to the so-called Monterrey Consensus, 'our goal is to eradicate poverty, achieve sustained economic growth and promote sustainable development as we advance to a fully inclusive and equitable global economic system'.[7] Significantly, too, the Consensus reaffirmed each country's primary responsibility for its own social and economic development, even as it acknowledged the need for an enabling international economic environment.

The Implementation Plan adopted at the Johannesburg Summit also stressed the primary responsibility of each country for its own sustainable development and the importance of national policies and strategies. Similarly, it recognised the need for partnership between governments of the North and South and between governments and major groups within each country. It seems clear, therefore, that there is a global consensus, not only on the substance of sustainable development, but also on the mechanisms and processes for its pursuit. In particular, sustainable development is the outcome of the complex interaction between economic growth, interpersonal and intergenerational equity, social and political capabilities and the utilisation of environmental resources.

PROSPECTS FOR SUSTAINABLE DEVELOPMENT IN AFRICA

The milieu for sustainable development today is quintessentially that of globalisation. It has almost become a cliché to say that globalisation offers opportunities and challenges. Even so, as at Monterrey, it is recognised that developing countries and countries with economies in transition face special difficulties in responding to these challenges and opportunities. This is the context in which the New Partnership for Africa's Development (NEPAD) was launched in 2002. NEPAD is a self-consciously African response to global dynamics and an acceptance of the global consensus on development. It is also a strong assertion of ownership of the African development agenda. The NEPAD document describes itself as a pledge by African leaders to eradicate poverty and to place the continent on a path of sustainable development, anchored in Africa's determination to extricate itself from underdevelopment and global marginalisation.

Having spent the greater part of the last forty years negotiating the continent's development with external partners, African leaders, through NEPAD, appear to have finally recognised that primary responsibility for the continent's destiny lies with the people of Africa.[8] It is a responsibility that needs to be followed through by African leaders committing effectively to responsible governance, guaranteeing basic freedoms and nurturing their citizens' creativity.

The Johannesburg Summit stressed the primary responsibility of each country for its own sustainable development and the importance of national policies and strategies

In the final analysis, the sustainable development of any country can only be as effective as its people want it to be. It is fundamentally an endogenous process, generated and sustained by the energy of society and its ability to learn creatively from its own and others' history. An important lesson from history – demonstrated, for instance, by the development experience of Japan, South Korea and Mauritius – is that successful transformation has almost always been the product of a 'nationalist' project.[9] It is the responsibility of a people to articulate the nature of their development problem, define their vision and seek solutions. This cannot be ceded to any external agent, however sympathetic. In the case of Africa, the great, even excessive, external interest in its development cannot always be assumed to be wholly advantageous. Indeed, it has often undermined the self-confidence of the continent, substituting guilt for being poor for the determination to improve its existential conditions. The real dynamic of development lies in the empowerment that comes from taking ownership.

UNLOCKING PEOPLE'S CREATIVITY

By unlocking people's creativity, society is enabled to achieve sustainable development

Sustainable development indicates the huge pay-off from aligning economic growth and environmental conservation (broadly defined). As desiderata of long-term human progress, sustainable development also carries the imperative of nurturing people's creativity. In this context, and from a practitioner's perspective, the notion of sustainable development goes far beyond the environment/growth nexus. Sustainability must extend to political and social structures and particularly to the notion of social capital. It requires time and a long-term vision to build/restock social capital. However, by building mechanisms that strengthen the social network and the capacity of associations – and thus give greater voice to the largest possible segment of society – trust, values and ownership are strengthened. If such integrative mechanisms are harnessed to enhance human capabilities through health, knowledge, self-respect and the ability to participate actively in community and national life, then people's creativity can be deemed to have been unlocked. And by unlocking people's creativity, society is enabled to achieve sustainable development.

Group solidarity, always an important characteristic of the African continent's social dynamics, represents an important pillar on which future development can be built.[10] In many African communities, collective decisions are cherished and valued because they promote popular participation, consensus and social camaraderie. This enables self-empowerment that recognises the need to tap local resources, generate initiatives and involve local people as the principal drivers of the development train and its primary beneficiaries.

ACTORS AND INTERESTS IN SUSTAINABLE DEVELOPMENT

In the search for the most effective processes and the appropriate loci of action for moving any given society towards sustainable development, it is essential to look at the interests and relations between the different stakeholders, particularly the state, the private sector and civil society. The interests of these three actors vary from such concerns as longevity of tenure and national economic viability in the case of the state, through profit maximisation and secular growth for the private sector. For the collective sector, this may be seen in terms of a broad range of socio-economic and political concerns. Being able to harmonise these diverse interests in the context of a long-term future translates into a vision for the society, which at the same time constitutes the definition of sustainable development in a particular national context.[11]

THE STATE

Although the role of the state in the development process has varied over time and across countries, its centrality has been a constant factor in the history of successful development. However, the ongoing globalisation process is altering the nature of international relations and the authority of the state vis-à-vis the market and civil society. In particular, as globalisation circumscribes the autonomy and discretion of the state, it shapes the prospects for the practical realisation of sustainable development by shifting the substance and terms of debate, as well as the modalities of collaboration, between and within countries. Nonetheless, there is a measure of consensus that the effectiveness of the state is fundamental to the development process. The World Bank's World Development Report lists the following five fundamental tasks of the state (1997):

- establishing a foundation of law;
- maintaining a non-distortionary policy environment, including macroeconomic stability;
- investing in basic social services and infrastructure;
- protecting the vulnerable, and
- protecting the environment.

Unfortunately, the lessons of experience do not provide an easy answer as to whether these fundamental tasks constitute an optimal role for the state. In particular, the notion of 'non-distortionary' policy is subject to some debate. It is clear, however, that a long-term strategic vision of the development process must be formulated, with the state assuming leadership, eliciting commitment and maintaining widespread enthusiasm (or at least popular support) for this vision. Within this vision, it becomes possible for a feasible and satisfactory, if not optimal, strategy of intervention to be designed.

THE PRIVATE SECTOR

The private sector covers a range of players from the transnational corporation (or branch thereof) to the small and micro enterprise. These actors' interests are similar in their concern for profit and their need for a predictable political and regulatory framework. However, their interests may diverge with respect to their need for state support or the type of incentives they require. Furthermore, in spite of the desire of most private-sector players to be good citizens, tensions often arise between their worldview and the perspective of the state. The pursuit of sustainable development requires that mechanisms be put in place to reconcile divergent interests and perspectives.

THE COLLECTIVE SECTOR

While the state may have a comparative advantage on macro issues to lead the process of developing a national agenda, it is not always the most effective site from which to identify, analyse or seek solutions to specific problems. In addition to working closely with the private sector, the state must ensure active collaboration with civil society. Community organisations, grassroots groups and non-governmental organisations, being closer to the level of a local problem, are often much better placed to seek and implement solutions and monitor policies and programmes.

CSOs (civil society organisations) and community groups have become key partners in the development process in Africa today. They provide alternative and complementary channels for the mobilisation of human and financial resources for the development process. They can also, with great effectiveness, substitute for the public sector by implementing programmes and actions that, although normally the responsibility of the state, it is unable to carry out. In short, they add a critical dimension to sustainable development by expanding the range of individual choices and human freedoms.

There is a measure of consensus that the effectiveness of the state is fundamental to the development process

CONCLUSION

Since its transition to democracy ten years ago, South Africa has recorded impressive achievements in the social, political and economic spheres. Indeed the basic policy framework instituted at the time, the

Reconstruction and Development Programme, demonstrates that the country was already thinking along the lines of sustainable human development (Box 1.2). The achievements of the first five years and some continuing challenges were analysed in the 2000 National Human Development Report. That report explored the question of transformation and noted some dramatic changes for the better, particularly in the political arena. However, it also noted some recalcitrant challenges in poverty reduction, employment and access to services.

In the aftermath of the World Summit on Sustainable Development, these may be described as South Africa's sustainable development challenges. They constitute the particular focus of this report.

Box 1.2

Reconstruction and Development Programme: a sustainable development vision for South Africa

'Our history has been a bitter one dominated by colonialism, racism, apartheid, sexism and repressive labour policies. The result is that poverty and degradation exist side by side with modern cities and a developed mining, industrial and commercial infrastructure. Our income distribution is racially distorted and ranks as one of the most unequal in the world – lavish wealth and abject poverty characterise our society.

The economy was built on systematically enforced racial division in every sphere of our society. Rural areas have been divided into underdeveloped bantustans and well-developed, white-owned commercial farming areas. Towns and cities have been divided into townships without basic infrastructure for blacks and well-resourced suburbs for whites.

Segregation in education, health, welfare, transport and employment left deep scars of inequality and economic inefficiency. In commerce and industry, very large conglomerates dominated by whites control large parts of the economy. Cheap labour policies and employment segregation concentrated skills in white hands. Our workers are poorly equipped for the rapid changes taking place in the world economy. Small and medium-sized enterprises are underdeveloped, while highly protected industries underinvested in research, development and training.

The result is that in every sphere of our society – economic, social, political, moral, cultural, environmental – South Africans are confronted by serious problems. There is not a single sector of South African society, nor a person living in South Africa, untouched by the ravages of apartheid. Whole regions of our country are now suffering as a direct result of the apartheid policies and their collapse.

In its dying years, apartheid unleashed a vicious wave of violence. Thousands and thousands of people have been brutally killed, maimed, and forced from their homes. Security forces have all too often failed to act to protect people, and have frequently been accused of being implicated in, and even fomenting, this violence. We are close to creating a culture of violence in which no person can feel any sense of security in their person and property. The spectre of poverty and/or violence haunts millions of our people.

Millions of ordinary South Africans struggled against this system over decades, to improve their lives, to restore peace, and to bring about a more just society. In their homes, in their places of work, in townships, in classrooms, in clinics and hospitals, on the land, in cultural expression, the people of our country, black, white, women, men, old and young devoted their lives to the cause of a more humane South Africa. This struggle against apartheid was fought by individuals, by political organisations and by a mass democratic movement.

It is this collective heritage of struggle, these common yearnings, which are our greatest strength, and the RDP builds on it. At the same time the challenges facing South Africa are enormous. Only a comprehensive approach to harnessing the resources of our country can reverse the crisis created by apartheid. Only an all-round effort to harness the life experience, skills, energies and aspirations of the people can lay the basis for a new South Africa.

The first decisive step in this direction will be the forthcoming one-person, one-vote elections. A victory for democratic forces in these elections will lay the basis for effective reconstruction and development, and the restoration of peace.

But an election victory is only a first step. No political democracy can survive and flourish if the mass of our people remain in poverty, without land, without tangible prospects for a better life. Attacking poverty and deprivation must therefore be the first priority of a democratic government.

How can we do this successfully? It is no use merely making a long list of promises that pretend to answer every need expressed. Making promises is easy – especially during election campaigns – but carrying them out as a government is very much more difficult. A programme is required that is achievable, sustainable, and meets the objectives of freedom and an improved standard of living and quality of life for all South Africans within a peaceful and stable society.

The RDP is designed to be such a programme. To reach the RDP's objectives we face many obstacles and we are setting ourselves a great challenge. Each and every expectation will not be realised and each and every need will not be met immediately. Hard choices will have to be made. The RDP provides the framework within which those choices can be made. Even more importantly, it will involve both government and the people in further identifying needs and the obstacles to satisfying those needs, and will involve both in jointly implementing realistic strategies to overcome these obstacles. The RDP is an expression of confidence in the wisdom, organisational abilities and determination of our people.'

Source: ANC (1994), Reconstruction and Development Progreamme, pp. 2–4

Endnotes

1 International Union for the Conservation of Nature (1980)
2 World Conference on Environment and Development (1987)
3 World Conference on Environment and Development (1987:43)
4 Ohiorhenuan *et al.* (1998)
5 The major UN conferences during the nineties include: the UN Conference on Environment and Development in Rio de Janeiro (June 1992); the World Conference on Human Rights (Vienna, June 1993); the International Conference on Population and Development (Cairo, September 1994); the World Summit for Social Development (Copenhagen, March 1995); the fourth World Conference on Women (Beijing, September 1995); the Second UN Conference on Human Settlements (Istanbul, June 1996); the UN GA Special Session on Small Island Developing States (New York, September 1999); the UN GA Special Session, 'World Summit for Sustainable Development and Beyond: Achieving Social Development for All in a Globalised World' (Geneva, June 2000); the Millennium Summit (New York, September 2000); the third UN Conference on the Least Developed Countries (Brussels, May 2001); the World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance (Durban, August-September 2001); the International Conference on Financing for Development (Monterrey, March 2002), and the World Summit on Sustainable Development (Johannesburg, August-September 2002).
6 Monterrey, Mexico, March 2002
7 Monterrey Consensus (2002), paragraph 1.
8 It should be noted, however, that NEPAD runs the risk of being undermined by the message in the document (paragraph 144) that 'the bulk of the needed resources will have to be obtained from outside the continent'. This expectation is not supported by history: external resources can only play a supplementary role.
9 See Ohiorhenuan (1990) and Ohiorhenuan *et al.* (1998)
10 A promising example of community organisation capacity building is the *Ubudehe* from Rwanda. Prior to colonisation, Rwanda had a highly organised traditional system of community-based development and self-reliance. This centred on collective action, known locally as *Ubudehe*. This practice was quite effective in mobilising communities and served to build social capital. As part of the poverty reduction strategy process, this traditional approach was revived as a key aspect of the decentralisation programme and the national unity and reconciliation process. The application of *Ubedehe* is based on the principle that the poor and the communities in which they live understand the problems they face and know their priorities, but do not have sufficient information and resources to design the best solutions and may not be aware of all the options available. A pilot was conducted in the province of Butare. It involved the direct funding of projects identified by communities or households. A European Commission pledge to support each community project with a maximum of $1 000 served as a guarantee of external financing to meet some of the expectations of the poor in this province. The pilot was successful and has now been taken up by the government, which intends to adopt this programme countrywide. This is a promising example in that it strengthens already-existing structures and capacities. The risk, however, lies in the way the system was revived. Tied, as it was, to project grants, it may generate a culture of entitlements rather than genuine self-help.
11 Ohiorhenuan *et al* (1998)

3

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Policy making and implementation

Despite significant achievements in policy development, growing unemployment, income poverty and inequality and shortcomings in service delivery have fuelled criticisms about the effectiveness of government policies to transform the objective conditions of the poor

The attainment of sustainable development depends to a significant degree on the extent to which a country's development strategy and related policy-making process are aligned to serve such a vision. In order to complement the overview of socio-economic development in South Africa (as summarised in Chapter 2), this chapter examines the evolution of the country's development strategy, policy making and implementation.

The period since 1994 has been characterised by wide-ranging and fundamental policy and legislative reforms. During the first five years, there were remarkable achievements in a range of policy developments. Literally hundreds of policies and laws were developed, many imbued with the ethos of economic and social development and containing specific provisions to promote these goals.[1]

The policies developed during this period relied heavily on the major changes taking place in respect of institutional mechanisms for policy development, integration and coordination. The 1994–1999 period was characterised by the establishment of a number of largely political structures to enhance both horizontal (between national departments) and vertical (between the three spheres) coordination.

A salutary lesson of the first democratic government was that structures, while important, do not guarantee successful integration. Good integration requires well-functioning processes; and the effectiveness of processes depends less on structures than on the commitment of decision-makers and managers to the goals of coordination.[2]

After the 1999 election, the newly elected President quickly made it clear that he wanted his administration to function as an efficient entity in order to meet the major challenge of delivering services to the people. To this end, it was essential that government operate in an effective way across both departments and spheres. The institutional structures established during the first five years were reviewed by the Mbeki government and modified in the light of their effectiveness or lack thereof. The development of the necessary coordinating structures in this relatively short period is summarised in Box 3.1 (p. 59) and represents an important achievement of the current government.

Yet, despite significant achievements in policy development, growing unemployment, income poverty and inequality and shortcomings in service delivery have fuelled criticisms about the effectiveness of government policies to transform the objective conditions of the poor. The success of the new reforms depends both on the substance of the policies and the ability of the government to implement them efficiently. On the one hand, a significant gap between the adopted policies and their successful implementation can potentially explain some of the problems experienced with the delivery of the government's main transformation objectives.[3] On the other, some of the adopted policies may be responsible for the persistence of some undesirable outcomes during the past nine years, as highlighted in Chapter 2.[4]

IMPLEMENTATION GAP

It is widely known – and indeed acknowledged by the government – that there is a major gap between policy and its implementation: in respect both of broad policy intent and the implementation of legislation.[5] Given the volume of official policy documents and legislation since 1994, there is clearly a case to be made for reviewing the challenges to implementation. It is, at the same time, necessary in some cases to distinguish between policy inconsistencies and contradictions and issues that relate to poor implementation.[6]

It is possible to identify a number of factors that have contributed to the creation of the 'implementation gap' and to acknowledge that it is likely to be the consequence of a number of factors rather than any single one. Three such factors can be identified:[7]

- human resource constraints within the decentralised political framework;
- macroeconomic policy and the budget, and
- coordination between policy making and the budget.

HUMAN RESOURCE CONSTRAINTS

In 1994, South Africa moved in one dramatic step from the relatively centralised political framework of the apartheid era to a decentralised framework made up of the national government, nine provinces with their own governments and legislatures and over 800 municipalities (now rationalised at around 280).[8] Given the considerable expenditure responsibilities and revenue assignments of all three spheres, a huge skills base is required if policy implementation is to occur effectively within such a framework.[9]

It is clear that the absence of high-level policy skills and middle-level governance and management skills has been a key factor impeding implementation. There were no concerted efforts to build the human resource base at local government level during the first five years of democracy.[10] Almost all capacity-building and human resource planning during this period was directed at the two 'upper' spheres: namely the national and provincial governments. This explains, to a substantial degree, the inability of the local government sphere to deliver basic services to the poor. Even at the provincial government level, human resource development proceeded in a rather *laissez faire* manner, so that poorer provinces, like the Eastern Cape and the then Northern Province,[11] were unable to develop and implement appropriate strategies to enhance their stock of middle-management staff. Moreover, the government's own training institute, the South African Management Development Institute (SAMDI), has not yet come to grips with the critical supply and demand questions relating to governance skills in all three spheres.[12]

MACROECONOMIC POLICY AND THE BUDGET

The Government of National Unity (GNU) inherited an economy characterised by sluggish growth, high unemployment, poverty and inequality. The government's new macroeconomic policy, Growth, Employment, and Redistribution (GEAR), was proclaimed in June 1996. Its aims were to stimulate economic growth and job creation, reduce inflation and the budget deficit, accelerate domestic savings and increase the flow of foreign direct investment.

The implications of GEAR for policy implementation and service delivery were twofold. First, attempts to reduce the budget deficit from about 5 per cent to less than 3 per cent within a five-year period entailed severe restrictions on expenditure, the impact of which was felt most forcefully in government's capital investment, and thus most noticeably in social and economic infrastructure development.[13]

It is clear that the absence of high-level policy skills and middle-level governance and management skills has been a key factor impeding implementation

It is important to avoid policy making through the budget

Second, the introduction of the Medium Term Expenditure Framework (MTEF) saw the emphasis in the budgeting process shift almost exclusively to restrictive expenditure and away from the encouragement of effective expenditure. The aim of government was to make the public management system more transparent, accountable and results-oriented. The great advantage of an MTEF is that it can be used both as an expenditure management tool (to promote fiscal discipline) and as a planning tool (to ensure funding for government priorities). The evidence until very recently suggests that the government has achieved considerable success with the first of these two goals. However, spending agencies (national and provincial governments) have had to ensure that they remain within their fiscal envelopes. According to Pillay (2002), this has led to the development of a 'non-spending' mindset and under-spent funds, negatively impacting on service delivery across the country.

COORDINATION BETWEEN POLICY MAKING AND THE BUDGET

There is growing evidence from developing and industrialised countries that an important precondition for effective coordination is for governments to plan for long-term policy objectives.

There are several reasons why a strategic policy framework is necessary. First, by establishing a comprehensive set of goals and priorities (and ensuring that policy proposals fall within these parameters), decision makers are able to pursue their common agenda more coherently. Second, the centre can use the strategic framework as a tool to orient policy development in line ministries. This is facilitated if the government's agenda has been mapped out collectively: that is, with the involvement of all the Ministers who will be responsible for implementation through sectoral policies. A collective priority-setting exercise provides the head of government with an opportunity to reinforce the cohesiveness of Cabinet. The centre can support that exercise by leading a planning process designed to coordinate ministerial priorities, reconcile any conflicts and seek a balance that will merge sectoral priorities and the government's main policy goals into a coherent programme for discussion by Cabinet.

The budgetary process is a powerful coordination tool in all countries. It affects sectoral activities, provides an annual opportunity to set political and strategic directions for the future, and plays a critical role in the definition of the government's policy priorities. The budget is a statement, however implicit, of the government's sectoral policy priorities, in that it defines relative levels of expenditure for different programmes and activities.

However, it is important to avoid policy making through the budget. Expenditure control considerations that rely too heavily on budget making carry the serious risk of allowing the budgetary framework to dominate other policy frameworks. Traditional tensions between the Ministry of Finance and line ministries underscore the need for mechanisms that systematically link the policy-making process to the budgetary process. There should be mechanisms in place to enable the centre to integrate expenditure control objectives into the government's overall programme.

A number of institutional mechanisms and processes have been developed in all three spheres of South African government in order to enhance policy integration and cohesion. At the national level, these include the new Cabinet Committees, the Director-Generals' clusters and Forum and, in the Presidency, the Cabinet Office and the Policy Coordination Services Unit (Box 3.1). It is still too early to draw clear conclusions as to whether these institutions, particularly the structures in the Presidency, are actually playing the roles for which they were designed.

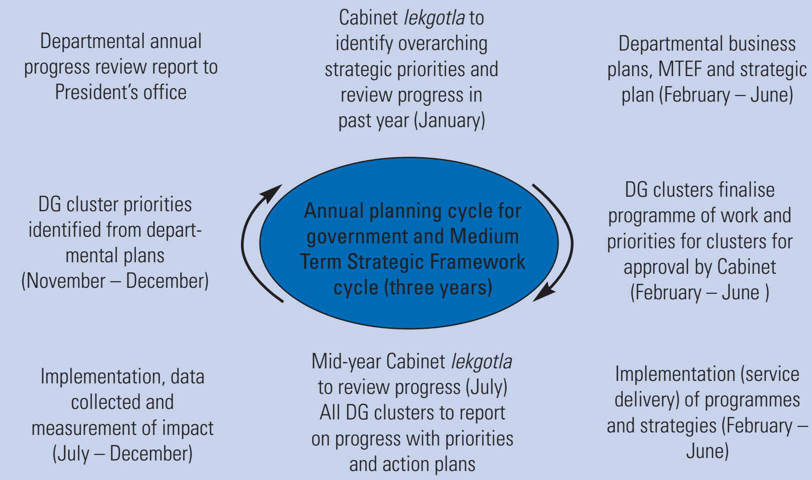
DEVELOPMENT PATH, POLICY AND PERFORMANCE

Policies need wide national support if they are to address the developmental needs of the country successfully. This support must come, not just from the economically powerful segment of the population and its advocacy organisations (political organisations, the media and so on) but, more importantly, from the historically deprived, excluded or marginalised sections of the population and *their* social and political organisations. Such broad support is needed both to maintain the political stability of the socio-economic regime, and to ensure that policy-making processes lead to the enhancement of people's quality of life, especially through unlocking the creativity of participants in development. In this context, no matter how 'efficient' a process is and/or theoretically sound a particular course of action may seem, it is likely to fall short in human development terms if it is not widely supported by the country's majority poor and their organisations.

In South Africa, there has been a significant increase in the discord on policy matters amongst the Alliance[14] partners and between government and other civil society organisations (e.g. churches, NGOs) during the past few years. Issues of contention include the macroeconomic policy framework, industrial policy, privatisation, trade policy and other matters. The core issue is the dynamic relationship between the orientation of government policies in these areas and their actual and expected socio-economic outcomes.

Given the importance of a broad fundamental consensus on the 'how' of South Africa's socio-economic transformation, a brief review of the early 1990s transformation debate may be useful. It is generally agreed that the root of the current disagreements are located in that debate.[15]

Box 3.1 **Integrated national planning cycle**



Source: Pillay (2002)

PRE-1994 DEVELOPMENT CONSENSUS

With the release of Nelson Mandela in 1990, discussions on South Africa's political transition and socio-economic transformation after the expected demise of the apartheid regime went into high gear. From then until the election in April 1994, two distinct viewpoints about the post-apartheid development path received prominence.

The Alliance articulated its consensus on the South African development path in the Reconstruction and Development Programme (RDP). The representatives of organised business, who sat mainly outside the ANC-led Alliance, also provided a common strategy for the post-apartheid era.

There has been a significant increase in the discord on policy matters amongst the Alliance partners and between government and other civil society organisations

Anti-apartheid alliance's consensus

The RDP was the result of great efforts by organised anti-apartheid forces to

The RDP's development strategy did not coincide entirely with the largely white-dominated business sector's vision for the post-apartheid era

reach a unified strategy for the post-apartheid transformation prior to the 1994 election. In the preface to the final pre-election document, ANC President Nelson Mandela emphasised that the RDP was the result of many months of consultation by the ANC and its Alliance partners and with other mass organisations in the wider civil society.[16] In addition, he valued the RDP as a vital step in the process of developing a detailed policy and legislative programme for implementation by the incoming government.

The RDP articulates the vision and development path for South Africa's transformation in terms of six basic principles, which represent its political and economic philosophy. These are:

An integrated and sustainable programme, 'to harness all our resources in a coherent and purposeful effort that can be sustained into the future'.[17] This programme was expected to centre on:

A people driven process focusing on 'our people's most immediate needs, and it relies, in turn, on their energies to drive the process of meeting these needs'.[18]

Peace and security for all, with security forces that 'reflect the national and gender character of our country. Such forces must be non-partisan, professional, and uphold the Constitution and respect human rights. The judicial system must reflect society's racial and gender composition, and provide fairness and equality for all before the law'.[19]

Nation building: 'We must not perpetuate the separation of our society into a "first world" and a "third world" – another disguised way of preserving apartheid. We must not confine growth strategies to the former, while doing patchwork and piecemeal development in the latter, waiting for trickle-down development.'[20]

Link reconstruction and development: 'If growth is defined as an increase in output, then it is of course a basic goal. However, where that growth occurs, how sustainable it is, how it is distributed, the degree to which it contributes to building long term productive capacity and human resource development, and what impact it has on the environment, are the crucial questions when considering reconstruction and development. The RDP integrates growth, development, reconstruction, and redistribution into a unified programme. The key to this link is an infrastructural programme that will provide access to modern and effective services like electricity, water, telecommunications, transport, health, education and training for all our people.'[21]

Democratisation of South Africa: 'The RDP requires fundamental changes in the way that policy is made and programmes are implemented. Above all, the people affected must participate in decision-making. Democratisation must begin to transform both the state and civil society. Democracy is not confined to periodic elections. It is, rather, an active process enabling everyone to contribute to reconstruction and development.'[22]

Big-business consensus

The RDP's development strategy did not coincide entirely with the largely white-dominated business sector's vision for the post-apartheid era. The post-apartheid vision of this powerful and organised force was articulated directly through its structures (the South African Chamber of Commerce, Chamber of Mines, Freedom Foundation, South Africa Foundation, etc.) and through political parties such as the National Party (NP) and the Democratic Party (DP). During the late 1980s and early 1990s, significant resources were ploughed into influencing the economic policy of the potential future government.[23]

Business's vision of the country's future and its development path was articulated in various documents and public statements between 1990 and 1994.

Its main tenets were:

Preservation of private property rights: Amid calls by sections of the Mass Democratic Movement for nationalisation and other redistribution measures, it was almost natural for business to place emphasis on the preservation of property rights.[24] A number of business organisations joined the debate, putting forward strong arguments against nationalisation. These included the National African Federated Chamber of Commerce (NAFCOC) and the Foundation for African Business and Consumer Services (FABCOS).[25, 26] The DP also released a policy document in 1992, entitled 'A Social Market Economy: Manifesto and Economic Proposals'. In the document, the DP committed itself to defending 'the right to own, acquire, and dispose of property'.

The adoption of 'market-friendly' policies, to be reflected particularly in the limited role of the state: Nattrass (1992) has argued that business modified its 'usual evangelistic free market rhetoric' a great deal during the economic policy debates of the early 1990s. However, SACOB's Economic Options for South Africa, the DP and NP's policy proposals and numerous statements from other representatives of business continued to place the customary emphasis on 'free enterprise' and the 'free market' economy.[27] SACOB's proposed reform of the economy envisaged a reduction in the role of the state through privatisation and deregulation. It also called for a reprioritisation of public sector expenditure programmes with a view to accommodating the 'new' South Africa. The DP policy proposals also included 'restricting the role of the state'. It argued that the civil service should be 'lean, economical and effective'.[28]

Promoting redistribution through growth: SACOB's Economic Options document warned that 'attempts to redistribute income and wealth would not reduce poverty significantly but would rather have a negative effect on the growth of the formal sector'. Suggestions for future 'wealth' taxes were strongly criticised.[29] The Sanlam-sponsored Platform for Investment, published in 1993, was extremely critical of 'highly disruptive redistributionist strategies'. The Nedcor/Old Mutual Professional Economist Panel published a document in 1993, which opposed additional taxation or increased government expenditure.[30] Lower taxation was advocated in many business inputs and, in late 1993, the DP went as far as to call for a middle-income tax cut in order to develop 'latent entrepreneurial potential'.

Integration into the world economy: With the lifting of sanctions and prospects of South Africa normalising its relationship with the rest of the world, most representatives of business welcomed the new opportunities and challenges, although a few were cautious about opening up to international competition.[31] In 1991, the NP government was being advised to adopt more flexible 'protection' measures to accommodate the General Agreement on Tariffs and Trade (GATT)[32], and sections of business were calling upon government to create an environment conducive to investment in export-oriented capital projects.[33] Trade liberalisation became a serious option only when sections of business began to recognise that the development prospects of industry behind high tariff walls were limited.[34]

Labour relations: Business representatives and spokespersons have generally emphasised the importance of a skilled workforce and the need to increase the level of skills and education among workers.[35] The NP committed itself to protecting workers' and employers' rights, whilst the DP went further to espouse the need for the adoption of a model of industrial democracy wherein workers would have some share in the ownership of the means of production. The DP opposed the idea of a national minimum wage, but promoted the goals of full employment and collective bargaining at regional and industry level.

The end of apartheid saw the emergence of two broad visions for the country

Thus the end of apartheid saw the emergence of two broad visions for the country. One vision was shared by the majority of the organised anti-apartheid movements and, although powerful in terms of broad social and political acceptability, was relatively weak in terms of support from economically powerful business forces. The second vision belonged to the organised business sector and was shared by the weakened apartheid-era political parties. This vision clearly had a smaller appeal amongst the dominant social and political forces of the day, but stemmed from the strong, concentrated and organised economic forces centred in the white community, and was supported by international allies in governments, institutions and business. It also received some support from a small faction of Black business within the ANC.

POST-1994 DEVELOPMENT PATH AND POLICIES

Historically, the bond between the ANC, the trade union movement and the South African Communist Party (SACP) was expressed by a unity of purpose: namely 'the revolutionary mission of liberating black people in general and Africans in particular'.[36] More substantively, there was a commitment from all partners of the Alliance, regardless of their differences, to the strategic view that the 'national democratic revolution' would fundamentally transform South Africa into a non-racial, democratic, united and non-sexist society, as contained in the call for 'All Power to the People' and the commitment to meeting the aspirations of, especially, the poorest section of the population. This has remained the most fundamental binding principle of the Alliance.[37]

The Alliance's support for the RDP expressed a further commitment by all partners to the post-apartheid strategic development path. This was characterised by at least three inter-related features, namely: (a) growth *through* redistribution; (b) a mixed economy with a state actively committed to development, emphasising poverty eradication and service delivery, and (c) a people-driven approach to policy making. Diverse mass-based political organisations were signatories to the RDP document, including the ANC, the Congress of South African Trade Unions (COSATU), the SACP, the South African National Civics Organisation (SANCO) and the National Education Coordinating Committee (NECC). The RDP consensus provided the ANC-led government with the opportunity to enjoy widespread support for its post-election policies, especially amongst the African population, the main constituency of these organisations.

The Alliance has continued to refer to the RDP as the embodiment of its vision and development path for South Africa

During the past nine years, the Alliance has continued to refer to the RDP as the embodiment of its vision and development path for South Africa.[38] Yet, despite continued widespread support for the RDP, the government's policy orientation and policy-making process have resulted in significant levels of dissatisfaction and policy contestation within the Alliance and other civil society organisations (e.g. churches, NGOs) during this period. This is despite the fact that, in areas such as the Constitution, labour legislation and certain areas of social policy, there have been significant positive changes in policies, with members of the Alliance expressing satisfaction with the process and content of the changes introduced.[39]

In the area of economic policy, however, government's current policy framework remains the area of greatest contestation. From early in the term of the first democratic government, concerns were raised within the Alliance about the direction economic policy-making was taking. An important sign of the emerging differences within the Alliance with regard to new government's policy framework was the ANC's unenthusiastic reception of recommendations made by the Macroeconomic Research Group (MERG) in its report to the members of the democratic movement of South Africa in late 1993.[40] MERG, which was established with high-level support from the ANC and shared the vision and basic principles of the RDP, produced an economic policy framework to address the inherited problems of economic stagnation, poverty, unemployment and poor access to services. Its detailed policy proposals amounted to 'a strategy in which the state would provide leadership and co-ordination for widely-based economic development and intervene directly in key areas.'[41]

The relinquishing of support for MERG paved the way for the production of the RDP White Paper which, together with the tabling of a number of policy proposals during the first half of 1994, led COSATU and the SACP to criticise the government implicitly for beginning to embrace neo-liberal economic policy framework and policies. The criticisms focused particularly on the RDP White Paper's downgrading of the role of government to mere *management* of transformation, and subsequent policy proposals regarding the privatisation of state assets and trade and financial liberalisation.[42] On the other hand, the business sector as a whole appeared pleased with the general trends expressed in the RDP White Paper.[43, 44]

After the publication of the RDP White Paper, the government released the Growth, Employment, and Redistribution (GEAR) strategy document in June 1996. GEAR was presented to Parliament as a non-negotiable economic policy framework for the period 1996–2000. Its main pillars were fiscal contraction characterised by major cuts in the government deficit–GDP ratio; accelerated trade liberalisation, tight monetary policy; privatisation, and deregulation of financial markets. The proponents of GEAR argued that the economic benefits of implementing its measures would be felt during 1996–2001. They predicted a gradual but significant increase in the growth rate of the economy, the number of formal manufacturing jobs, the net inflow of foreign investment, exports and real private and public investments.[45]

Earlier in 1996, the organised business sector and COSATU also published their respective economic policy packages.[46] By all accounts, the three documents revealed the closing of the gap between government and business's policy proposals on the one hand, and the rising policy differences between the ANC and COSATU on the other. The main differences continued to focus on: (a) understanding the working of a capitalist economy (e.g. efficiency through regulated or unregulated markets); (b) sources of economic growth and how to induce growth; (c) the role of government in the economy; (d) the labour market structure most suitable for the economic growth and development of South Africa, and (e) the role of foreign trade and foreign investment in achieving sustainable growth (Box 3.2, p. 64).

Since the adoption of GEAR as its main economic policy framework, the

GEAR's main pillars were fiscal contraction, characterised by major cuts in the government deficit – GDP ratio; accelerated trade liberalisation; tight monetary policy; privatisation, and deregulation of financial markets

Box 3.2

False premises

'The economic and social policy approach of the new government was formulated under strong pressure from the corporate sector and its global partners, and was based on several contentious premises:

i. South Africa has a high economic growth potential.
ii. Integration into the benign global economy will enhance economic growth.
iii. A high economic growth will unlock the labour-absorption capacity of the economy.
iv. The benefits of a high economic growth rate will 'trickle down' to the poor.
v. The restructuring of the economy should be entrusted to market-led economic growth.

With the benefit of hindsight, we have good reason to reject all five of these premises. All five are either false, or do not apply under South African circumstances. All five have their roots in the naive optimism of the managerial elite of the corporate sector and its global partners about the benefits of the free market. All five are propagated by the corporate sector and its global partners in order to protect their vested interests, enhance their position of power and privilege, and promote their sectional and short-term financial interests. All five premises incorrectly regard economic growth, neo-liberalism, and globalisation as the panacea for South Africa's social crisis.

Those responsible for these premises and the government's approach were highly unrealistic, and did not take into account the following defining characteristics of the South African economy:

- its dualistic character; after 350 years of unequal power relations, unfree labour patterns, and uneven socio-economic development, it is divided into a mainly White-owned and White-controlled modern sector, and a Black underdeveloped non-formal sector;
- the deeply institutionalised inequalities in the distribution of income, socio-economic power, and property and opportunities; and
- the emergence – over the past 30 years – of a modern, first-world, capitalist enclave that is detaching itself from the Black labour market and the lumpenproletariat because they are regarded as irrelevant to the enclave's operation and profitability.

All of these characteristics overlap and accentuate the 'two worlds' character of the economy: one modern, smart, professional, efficient, and globally oriented; the other neglected, messy, unskilled, downtrodden, and thriving on crime and violence. To complicate matters, political and economic developments over the past 30 years have increased the distance between these 'two worlds', and destroyed what beneficial interaction might have previously existed between them.'

Source: Sampie Terreblanche (2002), pp. 424–426

The differences between the RDP and the current policy orientation are potentially significant in explaining the persistence of a number of undesirable trends in post-apartheid socio-economic development

government has moved further to institutionalise its main underpinnings. Two measures in this regard are worth mentioning: the adoption of the multi-year Medium Term Expenditure Framework (MTEF) for budgeting purposes, and the adoption of inflation targeting as the framework for monetary policy. The first has enabled the government to integrate GEAR's fiscal policy stand into an economic policy planning process that has gone beyond GEAR's original five-year plan. The adoption of inflation targeting has also allowed the government effectively to institutionalise GEAR's tight monetary policy stance: the primary objective of the Reserve Bank was to lower the inflation rate to a historically low rate of 3 to 6 per cent within a relatively short period.

The differences between the RDP and the current policy orientation are potentially significant in explaining the persistence of a number of undesirable trends in post-apartheid socio-economic development. The contractionary nature of the adopted tight fiscal policy, high real interest rate oriented monetary policy, and accelerated liberalisation of the economy and privatisation have produced similar developmental results to those of other countries that have adopted the same policies. As shown in Chapter 2, the results have been increases in unemployment, real cuts in important social spending, low real investment and growth and rising income disparities. It is not, therefore, surprising that some government policies are seriously contested by a number of important social and political forces in the country, including some members of the Alliance and some important churches and NGOs.

CONCLUSION

As recently as the June 2003 Growth and Development Summit, the government has essentially reaffirmed its commitment to the macroeconomic strategy and policy framework.[48] However, rising unemployment and income inequality, low domestic and foreign investment and other issues[49] have made it increasingly apparent that the government needs to review some of the explicit tenets or underlying premises of GEAR. In this context, the government's current Ten Year Review process is a much needed endeavour by Cabinet. It is intended to:

- determine the degree to which the democratic dispensation has directed the purpose, intentions and content of government policy;

- identify and explain the results of the implemented policies of government;
- determine the impact of government policies;
- identify and explain factors that have affected the performance of government;
- identify concrete lessons that can be learnt about the transformation process;
- identify key challenges facing government in the next decade of freedom, and
- identify possible objectives that could be pursued by government to address the challenges.

The current state of socio-economic development and policy formulation in South Africa indicates that, while there is a need for improvement in the government's implementation capacity, there is also an urgent need to articulate a socio-economic strategy and policy framework that is designed to address, in a sustainable manner, high levels of poverty, income inequality, lack of access to affordable and quality services, unemployment and the low growth rate. The challenges facing such an endeavour are explored in the remaining chapters of this report.

Rising unemployment, income inequality, low investment and other issues make it increasingly apparent that government needs to review GEAR

Endnotes

1 UNDP (2000). The South Africa National Human Development Report of 2000, which focused on the process of transformation, provides a detailed review of major policy and legislative changes during this period.
2 Pillay (2002)
3 This view is shared particularly by senior government officials.
4 Cronin (2002)
5 After attending a crucial Cabinet *Lekgotla* (retreat) in July 2002, President Mbeki argued that the challenge facing government was not to change government policies, but to ensure that they were implemented.
6 For more on policy inconsistencies and contradictions, see Chapter 5.
7 Pillay (2002) includes two additional factors: namely, the need for consensus and government's relationships with non-governmental partners. Discussion of these factors has been incorporated into the latter part of this chapter.
8 The apartheid system of government included the homeland governments, consisting of 'self governing' KwaZulu, QwaQwa, Gazankulu, Lebowa, KaNgwane, KwaNdebele and 'independent' Transkei, Ciskei, Bophuthatswana and Venda.
9 With respect to the latter, national and local governments only.
10 Pillay (2002)
11 The Northern Province was renamed Limpopo on 26 June 2002.
12 Pillay (2002)
13 For more details, see Chapters 2 and 5.
14 African National Congress (ANC), Congress of South African Trade Unions (COSATU) and the South African Communist Party (SACP).
15 See Cronin (2002)
16 The negotiating process and the content of the RDP were influenced by a number of interlinked factors. Among these were: (a) the need for the ANC and its Alliance partners to present an election manifesto that articulated its vision, development strategy and policy framework; (b) the country's broad socio-economic crisis, and (c) the simultaneous unfolding of negotiations for the political transition, which included principal issues related to the post-apartheid management of the economy. Before the release of the final RDP document in 1994, six earlier drafts were submitted to various participating organisations for discussion and comment. The RDP was built on the tradition of the Freedom Charter, which was the result of an extraordinary countrywide consultation in 1955, culminating in a gathering at Kliptown where the Charter was adopted. The Charter has been a guiding document of the ANC ever since.
17 RDP (1994)
18 RDP (1994)
19 RDP (1994)
20 RDP (1994)
21 RDP (1994)
22 RDP (1994)
23 Marais (1998); Bond (1996)
24 In September 1990, the South African Chamber of Business (SACOB) led the calls against nationalisation by arguing that: 'Attempts at alienation of property or nationalisation, with or without compensation, fall in the category of measures which will cause immeasurable harm'. In its document titled *Economic options for South Africa*, it pointed out that: 'SACOB is convinced that the market economy based on the principles of private ownership and freedom of choice and association will best accommodate the economic requirements of both growth and employment.' (p. 1). The document goes on to state: 'Attempts at alienation of property or nationalisation, with or without compensation, fall in the category of measures which will cause immeasurable harm.' (p. 11)
25 See South African Institute of Race Relations (1991/1992).
26 A year later, a spokesperson for Anglo American (one of the country's six large conglomerates) was quoted as saying: 'Anglo American believes that nationalisation in the form put forward by Mr Mandela will kill initiative and investment and encourage the flight of capital and skills as surely as the raising of taxes would. His proposals would end up impoverishing the disadvantaged even further'. (*Citizen*, 30 September 1991)
27 The free-market rhetoric espoused by business is exemplified in a statement made by Stuart Morris, of KPMG Aiken and Peat: 'An ideal South African government would take a leaf from the countries that have succeeded in growing their economies and improving the lives of their people. *It would free the economy from controls and interference*; provide massive education and training to prepare the community to play its part in the industrialisation of the country,

and reduce personal and corporate tax rates to encourage the entrepreneur.' (*Business Day*, 10 January 1992, emphasis added)

28 DP leader, Zach de Beer, quoted in *Natal Post*, 2 September 1992

29 Marius van Blerck, chairperson of the SA Fiscal think tank and a tax consultant at Anglo American, was amongst the leading business figures in the taxation debate. He was critical of the suggested taxes because he felt they were too costly to administer and would 'generate disproportionately negative perceptions in relation to the revenue they generate'. (*Business Day*, 8 April 1992)

30 Bond (1996)

31 The SACOB Economic Options document recognised the need for an industrial strategy that would help South Africa become 'an outward-looking export country of manufactured goods'. However, it said little about opening up the South African economy.

32 *Business Day*, 28 March 1991

33 Anglo Chairman, *Business Day*, 17 July 1991

34 Gaby Magomola of FABCOS was one of many who argued that 'the case for protecting some industries was overstated' (*Business Day*, 31 January 1992). The South African funded International Freedom Foundation also attacked South Africa's protectionism as leading to 'spiralling prices, inflation, unemployment, the misallocation of resources, skewed economic development, and the creation of monopolies'. (*The Star*, 6 February 1992)

35 In its policy document, SACOB even admitted that, 'in its own interest the business community will therefore need to participate actively in in-house training and education of blacks…' (p. 25). A similar theme is evident in the earlier noted statement by Stuart Morris of KPMG, Aiken and Peat, and in the policy proposals of the NP and DP.

36 Ramathlodi (2001)

37 See ANC (1997)

38 In December 1997, the ANC Conference reaffirmed the role of the RDP as '[t]he basic economic and social transformation framework of the ANC.' ANC (1997:50). Similarly, COSATU, the SACP and civil society organisations (NGO umbrella organisations, churches, etc.) have continued to advocate an RDP-consistent transformation path and to consider the RDP as the Alliance's adopted developmental path for the country. In its *Accelerating Transformation* document, COSATU states that its 'beacon in the post-1994 period has been the Reconstruction and Development Programme (the RDP), adopted by the tripartite alliance as the platform for South Africa's first democratic government.' COSATU (2000:5)

39 As will be noted in a later section of this chapter, different groups in society are increasingly challenging the pace and/or the orientation of government social policy recommendations.

40 For details, see MERG (1993).

41 MERG (1993:281)

42 *The Star*, 7 April 1995. For a critical review of the RDP White Paper, see Adelzadeh and Padayachee (1994).

43 Writing in *The Sunday Times*, Kevin Davie remarks that 'all signs now are that our policy makers see that the objectives of the RDP are wholly compatible with the three words [privatisation, liberalisation, and convertibility] which so interest the money men' (9 October 1994). The *RDP Monitor* noted that 'the private sector, after its somewhat tentative initial endorsement, has come out in full support'. RDP Monitor (1994:5). The IMF was also satisfied with emerging ANC economic thinking. This was evident from its 1995 comments on the government's economic policy: 'It was clear by late 1993 that the most immediate problems facing South Africa were confidence related. Consequently, the African National Congress, even before it was elected to government in April 1994, voiced its commitment to eschewing policies perceived to imperil confidence – interventionist regulation, excessive fiscal and monetary spending and confiscatory tax policies – and to strengthen market forces … [but] the most telling signal of the new government's economic ideology has been its broad advocacy of free trade'. IMF (1995:89-90)

44 However, despite the concessions to free market thinking evident in the White Paper, neo-liberals and the business sector were not entirely happy with all aspects of the document. While praising recent shifts, they continued to hammer away at any last vestiges of interventionist policy proposals. The *RDP Monitor* referred to 'two general elements which will disturb some'. These were the 'repeated reference to the entrenchment of trade union and labour rights' and the 'centrality of the role of the state …' RDP Monitor (1994:6). *Business Day* expressed its concerns about the White Paper's continuing reference to 'anti-trust' legislation, the use of the phrase 'government will support' in reference to trade and industry policy, and to 'excessive indirect taxation' (fearing that direct taxes might be raised if indirect taxes like VAT were reduced).

Finally, the newspaper expressed concern that the inclusion of civic organisatoins in NEDLAC would delay decision-making. These and other concerns of domestic business and international financial organisations were indications that business interest groups would continue to press for further liberal reform in policy making after the publication of the White Paper.

45 See the table on the results of implementing GEAR's 'integrated' scenario, GEAR (1996:7)

46 COSATU published *Social Equity and Job Creation, the key to a stable future*. South Africa Foundation published the business sector report titled *Growth for All, an economic strategy for South Africa*.

47 Cronin interview (2002)

48 *Sunday Times*, 13 April 2003; *Business Day*, 12 May 2003; *Mail & Guardian*, 6 June 2003

49 This includes the rising tensions within the Alliance and the business sector's concern about the real economic impact of the current monetary policy, which has resulted in high interest rates. The interest rate was raised four times during 2002.

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Poverty and inequality

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Poverty and inequality

What people can or cannot do and how they survive in a market economy depends to a large extent on access to the necessary financial resources and assets to meet an increasing portion of their needs

The eradication of income poverty is an indispensable requirement for sustainable development. What people can or cannot do and, more importantly, how they survive in a market economy, depends to a large extent on access to the necessary financial resources and assets to meet an increasing portion of their needs.

At the same time, pronounced income and wealth inequality impedes sustainable development by contributing to a rise in poverty, distorting the utilisation of society's productive resources, frustrating the growth potential of a country[1] and jeopardising the sustainability of its environmental well-being (Box 4.1).[2]

Chapter 2 reported on the current state of poverty and on income and wealth inequalities in South Africa, measured by changes in a number of indicators such as headcount poverty, Gini coefficient, Human Development Index (HDI), and Human Poverty Index (HPI). Among the most significant findings was the fact that about 50 per cent of the country's population currently falls below the national poverty line.[3] It was also observed that a particularly high concentration of wealth persists.[4] This chapter analyses the challenges South Africa faces in respect of the growing problems of rising poverty and distributional inequalities.

ANALYSIS OF CHALLENGES TO ERADICATING INCOME POVERTY AND INEQUALITY

From the perspective of the new economics of poverty and inequality, unequal income and wealth distribution become economically costly and growth-reducing when large numbers of a country's citizens are unable or unwilling to work or engage in entrepreneurial activity, unable to save and invest, and unable to meet charges for the provision of essential services.[5]

South Africa's income poverty and inequality have increased during recent years, with empirical studies showing that there is a large segment of initially poor households that have either held steady or fallen behind. For example, a significant proportion (21%) of households in KwaZulu-Natal, observed in both 1993 and 1998, emerged in the second period not only as poor, but as falling even more deeply into poverty: that is to say, their ability to generate an income declined between the two periods. While still poor, just 4 per cent of the people in the sample were able to improve their situation.[6]

In the language of conventional empirical analysis of poverty dynamics, these households are chronically poor. Upward mobility appears to be concentrated among households that were initially better off. A substantial number of households continue to move in and out of poverty, while some appear to be falling further into poverty. Those able to get ahead in the new economic environment may be able to escape this poverty trap; but this proportion is small, and may decline in the future. If this trend persists, the result may be a continued increase in income poverty in the country. It may also result in continuing sluggish aggregate growth as large numbers of families find themselves unable to make the investments needed to meet their own full potential, or to help their children realise theirs (Box 4.1).

While the disturbing increase in headcount poverty and income inequality doubtless reflects the persistence of trends set in motion by former apartheid governments, it may also be partly ascribed to the post-apartheid government's difficulties in delivering on various outcomes. This chapter considers these challenges against the multitude of constraints that limit the ability of the poor to use their limited assets and endowments.

Box 4.1

What is happening with global income inequality?

'Grotesque levels, ambiguous trends

Human Development Report 2002 noted that while the definition of global income inequality is fuzzy and its trends ambiguous, there is widespread consensus on its grotesque levels. This has not changed. Incomes are distributed more unequally across the world's people (with a Gini coefficient of 0.66) than in the most unequal countries (Brazil, for example, has a Gini coefficient of 0.61). (The Gini coefficient is a measure of income inequality that ranges between 0, indicating perfect equality, and 1, indicating complete inequality.) The richest 5% of the world's people receive 114 times the income of the poorest 5%. The richest 1% receive as much as the poorest 57%. And the 25 million richest Americans have as much income as almost 2 billion of the world's poorest people (Milanovic 2002, pp. 51–92).

Monitoring and containing income inequality are essential not only to increase opportunities for as many people as possible, but also to reduce social friction in areas (usually urban) with high inequality. As globalisation deepens and access to information becomes cheaper and more widely available, awareness of global inequality is increasing. People no longer compare themselves only to their fellow citizens: they are also aware of international gaps, making divergence across countries increasingly harmful – and dangerous. To reduce growing tensions, it is crucial that the tide of development lift all boats.

Findings on global inequality vary considerably depending on the approach used to analyse it. Inequality can be calculated across countries (using average national incomes), across the world's people (regardless of national boundaries) and across people within countries.

Inequalities across countries

International inequality is generally measured by comparing national per capita incomes. Countries with the highest per capita incomes in the early 1800s are still today's richest countries, indicating persistence in the structure of international inequality.

In 1820 Western Europe's per capita income was 2.9 times Africa's – and in 1992, 13.2 times (Maddison 2001). In the 1990s per capita incomes increased slowly but steadily in high income OECD countries, but many transition countries in Central and Eastern Europe, particularly the CIS, many parts of Sub-Saharan Africa and some countries in Latin America and the Caribbean experienced economic stagnation. At the same time, highly populated developing countries such as China and India achieved rapid growth.

As a result per capita incomes have been converging in rich countries, while in developing countries the pattern is mixed. But when income data are weighted by population – to capture the relative importance of each country's performance – average incomes across countries appear to be converging. Highly populated developing countries drive such trends: fast-growing China and India are catching up with parts of the industrialised world, such as North America and Western Europe.

Inequality across the world's people

Some studies have tried to capture trends in true global inequality – that is, the distribution of income across citizens of the world, regardless of national borders. Income surveys suggest that when measured this way, global inequality increased between 1987 and 1998. The main forces behind this divergence were:

- a widening income gap between the poorest and the richest people due to slow growth in rural incomes in populous Asian countries relative to rich OECD countries;
- faster progress in urban China relative to rural China and to India, and
- shrinkage in the world's middle-income group (Milanovic 2002, pp. 51–92).

But these conclusions are not entirely robust due to the limited timeframe covered and the use of purchasing power parity (PPP) rates, which are often unsuitable and do not accurately reflect international price differences.

Using alternative methodologies, other analysts have reached more optimistic conclusions suggesting convergence in global individual incomes: that after peaking in 1970, the gap in 1995 had returned to the level in 1950 (Dollar and Kraay 2002, pp. 120–33; Bhalla 2002; Sala-i-Martin 2002). A driving factor in this debate is the measure of inequality used to draw conclusions. When measured using single summary indicators such as the Gini coefficient, incomes appear to be converging. (Because of the Gini coefficient's construction, it gives more weight to middle-income groups and less to the extremes.) Still, in recent decades there has unquestionably been a widening gap between the incomes of the very richest and the very poorest.

Inequality across people within countries

National income inequality is the concept used for country-level analysis. This concept is suitable for analysing the correlation between a country's policies – typically economic openness or redistribution measures – and its distribution of income.

In many countries inequality in assets and especially income appears to be on the rise. Numerous studies have tried to capture trends in income distribution over time across large samples of countries. Cornia and Kiiski (2001) estimate that between the 1980s and the mid- to late 1990s inequality increased in 42 of 73 countries with complete and comparable data. Only 6 of the 33 developing countries (excluding transition countries) in the sample saw inequality decline, while 17 saw it increase. In other words, within national boundaries control over assets and resources is increasingly concentrated in the hands of a few people.

Though not the case for all these countries, in many inequality began increasing during the debt crisis of the early 1980s (Kanbur and Lustig 1999). Since then inequality has soared, particularly in the Commonwealth of Independent States (CIS) and south-eastern Europe. And in many Latin American countries inequality remains extremely high. If sharp increases in inequality persist, they may have dire effects on human development and social stability (including violence and crime rates; see Fajnzylber, Lederman and Loayza 1998 and Bourguignon 2001).'

Source: Ravallion 2002; Schultz 1998, pp. 307–44; Korzeniewicz and Moran 1997, pp. 1000–39; Sprout and Weaver 1992, pp. 237–58; Maddison 2001; Milanovic 2002, pp. 51–92, 2003; Dollar and Kraay 2002, pp. 120–33; Kanbur and Lustig 1999; Bhalla 2002; Sala-i-Martin 2002; Cornia and Kiiski 2001; UNDP 2002e; Fajnzylber, Lederman and Loayza 1998; Bourguignon
Reprinted from Human Development Report (2003:39)

Control of society's wealth has long been associated with unequal power relations between social classes

REDUCING WEALTH INEQUALITY

When analysing inequality, it is important to distinguish between accumulated wealth (i.e. assets) and current income.[7] It is usually the case that the distribution of wealth is highly unequal and that wealth is less equitably distributed than income. There are at least three reasons why the distribution of wealth is an important factor in explaining inequality. First, ownership of financial wealth is a significant source of income: inequity in the distribution of wealth implies a corresponding inequity in the distribution of dividends, interest, rent and other income received by wealth owners. Second, wealth provides security: a wealthier household is better able to survive interruptions in income or expensive emergencies. Finally, wealth brings its owners political and economic power in several forms – although the exact nature of that power remains controversial.[8]

The concentration of wealth plays an important role in the theoretical and empirical literature on sources of poverty and inequality. Control of society's wealth has long been associated with unequal power relations between social classes. This, in turn, expresses itself in terms of an exploitative relationship that results in widening income and wealth inequalities as more and more wealth is amassed by the wealthy in the process of accumulation.[9]

Wealth inequality also implies inequality in the vulnerability of households when encountering economic or personal crises. It has been shown that modest personal wealth makes it possible to overcome the economic problems of temporary unemployment, illness or accident, while the absence of wealth allows small crises to develop into long-term losses.[10]

In South Africa, the colonial and apartheid policies of forced removal, expropriation and discriminatory property laws produced an extraordinary concentration of financial, land and physical capital in the hands of a small White segment of the population. For example, in 1998, just one Black-owned company was listed on the Johannesburg Securities Exchange (JSE) and Black people owned 2 per cent of the economic wealth.[11] Even though the South African economy is not predominantly agricultural, inequality in land ownership is clearly linked to the rise in income inequality and rural poverty.[12]

South Africa is, by all standards, a country with a substantial amount of natural, mineral and produced wealth. Table 4.1 demonstrates the composition of total wealth in South Africa over the past twenty years. The country's national surveys are, however, weak in terms of capturing the financial and property wealth of individuals and households, making it difficult to measure wealth inequality between different types of households and social classes accurately. However, there are strong indications that the disparity between African and White households is much greater in terms of wealth than of income. The average White family has much more home and vehicle equity and many more financial assets of all types (e.g. interest bearing bank accounts, bonds, and equity) and other properties (e.g. land). The poor (who are mainly African) have no, or negligible, net assets.

In South Africa, as in many other countries, ownership of wealth by the upper class implies significant additional sources of income and entails control of many of the largest corporations and banks. The income derived from property – that is, ownership of stocks, bonds, real estate, etc. – is substantial. In 2002, for example, households' income from property amounted to R256 billion, compared to households' wage/salary income (i.e compensation of employees), which

Table 4.1 **Composition of wealth in South Africa (1960 – 2001)**

	1960	1970	1980	1990	2000	2001
	Rand$ PPP adjusted (Rand billion 1995 prices)[1]					
Natural capital	645	633	608	569	586	586
Agriculture	238	275	328	367	388	390
Mining	407	357	280	202	198	196
Produced assets[1]	550	927	1 782	2 326	2 571	2 587
Structures	424	710	1 233	1 588	1 691	1 694
Machinery and equipment	64	118	232	273	352	361
Urban land	141	237	411	529	564	565
Net foreign liabilities	–79	–137	–94	–64	–35	–33
Human resources[1]	2 874	5 685	6 649	8 692	7 780	6 806
Total wealth	4 070	7 245	9 039	11 587	10 937	9 980
	Per capita Rand$ PPP adjusted (Rand billion 1995 prices)[1]					
Natural capital	37	28	22	16	13	13
Agriculture	13	12	12	11	9	9
Mining	23	16	10	6	5	4
Produced assets[1]	31	42	64	67	59	58
Structures	24	32	44	46	39	38
Machinery and equipment	4	5	8	8	8	8
Urban land	8	11	15	15	13	13
Net foreign liabilities	–4	–6	–3	–2	–1	–1
Human resources[1]	163	255	239	250	177	153
Total wealth	231	325	325	333	249	224

Source: Quantec (2002)
Note: (1) Only human resources and produced assets (structures) are adjusted for PPP. (Natural resources are already valued at international trading prices.)

amounted to R496 billion.[13] Overall, 37.3 per cent of households' disposable income was income from property.[14]

The upper class in South Africa consists of a small, wealthy and mainly White segment of the population. Its members dominate the top echelons of business and institutions and own a large proportion of all privately held corporate stock in the country. Many of the stockholding families in the upper class continue to be involved in the direction of, and are disproportionately represented on, the boards of large corporations.[15]

The wealth of the upper class gives it enormous corporate power and a direct influence over the economic lives of the majority of South Africans.[16] At the same time, big business has historically united to promote a common agenda and has used its extensive economic power to influence the country's politics and policies.[17] Big business has also occasionally used economic threat to achieve its objectives – such as warning that it will withhold investment or move investment out of the country in order to force policy compromises.[18]

Steep wealth inequality, therefore, contributes to persistent and rising income poverty and inequality. Furthermore, because business power is magnified and reinforced by its political unity, pervasive forms of wealth inequality provide the real bedrock of the power of the rich to safeguard and enhance their economic and political interests. [19]

South Africa's new Constitution, bolstered by important new legislation, has already eliminated the discriminatory legal foundation for unequal wealth ownership. Programmes aimed at land reform,

The wealth of the upper class gives it enormous corporate power and a direct influence over the economic lives of the majority of South Africans housing, education, small, micro and medium size enterprise (SMME) development and Black economic empowerment (BEE) are specific measures offering the potential for bringing about substantial changes in the pattern of wealth ownership. However, the main focus of transformation in the ownership of wealth has been gradually to change its racial composition. To what extent and whether these important reforms significantly reduce the overall concentration of wealth – beyond the race issue – is harder to ascertain and requires more focused attention (Box 4.2). The success of certain direct measures, such as land reform and housing programmes, is essential to achieving the more egalitarian distribution of basic forms of wealth. Other measures aimed at eliminating poverty and minimising income inequality – such as access to credit – also contribute indirectly to the reduction of wealth inequality over time.

Earnings inequality grows when real earnings rise for high-income workers, but fall for those at the bottom

Clearly, policies that expand economic opportunities for the poor also help to expand the domain of ownership of wealth in the country. Land reform and SMME development are two important factors, whose potential success in reducing poverty depends on the redistribution of particular forms of wealth. Challenges related to both of these issues are developed in the sections on land reform and SMME development later in this report.

The desirability of minimising wealth inequality in South Africa, therefore, goes beyond its effect on reducing income inequality and poverty. Its links to a number of other socio-economic and political issues make the impact of overcoming this challenge far-reaching.

Box 4.2 SMMEs and redress

'"It is evident that an SMME strategy undoubtedly will contribute to redressing severe inequalities inherited from the apartheid period in terms of patterns of economic ownership" (South Africa 1995). None the less, it must be cautioned that whilst SMMEs "represent one vehicle for redressing racial income inequalities, it would be dangerous for policy-makers to rely on SMMEs as the main agent for economic redistribution in South Africa" (Manning, 1996, p. 65) for at least four major reasons. First, it must be acknowledged that a reliance on SMMEs to redistribute wealth does not tamper with the core economic power of South Africa, most of which is concentrated in the hands of the large white-owned corporations (Rogerson, 1999; Kesper, 2001b). Second, as presently the majority of Black-owned businesses are very small and yield only limited incomes to their owners, these alone "cannot be expected to significantly shift the patterns of income distribution" (Manning, 1996, p. 65). Third, it is asserted that "even if SMMEs are a successful channel of wealth to black entrepreneurs, this does not necessarily translate into reduced income inequality" because of the unequal distribution of the benefits of enterprise expansion (Qualmann, 2000; Berry *et al*, 2002). Finally, Qualmann's (2000:45) analysis identifies a suite of factors that limit the effective application of SMMEs as *the* instrument for Black empowerment, not least that the strong pull factor for qualified and trained people in the public sector, NGOs and corporate world has reduced, albeit temporarily, the potential flow of (Black) "opportunistic entrepreneurs" for the SMME economy.'

Source: Rogerson, C M (2002) The role of South Africa's SMME economy in sustainable development, Prepared for UNDP.

REDUCING EARNINGS INEQUALITY

Earnings from work[20] are the most important source of household income in South Africa. More than 50 per cent of total income in all households represents earnings from work.[21] At the same time, there is a close relationship between trends in earnings inequality and overall household income inequality. Overall earnings inequality grows when real earnings rise for high-income workers, but fall for those at the bottom.

A number of factors usually contribute to rises in earnings inequality. Among these are: a sustained slowdown in growth; change in technology that produces dualism between leading and lagging sectors; demographic changes; decline in entry level wages and labour shift from manufacturing into services, where there is a relatively low average and high variance of wages.

Other factors with considerable influence on a trend rise in earnings inequality include: pursuit of flexibility in different aspects of business operations (such as flexible specialisation); the growing importance of part-time and other contingent workers, attempts to reduce wages and avoid unions; contracting out, and the restructuring of full-time into part-time jobs. All of these changes are likely to increase inequality in the distribution of earnings. Similarly, unemployment is a particularly important factor in wage inequality: a large unskilled army of unemployed helps keep the wages of this group low, while the earnings of the small skilled portion of the labour force continue to rise.

Statistical analyses have also shown that earnings inequality is related to productivity growth and manufacturing employment; greater productivity and more manufacturing jobs both tend to create more equal earnings. Cross-country studies have also shown that the stronger the role played by institutions in wage determination, and the greater the efforts towards education and training, the more egalitarian the distribution of skills, dampening the effects of shifts in the supply of and demand for labour. Other institutions, such as social insurance and income maintenance programmes, also affect wage distribution.[22]

These findings indicate that avoiding a trend increase in earnings inequality demands concerted interventions (e.g. institution building) that take into account macroeconomic issues (e.g. unemployment, inflation, growth), but go beyond achieving economic recovery and employment creation.[23] For example, once employment potential expands, the extent to which a rise in earnings inequality can be avoided depends partially on whether the poor are able to benefit (through a reduction in underemployment and/or raising the earnings of labour) from rising employment opportunities. This, in turn, depends on the capabilities of the poor to integrate into the expanding sectors of the economy. If the new opportunities arising from economic growth and its employment potential are such that the capability they demand does not match the skills possessed by the poor, then, by potentially benefiting non-poor workers, the earning inequality will increase. Much, therefore, depends on the correspondence between the structure of the new opportunities and the structure of skills possessed by the poor.[24]

South Africa has one of the largest earnings inequalities in the world. This is reflected in the difference between the average monthly incomes of a relatively small group of skilled employees and the majority of employed who are semi-skilled or unskilled.[25] There is also clear evidence from the October Household and Labour Force surveys that earnings inequality grew and contributed to the rise in income inequality during the 1990s.

Clearly, managing South Africa's industrial restructuring and the related composition of investment has important implications for the evolution of earning inequalities. A rapid move towards skills and capital-intensive structural transformation could significantly increase the already high income inequality. It could, on the one hand, lead to a relatively high rate of wage increases for the small minority of skilled employees, while at the same time producing higher unemployment, thus exacerbating income inequality and poverty among households.[26] An important challenge, therefore, is to adopt a developmental process that manages technological advances and skills requirements in line with society's current skills pool and pace of economic growth. At the same time, this process needs to be supplemented with high levels of support for institutional structures that promote more egalitarian income distribution, dampen the effects of market failures and provide comprehensive social assistance to the poor and vulnerable.

Much depends on the correspondence between the structure of the new opportunities and the structure of skills possessed by the poor

OVERCOMING LABOUR MARKET PROBLEMS

The argument in the previous section (that long-term measures are needed to avoid rising earnings inequalities) relates mainly to access to employment-related income. It is well recognised that employment is one of the most fundamental economic opportunities. It provides people with incomes that enable them to purchase a range of goods and services with which to enhance their and their dependants' standards of living.[27]

At a macro level, the main functions of the economy (e.g. production, employment and distribution) are linked directly to the labour market and specifically to employment. Analytical and empirical country studies have established a number of ways in which poverty is tied to the operation and outcomes of the labour market. This body of literature shows that employment is the bridge between economic growth, poverty eradication and opportunities for human development. The findings underscore, therefore, the importance of incorporating employment into poverty eradication strategies. The high rate of unemployment in South Africa demonstrates that the problem of poverty cannot be addressed in any meaningful way unless the unemployment issue is also tackled.

Employment is the bridge between economic growth, poverty eradication and opportunities for human development

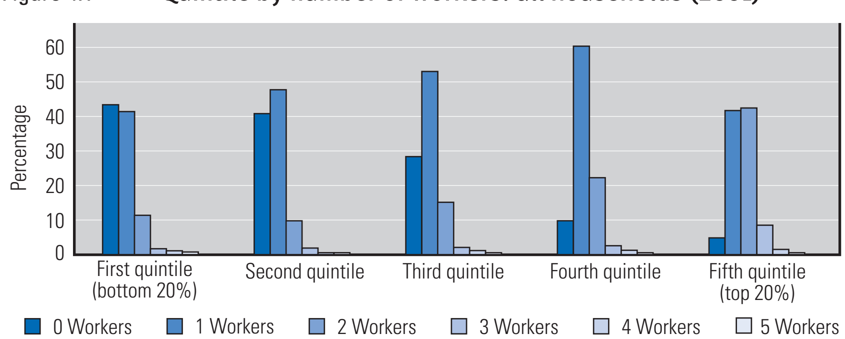
For South Africa, the link between poverty and the labour market is evident at different levels of analysis: from the microeconomic level of the individual, household and community to the macroeconomic level of the national economy, and even at the global level as it relates to the nature of the international economy and its relationship with South Africa. Thus the labour market provides an important point of entry when examining the challenges facing poverty eradication.

Household poverty status and the labour market

Statistical analyses of household surveys show that the probability of being poor increases when an individual is unemployed. Empirical studies have also established the degree of dependency of poor households on the employment status of household members and their related income flows.

Substantively, data from household surveys – reflected in income quintiles – show that the poorest South African households rely heavily on pensions or remittances for their livelihoods (Figure 4.1). This is most pronounced in African households, where over 50 per cent of households in the first income quintile and almost 40 per cent in the second income quintile had no income earners in 2001 (Figure 4.1). A relatively large number of households, especially those in the poorer income quintiles, relied heavily on only one income earner. Again, this dependence is most pronounced for African households. This shows the extent to which households are dependent on income earners and are thus extremely vulnerable to the loss of an income or pension.

Figure 4.1 **Quintile by number of workers: all households (2001)**



Source: Labour Force Survey (Feb. 2001)

Poverty and the quality of employment

Sole earners supporting the poorest households are most likely to be in low-skilled, low-pay and low-quality occupations (Figure 4.2). This is compounded by the fact that these jobs are often tenuous and insecure, suggesting even greater vulnerability to job loss. Thus the type of employment available to, or occupied by, the poor is an additional problem faced by the 'working poor'. Moreover, it reflects a labour market structure in which a relatively large number of households (with one or more workers) in the first income quintile are trapped in poverty.

The attainment of employment, its quality and conditions and vulnerability are, therefore, also important to the relationship between poverty and employment. However, there are many other labour market issues that affect poverty directly or indirectly, such as discrimination, disadvantage and other impediments.

Poverty and the supply of labour

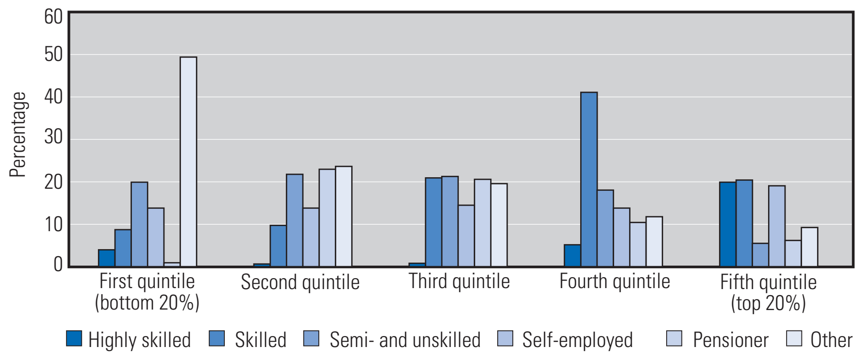
In a large number of studies, supply side considerations reveal that poverty impacts directly on the supply of labour and the quality of labour supplied. For example, labour market participation and gender is a particularly striking feature in time-poverty studies, where the participation rates of rural women are directly and negatively correlated to the amount of time they must spend collecting wood or water for the household. Lack of access to education, a direct social effect of poverty, reduces earning potential. Likewise, the physical effects of poverty, where illness or poor health interfere with work, reduce not only earning potential but also the ability to purchase medical treatment. This leads cumulatively to worsened conditions and a lessened ability to work. Vicious circles of cumulative causation such as these – known as poverty traps – are found at different levels of aggregation within the labour market.

Economic restructuring, the labour market and poverty

The structure of a country's relationship to the world economy influences the way in which external economic shocks affect the poor. Studies have shown that poverty has been increasing in those countries that have adopted either the most open trade regimes, or have continued with the most closed trade regimes.[28] Economic liberalisation, particularly, increases the chances of poverty owing to its negative side effects. For example, economic liberalisation can affect aggregate real wages, unemployment, underemployment, distributive conflicts, sectoral differences in the changing pattern of demand for workers and changes in relative wages. These may or may not recover over time. Where the adverse effect of reforms is unanticipated or cannot be managed in some way, the poor may be further impoverished. To the extent that this occurs, poverty may become self-perpetuating and may undermine poverty reduction efforts.[29]

Overall, given the link between poverty and employment, it is clear that the labour market cannot be ignored when pursuing poverty eradication goals. South Africa provides a cogent example of how the problem of poverty is, to a large extent, intractable unless labour market problems are resolved. Chapter 7 of this report is dedicated to the challenge of employment creation as part of a sustainable development strategy.

Figure 4.2 **Occupational category of head of household (2001)**



Source: Labour Force Survey (Feb. 2001)

Where the adverse effect of reforms is unanticipated or cannot be managed in some way, the poor may be further impoverished

South Africa provides a cogent example of how the problem of poverty is intractable unless labour market problems are resolved

GENERATING A PRO-POOR GROWTH PATH

The literature on poverty is replete with discussions about growth as the key to poverty eradication. Sustained poverty reduction is not possible without sustained and rapid economic growth. Two basic channels link poverty reduction to growth. These are: (a) the social provisioning channel: that is, resources generated by growth (e.g. taxes) can potentially be used by a society to provide services to the poor; (b) the personal income channel: that is, the growth of the economy, through employment, translates into higher personal income amongst the poor.[30] Without the social provisioning channel and the personal income channel, faster economic growth will not be accompanied by a faster rate of poverty reduction.

Given the importance of growth for poverty reduction, an important question is how to shape the character of growth in such a way that it channels a disproportionate share of resources to the poor (Box 4.3).[31]

Traditionally, the debate focused on the relationship between growth and income inequality, and not on the relationship between growth and poverty. For about forty years, two economic propositions have had an important influence on the design and implementation of development strategies. The first proposition argues that the degree of income inequality bears a systematic relationship to the level of income per head, rising initially as income increases and then falling with further increases in income per head. The second proposition argues that there is a trade-off between equality and average income.[32] Together, the two propositions have been used to argue against policies designed to generate a less unequal society, since the first proposition suggests that policy interventions are not needed in the long run, and the second proposition implies that they are harmful in the short term.[33]

More recent literature, however, has reversed the above propositions and has become more explicit in its definitions of pro-poor growth strategies. The new findings have also helped articulate new sets of policies that prioritise the reduction of poverty and income inequalities through the use of both macroeconomic policy measures and traditional welfare measures. For example, new policies are expected to restructure the growth process towards the adoption of labour intensive techniques, investment in infrastructure, education, health and other basic services. In addition, transfer policies are designed to help reduce poverty and inequality directly. This approach differs from the traditional two-track approach that assigns growth to one track, with economic policies that are not necessarily pro-poor, and social development to another track, with social services and a safety net being assigned the burden of addressing poverty and inequality. The two tracks rarely converge. In fact, in many instances, the pursuit of the social development track is explicitly or implicitly conditioned by the policies and outcomes of the growth track.[34]

Even with a pro-poor growth strategy in place (i.e. a growth process accompanied by reduction in poverty), relying solely on growth to reduce poverty is not enough since there will inevitably be losers. Accordingly, those workers who lose their jobs because the factories or shops that employ them cease to be competitive may merit special attention, and it may be efficient to maintain an employment insurance system that offers cash benefits, training and labour market information to the unemployed. Japan has long had such a system, and South Korea is in the process of adopting one.

Box 4.3

SMME'S and poverty alleviation

'"The contribution of the SMME economy towards poverty alleviation and income redistribution is also the subject of growing controversy. Although a number of critical studies are questioning the potential of the SMME economy to attain the goals of extensive employment creation, most observers concur that the SMME economy can be a positive factor in contributing towards poverty alleviation" (Rogerson, 1999; Kesper, 2001b). For example, Dorfling (2001:93) argues that because of the sheer size of the micro-enterprise and informal economy and the fact that many of those involved are female heads of households, disabled people and rural families who are struggling to survive, "the sector plays a particularly important role in terms of income generation and poverty alleviation". A contrary view emerges in the analysis of the Global Entrepreneurship Monitor in which it asserted that necessity entrepreneurs would not be "an effective route to poverty alleviation" because of their limited capacity to generate incomes (Driver *et al*, 2001:51).

A critical factor in determining the positive contribution towards poverty reduction that might be made by the SMME economy, especially of micro and informal enterprise, is the policy and support environment offered by local as well as national governments. The international experience shows that policy support and a less hostile attitude of local governments can allow greater informal income and livelihood opportunities and thus making the lives of the poor a little less poor (Mead, 1999). It has been argued that current national support programmes offer little in the way of support for survivalist enterprise, women entrepreneurs and rural SMMEs. For these groups of survivalist enterprise at the coalface of poverty alleviation, the most effective level of policy intervention and support is at the local level rather than the national scale of government (Rogerson 1999). Important opportunities exist for local governments to enact a range of measures to support survivalist enterprises as part of local economic development initiatives for poverty alleviation. In particular, for groups of urban survivalist enterprise, engaged in for example the business of street hawking or the running of retail spazas, the activities of local government can exert a profound impact upon the economic health of these kinds of enterprise and on the wider coping strategies of poor households (Lund, 1998). The establishment of formal markets, appropriate policies towards land use zoning and improved infrastructure provision, among others, are key issues for local government intervention which can impact positively upon the workings of survivalist informal enterprise and enable a contribution towards poverty alleviation (Rogerson, 1999).

The gains to poor women street traders of a changing policy environment represent documented examples of how the poor can be a little less poor and that informal enterprises of South Africa's SMME economy can contribute towards poverty alleviation (Skinner, 1999, 2001). The critical significance of policy support for survivalist enterprises is once again highlighted by South Africa's HIV/AIDS crisis with the chronic nature of the implying additional long-term costs that households and extended family networks are forced to cover. Among the coping mechanisms used by the poor to weather economic shocks and smooth income flows are the running of small enterprises which thus play a positive role in assisting the affected to offset some of the added financial burden which is caused by HIV/AIDS (Ebony Consulting International, 2001; Grant, 2001).'

Source: Rogerson, C M (2002) The role of South Africa's SMME economy in sustainable development, Prepared for UNDP.

Tourism and poverty

'In the international context, one of the most distinguishing facets of South Africa is the strong commitments made towards tourism assuming a developmental role (Ashley and Roe, 2002; Ashley and Ntshona, 2002). More especially, a strong emphasis in South African planning is upon job creation and enterprise development in support of the country's previously neglected black communities. For example, as an integral part of the national government's programmes for poverty alleviation, the DEAT operates a Poverty Relief Programme. The central aim is to catalyse long-term sustainable work opportunities through improving tourism potential, creating new facilities or infrastructure, and encouraging communities to provide better services. DEAT's poverty relief priorities seek to integrate with and firmly support broader national government initiatives. Other important national initiatives that link tourism and poverty alleviation have been launched as part of South Africa's Spatial Development Initiatives (SDI) Programme (Rogerson 2001a, 2001b).

At least four different sets of interventions may be recognised as designed to make tourism a vehicle for poverty alleviation in South Africa. First, there have been substantial investments made in improving the infrastructure for tourism development in areas of South Africa with untapped potential. In particular, for many poor rural communities marked by underdevelopment and poverty, access to tourism opportunities is fundamentally constrained by the absence of infrastructure needed to attract investment by tourism developers or to access tourism markets (Viljoen and Naicker, 2000). The initial incorporation of tourism in the Spatial Development Initiatives programme, which aims at unblocking investment opportunities, was associated with commitments made to poverty alleviation (Rogerson, 2001b). The Lubombo SDI and the Wild Coast SDI represent two good examples of infrastructure improvement which is linked to the opening up of new tourism opportunities for rural communities in these areas. In addition, the Maputo Development Corridor, the West Coast Investment Initiative and even the Gauteng SDI also have incorporated substantial commitments towards infrastructural improvements that allow poor communities to participate in tourism (see Rogerson, 2001a, 2001b; Rogerson and Sithole, 2001).

A second stream of interventions that link tourism and poverty alleviation relate to the search for new market niches and the development of new tourism products that involve poor communities. In relation to tourism product development, the attention given to cultural tourism offers considerable job and enterprise opportunities for many poor communities. For example, cultural villages offer both direct and indirect employment and entrepreneurship opportunities in many rural areas of South Africa (Jansen van Veuren, 2001a, 2001b, 2002). The most important indirect spin-offs relate to the selling of rural handicrafts as well as cultural performances (Rogerson and Sithole, 2001). Another aspect of cultural tourism is the initiatives to promote "township tourism" in places such as Soweto, Alexandra (Johannesburg) or Khayelitsha (Cape Town). In the growth of these areas as new tourism spaces the focus is often on the political struggle for democracy in South Africa. Once again, this new alternative form of tourism creates a range of indirect livelihood opportunities, including the provision of food, drinks as well as craft retailing.

Nature tourism is a further critical area for expansion that is linked to poverty alleviation in many rural areas (Viljoen and Naicker, 2000). Certain South African ecotourism enterprises, such as Wilderness Safaris and Conservation Corporation Africa, have demonstrated a commitment to expand the benefits of tourism development to local communities (Kirsten and Rogerson, 2002; Spenceley *et al*, 2002). Promotion of small businesses and the informal sector as well as community involvement in the ecology is an important element of the activities of these enterprises. More broadly, in the

Box 4.3 (continued)

investment projects promoted through the SDI programme there is a strong "empowerment" component in tourism development with the focus upon the maximisation of the benefits of private sector investment for local communities (Rogerson, 2001c). The key factor in the success of these pro-poor initiatives is, however, the financial viability of the core business (Poultney and Spenceley, 2001). Of equal importance for long-term sustainable development is the establishment of tourism projects which are environmentally sustainable as well as offering economic and social benefits through local communities (Norton, 2001). Indeed, sustainable management is essential for "pro-poor tourism should always be sustainable" (Green and Sibisi, 2001:1). This highlights the importance for sustainable (pro-poor) rural tourism of initiatives for community-based natural resource management (Mayoral-Phillips, 2001).

Third, the improvement of the skills base of poor communities through various training initiatives is another important policy intervention (Mafisa, 2001). DEAT has facilitated the establishment of the Tourism and Hospitality Education and Training Authority (THETA) which functions as the overarching training authority for the tourism industry. The THETA is devising a National Training Strategy for accreditation, setting of standards and disbursement of levies. The critical issue of job creation is addressed through a Learnerships programme which DEAT facilitates. Most of these learnerships target students and unemployed youth and aim to improve their employment prospects in tourism through a combination of structured learning and structured workplace experience (DEAT, 2000b). Skills training focuses upon a range of occupational categories in which an expansion of job opportunities is anticipated relating to tourism expansion in both rural and urban areas of South Africa.

The introduction of various new forms of ownership and institutional arrangements for tourism projects is a further vital aspect for poverty alleviation. The core emphasis has been upon direct involvement of communities in the ownership and operations of tourism projects. The South African experience shows that if communities have land ownership as an asset base there is a potential for strong economic and social empowerment with considerable benefits flowing for poor communities. Correspondingly, where the land rights situation is unclear, communities may still benefit from tourism, albeit to a lesser extent (Ashley and Ntshona, 2002). Through the SDI policy programme much attention was given to the development of new 'empo-tourism' models which sought to move away from a corporate responsibility approach to one that is anchored on the underlying rights and abilities to add value to such deals (Elliffe *et al*, 1998). These new models are being implemented through so-termed "Community Public Private Partnerships" which aim to revitalise depressed rural economies through linking "resource rich" communities with private investors interested in the sustainable utilisation of natural assets (Elliffe, 1999). One of the most advanced CPPP projects is the Makuleke tourism initiative in Limpopo which arose as a consequence of the victory of the local community in a land restitution case. The Makuleke community is involved in a joint venture with the private sector in developing new game lodges and other tourism products in an area which is functionally part of Kruger National Park (Mahony and Van Zyl, 2001).'

Source: Rogerson, CM (2002) Tourism in South Africa: Potential economic driver, potential for poverty alleviation. Prepared for the UNDP.

Of course, such programmes need to be carefully designed so that they can achieve an effective balance between protection and incentives.

In South Africa in the early 1990s, the Reconstruction and Development Programme (RDP) correctly prioritised the importance of achieving growth through redistribution, and the government's role in actively investing in social services and infrastructure to eradicate poverty.

However, the current strategy and policies for achieving growth through increased exports and competitiveness are pursued through the adoption of new production technologies that are increasingly capital intensive. This strategy seems objectively anti-poor as, on the one hand, the gap between economic growth and employment growth is widening and, on the other, given their capabilities, the poor are not able to integrate into the current processes of economic expansion. Chapters 7 and 8 of this report elaborate on these issues and show how the South African economy can be steered towards achieving sustained growth with reductions in poverty and inequality.

EXPANDING ACCESS TO BASIC SERVICES

It has become increasingly evident that the poor are unable to meet charges for the provision of essential services, especially in the light of rising unemployment. Access to free or subsidised essential services – especially water, energy and housing – could be a complementary measure to release some of the financial constraints on poor households. At the same time, it is important to minimise the trade-off between food and non-food essentials in a large number of poor households in the country, especially in an environment of rising basic prices (Box 4.4).

Furthermore, lack of access to affordable services can lead to 'time poverty', which further constrains the ability of a household to use its time generating a livelihood. Time spent on unpaid work in the home sharply diminishes a household's capacity to generate income. It has been estimated that the time demands of securing drinking water and fuel wood diminish the median household's available uneducated labour power by some 20 per cent.[35] Chapter 5 presents a more detailed discussion of the challenges facing the country in the delivery of quality and affordable services.

ADVANCING LAND REFORM

Historical evidence suggests a strong link between redistributive land reform and a reduction in poverty. History also shows that the success of land reform programmes is closely linked to their integration with a broader package of basic services, such as water and electricity and training and extension support for productive activities.

However, since the mid-1980s, land reform programmes in South Africa have increasingly conformed to market-led approaches. They have failed to transfer significant amounts of land to the poor, and have sometimes exacerbated inequalities in resource distribution. At the same time, the global processes that have shifted the basis of land reform programmes from redistributive to market-based considerations have also induced a reduction in state spending on basic services.

In South Africa, many necessary elements have been put in place to achieve land reform and link it to other developmental interventions that will allow for sustained development and economic growth, especially in the rural areas. However, the overall result has been an extremely slow pace of land redistribution, and weak accommodation of redistribution with other social measures that might make land reform successful.

The budgetary allocation to the Department of Agriculture and Land Affairs (DALA) has remained relatively small, at about one-third of a per cent of the total national budget, and is set to continue at this level in the medium term.[36] From the budget allocated to the DALA, the share allocated to the actual payment of grants under the land reform and restitution programmes is about 50 per cent (Table 4.2). Consequently, grants have been inadequate for the purchase and redistribution of a reasonable amount of arable land. The productive use of the distributed land depends on a support system that includes the provision of infrastructure, training, credit and market access as complementary measures. Without these, beneficiaries may not be much better off than they were

Box 4.4 **How many South Africans are vulnerable to food insecurity?**

'According to the 1999 October Household Survey, about 1.13 million households with children under 7 years old went hungry due to lack of money to buy food. This is about 11% of all households. The situation is even worse in rural areas, where 16% of households with children under 7 years old went hungry as a result of their inability to purchase food. Another 2.3 million households with people aged 7 years and older could not afford to purchase food and consequently went hungry. This represents about 22% of South African households. Thus about 33% of all households in total went hungry in 1999. As expected the ratio is relatively higher in rural areas where 26% of households with people aged 7 years and older went hungry as a result of lack of money for food.'

Source: Bonti-AnKomah, S, (2002) Food Security in South Africa and implications to Sustainable Development, prepared for the UNDP.

Table 4.2 **Restitution and land reform grants (1998–2005)**

	Restitution grants		Land reform grants	
Budget year	Value (R1 000)	% of DALA budget	Value (R1 000)	% of DALA budget
1998–99	12 088	1.7	358 274	49.6
1999–2000	122 196	17.8	173 008	25.3
2000–01	205 590	26.7	156 623	20.3
2001–02	186 528	19.2	332 431	34.2
2002–03*	242 951	25.2	251 463	26.1
2003–04*	265 441	25.1	209 247	19.8
2004–05*	305 873	26.8	230 314	20.2

Source: Derived from Department of Finance, 2002
* predicted

before gaining access to the land.[37] The DALA's Quality of Life report found that production levels were very low among land reform beneficiaries, with less than 10 per cent using the land for agriculture, and many not using the land at all. Fully 80 per cent of beneficiaries said they had participated with the expectation that they would be able to plant crops and generate an income; yet only 22 per cent said they had managed to do this. The time of poorer women beneficiaries, in particular, was taken up by collecting natural resources for survival rather than organising systematic production on the land.[38]

In addition to land redistribution, tenure security in common property areas is important for sustainable development for a number of reasons. Communal land rights minimise individual risks associated with natural resources that vary widely over space and time. They also serve to reduce inequalities through common user rights, hence preventing social destabilisation.[39] They provide residents with a legal basis to challenge top-down development projects that may not suit their needs. Land-based livelihoods, especially in communal areas, extend well beyond agricultural production.[40] Value may also be derived from indigenous or wild resources, livestock systems and indirect and non-use values related to aesthetics, spirituality and ecological functions. These are best understood in an integrated way, with the components reinforcing one another.

Poor people, particularly those living in rural areas, often rely heavily for their sustenance on a range of environmental goods and functions

In the past, the fact that rights were not legally recognised was one of the factors that prevented communities from challenging the appropriation of benefits from 'development projects' on communal land by homeland politicians and traditional authorities. It also prevented settled communities from challenging the dumping in their areas of people who were forcibly removed under apartheid.[41]

A lack of clarity and certainty on tenure rights is clearly a constraint on private and public investment. Major government funded public works programmes have been thwarted by tenure uncertainties.[42] In one instance, a settled community collected counterpart funds for the construction of a school, but lost the opportunity because of confusion over land allocation responsibilities.[43]

INVESTING IN A SAFE ENVIRONMENT

Environmental conditions relate to three key dimensions of poverty: (a) *livelihoods:* poor people tend to be most directly dependent on natural resources, and are therefore the first to suffer when these resources are degraded; (b) *health:* poor people suffer most when water and air are polluted; and (c) *vulnerability:* poor people are most often exposed to environmental hazards and environment-related conflict, and are least capable of coping when they occur.

Poor people, particularly those living in rural areas, often rely heavily for their sustenance on a range of environmental goods (natural resources) and functions (ecosystem services). Natural resources can be a primary source of livelihood or may supplement household daily income. Ecosystems – forests, agro-ecosystems, grasslands, freshwater systems and coastal ecosystems – provide essential services that contribute to the productive activities of rural and urban poor people in numerous ways. These services are public goods, which provide indirect values that are not consumed or traded in the market place. They are, however, vital to the livelihoods of poor people, especially in the more marginal environments or where poor people have limited access to external technology and other inputs.

The disease burden from environmental risks is much greater among the poor. Water-related diseases, such as diarrhoea and cholera, mainly affect children in poor communities. Other diseases, such as malaria, are linked to a wide range of environmental conditions or factors related to water contamination and inadequate sanitation. Indoor air pollution, caused by the burning of traditional biomass fuels (e.g. wood, dung) for cooking and heating, affects mainly the poor.

Environmental degradation has a much greater impact on the poor than on the rich. The overwhelming majority of those who die from air and water pollution each year are poor people. They are also most affected by the floods, storms and harvest failures brought about by global warming. All over the world, it is poor people who generally live nearest to dirty factories, busy roads and dangerous dumps, while the loss of biodiversity is most severe for poor rural communities.

Some environmental degradation truly reflects global concerns, such as global warming and the depletion of the ozone layer. Others are international, like acid rain. Yet others are more localised, though they may often occur worldwide, like urban air pollution, water pollution or soil degradation. However, even though poor people feel the impact of global environmental degradation, local environmental damage affects the lives of poor people even more. This includes the unequal health and livelihood impacts of water pollution, air pollution, domestic solid waste and industrial hazardous waste, soil degradation, deforestation and loss of biodiversity.

In South Africa, the relationship between poverty and the environment needs to be understood in terms of the country's political history. Forced removals, overcrowding in the so-called homelands, discriminatory urban policies that contributed to inefficient resource flows and inequitable access to environmental services, unjust land-use practices (poor communities located alongside polluting industries), the migratory labour system and a protectionist approach to nature conservation all contributed to environmental degradation and the alienation of people from their land and resources.

Other key features of the poverty-environment interface in South Africa are the skewed power relations that deny the poor access to environmental resources and services such as clean water, productive land and natural resources.[44] In brief, the poor have been, and continue to be, 'left out' of the processes of economic growth and development due to historical and geographical circumstances, and also because of the social exclusion that results from unequal power relations between rich and poor, men and women, and the way in which institutions function to reproduce patterns of wealth and poverty.[45]

The commonly held perception is that poverty is mainly a rural phenomenon and that the poor are largely responsible for the degradation of land and resources. Poverty in rural areas and the human response to securing food, shelter, and generating livelihoods undoubtedly contribute to environmental degradation. In addition, research for the National Spatial Development Perspective Report (1999) indicates that, although there is a severe poverty gap in the rural districts of the former homelands, the highest poverty gap[46] is measured in the large metropolitan areas. Conditions of extreme poverty and human deprivation are evident in many of the informal settlements around and within South Africa's cities. However, as in many developed nations, the unsustainable consumption and production patterns of the wealthy minority in South Africa may be a greater threat to environmental sustainability than the unsustainable practices of the poor.[47]

The overwhelming majority of those who die from air and water pollution each year are poor people

In a recent study of 700 South African households affected by HIV/AIDS, more than half of the affected families did not have enough food to stave off starvation

Although poverty is a countrywide scourge, its interface with the environment is perhaps most visible in rural areas. A large proportion of South Africa's rural poor is directly dependent on natural resources for subsistence purposes. The use of such resources provides an important, albeit largely unrecognised, buffer against poverty, as well as opportunities for employment in the informal sector.[48] But for the poor, 'the environment' can also be viewed as a hazard (e.g. through processes of desertification) and a threat to human health and well-being (e.g. through poor air quality). As producers, consumers, harvesters and main caretakers, women have been particularly vulnerable to the degradation of natural resources, the subsequent destabilisation of their livelihoods and income-generating abilities, and the added burden of unremunerated work. Consequently, addressing poverty is not only critical in terms of safeguarding South Africa's environmental heritage and resource base, but also in terms of meeting constitutional imperatives. These are contained in the Bill of Rights, which includes the right to an environment that is not harmful to health and well-being, and the right to equitable access to all of South Africa's natural resources.

Chapter 6 of this report elaborates on the relationship between socio-economic development and the environment in South Africa. It also identifies major environmental challenges.

COMBATING HIV/AIDS

About 12.6 per cent of South Africans (5.58 million) are currently estimated to be suffering from HIV/AIDS.[49] HIV/AIDS has had a disproportionate impact on poor communities, permanently trapping many of its victims in poverty. The magnitude and far-reaching consequences of the HIV/AIDS pandemic mean that the disease is no longer a crisis only for the healthcare sector, but presents a major challenge to all sectors.

Many studies in South and southern Africa have clearly demonstrated that HIV/AIDS contributes to a rise in poverty, and that poverty reduces the ability of poor people living with HIV/AIDS to cope with the disease.[50] AIDS generates new poverty as people lose employment and housing tenure. Household incomes fall due to the loss of wage earners and rising spending, particularly on medical care and funerals. In both Thailand and Tanzania, households are reported to spend up to 50 per cent more on funerals than on medical care.[51] Not only do household outputs and incomes decline, but household members, particularly women, have to make hard choices on the allocation of their time between production, meeting household needs, child care and care of the sick. In a recent study of 700 South African households affected by HIV/AIDS, more than half of the affected families did not have enough food to stave off starvation. Two-thirds of the households reported a loss of income as a result of the disease and larger proportions of household income being spent on health care and funerals.[52]

The poverty that results from AIDS interacts with other dimensions of poverty to generate a vicious downward cycle. Under these conditions, AIDS not only increases poverty, but also widens the gap between the rich and the poor. Households may cope by selling assets: land, bicycles, radios, cattle and other goods. If they dispose of productive assets such as cattle or land, they reduce their chances of recovering and rebuilding. The tendency is for such households to be unable to cope and to collapse.

From a social sustainability perspective, key concerns include changes in family structures and social networks.

The increasing pressure on grandparents to care and provide for growing numbers of orphaned children is placing a heavy burden on those who are already vulnerable. The number of households whose primary caregivers are under the age of eighteen years is also increasing. This has the knock-on result of decreasing school attendance and retarding efforts to build human capital. Other social implications include the abandonment and abuse of people living with HIV/AIDS, stigmatisation, poor morale and stress.

Encouragingly, the link between poverty and HIV/AIDS has been emphasised in South Africa and the government has urged action to deal with the root causes of poverty. However, various factors still impede the implementation of a coherent and unified strategy. Whilst there have been positive attempts by various government departments to develop and implement policy responses to the epidemic,[53] little progress has been made with mainstreaming HIV/AIDS into all sectoral policies – in government, business or civil society institutions – and identifying practical strategies to address the epidemic. The magnitude and dimensions of the epidemic demand the urgent adoption of a multi-sectoral and multi-stakeholder approach.

ENHANCING CIVIL SOCIETY CAPABILITIES

Non-profit organisations (NPOs) were deeply engaged in the struggle against apartheid. Because political parties were banned, activists used other bodies – usually NPOs – as catalysts to apply pressure on the government.

In the post-apartheid period, NPOs have had to redefine their objectives towards the reconstruction of the new society and, in so doing, gear their work to the redress of the social imbalances caused by apartheid.[54] Despite the fact that several NPOs had to close in the period following 1994,[55] the NPO sector is still made up of a wide spectrum of organisations, and is currently playing a critical and vibrant role in the social and economic development of South Africa.

NPOs create new opportunities for the large numbers of people who work in these institutions and benefit from their services. This is particularly important in respect of the fight against poverty. The Vulamehlo Women's Club, for example, creates skills and employment through food production. Another example is the Siyakhula Development Project, where unemployed people are given basic skills training in fields as diverse as plumbing, carpentry, mechanics, welding, gardening and security services. Thereafter, Siyakhula supports and encourages its graduates to contract small jobs to underserviced communities at minimum cost.

Mutual aid structures such as 'stokvels' and 'burial societies' are significant actors in the economic life of South African communities

Mutual aid structures such as 'stokvels' and 'burial societies' are widespread and are significant actors in the economic life of South African communities. These structures assist members with credit requirements or special financial needs, such as the costs of traditional funerals. Many of these voluntary associations use revolving credit mechanisms, although some have become sufficiently established to be able to secure credit through more formal channels. In addition, social coping mechanisms improve the ability of individuals and groups to enhance their economic potential – such as support for single mothers and after-school care groups.

A wide range of development and housing organisations has evolved, creating employment opportunities by facilitating the physical development of infrastructure and housing.[56] Other organisations impart skills or assist with access to capital, equipment and information technology for people in specific circumstances, such as small to medium-scale business enterprises, rural development initiatives and infrastructure provision to marginalised communities. One such organisation, KhulaStart, was established in 2000 and is partially operated by volunteers arranged by the United Nations Volunteers (UNV). KhulaStart provides group loans without personal collateral security, with the aim of kick-starting small and medium-scale business ventures. Volunteers were used to establish the organisation, to train the eighty or more staff members and to provide field support.[57]

Volunteering is also an important economic force in South Africa, focusing on the marginalised sectors of society and on those special needs groups that tend to be overlooked by government and the corporate sector. It also builds social capital amongst marginalised communities and demographic groups by empowering them to set their priorities and shape their destiny. Many unemployed people have immersed themselves in the volunteer sector and, in so doing, have gained important social recognition, skills, networking, improved self-image and often the opportunity to move into more formal, paid positions. Alternatively, this capacity may remain within volunteer-based organisations, potentially in leadership positions, thus enhancing the sustainability prospects of the organisation.[58] This 'skills incubator' effect bodes well for South Africa, given the demographic profile of volunteer-based organisations. If supplemented with much-needed funding and skills development, it could provide important, socially responsible future leadership in all sectors of society.

Volunteer-based organisations are an important source of employment for Black people and women

Volunteer-based organisations are an important source of employment for Black people and women, both of whom have been historically, socially and economically marginalised in South Africa (Box 4.5).[59]

NPOs in South Africa, including volunteer organisations, are currently in need of support to enhance their sustainability and services. Some important interventions are needed to ensure that NPOs continue to play a direct role in poverty reduction and in unleashing the potential of communities to enhance overall developmental initiatives.

PROVIDING A SOCIAL SAFETY NET

Given the high percentage of the population living below the poverty line, South Africa's social assistance system of grants is an especially important aspect of addressing income poverty.[60] Low or non-existent incomes contribute directly to poor access to health care, education, housing and social infrastructure, since the poor have difficulty affording these services.[61]

However, the success of a policy can be judged by its ability to focus benefits on its target group.[62] Focusing on a specific target group also has the advantage of making it easier to identify the impact of a policy.[63]

A major objective of the government's transfer programme is to address poverty, particularly poverty among the black population. But have government transfer programmes been designed in a way that will impact positively on their targeted group? A way of answering this question is to: (a) identify the distribution of eligible individuals for a given social grant (targeting beneficiaries); (b) estimate the impact of a given programme on head-count poverty (targeting head-count poverty), and (c) estimate the impact of a given programme on the poverty gap (targeting the poverty gap).

Targeting beneficiaries

In terms of the distribution of eligible individuals for the main current programmes, Africans, who constitute the overwhelming majority of the poor in the country, are the main beneficiaries of the current old-age pension programme, the child support grant and the disability grant programme (Table 4.3).

Their total share of the above programmes (and current policies) is 79 per cent for the old-age pension, 94 per cent for the current child support grant and 85 per cent for the disability grant.

The distribution of beneficiaries for the above grants in terms of race and family type is sensitive to the means test. The means test refers to the income level criteria in terms of which the eligibility for income support of prospective grant beneficiaries is assessed. Those who qualify under the means test subsequently become recipients of grants. If the means tests are removed, the share of Africans in 'total potential number of eligible persons' for different grants is expected to drop. If all else remains unchanged, the

Box 4.5

Volunteering in South Africa

'The United Nations Volunteer Programme (1999) classifies volunteer activities into four groups: mutual aid or self-help, philanthropy or service to others, participation, and advocacy and campaigning. South African volunteering organisations are distributed as follows:

Mutual aid or self-help

These volunteers or members are the main recipients of the volunteering themselves. These are predominantly kinship groups such as burial societies, rotating credit associations such as stokvels, religious groups, health groups, disability support groups and sports and cultural groups. Volunteering of this type is a major catalyst to the growth and maintenance of social capital in the country through the development of strong community values, maintaining and furthering cultural norms and pursuits, empowering marginalised groups (such as women and children) and developing the infrastructure for the growth of economic capital through access to financial services, collective employment endeavours and employment opportunities within the most underdeveloped communities in urban and rural South Africa.

Philanthropy or service to others

The primary beneficiary of the volunteering in this category is a third party and not a member of the group. The culture of Ubuntu and South Africa's missionary heritage helps to explain why this type of volunteering is so substantial. The contribution of philanthropic activities to sustainable development in South Africa is based on both supporting and developing the social and economic fabric of communities through assisting marginalised groups, aiding in the fight against poverty and hunger and increasing the economic survival prospects of many thousands of people. Philanthropy NPOs offer care, shelter, feeding and clothing to children, the disabled and the elderly and financial and material assistance through soup kitchens, feeding schemes, shelters and job creation projects. Furthermore, economic capacity is developed through philanthropic adult education programmes, the building of educational facilities and job related skills development. It is also in the philanthropic sector that the most direct environmental programmes exist, protecting the rights of animals and aiming to conserve natural areas and resources.

Participation

By participation we refer to those organisations that are involved in the governance process either through representation on government bodies or through representation on other consultative bodies. Current participative organisations include school governing bodies, parents associations and ratepayers associations.

Advocacy and campaigning

Advocacy and campaigning tends to refer to the lobbying of government for purposes of changing policy and legislation. South African volunteering organisations are territorial and generalist in nature. This tends to deplete their lobbying "power" resulting in the volunteering activities of non-profit organisations seldom focusing primarily on advocacy and campaigning. There are a relatively large number of organisations that fall under the participation activity due to their main function being concerned with governance such as civic associations or rate payers associations, although part of their function is lobbying. There is also a growing number of influential organisations that are concerned with issues of human rights or sectoral policy concerns such as those of business, labour or the environment. These include HIV/AIDS lobby groups, business lobby groups, prisoners' rights organisations, workers unions, environmental and animal rights lobbies and educational groups. However, as many of these organisations' main activities are focused on the education of people concerning their rights and provision of legal representation, with only a small amount of time being spent on campaigning, they tend to be categorised under philanthropy and service to others. It is for this reason that only 1% of organisations are specifically involved in this type of activity.'

Source: Bev Russell (2002), 'The contribution of the South African Volunteering Sector to Sustainable Development.'

main group benefiting from the removal of the means tests will be individuals within the higher-income white community. Alternatively, when the means tests are removed, the share of pensioners from the 'Couple with No Children' family group increases by 4 per cent, while the share of 'Single Parent' families declines by 2 percentage points (Table 4.3).

In the case of the child support grant, the share of 'Single Parent' families in 'total number of eligible persons' when the means test is applied (71 per cent) is about four times the share of 'Couple with Children' families (18 per cent). Without the means test, however, beneficiaries of the grant are almost equally distributed among the above two family types (Table 4.3).

The distribution of beneficiaries among provinces also shows sensitivity to the removal of the means test (Table 4.3). When means tests are removed, the proportions of the total number of eligible persons for different types of grant for the two provinces with the highest portions of their population in poverty (i.e. Eastern Cape and Mpumalanga) decline between 0 and 6 per cent, depending on the grant programme.

Addressing head-count poverty and the poverty gap

Table 4.4 shows the combined impact of different grant programmes on head-count poverty.[64] The current policy for the old age pension, child support and disability

Table 4.3 **Distribution of Government Grants by Gender, Race, Family Type and Provinces (2002)**

		Current Policy[1]			Current Policy without Means Test[2]		
		Child Support	Old Age Pension	Disability Grant	Child Support	Old Age Pension	Disability Grant
	National	3,804,741	1,950,259	1,111,429	8,257,727	2,341,077	1,588,628
Gender	Male	48%	28%	48%	47%	28%	50%
	Female	52%	72%	52%	53%	72%	50%
Race	African	94%	79%	85%	86%	70%	78%
	Coloured	5%	8%	11%	7%	8%	10%
	White	0.2%	11%	2%	5%	20%	8%
	Indian	1%	2%	2%	2%	2%	3%
Family type	Single	11%	43%	54%	5%	41%	47%
	Couple with no children	0%	26%	8%	0%	30%	11%
	Couple with children	18%	17%	20%	48%	17%	27%
	Single parents	71%	14%	18%	47%	12%	15%
Province	Western Cape	4%	9%	9%	7%	11%	11%
	Eastern Cape	24%	21%	19%	18%	19%	16%
	Northern Cape	1%	2%	3%	2%	2%	4%
	Free State	5%	6%	11%	7%	6%	10%
	KwaZulu-Natal	23%	21%	23%	22%	19%	22%
	North West	9%	9%	9%	8%	8%	8%
	Gauteng	7%	12%	10%	12%	16%	14%
	Mpumalanga	7%	5%	4%	8%	6%	4%
	Limpopo	20%	14%	11%	17%	13%	10%

Source: Adelzadeh (2003a)
Note: The table is a result of running an integrated simulation model of government's tax and transfer programmes (Adelzadeh (2001a)). (1) Current policy refers to the preparation and running of simulations using the current tax and transfer legislation. For the child support grant, the current legislation on eligibility condition, including the age requirement of 0 and 9, is applied. The means test has been kept at 1999 prices. (2) current policy without means test refers to the removal of means test, and not other requirements, from the current grant policies; (3) Family type should not be mistaken with household type.

grants is expected to reduce poverty rate by 3.8 per cent. The number of poor people moving out of poverty due to government's grant programme depends on the conditions attached to each programme's eligibility and entitlement conditions.[65] A more inclusive and generous grant programme leads to a larger number of poor moving out of poverty.[66]

Of the three important grant programmes, the old age pension programme is the most effective in reducing head-count poverty, followed by the disability grant programme and the child support grant. The significant differences in the relative effectiveness of grant programmes on head-count poverty are due mainly to the large difference between the amount of the child support grant and the other two grants. The amount of the child support grant is about one-fourth of the grant amount for the old age pension and disability grants.

An additional way of measuring the effectiveness of government grant programmes is to estimate the percentage reduction in the poverty gap as a result of the transfers. The last column of Table 4.4 shows the percentage reduction in three different measures of the poverty gap associated with the combined effects of the three main government transfer programmes. Using a national poverty line of R569 per month per adult equivalent, the disbursement of the three grants among all the eligible individuals can reduce the poverty gap by 7.0 per cent. Table 4.4 shows that the government's grant programme is relatively more effective in reducing extreme poverty reflected in the higher reduction of the poverty gap when measured by one or two dollar per day per person, using the rand-dollar purchasing power parity exchange rate.

Clearly, not all poor grant recipients move automatically out of poverty as a result of receiving a government grant. Given the depth of income poverty in South Africa, the income of a large number of households receiving grants remain below the poverty line. This is especially the case since on the one hand, the child support grant is relatively small and does not cover poor children aged between 9 and 18, and on the other hand, the poor adult males, aged between 18 and 64, and poor adult females, aged between 18 and 59, are left out of the social security grant programme. As it stands, only about 30 per cent of the poor were eligible for receiving government grants in 2002. This implies that, even if there were to be a full take-up of grants, more than 16 million poor people fell outside the social security support system. Overall, 21 million people continued to live below the national poverty line in 2002. The above findings indicate that the current social assistance system of grants in South Africa, although essential to addressing poverty, has limited impact on reducing head-count poverty or the poverty gap. The system is not designed to lift all or the majority of the poor out of poverty. Nor is it appropriately financed to achieve such an objective, with the result that it is able to target only a fraction of the poor.

Only about 30 per cent of the poor were eligible for receiving government grants in 2002. This implies that more than 16 million poor people fell outside the social security support system

THE WAY FORWARD

There is growing acceptance of the view that high absolute poverty, pronounced income inequality and a high concentration of wealth ownership increase inefficiencies and reduce the growth potential of a country. Moreover, even though, by

Table 4.4 **Poverty Effects of Government Transfers (2002)**

		Poverty rate	Poverty gap
National Poverty Line		–3.8%	–7.0%
International Poverty Line	$2 per day	–11.0%	–12.2%
	$1 per day	–14.1%	–12.0%

Source: Adelzadeh (2003a)
Note: The table shows the difference between before and after government transfers.

The poor remain poor because they cannot borrow against future earnings, invest in inputs for production, or accumulate assests for future production, including education

definition, growth creates more income, the poor may not benefit from this increased income unless they are empowered – not only economically, but also socially and politically.

Delving below income poverty and inequality statistics, this chapter has analysed a number of the underlying proximate forces engendering poverty and inequality in South Africa. These include: highly skewed wealth distribution; an extremely large earnings inequality; weak access to basic services by the poor, unemployed and underemployed; a declining employment outcome of economic growth; environmental degradation; HIV/AIDS, and an inadequate social security system.

This chapter's analysis indicates that these challenges are not mutually exclusive. The vicious cycle of poverty clearly reflects the underlying links between the above factors. Sustained human development in South Africa will depend on the effective interruption of this cycle. The combination of the above factors has also been viewed as a series of multiple market failures in which markets do not work very well for the poor.[67] The poor remain poor because they cannot borrow against future earnings, invest in inputs for production or accumulate assets for future production, including education. They are unable or unwilling to engage in entrepreneurial activities because the costs of failure are too high.[68] They are unable to insure themselves against risks and lack information about market opportunities. Finally, they are deprived of many of the public goods necessary for such activities (such as property rights, public safety and infrastructure) and incur high costs in terms of time and expense when trying to obtain these goods. The analysis in this chapter provides the foundation for understanding the complex links between poverty and the main themes of the rest of the chapters of this report. The development of specific public and private interventions to address the challenges of sustainable development in South Africa needs also to take into account the analyses of these later chapters. Meanwhile, the following recommendations can help address some of the issues analysed in this chapter.

RESPOND TO THE HIV/AIDS EPIDEMIC

A comprehensive response to the HIV/AIDS epidemic should include the adoption of a multi-sectoral and multi-stakeholder approach that includes the following: (a) *Prevention:* no matter how bad the epidemic, some people are not infected and new cohorts become sexually active all the time. Thus expanding measures that help stop more infections are highly desirable. (b) *Treatment and care:* large numbers of people continue to fall ill and require care. The national approach to HIV/AIDS must be to expand access to anti-retroviral drugs, the only hope for people living with AIDS. In some settings, home-based care will need to be developed. The private sector may, through medical aid schemes, take care of their workers and their families but, for the bulk of poor South Africans, the state will have to be the source of treatment and care. (c) *Mitigating the impact of HIV/AIDS:* the country needs to plan for the loss of skills at all levels and for the increase in the number of orphans due to HIV/AIDS. It is important to point out that all of this requires leadership from the highest levels.

ESTABLISH A COMPREHENSIVE SOCIAL SAFETY NET

In March 2002, the report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa was delivered to Cabinet. It provides a comprehensive attempt to bring together the different elements of a fragmented social security system in order to provide recommendations that could ultimately lead to comprehensive social protection. This report supports the main conclusions and recommendations of the Committee's report, particularly the Committee's position that an appropriate social security system for South Africa must prioritise the needs of people without any, or with insufficient, income, and must encompass those engaged in the informal sector. This, for example, implies the extension of the child support programme to poor children between 9–18 years, who are not currently covered by the grant. It also implies extension of the social security system to provide income support to poor adults aged between 18–59 years and assistance for households where no one is employed.

In addition to expanding the scope for eligibility for social grants, the real value of social grants (after adjustment for inflation) also needs to increase in the medium term. The combination of both measures is needed to ensure that the government's social grant system effectively contributes to the fight against income poverty.

INCREASE SUPPORT FOR LAND REFORM

For the land reform programme to succeed, the government needs to increase the share of the budget for this programme, so that it can meet the target it set in the RDP and policy documents within an accelerated timeframe.

The state has an important role to play in creating the conditions for the creative participation of civil society in the process of land reform. But responsibility must also be placed at the door of civil society itself. The trend towards decentralisation and integration of government planning at the local level should be encouraged and expanded. Autonomous expressions of the popular will should be encouraged, and mechanisms should be designed to integrate these expressions into programmes and projects, even if they sometimes do not take the form desired by government officials and politicians. In rural areas in particular, participatory strategies for resource management should be formulated with local resource users.

Most critical is the need for grassroots organisations that are able to articulate the demand for land and related services. This is related to the success of decentralisation, both of the decisions and implementation of land reform, as well as broader integrated planning. At present, there is a tendency for local councillors to be responsive to political parties and hierarchies above them rather than to their constituencies at local level. The element of public participation, and the imperative that municipal councillors be in regular contact with a wide range of interests in their constituencies, should be strengthened. NGOs and other civil society organisations should be raising gender awareness in the activities and vision concerning land reform.

Advance tenure reform

In the communal areas, the best solution for natural resource use and management is the participation of resource users in appropriate local-level structures they themselves have designed. These multistakeholder structures can help unite local communities by involving traditional leaders, local councillors and resource users in managing and deciding on the use of resources in their areas. The principles of the 1997 White Paper on Land Policy should be followed in the process of constructing these institutions, as well as in their ongoing functioning. These principles stipulate that there should be full participation by women and by poorer sections of the community. It may be necessary for the state to monitor this process and provide capacity building and empowerment support as required.

In addition to expanding the scope for eligibility for social grants, the real value of social grants also needs to increase in the medium term to ensure that the government's social grant system effectively contributes to the fight against income poverty

NGOs and other civil society organisations should be raising gender awareness in the activities and vision concerning land reform

The specific type of land ownership should also be left to the local resource users to decide upon. There should be no preconceived bias for or against communal or individual tenure or any mixture of the two. The state should accept and legalise decisions made by local stakeholders, on condition that the process followed was inclusive, transparent and democratic and did not diminish the rights of the poorest sections of the population. A legal framework based on these principles should be constructed in line with constitutional imperatives.

The ecological maintenance of communal lands requires methods of conservation that provide immediate benefit to the livelihoods of resource users. Therefore, conservation programmes should be designed with the aim of integrating productive activities into conservation measures. This will provide people with short-term motivation for conservation activities with long-term benefits.

On commercial land, there should be a moratorium on evictions while legislation is reviewed to provide stronger rights for farm dwellers. An anti-eviction programme should be linked to land redistribution, so that farm dwellers liable for eviction are provided with land and resources they consider equivalent or better than their current standard of living. Farm owners who evict dwellers should be liable for some of the costs of alternative accommodation and resettlement.

Land reform projects should be conceptualised from the perspective of the development of an area as a whole, including the impact it will have on non-beneficiaries

Increase the pace of land redistribution

Land reform will make a contribution to large-scale improvements in the living conditions of the population only if the programme transfers significant resources to the dispossessed. Increasing the pace of land redistribution may demand that farm owners be recruited to contribute land and transfer their skills in exchange for tax breaks, special subsidies, preferential loans or reduced interest rates. While a demand-driven approach to land reform may encourage potential beneficiaries to organise and identify land they would like to purchase (under a 'willing buyer, willing seller' approach), it limits the amount of land available for resettlement at any one time. To counter this problem, the state could adopt aspects of a supply-led approach: meaning it should purchase land wherever this is available with the aim of redistributing it as soon as possible to members of the locality who want land, or even to people from elsewhere who wish to settle. This requires that the state have first option to buy when land is sold.

Insofar as agricultural production is identified as the land use option, redistribution must be coupled with a restructured extension support system. Where land reform is linked to agricultural production, the state should consider ways of nurturing growth by providing subsidised services and protection from international competition, as well as from competition from White farmers who have monopolised agricultural production in South Africa.

To be successful, land redistribution has to be integrated into broader development programmes. Land reform projects should be conceptualised from the perspective of the development of an area as a whole, including the impact it will have on non-beneficiaries. The decentralised planning and implementation framework currently under construction is a positive step in this direction and should be encouraged and enhanced. Land reform also needs a stronger flow of resources to the local level to implement projects and build and sustain the necessary support structures.

CONCLUSION

This chapter analysed a number of proximate forces that continue to engender poverty and inequality in South Africa. It also begins to bring into focus the complex links between the five main sustainable development challenges to South Africa. The chapter presented a few of the Report's overall policy recommendations aimed at combating poverty and distributional inequalities. Policy recommendations on combating poverty through expanded access to services, labour market measures, environmental policies and economic growth are outlined in Chapters 5 to 8 of the Report.

Endnotes

1 There is a large and growing literature on each of these issues. In the rest of this report, the importance of these issues to understanding and overcoming the challenges facing SHD in South Africa has been highlighted.

2 This issue will be explored in more detail in Chapter 7 of this report.

3 The poverty line used is R533 per adult equivalent per month: Adelzadeh (2001); Mlambo (2001). Klassen (1997) estimated that almost of half of South Africa's population was categorised as poor, and that one-fifth was earning less than $1 per day.

4 Leibbrandt *et al* (2001:22) show that 6 per cent of South Africa's population captures over 40 per cent of its income. Attempting to track trends in inequality, Budlender (2000:93) suggests that inequality may have increased between 1994 and 1998. May *et al* (2000a) calculate that the UNDP Human Development Index for South Africa shows significant spatial and racial differences within the country. They demonstrate that, while White South Africans had an HDI similar to that of Canada or Israel, the HDI score for Black South Africans was lower than that for Egypt and Swaziland. A provincial comparison shows that the score for the Limpopo province was lower than that of neighbouring Zimbabwe.

5 The new economics of inequality includes a microeconomic component: see Bardhan, Bowles and Gintis (2000). This has grown from the economics of imperfect information. Beginning with the idea that costly and asymmetric information leads systematically to missing and/or non-price rationed capital and insurance markets, the microeconomic literature has focused on the inequities and inefficiencies that result in economies with initial wealth inequality (e.g. poorer agents may initially be unable to finance productive projects that offer higher expected returns than do the projects of initially wealthier agents who do get financed). These theoretical insights have been buttressed by an empirical literature that has shown that initial inequality is related to lower levels of aggregate growth over time: e.g. Alesina and Rodrik (1994). Particularly striking in this regard is the work of Deininger and Squire (1998), which employs a new, better quality inequality data set to show that initial land ownership inequality appears to be strongly related to the subsequent rate of economic growth.

6 Carter *et al* (2002)

7 Ackerman (2000:33)

8 Ackerman (2000:33)

9 For example, in agricultural economies the rise in land ownership inequality is linked to rural poverty.

10 Oliver *et al* (1995)

11 SAIRR (1998:158); *Business Day*, 10 February 1998. See also Maseko (2001:229).

12 Bonti-Nkomah (2002) and May *et al* (2002)

13 Property income refers to dividend receipts, interest receipts less interest payments, rent receipts less maintenance cost, mortgage interest and consumption of fixed capital and the profits of non-corporate business enterprises – after consumption of fixed capital and after inventory valuation adjustment.

14 Reserve Bank (2002:S–131) September

15 These features of the South African upper class conform closely to the findings of Domhoff (1998) for the United States.

16 There are a number of ways in which corporate decisions with regard to employment, investment and the choice of technologies affect the lives of people inside and outside of the company. Clawson *et al* (1992)

17 South African big business has historically been able to go beyond the individual member's corporate interest or sector by articulating and actively lobbying for its long-term strategic 'class' interests. This has occurred in areas such as the choice of development path for the country, the issue of nationalisation, macroeconomic policy and privatisation. It has established bilateral and multilateral channels of dialogue with top government officials to ensure that the country's policy-makers are well aware of its positions. (See Chapter 2)

18 A recent example is the reaction of the big mining houses on the leaked policy proposal that suggested that, within the next ten years, the composition of ownership of the mining sector should change to include 50 per cent black people. In its presentation to Parliament, the Chamber of Mines, which represents the interests of the main mining companies in South Africa, threatened to withhold a substantial amount of investment in the sector if the proposal was legislated.

19 It is important to note that the relationship between wealth, economic power and political influence is not unique to South African society, past or present. Domhoff (1998:116)

concludes in his survey of the structure and influences of the American upper class: 'The upper class is based in the ownership and control of profit-producing investments in stocks, bonds, and real estate. In other words, the nationwide upper class rooted in the corporate community is a capitalist class as well as a social class. Its members are not simply concerned with the interests of one corporation or business sector, but with such matters as the investment climate, the rate of profit, and the overall political climate.'

20 This includes employed and self-employment, direct and indirect sources of income.

21 Adelzadeh, *et al* (1998)

22 Freeman (1993)

23 Harrison and Bluestone (1990) argue that economic recovery is not always sufficient to reduce adequately the rise of wage inequality and polarisation.

24 There are a number of reasons why the poor may not be able to integrate fully into and benefit from increased economic activities. Among these are: a nutrition-based barrier; the insider-outsider problem; market failures of various kinds; mismatch of skills; cultural stereotyping of occupations, and women's struggle to combine productive and reproductive activities. Osmani (2002)

25 The 2003 Human Development Report estimates that the income or consumption share of the richest 10 per cent is 65 times that of the poorest 10 per cent in South Africa. UNDP (2003:284)

26 For more on this topic, see Chapter 7 of this report.

27 It is understood that employment is not valued for its potential income only, but also because it allows people an opportunity to make a productive contribution to society, exercise their skills and enjoy self-respect, dignity and empowerment. Chapter 7 of this report elaborates on this dimension of employment.

28 UNDP (2003:284)

29 Carter, May and Padayachee (2002)

30 Osmani (2002)

31 McKinley (2001:202)

32 The two propositions are associated with Kuznets, Simon (1955) and Okun, Arthur (1975), respectively.

33 Griffin and Ickowitz (2001)

34 UNDP (2000:10)

35 Carter *et al* (2002)

36 Department of Finance (2002:136)

37 Deininger (1998:5-6). The Asian experience indicates that technical progress in small-scale farming can bring widespread livelihood-based improvements and prolonged poverty reduction alongside growth. Lipton (1996)

38 Cross and Hornby (2002:33–34)

39 Cooper *et al* (1996:596–97)

40 Shackleton, Shackleton and Cousins (2000)

41 Claassens (2000:130)

42 Adams, Cousins and Manona (2000:124)

43 EDA (1999:7)

44 Parnell (2002); Aliber (2001); Urquhart (2001)

45 Bernstein (1992); Cousins (2000); Glavovic *et al* (2002)

46 The poverty gap index indicates the extent of the difference between actual income and income required to sustain a minimum standard of living.

47 Satterthwaite (1999); Aliber (2001); Urquhart (2001)

48 Shackleton *et al* (2000)

49 Department of Health (2001)

50 Loewenson, Rene and Whiteside, Alan (2001)

51 World Bank (1997)

52 Research conducted by the Kaiser Family Foundation over the past year.

53 For example, in 2001, the Department of Social Development initiated a social relief programme that targeted vulnerable children affected by HIV/AIDS by providing school fees and uniforms to enable them to continue with school despite their circumstances. This responsibility is now provided for fully by the Department of Education. The Department of Social Development has developed a comprehensive HIV/AIDS programme offering social development services to vulnerable groups and those infected and affected by HIV and AIDS. Services range from home-based care and support, to poverty relief and comprehensive social security: Department of Social Development (2003). The departments of Agriculture, Land Affairs and Education have developed comprehensive programmes designed to address vulnerability to HIV/AIDS as a result of poverty. Other departments, including Education, Agriculture, Land Affairs and Public Works, have initiated HIV and AIDS programmes involving vulnerable communities. These programmes are guided by the Department of Public Service and Administration (DPSA) Impact and Action Project, initiated in January 2000, which aims to ensure that the public service is able to sustain quality services despite the progression of the AIDS pandemic. The DPSA has developed regulations to guide departments on the minimum requirements to manage HIV/AIDS effectively in the

workplace and ensure a coordinated public response: DPSA (2002).

54 Russell (2002)

55 Camay and Gordon (1999)

56 A number of very successful women's housing development groups have made important inroads into the drastic housing shortage in South Africa. For example, the Ilingelethyu Homeless Initiative assists people to build their houses; while the Sheredon Park Community Housing Initiative helps build housing for those still living in shacks.

57 UN Volunteers (2001:9)

58 Source: anecdotal evidence from AIDS studies conducted with the help of organisations operating in this sector.

59 According to Russell (2002), women make up 59 per cent of total full-time employees, and 81 per cent of full-time employees are black. Interestingly, however, there appears to be a slightly larger number of male volunteers, the large majority of whom are also black (70%).

60 This is particularly so because of the growing gap between the economically active population and the level of employment, and because a significant portion of the employed receive very low incomes. For example, the official number of unemployed in 2002 was 4.7 million compared to 1.8 million in 1995. Moreover, in 2001, work-related income for more than 27 per cent of the employed (about 3.5 million) was below the poverty line of R533 for an adult person per month.

61 Report of Committee of Inquiry into a Comprehensive System of Social Security for South Africa (2002:58)

62 Cornia and Stewart (1995); Grosh (1995)

63 Sen (1995)

64 For the rest of this section, a national poverty line, discussed in Chapter 2, is used.

65 Adelzadeh (2001a)

66 These findings are results of policy simulations run for this report. Adelzadeh (2003a).

67 Carter *et al* (2002)

68 Wood (2002)

6

Environmentally sustainable development

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Environmentally sustainable development

The relationship between socio-economic development and environment in South Africa needs to be understood in terms of South Africa' s political history

The sustainable use and management of environmental resources constitutes a central pillar of sustainable development. Environmental sustainability implies avoiding the overexploitation of renewable resource systems and maintaining the integrity of systems providing environmental sink functions. It also implies prudence when depleting non-renewable resources, and only to the extent that investment is made in adequate substitutes.[1]

Traditional neo-classical economic approaches see no major contradiction between economic growth and environmental sustainability. For neo-classical economists, clear and enforceable private property rights, including private ownership of resources would, in general, ensure that environmental resources are used in a sustainable manner.[2] When property rights are unclear, they argue, the result is environmental degradation through over-exploitation.

The World Bank's most recent statement takes a more circumspect position on the relationship between economic growth and environmental sustainability. In its 2003 World Development Report, the Bank recognises that 'stresses on the environment are increasing', especially through the unsustainable use of forest, marine and terrestrial resources. Pollution of air, water and land is occurring at a rate that is likely to result in permanent and irreparable damage to land and water ecosystems. The World Bank also acknowledges that the continued unsustainable use of resources and permanent damage to ecologies through pollution is a consequence of globalisation and unrestrained economic growth. The organisation remains optimistic about the ability of humans to generate economic growth while preserving the environmental resource base of the planet. The key to achieving this lies in putting institutions in place to manage and provide public goods, correct 'spillovers' and broker differing interests.[3]

A more radical perspective argues that unsustainable economic growth is the consequence of a particular 'model of development' that puts profits before the environment.[4] While this model may have allowed some countries to grow very rapidly, such growth has come at enormous environmental and social costs.[5] Reproducing this first world model of growth in the third world will be disastrous for the global environment.[6] Therefore, this approach argues for strategies that recognise the links between social and environmental injustice.[7] An environmentally just model of growth prioritises the environmental rights of poor people, recognises that over-consumption is a central problem for environmental sustainability and calls for the more efficient use of resources.[8] Box 6.1 describes some of the links between the environment and the different Millennium Development Goals.

THE ENVIRONMENTAL LEGACY OF APARTHEID

The relationship between socio-economic development and environment in South Africa needs to be understood in terms of South Africa's political history. Forced removals, overcrowding in the so-called 'homelands', discriminatory urban policies that contributed to inefficient

Box 6.1 Why reaching the environmental goal is so important for the other Millennium goals

'Goal	*Links to the environment*
1. Eradicate extreme poverty and hunger	Poor people's livelihoods and food security often depend on ecosystem goods and services. Poor people tend to have insecure rights to environmental resources and inadequate access to markets, decision-making and environmental information – limiting their capability to protect the environment and improve their livelihoods and wellbeing. Lack of access to energy services also limits productive opportunities, especially in rural areas.
2. Achieve universal primary education	Time spent collecting water and fuel wood reduces time available for schooling. In addition, the lack of energy, water and sanitation services in rural areas discourages qualified teachers from working in poor villages.
3. Promote gender equality and empower women	Women and girls are especially burdened by water and fuel collection, reducing their time and opportunities for education, literacy and income-generating activities. Women often have unequal rights and insecure access to land and other natural resources, limiting their opportunities and ability to access other productive assets.
4. Reduce child mortality	Diseases (such as diarrhoea) tied to unclean water and inadequate sanitation and respiratory infections related to pollution are among the leading killers of children under five. Lack of fuel for boiling water also contributes to preventable waterborne diseases.
5. Improve maternal health	Inhaling polluted indoor air and carrying heavy loads of water and fuel wood hurt women's health and can make them less fit to bear children, with greater risks of complications during pregnancy. And lack of energy for illumination and refrigeration, as well as inadequate sanitation, undermine health care, especially in rural areas.
6. Combat major diseases	Up to 20% of the disease burden in developing countries may be due to environmental risk factors (as with malaria and parasitic infections). Preventive measures to reduce such hazards are as important as treatment – and often more cost-effective. New biodiversity-derived medicines hold promise for fighting major diseases.
7. Develop a global partnership	Many global environmental problems – for development climate change, loss of species diversity, depletion of global fisheries – can be solved only through partnerships between rich and poor countries. In addition, predatory investments in natural resources can greatly increase pressure to overexploit environmental assets in poor countries.'

Source: Reprinted from Human Development Report (2003:125)

resource flows, inequitable access to environmental services, unjust land use practices (poor communities located alongside polluting industries), the migratory labour system, and a protectionist approach to nature conservation all contributed to environmental degradation and the alienation of people from their land and resources. South Africa's colonial and apartheid policies and practices effectively deprived the majority of Africans of the right to own land in 87 per cent of the country. Even in the so-called 'homelands' (which covered 13 per cent of the total land area of South Africa), the land remained in the hands of the state. Various forms of indigenous communal tenure were administered through traditional authorities, many of which were co-opted or corrupted into furthering the aims of the apartheid government.[9] During this period, millions of people were dispossessed of their land rights and moved to resettlement areas that were often extremely inhospitable and even hazardous to their health.[10]

Overcrowding and overstocking in the homeland areas eventually undermined the productive capacity of the land and led to the degradation of resources.[11] Although the state retained title to all land under traditional or communal tenure and magistrates were responsible for issuing permits to occupy land, in practice, traditional leaders approved applications to 'own' land without magisterial approval. This ad hoc and corrupt system of land allocation and administration had profoundly negative environmental implications, and resulted in the loss of the productive land and natural assets needed to sustain livelihoods and generate economic development activities. Rural communities were also forcibly removed from areas considered to be of high conservation value. Many of these were declared nature conservation areas[12] and people were removed from

Overcrowding and overstocking in the homeland areas eventually undermined the productive capacity of the land and led to the degradation of resources

The lack of serious policy focus on the exploration and development of alternative, non-polluting energy sources means that only a small percentage of total energy today is generated from renewable energy sources

land and resources they regarded as their own.

In many respects, economic development during apartheid has left a devastating legacy of 'unsustainable development'. Bethlehem and Goldblatt (1997) have identified three problems associated with the environmental sustainability of South Africa's industrial sector at the end of the apartheid era. The first was the continued dependence of the economy on resource extractive industries. Although there has been considerable diversification in the last twenty years, the economy has remained dependent on activities that exact a heavy toll on the natural environment through the use of, and as a sink for, waste products. It has been estimated that one ton of metal generates 100 tons of waste. This is deposited in tailing dumps, often close to poor black communities.

A second environmental characteristic of South African industry is that it has been shaped by and become dependent upon access to low energy prices. Although South Africa is well endowed with resources to meet its energy needs, it is extraordinarily dependent on a single energy source – electricity from coal power. The provision of cheap energy has been a major contributor to South Africa's environmental problems. Relative to gross domestic product, South Africa is the world's third highest producer of greenhouse gases, a result of coal-based electricity generation.[13] Many industries remain dependent on this: indeed, this is 'one of South Africa's key competitive advantages [that] continues to drive much of new investment in industry'.[14]

The third problem affecting South Africa's industrial sector is the fact that the capital stock of equipment is old and inefficient in terms of both energy use and waste disposal. This applies to energy suppliers as well as the mining and manufacturing industries. Coal-generated power stations lack desulphurisation or denitrification equipment. For other sectors of the economy, low capital stock means that pollution levels are high and energy-efficient technology has not been implemented to any extent.[15] Furthermore, the lack of serious policy focus on the exploration and development of alternative, non-polluting energy sources – such as wind and solar energy – means that only a small percentage of total energy today is generated from renewable energy sources.

Agricultural production in South Africa has been equally resource intensive and environmentally degrading. Within white commercial farming areas, low interest rates, subsidies for fuel and chemicals and a marketing structure that encouraged production paved the way for a farming sector that ensured national food self-sufficiency. While, given the growing threat of isolation, this was an important goal of the apartheid state, it encouraged mono-cropping, the expansion of intensive agriculture into marginal farming areas and a dependence on harmful chemicals and pesticides. Agricultural policies also encouraged the use of machinery, which has had a devastating impact on employment levels within this sector. The environmental impact of intensive agriculture has been complex and includes soil degradation, the pollution of waterways and underground water sources and the loss of biodiversity. Rates of soil loss – averaging at 2.5 tons per hectare – are considered to be at least eight times the rate of replacement, while water and wind erosion are estimated to affect 6.1 million hectares and 10.9 million hectares respectively of cultivated soil.[16] It is estimated that some 31 000 hectares of South African soils are severely degraded by pollution[17], and that soil acidification has increased beyond its natural rate, affecting the production of at least 5 million hectares.[18] Compaction and crusting are also serious problems and are considered severe in respect of about 2 million hectares of fine sandy soils.[19] These impacts have had a direct effect on the agricultural productivity of South African soils. Finally, during apartheid, agriculture became dependent on access to cheap water for irrigation and, as a consequence, used this scarce resource very inefficiently.

In the 'homeland' areas, racist legislation prevented black farmers from enjoying similar levels of state support. Here, problems of soil degradation and erosion are the consequence of overcrowding and poverty. In a comprehensive survey of land degradation in South Africa, Hoffman *et al* (1999) conclude that soil degradation is significantly greater in the former homelands than in the commercial areas of South Africa.

Poor working people and poor communities have felt the brunt of the 'environmental externalities' of industrial and agricultural development in South Africa. Regulations to protect workers on farms, in factories and on the mines were extremely weak or not enforced under apartheid, and many workers and their families continue to be affected by poor conditions in 'dirty industries'. Individuals who work in environmentally hazardous occupations frequently live in areas where environmental pollution is a severe problem. Indeed, as Luckey (2002) has argued, workers carry 'a double burden, facing environmental hazards at their workplaces and environmental hazards where they live'.[20]

With respect to the exploitation of marine resources, the policies and practices of apartheid systematically and effectively excluded all Black ethnic groups from full access to the various economic activities associated with the fishing industry.[21] The distribution of marine resources was heavily skewed in favour of large-scale White operators over the small-scale Black fishermen.[22] This was still evident in 1994, when only 0.75 per cent of the sum of the commercial 'total allowable catch' of all species was allocated to Black ethnic groups. In addition, only 7 per cent of the 2 700 registered commercial fishing boats in South Africa were owned by Black people.[23] One of the major barriers to gaining entry to the commercial fisheries was lack of access to capital and equipment. Apartheid policies meant that it was difficult for Africans to obtain financial support in the form of loans or credit. This effectively excluded the majority of fishermen from gaining access to a portion of the total allowable catch.[24] Consequently, participation in the fishing industry remained in the hands of the wealthy, reinforcing the government's policy of curtailing African ownership rights in natural resources.[25]

During apartheid, service delivery was highly skewed towards wealthier White communities; while Black townships in urban and especially rural areas had extremely limited access to water, energy and sewerage facilities. Indeed, levels of service delivery to wealthier White households were (and still are) similar to those enjoyed by middle-class Americans and Europeans. The link between inefficient service delivery to the poor and environmental degradation is well recognised. The absence of proper sanitation and waste removal forces communities to dump refuse close to settlements where it poses a considerable health hazard. Lack of access to clean and safe sources of water not only increases the drudgery on women and children, who spend long hours collecting water, it also exposes households to life-threatening diseases. Without electricity, households are forced to use traditional methods of energy for cooking and heating. In rural areas, the collection of wood can lead to environmental problems, including

Individuals who work in environmentally hazardous occupations frequently live in areas where environmental pollution is a severe problem

Embedded within the Bill of Rights is an environmental clause that states that 'everyone has the right to an environment that is not harmful to their health or well-being'

deforestation and soil erosion. In urban areas, the use of coal and paraffin poses considerable health hazards in the form of pollution and fires.[26] As McDonald argues more generally about basic services, 'the lack of these services is arguably the most serious environmental problem in the country today – if for no other reason than the number of people who are directly affected by its consequences'.[27]

This is not to say that South Africa has lacked environmental awareness: on the contrary, the country has a long history of environmental conservation. However, the history of the environmental sector is deeply embedded in the country's turbulent colonial and apartheid past, and continues to suffer from a perception that conservation is a White, middle-class issue, focused on nature conservation and irrelevant to the urgent need for development and social justice.[28] At the same time, South Africa has a relatively well-developed tradition of environmental justice, which has provided a critical analysis of environmental problems since the early 1990s. Such analysis has pointed out that the challenge in respect of environmentally sustainable development is, in a sense, 'global'. Apartheid has left a legacy of high levels of poverty, vast differences between the poor and the rich, inequitable access to resources and an industrial sector that has degraded natural environments. On the positive side, South Africa's post-apartheid democracy years have seen environmental issues move squarely into a socio-political arena concerned with human rights, access to natural resources, social justice and equity and sustainability.[29]

POST-APARTHEID ENVIRONMENTAL POLICIES AND STRATEGIES

In the run-up to South Africa's first democratic elections in 1994, the problem of environmental degradation was closely identified with the policies of apartheid.[30] In the early 1990s, environmental analysts argued that the state would face a difficult challenge if it were to meet the demand for water, job creation, housing and education, while at the same time rehabilitating and protecting the environment. Cock and Koch (1991) warned that the state might be tempted to meet these demands 'at the expense of the environment'.[31] Yet the ANC's policy statements before 1994 and immediately after South Africa's first democratic elections reflected a strong commitment to environmentally sustainable development. The Reconstruction and Development Programme (RDP), the ANC's pre-election manifesto, focused on reducing poverty, while at the same time redressing the injustices and inequalities of the former regime. It advocated a people-centred, needs-driven approach to development, while recognising the critical importance of using resources in a sustainable manner to achieve socio-economic goals.[32]

In June 1996, the government introduced the framework for Growth, Employment and Reconstruction (GEAR), a conventional macro-economic recipe for growth. The environment did not figure in any integral way in the original GEAR framework.[33] Its claim that 'environmental responsibility' is something the government should take into account when evaluating applications for tax holidays – but not in too limiting a manner – reflects an underlying assumption of the contradiction between environmental integrity and economic progress.

The 1996 Constitution also contains principles and clauses that underpin and support sustainable development.[34] Embedded within the Bill of Rights is an environmental clause that states that 'everyone has the right to an environment that is not harmful to their health or well-being'[35]. Part (b) of the clause gives government the responsibility for taking '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'. Other fundamental rights, including a set of specific rights for children, significantly strengthen the environmental clause. Clause 28 of the Bill of Rights makes specific reference to the rights of children to 'basic nutrition, shelter, basic healthcare services and social services'. Given the strong link between environmental degradation and the absence of key basic services for many poor South Africans, this is a powerful statement on the rights of children to an environmentally sustainable life.

The National Environmental Management Act of 1998 (NEMA) provides the framework legislation for environmental governance in South Africa.[36] This highly progressive piece of environmental legislation translates the environmental rights and principles contained in the Constitution into legal provisions. A key feature of NEMA is the inclusion of a set of legally binding principles. In essence, these principles flesh out those implied in the commonly adopted definitions of sustainable development and those underlying the environmental clause in the Bill of Rights. The key principle of sustainable development – of a people-centred, integrated and participatory approach to development within an ecological framework – is included. Other key principles include: equitable access to environmental resources, with special measures for the previously disadvantaged, and participation in environmental governance by all interested and affected parties, with appropriate capacity building to ensure equitable participation.

Several other key development strategies recently announced by the government are rather more ambiguous in their commitment to sustainable development. In the country's rural areas, development is now coordinated through the Integrated Sustainable Rural Development Programme (ISRDP).[37] While the ISRDP's 'vision statement' reflects some recognition of the importance of sustainable development by recognising the need for 'sustainable economies', its definition of sustainability is weak: 'Sustainability is derived from increased local growth, and where rural people care about success and are able to access resources to keep the strategy going'.

The National Environmental Management Act of 1998 (NEMA) provides the framework legislation for environmental governance in South Africa

Moreover, the ISRDP makes no explicit mention of environmental sustainability; nor is it clear whether 'sustainable economies' necessarily subsume environmental considerations. A more positive impact of the ISRDP may be its link to the strategy associated with Integrated Development Plans (IDPs). Research on the IDP process is extensive and suggests that this is an excellent vehicle for promoting poverty eradication through sustainable development. Thus far, however, it has been implemented with varying degrees of success due to the variable capacity of municipal structures.

While the ISRDP may be ambiguous in its commitment to environmental sustainability, other policy statements are strongly aligned to this principle. For instance, the Department of Environmental Affairs and Tourism's policy on pollution and waste management[38] is a very progressive statement on the need to focus on waste prevention rather than waste control.[39] Moreover, it aims to 'ensure environmental justice by integrating environmental considerations with social, political and development needs and rights of all sectors, communities and individuals'. On the relationship between economic growth and environmental

While remarkable progress has been made in implementing progressive environmental legislation, important challenges remain

sustainability, the document indicates that growth can be 'supported by the more appropriate and efficient use of natural resources'. The policy statement expresses its intention of prosecuting non-compliance through the legislation that arises out of the policy.

The Department of Minerals and Energy Affairs' recent statement[40] on the need for renewable energy has important implications for environmental sustainability. The recently released draft White Paper on renewable and clean energy development outlines the Department's future strategies. The document acknowledges that the current system of energy provision is a major source of pollution and notes that 'renewable energy that is produced from sustainable natural resources will contribute to sustainable development'. In addition, it argues that a renewable energy industry can contribute positively to economic growth and the environment. However, there is very little in the policy document about the relationship between energy, poverty and the environment, and the role that renewable energy resources might play in improving the situation of low-income households in South Africa. Perhaps more worrying is the fact that, while the policy envisages providing incentives for the development of renewable energy, these will be limited due to 'competing high priority social and economic programmes, particularly in providing services to historically disadvantaged communities'.[41] This appears to suggest a tension between incentives for clean energy and the needs of historically disadvantaged households. In fact, however, poor urban and rural communities could benefit enormously from electricity based on renewable sources of energy.

Although the New Partnership for Africa's Development (NEPAD) is not a South African programme *per se*, it has a potentially important impact on framing the country's efforts towards environmentally sustainable development. NEPAD does commit itself to sustainable development[42] and one of its seven key initiatives relates to the 'environment'. It should be noted, however, that NEPAD's environmental focus is more on the traditional concerns around conservation – including coastal management, wetland conservation, combating desertification – than on issues of environmental justice.

CHALLENGES TO ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

There have been significant changes in the way the post-apartheid government has addressed the question of environmental sustainability. Among the most important policy measures are the NEMA principles and the Environmental Impact Assessment (EIA) regulations, which were promulgated in 1997. These have gone a long way towards ensuring that environmental sustainability issues and community concerns are identified and addressed prior to decisions being made. Even the mining sector, which is exempt from the EIA regulations, has adopted provisions for EIA and ongoing environmental monitoring.

While remarkable progress has been made in implementing progressive environmental legislation, important challenges remain in ensuring environmentally sustainable development in South Africa. The remainder of this chapter identifies eight key challenges. These, in turn, give rise to some specific recommendations, which are outlined in the last part of this chapter.

GLOBALISATION

One of the difficulties of establishing a definitive relationship between economic growth and environmental degradation is that, over the last twenty years, environmental degradation associated with the transformation of natural resources has shifted from being a national to a global issue, requiring international agreements and cooperation. The Conventions on Climate Change and Biological Diversity represent attempts to address the negative environmental externalities associated with the economic activities of countries.

At another level, globalisation processes have intensified the competition between countries and regions seeking to attract global investments.

In many countries, attempts to attract foreign investment have compromised efforts towards environmentally sustainable development. Many developing countries have integrated 'more deeply' into global markets by increasing the intensity of resource extraction.[43] This is especially true of highly forested countries such as Brazil, Indonesia and Colombia, where deforestation is also leading to increases in carbon dioxide emissions.[44] Another impact of this deeper integration is that it prevents countries from exploring alternative and more efficient forms of resource extraction and transformation. Many developing countries, especially those with high debts, have had to adopt structural adjustment programmes requiring fiscal austerity. Without the funds to invest in exploring new ways to use resources in a sustainable way, many of them have resorted to increasing the intensity of resource extraction. Finally, the pressure to establish attractive conditions for foreign investment has meant that governments are often unwilling to impose stricter environmental regulations for fear of scaring investors away.

There is a strong link between global inequality and environmental degradation.[45] While advanced industrial countries are 'dematerialising' their economies by shifting from industrial processing and manufacturing to service oriented industries, per capita consumption of materials continues to increase in absolute terms. A recent World Resources Institute study found that between 45 and 85 metric tons of natural resources are required for material and food production per person per year in industrialised countries. The benefits and costs of enormous levels of resource extraction are not, however, shared equally, and most natural resource extraction now occurs in developing countries. Indeed, more than '70 per cent of the materials that flow through the Dutch economy, for example, never touch Dutch soil'.[46]

The extraction of natural resources is not only environmentally unsustainable; its impact on the welfare of people in developing countries is very unevenly distributed. Resources are often oversupplied, leading to low international prices and ever-greater levels of extraction in order to maintain revenues. The negative environmental impact of resource extraction is felt largely by the poor, who lose access to forest resources, soil and clean water. According to Muradian and Martinez-Alier (2002), developing countries specialising in the export of natural resources have become trapped in a vice of environmental degradation and poverty. Rising levels of inequality between and within countries are a central challenge to environmentally sustainable growth.

A dependence on resource extraction undermines all three pillars of sustainable development. Economically, it has a limited impact on growth rates; environmentally, it tends to lead to increasingly intense resource use and degradation; and socially, the resource base of the poor is detrimentally affected by resource extraction for development. Indeed, while global economic growth has led to

The negative environmental impact of resource extraction is felt largely by the poor, who lose access to forest resources, soil and clean water significant welfare gains for a small proportion of the world's population, the environmental degradation associated with this growth has had a disproportionate impact on the poor.

Poor people often rely to a greater extent on natural resources, and environmental degradation frequently undermines their livelihoods. Air, water and land pollution also affect the health of poor people to a greater extent than they do the economically wealthy – in both wealthy and poor countries. Poor people live increasingly in areas of high ecological vulnerability, which exposes them to greater risk of environmental hazards. Finally, the disease burden from environmental risks is ten times greater in poor countries.[47] Ironically then, it is the marginalised poor who are worst affected by environmental degradation.

The record of environmental degradation in a rapidly changing global economic environment has profound implications and poses significant challenges for South Africa's efforts to balance growth with environmental sustainability. The country is integrating itself into the global economy following a rather orthodox economic path. The challenge of developing 'win-win' scenarios in this context – where economic growth is achieved and poverty alleviated without environmental degradation – is considerable (Box 6.2).[48]

Box 6.2

Is ecotourism sustainable?

'Of the many forms of alternative tourism, ecotourism was seized upon in many developing countries as a critical base for sustainable tourism-led economic development (Weaver, 1998). In Brazil, for example, it was observed that "ecological tourism presents itself as one of the forces capable of contributing to economic development and at the same time to the preservation of Brazil's priceless natural heritage" (Ruschmann, 1992:125). Sometimes several of the defining characteristics of ecotourism are in direct contrast to those of mass tourism; most importantly, that ecotourism developments tend to be small scale, locally owned with lower import leakages and with a higher proportion of profits remaining in the local economy (Khan, 1997). Nevertheless, whilst the general picture is that most ecotourism projects are typically small scale and independent, there is a growing trend, as illustrated by the experiences of Australia, Belize and Kenya, for corporate ownership to be more common (Cater, 1994; Fennell, 1999). In cases of foreign corporate ownership, often "ecotourism must share many of the same characteristics as conventional tourism in terms of leakages" (Cater, 1994:72). High levels of foreign ownership and control of tourism projects result in income leakages that prevent ecotourism from redistributing wealth in underdeveloped rural areas. Lack of rural enterprises, weak integration of ecotourism within larger regional planning frameworks and the existence of lower multipliers in rural areas mean that it is frequently easier to import external expertise and products from urban areas or foreign countries to remote ecotourism sites than develop such local expertise or products (Goodwin *et al*, 1997). In Indonesia, a rigorous examination of the local economic impacts of ecotourism disclosed that distributional inequalities favour external operators and urban residents rather than rural villagers (Walpole and Goodwin, 2000). Accordingly, it is increasingly accepted that ecotourism *per se* "is not a synonym for sustainable tourism" (Goodwin, 2001:1).

Overall, whilst ecotourism is touted as offering a *solution* to sustainable development in rural areas "it has not been proven to generate less damage and more benefits than mass tourism" (DFID, 1999:2). From the experience of Mexico, Barkin (2000:159) avers: "Although ecotourism is an ideal economic activity for promoting both sustainability and development, it cannot be successful in isolation. Such an activity must be actively integrated into a broader institutional nexus in which diversified production and social organization are reinforced". The mounting criticism of ecotourism as a development model reinforces Mowforth and Munt's (1998) argument that alternative forms of tourism *per se* are not necessarily some form of panacea for developing countries; nor are they likely to remedy all the ills associated with the mass tourism model. The actual contributions of alternative tourism to objectives of sustainable development have come under increased scrutiny (Weaver, 1995, 1998; Walpole and Goodwin, 2000) and for most developing world countries alternative tourism must be read, at best, as a complement to rather than a direct replacement for the conventional mass tourism model. In addition, Weaver (1998:33) argues importantly that large-scale tourism "is gradually modifying its practices (if not its scale) in response to the demands of the 'new tourist' market". By contrast, whilst alternative tourism tends by its very characteristics to be sustainable, there are cases in which "it can also be unsustainable under circumstances, even when honestly conceived" (Weaver, 1998:33).'

Source: Rogerson, CM (2002) Tourism in South Africa: Potential economic driver, potential for poverty alleviation. Prepared for the UNDP.

VALUING THE 'ENVIRONMENT'

A major obstacle to attaining environmentally sustainable development is the fact that current economic accounting systems are concerned mainly with the flow of economic activity, and not with the stocks of natural capital on which such activities are based. Thus they largely ignore changes in the value and quantity of natural resources, including land.[49] Current accounting systems also undervalue or fail to place any value on the economic services provided by natural resources such as the maintenance of air and water quality or the generation of soils. Because of this, national income measures such as GNP do not reflect the depletion or degradation of environmental assets. On the contrary, GNP could well be seen as a 'perverse' indicator of the state of a nation's environment, given that expenditures to offset environmental degradation actually increase national income.[50] National economic systems urgently need to be revised so as to take these factors into account.

Table 6.1 is an attempt to measure total wealth in South Africa by incorporating natural capital (agriculture and mining), urban land, and human resources. It shows gradual declines in the share of stocks of mining and agricultural wealth in the country's total wealth. On the other hand, the share of the stock of urban land has slowly increased over time.[51]

Table 6.1 **Distribution of South African Wealth[1] (1960–2001)**

	1960	1970	1980	1990	1994	2001
Natural capital	15.8	8.7	6.7	4.9	4.5	5.9
Agriculture	5.8	3.8	3.6	3.2	2.9	3.9
Mining	10.0	4.9	3.1	1.7	1.6	2.0
Produced assets[2]	13.5	12.8	19.7	20.1	18.4	25.9
Structures	10.4	9.8	13.6	13.7	12.8	17.0
Machinery and equipment	1.6	1.6	2.6	2.4	2.1	3.6
Urban land	3.5	3.3	4.5	4.6	4.3	5.7
Net foreign liabilities	–1.9	–1.9	–1.0	–0.6	–0.7	–0.3
Human resources[2]	70.6	78.5	73.6	75.0	77.2	68.2
Total Wealth	100.0	100.0	100.0	100.0	100.0	100.0

Source: Quantec (2002)
Notes: (1) US$ PPP adjusted ($m 1995 prices) % distribution. (2) Only human resources and produced assets (structures) are adjusted for PPP (natural resources are already valued at international trading prices).

Another layer to this problem emerges in communal lands where informal activities, wild harvested products and non-marketed goods are typically disregarded by decision-makers, despite the substantial role they play in maintaining rural livelihoods, reducing cash expenditure and cross-subsidising basic services such as healthcare. Shackleton *et al* (2000) attribute this neglect to a range of factors, including: the bias in rural research; development towards formally marketed goods and cash income; skewed data collection; lack of multidisciplinary research between livelihoods and resource-use systems, and poor recognition of the safety net provided by land-based livelihood activities. Increased recognition of the value of natural resources in land reform and rural development strategies, especially in communal lands, is crucial and makes economic sense[52], as well as providing incentives for environmental conservation. Increased public investment and institutional support for natural resource use in communal areas, combined with improved infrastructure and support services for land-based livelihoods, would go some way towards achieving such recognition. Enhanced efforts with respect to the cultivation and management of harvested resources would also assist in preventing the overexploitation of resources on communal lands. As discussed earlier, however, strategies to improve resource management must go hand in hand with tenure reform.

Strategies to improve resource management must go hand in hand with tenure reform

Ultimately, economic decisions reflect the values that people place on various goods and services, based on the incentives they offer and the information available. The use of economic instruments, as well as non-fiscal incentives such as education and tenure reform, are, therefore, important complements to regulatory approaches. Incentives are particularly important ways of inducing people to change their behaviour. By subsidising unsustainable activities, economic incentives often undermine sustainable development rather than encouraging desirable behaviour. These so-called 'perverse incentives' or distortions need to be removed and replaced with a system that rewards environmentally appropriate actions and encourages local stewardship of natural resources. Properly designed environmental taxes, for example, could provide incentives for the sustainable use of certain resources. Taxes on emissions of pollutants and waste products could also be imposed. Such strategies have been introduced in

Lack of clarity on land tenure rights has been a major obstacle to promoting equitable access to resources

several industrialised countries and would be especially appropriate to the industrialised sector of South Africa's economy.[53] A different but complementary set of incentives is obviously required for the developing component of the economy.

Many of these strategies are already being adopted in South Africa, and are articulated in new policies and laws relating to water, environmental management, pollution control and biodiversity. It is possible that the emphasis of policy on fiscal restraint will effectively hinder the implementation of these progressive strategies. However, an especially vigilant role by civil society could help build a nation that is not only socially just and economically secure, but also environmentally sustainable.

TENURE SECURITY AND ACCESS RIGHTS

Several sections of the South African Constitution refer to addressing past injustices and ensuring equitable access to all of South Africa's natural resources. These constitutional imperatives have been reinforced by a wide array of policy and legislative provisions that govern natural resource management. Examples include the National Water Act, the Water Services Act, the Marine Living Resources Act, the National Forests Act, Biodiversity Policy, the White Paper for Sustainable Coastal Development and NEMA, as well as the various policies and laws dealing with land reform. Since 1994, there have been major achievements in enhancing access to environmental resources (goods and services) by previously disadvantaged groups. For example, since 1994:

- approximately 7 million people in rural areas have gained access to potable water, and millions of urban residents have benefited from new or improved water supplies;[54]
- access to commercial and semi-commercial fishery resources has been broadened;[55]
- subsistence fishers are now recognised as a legal category, and guidelines for the allocation and management of subsistence fishers and resources have been prepared;[56]
- significant progress has been made in the resolution of land claims (e.g. Makuleke, Kalahari San);
- access to biological resources within protected areas has been broadened, and
- several Participatory Forest Management Fora have been established to enable managed access to indigenous state forests by local communities.

Despite these achievements, there are still major obstacles to bringing about equitable access to natural resources. Key challenges include land tenure rights, land use zoning, women's access to resources, and allocation of consumptive use rights.

Lack of clarity on land tenure rights has been a major obstacle to promoting equitable access to resources. A Communal Land Rights Bill, which seeks to secure land rights for individuals and groups who live in the former bantustans, was gazetted in the course of 2002. However, the appropriateness of this Bill has been widely questioned by a range of people, including academics, politicians and traditional authorities. The state is the custodian of a variety of natural assets. These assets are not well inventoried, and policies regarding the disposal of, access to, and use of state-owned resources do not always promote the principles of equitable and sustainable use and development of resources.[57]

The current system of land use zoning, which confers rights on owners, frequently restricts access to resources. This is particularly problematic in the coastal areas, where large sections of coastal land have been developed or are zoned for development.

Opportunities to develop environmental resources to sustain livelihoods, create jobs and improve local and regional economies within an ecological framework are not being adequately investigated, supported and harnessed.

Slow progress with the land reform programme means that most poor people do not yet have rights to land and other natural resources that are rightfully theirs.

Women's access to resources is determined largely by male family members, thereby compromising their rights. Strategies to ensure equal access to natural resources, as well as the array of materials and services needed to sustain livelihoods, pose many challenges.

The different attitudes and perceptions of nature conservation agencies regarding the allocation of the consumptive use rights of communities living adjacent to natural protected areas have also impeded access to resources by the poor.

PLANNING SYSTEMS AND APPROACHES

South Africa's historical system of development and spatial planning – heavily influenced by apartheid ideology – had devastating consequences for the environment.[58] Since 1994, there have been significant changes to South Africa's planning system, most notably at local level. These changes have been influenced by global shifts in planning philosophy and approaches, as well as the incorporation of sustainable development principles in policies and legislation relevant to spatial and development planning.[59]

As a result of the enhanced planning and economic development responsibilities assigned to it, local government is increasingly playing a key role in shaping urban and rural environments. Since 1994, planning has become concerned with contributing to effective local governance, including effective service delivery and sound financial performance.[60] These ideas are being operationalised through the Integrated Development Plans (IDPs). The principles and approaches underlying IDPs are consistent with sustainable development and recognise the complex interrelationships and dependencies between social, economic, environmental and political considerations. However, while IDPs hold the promise of a more holistic, integrated and participatory approach to planning, sustainability principles and processes are not yet fully integrated. For instance, government departments are still structured along sectoral lines and the functions of planning, economic development and environment are handled separately. A review of various IDP case studies indicates that local authorities are still struggling with the concept of integration and sustainability.[61] Local authorities will need time, experience and evidence of the benefits of integrating sustainability principles into planning processes before they can integrate them fully at the strategic planning level.

The concept of zoning land for particular uses has been integral to South Africa's spatial planning system. The current system of land use zoning confers rights on property owners, creates expectations and determines property values. This makes it a major threat to the task of safeguarding South Africa's environmental heritage and resources. Many historical zonings were granted without due consideration to environmental and biodiversity concerns; while the removal of existing zoning rights can be effected only through compensation and negotiation. Although legal mechanisms such as

Women's access to resources is determined largely by male family members, thereby compromising their rights

EIA procedures may be effective when shaping the nature of development in the case of rezoning applications, there are limited mechanisms (land swaps, subsidies, tax incentives) at present to prevent inappropriate and unsustainable development.

A further challenge is how to integrate environmental concerns proactively into existing provincial, municipal and economic development planning systems – an exercise that will require strong collaboration between all spheres of government. The National Coastal Management Bill sets out legal mechanisms for the integration of sustainability principles into coastal planning and development, and establishes a hierarchy of Coastal Management Programmes to be developed from national to local level. Other important tools aimed at helping integrate environmental sustainability considerations into government activities include the NEMA requirement that selected departments prepare Environmental Implementation Plans (EIPs), and the requirement that those with management responsibilities prepare Environmental Management Plans (EMPs).

There is some concern that there may be too little overall coordination between the many capacity-building initiatives and programmes across, and even within, departments

While the introduction of these planning tools has certainly raised awareness of the linkages between economic development, environmental and social equity considerations, it is still too early to judge the results.

INSTITUTIONAL AND HUMAN CAPACITY

Lack of capacity to implement policies and laws and execute line functions (i.e. knowledge of concepts and principles, technical skills and practical experience) is prevalent in most government departments and at all levels of government. These capacity deficiencies militate against effective environmental governance and natural resource management.[62] The restructuring of government departments, transformation processes, the introduction of several new policies and laws, shrinking budgets, expanding mandates and the absence of holistic and integrated approaches to educational programmes have all contributed to these capacity problems. Of particular concern is the expanded mandate of local government and its increasing range of responsibilities with respect to meeting sustainable development goals.

The institutional capacity of local government is variable. A few municipalities are well resourced. Others lack the administrative capacity, experienced staff, budgets, revenue bases and adequate public confidence to undertake their core business. In the absence of effective local delivery mechanisms, government is severely constrained in implementing its policies and fulfilling its mandate.[63]

In keeping with the Constitution, NEMA and the various policies governing environmental and natural resource management, the South African government has demonstrated its commitment to capacity building and training. It has established various structures (such as the South African Qualifications Authority) within and outside government to address human and institutional capacity building needs.[64]

There is some concern, however, that there may be too little overall coordination between the many capacity-building initiatives and programmes across, and even within, departments. The result is a tendency towards duplication and the inefficient use of productive time.

Funding is an important constraint that impedes effective capacity building. A requirement that all levels of government devote a portion of their annual budgets to capacity building and human resource development[65] would go some way towards addressing this issue. However, while capacity building is crucial to improved environmental governance, it will not automatically lead to the desired institutional change. Institutional change is a slow and complex process involving many dimensions.

Government calls for greater involvement in environmental governance and resource management by civil society and resource users mean that it needs to allocate resources to training, capacity building programmes and awareness raising interventions. If local communities are to play an active role in resource management and decision-making, it is critical that they be informed and given the capacity to participate as equal partners in management.[66]

APPROACHES TO NATURAL RESOURCE MANAGEMENT

The creation of partnerships between government agencies, civil society organisations and the private sector are especially necessary and desirable in South Africa, in the light of decreasing budgets and an increasing recognition of the value of incorporating local knowledge into decision-making. Another consideration is that management systems that involve resource users improve legitimacy and may result in greater compliance, thereby reducing 'transaction costs'.[67] These partnerships (which have taken various forms and include public-private-partnerships, local Agenda 21-type initiatives and community-government partnerships) have had varying degrees of success. A recent review of nine co-management case studies involving coastal and fishery resources has revealed that there are still several obstacles to the successful implementation of co-management arrangements in South Africa.[68]

A major obstacle to implementing successful co-management arrangements appears to be insufficient government commitment to devolving power to local level institutions.[69] This is manifested, for instance, by the inadequacy of resources and assistance made available for the development of these institutions and arrangements. Despite legislative imperatives to move towards participatory management, some government departments appear to lack genuine commitment to the principles of co-management and partnership with local resource users.

There is thus an urgent need to build effective, transparent and sustainable partnerships between relevant government agencies, resource users and other stakeholders. Government needs to play the role of catalyst and facilitator in this process, and must be willing to invest the necessary financial resources and technical support to initiate and sustain it.

There is an urgent need to build effective, transparent and sustainable partnerships between relevant government agencies, resource users and other stakeholders

HIV/AIDS

The magnitude and far-reaching consequences of the HIV/AIDS pandemic mean that the disease is no longer a crisis only for the healthcare sector, but presents a major challenge to all sectors.

The social, economic and biophysical micro impacts of the disease for individuals and households are sufficiently significant and extensive to make it essential that they are considered at a macro level. In a country such as South Africa, with its limited water resources, HIV/AIDS poses several problems. These include, first, the difficulty of estimating future water demand as population profiles, growth rates and mortality rates change. Second, any decline in water quality leads to increased public health risks, particularly for those with compromised immune systems; and third, many households are increasingly unable to pay for water and sanitation as larger and larger portions of household income are spent on health care and funerals.

For many living on or below the poverty line, harvesting natural resources is an important survival strategy. Many households, particularly in the rural areas, use natural resources as a 'safety net' when they have no other means to acquire income or food. In a recent study[70] of 700 South African households affected by HIV/AIDS, more than half the affected families did not have enough food to stave off starvation. Two-thirds of the households reported a loss of income owing to the disease and larger proportions of the household's income being spent on health care and funerals. Additionally, in many African countries, HIV/AIDS has resulted in people moving away from the cities where they work and back to the rural areas. This means that pressure on natural resources, especially in rural areas, is likely to escalate. In South Africa, many of the sick return to the former homeland areas where environmental resources are already degraded and, in many cases, overexploited.

As the number of funerals escalates, there is also an increased risk of groundwater contamination due to improper burial practices

Other environmental concerns linked to the HIV/AIDS epidemic include the fact that increases in the disposal of healthcare waste could increase air, land and water pollution. As the number of funerals escalates, there is also an increased risk of groundwater contamination due to improper burial practices. These varied potential impacts impinge on regional development planning, requiring substantive re-consideration of strategies and plans.[71]

THE WAY FORWARD

This chapter has described why economic growth under apartheid was environmentally unsustainable. The economic system privileged an elite class of White people, limited access to environmental resources for the majority of South Africans and forced overcrowding in the homeland areas, leading to loss of productive capacity and degradation. The economy was also highly resource intensive, and environmental regulations for industry, agriculture, commercial fishing and mining were inadequate and not properly enforced. Environmental protection was viewed as the protection of conservation areas for use by the White minority. The majority of the population in South Africa was systematically excluded from the country's wealth and was disproportionately affected by degradation and limited environmental regulations at home and in the workplace.

Since 1996, a plethora of policies and laws have been promulgated, many of which embrace the notion of sustainable development and require that sustainability principles be integrated into planning and decision-making processes. However, mechanisms for translating sustainability provisions into action at different levels of government and the private sector are frequently weak or absent.

The RDP and the Constitution are both extremely powerful statements on the need for environmental justice and sustainable growth. However, GEAR appears to represent a setback in this commitment. The state has responded to the plight of the unemployed urban and rural poor by providing basic water grants, lifeline electricity quotas and other forms of support. Line departments have also introduced important measures to encourage the use of renewable energy and establish environmentally sustainable waste and sanitation programmes. However, these extremely important initiatives are constrained by the broader macro-policy environment, which has not succeeded in creating new employment opportunities and has tended to limit the capacity of state departments to intervene more effectively in the lives of poor people.

Some progress has been made with the introduction of educational and capacity-building programmes and new policies and laws concerned with water, pollution and environmental and biodiversity management. However, the capacity and resources to implement these measures and monitor offenders is limited.

In particular, the increasingly important role of local government in addressing poverty and delivering on sustainable development goals and targets places enormous pressure on the least capacitated and resourced sphere of government. Unless understanding and capacity are built amongst local government officials and councillors – through coherent, needs-driven and ongoing capacity-building programmes – inappropriate resource allocation decisions will be made and unsustainable practices will continue. Furthermore, mechanisms for the involvement of civil society and resource users in management activities and decisions must be strengthened as a matter of urgency.

Moreover, before citizens and resource users can become more involved in, and take greater responsibility for, resource management decisions, issues of tenure security and access rights need to be resolved. The slow pace of the land reform process, lack of clarity about the powers of traditional leaders, the limited rights of women with respect to resource rights and ownership, and the current system of land-use planning and zoning all present major obstacles to bringing about equitable access to land and environmental resources. Government needs to take bold steps to:

- clarify the powers and responsibilities of traditional leaders and the role of customary law in respect of resource rights and land ownership;
- put mechanisms in place to expedite the land reform process, particularly with regard to security of tenure; and
- redress the gender disparities that continue to exist, by giving women real rights to resources and land.

'MAINSTREAMING' ENVIRONMENTAL SUSTAINABILITY ISSUES

The environment as a sector has suffered because it is not fully integrated into economic development and planning strategies. Although progress has been made in the establishment of institutional arrangements to foster improved coordination and integration across sectors, practical implementation has proved extremely difficult, largely because environmental issues are not an integral part of the core business of sectoral departments.

The 'mainstreaming' of environmental and biodiversity considerations requires the employment of a broad array of different approaches and tools. These include awareness raising, capacity building, garnering political commitment and the reflection of environmental considerations in sectoral budgets.

STRENGTHENING INSTITUTIONS AND BUILDING CAPACITY

Strengthening institutions and building human capacity is an essential element, not only in mainstreaming environmental issues into governance, but also in raising awareness and appreciation of the value of our natural resources for poverty eradication and economic development. There is an urgent need for government to develop environmental capacity enhancement programmes that are coherent and focused, adopt a continuing education approach, and build on disparate capacity-building initiatives. Government departments charged with environmental management responsibilities should allocate a portion of their annual budgets to environmental capacity-building interventions.

Government departments charged with environmental management responsibilities should allocate a portion of their annual budgets to environmental capacity-building interventions

VALUING ENVIRONMENTAL RESOURCES

Another challenge to sustainable development in South Africa is the failure

Recent policies and legislation require more participatory approaches to the management of natural resources

of current accounting systems to assign value to the environmental goods and services provided by natural resources and systems. It is critical that the real value of environmental resources be reflected in national accounting systems and integrated into planning and decision-making processes. Furthermore, a central cause of environmental degradation is that the costs of degradation have not been internalised. In addition, the costs of improving environments are often looked at in the short term and the long-term financial and welfare benefits are ignored.

An important recommendation would involve shifting accounting procedures so that the real costs of degradation are included in expenditure decisions.

PARTICIPATION IN RESOURCE MANAGEMENT

Recent policies and legislation now require more participatory approaches to the management of natural resources. For these to become really effective, it is crucial that a strategy of decentralisation (to lower spheres of government) and devolution (to local level community-based institutions) be developed and implemented. To create genuine co-management arrangements, government needs to play the role of facilitator and be willing to invest the necessary financial resources and technical assistance to initiate and sustain these processes. This needs to be accompanied by a capacity-building programme to ensure that local resource users can participate in management decisions as equal partners.

CONCLUSION

This chapter identified a number of key challenges that need to be addressed in order to ensure environmentally sustainable development in South Africa. It showed the complex relationships between the environment, inequality and economic development.

Endnotes

1 Harris *et al* (2001)
2 Anderson and Leal (1999); Mitchell and Simons (1999)
3 World Bank (2002:10)
4 Cornia (2002); Lipietz (1995)
5 Daly (1996, 1999)
6 Sutcliffe (1995); Sachs (2002)
7 Domoto (2002)
8 Note that the World Bank Report also acknowledges the links between poverty and inequality and the environment: '… improving the quality of life for those living in poverty today … will require a growth path that integrates environmental and social concerns more explicitly'. However, the World Bank's solution involves well functioning markets and institutions rather than a different model of growth. World Bank (2003)
9 Turner and Meer (2001)
10 Sowman and Urquhart (1998)
11 Hoffman and Ashwell (2001)
12 Turner and Meer (2001); Kepe (1997); Wynberg (2001)
13 Bethlehem and Goldblatt (1997)
14 Spalding-Fetcher (2002:10)
15 Spalding-Fetcher (2002:10)
16 Department of Environmental Affairs and Tourism (1999)
17 Scotney (1995)
18 Garland *et al* (1999)
19 Scotney (1995)
20 Luckey (2002:375)
21 Hersoug and Holm (2000)
22 Payne and Cochrane (1995); Hersoug and Holm (2000)
23 Small Business Sector (1996)
24 Hauck and Sowman (in press)
25 Martin and Raakjaer Nielsen (1998)
26 For example, pollution research in Soweto shows that people are affected by local sources of contamination. So-called 'shack fires', frequently caused by heating and cooking facilities, have become a devastating hazard in informal settlements.
27 McDonald (2002:293-4)
28 Beinart and Coates (1995)
29 Sowman and Wynberg (2002)
30 The head of the African National Congress's Department of Economics and Planning, Max Sisulu, argued that: 'The ANC believes that a rational ecological protection policy requires the dismantling of apartheid. Widespread overgrazing, soil erosion and serious land degradation in the so-called homelands constitute the inevitable destructive consequences of apartheid. These cannot be reformed or rehabilitated by land-use management measures without first dismantling apartheid. The ANC believes environmental reconstruction constitutes a major task of a free and democratic post-apartheid South Africa.' Cited in Cock and Koch (1991:12-13).
31 Cock and Koch (1991:15)
32 Significantly, the RDP acknowledged the links between poverty and the environment: 'The democratic government must ensure that all South African citizens, present and future, have the right to a decent quality of life through sustainable use of resources. To achieve this, the government must work towards: equitable access to natural resources; a safe and healthy living and working environment; and a participatory decision-making process around environmental issues, employing communities to manage their natural environment'. ANC (1994) section 2.10.1
33 'Projects which meet certain basic conditions will be awarded a tax holiday, the duration of which will depend on three criteria. The basic qualifying conditions, which will include a sufficient level of domestic value added in a manufacturing process ... and evidence of a commitment to key economic goals including human resource development, foreign exchange conservation, and environmental responsibility are not intended to be unduly restrictive.' GEAR (1996)
34 Republic of South Africa (1996)
35 Clause 24(a)
36 National Environmental Act 107 of 1998
37 Department of Land Affairs (2000). The IRDP was underpinned by an earlier policy document called the Integrated Rural Development Programme. It is not clear whether the omission of 'sustainable' in the programme is significant in terms of this discussion.
38 Outlined in its White Paper on Integrated Pollution and Waste Management.
39 Department of Environmental Affairs and Tourism (2000)
40 Department of Minerals and Energy (2002)
41 Department of Minerals and Energy (2002)
42 'African leaders have learnt from their own experience that peace, security, democracy, good governance, human rights and sound economic management are conditions for sustainable development.' NEPAD (2001) paragraph 7

43 Sen (1993)
44 Paterson (1996)
45 Muradian and Martinze-Alier (2002)
46 World Resources Institute (2001:1)
47 UNDP (2002)
48 In 1999, the Department of Environmental Affairs and Tourism warned that: 'GEAR was not developed from a sustainable development perspective and many of the targets and strategies it sets out will have to be implemented carefully to ensure that they are met without further degradation to the environment and that they contribute to, rather than hinder, sustainable development'. Department of Environmental Affairs and Tourism (1999)
49 MacNeill *et al* (1991)
50 Korten (1995), for example, reports that the costs of cleaning up the *Exxon Valdez* oil spill on the Alaska coast counted as a net contribution to economic output.
51 A more detailed table is provided in Chapter 4, Table 4.1.
52 Shackleton *et al* (2000)
53 MacNeill *et al* (1991); O'Riordan (2000)
54 Urquhart (2001)
55 Sowman *et al* (2002)
56 DEAT (2001)
57 Glavovic *et al* (2001)
58 Sachs (1990); Khan (1998); Munslow and Fitzgerald (1997); Ngobese and Cock (1997); Glazewski (1999)
59 Such as the Green Paper on Development and Planning, the Development Facilitation Act, the White Paper on Spatial Planning, the Land Use Management White Paper and the Natural Environmental Management Act.
60 Mabin (2002)
61 Sowman *et al* (2002)
62 Turner and Meer (2001); Wynberg (2001); Glavovic *et al* (2001); Hauck and Sowman (2001); Urquhart, Wynberg and Kepe (1999); Kepe (1997)
63 May (2000)
64 Urquhart (2001)
65 A21 review report on capacity building
66 Hauck and Sowman (2001)
67 Hara (2001); Hauck and Sowman (2001)
68 Hauck and Sowman (2001)
69 Hauck and Sowman (2001); Turner and Meer (2001); Shackleton *et al* (1998)
70 Research conducted over the past year by the Kaiser Family Foundation. Kaiser Family Foundation
71 The KwaZulu-Natal Town and Regional Planning Commission, for example, began to consider the implications of HIV/AIDS for its activities in 1995. Whiteside *et al* (1995)

7

Creating jobs

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Creating jobs

Access to jobs that are appropriately remunerated and provide decent work is not only an important means of improving living standards; it is also a means of exercising skills, creativity, making productive contributions to society and enjoying self-respect, dignity and empowerment

The sustainable development approach to development seeks to enlarge the choices available to people to live long, healthy and creative lives, thus putting people at the centre of development. It is well recognised that 'productive work and employment are central elements of development as well as decisive elements of human identity.'[1] Diverse factors link the poverty eradication goal of sustainable development with employment (Chapter 4). However, employment is more than a fundamental economic opportunity by means of which people generate income. Access to jobs that are appropriately remunerated and provide decent work is not only an important means of improving living standards; it is also a means of exercising skills, creativity, making productive contributions to society and enjoying self-respect, dignity and empowerment.

These attributes of employment led the World Summit for Social Development (1995) to adopt a commitment to 'promoting the goal of full employment as a basic priority of our economic and social policies, and to enabling all men and women to attain secure and sustainable livelihoods through freely chosen productive employment and work.'[2] The conference advocated harnessing the positive links between economic growth and employment as a means to achieving poverty eradication and sustainable economic growth.

THE STATE OF THE LABOUR MARKET

EMPLOYMENT AND UNEMPLOYMENT

Between the two censuses of 1996 and 2001,[3] the official unemployment rate (using the strict definition)[4] is estimated to have increased by 17.7 percentage points: from 23.9 per cent to 41.6 per cent.[5] Table 7.1 provides summary information on the distribution of the employed and unemployed, using Census 2001. It reveals the persistence of some important dimensions of the South African labour market. For example, (a) more males than females remain unemployed, with 35.8 per cent against 48.1 per cent unemployment rates, respectively; (b) 50 per cent of the African population in the labour force is officially unemployed compared to much lower unemployment rates among other ethnic groups (the unemployment rate in the White population was 6.3 per cent); and (c) for three provinces, Eastern Cape, KwaZulu-Natal and Limpopo, the official unemployment rates are about 50 per cent or above.[6]

Table 7.2 on p. 146 compares the distribution of employed people between the ages of 15 and 65 by occupational category for 1996 and 2001. The table reveals two important findings. (a) The labour absorption rate[7] for the working-age African population (27.8 per cent in 2001, column 3) is 2.2 times lower than the corresponding rate for the working-age White population (61.4 per cent in 2001, column 12). This broad measure of labour market inequality shows deterioration since 1996.[8] (b) The racial distribution of the employed within each occupational category shows that Africans have increased their shares of total employment in all but two occupational categories (column 2): their shares of total employment in the categories 'professionals' and 'skilled agricultural and fishery workers' have declined.

Table 7.1 **Distribution of population by labour market status (Census 2001)**

	Population		Economically active		Not economically active[2]	Unemployment rate[3]
			Employed	Unemployed[1]		
	(mil)	(% of total)	(% of population of working age 15–65)			%
Total	44.8	100	33.7	24.0	42.3	41.6
African	35.4	79.0	27.8	28.1	44.1	50.2
Coloured	4.0	8.9	46.1	17.1	36.9	27.0
Indian	1.1	2.5	49.2	10.0	40.9	16.9
White	4.3	9.6	61.4	4.1	34.5	6.3
Male	21.4	47.8	41.3	23.1	35.7	35.8
African	16.9	79.0	35.0	26.7	38.3	43.3
Coloured	1.9	8.9	52.6	18.2	29.2	25.7
Indian	0.5	2.3	62.8	11.7	25.5	15.7
White	2.1	9.8	70.4	4.6	25.0	6.1
Female	23.4	52.2	26.8	24.9	48.3	48.1
African	18.5	79.1	21.4	29.3	49.2	57.8
Coloured	2.1	9.0	40.1	16.1	43.8	28.6
Indian	0.6	2.6	36.2	8.3	55.5	18.7
White	2.2	9.4	52.8	3.7	43.5	6.6
Provinces	44.7	100.0				
Eastern Cape	6.4	14.4	20.4	24.6	55.0	54.6
Free State	2.7	6.0	33.7	25.5	40.8	43
Gauteng	8.8	19.7	45.0	25.8	29.2	36.4
KwaZulu-Natal	9.4	21.0	27.8	21.6	45.7	48.7
Limpopo	5.3	11.8	22.7	21.6	55.7	48.8
Mpumalanga	3.1	7.0	33.0	23.0	43.9	41.1
Northern Cape	0.8	1.8	39.4	19.7	40.9	33.4
North West	3.7	8.2	31.8	24.8	43.4	43.8
Western Cape	4.5	10.1	48.5	17.1	34.4	26.1

Source: Statistics South Africa (2003)
Notes: (1) Official or strict definition of unemployed is used (see endnote 4). The percentage unemployed is not the unemployment rate. It is the percentage unemployed of the entire working age population. (2) The not economically active part of each population group include students, homemakers, the disabled, those too ill to work and anyone not seeking work. (3) The unemployment rate is calculated as the percentage of unemployed within the officially defined economically active population. These calculations do not include the not economically active, hence are larger than proportion of unemployed within the entire working age population.

Box 7.1 compares South Africa's unemployment rate with rates for other regions of the world.

THE EXPANDING INFORMAL SECTOR

The informal sector consists of small-scale activities that fall outside certain government regulations (such as registration, tax and social security obligations, as well as health and safety rules). The informal economy is also characterised by the insecure nature of work: workers in informal enterprises and informal jobs

Box 7.1 **International comparison of unemployment rates (%) (2000–2002)**

	2000	2001	2002
Asia and the Pacific	3.8	4.1	4.2
East Asia	3.2	3.6	4
South-East Asia	6	6.8	6.5
South Asia	3.4	3.5	3.4
Industrialised countries	6.1	6.4	6.9
Latin America and the Caribbean	9.7	9.6	9.9
Middle East and North Africa	17.9	18.9	18
Sub-Saharan Africa	13.7	14	14.4
Transition economies	13.5	12.6	13.5
South Africa (official)[1]	25.8	29.5	30.5
South Africa (expanded)[1]	35.9	41.5	41.8

Source: ILO's Global Employment Trends (2003) and Statistics South Africa's Statistical Release (P0210), September 2002.
Note: (1) South African unemployment rates are from Labour Force Surveys of September 2000, 2001, and 2002.

Table 7.2 **Distribution of the employed aged 15 – 65 by occupational category and population group (1996 and 2001)**

	African			Coloured			Indian			White			Total		
	% of total employed	% of total emp. in an occup.	Labour absorption rate	% of total employed	% of total emp. in an occup.	Labour absorption rate	% of total employed	% of total emp. in an occup.	% of population	% of total employed	% of total emp. in an occup.	Labour absorption rate	% of total employed	% of total emp. in an occup.	Labour absorption rate
2001	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Legislators, senior officials and managers	2.3%	27.1%	0.6%	3.5%	8.2%	1.6%	11.7%	9.0%	5.8%	15.4%	55.7%	9.5%	5.4%	100%	1.8%
Professionals	4.0%	36.1%	1.1%	3.9%	7.1%	1.8%	12.1%	7.2%	6.0%	17.8%	49.5%	10.9%	7.0%	100%	2.4%
Technicians and associate professionals	8.0%	52.9%	2.2%	8.4%	11.1%	3.9%	12.3%	5.3%	6.0%	15.2%	30.7%	9.3%	9.6%	100%	3.2%
Clerks	7.8%	45.7%	2.2%	13.1%	15.1%	6.1%	21.1%	8.0%	10.4%	17.5%	31.1%	10.7%	10.9%	100%	3.7%
Service workers, shop and market sales workers	10.3%	64.6%	2.9%	8.6%	10.6%	4.0%	12.2%	5.0%	6.0%	10.4%	19.8%	6.4%	10.2%	100%	3.4%
Skilled agricultural and fishery workers	3.1%	71.5%	0.9%	2.5%	11.3%	1.2%	0.4%	0.6%	0.2%	2.4%	16.6%	1.5%	2.8%	100%	0.9%
Crafts and related trades workers	13.2%	69.5%	3.7%	13.0%	13.5%	6.0%	10.3%	3.5%	5.0%	8.4%	13.5%	5.2%	12.2%	100%	4.1%
Plant and machine operators and assemblers	11.0%	79.8%	3.1%	8.1%	11.6%	3.7%	8.3%	3.9%	4.1%	2.1%	4.7%	1.3%	8.8%	100%	3.0%
Elementary occupations	34.0%	81.9%	9.5%	31.9%	15.2%	14.7%	5.3%	0.8%	2.6%	2.8%	2.0%	1.7%	26.5%	100%	8.9%
Undetermined	6.2%	59.6%	1.7%	6.9%	13.0%	3.2%	6.3%	3.9%	3.1%	8.0%	23.5%	4.9%	6.7%	100%	2.2%
Total	100%	63.8%	27.8%	100%	12.6%	46.1%	100%	4.1%	49.2%	100%	19.4%	61.4%	100%	100%	33.7%
1996	African			Coloured			Inidan/Asian			White			Total		
Legislators, senior officials and managers	1.7%	26.7%	0.5%	2.7%	8.3%	1.4%	7.5%	7.5%	3.8%	11.1%	56.4%	7.0%	4.0%	100%	1.5%
Professionals	7.5%	49.1%	2.4%	6.6%	8.6%	3.4%	11.5%	4.8%	5.9%	17.1%	36.4%	10.8%	9.6%	100%	3.6%
Technicians and associate professionals	3.1%	32.9%	1.0%	4.9%	10.2%	2.5%	10.0%	6.7%	5.1%	14.4%	49.1%	9.1%	6.0%	100%	2.3%
Clerks	4.4%	35.0%	1.4%	9.3%	14.8%	4.7%	14.8%	7.6%	7.5%	15.9%	41.5%	10.0%	7.8%	100%	3.0%
Service workers, shop and market sales workers	9.0%	62.6%	2.8%	8.2%	11.3%	4.2%	9.8%	4.3%	5.0%	9.2%	20.9%	5.8%	9.0%	100%	3.4%
Skilled agricultural and fishery workers	4.7%	74.8%	1.5%	3.1%	9.9%	1.6%	0.5%	0.5%	0.2%	2.7%	14.2%	1.7%	3.9%	100%	1.5%
Crafts and related trades workers	15.7%	68.6%	4.9%	14.2%	12.3%	7.2%	11.7%	3.3%	6.0%	10.5%	15.0%	6.7%	14.3%	100%	5.4%
Plant and machine operators and assemblers	10.3%	75.3%	3.2%	8.8%	12.7%	4.5%	9.8%	4.6%	5.0%	2.8%	6.7%	1.8%	8.5%	100%	3.2%
Elementary occupations	33.8%	80.6%	10.6%	33.0%	15.6%	16.8%	5.2%	0.8%	2.6%	2.9%	2.3%	1.8%	26.1%	100%	9.9%
Undetermined	9.7%	56.0%	3.0%	9.2%	10.5%	4.7%	19.3%	7.1%	9.8%	13.4%	25.3%	8.5%	10.8%	100%	4.1%
Total	100.0%	62.3%	31.3%	100.0%	12.4%	50.9%	100.0%	4.0%	50.9%	100.0%	20.4%	63.2%	100.0%	100%	37.9%

Source: Statistics South Africa (1998, 2003); Census 1996, 2001.
Note: Labour absorption rate is calculated as $(\text{Employment})_{ij}/(\text{Working-age population of 15 – 65})_{j}$, where i refers to different occupational categories and j represents different population groups.
In each row, the sum of columns 2, 5, 8 and 11 equals 100 (column 14).

are generally not covered by social security and labour legislation.

A clear trend since the mid 1970s has been the rising share of the informal sector in total employment (Figure 7.1). Of the 55 per cent of the labour force that was employed in South Africa in 2002, only two-thirds (63%) was in formal non-agricultural employment. This contrasts significantly with the 1995 figure of 70 per cent.[9]

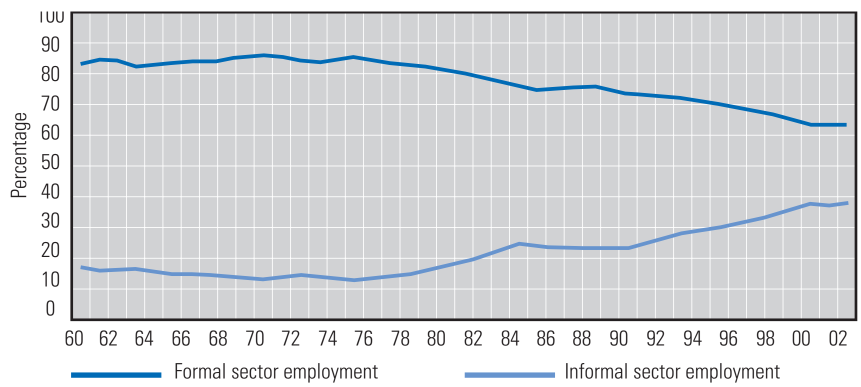
UNDEREMPLOYMENT

The high levels of unemployment tend to distract attention from the fact that being employed does not necessarily mean having full or adequate employment. Underemployment – in the form of 'inadequate employment' or 'low-quality jobs' – includes the kind of jobs characterised by low wages (defined as below the minimum collectively bargained wage), lack of training and promotion opportunities, exposure to excessive occupational health and safety risks, lack of job security and lack of worker representation and collective bargaining at the workplace.[10]

Low-quality jobs are very prevalent in the economy and form a very large 'ghetto' in the South African labour market. They are associated with low individual and household income and bear the usual demographic markings of the legacy of apartheid: they are disproportionately held by people in rural areas and African and Coloured women, but are by no means completely confined to these categories. Atypical jobs, such as casual and temporary work, are also among the lowest quality jobs.[11] Moreover, demands for a more flexible work force may exacerbate the increasing number of low-quality jobs or those offering inadequate hours.

Figure 7.2 indicates the distribution of time-related underemployment and low-quality jobs in both the formal and informal sectors.[12] Half of all working people are in employment that can be defined as 'low-quality jobs' when looking at indicators related to wages, occupational health and safety risks, skills development, industrial relations and job security. While this is the fact for three out of ten employees in the formal sector, six out of ten informal-sector workers are in low-quality jobs. Time-related underemployment is also more frequent in the

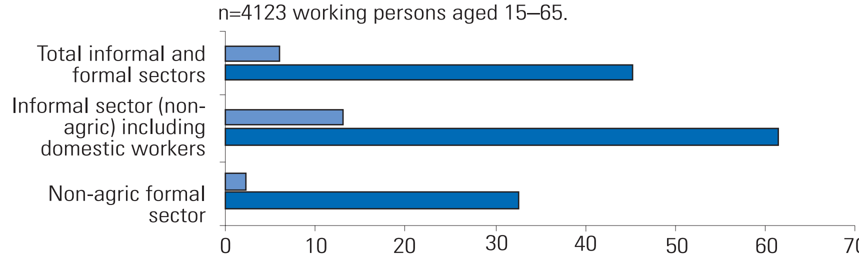
Figure 7.1 **Formal and informal employment (shares of total employment) (1960–2002)**



Source: Quantec dataset

Figure 7.2 **Underemployment: formal and informal sectors (shares of total employment)**

n=4123 working persons aged 15–65.



	Non-agric formal sector	Informal sector (non-agric) including domestic workers	Total informal and formal
Time-related underemployed: wants and is available for more work	3	13	6
Low-quality job (on 3 out of 5 items: wages, training, security, OHS risk)	33	62	46

per cent

Time-related underemployed: wants and is available for more work
Low-quality job (on 3 out of 5 items: wages, training, job security, occupational health and safety risk)

Source: Lewis *et al* (2002)

Being employed does not necessarily mean having full or adequate employment

31.4 per cent (3 million) of all workers (9.6 million) and 41.8 per cent (2.5 million) of all African workers (6.1 million) had an average monthly income of less than R801 a month in 2001

According to the Labour Force Survey of September 2002, the income of 24 per cent (2.6 million) of all workers (11 million) was lower than R501 a month

informal sector, with 13 per cent of informal-sector employees working less than 35 hours per week and wanting to work more, compared to 3 per cent in the formal sector. It is not news that informal-sector jobs are low-quality jobs – it is actually somewhat surprising that as many as 30 per cent of informal-sector jobs are 'quality jobs', as defined here.

HIV/AIDS AND THE LABOUR MARKET

The HIV/AIDS epidemic poses a major threat to the social fabric and economy of South Africa. Infection in the labour force was about 20 per cent in 1997, but is expected to increase to 25 per cent by 2005. Moreover, it is estimated that 96 per cent of HIV positive individuals are within the working age population of 15–65.[13]

The impact of AIDS will have far-reaching consequences for the South African economy in the next decade, with detrimental effects on labour productivity and economic growth. The excessively high morbidity rates amongst the most productive segment of the labour force (15–49 years) impacts on labour productivity, GDP growth rates and cost burdens to the state in terms of health costs and orphaned children.[14]

HIV/AIDS is resulting in a demographic shift whereby part of the productive generation is being lost, while the social costs of dealing with the disease are escalating. In the informal sectors of the economy, the disease is compromising households and depleting their coping mechanisms. In the formal sector, the result of the epidemic is the higher cost of employing labour (because of increased absences from work due to illness, decreased productivity and increased medical and funeral costs). Given the fact that large segments of the labour force in the formal sector work under minimal conditions, with little or no provision for prolonged sickness, the burden of HIV/AIDS care is being shifted onto the non-formal sectors. Increasingly women, children and older members of households and some public facilities are carrying the burden of caring for those affected by the disease.[15]

EMPLOYMENT AND WAGES

Table 7.3 shows the distribution of the employed across various income categories, using the 2001 census. While the average income of 68.6 per cent of African workers was less than R1 600 a month, the average income of 65 per cent of workers within the White population was between R3 201 and R25 600. According to the table, 31.4 per cent (3 million) of all workers (9.6 million) and 41.8 per cent (2.5 million) of all African workers (6.1 million) had an average monthly income of less than R801. According to the Labour Force Survey of September 2002, the income of 24 per cent (2.6 million) of all workers (11 million) was lower than R501 a month.

PRODUCTIVITY AND UNIT LABOUR COST

Productivity can be defined as the ratio between output (goods and services produced) in the economy and the input or resources (capital, labour, natural resources) used to produce output. In South Africa, labour productivity in the non-agricultural formal sector of the economy increased by 1 per cent per annum from 1982 to 1993, compared to 3.47 per cent during 1994–2002. Capital productivity[16], on the other hand, declined at an annual average rate of 0.8 per cent during 1982–1993. However, it grew positively at an average annual rate of 1.3 per cent during 1994–2002. Multi-factor productivity[17] also increased at a faster rate during 1994–2002, compared

Table 7.3 **Distribution of employed by income category and race (Census 2001)**

	African		Coloured		Indian		White		Total	
Income Category	% of employed	% of income category	% of employed	% of income category	% of employed	% of income category	% of employed	% of income category	% of employed	% of income category
R1 – R400	19.6	88.7	9.7	8.7	2.0	0.6	1.4	2.0	14.1	100.0
R401 – R800	22.2	81.6	20.0	14.6	5.2	1.3	2.3	2.5	17.3	100.0
R801 – R1 600	26.8	75.8	25.8	14.5	18.9	3.5	7.1	6.1	22.5	100.0
R1 601 – R3 200	18.6	61.0	23.4	15.2	28.2	6.0	17.7	17.7	19.4	100.0
R3 201 – R6 400	9.0	40.4	14.4	12.7	25.5	7.4	29.0	39.5	14.3	100.0
R6 401 – R12 800	2.8	22.9	5.2	8.6	13.7	7.4	24.0	61.0	7.7	100.0
R12 801 – R25 600	0.6	13.0	1.1	4.4	4.5	6.2	11.9	76.4	3.0	100.0
R25 601 – R51 200	0.2	13.4	0.3	3.5	1.2	4.9	4.0	78.3	1.0	100.0
R51 201 – R102 400	0.1	13.7	0.1	4.4	0.5	5.1	1.5	76.8	0.4	100.0
R102 401 – R204 800	0.04	15.0	0.1	4.3	0.2	5.2	0.7	75.5	0.2	100.0
R204 801 or more	0.03	19.5	0.03	3.3	0.11	4.2	0.4	73.0	0.1	100.0
Total	100.0	63.7	100.0	12.6	100.0	4.2	100.0	19.5	100.0	100.0

Source: Census 2001 Statistics South Africa (2003)

to 1982–1993. The corresponding average annual growth rates were 0.2 and 3.45 per cent.[18]

Real unit labour cost (the cost of labour per unit of production) declined by 0.5 per cent per annum in the non-agricultural formal sector of the South African economy during 1970–2001. In the manufacturing sector, it dropped by 2.8 per cent per annum during the same period.

VULNERABILITY OF WORKERS AND THEIR FAMILIES

The high and growing rate of unemployment reflects the increasing vulnerability of South African workers and their families. A relatively large number of households, especially those in the poorer income quintiles, rely heavily on only one income earner. This dependence is most pronounced for African households. These facts underscore the extent to which households are dependent on income earners and are vulnerable to the loss of an income or pension.

The foregoing discussion highlights the defining features that present unique challenges to the labour market. These features arise within a particular structural and policy context that has as much to do with inherited problems as with the unfolding transformation process. Sustainable development challenges facing the labour market are defined within this context. This chapter will draw out the implications for policy, with the aim of identifying strategies to precipitate job creation at levels and of a quality that will lead to inclusive, equitable and sustainable development.

CHALLENGES FOR EMPLOYMENT CREATION

Two important challenges must be addressed if the South African economy is to produce a gradual but substantial decline in the rate of unemployment and underemployment. These are the achievement of a sustainable high growth rate and the inclusive reorientation of the economy.

A SUSTAINABLE HIGH GROWTH RATE

Clearly, without growth, there can be no sustained expansion of employment

Challenges in the labour market have as much to do with inherited problems as with the unfolding transformation process

Unless economic transformation is directed towards an inclusive reorientation of the economy, the problem of a high unemployment rate will remain

potential. The only way in which employment can be expanded in a stagnant economy is by lowering the wages paid to workers or by increasing the rate of underemployment. Neither route offers a good solution to improving the well-being of a growing population. There are close interactions and mutual inter-dependencies between the accumulation process and labour market operation in a market economy. Only a growth-induced shift in employment has the potential to give the working poor access to rising income, either through reduced underemployment or through higher earnings. Economic growth is, therefore, an essential component of any employment generation strategy.

At the same time, even though private sector decisions about investment and production technology have important implications for the level and types of employment opportunities generated by the mainstream economy, growth performance depends on factors such as labour commitment and its quality and productivity. Moreover, various chapters of this report have highlighted how South Africa's growth potential and characteristics affect and are being affected by the strategies and policies that aim to respond to a number of the socio-economic challenges to sustainable development prospects. Chapter 8 provides a detailed analysis of these challenges and of strategies for achieving a sustainable high growth rate in South Africa.

The roots of a number of the current problems facing the South African labour market go back to the economic structure, laws and practices of the apartheid era

INCLUSIVE REORIENTATION OF THE ECONOMY

It is generally agreed that the roots of a number of the current problems facing the South African labour market go back to the economic structure, laws and practices of the apartheid era. The pervasiveness and persistence of unemployment and underemployment are, first and foremost, a consequence of the manner in which the economy has evolved over time. In this process, a significant and increasing portion of the labour force was either excluded from, or only marginally incorporated into, the formal sector – which is where the dynamic productive activities are found. With primary forms of production in mining and agriculture as enclave sectors, the earlier inward-looking strategy emphasised large-scale and capital-intensive forms of production with a low capacity for employing the growing labour force.

Since 1994, the evolution of the economy has continued to generate increasing unemployment. Against this background, unless economic transformation is directed towards an inclusive reorientation of the economy, the problem of a high unemployment rate will remain. The future growth potential of the economy needs to be associated with a larger shift in employment – that is, one that is more employment-elastic – and the poor need to be able to integrate into the processes of economic expansion (Box 7.1). The rest of this section elaborates on these two issues and the various challenges that need to be overcome in each case.

Box 7.2 Power of industry

'Given the difference in power between those who can provide jobs, a place in the market areas, access to buying and selling channels, and poor people who need to survive, private employers in fact govern the lives of poor people. From large farm landlords to boat owners and mine owners or those who run factories, construction companies, cafés or manage buildings, poor people turn to those who can offer them work. The importance of private enterprise in job creation is mentioned in many parts of the world. However, to create market opportunities that benefit the poor, the nature of poor people's interactions with the private sector needs to be understood.'

Source: Narayan, D, Chambers, R, Shah, MK and Petesch, P. (2000) *Voices of the Poor: Crying out for Change.* World Bank and Oxford University Press, Washington DC and New York, p. 214

Job-creating growth

The elasticity factor refers to the ability of any given growth in production to stimulate the growth of employment. The idea behind this concept is that any given growth rate can be associated with different degrees of shift in employment potential, depending on the nature of the growth process. The growth process that is associated with a bigger shift – i.e. one that is more employment-elastic – will be more desirable, other factors remaining equal.

Some of the hurdles to be overcome if South Africa's economic growth is to begin to produce a high rate of employment are discussed below.

Policy biases toward capital intensity: The generally low responsiveness of employment to investment and output growth in the formal sector has been the consequence of various built-in biases in favour of capital-intensive methods of production. As many observers have noted, during the apartheid era there were various incentives to invest in capital-intensive methods of production in agriculture, mining and manufacturing. These included corporate tax incentives, depreciation allowances, tariff rebates, debt financing, subsidised interest rates, the provision of utilities and infrastructure and the legacy of import substitution policies. These incentives have increased the use of capital in private sector corporations, as well as in public corporations engaged in what were considered strategic industries (Eskom, Sasol, etc.).[19]

These measures contrived a distorted comparative advantage for the export of capital-intensive manufactured goods, resulting in high unemployment.[20] Their particularly severe impact on employment was compounded by the regime's failure to invest in a supportive policy and institutional framework to enhance the relationship between new technologies, human resource development and employment.

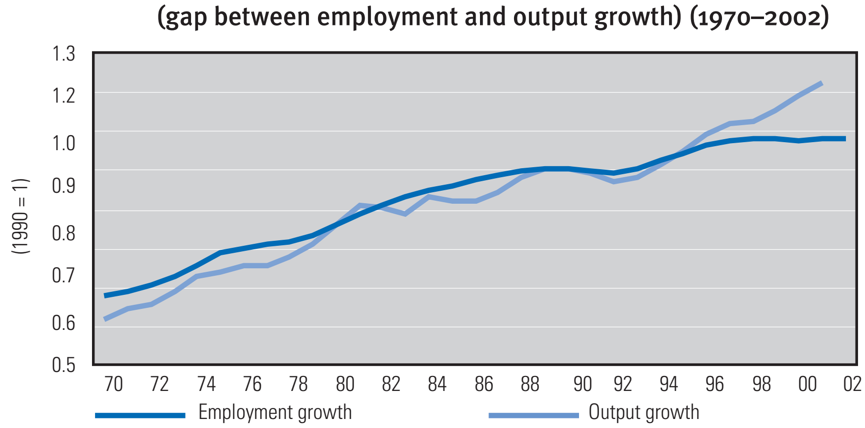
Since 1994, the government has pursued the objective of restructuring the economy through export-promotion in an increasingly liberalised environment. In doing so, it has used a host of incentives that have continued to foster the capital intensity of production at the expense of encouraging employment potential. As a result, the mainstream of the economy has remained on the same comparative advantage path as before, resulting in increasing capitalisation of production activities and corresponding direct job losses. The restrictive macroeconomic policy has constrained the realisation of the growth potential of the adopted new technologies. It has also resulted in inadequate institutional and policy support to enhance the economy-wide net employment effects of using high capital-intensive technologies in the mainstream of the economy. Consequently, employment growth has seriously lagged behind output growth since 1995 (Figure 7.3).

This means that, currently, compared to 1995, a much smaller number of jobs is being created for every one-percentage

Since 1994, the government has pursued the objective of restructuring the economy through export-promotion in an increasingly liberalised environment

Employment growth has seriously lagged behind output growth since 1995

Figure 7.3 **Employment intensity of growth (gap between employment and output growth) (1970–2002)**



Data source: Real GDP from Reserve Bank dataset and employment from Quantec dataset
Note: Employment data includes the informal sector.

growth in total production. Unless the future growth potential of the economy is associated with a larger growth in employment – that is, one that is more employment-elastic – problems of unemployment and underemployment will continue. This constitutes one of the central challenges and conditions for South Africa's sustainable development path.[21]

In respect of trade policy in the post-1994 period, the industrial sector has been very rapidly exposed to international competition. An International Labour Organization (ILO) sponsored study[22] explored the employment effects of South Africa's trade in manufactured goods and the likely effects of its trade reform policies on employment in the sector. It found that 'import liberalisation in particular is likely to have significant adverse effects on employment in the manufacturing sector, including employment in relatively low-wage sectors and regions.'[23] The ILO study argued that trade reform is leading to a growth in capital-intensive manufacturing and a decline in the labour-intensive industries of the manufacturing sector.

The current economic liberalisation path continues to move the economy along the trajectory of capital-intensive production, with the result that 50.7 per cent of total investment in 2002 was in machinery and equipment

This is clearly reflected in the statistics. There have been substantial job losses in industries such as textiles, clothing and footwear. The current economic liberalisation path continues to move the economy along the trajectory of capital-intensive production. This is evidenced by an average real growth rate of 8.2 per cent in investment in machinery and equipment during the 1990s, with the result that 50.7 per cent of total investment in 2002 was in machinery and equipment.[24]

Restructuring in the minerals and allied processing industries has resulted in a significantly increased use of capital over labour, leading to job losses.

The motor industry, which has been praised for its increased exports, has made substantial use of government export-linked import subsidies to restructure the sector through the extensive use of imported capital goods. As a result, average annual fixed real investment increased from R895 million during 1982–1993 to R1.6 billion during 1994–2001. The share of intermediate imports (in total imports) increased from an average of 43 per cent during 1982–1993 to 56 per cent during 1994–2001. Consequently, the average annual real growth of the sector's output jumped from -0.9 per cent during 1982–1993 to 8.7 per cent during 1994–2001. The export share of motor vehicles and accessories in the sector's total output increased from an average of 3.8 per cent per year during 1982–1993 to 13.3 per cent during 1994–2001.

These significant improvements in investment, output and exports have, however, resulted in a decline in direct employment in the sector. Thus the average annual employment in the sector was 77 602 during 1994–2001, compared to 86 045 during 1982–1993. For the manufacturing sector as a whole, output grew by 17 per cent between 1994 and 2001, while employment declined by 22.6 per cent during the same period.

The aim of the Department of Trade and Industry's (DTI) package of supply-side policies is to put pressure on producers and support their efforts to reduce production costs, rapidly improve levels of productivity, and thereby increase their international competitiveness and exports. A range of support measures – including tax holidays, technology upgrading schemes, incentives to promote multiple shifts, support for innovation and research and development, and accelerated depreciation allowances – have been implemented to achieve these objectives. These supply-side support measures have been directed primarily at the larger industrial enterprises in the formal economy, and have promoted a rapid and widespread process of restructuring at firm level. This has resulted in extensive job losses in the formal economy and the increasing use of flexible labour at the enterprise level.[25]

Biases toward large-scale enterprises: The economy also has built-in preferences for large-scale forms of production which, by the same token, have been historically biased against the growth of small and medium-scale enterprises. The latter types of enterprises could assist in making the economic base more broadly inclusive, apart from being relatively more labour intensive. Such biases are generally a consequence of various regulatory stipulations in respect of registration, access to finance, compliance with specific laws, access to incentives and so on. A report by Ntsika Enterprises (1997) shows that large-scale enterprises dominate in terms of their contribution to value of output in all the major sectors: manufacturing (69%), mining (97%), finance (95%) and transport (85%). Small-scale activities are better represented in terms of value of output in trade (48%), agriculture (43%), construction (32%) and in the smaller sector of community and social services (68%). The overall contribution to gross domestic product by size of enterprise was estimated to be 21 per cent for small enterprises, 12 per cent for medium enterprises and 67 per cent for large-scale enterprises.

With regard to formal employment, the Ntsika Enterprises report found that small-scale enterprises contributed 30 per cent, medium-scale enterprises 15 per cent and large-scale enterprises 55 per cent. The report notes that South Africa's representation of small enterprises and self-employment is comparatively very low. This is primarily because of restrictive policies that have directly or indirectly inhibited the emergence and growth of small-scale enterprises.[26] The under-representation of black farmers in smallholding commercial farming is a classic example of the biases implied by the foregoing statistics.

The relative cost of labour: From the mid-1980s, the rate of unionisation in the economy increased rapidly from a union density rate (percentage of employees unionised) of below 20 per cent to more than 35 per cent a decade later.[27] The rate continued to increase throughout the 1990s, in contrast to many countries around the world where the trend was towards a decrease in unionisation. For specific historical, political and economic reasons, the rate of unionisation in South Africa is fairly high by both developing and developed country standards. This can be expected to have had an upward impact on wage trends in the economy and to have negatively affected employment creation.[28]

However, according to the ILO Country Review[29], given the many other causes of the decline in employment in South Africa, it is not easy to demonstrate that unionisation has contributed to it or been its major cause. In addition, average real wages could have risen for any number of reasons, including nutritional and efficiency considerations, as well as rising education and skills levels among the employed as overall capital intensity rose. In many sectors, real wages over the years have been relatively static or have increased slowly. In addition, there are wide variations in wages by industry and sector, which are not easily explained by conventional claims.

Most interestingly, as was pointed out in the ILO Country Review, the number of workers covered by collective bargaining agreements and sectoral wage determinations has been declining over the years. Thus the rising capital intensity in many sectors cannot easily be attributed

The economy also has built-in preferences for large-scale forms of production which have been historically biased against the growth of small and medium-scale enterprises

The poor have benefited little from this expansion thus far, as they do not possess the skills needed by the expanding sectors

to wage determinations, increasing unionisation or rising real wages. Overall, the share of wages and salaries in gross domestic product has declined over the past nine years, along with the real unit cost of labour (Figure 7.4).[30]

Matching skills to job opportunities

Rapid growth and high elasticity of employment potential can, together, ensure that economic activities create greater opportunities for workers to increase their income through a combination of greater employment and higher earnings for labour. However, greater opportunities do not necessarily mean opportunities for 'poor workers' or the unemployed poor. Thus even a combination of rapid growth and a related high response of job creation does not guarantee a rapid rise in the employment of the unemployed poor. If the new opportunities are such that the capabilities they demand do not match the capabilities of the poor, then non-poor workers will either seize those opportunities or the opportunities may be lost altogether.

Greater opportunities do not necessarily mean opportunities for 'poor workers' or the unemployed poor

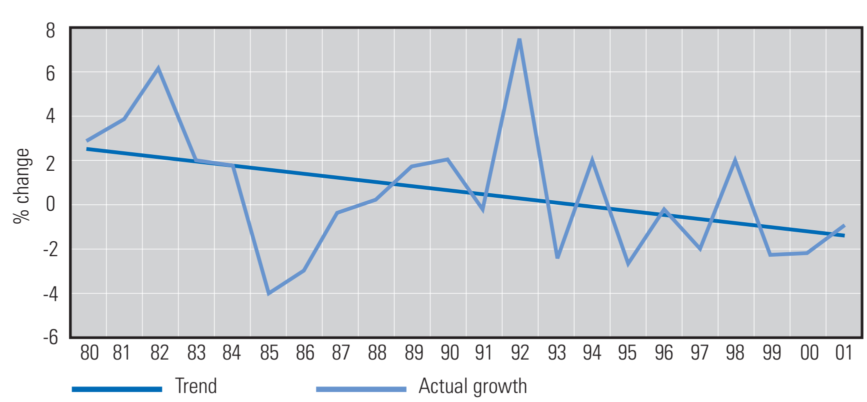
Much, therefore, depends on the correspondence between the structure of the opportunities that are opened up and the structure of skills possessed by the poor. The 'integrability factor' refers to the degree of this correspondence. The greater it is, the more extensively will the poor be able to integrate into the processes of economic expansion, and the faster will be the rate of poverty reduction for any given rate of growth.[31]

There are various reasons why the poor may not be able to integrate fully into economic processes so as to take advantage of an expansion in employment opportunities created by economic growth. In the remainder of this section, a number of such explanations will be explored, in order to provide a better understanding of the major barriers to increased integrability in South Africa.

Mismatch of skills: One source of limited integrability lies in a possible mismatch of skills – between the skills demanded by the expanding sectors and the skills possessed by the poor. This is exemplified by current experience in many Latin American countries. As these countries tried to open up their economies, they found that, unlike the countries in East and South East Asia (which opened up their economies earlier), their comparative advantage did not lie in activities that are intensive in relatively unskilled labour. The emergence of poor and populous countries on the global scene – such as China and India – ensured that Latin America would not be able to compete in these types of products. Instead, most Latin American countries find their comparative advantage in relatively skills-intensive activities.[32] The opening up of these economies has led, predictably, to an expansion of such activities. The poor have benefited little from this expansion thus far, as they do not possess the skills needed by the expanding sectors.[33]

A different kind of mismatch relates to the gender dimension of the integrability problem. The types of jobs for which demand rises may be defined culturally as men's jobs, whereas poverty

Figure 7.4 **Trend in growth rate of real unit labour cost (1980 – 2001)**



Source: Reserve Bank Dataset

may be concentrated mostly among women. This problem is especially relevant in much of Africa, where crop production has acquired a gendered pattern: with many cash crops being identified as men's crops and subsistence food crops as women's crops. Trade liberalisation and the greater commercialisation of agriculture may boost the employment potential in cash crop production; but, to the extent that a gendered pattern of crop production remains a constraint, poor women will find it hard to take advantage of the new opportunities.

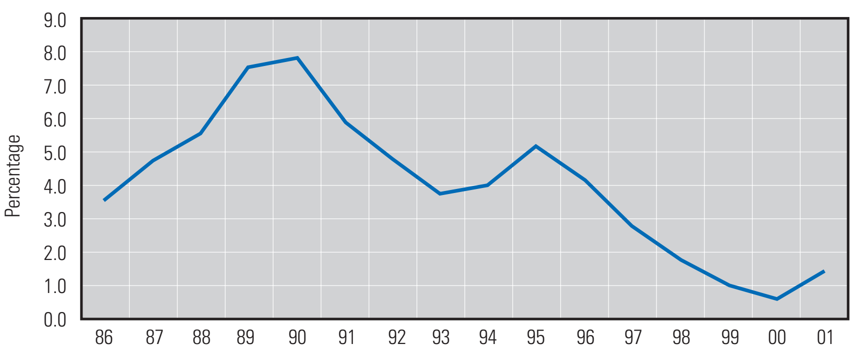
In South Africa since 1994, patterns of employment and unemployment strongly suggest the persistence of certain labour market inequalities that have proved hard to overcome, despite a major overhaul of labour market laws of the apartheid era. At the same time, the unemployment problem has worsened significantly.

Labour is reallocating between industries at an increasing pace. This can be measured by using the sector shift measure of the Lilien index (1982).[34] The results show that, for the twenty-eight manufacturing sectors, the trend is towards increasing structural change. The question is: to what extent is the deterioration in the unemployment rate due to a rising gap between the inherited characteristics of the labour supply and changes in the characteristics of labour demand arising from a rapidly changing macroeconomic structure? In other words, to what extent is the problem of sharp increases in the unemployment rate since 1994 due to factors related to the unavailability of the right mix of skills required by producers?

Statistics South Africa's survey of the manufacturing sector indicates that the weight given by enterprises to the insufficiency of appropriate types of labour to expand their capacity utilisation has been decreasing since 1995.[35] This applies to skilled (except for 2001), semi-skilled and unskilled labour (Figures 7.5 and 7.6).

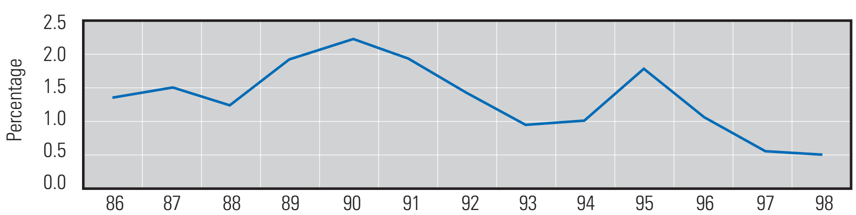
From this survey data, one cannot conclude that the main reason why manufacturers have not expanded their levels of activity is a mismatch between jobs and jobseekers. For a more comprehensive

Figure 7.5 **Reasons for under-utilisation: shortage of skilled labour (%) (1996–2001)**



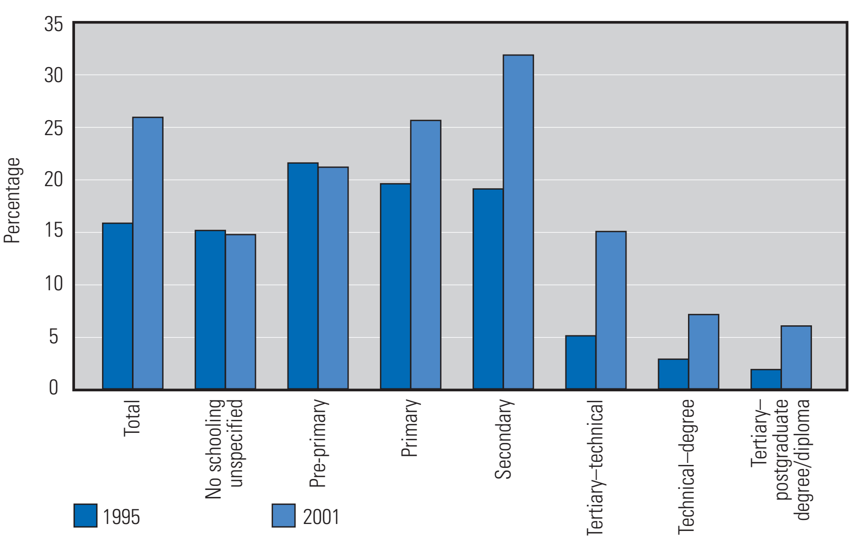
Source: Statistics South Africa (Statistical Release P3043)

Figure 7.6 **Reasons for under-utilisation: shortage of semi- and unskilled labour (%) (1986–1998)**



Source: Statistics South Africa (Statistical Release P3043)

Figure 7.7 **Unemployment rates among educated groups (1995 and 2001)**



Source: October Household Survey (1995) and Labour Force Survey (Feb 2001)

Since 1995, unemployment rates increased at all educational levels above pre-primary

No specific category of educated labour seems to be limiting the expansion of total labour demand

picture, Figure 7.7 presents rates of unemployment by education.

If rising unemployment during the 1990s was caused by an increasing mismatch in qualifications, we should expect rising unemployment for some categories of labour and low or decreasing unemployment for the kinds of workers in high demand. Figure 7.7 shows that, from 1995 to 2001, unemployment increased at all educational levels above pre-primary. For people with secondary education as the highest completed level of education, the rate has almost doubled, from 18 per cent to 32 per cent. For people with a tertiary technical education as the highest completed education, the rate has tripled, up to 15 per cent. For other kinds of higher education, unemployment has increased but is still comparably low. Thus no specific category of educated labour seems to be limiting the expansion of total labour demand. Within these broad categories there might be a lack of some kinds of highly specialised labour; but the possibilities of substitution will, to some extent, level out the unemployment rates between different kinds of personnel.

These statistics demonstrate that the problem does not necessarily relate to the inadequate supply of skilled people: it is the demand for all (except elementary) skills that has declined. This emphasises the point that, even though the new technologies may require higher-level skills, employment (skilled and otherwise) per unit of new investment in machinery has been declining. In other words, newer machinery demands less of *all* types of labour, skilled and unskilled alike.

At the same time, the trend in capital productivity indicates that, despite the increasing use of mainly imported machinery (and the introduction of the latest technology to diverse economic activities in South Africa), the productivity of the new machinery has not been impressive. For example, manufacturing output has barely kept pace with the rise in capital stock (between 1995 and 2002, manufacturing real output grew by 15.2 per cent, compared to a growth of 15.7 per cent in the sector's real capital stock).[36] This points to possible problems in work organisation, where the relationship between technology and human resource development is neglected.[37]

The foregoing analysis makes it clear that the sharp rise in the unemployment rate during the past nine years cannot be satisfactorily explained by skills gaps in the labour supply. At the same time, it remains important to acknowledge the potential danger such a gap poses for employment creation in South Africa. An effective safeguard requires institutional and policy support to enhance the relationship between technology, human resource development and employment.

Technology, human resource development and employment:[38] The relationship between the technologies used and the economy's human resource development and employment needs is more complex than rigidly defined combinations of different human and other productive inputs in the production process. Recent developments in the economics of technology provide a useful and broad understanding of the nature of technology and technological progress, especially when combined with insights from recent literature on institutional economics.[39] An important insight provided by this literature is that technology has 'tacit' and 'specific' qualities[40] The tacit attribute of technology refers to the difficulty of fully codifying a technology into formal instructions for easy transfer across individuals and organisations. It is during the process of using a technology that its tacit elements are revealed, interpreted and adapted to their current use by the users. This is especially important for the realisation of the technology's maximum productivity.

This means that the productivity of a technology is crucially affected by the organisation of work. The distribution of authority along the production hierarchy, the channels of information exchange across various divisions of the firm, the extent of job rotation and the reward structure (e.g. whether rewards are tied to group rather than individual achievements; whether they are tied to seniority) are all elements that become important.[41] The tacit dimension of technology also implies that the training of workers should emphasise the enhancement of their 'problem-solving' capacity. The extent to which workers can exercise initiative during the production process affects the realisation of the full potential of the technology concerned.

The 'specific' quality of a technology refers to the process that a technology often develops. It usually concerns particular problems faced by a firm or organisation, and thus includes a significant number of components that are 'specific' to its current use. This has important implications for employment institutions and training. For example, a number of recent works have emphasised that a more 'firm-specific' technology requires a less mobile labour force. It is also becoming more evident that 'societal' (rather than firm level) institutions matter in the determination of labour mobility: that is, laws such as those regarding hiring and firing and the social welfare system (especially unemployment insurance). In terms of training (depending on the industry concerned), firm-specific, on-the-job training may be of greater importance than the 'generic' training provided by outside bodies – such as dedicated (public and private) training institutions and vocational schools.

The tacit dimension and specificity of technology implies that the relationship between technological progress, human resource development and employment is not unidirectional (from human resource development to technological progress or use); nor is it uni-dimensional (it is the quality of education that matters). The institutions that regulate the division of labour at the firm level, together with employment-related institutions at both the firm and societal levels, affect the efficiency with which new technologies can be absorbed by their users and the way in which technological progress relates to human resource development and employment. The choice and impact of technological progress on employment depends on the existence of diverse and complementary institutions that determine how access to income is secured in the society (e.g. the extent and shape of the welfare state); how efficient and equitable the system of income transfers is (e.g. the nature of taxation system), and so on.

More specifically, the extent to which a particular technological process will generate jobs at the social level (not just in a particular firm or sector) depends in the end not only on the labour intensity of new technology,[42] but also on social institutions and government policies. For example, in order to achieve significant positive employment results from technologies that succeed in maximising net output (i.e. output over and above production costs) but result in direct firm level job losses, the surplus generated needs to be used to support the rest of the population. This can be done in a number of ways. These include direct income support, public works programmes, overstaffing the productive enterprises themselves by keeping 'redundant' workers on the payroll, or even through the deliberate preservation of job-generating low-productivity sectors (such as retaining some small firms

The productivity of a technology is crucially affected by the organisation of work in the manufacturing, retail or farming sectors, as is practised in countries like Japan and Switzerland).

However, the various institutional arrangements that aim to support the 'rest' have very different implications for the future of the economy; just as they have different implications for work incentives, the government budgetary position, corporate flexibility and even the organisation of living space. For example, if we recognise the human resource development function of people's work experience, we may deliberately create employment in low-productivity sectors in order to prevent 'decay' of the human resource due to non-use. This step might be taken even where the current output produced by such extra employment is lower than the wage bill.

The number of 'jobs' at the social level into which a particular technological progress will translate eventually depends not only on the labour intensity of the new technology, but also on government policies and institutions of employment, entitlement and work

Therefore, the number of 'jobs' at the social level into which a particular technological progress will translate eventually depends not only on the labour intensity of the new technology, but also on government policies and institutions of employment, entitlement and work.

In South Africa, the continuing trend of the economy to invest in technologies that require increasingly less labour, together with relatively weak job-creating institutional and policy support, threatens the realisation of one of the central goals of the Reconstruction and Development Programme (RDP) and sustainable development: namely the creation of productive employment opportunities at a living wage for all economically active South Africans.[43] Given the extent of the problem, there is a need for – among other measures – important changes in the macroeconomic structure and policies so that the net employment effects of the future expansion of the economy significantly and positively reflect a gradual reduction in the unemployment rate.

Government policies (e.g. investment incentives, education policies, labour legislation), private sector decisions (e.g. choosing among available technologies, work organisation and in-house training programmes) and labour (e.g. applying efforts to realise maximum productivity from new technologies) play important and complementary roles in the establishment and operation of the above institutions. Thus consensus among them with respect to the goals and means of achieving technological progress is essential. In the context of sustainable development, the policy challenges are to build and use social institutions that support a technology choice that aims to maximise human resource development and employment creation, is conducive to the realisation of the technology's maximum productivity, and translates the extra wealth created by more productive technologies into new jobs.

At the same time, there is a need for other complementary strategies and policies to ensure that new measures that aim to increase elasticity and integrability factors will not compromise the chances of productivity growth and macroeconomic balances. For example, strategies to reduce income and wealth inequalities (outlined in Chapter 4) may reduce the proportion of luxury good imports in total imports (or reduce the value of luxury goods imports relative to the value of households' disposable income). This helps reduce the pressure on the export sector to provide foreign exchange for the import of luxury goods for a small segment of the population.

As stated earlier, a significant portion of the trend rise in labour productivity corresponds to the increasing mechanisation of economic activities. If South Africa is to maintain the gradual rise in labour productivity, macroeconomic restructuring needs to include a strategy to make the basic consumer goods that constitute workers' subsistence cheaper, particularly food. Such a strategy should be considered an essential element of the competitiveness and viability of the broader restructuring of the economy towards labour absorptive economic activities. An important way of making food and simple manufactured goods cheaper is by increasing productivity in their domestic production.[44]

The high reservation wage: Some recent nutrition-based theories of unemployment and underemployment offer insights that relate to factors underlying the problem of low integrability. The inability of certain segments of the labour force to be easily integrated into and participate in the growth process may stem from the physiological fact that every individual has to incur a 'fixed cost' (or use up some fixed amount) of energy simply to maintain the body at rest. This is required even before the exertion of additional energy for physical work. For an individual who has no alternative means of meeting this 'fixed energy cost' – for example, a labourer without assets – the energy value of his or her labour (in terms of earnings from, say, a day's work) will have to be large enough to cover the cost of food intake, in order to produce the calories to cover both the 'fixed' and the 'variable' energy costs associated with the work. The sum of fixed and variable energy costs will then represent the worker's reservation wage, below which he or she will not work.

However, job seekers with some asset income might be willing to work for a lower wage, since a part of the fixed energy cost will be met by other means. As a result, in a competitive labour market, labourers without assets will be priced out by those with some assets, and will therefore suffer from longer-term unemployment.[45] By the same token, those who have fewer assets may be priced out by those who have more. To put it differently, even in the face of an overall expansion in employment potential, the poorest among the poor may not be able to integrate into economic processes because of competition from the less poor, and perhaps the non-poor as well.

In South Africa, a case can be made for the fact that the minimum offer price at which individuals will accept employment is, for a number of reasons, relatively high. This is a consideration often ignored by proponents of labour market deregulation. A high reservation wage implies that, if the wage rate falls below a particular level, the individual will withdraw his or her labour and prefer to be unemployed or stay out of the labour market. The reasons for so high a reservation wage relate to the high transaction costs of being in the labour market (such as those related to the cost of transport, housing and job search); the high cost of meeting the bare minimum requirements of survival; a return to informal and subsistence modes of survival (which might, for some workers, include crime), and the size of transfers to relatives from those engaged in wage work. All the foregoing factors also impact on the wage demands of those who are in employment and are unionised. An interesting aspect of this is the fact that the number of household members that need to be supported by wage earners increases with increasing levels of unemployment, thereby further compelling those in employment to demand higher wages.

Market failures: Chapter 4 listed a number of areas in which markets do not work well for the poor. The lack of integrability may also result from market failures, especially the failure of the credit market. It is well known that, because of informational asymmetries, the formal credit market often tends to resort to credit rationing in such a way that the poor, because of their lack of assets, are

Even in the face of an overall expansion in employment potential, the poorest among the poor may not be able to integrate into economic processes

There is a direct conflict between the demands of labour-intensive activities and the severe time constraints faced by poor women as they try to combine productive and reproductive activities within the household

left out or severely discriminated against. Poor entrepreneurs are then compelled to turn to monopolistic informal moneylenders. However, the exorbitant rates of interest these moneylenders charge may make it impossible to expand a business, even where there is an overall expansion of economic opportunities. Similarly, poor infrastructure, lack of information, market thinness and problems associated with living in remote areas may make transaction costs so prohibitive that, even if new opportunities open up in the overall economy, poor entrepreneurs in those areas may not find it worthwhile to expand their businesses or undertake new business activities.[46]

Institutional issues (insider-outsider rivalry): Labour market institutions may also play an important role by creating an 'insider-outsider' problem. Certain types of labour laws and collective bargaining practices may create so sharp an asymmetry of power between insiders (i.e. those already employed in the organised sector) and outsiders (i.e. those seeking entry into the organised sector) that the insiders may be able to prevent the outsiders from gaining entry.[47] In such circumstances, the outsiders will find it hard to integrate into the mainstream of economic expansion. The benefit of expansion will then accrue largely to the insiders as higher returns on labour, leaving little direct benefit for the outsiders. To the extent that the outsiders are likely to be poorer than the insiders, this will be detrimental to the cause of poverty reduction.

Time-poverty: Yet another problem that creates difficulty for women in their efforts to integrate into economic processes is the time constraint. Poor, labour-abundant economies may have a comparative advantage in labour-intensive activities and, if market distortions are removed, such activities may flourish. However, many poor women may not be able to take advantage of these opportunities. There is a direct conflict between the demands of labour-intensive activities and the severe time constraints faced by poor women as they try to combine productive and reproductive activities within the household.[48]

Depreciation in social capital: Another factor that impacts negatively on the integrability of the unemployed relates to the depreciation in social capital among some categories of workers, particularly female-headed households and workers in rural areas. Social capital refers to the economic value inherent in, and derived from, social institutions and relationships such as the extended family, community organisations and friendships. Different stages in the development of individuals require specific forms of social capital for support, in order that they may operate as functional beings in society. A major legacy of apartheid has been the disruption of various forms of social capital among Africans.

Reasons for this range from the consequences of spatial segregation and locational distance on the cohesion of the family and the raising of children, to the consequences of migration between urban and rural areas, and the temporary separation of male migrants from their families and female domestic workers from their township households. While groups that were previously disadvantaged have been quite ingenious in devising new forms of social capital such as *stokvels*[49] (and unions, for that matter), other forms of social capital have been severely compromised, particularly as they relate to investment in children as future human capital. Such undermining of social capital has negative effects on the integrability into the growth process of some segments of the labour force.

This section has explored a number of barriers that the unemployed, especially the poor, typically face when trying to integrate into the growth process. Responsible policy making demands that policy makers choose a growth framework that responds well to the major barriers constraining increased employment-intensity of growth and the integrability of the unemployed (especially the poor) in the country's growth path. The rest of this chapter and the next outline a policy framework to unlock these potentials.

THE WAY FORWARD

Three important causes of poverty amongst the poor in the labour force are unemployment, under-employment and low earnings from labour.[48] Therefore, the objective of any successful sustainable development strategy is inexorably linked to the country's employment generation strategy. This must encompass a substantial reduction in the country's high rates of unemployment and underemployment, and an improvement in the earnings of workers.

This chapter has examined the relationship between sustainable development and the labour market with the aim of identifying the strategies and the policy direction required if South Africa is to achieve compatibility between its transformation process and the sustainable development vision.

There have been numerous calls for a comprehensive employment strategy with pro-active policies that will increase the capacity of the economy to absorb labour in a manner that will sustainably reduce open unemployment and underemployment.[49] However, none has been able to reverse the current trends effectively.[50] The goals of sustainable development require that the promotion of productive employment be achieved in a manner compatible with a growing, equitable and competitive economy. Indeed, sustainable development posits that economic growth and employment are mutually necessary and supportive components of economic development. Here the fundamental policy issue concerns the manner in which the employment problem is posed vis-à-vis growth and development.

In order to reorient an economy that continues to exclude a large portion of the labour force from gainful productive activities, South Africa must put employment and an employment policy at the centre of its development vision. The entirety of the labour force needs to become the vehicle and instrument for economic transformation and restructuring. Thus the growth and employment strategies should really be one and the same, with the aim of effecting economic development that is broad-based, equitable and sustainable over time. This implies the need to unlock the productive potential of the labour force so as not only to generate increased output, but also to provide the basis for the necessary parallel increase in effective demand and the mobilisation of savings for investment.[51]

This strategy has important policy implications. The nature of the labour market challenges discussed above is such that merely getting orthodox market indicators right will not be enough to resolve them. It needs to be recognised that measures such as trade liberalisation, privatisation and the deregulation of the labour market tend to be passive measures. Such reforms leave outcomes primarily to the dictates of global markets and, hence, have generally tended to regenerate developmentally undesirable outcomes, especially in terms of income distribution, employment and the environment. Such reforms will not be able to propel the country along an inclusive growth path.

The objective of any successful sustainable development strategy is inexorably linked to the country's employment generation strategy

South Africa must put employment and an employment policy at the centre of its development vision

Commitment to the goals of sustainable development requires that policies move away from a focus on industrial competitiveness in the global market to rewarding sectors of the economy on the basis of their potential contribution to national developmental goals

Proactive and bold measures are needed to steer the economy towards generating the above outcomes, while bearing in mind the imperatives of the global economic situation. Measures to ensure that growth actively generates employment while integrating the poor into the process require government intervention of one sort or another. They also necessarily imply 'interference' with the market, even if only for a particular duration. Such proactive measures require consideration of general policies to ensure that an employment generating and labour absorbing growth process is initiated and maintained. They also demand specific employment policies to overcome problems associated with the low employment intensity of growth and the weak integrability of the unemployed, especially the poor, in the growth process.

The following recommendations focus on specific employment policies aimed at raising both the employment intensity of growth (production) and the integrability of the unemployed in the country's growth process. Policy issues related to the challenge of achieving a sustainable high growth rate in South Africa are developed in the next chapter.

POLICY RECOMMENDATIONS

Increase the labour intensity of production

Central to a successful reorientation of the economy is the need to ensure that the general production processes become significantly more labour intensive. Suitable policy measures in this area include: (a) the withdrawal of explicit or implicit subsidies which favour capital-intensive and/or large-scale enterprises; (b) the identification of targeted, time-structured and conditional incentives to promote labour-intensive production; (c) agricultural interventions to promote increased acreage under labour-intensive crops; (d) the promotion of alternative ownership and production arrangements, such as co-operatives and equity arrangements that use labour-intensive methods of production.

In a number of these areas, the restructuring of South Africa's diverse public enterprises can lead the way. Moreover, government procurement policy, at both national and provincial levels, should be amended to put greater stress on procuring goods and services from companies that seek to use labour more extensively in their areas of activity. Overall, commitment to the goals of sustainable development requires that policies move away from a focus on industrial competitiveness in the global market to rewarding sectors of the economy on the basis of their potential contribution to these national developmental goals.

Enhance the economy's capacity to utilise more labour

It is necessary to develop sector strategies that aim directly at promoting labour absorption. Such sector strategies should not be seen as separate from an employment strategy, but as vehicles for the realisation of the employment promotion objective. Sectoral strategies need to be internally coherent, as well as in terms of how they link together nationally and regionally.

Supportive policies in this regard generally focus on the following: enabling policies, pricing, inputs, innovation and technology, information, infrastructure, the development of regulatory regimes and institutions, incentive structures, the identification of specific activities or groups to be targeted and resource mobilisation. Box 7.2 provides an example of measures to ensure the development of tourism supports sustainable development goals.

Box 7.3

Tourism and sustainable development in South Africa: lessons from the international experience

'There is a number of relevant international lessons or policy guidelines that can inform future policy surrounding responsible tourism in South Africa (see Ashley and Roe, 2002: Spenceley *et al*, 2002). Indeed, there is much that can be gleaned from international experience that might contribute towards unleashing creativity at all levels of government, within business and civil society in terms of shaping the future development of a tourism industry that supports the wider goals of sustainable development.

In terms of the goals of sustainable development for eradicating poverty, eliminating unemployment, delivering basic needs and preserving environmental wealth, of greatest significance, perhaps, is the emergent agenda of pro-poor tourism. It can be argued that tourism can contribute towards the objectives of sustainable development if there is a greater awareness and acceptance of the need to tilt the policy balance in favour of the poor (DFID, 1999; Ashley, Roe and Goodwin, 2001). Overall, it is argued that there are four overarching factors that need to be addressed in any pro-poor tourism initiative (Ashley, Goodwin and Roe, 2001). First, is the importance of improving the access to market opportunities, in terms of overcoming barriers of physical location, establishing linkages with established operators and transcending social constraints (such as gender) on poor consumers. Second, is the set of issues around commercial viability as regards the product quality and price, marketing and strength of the destination as a whole. Third, is the importance of developing an appropriate policy framework which covers such matters as land tenure, regulatory contexts, planning processes, and government capacity. Finally, there is a suite of implementation challenges in the local context, such as the need to address skills shortages, the management of costs and (community) expectations and the implementation of responsible tourism best practices at destinations (Spenceley *et al*, 2002).

All these issues have a number of implications for the roles to be played by different stakeholders in tourism. A host of policy suggestions are offered by the pro-poor tourism literature which contain many relevant lessons for moving towards sustainable development in South Africa (see Ashley, Boyd and Goodwin, 2000; Ashley, Roe and Goodwin, 2001; Roe and Urquhart, 2001) and supporting the objectives for responsible tourism (Spenceley *et al*, 2002). The following may be noted as amongst the most significant implications respectively for the private sector, government and civil society (Ashley, Goodwin and Roe, 2001).

1. For the *private sector*
   - Maximise use of local suppliers and local labour.
   - Provide technical advice, support and clients to local tourism enterprise, helping to develop awareness and understanding of tourism.
   - Establish business partnerships with local residents and the community.
   - Develop or share access to infrastructure and key equipment.
   - Respect and promote local guidelines and norms.
   - Explain to tourists and suppliers why pro-poor commitments are important.
2. For *government*
   - Consult with local residents when making decisions about tourism.
   - Provide secure tenure for the poor over tourism land or assets.
   - Apply planning controls and investment incentives to encourage private operators to make and implement pro-poor commitments.
   - Encourage the spatial dispersion of tourism through appropriate marketing and infrastructural investments.
   - Revise regulations that impede the poor in employment or in entrepreneurship.
   - Incorporate pro-poor elements into tourism, rural development and growth strategies.
   - Dynamise pro-poor tourism by facilitating the efforts of others or at least by removing all obstructions.
3. For *civil society*
   - NGOs can function as catalysts for developing pro-poor tourism in particular by liasing with stakeholders.
   - NGOs should invest in training and technical assistance to the poor.
   - NGOs can explore and facilitate business linkages between the private sector and community/poor suppliers.
   - NGOs can develop processes that amplify the voice of the poor at all policy levels.'

Source: Rogerson, CM (2002) Tourism in South Africa: Potential economic driver, potential for poverty alleviation. Prepared for the UNDP.

Five examples of relevant policy measures in this regard are: (a) the facilitation of access to credit for disadvantaged individuals and communities through the reform of financial institutions, a lowered interest rate, and/or the selective promotion of prescribed asset and/or investment policies; (b) land reform through restitution, tenure reform and redistribution; (c) projects that target the poor, labour tenants, farm workers, women and emerging farmers, giving them access to land for residential and productive use; (d) targeted provision of subsidised credit and extension services for labour-absorbing large, medium and small-scale activities that enhance employment creation; and (e) using an employment subsidy programme to encourage the private sector to increase the employment of first-time jobseekers, and the retraining and/or hiring of retrenched employees. These recommendations point to the need for a political consensus on how the increased wealth from technological progress can translate into actual jobs, as well as related efforts to build the institutions necessary to cement that consensus.

Promote sectoral programmes with a high level of employment multiplier

Employment opportunities can be expanded through the promotion and consolidation of value chains or sectoral linkages as new economic activities are promoted. Proactive policy measures include: (a) support for the development of activities that fill gaps in the value chain (distribution, marketing, financial intermediation, input provision, research and development, technological capabilities, etc.) for select activities in agriculture, manufacturing and services; (b) tight coordination of public investment projects to maximise their impact on mutually re-enforcing activities in the private sector; (c) development of regional clusters of economic activities, especially in depressed areas of the economy; (d) special employment and public works programmes for those who cannot be immediately absorbed into productive employment. Such public works should focus on carefully chosen activities of a 'public good' nature, which will enhance social infrastructures that support private sector productivity.

The increasing cost of food, housing, health care, transport and childcare all contribute to the high cost of living, and thus impact on workers' wage demands

Reduce the cost of living

The cost of labour is influenced by the relatively high cost of living in South Africa. The increasing cost of food, housing, health care, transport and childcare all contribute to the high cost of living, and impact on workers' wage demands. Policies must maintain a particular focus on ensuring that wage goods are relatively cheap and accessible. This can be done primarily by implementing public sector productivity-enhancing activities that will lower the costs of production and supply in the economy, without necessarily resorting to price controls. There is also a need to lower the transaction costs of labour force participation through proper planning of transport requirements for prospective workers, spatial planning of housing and industry, and regional and local development initiatives.

Promote education, training and human resource development

There is a need for the proactive promotion of economic activities that can make efficient use of the educated human resources that already exist. Policy support in this area needs to be based on monitoring trends in the patterns of labour demand in expanding enterprises or sectors. This can lead to the provision of incentives and disincentives to steer learners and students into particular areas of specialisation and away from others. Second, the education and training of human resources can be directed towards supporting the productive economic activities being promoted in the employment strategy. This is particularly relevant to the promotion of micro-enterprises aimed at broadening the economic base, which cannot be left to market forces alone.

Extend the Labour Relations Act to the informal economy

A useful mechanism for incorporating the informal economy into the labour relations system may be the establishment of one or more bargaining councils, similar to those that currently function under the Labour Relations Act (LRA). The councils – which may be composed of employers (including contractors and sub-contractors), workers and government – could be charged with the responsibility of concluding appropriate collective agreements, handling disputes and promoting training and other policy in the informal economy. The main objective of these councils would be the promotion of a culture of collective bargaining and voice regulation, thereby avoiding the more violent forms of dispute resolution that currently characterise the informal economy in South Africa. There are various role models for the establishment of this type of collective bargaining. In India, for example, a number of decentralised tripartite boards is charged with the responsibility of concluding collective bargaining agreements on issues such as street vending and subcontracted labour.

Improve enforcement

A key issue with respect to minimum labour standards is the improvement of the Department of Labour's enforcement powers. Research in the clothing industry, for example, demonstrates that employers are simply not complying with labour legislation.[54] The same holds true for domestic workers. This may be why amendments to the LRA that aim to close the legislative loophole with respect to independent contracting are not a source of concern for those who have restructured their workforces into a system of independent contractors to avoid labour legislation.[55]

Promote micro-enterprises in rural and urban settings

Non-formal sectors in urban and rural areas have been dominated by low productivity, low value, low income and, hence, primarily survivalist economic activities.[56] Self-employment has been less a rational choice than a forced outcome of the absence of better employment or income-generating alternatives. Non-formal sectors have evolved as residual sectors providing employment of last resort. These sectors have been plagued by inadequate infrastructure and financial resources from formal or household sources, market gaps and failures with respect to the distribution of inputs and outputs, the failure of location clusters and synergies to materialise, an inhospitable regulatory regime, increasing numbers of participants, and the general absence of government attention to the provision of extension services, infrastructure, subsidies or promotional activities such as research and development.

Extend social protection mechanisms to those working informally

Workers operating in the informal economy seldom receive social benefits – unemployment insurance, health insurance and retirement or disability benefits – either from their employers or from their governments. There are social arguments (for basic human rights) and economic arguments (increased productivity of workers in a secure setting) for providing work-based security for informal economy workers.[57] Social insurance for the informal economy may be realised through schemes where workers contribute and where there is an active role for the state, the private sector, trade unions and other civil society organisations.

International experience – for example, the Self Employed Women's Association's integrated social security scheme[58] and mutual health insurance schemes in Bolivia and West Africa – demonstrates that informal workers are willing and able to contribute to these schemes. The state can make financial contributions, manage the scheme or deliver the benefits. Employers – including lead firms in subcontracting chains – can make financial contributions. Where individual firms are unwilling to contribute, the

Self-employment has been less a rational choice than a forced outcome of the absence of better employment or income-generating alternatives

Non-formal sectors in urban and rural areas have been dominated by low productivity, low value, low income and, hence, primarily survivalist economic activities

The government needs to put pressure on the banks to become more accessible to those who work in the informal sector

total output of specific industries can be taxed.

There is a network of over 100 local business service centres (LBSC) throughout the country. There are indications that these LBSCs are focused on servicing bigger businesses. National government should make use of this existing infrastructure and ensure that LBSCs extend their services to those working in the informal economy. Informal economy workers often need similar services (business skills training, legal advice and assistance with access to financial services), but they need to be packaged in different ways.[59] There are also interventions that are industry or activity specific. Craft sellers servicing international tourists need advice on how to convert international currency into rands, while street traders need advice on how to negotiate their way through the myriad of local government regulations.

International experience demonstrates that what is needed are institutions that are accessible, friendly and prepared to accept small deposits, in an environment in which clients also have access to other kinds of services. The government needs to put pressure on the banks to become more accessible to those who work in the informal sector.

Strengthen organisational representation for informal economy workers

If those working informally are not organised, they cannot lobby for their rights; nor can they ensure that the rights they have secured are enforced. As the ILO points out, given the changes in the workforce, traditional union priorities and organising techniques need to be re-examined. Furthermore, other forms of organising need to be given more profile and support.[60]

It appears that formal sector trade unions are only beginning to engage with this issue.[61] There are, however, a few interesting examples in developed country contexts. The Australian Textile, Clothing and Footwear Union and the Canadian Garment Workers Union have organised home workers and often bargain collectively on their behalf.

CONCLUSION

This chapter has identified the achievement of sustainable high growth rates together with an inclusive reorientation of the economy as necessary conditions for a gradual decline in the rate of unemployment and underemployment. The final chapter of this report examines important challenges with respect to achieving a growth path that is consistent with these sustainable development goals.

Endnotes

1 World Summit for Social Development (1995:79)
2 World Summit for Social Development (1995:16)
3 In Chapter 2, the section on the labour market presented findings from the October Household Survey of 1995 and the September 2002 Labour Force Survey. This section presents findings from the 1996 and 2001 censuses.
4 Statistics South Africa uses two definitions for unemployed. The 'official' definition applies to those within the economically active population who: (a) did not work during the seven days prior to the interview; (b) want to work and are available to start work within a week of the interview, and (c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview. The 'expanded' definition of unemployed excludes criterion (c). Among those who are included in the expanded (but not the official) definition of unemployment will be the discouraged job seekers. Statistics South Africa (2003:xv), P0210, 25 March 2003
5 The official brief on the 1996 census reports a 33.9 per cent unemployment rate using the expanded definition. Since a conservative estimate of the difference between the official and expanded definitions is 10 per cent, it is estimated that the *official* unemployment rate was 23.9 per cent in 1996.
6 Compare to 1996.
7 Labour absorption rate measures the share of employed aged 15–65 relative to the working-age population (aged 15–65).
8 For 1996, the corresponding rates were 31.3 per cent and 63.2 per cent.
9 Chapter 7 analyses some of the factors that have impacted on changes in the composition of employment in South Africa.
10 Lewis *et al* (2002)
11 Lewis *et al* (2002)
12 Lewis *et al* (2002)
13 ASSA 2000 demographic model.
14 A recent World Bank report (2003) on the impact of HIV/AIDS on sub-Saharan Africa argues that the epidemic will potentially have a devastating effect on the growth performance of the South African economy, especially in the long run.
15 Diverse issues related to HIV/AIDS are explored throughout this report.
16 Defined as output per unit of fixed capital input.
17 Multi-factor productivity is a measure of the growth in output that is not explained by the growth in the quantity of inputs. Multi-factor productivity includes technical progress, improvements in the workforce, improvements in management practices and economies of scale. In the short to medium term, factors such as the weather and variations in capacity utilisation associated with the business cycle can affect multi-factor productivity.
18 Chapter 8 highlights the importance of growth in productivity for achieving important goals of sustainable development.
19 For more on this topic, see Gelb (1991), Fine and Rustomjee (1997) and Saul and Gelb (1981).
20 The dominance of the state in guiding economic development in apartheid South Africa is well documented. Indeed, the state dictated the direction of production and investment activities with a variety of incentives and sanctions, thereby controlling and shaping the accumulation process. The state played a hegemonic role in shaping capital-labour relations as well.
21 It is interesting to note that the gap between the employment growth rate and the growth rate of the economy has gradually increased, in contrast with the OECD countries where the gap has been narrowing.
22 Bell and Cataneo (1996)
23 Bell and Cataneo (1996:27)
24 The corresponding figure for 1995 was 45.7 per cent.
25 See Valodia (1996); Standing *et al* (1996); Altman (1995); Fakude (2000); Fine and Padayachee (2000); Kenny and Webster (1999).
26 For a detailed analysis of the challenges facing the development of SMMEs in South Africa, see Rogerson (2002).
27 Baskin (1996)
28 Fallon (1997)
29 Standing *et al* (1996)
30 The share of 'compensation of employees' in gross domestic product declined from 50.1 per cent in 1995 to 45.3 per cent in 2002 (Reserve Bank Quarterly Bulletin, March 2003).
31 Osmani (2002)
32 Wood (1997)
33 The resulting phenomenon of widening wage differentials between skilled and unskilled workers has been analysed by Behrman *et al* (2000).
34 The Lilien index detects structural change in

the economy to the extent that the structural change is characterised by workers moving from declining to expanding industries.

35 Statistics South Africa, 'Manufacturing: utilisation of production capacity', *Statistical Release, P3043*

36 Thus, the growth of capital productivity in the manufacturing sector was actually negative (–0.5 per cent) between 1995 and 2002.

37 Chapter 8 further explains the importance of trends in labour and capital productivity for a sustainable development framework for South Africa.

38 This section relies heavily on Chang (1998).

39 For more, see Dosie *et al* (1988); Nelson (1993); Lundvall (1992). Important classic works on the relationship between technology and employment are Schumacher (1973) and a survey of the debate by Stewart (1978). Other important contributions include Rosenburg (1982) and Sen (1968).

40 The conventional view of technology as an exogenously given 'blueprint' defines the relationship between technological progress, human resource development and employment very simply: all policy makers have to do is improve the education system.

41 Numerous studies of Japanese firms show that what makes their workers better at absorbing new technology is the wider work experience they acquire through job rotation and the assumption of more decision-making power than is found in typical factories in other countries. Best (1990), Chapter 5, provides a succinct and useful summary of the literature.

42 Discussed in the previous section on 'job creating growth'.

43 RDP (1994:79)

44 Wyuts (2001)

45 Dasgupta (1993)

46 It is conceivable that in both the cases of market failure mentioned above – viz. credit market imperfections and the high transaction costs of living in remote areas – poor entrepreneurs will find it worthwhile to expand their businesses, provided the shift in the marginal value productivity curve of labour is sufficiently large to offset the additional costs. This implies the existence of a threshold effect – that is to say, integrability will remain a problem unless the expansion in employment potential is large enough to cross a minimum threshold.

47 Lindbeck and Snower (1989)

48 For more details, see Chapter 4 of this report.

49 'Stokvels' are a form of community saving scheme that rely on individual member contribution.

50 For more details, see Chapter 4 of this report.

51 The most recent initiative is the Growth and Development Summit that was held on 7 June 2003. One of the stated objectives of the Summit was to halve the unemployment rate by 2015. The official summit document is, however, vague about how the above objective can be achieved via current policies and measures adopted at the Summit.

52 The need for such a strategy has been recognised in the RDP, the Growth and Development Strategy discussions, the National Strategic Vision discussions, the Comprehensive Labour Market Commission report and the Growth, Employment and Reconstruction programme (GEAR).

53 See also Chapter 8 of this report.

54 See Skinner and Valodia (2001).

55 See Valodia and Skinner (2001) for further details.

56 Mhone (1996)

57 Lund and Srinivas (2000)

58 SEWA's social security programme provides health insurance (including a maternity component), life insurance and asset insurance to over 32 000 SEWA members. One third of the scheme is financed through direct contributions by members.

59 Skinner (2000b)

60 ILO (1999b:45)

61 A 1999 ILO/International Confederation of Trade Unions (ICFTU) survey – reported in ILO (1999) – revealed that about a fifth of unions and a quarter of national centres surveyed throughout the world did not target any atypical or informal economy workers in their mobilisation efforts.

8

Sustainable growth

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Sustainable growth

Growth should be judged by how its processes and outcomes enrich all aspects of people's lives

The sustainable development paradigm agrees with the conventional wisdom that economic growth expands the material base for the fulfilment of human needs. However, while the conventional wisdom assumes an automatic and unidirectional link between growth and the fulfilment of human needs, the sustainable development framework argues that the link between the two is neither automatic nor unidirectional. Hence, even though economic growth is essential to sustainable development, it is the *quality* of that growth that determines whether it genuinely serves human needs.

This implies that growth should be judged by how its processes and outcomes enrich all aspects of people's lives. Sen's concept of promoting human 'capabilities' suggests that a society's standard of living should be assessed, not by averaging levels of income, but by people's capabilities to lead the lives they value.[1] Similarly, access to goods and services needs to be viewed as a way of enhancing human capabilities through health, knowledge, self-respect and the ability to participate actively in community life.

Put differently, the quality of economic growth is defined by the extent to which it is accompanied by improvements in the distribution of income and wealth, the eradication of poverty and the provision of equal opportunities.

For instance, if an economy's growth path does not create sufficient jobs or livelihood opportunities, people are deprived of more than a livelihood. They are also robbed of opportunities to develop their abilities, thereby undermining their dignity and self-respect. Thus a successful growth model must also ensure appropriate investment in the development of human capabilities, and match people's capabilities with productive and properly rewarded employment opportunities.

Since these outcomes are not necessarily direct consequences of a market economy, specific policy measures are required to ensure that economic growth embodies qualities that result in human progress. These qualities and outcomes cannot be 'added on' to a conventional economic reform package; rather, an integrated and consistent long-term policy framework is needed. This will encourage the achievement of economic growth through diverse forms of investments (e.g. public and private investments in physical and human capital) and redistribution (e.g. land).

MACROECONOMIC PERFORMANCE AND THE VISION OF SUSTAINABLE DEVELOPMENT

After more than a decade of slow economic growth (represented by a lower than 1 per cent average annual real growth rate between 1980 and 1993), the South African economy began to grow above the population growth rate. Between 1994 and 1996, the economy grew at an average annual rate of 3.6 per cent, or 1.2 per cent in terms of the average annual growth rate of real per capita GDP. However, growth slowed down to an average annual rate of 2.5 per cent between 1997 and 2002, which translates into an average annual real per capita GDP growth rate of 0.5 per cent. Table 8.1 compares South Africa's average annual real growth rate for 1995–2001 with the corresponding rates for a number of other countries.

In terms of the sectoral composition of growth, the three main sectors of the economy have grown positively since 1995, with the tertiary sector growing faster than the primary and secondary sectors. In per capita terms, however, only the real output of the tertiary sector has outpaced population growth. The transport and finance sub-sectors of the tertiary sector have grown significantly in recent years, compared with the government sector, whose contribution to the economy has stagnated.[2]

This differential in sectoral growth performance has also meant gradual changes in the composition of total output. The share of the primary sector in total output has almost halved – from 23.6 per cent in 1960 to 11.8 per cent in 2002. The share of the secondary sector[3] in total output has also declined, although not as significantly – from its highest level of about 30 per cent during the 1980s to 24 per cent in 2002. The share of the tertiary sector in total output has gradually increased since the 1960s, when it constituted about 50 per cent of total output, to about 64 per cent in 2002 (Figure 8.1).

The three main sectors of the economy have grown positively since 1995, with the tertiary sector growing faster than the primary and secondary sectors

INVESTMENT

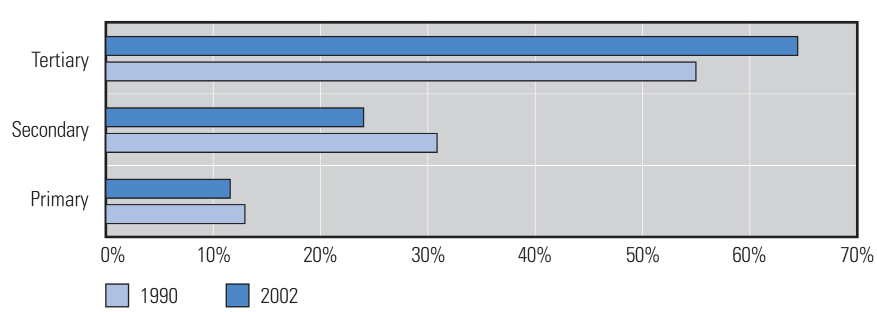
Between 1994 and 1996, total real investment[4] grew at an average annual rate of 10.8 per cent. Thereafter, between 1997 and 2002, the corresponding growth rate of total real investment slowed down to

Table 8.1 **Economic growth: developing countries' performance (1995 – 2001)**

Region and country	Annual GDP growth rate 1995–2001
Latin America	2.5
Brazil	2.5
Argentina	1.3
Chile	5.6
Mexico	3.2
East Asia[1]	6.7
China	8,6
Korea, Rep.	5.6
South East Asia	4.0
Indonesia	2.4
Malaysia	5,0
Singapore	6.7
Vietnam	7.2
South Asia[1]	5.5
India	6.5
Bangladesh	5.1
Middle East and North Africa	–
Egypt	5.0
Morocco	2.6
Tunisia	5.1
Jordan	3.6
Transition Economies	–
Czech Republic	1.8
Hungary	3.6
Poland	1.3
Russian Federation	0.6
Sub-Saharan Africa	–
Botswana	5.2
Kenya	2.2
Mauritius	5.6
Namibia	3.9
Nigeria	2.7
Senegal	5.3
Tanzania	4.0
Zambia	2.3
South Africa	2.7

Source: ILO's Global Employment Trends (2003) and the Reserve Bank of South Africa
Note: (1) The rate is for 1995 – 2000. (2) The reported growth rates in ILO (2003) are mainly from World Bank (2002b).

Figure 8.1 **Composition of GDP (1990–2002)**



Source: Reserve Bank dataset

1.7 per cent.[5] Investment as a share of GDP has not significantly changed and remains at about 16 per cent, which is considered low relative to other countries' performance (Table 8.2).

Private sector net investment (investment minus depreciation) relative to GDP has, however, declined, from 4.6 percent (R28.6 billion) in 1996 to 3 per cent (R33 billion) in 2002 (Figure 8.2). Figure 8.3 depicts trends in the per capita real investment by the private and public sectors over the past 20 years. Overall, trends in different measures of real investment (whether related to public investment, private investments, per capita investment or investment as a share of GDP) show continuing weak or negative performance during the past nine years.

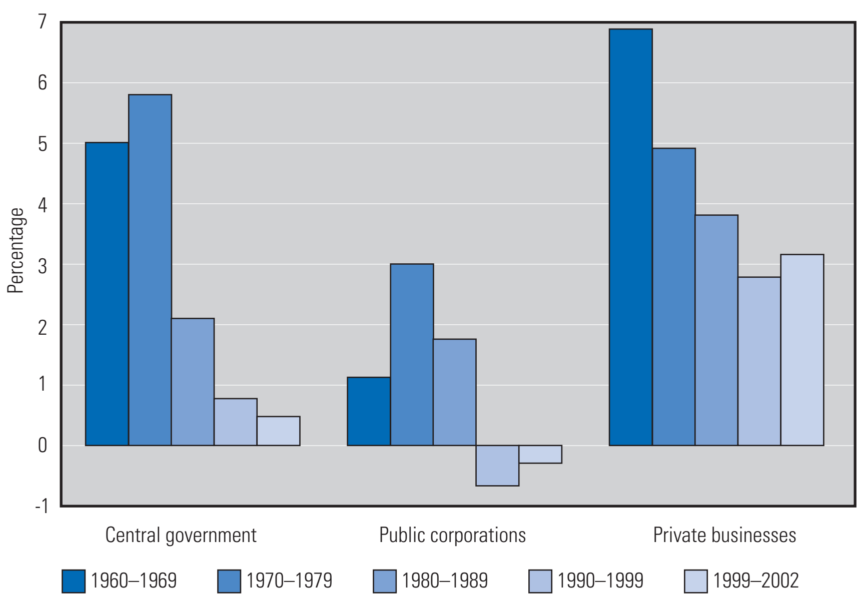
Overall, trends in different measures of real investment show continuing weak or negative performance during the past nine years

Table 8.3 presents trends in the sectoral composition of real investment. Among the various types of assets, investment in 'machinery and other equipment' by far exceeded other types of investment during 1995–2002. An average of about 50 per cent of total investment was devoted to this sector annually from 1995 to 2002. This was about 8 per cent higher than the corresponding share during the 1980s and early 1990s.[6]

FINANCING INVESTMENT

The two principal sources of financing gross domestic investment are gross domestic savings and net capital inflow into the country (Table 8.4, p174).[7]

Figure 8.2 **Net capital formation (by organisation, % of GDP) (1960–2002)**



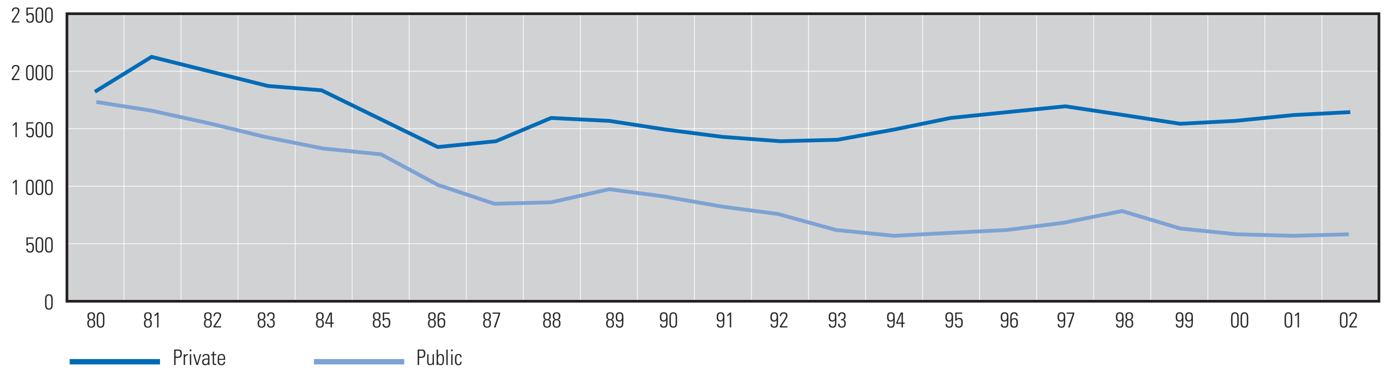
Source: South African Reserve Bank

Table 8.2 **Investment: developing countries' performance**

Region and country	Gross investment (% of GDP) 2001
Brazil	21
Argentina	16
Chile	23
Mexico	21
China	39
Korea, Rep.	27
Indonesia	17
Malaysia	24
Singapore	31
Vietnam	27
India	24
Bangladesh	23
Egypt	23
Morocco	25
Tunisia	28
Jordan	22
Czech Republic	30
Hungary	31
Poland	27
Russian Federation	22
Botswana	20
Kenya	13
Mauritius	26
Namibia	24
Nigeria	23
Senegal	20
Tanzania	19
Zambia	21
South Africa	15

Source: World Bank (2003)

Figure 8.3 **Per capita private and public real investment (1980–2002)**



Source: Reserve Bank dataset

Table 8.3 **Gross fixed capital formation (investment) in South Africa (annual averages) (1960–2002)**

	Real % change					% of total				
	1960–69	1970–79	1980–89	1990–94	1995–02	1960–69	1970–79	1980–89	1990–94	1995–02
By economic activity										
Agriculture	3.6	0.6	–7.7	–0.4	0.7	8.0	5.8	4.4	3.6	3.5
Mining	–0.5	9.4	1.9	–7.6	5.4	8.7	7.3	12.1	10.9	9.3
Manufacturing	9.3	5.7	–3.6	–1.2	2.3	18.9	19.7	19.3	23.2	23.2
Electricity	8.2	8.9	–3.8	–3.7	–7.2	8.1	9.3	13.1	7.8	5.8
Construction	15.5	6.6	–2.8	–4.6	3.4	1.1	1.8	1.5	1.3	1.0
Trade	6.3	–1.2	1.7	2.2	4.7	6.4	6.5	5.6	6.2	6.5
Transport	3.9	4.3	–5.0	7.1	7.2	14.1	14.5	10.5	9.6	13.6
Finance	8.8	–1.2	2.6	0.3	2.2	17.1	17.4	20.4	22.3	23.2
Community services	9.2	0.2	0.6	–2.3	1.4	17.8	17.7	13.1	15.2	13.9
By type of asset										
Residential buildings	5.9	–0.9	–0.9	0.6	0.6	14.5	12.4	12.7	10.5	9.2
Non-residential buildings	6.4	0.9	0.5	–4.1	–3.3	14.6	15.2	13.3	13.0	11.0
Construction works	5.4	5.0	–4.0	–9.7	2.1	23.7	23.6	18.8	18.2	14.0
Transport equipment	6.3	5.5	–1.6	–1.4	0.3	11.7	12.1	12.1	14.5	13.8
Machinery and other equipment	8.6	4.3	–0.3	3.4	5.3	32.9	34.7	40.7	40.4	49.0
Transfer costs	11.7	–5.2	1.6	4.2	–1.4	2.5	2.2	2.5	3.4	3.0
Total fixed capital formation	6.7	3.2	–1.3	–1.1	2.6	R1.7bn	R7.1bn	R29.1bn	R61.3bn	R124.bn

Source: South African Reserve Bank

Gross domestic saving[8] as a percentage of GDP gradually declined from the 1980s, from an average of 26.2 per cent during the 1970s to 16.1 per cent in 2002.[9] In recent years, this declining trend can be ascribed to the gradual decline in saving by households and the corporate sector (Figure 8.4, p. 174). Government dissaving has declined significantly since 1997.

In addition to gross domestic saving, part of total gross investment is financed by net capital inflow into the country. Table 8.4 on p. 174 shows that there has been a dramatic increase in the outflow of capital by the South African private sector since 1994. In total, the foreign investment inflow into the South African private sector was R264 billion during

1994–2002. During the same period, R206 billion was invested abroad by the South African private sector, which is equivalent to an average annual amount of R23 billion. This is a considerable amount when it is compared to the private sector's domestic net investment, which was R24 billion per annum on average during the same period.

THE MONETARY SECTOR

In view of the tight monetary policy stance of the Reserve Bank, the level of real interest rates in South Africa has increased significantly since the mid-1990s. Table 8.7 on p. 177 provides a comparison of two South African real interest rates with the rates from other countries. South Africa's real deposit and lending rates are significantly higher than the corresponding rates for the countries listed in the table. Figure 8.5 shows the increased gap between nominal interest rates and inflation since the late 1980s.

The exchange rate is the rate at which the currency of one country is exchanged for the currency of another. The effective (trade-weighted) exchange rate is the average of a country's bilateral exchange rates. Trends in South Africa's nominal and real effective exchange rates show gradual depreciation (Figure 8.6).

Table 8.4 **Financing of gross capital formation (current prices, Rand mil.) (1990–2002)**

	1990–1993	1994–2002	Av 90–93	Av 94–02
Gross saving	247 614	1 065 692	61 904	118 410
Saving by households	36 155	41 068	9 039	4 563
Corporate saving	75 194	294 547	18 799	32 727
Saving of general government	–72 778	–170 043	–18 195	–18 894
Consumption of fixed capital	209 043	900 120	52 261	100 013
Net capital inflow	–18 253	132 570	–4 563	14 730
Balance on financial account	–7 220	126 381	–1 805	14 042
Net changes in foreign assets and liabilities				
(Outflow (–), inflow (+))	–11 204	130 933	–2 801	14 548
Change in foreign liabilities	–247	348 179	–62	38 687
Change in foreign liabilities: public	*2 971*	*83 626*	*743*	*9 292*
Change in foreign liabilities: private	*–3 218*	*264 553*	*–805*	*29 395*
Change in foreign assets	–10 957	–217 246	–2 739	–24 138
Change in foreign assets: public	*–1 433*	*–11 402*	*–358*	*–1 267*
Change in foreign assets: private	*–9 524*	*–205 844*	*–2 381*	*–22 872*
Change in liabilities related to reserves	4 538	–1 613	1 135	–179
Capital transfer account (net receipts+)	–554	–2 939	–139	–327
Unrecorded transactions	–11 033	6 189	–2 758	688
Change in gold and other foreign reserves	–3 878	–86 381	–970	–9 598
Gross capital formation	225 483	1 111 881	56 371	123 542
Foreign investment	–22 131	46 189	–5 533	5 132

Source: South African Reserve Bank Quarterly Bulletin

Table 8.5 **Consumer prices in South Africa (1970–2002)**

	Weights	Average annual % change			
	2000 (%)	1970–79	1980–89	1990–94	1995–2002
Services	42.9	9.6	14.0	11.2	7.2
Housing, including domestic workers	24.3	8.9	14.7	3.7	6.1
Transport	3.4	10.5	10.6	14.2	3.6
Goods	57.1	10.8	14.9	14.8	7.2
Food, including non-alcoholic beverages	22.1	5.2	15.7	16.9	8.0
Vehicles	6.0	10.6	19.0	18.6	6.0
Transport: running costs	5.5	17.1	11.3	12.8	10.6
Clothing and footwear	3.2	8.6	13.6	10.7	1.6
Furniture and equipment	2.5	8.7	13.0	9.8	4.1
Consumer prices: total	100.0	10.1	14.6	13.3	7.1

Source: South African Reserve Bank

Table 8.6 **Producer prices in South Africa (1970–2002)**

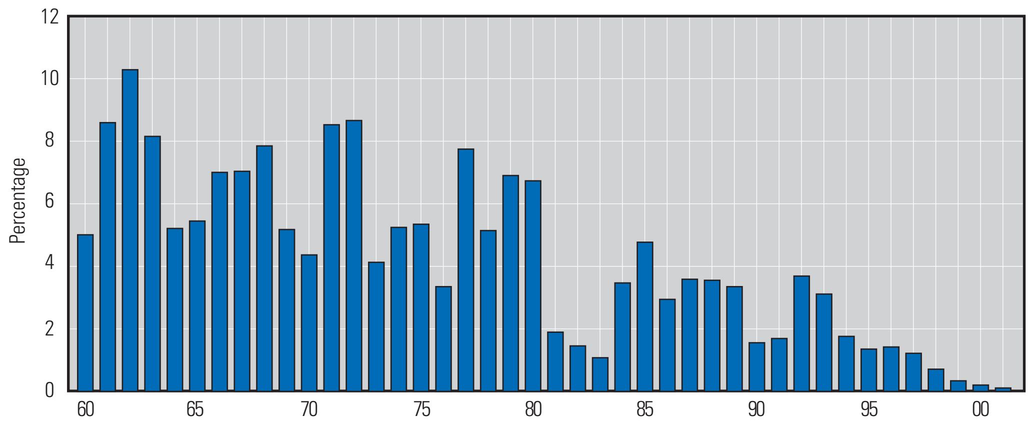
	Weights	Average annual % change			
	2000 (%)	1970–79	1980–89	1990–94	1995–2002
Imported	27.0	14.5	14.6	6.9	8.6
Domestic	73.0	12.0	14.1	10.2	7.8
Agriculture, forestry and fishing	12.5	10.9	13.0	9.7	7.1
Manufacturing	77.5	12.2	14.2	10.2	8.1
Machinery and transport equipment	14.7	10.7	15.6	11.1	6.1
Food	12.4	11.9	14.5	8.9	9.1
Basic metals and products	7.8	14.5	14.7	9.3	7.3
Textiles, clothing and footwear	5.4	9.6	13.7	9.7	6.2
Producer prices: total	100.0	12.0	14.1	10.1	8.1

Source: South African Reserve Bank

DEBT, DEFICIT, AND TAX RATES

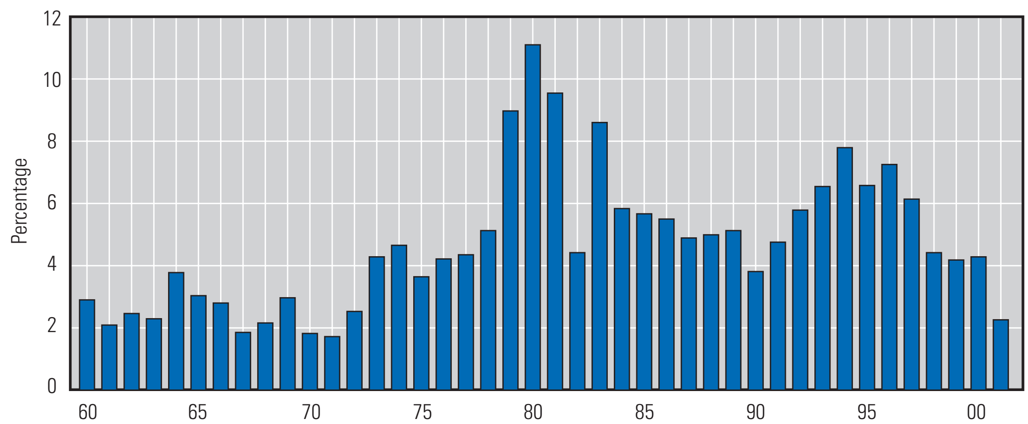
Government debt as a percentage of GDP reached 50.4 per cent in 1995. It then declined gradually to 45.7 per cent at the end of 2002 (Figure 8.7, p.177). The interest payment on government's debt amounted to R32.5 billion in 1995

Figure 8.4a **Household saving (% of GDP) (1960–2000)**



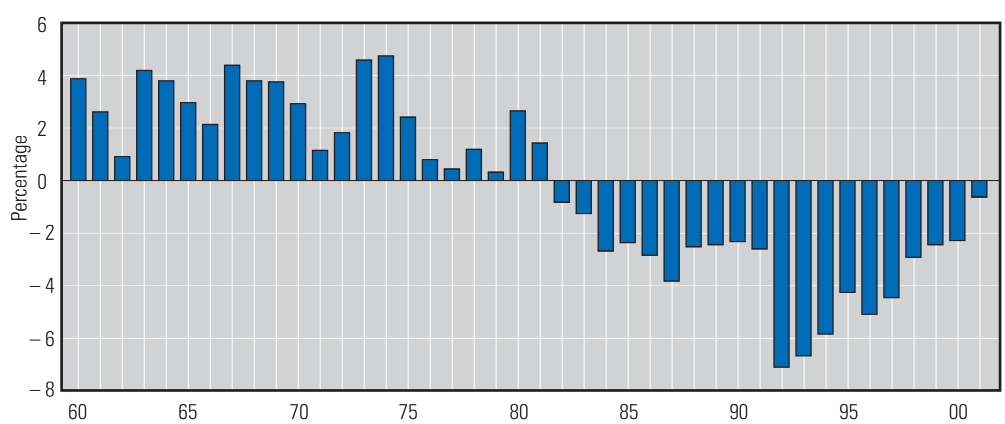
Source: South African Reserve Bank

Figure 8.4b **Corporate saving (% of GDP) (1960–2000)**



Source: South African Reserve Bank

Figure 8.4c **General government saving (% of GDP) (1960–2000)**



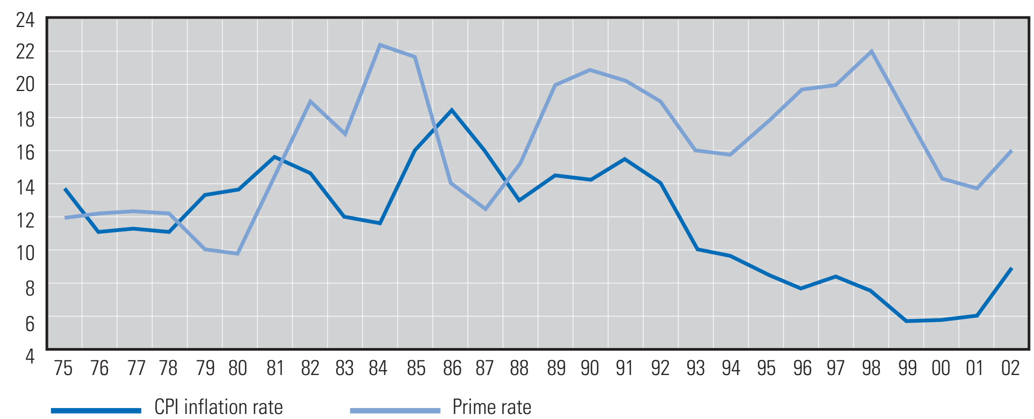
Source: South African Reserve Bank

Table 8.7 **Real interest rates (% annual averages) (1980–2000)**

	Deposit rate[1]				Lending rate[2]			
	1980–84	1985–89	1990–94	1995–2000	1980–84	1985–89	1990–94	1995–2000
South Africa	–1.5	–1.7	1.8	6.0	2.5	0.9	5.3	10.1
Greece	–5.8	–0.8	3.1	5.0	–0.8	4.1	10.5	11.9
Korea, Republic	0.1	5.6	2.3	4.2	1.3	5.8	2.3	5.0
Australia	1.3	4.9	4.8	3.9	3.7	8.4	9.2	7.8
Canada	3.5	4.7	4.8	3.3	5.3	6.4	5.9	4.8
Spain	–1.2	2.4	3.8	2.4	1.9	6.7	7.3	4.6
Norway	–4.5	4.0	5.3	2.1	3.4	8.0	9.4	4.7
France	–3.1	1.3	1.9	2.0	1.6	6.2	6.8	5.4
Philippines	–1.9	3.0	3.1	1.7	1.5	8.5	7.4	7.1
Japan	0.3	1.1	1.0	0.1	3.5	4.4	3.8	2.3

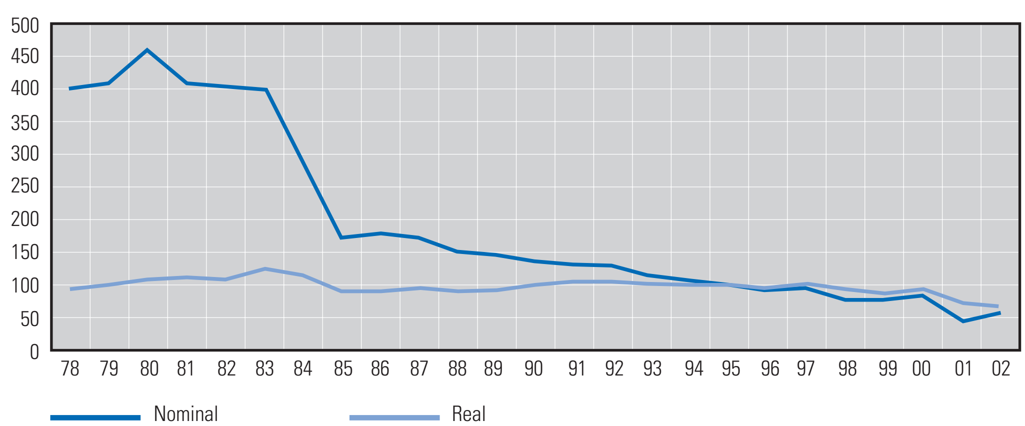
Source: IMF (2002)
Note: (1) Rate offered for demand, time or savings deposits. (2) Rate charged for short- and medium-term finance.

Figure 8.5 **Interest rate and inflation (prime overdraft rate) (1975–2002)**



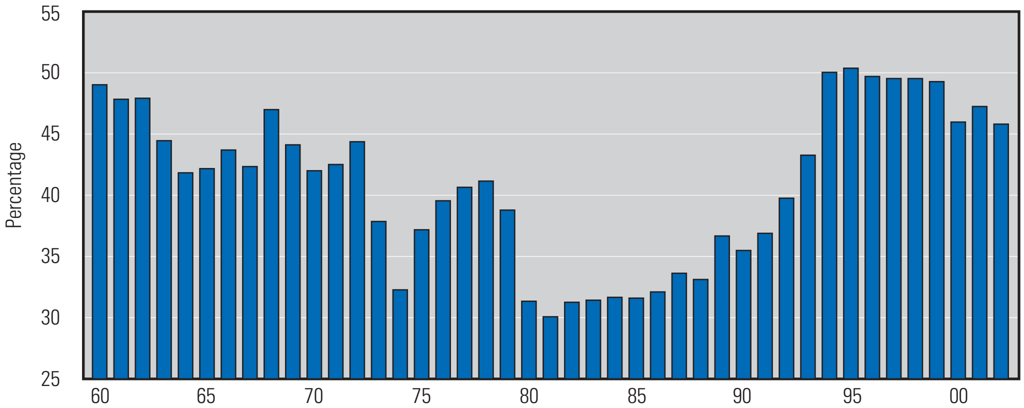
Source: South African Reserve Bank

Figure 8.6 **Trends in effective exchange rates (1978–2002)**



Source: South African Reserve Bank

Figure 8.7 **National government debt (% of GDP) (1960–2002)**



Source: South African Reserve Bank

and increased to R54.4 billion in 2002. Government's deficit spending as a percentage of GDP has systematically decreased, from 4.4 per cent in 1996 to 0.2 per cent in 2002.

An analysis of South Africa's government debt highlights one of the important differences between South Africa and many other medium-size economies: namely, only a small, but growing, share of central government debt in South Africa is held by foreigners. In 2002, the domestically held share of the debt amounted to about 81 per cent of total debt, while the share of debt held by foreigners was 18.4 per cent of the total. In 1995, the corresponding shares were 91.7 per cent of the debt for domestically held debt and 3.5 per cent for foreign held debt (Table 8.8).[10]

The effective corporate tax rate (corporate tax as a percentage of corporate profits) in South Africa increased from an average of 21.4 per cent during the 1960s to 32.3 percent during 2000–01. During the same period, the effective personal tax rate (personal tax as a percentage of current household income) increased from 6.1 per cent to 14.3 per cent on average. As a result of these developments, total tax revenue as a percentage of government current revenue rose from an average of 84 per cent during the 1960s to 96.8 per cent during 2000–01.[11]

The share of African households in the bottom income quintile increased from 29 per cent to 33 per cent

HOUSEHOLD INCOME AND EXPENDITURE

The Income and Expenditure Survey of 2000 shows that African households, which represent 85 per cent of total households in the country, experienced a greater decline in their average income and expenditure compared to other groups between 1995 and 2000. The

Table 8.8 **Central government debt in South Africa (annual averages) (1960–2001)**

	% of total					% of GDP				
	1960–69	1970–79	1980–89	1990–99	2000–01	1960–69	1970–79	1980–89	1990–99	2000–01
Domestic	95.4	92.9	95.4	95.3	90.5	42.6	36.8	29.8	41.5	41.5
Foreign	4.6	7.1	4.6	3.4	9.4	2.1	2.8	1.4	1.6	4.3
Other	–	–	–	1.3	0.1	–	–	–	0.6	0.1
Total debt	R3.5 bn	R10.4 bn	R42.0 bn	R240.5 bn	R422.2 bn	44.7	39.6	31.2	43.7	45.9

Source: South African Reserve Bank

The persistence of low growth rates, worsening income distribution and a rising unemployment rate indicate a growth path that falls short of sustainable development goals

share of African households in the bottom income quintile increased from 29 per cent to 33 per cent during this period. Their share of the total households in the top income quintile declined from 8 per cent in 1995 to 5 per cent in 2000. On the other hand, the average income and expenditure of White households improved during this period. Their share of the bottom quintile declined from 2 to 1 per cent, and their share of the households in the top quintile increased from 60 per cent in 1995 to 66 per cent in 2000.[12]

QUALITY OF GROWTH

There are several dimensions to South Africa's socio-economic transformation towards sustainable development. An important aspect of this process is the restructuring of South Africa's macroeconomic structure to elicit an adequate and sustainable level of economic growth with certain desirable features. The persistence of low growth rates, worsening income distribution and a rising unemployment rate indicate a growth path that (in terms of the rate and quality of growth) falls short of sustainable development goals.

The emphasis throughout this chapter is on the quantitative and qualitative dimensions of growth and their synergy. One way of demonstrating this interrelationship is to show how different growth processes relate to different outcomes in terms of reducing income poverty.

Using a defined (fixed) poverty line, the interaction between growth and income distribution results in three possible types of growth paths. In one case (where growth is distribution-neutral), the economy grows, income inequality remains unchanged, but growth results in a decrease in the incidence of poverty. In another case, the quality of growth is such that inequality declines as growth proceeds. Here, growth is said to be pro-poor. In such a case, the growth process will reduce poverty at a faster pace than is the case in the first scenario. Under the second scenario, a relatively smaller growth rate is required to reduce absolute poverty by the same amount as in the first scenario. Finally, there is a third possibility, where inequality increases with growth. Here, the growth process is considered to be anti-poor. This does not mean that poverty will necessarily increase; only that poverty, if it does decrease, will decrease by less than it would have done had growth been distribution-neutral.

This chapter undertakes a critical analysis of the current underlying economic structure and policy framework in an attempt to sketch a growth process that is consistent with sustainable development goals. The following section undertakes an analysis of South Africa's emerging macroeconomic structure. It compares the apartheid era growth path with the current path and uses some empirical findings to explain the relationships between growth, productivity, investment, and income distribution. The last part of the section discusses empirical findings that relate policy variables to output, investment and employment. The section ends by outlining the main challenges for a South African growth path that is consistent with sustainable development. The final two sections use the findings of the previous sections and earlier chapters to outline the elements of an analytical and policy framework that allows for the design of policies and the mobilisation of resources to achieve the desired growth objectives.

THE MACROECONOMIC STRUCTURE

The characteristics of the growth process in a market economy have always been significantly influenced by private sector investment decisions. These include the quantity and pattern of investment, the choice of production technique and so on. They are also influenced by the strategy and policy framework that guides public sector interventions in the economy. This includes both micro and macroeconomics interventions (Box 8.1).

As discussed in Chapter 3, the growth path of the economy is a central theme in the transformation debate in South Africa. Although economic growth has been considered a 'basic goal', there are crucial challenges with regard to 'where that growth occurs, how sustainable it is,

The growth path of the economy is a central theme in the transformation debate in South Africa

Box 8.1

Poverty, globalisation and growth: perspectives on some of the statistical links

'Several recent econometric studies have tried to show a systematic relationship between gobalisation and growth – and between growth and poverty reduction. The message of these studies is clear: open your economy, liberalise and you will grow, and as you grow, poverty will be reduced. This research is supposed to lay to rest the attacks on globalisation and, though it shuns the words, breathe new life into long-discredited trickle-down economics, which held that "a rising tide lifts all boats".

Trickle-down economics became discredited for an obvious reason: it was not true. Sometimes growth helps poor people, but sometimes it does not. By some measures poverty increased in Latin America in the 1990s, even in many countries where there was growth. It was not just that well-off people gained disproportionately from growth: some of their gains may even have been at the expense of poor people.

Though there are a number of technical problems with these recent studies, the most telling problem is that they asked the wrong question: globalisation and growth are endogenous, the result of particular policies. The debate is not about whether growth is good or bad, but whether certain policies – including policies that may lead to closer global integration – lead to growth; and whether those policies lead to the kind of growth that improves the welfare of poor people. A look at the most successful countries, in growth and poverty reduction, shows how misleading these studies are.

China and other East Asian countries have not followed the Washington consensus. They were slow to remove tariff barriers, and China still has not fully liberalised its capital account. Though the countries of East Asia "globalised", they used industrial and trade policies to promote exports and global technology transfers, against the advice of the international economic institutions. Perhaps most important, unlike the Washington consensus, policies promoting equity were an explicit part of their development strategies. So too for perhaps the most successful country in Latin America, Chile, which during its high-growth days of the early 1990s effectively imposed a tax on short-term capital inflows.

The policy issue is not "to globalise or not to globalize" or "to grow or not to grow". In some cases it is not even "to liberalise or not to liberalise". Instead the issues are: To liberalise short-term capital accounts – and if so, how? At what pace to liberalise trade, and what policies should accompany it? Are there pro-poor growth strategies that do more to reduce poverty as they promote growth? And are there growth strategies that increase poverty as they promote growth – strategies that should be shunned?

For instance, neither theory nor evidence supports the view that opening markets to short-term, speculative capital flows increases economic growth. But there is considerable evidence and theory that it increases economic instability, and that economic instability contributes to insecurity and poverty. So, such forms of capital market liberalisation might in some ways increase "globalisation". But they do not enhance growth – and even if growth increased slightly, this form of it might increase poverty, especially in countries without adequate social safety nets.

Similarly, trade liberalisation is supposed to allow resources to move from low-productivity protected sectors to high-productivity export sectors. But what if export markets in areas of comparative advantage (such as agriculture) are effectively closed, or credit is not available (or available only at exorbitant interest rates) to create the new export-related jobs? Then workers simply move from low-productivity protected sector jobs to unemployment. Growth is not enhanced, and poverty is increased.

Even often-praised measures, such as tarriffication, have proven to be double-edged swords, because they have exposed developing countries to additional risks that they are ill prepared to cope with. Again, whether tarriffication leads to faster growth is not clear; that the increased variability increases poverty is far more evident.

There are policies that in the long run may enhance growth and reduce poverty, such as enhancing education opportunities for disadvantaged groups, which allows countries to tap into vast reservoirs of underused talent. But the returns to investments in preschool education today will not manifest themselves for two decades or more – not the kind of results that show up in typical econometric studies.

Hidden beneath the surface in these econometric studies of globalisation is another subtext: because globalisation has proven so good for growth and poverty reduction, critics of globalisation must be wrong. But these cross-sectional studies cannot address the most fundamental criticisms of globalisation as it has been practised: that it is unfair and that its benefits have disproportionately gone to rich people. After the last round of trade negotiations, the Uruguay Round, a World Bank study showed that Sub-Saharan Africa was actually worse off. Asymmetric liberalisation had global terms of trade effects. The globalisation studies suggest that Africa has suffered because it has not globalised. That may be partly true. But it is also true that Africa has suffered from the way that globalisation has been managed.

Thus these econometric studies on globalisation, growth and poverty have been a misleading distraction, shifting the debate away from where it should be – on the appropriateness of particular policies for particular countries, on how globalisation can be shaped (including the rules of the game) and on international economic institutions, to better promote growth and reduce poverty in the developing world. The antiglobalisation movement has often been charged with being unthinking in simply asking whether globalisation is good or bad. But the econometric studies, for all the seeming sophistication of their statistics, are equally guilty.'

Joseph E Stiglitz
Nobel Laureate in Economics, 2002

Source: Human Development Report, 2003

The transformation of the South African economy since 1994 shows both breaks and continuities with the past economic growth path

how it is distributed, the degree to which it contributes to building long-term productive capacity and human resource development, and what impact it has on the environment ...'.[13] This section aims to provide a brief explanation of the evolution of the macroeconomic structure and policies that have defined the past and present features of South Africa's growth process.

PRE-1994 MACROECONOMIC STRUCTURE

Most analysts agree on the following defining characteristics of South Africa's macroeconomic structure in the years before the democratic transformation. The industrialisation of the economy was fuelled by the growth of exports in the mining sector, which provided the necessary foreign exchange for the import of capital goods to all sectors. This was reflected, for example, in an average annual export/output ratio of 96.9 per cent for the primary sector compared to the corresponding 17.5 per cent and 6.6 per cent for the secondary and tertiary sectors during the 1970–1993 period. On the other hand, the share of imported intermediate goods in the secondary sector's total imports amounted to 60 per cent of the total. For the total economy, 62.6 per cent of total imports were intermediate goods (materials used for the production of final goods) during the same period.

If growth is not inherently pro-poor, social service provision and welfare programmes will have only a limited impact on alleviating poverty or reducing unemployment

The agricultural and mining sectors relied on the cheap unskilled labour fostered by the apartheid system.[14] A narrow complex of mining and financial capital dominated the economy, and large state enterprises played a central role in organising extensive manufacturing and beneficiation schemes, which supplied infrastructure and capital.

During this period, domestic demand (local capacity to buy goods and services produced) was limited owing to high levels of poverty and income inequality. Thus manufacturing goods were produced mainly to satisfy the needs of a small but high-income group. The 1995 Income and Expenditure Survey shows that more than 75 per cent of the durable goods and services, and more than 50 per cent of the semi-durable and non-durable goods, were bought by the richest 20 per cent of the population. The corresponding figures for the same categories of goods consumed by the bottom 20 per cent of the population were less than 1 per cent and 6 per cent respectively. Therefore, the two richest income quintiles were the main sources of domestic demand for goods and services (Table 8.9).

Furthermore, during the apartheid era, the state played a central role in shaping the growth path of the economy by providing domestic manufacturers with cheap labour, investment capital, subsidised infrastructure and energy as well as tariff protection.[1]

POST-APARTHEID MACROECONOMIC STRUCTURE

The transformation of the South African economy since 1994 shows both breaks and continuities with the past economic growth path. An increased emphasis on trade liberalisation, export promotion, privatisation, deficit reduction and restrictive monetary policy has steered the economy towards a new growth path. Through a variety of policies, the new macroeconomic structure is expected to

Table 8.9 **Distribution of total expenditure by quintile (1995)**

Categories of goods and services	Quintile 1 (lowest)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (highest)	Grand total
Durable	1%	2%	5%	13%	79%	100%
Semi-durable	3%	7%	12%	22%	56%	100%
Non-durable	5%	9%	13%	21%	52%	100%
Service	1%	2%	5%	14%	79%	100%
Total	2%	4%	8%	16%	69%	100%

Source: Adelzadeh *et al.* (1998); Data Source: October Household Survey and Income Expenditure Survey of 1995 become increasingly export-oriented, producing internationally competitive goods and services that go beyond the traditional mining sectors, and yielding substantial additional net inflow of foreign capital. This should provide the necessary foreign exchange to pay for the rise in imports of consumer goods and the import of the capital goods that will make continued restructuring of the economy along the above lines possible.

These changes have resulted in an increase in real exports as a share of GDP: from an average annual ratio of 21 per cent during 1982–1993 to 27 per cent during 1994–2001. The diversification of the export sector is reflected in increases in the average annual shares of exports in the total production of the secondary and tertiary sectors. During 1994–2001, for example, the average annual export/output ratio of the secondary sector more than doubled the corresponding figure for the period 1982–1993 (Figure 8.8).

At the same time, the continued dependence of the economy on the import of intermediate goods is reflected in the value of imports of intermediate goods as a proportion of the value of total imports, which has remained very high for the three branches of the economy.

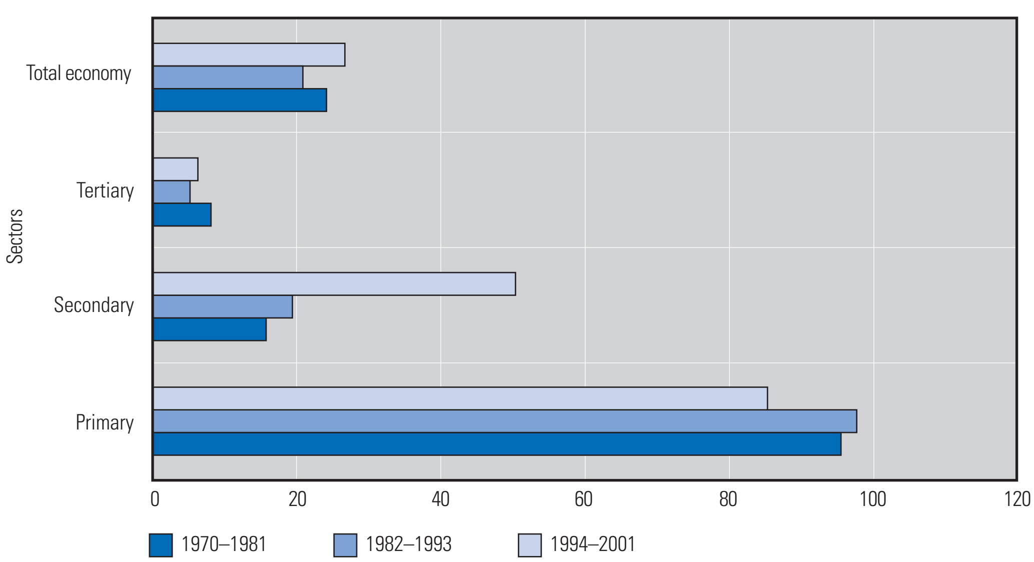
The tertiary sector's imports of intermediate goods relative to total imports have substantially increased from an annual average of 68.8 per cent during 1982–1993 to 95 per cent during 1994–2001 (Figure 8.9).

More generally, the average annual ratio of total imports to the total output of the economy increased from 15 per cent during 1982–1993 to 22.2 per cent during 1994–2001. If total imports are broken down into imports of intermediate goods and imports of final goods, the corresponding increases are, respectively, from 9.1 per cent of imports during 1982–1993 to 12.2 per cent during 1994–2001, and from 5.9 per cent during 1982–1993 to 10 per cent during 1994–2001.

Thus the apartheid dual strategy of export promotion in the mining sector to support an import-substitution industrial strategy within a protective environment is gradually being succeeded by a new strategy of import-dependent and export-oriented industrialisation evolving within an increasingly open market

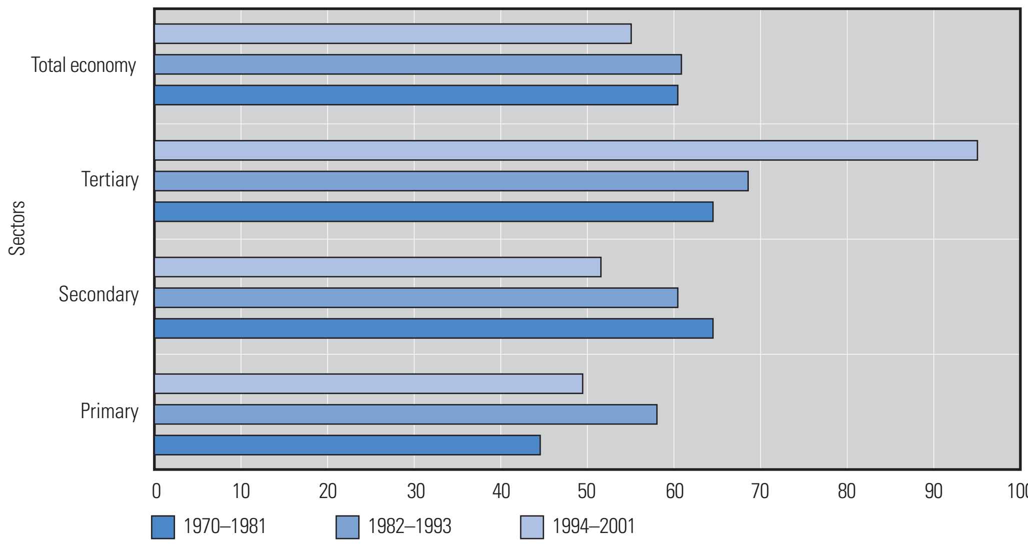
The overriding objective of the present strategy is growth based on an implicit assumption that job creation will result naturally from a strategy that successfully produces economic growth

Figure 8.8 **Average annual export-output ratio (%) (1970–2001)**



Source: South African Standardised Industry database

Figure 8.9 **Intermediate imports relative to total imports (annual average) (1970–2001)**



Source: South African Standardised Industry database

environment.[16] This new growth strategy is supported by a host of policy interventions, which are analysed in more detail in the rest of this chapter.

Leaving political claims aside, neither past nor present growth strategies were articulated from the perspective and requirements of a pro-poor growth strategy. While the apartheid era's macroeconomic structure and policies were blatantly anti-poor, the overriding objective of the present strategy is growth based on an implicit assumption that job creation will result naturally from a strategy that successfully produces economic growth. However, owing to the nature of the current growth (elaborated on further in the next section), increased per capita real GDP (i.e. output growing faster than the population growth rate) has produced increased unemployment.[17]

Other parallel initiatives have been 'added on' to the above core reform in order to respond to the developmental needs of the country. However, despite these contributions, it is becoming evident that the fundamental developmental challenges facing the country cannot be addressed satisfactorily by using such a 'two-track' approach. The challenge of growth cannot be addressed independently of the need to deal with poverty and unemployment. If growth is not inherently pro-poor, social service provision and welfare programmes will have only a limited impact on alleviating poverty or reducing unemployment. This is because some elements of the core economic reforms and outcomes (e.g. high interest rates, cuts in the budget, low investment) dominate and condition the scope for the success of the majority of parallel reforms.

In order clearly to identify the sustainable development challenges facing South Africa's growth process, this section presents three important empirically established determinants of economic growth. This provides the foundation on which one can critically investigate the evolution of these factors during recent years. It also helps clarify the interface between economic policies and performance.

GROWTH AND LABOUR PRODUCTIVITY

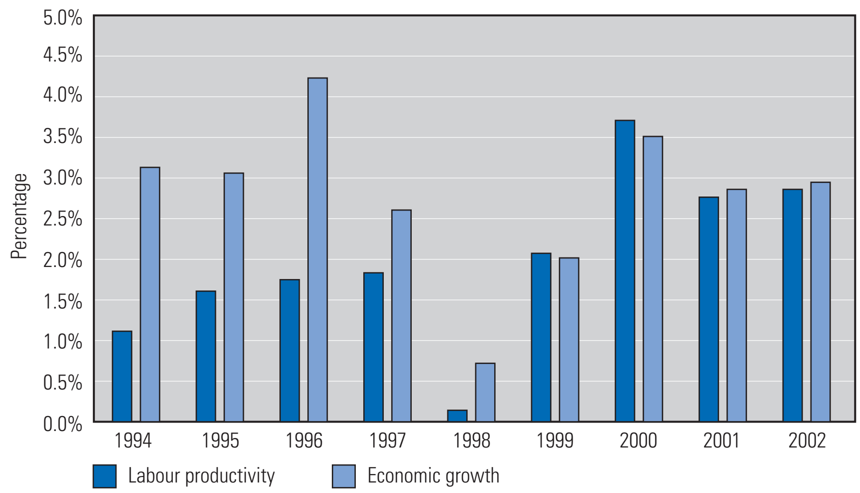
Studies of historical data on South Africa's growth performance have found that labour productivity (productive efficiency of labour) is the most significant determinant of sectoral and economy-wide outputs.[18] Improvements in sectoral labour productivity are expected to raise the short and long-term outputs in 35 out of 43 sectors of the economy. For the total economy, other things being equal, output can be expected to increase by 5.2 per cent if real labour productivity increases by 10 per cent. Figure 8.10 presents recent trends in labour productivity and output for the total economy.

During the past nine years, the challenge of improving the productivity of labour has been a central objective of the restructuring programmes and policies of government and business. Sectoral and economy-wide trends in labour productivity indicate that the economy has registered significant improvements in this area, providing positive impetus to long-term growth (Figure 8.11). The index of total labour productivity (1995=100) grew at an average annual rate of 3.4 per cent between 1994 and 2002, compared to a rate of 1 per cent between 1982 and 1993.

At the same time (as discussed in Chapter 7), increases in labour productivity have had a negative impact on employment in a number of labour-intensive sectors (e.g. mining, wearing apparel, footwear, plastic products and building construction) and the economy as a whole.[19] Labour productivity is also found to have had a statistically significant positive influence on the average wage of employees in 32 out of 43 sectors of the economy.[20] Finally, an improvement in labour productivity is found to have improved the price competitiveness of 25 out of 43 sectors.

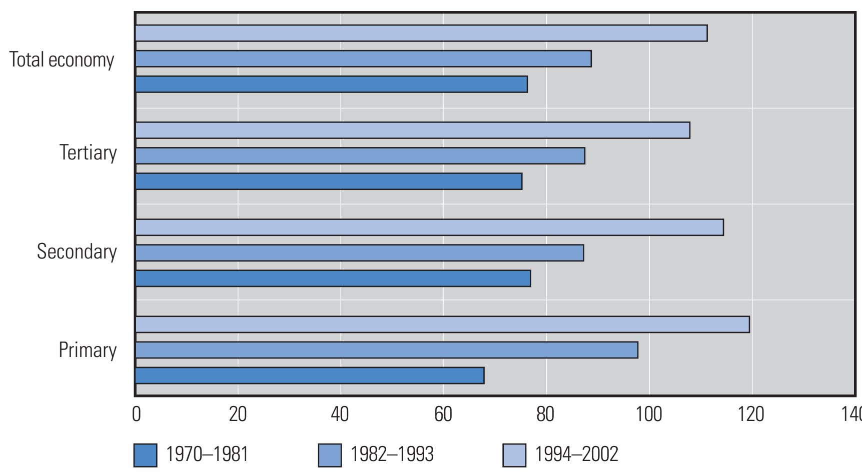
Therefore, labour productivity has been found to be an extremely important variable on account of its desirable direct influences on growth, average compensation of employees and prices. However, it has a negative impact on employment.

Figure 8.10 **Economic growth and labour productivity (1994–2002)**



Source: Reserve Bank Dataset

Figure 8.11 **Average labour productivity (1995 = 100) (1970–2002)**



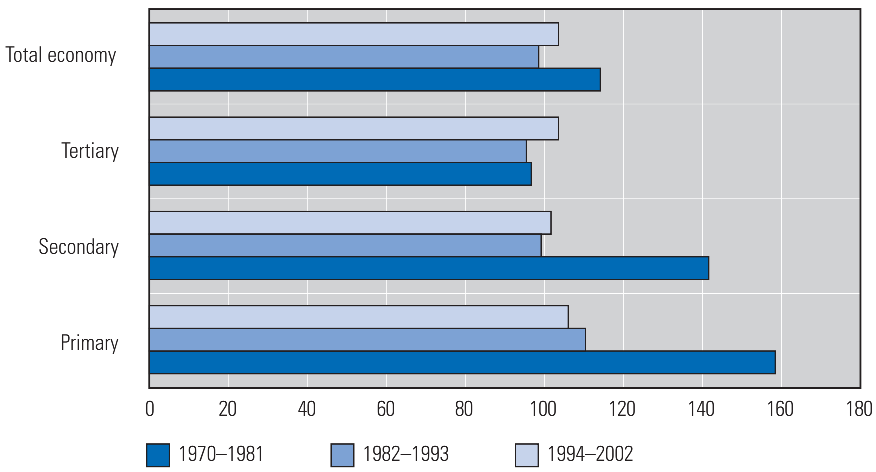
Source: Reserve Bank Dataset

This introduces a challenge that needs to be addressed in the larger analytical context of policy options (as discussed later in this chapter).

At the same time, the growing HIV/AIDS epidemic is expected to have a negative impact on labour productivity. Increased illness in the workforce is expected to reduce the output, not only of those workers who are ill, but potentially the output of entire work teams. This impact will probably be more severe in the public sector because it grants greater sick leave entitlements to employees.

The growing HIV/AIDS epidemic is expected to have a negative impact on labour productivity

Figure 8.12 **Trends in productivty of capital by sector (1995=100) (1970 – 2002)**



Source: Reserve Bank Dataset

GROWTH AND INVESTMENT

Investment is a crucial determinant of economic growth. Fixed investment – both public and private, as well as at aggregate and sectoral levels – is found to be an important determinant of growth in almost all sectors of the South African economy.[21] In addition to sectoral investment, total economy-wide investment aggregates have a positive influence on growth rates in ten sectors. For example, public investment is found to have positive impacts on the growth of the manufacturing sector and the total economy.

Barring a few sectors (e.g. television, radio and the communication equipment sector), the impact of investment on sectoral growth is found to be small in the short run but much greater in the long run.[22] For example, other things being equal, a 10 per cent increase in investment in the financial services, business intermediation, insurance and real estate sectors is expected to increase output by 0.8 per cent in the short run and 3.3 per cent in the long run. Overall, these findings confirm the important historical problem of low capital productivity (i.e. output per unit of capital) in South Africa (Figure 8.12). As will be discussed later, improving the productivity of investment is crucial to the enhancement of the redistributive and employment-generation capacity of economic growth.

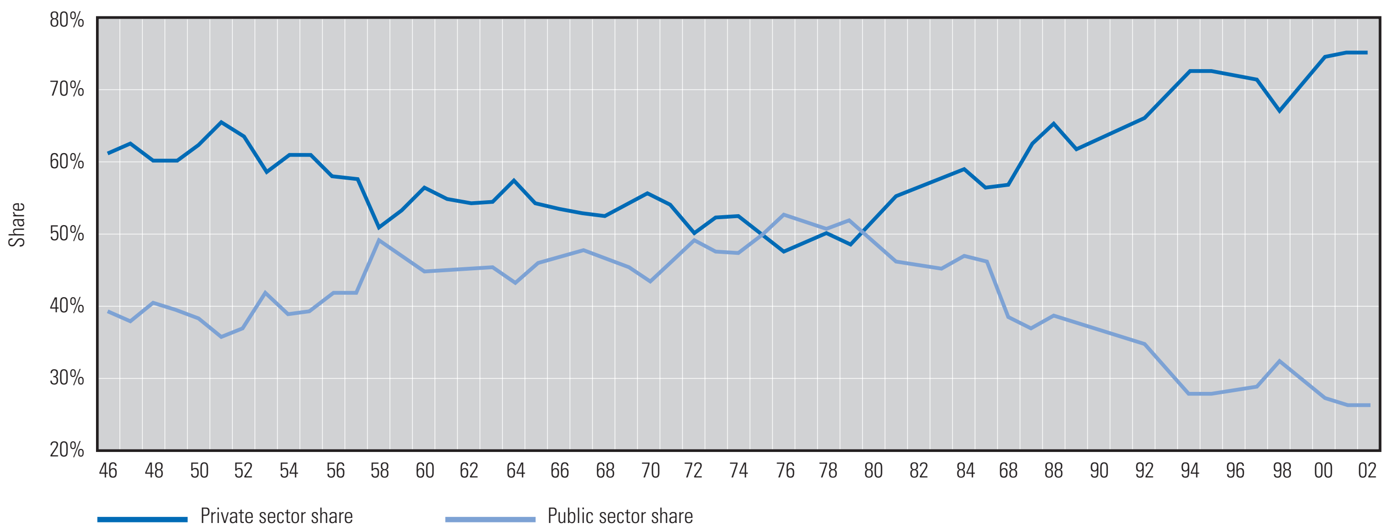
Between 1950 and 1977, the public sector's share of total investment increased gradually from about 40 per cent to 50 per cent, at par with the private sector's share of total investment in 1978. From 1980 onwards, public sector total investment began to decline as the private share increased. These trends have continued since 1994. In 2002, private and public sector shares in total investment were 76 per cent and 24 per cent respectively (Figure 8.13).

Even more important is the fact that the level of total real investment in the economy actually declined between 1981 and 2001. In 1981, total real investment amounted to R106.4 billion (accounting for 27.5 per cent of GDP). In 2001, total real investment in the economy was R100.6 billion (14.8 per cent of GDP).[23] Since 2000, the public sector's annual gross investment has been less than the annual replacement cost (depreciation) of public assets.[24]

Clearly, the need to increase the level of total investment is another important challenge facing the South African economy. Both private and public investment began to increase substantially between 1994 and 1996 (private and public sector investments grew at average annual rates of 10.4 per cent and 6.8 per cent respectively). However, relative to 1994–1996, both the growth rates of public and private investment declined sharply during 1997–2002. They reached average annual rates of 0.12 per cent and 3 per cent respectively. The sharp decline in the average annual growth rates of investment is a major source of concern, as it is found to have a significant negative impact on economic growth.

As Figure 8.14 shows, the share of 'machinery and other equipment' in total

Figure 8.13 **Distribution of total fixed investment (1946–2002)**



Source: Reserve Bank Dataset

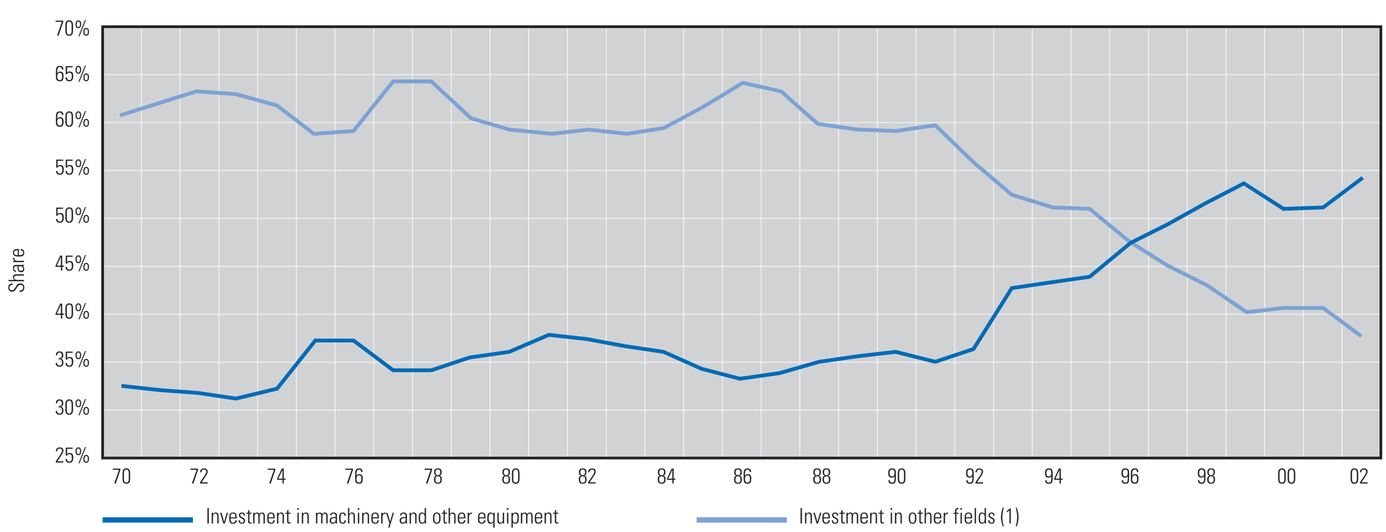
private sector real investment has increased sharply in recent years, reaching about 60 per cent in 2002. This poses an additional concern regarding the employment effect of the private sector's bias towards investing mainly in machinery and other equipment.

GROWTH AND INCOME DISTRIBUTION

An important determinant of the level of economic activity is the level of aggregate demand (the total capacity to purchase what is produced), which is linked to the distribution of income.[25] This dependence arises from the fact that a given level of economic activity can be sustained only if the total supply of goods and services is met by an equivalent capacity of domestic and international demand to buy them. Wages of employees and profits earned by owners of capital (as the two main components of the distribution of national income) are

The sharp decline in the average annual growth rates of investment is found to have a significant negative impact on economic growth

Figure 8.14 **Trends in components of private real fixed investment (1970 – 2002)**



Source: Reserve Bank Dataset

With almost 50 per cent of the population living in poverty, the total level of financial resources for buying goods and services in the economy remains severely constrained

the main sources of domestic demand in the economy.

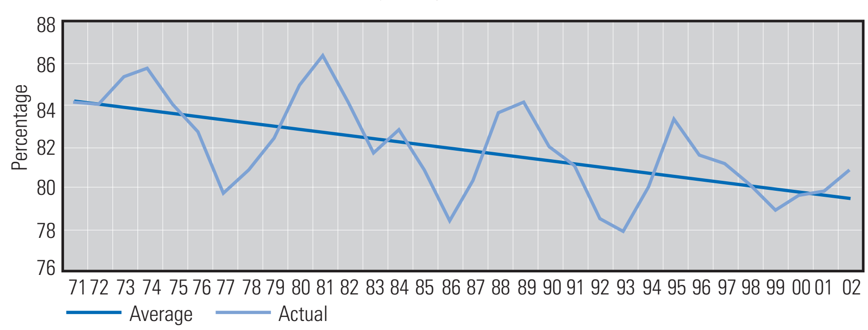
For example, in 2002, R496 billion or 62.7 per cent of household income of about R791 billion came from wages and salaries, while R256 billion or 32.3 per cent was income from property (i.e. mainly profit and interest income). After paying taxes and other transfers, disposable household income of R685 billion was spent almost entirely (R682 billion) on various types of consumer goods and services. This is equal to about 64 per cent of the total domestic demand[26] of R1 061 billion, or 62.1 per cent of total GDP.[27] Similarly, the retained profits of business enterprises are spent mainly on new investment.[28]

On the other hand, with almost 50 per cent of the population living in poverty, the total level of financial resources for buying goods and services in the economy remains severely constrained (constrained aggregate demand). This, in turn, deprives producers of a potentially much larger domestic market – a market that would allow them to operate at a higher level of current production capacity and/or invest in expanding their production capacity and employment. This conclusion is strongly supported by Statistics South Africa's regular survey, *Manufacturing: Utilisation of Production Capacity*.[29] The survey is based on a sample from the census of manufacturing, with each respondent reporting on the current level of capacity utilisation.[30]

From the surveys of the last sixteen years, two aspects stand out clearly. First, utilisation of production capacity in manufacturing has remained relatively unchanged since 1994 (Figure 8.15a). Second, the survey data shows that South African manufacturers regard insufficient demand as the main reason why they are not operating at higher levels of capacity utilisation (Figure 8.15b).

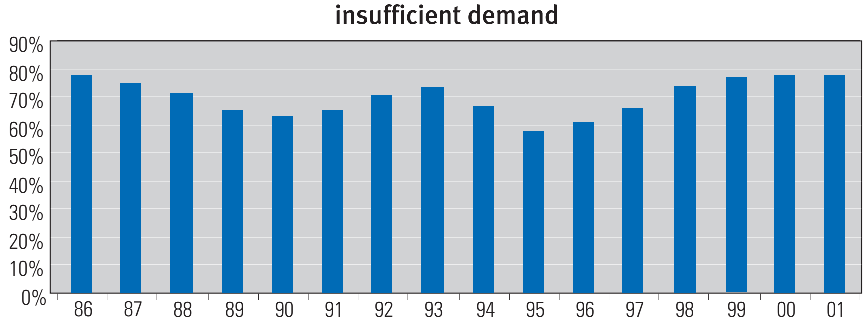
Household expenditure surveys also suggest that, owing to high-income inequality and poverty, the overall demand for goods and services is relatively weak among 80 per cent of households in South Africa. Table 8.10 summarises the average annual household expenditure by different population groups for the *Income and Expenditure Survey* of 2001. The table clearly shows significant disparities as far as household expenditures are concerned. In 2001, the average annual household expenditure of a White household in South Africa was six times the corresponding amount for an African household. Given that African households constitute more than three quarters of total households in the country, it is clear that, owing to their low income levels and, hence, their combined low purchasing power, the majority of South African households continue to exert little demand pressure on the economy.[31]

Figure 8.15a Manufacturing capacity utilisation (1971–2002)



Source: Reserve Bank Dataset

Figure 8.15b Manufacturers' reasons for under-utilisation: insufficient demand



Source: Statistics South Africa

These observations provide consistent evidence that low demand is one of the main inhibitors of economic growth in South Africa. However, similar conclusions can be reached by using more sophisticated statistical methods. For example, the role of demand in the South African economy can be investigated by examining whether the manufacturing sector's output performance is related to demand for its outputs. One study used the Index of Volume of Manufacturing Production as representative of the supply of manufactured goods, and the Index of Orders and Sales for Manufacturing as representative of overall capacity to buy these manufactured goods. Regression analysis showed that demand for manufacturing output has a strong positive effect on the production of manufactured goods in the short and long term.[32]

Finally, other empirical evidence confirms the importance of income distribution for economic growth. Analysis of the determinants of sectoral outputs reveals that the short and long-term output of sectors of the economy depends significantly on one or more variables related to income distribution or aggregate demand. These variables include real gross domestic expenditure, real average wage rate, real household disposable income and household consumption of non-durable goods and exports.[33] For example, other things being equal, a 10 per cent increase in real total domestic expenditure is expected to raise real production of goods in the manufacturing sector by 10.2 per cent.

Table 8.10 **Average annual household expenditure by household size and population group in 2001 (Rand)**

Households	Household size (number of persons)	African	Coloured	Indian	White	All
	1 person	18 194	22 975	52 122	74 610	24 486
	2 persons	21 056	32 380	61 124	130 668	50 074
	3 persons	23 595	47 486	75 914	155 752	46 276
	4 persons	24 882	57 173	77 445	179 965	55 907
	5 persons	27 032	50 275	69 879	138 894	40 276
	6 persons	24 088	49 693	91 718	135 508	33 394
	7 persons	22 665	36 827	58 269	179 825	28 161
	8 persons	23 464	48 835	69 568	86 360	26 172
Total		22 558	45 146	72 006	136 141	39 400

Source: Income and Expenditure of Households 2000, Statistics South Africa (Statistical Release P0111, November 2002)

OUTPUT, INVESTMENT AND EMPLOYMENT

Figure 8.16 on p. 188 shows the linkages between investment, production and employment in the South African economy. It demonstrates that a complex mix of supply and demand factors directly and indirectly determines the level of output in the economy. For example, increases in real domestic spending on goods and services, investment, labour productivity and the exchange rate are found to improve economic performance directly. In turn, with employment being partially determined by the volume of goods and services produced, factors that influence total production levels also have an indirect positive impact on employment.

Increases in labour productivity are found to have a direct positive effect on production levels, but a direct negative impact on employment. However, the impact of labour productivity on employment is not limited to this negative direct relationship alone. The increased output induced by improvements in labour productivity will have a positive effect on employment. This results from subsequent expansion in production capacity in response to higher profits. Therefore, the overall impact of an improvement in labour productivity on employment is the net effect of its direct negative impact and its indirect positive effect.

Similarly, Figure 8.16 shows that total real investment in the economy is determined by a number of economic variables, including the profit rate in the economy, access to credit, real interest rate, real average wage rate and both

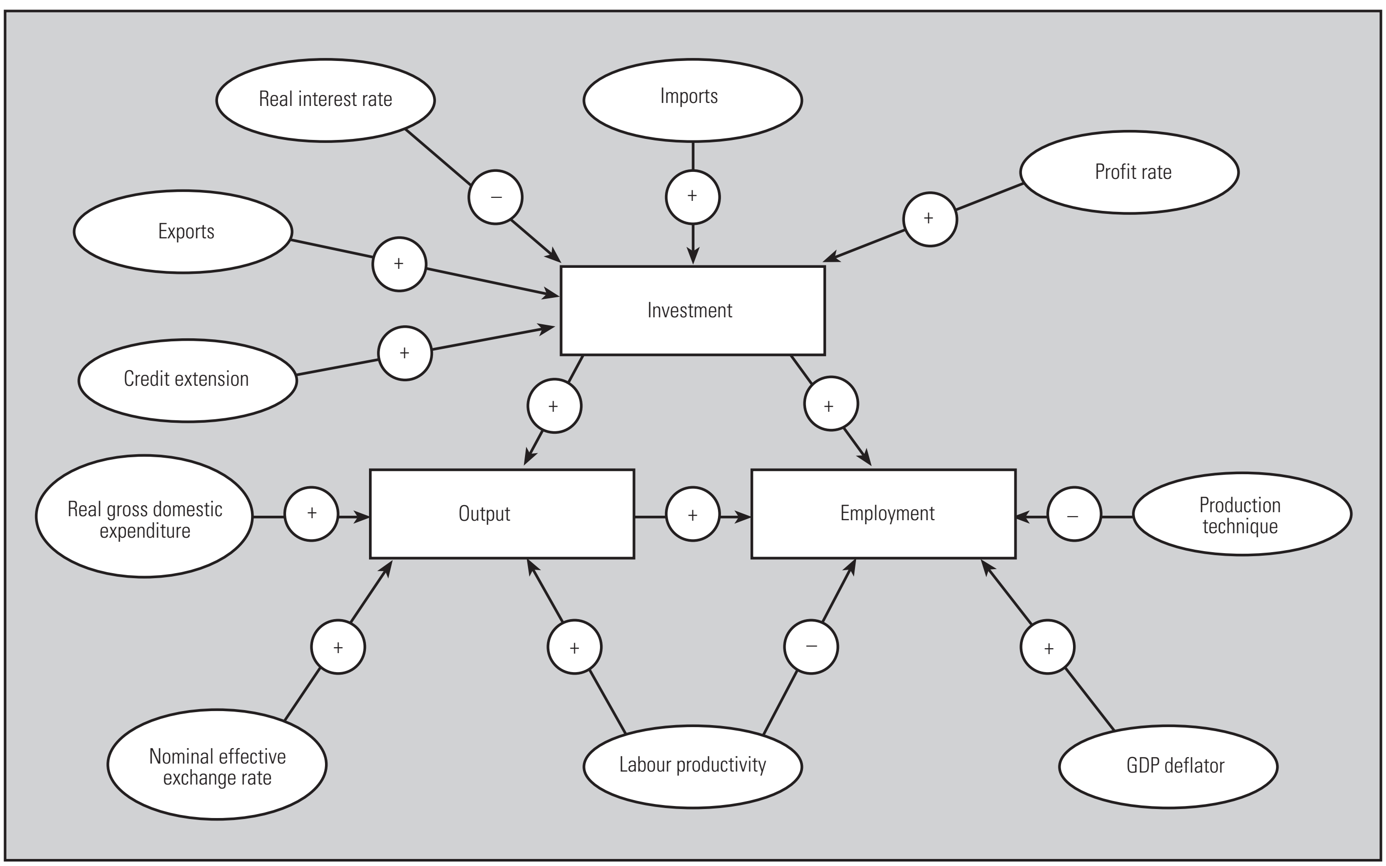
Owing to their low income levels, the majority of South African households continue to exert little demand pressure on the economy

Increases in labour productivity are found to have a direct positive effect on production levels, but a direct negative impact on employment exports and imports. At the same time, since investment is found to be an important determinant of total output, all identified factors that directly influence investment will indirectly influence the growth prospects of the economy. In the same way, since changes in investment are also found to impact directly on total employment in the economy, the above factors affecting investment will indirectly affect employment. Finally, with investment impacting on output and output affecting employment, the factors determining investment will also impact on employment through their indirect effect on output.

The above influences on employment performance are additional to the significant influences of choice of technique (whether capital-intensive or labour-intensive), labour productivity and prices. When, in addition to the above, one considers factors that directly influence investment, output and employment and their interrelationship, one begins to appreciate the complexity of the forces that together, albeit with different degrees of influence, determine the evolution of output and employment in an economy. It also becomes abundantly clear how a diverse range of private and public sector policies directly or indirectly influences the evolution of these important variables in the economy.

Figure 8.16 implicitly underscores the role of public policy in influencing the outcome of the economy in terms of output, investment and employment. It

Figure 8.16 **Direct and indirect determinants of investments, output and employment for the total economy**



Source: Adelzadeh (2001b)

Table 8.11

Growth, Employment, and Redistribution (GEAR)

Fiscal policy

Policy measures

- Deficit reduction
- Income tax revision
- Decrease government consumption expenditure
- Decrease tax to GDP ratio

Expected outcome

- Contain debt service
- Counter inflation
- Free resources for investment by decreasing government dissaving
- Promote redistribution
- Correct fiscal drag

Monetary policy

Policy measures

- Tight monetary policy
- Relaxation of exchange controls
- Relax access to domestic credit by foreign investors
- Doubling limit for institutional investors to obtain foreign assets via asset swaps

Expected outcome

- Reduce inflation
- Stabilise REER
- Increase domestic saving and investment
- Promote higher economic growth
- Increase employment opportunities
- Promote equitable income distribution

Trade policy

Policy measures

- Accelerate tariff reform
- Tax incentives
- Competition policy
- Offset import costs against exports
- Replace quantative restrictions with tariffs
- Phase out GEIS
- Accelerated depreciation for new manufacturing investments
- Promote SMMEs

Expected outcome

- Contain input prices
- Facilitate industrial restructuring
- Stimulate new investment
- Rise in non-gold exports
- Rise in private investment
- Rise in manufacturing
- Increase foreign fixed investment
- Develop SMMEs

Labour market policy

Policy measures

- Increase labour market flexibility
- Reduce indirect wage costs
- Increase incentives for more shifts, job-sharing, and increase job flexibility
- Productivity linked wage increases
- Wage moderation
- Flexible regulatory labour market framework

Expected outcome

- Rise in competition and labour intensive growth path
- Accelerate investment and employment
- Lower inflation pressures
- Flexible collective bargaining structures
- Wage and salary rises limited by productivity growth

GEAR's main targets in 1996 for 2000

- GDP growth of 6% by the year 2000
- Accelerated employment growth, reaching 409 000 jobs annually after the year 2000 and reverse unemployment
- An inflation rate below the 10% barrier throughout the period
- Average annual real non-gold export growth of 8.4% during the five-year period
- A rise in gross domestic saving from 18% to 22% of GDP
- Increased gross domestic investment, from 20% to nearly 26% of GDP in the year 2000; with an average annual real private investment growth of 11.7%
- Inflows of foreign Investment equivalent to almost 4% of GDP

Actual outcome for 2000

- Average annual GDP growth was 2.1% between 1997 and 2000. The growth rate of GDP was 3.1% for 2000
- Employment declined by 509 000 in Non-agriculture sectors
- Inflation was below the 10% barrier. The latest CPIX was 6%
- The average annual real growth rate for the exports of goods and services was 4.3%
- For 2000, gross savings were 15.2% of GDP
- Gross domestic investment was only 16.7% of GDP for 2000
- Direct foreign investment for 2000 was only 0.7% of GDP (R6.1 billion compared to expected R35 billion)

Source: Adelzadeh (2000b)

GEAR's policy framework has remained restrictive and is excessively focused on meeting selected intermediate targets

shows how monetary policy contributes to this through its influence on interest rates, credit extension, the exchange rate and inflation. It also demonstrates the influence of fiscal policy through spending and taxation. The effects of trade and industrial policies are transmitted through their influence on exports, imports, labour productivity, choice of technique and profitability. Therefore, the macroeconomic structure of the country, together with the policy framework, jointly determines investment, growth and employment.

Table 8.11 on p. 189 uses the provisions in the Growth, Employment, and Redistribution (GEAR) document to illustrate the main tenets of the current economic policy framework and policies. The table also provides a comparison of the programme's planned outcomes and the actual performance of the economy. As the table makes clear, GEAR's policy emphasis has been on the implementation of restrictive fiscal and monetary policies, trade and financial liberalisation and privatisation.

The macroeconomic structure of the country, together with the policy framework, jointly determines investment, growth and employment

Since its introduction, GEAR's policy framework has increasingly defined the orientation and scope of government interventions, with a view to providing the framework for the transformation of the South African economy.[34] However, it has remained restrictive and is excessively focused on meeting selected intermediate targets. The framework has given marginal priority to the quality of growth in terms of employment creation and poverty reduction. It has also potentially trapped the economy in a low growth path.[35]

Discussions in this chapter, along with issues raised in previous ones, call attention to six key challenges for a growth process consistent with sustainable development in South Africa. What is required is to:

- obtain a sustainable high growth rate for the economy;
- raise the rate and change the composition of investment;
- ensure continuing productivity growth;
- ensure that the economy's growth creates a substantial amount of employment, so that the unemployment rate gradually declines;
- ensure that the growth path is pro-poor (with income inequality declining) so that realistic growth targets can be set for the reduction of poverty, and
- ensure that the growth path does not compromise the country's environmental wealth.

Using these criteria, the next segment of this chapter provides an analytical framework that can be used as the basis for recommending certain core policy interventions needed to overcome the above challenges successfully.

A GROWTH STRATEGY FOR SUSTAINABLE DEVELOPMENT

Two important prerequisites for a sustainable development strategy are that the growth process embodies simultaneous gradual reductions in (a) income inequality and (b) the unemployment rate. To satisfy the former (i.e. the redistributive condition), the share of national income secured by property owners as profits, interests and rents (i.e. profit share) needs to decline[36] until a more equitable pattern of income distribution is established. To satisfy the latter condition (i.e. the employment generation condition), the growth rate of employment must be greater than the growth rate of the labour force. The main question is: under what conditions and policy measures can these prerequisites be met without undermining the necessary macroeconomic and environmental balances?

GROWTH, PROFITABILITY, PRODUCTIVITY AND TECHNICAL CHANGE

The growth rate of capital productivity needs to be greater than the growth rate of after-tax profit rate if the economy is gradually to generate a reduction in income inequality as the profit share begins to decline.[37] This can be shown by using a simple accounting relationship between the profit rate (i.e. rate of return on investment), the profit share (i.e. share of property owners from total national income) and capital productivity (i.e. output per unit of fixed capital used).[38] Capital productivity can also be expressed in terms of average labour productivity divided by the average rate at which capital goods are used per employed person in the economy (i.e. the capital-labour ratio). Thus, an alternative way of expressing the condition for a redistributive economic outcome is for the growth rates of the after-tax profit rate to be lower than the difference between the growth rates of labour productivity and the capital-labour ratio.[39]

Similarly, the requirement for a gradual reduction in the unemployment rate can be expressed in terms of the need for the growth rates of the economy to be greater than the sum of the growth rates of labour productivity and the labour force.[40] Technical Note 2 formally presents the derivation of these relationships.

From the above discussion, it is clear that the redistribution and employment generation conditions are related to the evolution of four variables in the economy: namely, labour productivity, the rate of return on investment, economic growth and the relative capital intensity of economic activities in the country. Factors that explain the evolution of and interactions between these four variables are crucial to understanding the real potential for the realisation of these two conditions and the formulation of supportive policies.

The dynamics of the four variables are strongly related, especially through the forces of competition. Both domestic and international competition force investors to seek reductions in the unit cost of production in order to remain price competitive, thus protecting themselves from extinction and simultaneously safeguarding the profitability of their activities. An important way of achieving this is by increasing labour productivity, which is attained through measures that include changes in production technologies. At the same time, if they believe it to be profitable, firms are keen to expand their existing production, or to invest in new products and services in order to survive competition by increasing their market share.

The ways in which threats of competition are warded off and increases in labour productivity are achieved have far-reaching consequences for the quality and sustainability of growth. In this context, there is a need to: (a) realise a technology's maximum productivity; (b) secure the greatest possible labour productivity increases through measures other than replacing labour with machinery, and (c) expand production.

This requires a structure of incentives and constraints that will encourage enterprise owners to undertake high levels of investment, and to initiate and cooperate with improvements in workplace organisation and technology. In practice, however, this is hard to achieve. Production activities and income distribution issues are closely linked. For example, an important but standard difficulty is the conflicting nature of interactions between owners of properties, workers and the state, reflecting the constant struggle over the distribution of income between profits, wages and taxes. Labour

The redistribution and employment generation conditions are related to the evolution of four variables in the economy: labour productivity, the rate of return on investment, economic growth and the relative capital intensity of economic activities in the country

The growth rate of capital productivity needs to be greater than the growth rate of after-tax profit rate if the economy is gradually to generate a reduction in income inequality productivity and economic growth are significantly affected by this interaction.

When a wage structure is contested at the enterprise or sector level, a non-cooperative environment may dominate the relationship between enterprise owners and employees. In many instances, this leads to industrial unrest, reduced labour productivity and declining production.

At the national level, with the inclusion of the state, the struggle over the distribution of income takes on an additional dimension. The taxation on profits, wages and products, on the one hand, and government's functional distribution of its revenue (e.g. provision of subsidies to enterprises, investment in infrastructure, expenditure on health, education or defence) on the other, impact on the struggle over the distribution of national income: both workers and property owners are affected by the distribution of the net benefits of government tax and transfers. In this respect, government policies have an important direct and indirect impact on income distribution, output and labour productivity.[41]

Growth rates that are greater than the sum of labour productivity and labour force growth rates are needed for the gradual reduction of the unemployment rate

Therefore, ensuring sustained productivity and increased production is linked to how successfully and enduringly distributional conflicts are resolved at enterprise and national levels. The desirable outcome is a generally positive labour productivity growth path that is higher than the speed of mechanisation in the economy. Such an outcome establishes the required space to ensure improvement in income distribution through tax and transfer policies, thereby helping to keep the growth rates of the after-tax average profit rate below the growth rate of capital productivity.

INVESTMENT, CAPACITY UTILISATION AND GROWTH

The foregoing discussion focused mainly on important factors that need to be considered if the interactions of labour productivity, technical change and the profit rate are to support a growth process that satisfies the redistributive condition for sustainable development. The particularities of the solutions proposed in respect of distribution issues have implications for economic growth, particularly through their influence on productivity. However, further attention must be given to other important factors that help achieve growth rates that are greater than the sum of labour productivity and labour force growth rates. As explained earlier, such rates of growth are needed for the gradual reduction of the unemployment rate.

Three additional factors that influence economic growth are: (a) rates of investment; (b) the composition and level of purchasing power in the economy; and (c) the degree of responsiveness (elasticity) of output to changes in its determinants.

An important elasticity relates to the responsiveness of output to investment. This can be enhanced through institutional and policy measures that facilitate the realisation of the existing technology's maximum productivity and through increased capacity utilisation. Increasing outputs by enhancing the relationship between technology, employment and output was explained in Chapter 7. With respect to the role of capacity utilisation, companies can, at low levels of economic activity, raise their levels of operation without having to pay substantially higher real wages – because of the pool of unemployed in the labour market. Consequently, the higher utilisation of productive capacity implies that higher outputs and higher profits can be achieved with existing capital stock, leading to higher capital productivity and a higher rate of profit. This is especially the case in an economy like South Africa, characterised by very high levels of unemployment and poverty.[42] The dynamic relationship between capacity utilisation and profitability also has implications for investment, an important determinant of economic growth.

Domestic investment is composed of private and public investment. Private sector investment varies with profitability and the level of activity in the economy (that is, capacity utilisation). The higher the rate of profit, the greater the inducement to invest. The higher the capacity utilisation, the greater the pressure on firms to increase their capital stock so as to be able to respond to demand for goods and services. Since private investment depends on both profitability and capacity utilisation, the level of private investment that can be sustained is subject to the constraints imposed by the feasible combination of profitability and utilisation discussed earlier.

At the same time, a given level of economic activity can be sustained only when the two components of the product market, the aggregate demand and the aggregate supply, keep close pace with each other. This implies that increases in investment and output depend on the expectation of corresponding increases in aggregate demand (domestically and internationally). Notwithstanding an economy's need for a large export sector as an important source of foreign exchange, most economies rely heavily on their domestic markets (between 70 to 90 per cent) as the source of demand for their domestic outputs and future potential growth rates. In the context of an economy with major problems of poverty and income inequality, achieving and sustaining high growth rates depends, partly, on combating poverty and income inequality. Thus, the fulfilment of the two prerequisites for a sustainable growth strategy is substantively linked and complementary.[43]

Overall, the desired evolution of the four key variables on which the quality of the growth process depends is significantly determined by (a) the manner in which the society, faced with forces of competition, resolves its main distributional conflicts; and (b) whether domestic demand is successfully broadened to accommodate sustained aggregate supply growth through increases in investment and capacity utilisation. Policies can be designed directly and indirectly to enhance the chances of such outcomes.

POLICY FRAMEWORK AND RECOMMENDATIONS

South African businesses have responded to increased competition during the post-1994 liberalisation of the economy by introducing new production technologies that have enabled them to lower their unit production costs. However, the cumulative impact of this transformation nine years later is neither improved income distribution nor a reduction in the unemployment rate. On the contrary, the marked increase in labour productivity has been accompanied by a rise in profit rates and shares, leading to an overall worsening of the income distribution pattern.[44] At the same time, the unemployment rate has continually increased.

These results reflect (a) an average annual real growth of 3.8 per cent in the average profit rate between 1994 and 2002, which was significantly higher than the average annual real growth of capital productivity (1.9%) during this period: the higher growth rate of the profit rate compared to labour productivity during this period also meant an average annual increase of 2.2 per cent in the profit share; and (b) the average annual growth of the labour force by 2.1 percent and of labour productivity by 2 per cent during 1994–2002. The average annual real growth rate of the economy during this period (2.8%) was, however, significantly

The desired evolution of the four key variables on which the quality of the growth process depends is significantly determined by the manner in which society resolves its main distribution conflicts, and whether domestic demand is successfully broadened

In South Africa, both fiscal policy and monetary policy have been growth debilitating, resulting in an overall decline in private sector net investment

lower than the 4.1 per cent (which is the sum of the average annual growth rates for labour productivity and the labour force) needed to prevent a rise in the unemployment rate during this period. As a result, on average, the number of unemployed increased annually by 6 per cent between 1994 and 2002 (Figure 8.17).[4]

South Africa has the largest gap between the actual growth rate of the economy and the sum of the growth rates of labour productivity and the labour force.

With the help of the analytical framework in the previous section, these results explicitly or implicitly underscore the need to identify a few central policy options, which will be necessary to achieve the distributive and employment-generation goals of a sustainable growth process for South Africa.

PROACTIVE GROWTH-ORIENTED MACROECONOMIC MANAGEMENT

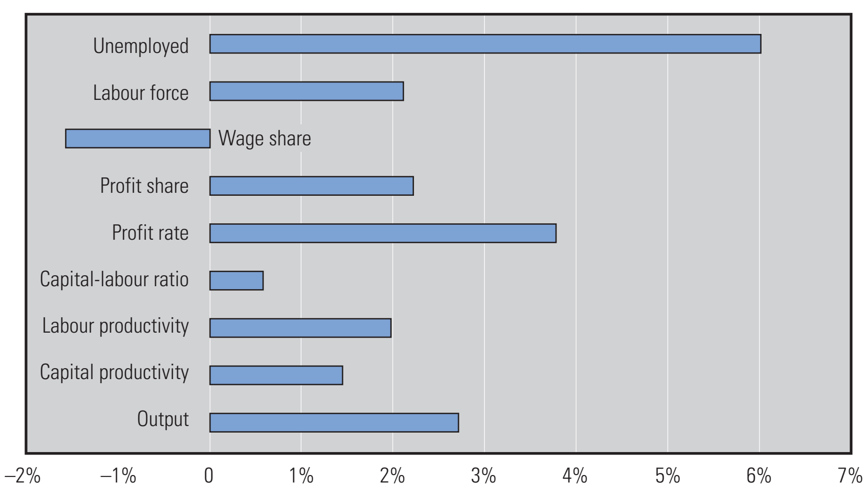
Expansionary fiscal and monetary policies can be used to move the system in the direction of higher economic activity and fuller capacity utilisation. By contrast, contractionary policies push the economy towards lower levels of utilisation and investment. In South Africa, both fiscal policy (aimed at reducing the debt-GDP ratio) and monetary policy (focused on reducing the inflation rate) have been growth debilitating, resulting in an overall decline in private sector net investment since 1996 (Box 8.2).[46]

According to standard economic theory, there is a threat that the ratio of debt to output will grow if the interest rate on debt is greater than the growth rate of output. Keeping debt from growing in relation to output requires a primary surplus equal to the interest on the debt. A primary deficit of that amount requires a permanent increase in net taxes equal to the interest on the debt, or an equivalent reduction in the non-interest expenditure of government.

In South Africa, the significant gap between the real interest rate and the real growth rate (an average of 10.8 per cent real lending rate relative to 2.5 per cent average real growth rate) has led fiscal authorities to seek increases in the primary surplus in order to prevent the government debt from increasing faster than the economy.

This has been achieved mainly by raising government's non-interest expenditure more slowly than increases in government revenue. Since 1996, when the reduction of the debt/GDP ratio was declared the fundamental objective of fiscal policy,[47] the government has increased the primary surplus from R8 billion to R52.5 billion (in 2002). While in 1996 only an equivalent of 20.5 per cent of the total interest payment on government debt was financed by the primary surplus, by 2002 this had increased to 96.5 per cent (Table 8.12, p. 196). The gradual increase in the primary surplus is a reflection of government's tight fiscal policy,

Figure 8.17 **Growth, distribution, and employment (% average annual real growth rates, 1994–2002)**



Note: (1) Wage share refers to the share of remuneration of employees in GDP; profit share refers to the share of gross operating surplus in total GDP; profit rate refers to the gross operating surplus relative to the value of capital stock. (2) The employment data used for calculating labour productivity and capital-labour ratio includes employment in the informal sector. For the formal sector, the growth rates of the two variables were larger during 1994–2002 (see Chapter 7).

Data source: South African Reserve Bank

Box 8.2

Kicking away the ladder – development strategy in historical perspective

'There is currently great pressure on developing countries to adopt a set of "good policies" and "good institutions" to foster their economic development. Naturally, there have been heated debates on whether these recommended policies and institutions are appropriate for developing countries. However, curiously, even many of those who are sceptical of the applicability of these policies and institutions to the developing countries take it for granted that these were the policies and the institutions that were used by the developed countries when they themselves were developing countries.

This cannot be further from the truth – the developed countries did ***not*** get where they are now through the policies and the institutions that they recommend to the developing countries today. Most of them actively used "bad" trade and industrial policies, such as infant industry protection and export subsidies – practices that are frowned upon, if not actively banned, by the WTO these days. Very interestingly, the UK and the USA, which most of us think as the paragons of free-trade and free-market policies, were the most ardent users of such policies in the earlier stages of their development. In terms of institutional development, until they were quite developed (say, until the early 20th century), the developed countries had very few of the institutions deemed essential for developing countries today, such as democratic political institutions, a professional bureaucracy, and the central bank. Indeed, when they were developing countries themselves, the developed countries had much lower-quality institutions than today's developing countries at comparable levels of development.

If this is the case, aren't the developed countries, under the guise of recommending "good" policies and institutions, actually making it difficult for the developing countries to use policies and institutions that had allowed them to develop economically in earlier times? Friedrich List, the mid-19th-century German economist who perfected the theory of infant industry protection (which was first systematically developed by the first US Secretary of Treasury, Alexander Hamilton), certainly thought so. He criticised the British preaching of the virtues of free trade to countries like Germany and the USA as an attempt to "kick away the ladder", with which Britain climbed to the top.

Pointing out that the allegedly "good" policies and institutions recommended by the Bretton Woods institutions and the developed country governments have not been able to generate the promised growth dynamism in the developing countries during the last two decades or so, there is a need for a radical rethinking on development strategy.

First of all, the above-mentioned historical facts about the developmental experiences of the developed countries should be more widely publicised so that the developing countries can make more informed choices about policies and institutions. Second, policy-related conditionalities attached to financial assistance from the IMF and the World Bank or from the donor governments should be radically changed, on the recognition that many of the policies that are these days considered "bad" are in fact not, and that there can be no "best practice" policy that everyone should use. Third, the WTO rules and other multilateral trade agreements should be rewritten in such a way that a more active use of infant industry promotion tools (e.g. tariffs, subsidies) is allowed. Fourth, improvements in institutions should be encouraged, but this should not be equated with imposing a fixed set of (in practice, today's – not even yesterday's – Anglo-American) institutions on all countries. Special care has to be taken in order not to demand excessively rapid upgrading of institutions that are not really essential in the earlier stages of economic development (such as strong intellectual property rights), when these countries already have relatively high-quality institutions by historical standards and when institutional upgrading can divert resources away from other crucial sectors such as education, health, and infrastructure.

By adopting policies and institutions that are more suitable to their stages of development and to other conditions they face, the developing countries will be able to grow faster. This will benefit not only the developing countries but also the developed countries in the long run, as it will increase the trade and investment opportunities available to the developed countries in the developing countries.'

Source: Ha-Joon Chang (2002)

which resulted in a 70.9 per cent increase in government's nominal non-interest expenditure, compared to a 94.8 per cent increase in its nominal revenue[48] between 1996 and 2002. Thus the dynamic interaction between the Treasury's aim of reducing the country's debt/GDP ratio and the Reserve Bank's high interest rate policy – used to achieve its targets for inflation – has prevented these policies from performing expansionary roles in the economy.

To achieve the desired high growth rates, both these policies need to undergo substantial changes to enable the government to coordinate effective growth oriented policy interventions.

Fiscal policy for growth and development

In South Africa, the central aim of fiscal policy should be to help achieve the high quality and quantity growth rates that are needed. Once this aim is shared by the monetary authorities, resulting in a proper coordination of the two policies, the fiscal authorities will also be able to maintain a sustainable debt/GDP ratio. In this context, tax and expenditure policies should be based on their ability to promote growth, redistribution, poverty reduction and employment creation. The temptation to achieve a balanced budget must be tempered by the immediate and

Table 8.12 **Current income and expenditure of general government (R billion)**

	1970	1980	1990	1994	1996	1998	2000	2002
1 Current income	2.7	14.4	77.4	123.7	161.9	206.9	243.2	315.4
2 Current non-interest expenditure	2.1	11.3	72.2	125.4	153.8	180.3	208.7	262.9
3 Primary deficit (+ surplus, – deficit) (1–2)	0.6	3.1	5.2	–1.7	8.1	26.6	34.4	52.5
4 Interest on Public Debt	0.2	1.6	12.0	26.6	39.4	47.1	51.6	54.4
5 Deficit (3–4)	0.4	1.6	–6.8	–28.3	–31.3	–20.5	–17.2	–1.9

Source: South African Reserve Bank database

The central aim of fiscal policy should be to help achieve the high quality and quantity growth rates that are needed

long-term growth and development implications. As James Tobin points out, in conditions where the economy is suffering from high unemployment and under-utilisation of resources, '[f]iscal austerity is not a recipe for recovery.'[49]

Furthermore, fiscal policy should avoid unitary total annual expenditure limits that fail to discriminate between investment and consumption expenditures, given their varying economic significance with respect to future growth performance. Investment expenditures on capital assets that generate a future stream of benefits are distinguishable from recurrent expenditures. Public investment levels need to be protected by an institutional mechanism that allows them to be planned in conformity with macroeconomic needs, instead of short-term budgetary limits that are defined with reference to the constraints of a fixed deficit/GDP target.

The required mechanism should include a formal separation of public finances into current and capital budgets. A parallel realistic current account balance target would operationalise the key variable of fiscal policy sustainability – the reconciliation of current expenditures with current revenues.[50] The revision of the current fiscal policy components needs to lead to substantial increases in infrastructure investment, social services and the revamping of the country's social security system (as described in Chapters 4 and 5 of this report). This requires, in particular, an upward adjustment of the current deficit/GDP target to 4–5 per cent in the medium term. Tax policy also needs to facilitate the new policy objective of ensuring that the growth of the after-tax average profit rate remains below the growth rates of capital productivity in the economy (see section on increasing investment).

While it is important to shield the Bank from short-term political interference, its social legitimacy depends, in part, on its accountability for the performance of the economy

Monetary policy for growth

Monetary policy should be incorporated into the overall growth strategy by re-orienting it towards a significantly lower real interest rate, a higher monetary base and higher credit relative to GDP. The Reserve Bank needs to balance its legitimate concern with inflation against other important considerations. While it is important to shield the Bank from short-term political interference, its social legitimacy depends, in part, on its accountability for the performance of the economy. Rather than aiming for a low inflation target, the Bank should aim directly at observed and projected macroeconomic performance as measured by real GDP growth, unemployment, excess capacity and other indicators of slack economic performance.

The appropriate monetary policy should coalesce with some agreed-upon or compromise range for real GDP growth.[51] This is not to argue that inflation is not a major economic consideration. Very high levels of inflation can have significant negative economic impacts. Accordingly, the Reserve Bank *does* need to remain vigilant against very high levels of inflation (15–20 per cent).[5] At the same time, due to the leaking of part of demand abroad during an expansion (i.e. increase in demand for imports), the exchange rate policy needs to help ensure the sustainability of the current account deficit.

Given the history and institutional structure of monetary policy in South Africa, nominal GDP targeting offers an important improvement over inflation targeting.[53] The advantage is that this places weight, not only on inflation, but also on real GDP and growth. Hence it is more likely to help economic growth than is the inflation target approach, which places no explicit weight on real output. In addition, a revised policy should consider the adoption of a policy of managed currency depreciation to generate the extra exports needed to maintain the sustainability of the current account as the economy grows.

The above fiscal and monetary policy measures enhance the growth potential of the economy, ensure that the two policies are coordinated to respond positively to the need for real high growth rates, and give necessary consideration to the evolution of government's debt/GDP ratio and the monetary authority's concern about inflation. At the same time, the measures are designed to strengthen the overall redistributive thrust of economic policies.

If the private sector believes that the resultant expansion is sustainable, it is more likely to respond positively by increasing its investment.

In this context, any strategy that focuses only on this approach will leave the relationship between profitability and utilisation untouched. This risks reaching the limits imposed by the negative trade-off between the two, owing to the extent of poverty and highly skewed income distribution.[54] At the same time, the effectiveness of the expansionary fiscal and monetary policy option in engendering a positive investment response by the private sector improves when it is complemented with additional important interventions (Box 8.3 on p. 198).

MAKING PRODUCTIVITY, GROWTH, AND INVESTMENT MORE PROFITABLE

A promising macroeconomic policy change is one that serves to raise the average rate of profit feasible at any given level of utilisation, while taking into account the above redistributive and employment-generation conditions. Assuming, as we have, that the product market traces a positive relationship between the rate of profit and the level of capacity utilisation, raising profitability without resorting to measures that undercut worker motivation, and thus productivity (e.g. wage cuts), will result in a new macroeconomic balance. Such a balance represents an unambiguous improvement for the economy, with a higher profit rate, a lower rate of unemployment, a higher rate of investment and improved income distribution.

The key to this multi-purpose strategy is the sustained improvement of capital productivity, or higher labour productivity growth relative to changes in the production technique.[55] Under the redistribution condition, where the share of profits in total income needs to decline, achieving increases in the profit rate (i.e. profits per unit of fixed capital input) is possible if the growth rates of capital productivity remain significant.[56]

An expansionary macroeconomic policy designed to shift the product market to higher levels of economic activity will result in larger increases in capacity utilisation, capital productivity and profitability. Moreover, the profitability of the private sector can be raised by incorporating the critical role of public capital

Box 8.3

Lessons of best practice for sustainable SMMEs

'The international experience suggests that the sustainable development of SMMEs can be assisted by adopting the broad lessons or best practice which are identified by the Committee of Donor Agencies on Small Enterprise Development (1998, 2001). The lessons to inform best practice as regards support for SMMEs draw upon a wide range of worldwide practices across both developed and developing countries. It is argued that the "fundamental principle" that shapes all business development service provision is that the service providers that are best at supporting SMMEs are themselves small enterprises in terms of their personnel, systems and values (Committee of Donor Agencies for Small Enterprise Development, 1998:27). New innovative research on the East Asian experience (especially in Thailand and Vietnam) confirms the need for an approach that is business-like as well as demand-led (Allal, 1999; White, 1999; Anderson, 2000). From the Latin American experience also there is considerable body of evidence of the strength of demand-driven SMME support programmes (Tendler, 1997, 2002). In particular, Tendler and Amorim (1996:407) argue that "the striking stories" of successful small enterprises "have tended to be driven by demand" and draw attention to the potential offered by changing procurement systems. Another critical element of best practice is to achieve "sustainability", the meaning of which is contested albeit often advocated to be equivalent to the cost-effectiveness of implementation (White, 1999; Dorfling, 2001). Equally important is the need for "tailoring" of support services such that those involved in support interventions need to be clear "what an intervention is trying to do and with whom" (Committee of Donor Agencies for Small Enterprise Development, 1998:27). Tailoring is often associated with the application of sub-sector analysis to determine the specific interventions to appropriate economic sub-sectors. Nevertheless, the principle of tailoring applies equally to the support of women entrepreneurs involved in small enterprises (ILO, 2001; Kantor, 2001). The adoption of participatory approaches in the planning of business development services is viewed as likely to further contribute to long-term sustainability, more especially if it involves a better understanding of the needs of SMMEs (Committee of Donor Agencies for Small Enterprise Development, 1998, 2001; White, 1999).

An essential element for best practice concerning the sustainable development of SMMEs is to maximise outreach of business development services (Allal, 1999); in this respect a focussed, strategic and collective approach is recommended for service providers (Humphrey and Schmitz, 1996). Successful support interventions need to deploy "the Triple C" approach in which effective support is customer-oriented, collective or directed at groups of enterprises rather than individual firms, and cumulative (Humphrey and Schmitz, 1996). Moreover, there is a need to build on demonstrated initiatives, on what already exists at local level, rather than *necessarily* to copy or replicate models of success drawn from developed countries (Committee of Donor Agencies on Small Enterprise Development, 1998, 2001). Another important theme is that service support providers should focus on a core role and activity, becoming expert in that role, rather than diversifying into other activities of which they have little understanding (Committee of Donor Agencies on Small Enterprise Development, 1998). Nevertheless, there is considerable support for the provision of a range of support interventions literally under one roof in the form of the "one-stop-shop" concept, which has been demonstrated as an efficient and effective means of service delivery (Cape Metropolitan Council, 2000a, 2000b).

From a range of international experiences it has been demonstrated that the sustainability of the SMME economy is most appropriately assured by a pattern of decentralised local advice and assistance (Levitsky, 1996). It has been argued that if institutions are to be effective in support provision, they have to be kept smaller and completely decentralised in their operations. Moreover, there is evidence that small staff complements operating either in a limited locality or confined to a particular sector perform most effectively (Gibb, 1993). Levitsky (1996) also argues the case for encouraging a high level of cooperation between service providers in any particular region such that the provision of packages of interrelated services may be best offered by "networks" of service support providers. Lastly, the Committee of Donor Agencies on Small Enterprise Development (1998, 2001) makes the argument for continual attention and monitoring to ensure the improvement in the provision of all support services both in terms of financing and business enterprise development.

Not surprisingly, against the backdrop of these radical changes and new paradigms occurring in "best practice" support for SMMEs, new creative roles have been defined variously for the private sector, government and NGOs in achieving the sustainability of SMMEs and correspondingly also for supporting the potential for SMMEs to contribute towards objectives of sustainable development. In recent years, for example, there has been a greater involvement of the private sector in delivery of support services to SMMEs on the basis of a demand-based service delivery model. Further, large private enterprises are viewed as offering much scope for supporting SMMEs through linkages of subcontracting, opening up opportunities for large firms to advise and assist SMMEs directly. Instead of becoming directly involved in direct SMME support provision, the international experience suggests that government initiatives should be aimed at simplifying or strengthening the service delivery mechanisms which already are in place. One study on best practice suggests that the public sector should be limited to activities that support SMME development such as policy formulation, research and analysis of the specific needs within the SMME sector, the coordination of service provision and the creation of business opportunities within the public sector through the mechanisms of public procurement (Cape Metropolitan Council, 2000a, 2000b). Further, a UNIDO (1999) analysis concluded that the role of government should be as facilitators and promoters rather than providing direct support services directly to the SMME economy.

Finally, for NGOs new roles are suggested in the context of the contemporary paradigm of SMME support (Cape Metropolitan Council, 2000a, 2000b). Alongside the private sector, NGOs have become critical institutional vehicles for delivery of support services and have focused on becoming sustainable as well as achieving a certain level of scale and impact in their efforts. In order to manage various types of business development services on a sustainable basis, NGOs are challenged to adopt commercial practices and approaches and recruit specialised staff with the necessary technical and business skills whilst focusing on clients able to pay for services. In addition, rather than offering general assistance or advisory services, there is a demand for flexibility and a willingness to respond to client demands (Cape Metropolitan Council, 2000a, 2000b).'

Source: Rogerson, CM (2002) The role of South Africa's SMME economy in sustainable development, Prepared for UNDP.

goods and services in private sector production. This approach is a particularly promising one for South Africa, given historical under-investment in infrastructure and the low maintenance of existing social infrastructure. Many of the capital inputs required for efficient productive activity in a modern economy – education, training, communications, transportation and other elements of social and physical infrastructure – have a significant 'public good' character that precludes their being adequately supplied by private firms. Only the public sector (at national, provincial and local levels) can realistically be expected to take responsibility for the necessary social and infrastructure investment.

Private sector profitability can also be improved by firm level changes that help resolve the difficult relationship between owners and workers, particularly as they relate to investment in new technology and improvements in productivity. To the extent that the tension between the two can be addressed, the economy will benefit from higher investment accompanied by higher labour productivity. This, in turn, will raise the rate of profit obtainable at any given rate of utilisation. The private sector has continually insisted on legal reforms to give it wider discretionary powers to use the threat of unemployment as a way of keeping remuneration rates from rising and disciplining labour. There is, therefore, a need to find alternative means of worker motivation that rely less on the negative sanctions associated with outsourcing and unemployment and more on positive incentives. Such a solution depends on institutional and policy changes that advance cooperative outcomes by promoting long-term employment relations, and the sharing of profits and decision-making between workers and owners. The National Economic Development and Labour Council (NEDLAC) and the more recently established Millennium Labour Council are important institutional frameworks within which such objectives may be advanced in South Africa.

INCREASING INVESTMENT

Policies that help increase the rate of total investment at given levels of profitability and capacity utilisation are also needed. Such increases can be achieved through higher levels of public investment and/or by policies that induce higher levels of private investment at any given combination of profitability and utilisation.

At any level of profitability and utilisation, there is a need to increase the overall level of investment. Public sector investment in public goods and services directly raises the overall level of investment in the country, and indirectly contributes to higher levels of private sector productivity and profitability. The proposed expansionary fiscal policy provides the necessary resources for such investment.

Another complementary approach is to reduce uncertainty in the demand market. It is generally agreed that an important obstacle to private investment is uncertainty about future market demand conditions (domestic and international).[57] One way to resolve this problem is to increase the predictability and certainty of market growth by reducing the volatility of aggregate demand over time.

The main means by which institutional and policy changes can reduce aggregate demand volatility is by reducing the autonomous expenditure multiplier. At the macroeconomic level, this can be achieved through conventional automatic stabilisers (e.g. progressive taxation or public unemployment compensation) and by discretionary demand stabilisation policies. At the same time,

Many of the capital inputs required for efficient productive activity in a modern economy have a significant 'public good' character that precludes their being adequately supplied by private firms

There is a need to find alternative means of worker motivation that rely less on the negative sanctions associated with outsourcing and unemployment and more on positive incentives

Reducing poverty, improving income distribution and reducing unemployment in South Africa will strengthen the foundation for the enhanced rate and sustainability of economic growth

Enhanced investment opportunity will serve to mobilise resources to finance additional investment

high poverty and inequality impose major constraints on the size of the domestic market, forcing enterprises to seek foreign markets for their outputs. Accordingly, reducing poverty, improving income distribution and reducing unemployment in South Africa will strengthen the foundation for the enhanced rate and sustainability of economic growth.

Government procurement policies and investment incentive measures can also be used to increase the volume of private sector investment, influence the composition of investment and increase the chances of the future growth pattern being redistributive and job creating. As discussed earlier, in the past and in the recent period, some government trade and industrial incentive programmes have contributed to the increased capital intensity of production.

The recent Brenthurst Initiative[58] emphasises the importance of providing differential rates of corporate tax to encourage businesses to 'transform' and increase investment. It proposes the introduction of a precisely defined National Transformation Scorecard to create the necessary measures and targets. Even though the Initiative is founded on a narrow definition of what is meant by transformation,[59] a revised version of the approach can be used as a mechanism to reward investment by businesses whose activities reflect support for a more broadly based transformation of ownership, improved income distribution and a reduction in the unemployment rate.[60] More specifically, businesses can be given differential tax incentives, access to subsidies and access to government procurement, depending on the extent to which (a) they have restructured, or are going through an ownership restructuring process, that is resulting in a broad-based distribution of company ownership amongst their employees and the public as a whole; (b) their capital productivity growth rates exceed increases in their after-tax rates of profit, and (c) their real output grows faster than their labour productivity growth rates.

The above measures, which are designed to increase the investment and after-tax profitability of businesses, should specifically target changes in leading firms in sectors of the economy. Transformation related to ownership patterns, technology use and employee-employer relationships in these firms will help internalise the main objective of a sustainable development strategy among other firms in diverse sectors of the economy.

MOBILISING GREATER DOMESTIC RESOURCES

Implicit in the above argument is the fact that the enhanced investment opportunity afforded by improved conditions of profitability and levels of economic activity will also serve to mobilise resources to finance additional investment.

Investment decisions are generally considered to be separate from savings decisions. However, this does not reflect the complete picture. In many instances, the amount saved by an enterprise, household or individual depends on the specific investment opportunities open to that enterprise or household and its access to formal financial sector credit institutions. Under such circumstances, the incentive to save and improve the allocation of savings increases. Therefore, saving and investment decisions merge into one. People restrict their consumption, not in order to 'save', but in order to finance a desired investment. In such a situation, the role of government policy should not be to try to induce people to consume less (save more), but rather to create a development environment in which there are large numbers of profitable investment opportunities. Where there is an abundance of investment opportunities, the savings problem will take care of itself.[61]

Because some savings by a would-be borrower are almost always required before a loan can be obtained, widening access to lending institutions should increase the number of savers and the rate of savings. Employment status, ownership of assets (e.g. land, property, equities and bonds) and human capabilities (e.g. education and health status) also influence saving and access to loans. At the same time, financial institutions need to expand their lending facilities to lower income households and individuals. The development of any transformation scorecard for the financial institutions should, therefore, include clear indicators reflecting the number and types of loans allocated to low-income households and SMMEs relative to similar loans to other income groups and large firms, and the overall value of such loans relative to the total financing made available to the public by a given financial institution. Consequently, the broad transformation of society and the economy has a direct or indirect positive influence on investment opportunities and decisions, saving and access to credit.

MAINTAINING MACROECONOMIC BALANCES

The above measures are designed to enhance, not only the rate of growth, but also its quality, particularly in terms of redistribution and employment creation. The achievement of pro-poor growth rates reflected in a sustained reduction in income inequality and the unemployment rate reflect a proper working of the fundamentals of the country's macroeconomy.

At the same time, the sustainability of macroeconomic performance can be threatened by underestimating the potential negative impacts of excessively high rates of inflation, increases in balance of payment (BOP) difficulties and increases in the national debt-GDP ratio.

The proposed monetary policy framework, coupled with policy coordination aimed at achieving high real growth performance, are fundamental factors that will ensure the sustainability of South Africa's debt/GDP ratio over time. Moreover, the proposed monetary policy's sensitivity to high inflation rates is expected to ensure that the trend in inflation rates remains conducive to investment and growth.

Four important aspects of the above proposals also contribute positively to maintaining sustainable BOP performance over time. First, the proposed differential tax incentives, industrial and trade subsidies, and government procurement programme are designed to ensure the maximum utilisation of technologies in different sectors of the economy. To access these incentives, businesses are pressed to improve, as much as possible, the productivity of their operations by enhancing the links between technology, human resources and employment. This is expected to reduce the pace at which sectors of the economy have been importing machinery and other capital goods in recent years. Second, restructuring the composition of demand in South Africa (by improving income distribution) is expected gradually to reduce the economy's propensity to import expensive luxury goods.[62] Third, the managed depreciation of currency over time should help the competitiveness of South African exports, reduce some of the demand for imports, and contribute to an overall improvement in BOP. Finally, BOP is expected to improve over time as high growth, infrastructure capabilities and other factors induce increases in the inflow of foreign investment in a growing economy.

Financial institutions need to expand their lending facilities to lower income households and individuals

There are promising policy options for promoting stronger macroeconomic performance in South Africa

CONCLUSION

There are promising policy options for promoting stronger macroeconomic performance in South Africa, in line with sustainable development goals. Moreover, the pursuit of these policies will increase employment and job security and yield sustainable productivity growth in ways that simultaneously promote greater equality and participation in the economy. The fact that such a macroeconomic strategy requires changes in the government's current thinking and policy framework merely underscores the challenging opportunities before us, and the scale of political mobilisation that will be needed to realise those opportunities.

Endnotes

1 Sen (1989, 1995)

2 During 1995–2001, the per capita output of the government sector declined by an average of 1.7 per cent. Other sub-sectors whose real per capita outputs have grown in recent years are agriculture (2%), electricity (1.1%) and construction (0.2%). The sub-sectors with negative per capita real growth rates include mining (-2.4%), manufacturing (-0.3%) and trade (-0.2%).

3 The secondary sector includes manufacturing, electricity, gas and water, and construction.

4 Total real investment refers to total real gross capital formation.

5 The corresponding rates for gross *fixed* investment (i.e. gross capital formation minus change in inventories) were 9.3 per cent for 1994–1996 and 2.1 per cent for 1997–2002.

6 The macroeconomic implications of high imports of machinery equipment are discussed in Chapters 7 and 8.

7 Increases (decreases) in gold and other foreign reserves also reduce (increase) the financial resources available for investment.

8 Gross domestic saving is comprised of household saving, corporate saving, government saving and the consumption of fixed capital at replacement value.

9 The average saving rate was 23.6 per cent during the 1960s and increased to 26.2 per cent during the 1970s. During the 1980s, it fell to 23.5 per cent, after which it declined even further – to 16.2 per cent during the 1990s.

10 A small portion of the national government debt includes the debt and liabilities of the former TBVC countries and self-governing territories that were assumed by the national government in terms of Section 239 of the Constitution of the Republic of South Africa, as well as the liability assumed for the payment of the debts incurred by the Republic of Namibia as contemplated in subsection (1) of Section 52C of the Exchequer Act No. 66 of 1975, as amended.

11 Du Toit (2002)

12 Statistics South Africa (2002) November

13 RDP (1994:6)

14 For more details, see Chapter 6.

15 For more on this topic, see Gelb (1991), Fine and Rustomjee (1997) and Saul and Gelb (1981). Certain aspects of this topic are also more fully developed in Chapters 1 and 6 of this report.

16 According to Trevor Manuel, Minister of Finance, '... South African companies have changed their structure in order to become more competitive in an open global environment'. Also, 'As a country, we are now selling more goods and services to the world than we are buying from them. This means that we can now afford to import the fuel and capital equipment we need to grow our economy without borrowing from the rest of the world.' *Sowetan*, 22 November 2002, p. 18.

17 As discussed in Chapter 2, the increasing contradictions between the developmental goals of the RDP and the implementation of an orthodox economic restructuring programme are the main source of policy contestation in South Africa.

18 Adelzadeh *et al* (2000a)

19 Adelzadeh *et al* (2000a)

20 Adelzadeh *et al* (2000a)

21 Adelzadeh (2001b)

22 Adelzadeh (2001b)

23 Please note that the shares are calculated using nominal gross investment and GDP.

24 In 2002, the public sector's gross nominal investment of R39.6 billion was R4.4 billion less than the R44 billion depreciation of public assets (Reserve Bank Quarterly Bulletin, March 2003). Public sector refers to the combination of the general government and public corporations.

25 A number of theoretical works underlie this proposition. Classical contributions include Keynes (1936), and Kaldor (1960).

26 Domestic demand refers to gross domestic expenditure.

27 In addition, households 'consumed' an equivalent of R97 billion in kind in the form of government social transfers (e.g. education and health).

28 This is in addition to the business sector's much larger annual spending on replacing consumed fixed capital. In 2002, private business enterprises spent R101 billion on the replacement of fixed capital. Reserve Bank (2003) March

29 Statistics South Africa, Statistical Release P3043

30 If it is possible for a firm to increase its utilisation, it is required to report up to three important reasons for the incomplete utilisation of capacity, ranking the reasons according to importance. Respondents are provided with five choices in this regard. They report whether the reasons for under-utilisation are because of a

shortage of (a) raw materials, (b) skilled labour, (c) semi- and unskilled labour, (d) insufficient demand, or (e) other reasons (which must be specified).

31 As discussed in Chapter 4, the literature on the relationship between income distribution and growth is extensive, especially because of the emergence of new cross-country empirical research that not only questions the *validity* of the earlier analysis based on Kuznet's hypothesis, but appears to reverse its conclusions. A review of these studies led Griffin and Ickowitz (2002) to conclude that 'the idea that income redistribution is incompatible with growth receives no support from the cross-section evidence and the view that inequality is a precondition for growth is increasingly untenable'.

32 Adelzadeh (2000a)

33 Adelzadeh (2002)

34 In his statement prior to the presentation of GEAR to Parliament, Thabo Mbeki, the then Deputy President, stated that GEAR 'is the central compass which will guide all other sectoral growth and development programmes of the government aimed at achieving the objectives of the RDP'. National Assembly, June 14, 1996.

35 Weeks (2000) argues that government's GEAR policy has restricted rather than enhanced the country's growth performance. Adelzadeh (1996, 1999, 2000) has also argued that government's forecasts of high growth performance remain untenable, given the contractionary trust of its fiscal and monetary policies. Similar criticism of government's macroeconomic policy is found in Michie and Padayachee (1997), Harris and Michie (1998), Marais (1998, 2000).

36 This is relative to the share of remuneration of employees in total income.

37 Growth of the profit share can be written as the difference between the growth rates of the profit rate and capital productivity.

38 Profit share can be expressed in terms of the profit rate divided by capital productivity. This is equivalent to expressing the growth rate of the profit share as being equal to the difference between the growth rates of the profit rate and capital productivity.

39 With output/capital ratio being equal to labour productivity divided by the capital labour ratio, the growth rate of capital productivity can be expressed as the difference between the growth rates of labour productivity and the capital/labour ratio.

40 Glyn (1998) uses a similar relationship to estimate the overall implications of a given average growth rate of the economy for employment creation.

41 For example, government's expenditure policy on infrastructure development directly expands the economy's production level. Its taxes, subsidies, and transfers are important means of impacting on production by inducing changes in the rate and pattern of investment and worker productivity.

42 In an economy with a relatively small pool of unemployed people, a gradual rise in capacity utilisation leads to a demand for more labour than is readily available, resulting in the need to pay higher wages and, eventually, to what is called a 'high-employment profit squeeze' situation. In this situation, at some level of utilisation, the negative effect of rising employment will overcome the positive effect of rising capacity utilisation, and the profit rate will start to fall.

43 Balance in the product market can also be expressed in terms of the equality of total investment and total saving. Here, total investment includes public and private investment. A combination of the profit rate and capacity utilisation can express the balance between investment and saving in the economy. Higher capacity utilisation rates (i.e. economic activity) require higher profit rates to maintain the equality between savings and investment, and thus the balance in the product market.

44 For more details, see Chapter 4 of this report.

45 This implies that the economy should have grown by 36.9 per cent during this period, compared to the actual growth of 24.4 per cent.

46 Net investment refers to gross investment minus consumption of fixed capital (depreciation). The private sector's net investment relative to GDP declined from 4.6 per cent in 1996 to 3 per cent in 2002. Reserve Bank Bulletin (2003) March

47 Growth, Employment, and Redistribution (1996)

48 Government revenue refers to government's 'current income' as used in the Reserve Bank Bulletin table on Current Income and Expenditure of General Government.

49 Tobin (1987:199)

50 For more details of this proposal, see Newton (1997).

51 See Tobin (1997).

52 Stiglitz (1997)

53 Hall (1994); Frankel (1995); Epstein *et al* (1999)

54 Other potential problems with this approach are: first, any gain in capacity utilisation benefits

workers at the expense of lower profits for owners. This usually leads to intense political opposition from the latter, often appearing under the guise of the need to avoid 'overheating' or excessive inflation. Secondly, when the increase in economic activity reaches the point where, from there on, the trade-off between utilisation and profitability become apparent, exogenous demand shocks will not be able to raise overall private investment. It may even have an investment-dampening effect.

55 Production technique refers to the use of fixed capital goods per employee.

56 Or, to put it differently, if labour productivity grows faster than increases in the use of fixed capital per unit of employee.

57 This is, for example, reflected in the private sector's current concern about the possibility of more interest rate hikes.

58 Brenthurst Initiative (2003)

59 N Makgetla (*Business Day*, August 8, 2003, 'Rich demand even more of the poor'); C Ramaphosa (*Financial Mail*, August 15, 2003).

60 Jonathan Oppenheimer (*The Sunday Independent*, August 17, 2003) argues that 'defining precisely and agreeing on a National Transformation Scorecard is crucial to our ability as a nation to deliver both transformation and growth.'

61 Griffin (2001).

62 The Income and Expenditure Surveys of 1995 and 2001 show that the bottom 80 per cent of households spend a much smaller portion of their income on imported expensive luxury goods than the top 20 per cent of households.

Conclusion

Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is multidimensional and encompasses complex interactions between economic, social, political, cultural and environmental issues. It pledges to make the conquest of poverty, the goal of full employment and the fostering of a stable, safe and just society the overriding objectives of development policy and interventions.

The primary responsibility for translating the sustainable development agenda into action lies at the national and local levels. This is because the sustainable development of any country can only be as effective as its people want it to be. It is fundamentally an endogenous process, generated and sustained by the energy of a society and its ability to learn creatively from its own and others' history. At the same time, there is a measure of consensus that the effectiveness of the state remains fundamental to the development process.

Since its transition to democracy nine years ago, South Africa has recorded impressive achievements. These achievements were analysed in the 2000 National Human Development Report. In the aftermath of the 2002 World Summit on Sustainable Development, the aim of this issue of the South African Human Development Report is to identify the main challenges to sustainable development in South Africa, and to define a consistent strategy and policy direction that will help unlock the creativity of the country's stakeholders to meet those challenges.

Analysis of relevant trends in socio-economic development and policy-making processes during the last nine years (Chapters 2 and 3) helps identify five important sustainable development challenges for South Africa: the eradication of poverty and extreme income and wealth inequalities; the provision of access to quality and affordable basic services to all South Africans, especially the poor; the promotion of environmental sustainability; a sustained reduction in the unemployment rate, and the attainment of sustainable high growth rates.

Analyses in Chapters 4 to 8 identify specific factors that have historically engendered severe problems of poverty and inequality (Chapter 4), deprivation in terms of access to basic services (Chapter 5), environmental degradation (Chapter 6), a rise in the unemployment rate (Chapter 7), and an inadequate and developmentally unfavourable growth path (Chapters 7 and 8). Significantly, these outcomes are found to be attributable to both the past and current structure of the economy, and to the strategy and policy framework that has informed public and private sector interventions in the economy. At the same time, the five challenges of sustainable development in South Africa are found to be highly interrelated.

In order to highlight these points, the Report argues, for example, that excessive levels of poverty and income and wealth inequalities have resulted in an extremely skewed structure of demand in South Africa. This, coupled with growth-debilitating fiscal and monetary policies in recent years, has imposed important structural and policy limitations on the

There is a measure of consensus that the effectiveness of the state remains fundamental to the development process

South Africa's sustainable development prospects depend on a successful reorientation of the economy

potential growth rates of the economy. At the same time, the low responsiveness of employment to investment and economic growth have been the consequence of various built-in policy biases in favour of capital-intensive methods of production, which has resulted in a distorted comparative advantage in the international trade of capital-intensive goods. The dwindling of broad-based policy-making processes and transformation initiatives was also found to have constricted the formulation of sustainable development-consistent strategies and implementation programmes in certain areas.

The main forward-looking conclusion of this report is that South Africa's sustainable development prospects depend on a successful reorientation of the economy – such that it will become inclusive (broad-based), equitable and sustainable over time. This, it is argued, depends, among other things, on the ability to achieve and sustain high growth rates that simultaneously reduce unemployment, poverty, and income and wealth inequality, while improving environmental sustainability and macroeconomic balances. Furthermore, the inclusiveness and equity principles of this process are expected to unlock the creativity of social groups. This, in turn, underwrites sustainability.

The Report provides an analytical framework that captures the above requirements within an integrated and consistent system of relationships among factors that influence the main sustainable development challenges facing South Africa. The framework is founded on the notion that (a) market economies are built on important inequalities (e.g. inequalities in the ownership of properties, power, income distribution); (b) there are significant market failures that can exacerbate the extent of poverty and vulnerability in the society (e.g. periodic crisis, and weak private sector interest in investing in the delivery of social services and infrastructure to poor communities). These characteristics, combined with South Africa's uneven development, (c) make the free market mechanism incapable of satisfactorily overcoming its sustainable development challenges. Notwithstanding globalisation processes, (d) the state continues to have sufficient power, through public mandate and control over important institutions and policy leverages, to mobilise and guide resources towards important developmental outcomes. And finally, (e) a successful sustainable development process is predicated on the unleashing of the creativity of society so that it can participate in the articulation of challenges, and design and implement strategies and solutions.

On the basis of these premises and findings in Chapter 4, the Report addresses income distribution issues within the context of an ongoing struggle over the distribution of national income between property owners (who earn profits, interest and rent) and their employees (who earn wages and salaries). The Report argues that, for income distribution to improve, the declining trend in the latter group's share of national income needs to change. When the after-tax average rate of return on investment begins to grow more slowly than average capital productivity, the distribution of income can begin to favour wage and salary earners, thus resulting in a gradual narrowing in income inequality. Moreover, the Report argues that the South African fiscal authorities can enhance the government's role in reducing income inequality by ensuring that the poor and wage earners are the net beneficiaries of its tax and expenditure policies.

To achieve these outcomes, the Report proposes an annual adjustment in company tax such that the future trend in the growth of the after-tax average profit rate remains below the trend in the growth rate of capital productivity. It also argues that the government's share of national income needs to benefit the poor favourably in a number of ways: an improved social security system; expenditure on education, social infrastructure, land reform and the provision of social services, and the provision of a comprehensive response to HIV/AIDS.

Given the importance for sustainable development of a systematic decline in the unemployment rate in South Africa, the Report defines conditions for the reduction of the unemployment rate as the economy grows. This requires that the economy experience growth rates that are greater than the sum of the growth rates of labour productivity and the labour force. Realising such growth rates, however, requires economic restructuring and policy initiatives that will result in significant increases in real investment, marked improvements in the composition and level of purchasing power in the economy, and improvement in the responsiveness of output to investment. Moreover, the restructuring should also facilitate a better harnessing of the growth potential of interactions between labour productivity, technical change and returns on investment.

In order to champion such outcomes, the Report recommends the withdrawal of subsidies which favour capital-intensive and/or large-scale enterprises; the promotion of alternative ownership and production arrangements to help achieve sustainable productivity increases; a redefinition of the aims of fiscal and monetary policy so as to utilise them more readily to enhance the growth potential of the economy; the establishment of differentiated tax, subsidies and procurement programmes to encourage, explicitly or implicitly, private sector investment and its optimum utilisation of adopted technologies; public sector infrastructure programmes, and support for small, medium and micro enterprises and the informal economy.

The Report's policy framework and recommendations are consistent with the goals of creating enduring macroeconomic and environmental balances and sustainability. Chapter 8 shows how different aspects of the recommended policy initiatives provide a solid foundation for ensuring sustainable paths for the country's debt/GDP ratio, balance of payments and inflation rates. At the same time, the policy measures proposed in this report are designed to support improvements in, and the sustainability of, South Africa's environmental wealth, particularly through the provisioning of safe water access, improved sanitation, eradication of environmentally unsafe sources of energy, land reform, and the adoption of measures that encourage investment in environmentally friendly technologies.

Overcoming the challenges of sustainable development depends on confronting the political challenges

The Report also recognises that overcoming the challenges of sustainable development depends on confronting the political challenges. For example, it points out that, in the area of service delivery, the main political challenge (which will also help address the technical challenges) is the need for a strategic political intervention that focuses policies on the provision of coherent, comprehensive and sustained support for the objective of delivering sustainable access to quality and affordable social services for all.

The Report emphasises the unlocking of society's creativity as an important prerequisite to achieving sustainable development in South Africa. This is reflected, on the one hand, in the fact that overcoming specific challenges depends on unleashing the creative involvement of stakeholders in the formulation and implementation of initiatives. On the other hand, and in broader terms, the

The political economy of South Africa's transformation embodies the necessary prerequisites for a sustainable development process to take root

Report argues that the formulation and adoption of an appropriate sustainable development strategy is the cornerstone to unlocking the creativity of the public. A focus on inclusive policy-making processes and the embodiment of the major concerns of the various stakeholders in the country's sustainable development strategy will produce a suitable environment in which they can unleash their creative involvement in the development process.

In this context, inferences have been made in various chapters of this report about ways in which government, business and civil society organisations can interact more effectively in the sustainable delivery of social services, land reform, management of environmental resources and so on. The Report emphasises the importance of engendering processes that are inclusive, transparent, and democratic and empower the poorest sections of the population.

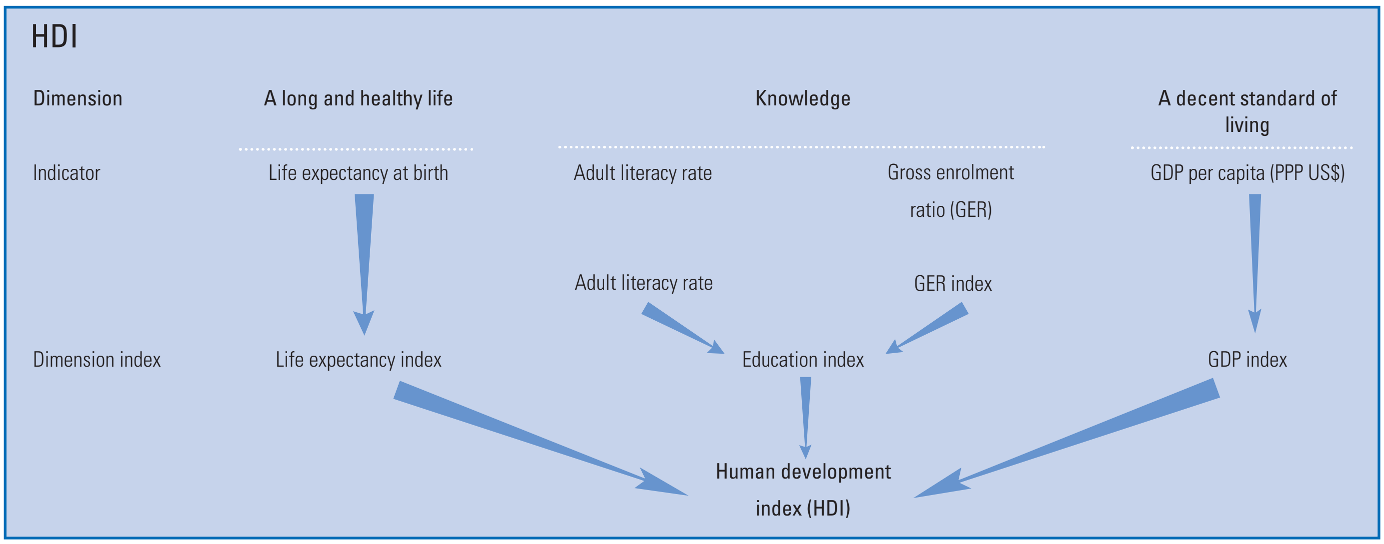
The Report has argued that communities are critical to planning and decision-making processes for social infrastructure delivery. Besides being the target users of infrastructure and services, they have the local knowledge and experience to support and even direct the policy, planning and delivery processes. From the ground, they are also in a position to play crucial roles in diligence and monitoring. The Report therefore makes recommendations on improving mechanisms for the involvement of civil society and resource users in management activities and decision-making.

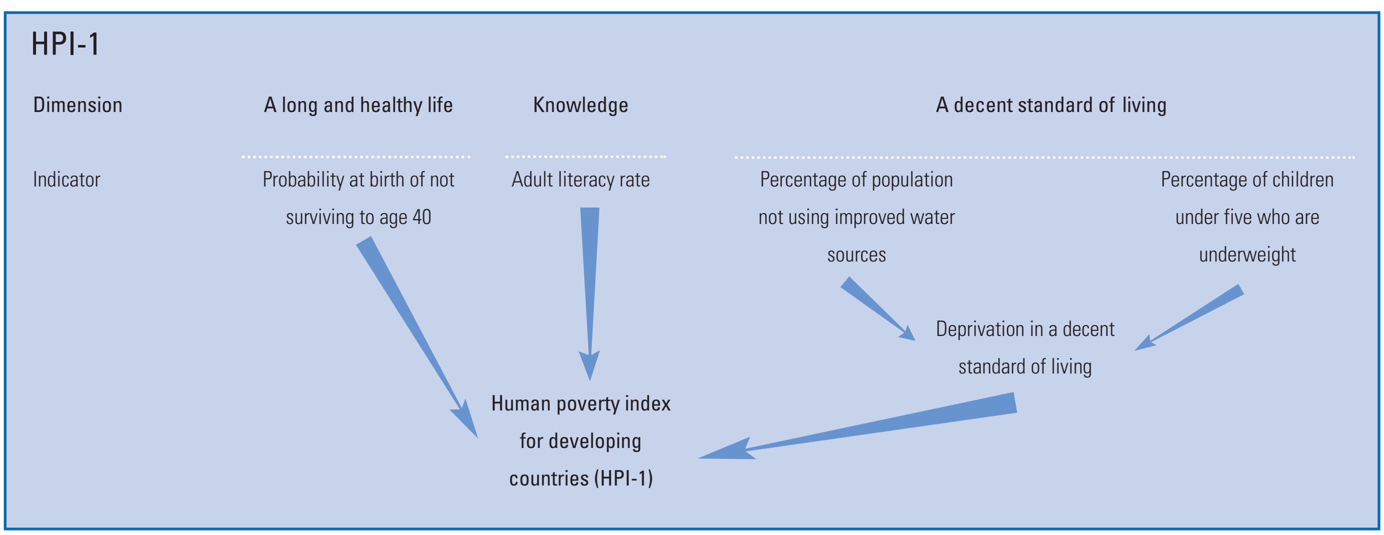
The political economy of South Africa's transformation embodies the necessary prerequisites for a sustainable development process to take root. This report's analysis of the challenges facing such a prospect is intended to contribute to the debate on how to realise such objectives.

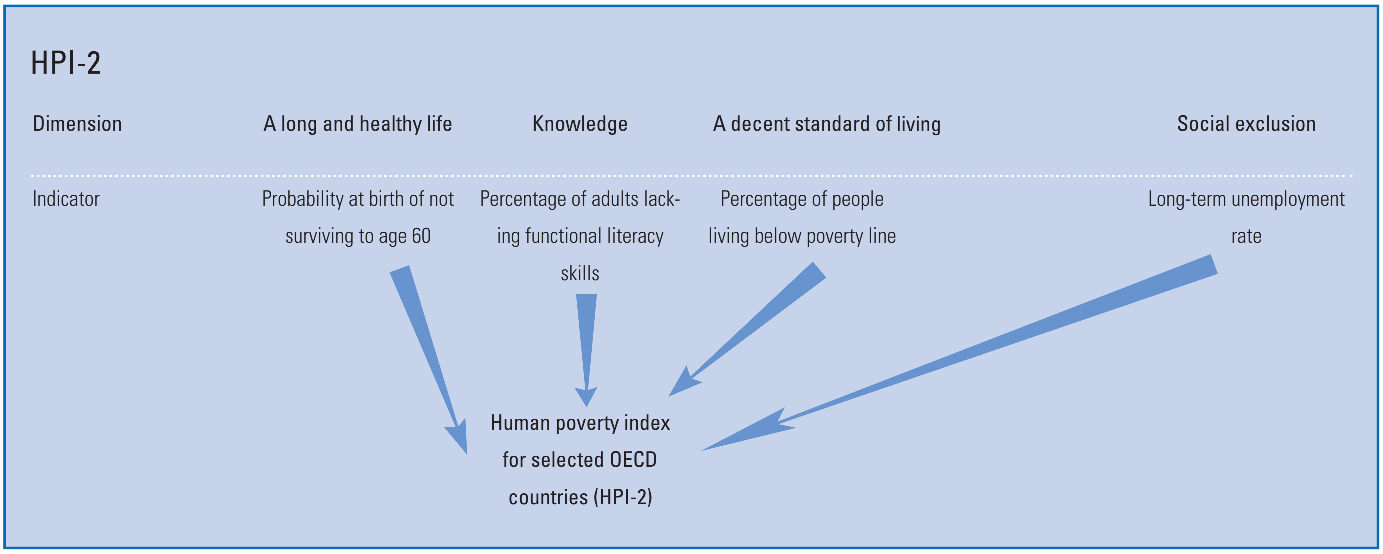
Technical note 1

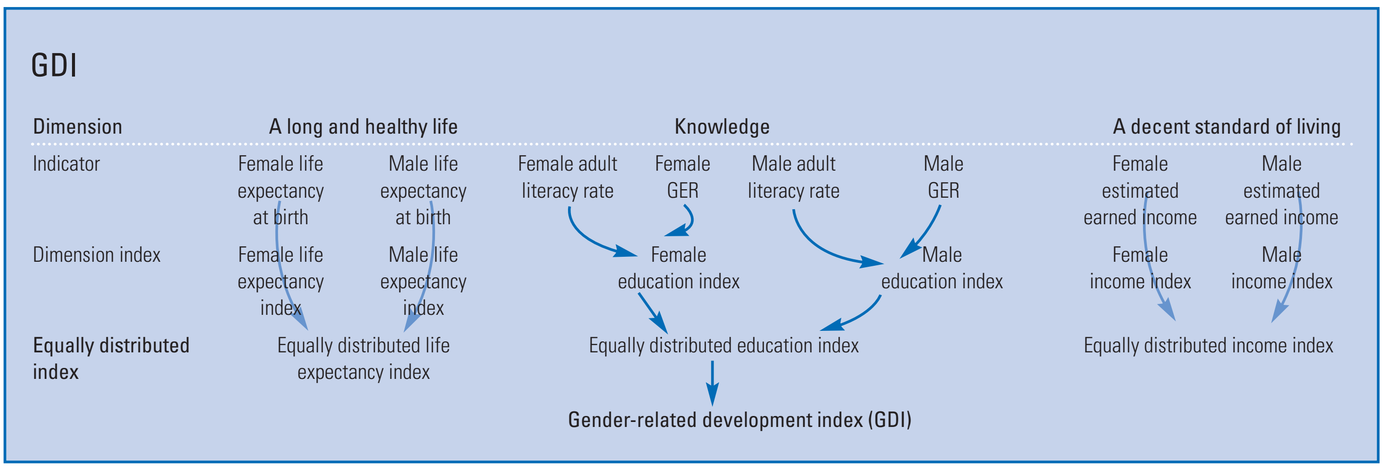
Calculating the human development indices

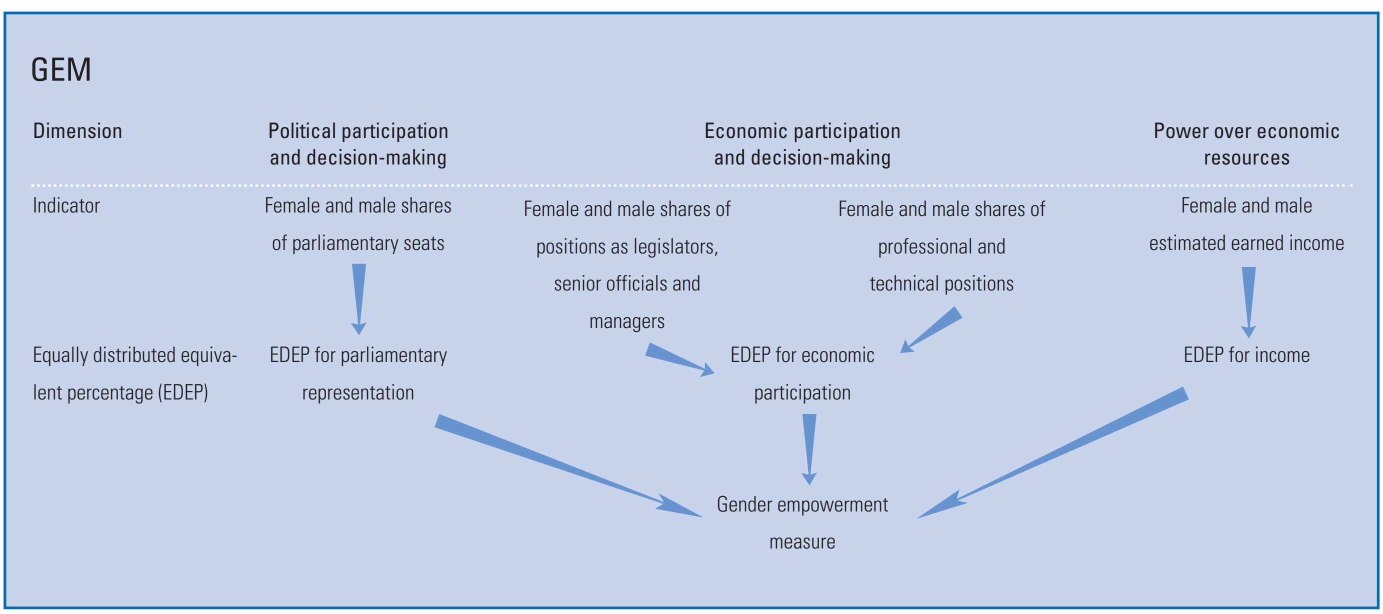
The diagrams here offer a clear overview of how the five human development indices used in the Human Development Report are constructed, highlighting both their similarities and their differences. For a detailed explanation and drivation of the human development indices see *Human Development Report 2003* pages 340–347 or visit www.undp.org/hdr.






HPI-2
Dimension
A long and healthy life
Knowledge
A decent standard of living
Social exclusion
Indicator
Probability at birth of not surviving to age 60
Percentage of adults lacking functional literacy skills
Percentage of people living below poverty line
Long-term unemployment rate
Human poverty index for selected OECD countries (HPI-2)


GDI
Dimension
A long and healthy life
Knowledge
A decent standard of living
Indicator
Female life expectancy at birth
Male life expectancy at birth
Female adult literacy rate
Female GER
Male adult literacy rate
Male GER
Female estimated earned income
Male estimated earned income
Dimension index
Female life expectancy index
Male life expectancy index
Female education index
Male education index
Female income index
Male income index
Equally distributed index
Equally distributed life expectancy index
Equally distributed education index
Equally distributed income index
Gender-related development index (GDI)


GEM
Dimension
Political participation and decision-making
Economic participation and decision-making
Power over economic resources
Indicator
Female and male shares of parliamentary seats
Female and male shares of positions as legislators, senior officials and managers
Female and male shares of professional and technical positions
Female and male estimated earned income
Equally distributed equivalent percentage (EDEP)
EDEP for parliamentary representation
EDEP for economic participation
EDEP for income
Gender empowerment measure

Technical note 2

Growth, redistribution and employment

Let:

- r represents the real rate of profit defined as the ratio of real profits (π) to the real value of the capital stock (k), or $r = \pi/k$. Profits include different forms of return related to property ownership (e.g. rent, interest and dividends).
- π_s represents the real profit share defined as the share of total real national income (y) as profits to property owners (i.e. $\pi_s = \pi/y$).
- w_s reflects the share of real wages and salaries (w) in total national income (i.e., $w_s = w/y$)
- K_p represents capital productivity, i.e. output per unit of fixed capital or y/k
- Lp represent labour productivity, i.e. output per unit of employment or L/y
- θ represents the production technique or capital-labour ratio, i.e. k/L
- LF represents the labour force.
- ˆ represents growth rate or the rate of change

A. Condition for the economy to be redistributive

The national income is distributed mainly as profits among a relatively small group of the population who own various kinds of property (i.e. profit share), and as wages and salaries among a much larger portion of the population who are wage and salary earners (i.e. wage share). An important approach to reducing high income inequality is to increase the majority of the population's share of national income gradually: that is, to increase the wage share by reducing the profit share.

The rate of profit can be written as the product of the profit share and capital productivity:

$$r \equiv \frac{\pi}{K} \equiv (\frac{\pi}{K})(\frac{\pi}{K}) \equiv \pi_s K_p \qquad (1)$$

In growth form, equation 1 indicates that the rate of change of the profit rate is equal to the sum of growth rates of the profit share and capital productivity:

$$\hat{r} \equiv \hat{\pi}_s + \hat{K}p \qquad (2)$$

A gradual rise in the wage share, a prerequisite for reducing high income inequality, requires a declining profit share, i.e. $\hat{\pi}_s < 0$. Applying this condition to equation 2, this redistribution condition can be expressed in terms of the need for the economy to produce rates of growth of profit rate that are lower than growth rates of capital productivity. That is:

To achieve $\hat{\pi}_s < 0$ (i.e. $\hat{W}_s > 0$) there is the need for $\hat{r} < \hat{K}p$ (3)

This implies that improvement in income distribution requires that the growth rates of return on investment be less than the growth rates of capital productivity. Otherwise, the profit share increases, producing an even higher level of income inequality.

At the same time, capital productivity can be expressed as:

$$K_p \equiv \frac{y}{k} \equiv (\frac{y}{L})(\frac{L}{k}) \equiv L_p \qquad (4)$$

or

$$\hat{K}_p \equiv \hat{L}_p - \hat{\lambda} \qquad (5)$$

Substituting equation (5) in equation (3) provides an alternative expression of the redistribution condition:

$$\hat{r} < \hat{L_p} - \hat{\lambda} \qquad (6)$$

Expression 6 implies that, in order for the profit share to decline, the growth rates of the profit rate need to be less than the differential growth rates of labour productivity and the capital-labour ratio.

Equations 3 and 6 are alternative ways of expressing the redistributive condition.

B. Employment Generation Condition

This section derives the basic condition that needs to prevail if the growth process is to be accompanied with a gradual decline in the unemployment rate.

Real output can be written as real labour productivity times employment:

$$y \equiv (\tfrac{y}{L})L \equiv L_p.L \qquad (7)$$

In growth form, equation 7 can be written as:

$$\hat{y} \equiv \hat{L_p} + \hat{L} \qquad (8)$$

which states that the real growth rate of the economy is equal to the sum of the labour productivity and the employment growth rates.

In order for the growth in employment to result in gradual reductions in the unemployment rate, it has to be greater than the growth rate of the labour force, where the labour force in a given year is equal to the sum of the employed and the unemployed within the working age population. Thus, declines in the unemployment rate can be observed when:

$$\hat{L} > \hat{LF} \qquad (9)$$

Substituting 9 in equation 8 provides the basic condition under which the growth performance of an economy is expected to result in declines in the unemployment rate:

$$\hat{y} > \hat{L_p} + \hat{LF} \qquad (10)$$

A combination of equations 9 and 10 shows that the unemployment rate declines only when the real growth rates of the economy are greater than the sum of the growth rates of labour productivity and the labour force. This implies that, when the growth rates of the economy are less than the sum of the growth rates of labour productivity and the labour force, the unemployment rate increases.

Equation 3 (or its equivalent, equation 5) and equation 10 together define the underlying requirements if economic performance is to be redistributive and result in reductions in the unemployment rate.

Note: Comments and question can be sent to asghar.adelzadeh@undp.org

Technical note 3

Service Deprivation Index (SDI)

This measurement is designed to complement the current set of UNDP indicators used for this issue of the South African Human Development Report. Since human well-being partly depends on access to at least 'decent' basic services, the aim of this measure is to examine the number of decent basic services from which a household (thus persons in the household) is deprived of. This number may be regarded as the deprivation score of the household under consideration.

The relevant literature for the above deprivation measure is the literature on multi-dimensional poverty and social exclusion (Atkinson *et al* (2002), Atkinson (1998), Sen (1998)). According to Bourguignon and Chakravarty (2002), multi-dimensional poverty measures define a poverty threshold for each functioning, estimates the short-falls of the functioning quantities of different individuals from the threshold levels, and aggregates the shortfalls into an aggregate magnitude of poverty.

In this report we have adopted the approach by Chakravarty and D'Ambrosio (2003) to the measurement of deprivation. We have thus calculated the number of functioning (decent basic services) which a household is deprived of. This number is regarded as the deprivation score of the household (and the persons in the household) under consideration. The aggregate deprivation measure is then calculated as the real valued function of the deprivation scores of different households in the society. Formally, the above deprivation measures can be presented using Chakravarty and D'Ambrosio (2003):

Let $\mathbf{N}$ ($\mathbf{N}_0$) be the set of all positive integers and $\mathbf{R}$ be the set of real numbers. For all $n \in \mathrm{N}$, $\mathbf{D}^n$ is the n-Cartesian product of N_0 and 1^n is the n-coordinated vector of ones. For any society with a household population of size $n \in \mathrm{N}$, there is a finite nonempty set of functionings F relevant for social well-being. We assume that F is fixed so that cross population comparisons of service deprivation can be made in terms of elements of F. A household in an n-household society can be excluded from any subset of F, where $n \in \mathrm{N}$ is arbitrary. The degree of exclusion or deprivation of a household can be captured using the number of functionings which it is deprived of. For each functioning, we define a characteristic function, which takes on the value 1 or 0 accordingly as the household is deprived or not deprived the functioning. The deprivation score of a household is then given by the sum of integer characteristic functions.

An exclusion or deprivation profile in a society of n households is a vector $x = (x_1, ..., x_n)$, where $x_i \in \mathrm{N}_0$ is the deprivation score of household i, with trade-off between deprived and non-deprived functionings not allowed. For instance, a household's access to 'decent' housing cannot compensate for its lack of access to 'decent' refuse removal service. The set of deprivation profiles for an n-household population is D^n, $n \geq 1$. Thus, $x \in D^n$ for some $n \in \mathrm{N}$. The set of all possible exclusion profiles is $\mathrm{D} = \bigcup_{n \in \mathrm{N}} D^n$. A measure of service deprivation is a function $E : D \rightarrow R$. For any $n \in \mathrm{N}$, the restriction of E on D^n is given by E^n. For any $n \in \mathrm{N}$, $x \in D^n$, $E^n(x)$ is a measure of the extent to which different households are deprived of access to 'decent' basic services in the society, that is, the degree of deprivation suffered by all households in the society as a whole. For all $n \in N$, $x \in D^n$, let $S(x)$ be the set of households with positive deprivation scores, that is $S(x) = \{i, 1 \leq i \leq n | x_i > 0\}$. For any $n \in N$, $x \in D^n$, let q be the cardinality of $S(x)$, that is the number of households in $S(x)$. For any $n \in N$, $x \in D^n$, we write $\bar{x}$ for nonincreasingly ordered permutation of x, that is $\bar{x}_1 \geq \bar{x}_2 \geq \ldots \geq \bar{x}_n$.

The deprivation measure $E : D \rightarrow R$ satisfies the following postulates:

Normalisation, which means that the aggregate deprivation measure is zero if nobody is deprived. *Monotonicity*, which states that if the deprivation scores of a household increase, then social deprivation should increase. If a basic service deprivation measure satisfies normalisation and monotonicity conditions, it will take a positive value if at least one household has a positive deprivation score. *Nondecreasingness of marginal social exclusion* states that when considering two households where the deprivation score of the first is not lower than that of the second, the change in the aggregate deprivation when the deprivation score of the former increases by one is at least as large as the corresponding change when the deprivation score of the latter increases by the same amount. It is clear that the normalisation and the nondecreasingness of marginal deprivation postulates capture the idea that deprivation is a relative phenomenon. *Subgroup decomposability* expresses aggregate deprivation in a society as a weighted average of subgroup exclusion levels, where the weights are population shares of the subgroups. $\frac{n_i}{n} E^{n_i}(x^i)$ is the contribution of subgroup i to total deprivation, i.e. the amount by which aggregate deprivation will decrease if deprivation in subgroup i is eliminated. *Population principle* states that if a deprivation profile is replicated several times, then the aggregate deprivation of the original and the replicated profiles are the same. Clearly, this postulate enables us to view deprivation in average terms, which is helpful for cross population comparisons. Finally, *Anonymity* implies that the deprivation measure is symmetric, i.e. any reordering of the deprivation scores leaves the deprivation level unchanged. This postulate is unavoidable as long as households are not distinguished by anything other than deprivation scores.

Following is the derivation of the class of service deprivation measures whose members satisfy the above conditions.

Let Φ be the class of all functions $f : \mathbf{N_0} \rightarrow \mathbf{R}$ such that $f(0) = 0$, f is increasing, and f has a nondecreasing marginal, that is:

$$f(x_i + 1) - f(x_i) \geq f(x_j + 1) - f(x_j) \tag{1}$$

where $x_i \geq x_j$. We then have a social deprivation measure $E : D \rightarrow R$ which satisfies above postulates *if and only if* for all $n \in N$, $x \in D^n$,

$$E^n(x) = \frac{1}{n} \sum_{1 \in S(x)} f(x_i) \tag{2}$$

where f is a member of Φ.

We can interpret f in (2) as the household deprivation function. An alternative way of writing the formula (2) is:

$$E^n(x) = \frac{H}{q} \sum_{1 \in S(x)} f(x_i) \tag{3}$$

where $H = \frac{q}{n}$ is the head-count measure of social deprivation, the proportion of households that is deprived of access to 'decent' basic services in the population.

In order to illustrate the general formula in (2), let $f \in \Phi$ be of the form $f(t) = t^{\delta}$, $\delta \geq 1$. Then the corresponding measure is:

$$E^n_{\delta}(x) = \frac{H}{q} \sum_{1 \in S(x)} f(x_i^{\delta}) \tag{4}$$

For any $\delta \geq 1$, E^n_{δ} satisfies all the postulates. As $\delta \rightarrow 0$, $E^n_{\delta} \rightarrow H$. The single parameter δ in (4) is a value judgment parameter. E^n_{δ} becomes more sensitive to the higher deprivation scores as δ increases from 2 to plus infinity. For a given $x \in D^n$ an increase in the value of δ does not decrease E^n_{δ}. For $\delta = 1$, E^n_{δ} becomes the average deprivation score of the society, that is, $A = \frac{1}{n} \sum_{1 \in S(x)} x_i$. For $\delta = 2$, we can rewrite E^n_{δ} as:

$$E^n_{\delta}(x) = \sigma^2(x) + A^2(x) \tag{5}$$

where σ^2 is the variance of the society deprivation scores. Given A, a reduction in σ^2 reduces the measure in (5). Such a situation may arise if a higher deprivation score decreases and a lower deprivation score increases by the same amount. Over social exclusion profiles with the same population size and the same average deprivation score, the ranking of the profiles generated by E^n_{δ} (for $\delta = 2$) is the same as that generated by σ^2.

Service deprivation index (SDI) for South Africa

This report has used the above deprivation measures E_{δ} in (4) to estimate measures of basic service deprivation in South Africa for 1996 and 2001, using the 100 per cent censuses for the two years. The unit of analysis used is the household. In each of the two censuses, whether a household is deprived of access to 'decent' basic services has been measured along the following domain: type of dwelling, source of water, toilet facilities, refuse or rubbish disposal, energy or fuel for lighting, energy or fuel for heating, and energy or fuel for cooking. More specifically,

- **Housing deprivation:** a household is considered deprived of a 'decent' housing if its dwelling type is: traditional dwelling/hut/structure made of traditional materials; informal dwelling/shack in backyard; informal dwelling/shack not in back yard e.g. in an informal/squatter settlement; or caravan or tent.
- **Source of water deprivation:** a household is considered deprived of access to a 'decent' source of water if it uses: piped water on community stand but with distance greater than 200 m from dwelling; borehole; spring/rain-water tank; dam/pool/stagnant water; river/stream; water vendor; or 'other'.
- **Toilet deprivation:** a household is considered deprived of access to a 'decent' toilet facility if it uses: chemical toilet; pit latrine with ventilation; pit latrine without ventilation; bucket latrine; or none.

- **Sanitation deprivation:** a household is considered deprived of access to 'decent' refuse or rubbish disposal facilities if its access is limited to: communal refuse dump; own refuse dump; or no rubbish disposal.
- **Electricity deprivation:** a household is considered deprived of a 'decent' source of energy or fuel for lighting if it uses: gas; paraffin; wood; coal; animal dung; or 'other'.
- **Heating deprivation:** a household is considered deprived of a 'decent' source of energy or fuel for heating if it uses: paraffin; wood; coal; animal dung; or 'other'.
- **Deprivation of access to energy for cooking:** a household is considered deprived of a 'decent' source of energy or fuel for cooking if it uses: paraffin; wood; coal; animal dung; or 'other'.

First E_δ for $\delta = 0, 1$, and 2 was calculated separately for the above seven indicators. A household's overall deprivation has been obtained by adding up its deprivations over the seven variables. Then, numerical estimates of service deprivation for South Africa for 1996 and 2001 were produced using variations of equation 4 under conditions of $\delta = 0, 1$, and 2. The results are reported in Table 26 of the data appendix in this report and in Chapters 2 and 5, Table 2.22 and Figures 2.16-2.18 and 5.1.

Note: Comments and question can be sent to asghar.adelzadeh@undp.org

Bibliography

Ackerman, Frank. 2000. 'The Distribution of Wealth and Power – Overview Essay.' In Frank Ackerman, Neva Goodwin, Laurie Dougherty, and Kevin Gallagher (eds). *The Political Economy of Inequality*. Washington D.C.: Island Press.

Adams, Cousins and Manona. 2000. 'Land Tenure and Economic Development in Rural South Africa: Constraints and Opportunities'. In B. Cousins (ed). *At the Crossroads: Land and Agrarian Reform in South Africa into the 21st Century*. Programme for Land and Agrarian Studies, School of Government, University of the Western Cape.

Adelzadeh, A. and V. Padayachee. 1994. 'The RDP White Paper: Reconstruction of a Development Vision'. *Transformation*. 25: 1–18.

Adelzadeh, A. 1996. 'From RDP to GEAR: A Gradual Embracing of Neo-liberalism in Economic Policy.' *Transformation (31)*. Originally published as *NIEP Occasional Paper Series 3*. August 1996.

Adelzadeh, A., C. Alvillar and C. Mather. 1998. *Poverty Elimination, Employment Creation and Sustainable Livelihoods in South Africa.* Report prepared for the United Nations Development Programme (UNDP), South Africa.

Adelzadeh, A. 1999. 'The Costs of Staying the Course.' *NGQO! NIEP Economic Bulletin*, 1(1): 1–5.

Adelzadeh, A, and K. Nicolaou. 2000a. 'Determinants of Employment in South Africa: A Sectoral Analysis.' *NIEP Research Report*. Johannesburg: National Institute for Economic Policy.

Adelzadeh, A. 2000b. 'Loosening the Breaks on Economic Growth'. *NGQO! NIEP Economic Bulletin*. 1(2).

Adelzadeh, A. 2001a. *NIEP social policy model: policy tool for fighting poverty in South Africa.* Project report presented to UNDP, National Institute for Economic Policy. Johannesburg.

Adelzadeh, A. 2001b. 'The Coal Sector within a Macroeconomic Model of South Africa: Growth and Employment Impacts of Scenarios for the Production Technique in the Coal Sector.' NIEP report produced for Miningtek as part of the Coaltech 2020 project.

Adelzadeh, A. 2003a. 'Measurement of poverty and deprivation in South Africa'. Background submission for the South Africa National Human Development Report 2003.

Adelzadeh, A. 2003b. 'Conceptual Framework for a Redistributive and Job Creating Growth Path in South Africa.' Background submission for the *South African National Human Development Report 2003*.

Alesina, A. and D. Rodrik. 1994. 'Distributive Policies and Economic Growth.' *Quarterly Journal of Economics*. 109(2): 465–490.

Aliber, M. 2001. *Study of the incidence and nature of chronic poverty and development policy in South Africa: An overview*. Programme for Land and Agrarian Studies, University of Western Cape in conjunction with Chronic Poverty Research Centre, University of Manchester. (Unpublished Paper).

Altman, M. 1995. 'Labour Regulation and Enterprises Strategies in the South African Clothing Industry.' *Regional Studies*. 30(4): 387–399.

Anand, S. and A. Sen. 1995. 'Gender Inequality in Human Development: Theories and Measurement'. *Occasional Paper*. 19. United Nations Development Programme, Human Development Report Office, New York.

ANC (African National Congress). 1992. *Ready to Govern*.

ANC (African National Congress.) 1994. *The Reconstruction & Development Programme: A Policy Framework*. Johannesburg: Umanyano Publications.

ANC (African National Congress). 1995. 'The Freedom Charter.' In Hassen Ebrahim. *The Soul of Nation – Constitution-making in South Africa*. Cape Town: Oxford University Press: 415–419.

ANC (African National Congress). 1997. *ANC Strategy and Tactics as adopted by the 50th National conference*. 1997. www.anc.org.za

Anderson, T.L. and D.T. Leal. 1999. 'Visions of the environment and rethinking the way we think'. In J.S. Dryzek and D. Scholsberg. *Debating the Earth: The Environmental Politics Reader.* Oxford: Oxford University Press.

Ashley, C. and D. Roe. 2002. 'Making tourism work for the poor: strategies and challenges in southern Africa.' *Development Southern Africa*. 19: 61–82.

Ashley, C. and Z. Ntshona. 2002. *Transforming Roles but not Reality? Private Sector and Community Involvement in Tourism and Forestry Development on the Wild Coast*.

Ashley, C., C. Boyd and H. Goodwin. 2000. 'Pro-poor Tourism: Putting Poverty at the Heart of the Tourism Agenda.' Natural Resources Perspectives No. 61. Overseas Development Institute, London. http://www.odi.org.uk/nrp/51.html

Ashley, C., D. Roe and H. Goodwin. 2001. 'Pro-Poor Tourism Strategies: Making Tourism Work for the Poor.' *Pro-Poor Tourism Report No. 1*. Overseas Development Institute, London.

Ashley, C., H. Goodwin, and D. Roe. 2001. 'Pro-Poor Strategies: Expanding Opportunities for the Poor.' *Pro-Poor Tourism Briefing No. 1*. Overseas Development Institute, London.

Atkinson, A.B. 1998. 'Social exclusion, poverty and unemployment.' CASE/4. Centre for Analysis of Social Exclusion. London School of Economics, 1–2.

Atkinson, A.B., B. Cantillon, E. Marlier, and B. Nolan. 2002. *Social Indicators: The EU and Social Inclusion*. Oxford.

Bangasser, P.E. 2000. 'The ILO and the informal sector: an institutional history.' *Employment paper 2000/9*. International Labour Organization, Geneva.

Bannister, P. 2001. 'South Africa: the rebirth of a brand.' *Journal of Southern African Tourism*, 1 (2): 14-15.

Barchiesi, F. 2001. *Fiscal Discipline And Worker Response: The Restructuring of Johannesburg's Solid Waste Management.* Municipal Services Project. Queen's University, Kingston, Canada.

Bardhan, K. and S. Klasen. 1999. 'UNDP's Gender-Related Indices: A Critical Review'. *World Development*. Vol. 27, no. 6.

Bardhan, P.K., S. Bowles and H. Gintis. 2000. 'Wealth Inequality, Wealth Constraints and Economic Performance.' In A.B. Atikinson and F. Bourgiugnon (eds). *Handbook of Income Distribution*. New York: Elvesier Press.

Barkin, J. 2000. 'The economic impacts of eco-tourism: conflicts and solutions in Highland Mexico.' In P.M. Godde, M. F. Price and F.M. Zimmermann (eds). *Tourism and Development in Mountain Regions*. Wallingford: CABI Publishing: 157–171.

Baskin, Jeremy. 1996. *Against The Current – labour and economic policy in South Africa*. Johanesburg: Ravan Press.

Batley, Richard. 1996. 'Public-private relationships and performance in service provision?' In *Urban Studies.* Vol. 33, no. 4-5: 723- 751.

Behrman, J.R., N. Birdsall and M. Szekely. 2000. 'Economic Reform and Wage Differentials in Latin America.' *Research Working Paper 435*. Inter-American Development Bank, Washington D.C.

Beinart, W and P. Coates. 1995. *Environment and History: The Taming of Nature in the USA and South Africa.* London: Routledge.

Bell, T. and N. Cataneo. 1996. 'Foreign Trade and Employment in South African Manufacturing.' *Occasional Report No 4*, Employment and Training Department, International Labour Organization.

Bernstein, H. 1992. 'Agricultural Modernization in Sub-Saharan Africa'. *Journal of Peasant Studies.*

Berry, A., M. von Blottnitz, R. Cassim, A. Kesper, B. Rajaratnam and D.E. van Seventer. 2002. *The economics of SMMEs in South Africa*. Unpublished draft paper for Trade and Industrial Policy Secretariat, Johannesburg. www.tips.org.za

BESG (Built Environment Support Group). 1999. *Towards the Right to Adequate Housing*. Durban.

Best. M. 1990. *New Competition.* Oxford: Blackwell.

Bethlehem, L. and M. Goldblatt, M. 1997. *The Bottom Line: Industry and the Environment in South Africa.* Cape Town: UCT Press.

Bhalla, S. 2002. *Imagine There's No Country: Poverty, Inequality and Growth in the Era of Globalisation.* Institute for International Economics, Washington D.C.

Bond, P. 1996. 'The making of South Africa's macroeconomic compromise'. In E. Maganya (ed.). *Developing Strategies in South Africa.* Johannesburg: IFAA.

Bonti-Ankomah, Samuel. 2002. *Food Security in South Africa and Implications for Sustainable Development*. Report prepared for the UNDP, South Africa.

Bourguignon, F. 2001. 'Crime as a Social Cost of Poverty and Inequality: A Review Focusing on Developing Countries.' In S. Yusuf, S. Evenett and W. Wu. (eds.). *Facts of Globalization: International and Local Dimensions of Development.* Washington D.C.: World Bank.

Bourguignon, F. and S.R. Charkravarty. 2002. 'The measurement of multidimensional poverty.' *Journal of Economic Inequality*. Forthcoming.

Brenthurst. 2003. *Our Unique Challenge*. Johannesburg, August 7.

Bromley. 1995. 'Informality, de Soto Style: From Concept to Policy.' In C. Rakowski (ed). *Contrapunto: The Informal Sector Debate in Latin*

America. Albany: State University Press of New York.

Budlender, D. 2000. 'Human development'. In: J. May (ed.) *Poverty and Inequality in Southern Africa: Meeting the Challenge*. Cape Town: David Philip.

Camay, P. and A. J. Gordon. 1999. *Study on the history of the non-profit sector in South Africa.* Prepared for the John Hopkins non-profit sector project. Johannesburg: The Co-operative for Research and Education.

Carter, M., J. May and V. Padayachee. 2002. *Sweetening the bitter fruit of liberty: Markets and poverty reduction in post-apartheid South Africa*. Report prepared for the UNDP, South Africa.

Cater, E. 1994. 'Ecotourism in the Third World – problems and prospects for sustainability.' in E. Cater and G. Lowman (eds). *Ecotourism: a Sustainable Option?* Chichester: John Wiley: 69–86.

Cattarinich, X. 2001. 'Pro-Poor Tourism Initiatives in Developing Countries: Analysis of Secondary Case Studies.' In *Pro-Poor Tourism Working Paper 8*. Overseas Development Institute, London.

Chakravarty, S.R. and C. D'Ambrosio. 2003. 'The measurement of social exclusion.' Paper presented at WIDER's conference on Inequality, Poverty and Human Well-Being, Helsinki, Finland, 30–31 May.

Claassens, A. 2000. 'Land Rights and Local Decision Making Processes: Proposals for Tenure Reform'. In B. Cousins (ed). *At the Crossroads: Land and Agrarian Reform in South Africa into the 21st Century. Programme for Land and Agrarian Studies*. School of Government, University of the Western Cape.

Clawson, D., A. Neustadt and D. Scott. 1992. 'Business unity, business power.' In D. Clawson et al (ed.). *Money Talks: Corporate PACs and Political Influence.* New York: Basic Books.

Cock, J. and E. Kock. 1991. *Going Green: People, Politics and the Environment in South Africa.* Cape Town: Oxford University Press.

Committee of Inquiry into a Comprehensive System of Social Security for South Africa. 2002. *Transforming the Present – Protecting the future.* March.

Congress of South African Trade Unions (COSATU). 1996. *Social Equity and Job Creation: the key to a stable future*. Johannesburg.

Congress of South African Trade Unions (COSATU). 2000. *Accelerating Transformation: Cosatu's engagement with policy and legislative processes during SA's First Term of Democratic Governance*. www.cosatu.org.za

Cook. 2002. 'Land claims "to be finalised within next three years"'. *Business Day*, 19 February: 2.

Cooper, D., S. Fakir and D. Bromley. 1996. 'Land reform and management of environmental impact'. In J. van Zyl, J. Kirsten and H. Binswanger (eds). *Agricultural Land Reform in South Africa: Policies, markets and mechanisms*. Cape Town: Oxford University Press.

Cornia, G.A. and F. Stewart. 1995. 'Two errors of targeting'. In D. van de Walle and K. Nead (eds.). *Public Spending and the Poor: Theory and Evidence*. Baltimore and London: John Hopkins University Press.

Cornia, G. and S. Kiiski. 2001. 'Trends in Income Distribution in the Post-World War II Period: Evidence and Interpretation.' In *UNU/WIDER Discussion Paper 2001*. No. 89. United Nations University, World Institute for Development Economic Research, Helsinki.

Cornia, G.A. 2002. 'Poverty and inequality in the era of liberalization and globalization.' In H. Van Ginkel *et al*. *Human Development and the Environment: Challenges for the United Nations in the New Millenium.* New York: United Nations University Press.

Cousins B. (ed.) 2000. *At the Crossroads. Land and Agrarian Reform in South Africa into the 21st Century.* Programme for Land and Agrarian Studies, University of the Western Cape and National Land Committee: 248-253.

Cronin, Jeremy. 2002. Interview by Dr Helena Sheehan. 24 January. www.comms.dcu.ie/sheehanh/za/cronin02.htm

Cross, C. and D. Hornby. 2002. *Opportunities and Obstacles to Women's Land Access in South Africa*. Research report for the Promoting Women's Access to Land Programme. Pretoria/Johannesburg: DLA/NLC.

CSIR (Council for Scientific and Industrial Research). 2001. *A Shared Understanding of Infrastructure*. CSIR working document. Pretoria.

Daly. H. 1996. *Beyond growth: the economics of sustainable development*. Boston: Beacon Press.

Daly, H.E. 1999. 'Sustainable growth: an impossibility theorem'. In J.S. Dryzek and D. Scholsberg. *Debating the Earth: The Environmental Politics Reader.* Oxford: Oxford University Press.

Dasgupta, P. 1993. *An Inquiry into Well-being and Destitution*. Oxford: Clarendon Press.

Deaton, A. 1998. *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy*. World Bank.

Deedat, H. and E. Cottle. 2002. 'Cost recovery and prepaid water meters: a case study in Madlebe, KZN.' In D. McDonald *et al* (eds.).

Deininger, K. 1998. *Making negotiated land reform work: Initial experience from Colombia, Brazil, and South Africa* (mimeo).

Deininger, K. and L. Squire, 1998. 'New Ways of Looking at Old Issues: Inequality and Growth.' *Journal of Development Economics*, 57: 2.

Department of Agriculture and Land Affairs. 1997. *White Paper on South African Land Policy*. Pretoria.

Department of Agriculture and Land Affairs. 2000. *Integrated Sustainable Rural Development Strategy*. Pretoria.

Department of Agriculture and Land Affairs. 2001. *White Paper on Spatial Planning and Land Use Management*. Pretoria.

Department of Education and Department of Labour. 2002. *Report of the Study Team on the Implementation of the National Qualifications Framework*. Pretoria: 131.

Department of Education. 2000–1. *Annual Report*. Pretoria.

Department of Education. 2001a. *Report on the School Register of Needs 2000 Survey*. Pretoria.

Department of Education. 2001b. *Education in South Africa: Achievements since 1994*. Pretoria.

Department of Education. 2001c. *National Plan on Higher Education (NPHE)*. Pretoria.

Department of Environmental Affairs and Tourism. 1999a. *National State of the Environment Report for South Africa*. www.ngo.grida.no/soesa

Department of Environmental Affairs and Tourism, Marine and Coastal Management. 1999b. *Proceedings of a National Workshop on Planning for Sustainable Development of Mariculture in South Africa*. Edited by J. Stenton-Dozey. 26–28 October.

Department of Environmental Affairs and Tourism. 2000a. *Transforming the South African Tourism Industry*. (Unpublished report). Pretoria: DEAT.

Department of Environmental Affairs and Tourism. 2000b. *National State of Environment Report*. Pretoria.

Department of Environmental Affairs and Tourism. 2000c. *White Paper on Integrated Pollution and Waste Management in South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Management and Remediation*. Pretoria.

Department of Environmental Affairs & Tourism. 2001. *Stability, Transformation and Growth 2001-2004: The Second Draft Discussion Document for the Fisheries Management Plan to Improve the Process of Allocating Rights*. Fisheries Management Directorate, Marine and Coastal Management Rights Allocation Unit.

Department of Finance. 1996. *Growth, Employment and Redistribution: a macroeconomic strategy*. June.

Department of Finance. 2000. *Intergovernmental Fiscal Review*. http://www.finance.gov.za

Department of Finance. 2001a. *Intergovernmental Fiscal Review*. http://www.finance.gov.za

Department of Finance. 2001b. *Strategic Framework: A Strategic Framework for Delivering Public Services through Public-Private Partnerships*. PPP Manual, National Treasury.

Department of Finance. 2002a. *Budget 2002: Estimates of National Expenditure*. Pretoria. http://www.finance.gov.za

Department of Finance. 2002b. *Public-Private Partnerships: National and Provincial PPP Projects in Progress*. PPP Unit, National Treasury.

Department of Health. 2002. *Inquiry into the various Social Security Aspects of the South African Health System*. 14 May. Pretoria.

Department of Housing. 2003. *ABC of housing statistics*. Pretoria. June.

Department of Land Affairs. 2000. *Integrated sustainable rural development strategy*. DLA, Pretoria.

Department of Land Affairs. 2002. *Restitution statistics as at 31 January 2002*. land.pwv.gov.za/restitution/updated stats.html

Department of Minerals and Energy. 2001. *Renewable energies in South Africa*. Pretoria: Department of Minerals and Energy.

Department of Minerals and Energy. 2002. *Draft White Paper on the Promotion of Renewable Energy and Clean Energy Development.* Pretoria: Department of Minerals and Energy.

DFID. 1999. *Tourism and Poverty Alleviation*. Department for International Development. Government of the United Kingdom, London.

Dollar, D. and A. Kraay. 2002. 'Spreading the Wealth.' *Foreign Affairs* 81(1).

Domhoff, G.W. 1998. 'The Corporate Community and the Upper Class.' In G.W. Domhoff (ed.). *Who Rules America?* Mountain View, California: Mayfield Publishing.

Domoto, A. 2002. 'International environmental governance – its impact on social and human development'. In H. Van Ginkel *et al. Human Development and the Environment: Challenges for the United Nations in the New Millenium.* New York: United Nations University Press.

Dorfling, T. 2001. *Enhancing small, medium and micro enterprise support provision: the case of Port Elizabeth, South Africa*. Unpublished MA dissertation, University of the Witwatersrand, Johannesburg.

Dorrington, R.E., D. Bradshaw and D. Budlender. 2002. *HIV/AIDS profile of the provinces of South Africa – indicators for 2002.* Centre for Actuarial Research, Medical Research Council and the Actuarial Society of South Africa.

Dosi, G., C. Freeman, R. Nelson, G. Silverberg and L. Soete. 1988. *Technical Change and Economic Theory.* London: Printer Publishers.

Drèze. J. and A. Sen. 1989. *Hunger and Public Action*. London: Clarendon Press.

Driver, A., E. Wood, N. Segal and M. Herrington. 2001. *Global Entrepreneurship Monitor: 2001 South African Executive Report*. Graduate School of Business, University of Cape Town, Cape Town.

Du Toit, J. 2002. *The Structure of the South African Economy.* The SA Financial Sector Forum, Rivonia.

Ebony Consulting International. 2001. *The impact of HIV/AIDS on high growth SMMEs*. Unpublished report for the Joint Center for Political and Economic Studies.

Ebrahim, H. 1998. *The Soul of a Nation: Constitution-making in South Africa.* Cape Town: Oxford University Press.

Elliffe, S. 1999. *Guidelines for the release/development of dormant state or community assets for ecotourism development in the context of community involvement, land issues and environmental requirements*. Unpublished paper presented at the Community Public Private Partnerships Conference, Johannesburg, 16–18 November.

Elliffe, S., P. Rutsch, and G. de Beer. 1998. 'Allocating Community Benefits: Institutional Options in Support of Empo-Tourism Models.' *Working Paper 14*. Development Policy Research Unit, University of Cape Town.

Environmental & Development Agency (EDA) Trust. 1999. 'Land Management and Tenure Reform in Communal Areas.' *EDA Trust Policy Discussion Paper*. Johannesburg: EDA

Epstein, G. and M. Maximov. 1999. 'A Critique of Inflation Targeting and An Alternative Proposal for the Reserve Bank of South Africa'. *NIEP Occasional Paper Series.* Johannesburg: National Institute for Economic Policy.

Fajnzylber, P., D. Lederman, and N. Loayza. 1998. 'What Causes Violent Crime?' World Bank, Latin America, and the Caribbean Region. Office of the Chief Economist, Washington D.C.

Fakude, G. 2000. *Informalisation in KwaZulu-Natal's Clothing Sector*. Research Report. Industrial Restructuring Project, School of Development Studies, University of Natal, Durban.

Fallon, P. and L.A. de Silva. 1994. *Economic Performance and Policies*. The World Bank.

Fallon, P. and R. Lucas. 1997. 'South African labour markets adjustment and inequalities'. *Discussion Paper 12.* The World Bank Southern Africa Department.

Fennell, D.A. 1999. *Ecotourism: An Introduction*. London: Routledge.

Fine, B. and V. Padayachee. 2000. 'A Sustainable Growth Path?' In S. Friedman (ed). *South African Review*, 8. Forthcoming.

Fine, B. and Z. Rustomjee. 1997. *South Africa's Political Economy: From Mineral-Energy Complex to Industrialisation?* London: Hurst.

Frankel, J. and M. Chinn. 1995. 'The Stabilizing properties of a nominal GNP rule'. *Journal of Money, Credit, and Banking*. Vol. 27: 318-334.

Freeman, R. and L. Katz. 2000. 'Rising Wage Inequality: The U.S. versus Other Advanced Countries.' In F. Ackerman, N. Goodwin, L. Dougherty, and K. Gallagher (eds). *The Political Economy of Inequality*. Washington D.C.: Island Press.

Garland, G., T. Hoffman, and S. Todd. 1999. 'Chapter 6: Soil Degradation.' In T. Hoffman, S. Todd, Z. Ntshona and Turner. *Land Degradation in South Africa*. Department of Environmental Affairs and Tourism: Pretoria.

[GEAR] Department of Finance. 1996. *Growth, Employment and Redistribution: a macroeconomic strategy*. June.

Gelb, Stephen. 1991. *South Africa's Economic Crisis*. Cape Town: David Philip Publishers.

Glavovic, B, B. Manaka, M. Sowman, S. Kuiper, B. Cousins, M. Hara, E. Russell, L. Mquakama and M. McKenzie. 2002. *Sustainable Coastal Livelihoods Study, 2: Background Document to Sustainable Coastal Livelihoods Study*. Unpublished report prepared for Directorate: Marine and Coastal Management, Department of Environmental Affairs and Tourism, Cape Town.

Glavovic, B.C., J. Browne and M. Coetzee. 2001. 'Integrated coastal management in South Africa.' In *SEACAM Country Report for South Africa*. Cape Town: Common Ground Consulting, Cape Town.

Glazewski, J. 1999. 'Environmental justice and the new South African democratic legal order.' In J. Glazewski and G. Bradfield (eds). *Environmental Justice and the Legal Process*. Cape Town: Juta.

Glyn, A. 1998. 'Internal and External Constraints on Egalitarian Policies.' In Dean Baker, Gerald Epstein and Robert Pollin (eds). *Globalization* *and Progressive Economic Policy*. Cambridge: Cambridge University Press.

Goodwin, H. 2001. *Contribution of ecotourism to sustainable development in Africa*. Paper presented at the Seminar on Planning, Development and Management of Ecotourism in Africa. Maputo, 5–6 March.

Goodwin, H., I. Kent, K. Parker, and M. Walpole. 1997. *Conservation and Sustainable Development.* Four reports on Tourism. Department for International Development, London.

Government of South Africa. 1996. *Growth Reconstruction and Development*. Pretoria.

Government of South Africa. 2002. *South Africa Survey*.

Graham, S. and S. Marvin. 1996. 'Re-defining universal service in a liberalised environment' In C. Hicks and G. Main (eds.). *Universal Service Obligations: A Policy Review* London: Centre for Regulated Industries: 35-56.

Graham, S. and S. Marvin. 1996. *Telecommunications and the City : Electronic Spaces, Urban Places.* London: Routledge. (first chapter published in *Net Business Daily*, November, 1996). Extracted in R. LeGates and F. Stout (2000). *The City Reader*, (Second Edition). London: Routledge: 568-578 and M. Miles, T. Hall and I. Borden (eds.). 2000. *The City Cultures Reader*. London: Routledge: 134-140.

Grant, W. 2001. *Effects of HIV/AIDS on micro and small enterprises – lessons from Malawi*. Unpublished paper. Ebony Consulting International, Johannesburg.

Green, J.M. and N. Sibisi. 2001. 'Pro-poor tourism in Maphephetheni, Kwazulu-Natal.' Paper presented at the *International Conference on Tourism as a Catalyst for Community-Based Development*. Centre for AfrikaTourism. Pretoria, 1–3 October.

Griffin, K. 2001. 'Macroeconomic Reform and Employment: An Investment-Led Strategy of Structural Adjustment in Sub-Saharan Africa'. In Terry McKinley (ed.). *Macroeconomic Policies, Growth and Poverty Reduction*. London: Palgrave.

Griffin, K. and A. Ickowitz. 2001. 'The Distribution of Wealth and the Pace of Development.' In Terry McKinley (ed.). *Macroeconomic Policies, Growth and Poverty Reduction.* London: Palgrave.

Hall, R.E. and N.G. Mankiw. 1994. 'Nominal income targeting'. In N.G. Mankiw (ed.). *Monetary Policy*. University of Chicago Press.

Hara. 2001. *Could co-management provide a solution to the problems of artisanal fisheries management on the Southeast Arm of Lake Malawi?* Unpublished PhD thesis. University of Western Cape, Cape Town.

Harris, L. and J.Michie. 1998. 'The effects of globalization on policy formation in South Africa.' In D. Baker, J. Epstein and R. Pollin (eds.). *Globalization and Progressive Economic Policy*. Cambridge: Cambridge University Press.

Harrison, B. and B. Bluestone. 1990. 'Wage Polarisation in the U.S. and the "Flexibility" Debate.' In F. Ackerman, N. Goodwin, L. Dougherty, and K. Gallagher (eds). *The Political Economy of Inequality*. Washington D.C.: Island Press.

Hauck, M. and M. Sowman. 2001. 'Coastal and fisheries co-management in South Africa: an overview and analysis.' *Marine Policy* 25(3): 173–185.

Health Systems Trust. 2000. *South African Health Review*.

Hemmati, M. (ed). 1999. *Gender and Tourism: Women's Employment and Participation in Tourism*. United Nations Environment and Development UK Committee, London.

Hersoug and Holm. 2000. 'Change without redistribution: an institutional perspective on South Africa's new fishery policy.' In *Marine Policy*, 24: 221–231.

[HIV] Dorrington, R.E., D. Bradshaw and D. Budlender. 2002. *HIV/AIDS profile of the provinces of South Africa – indicators for 2002.* Centre for Actuarial Research, Medical Research Council and the Actuarial Society of South Africa.

Hoffman, T. and A. Ashwell. 2001. *Nature Divided: Land Degradation in South Africa*. Cape Town: University of Cape Town Press.

Hoffman, T. and S. Todd. 1999. 'Chapter 7: Vegetation degradation.' In *Land Degradation in South Africa*. T. Hoffman, S. Todd, Z. Ntshona and S. Turner. Pretoria: Department of Environmental Affairs and Tourism.

International Labour Organization. 1999. *ILO Report on Social Impact of Globalisation*. Geneva: ILO.

International Monetary Fund. 1995. 'South Africa – selected economic issues'. *IMF Staff Country Report*, No. 95/21. March.

International Monetary Fund. 2002. *World Economic Outlook*. Washington, DC.

International Union for the Conservation of Nature. 1980. *World Conservation Strategy: Living Resource Conservation for Sustainable Development*. Gland.

Jansen, J. 2002. *The sustainability of education reforms in South Africa: a critical assessment 1994-2002.* Report prepared for the United Nations Development Programme.

Jansen van Veuren, E. 2001a. 'Transforming cultural villages in South Africa.' *South African Geographical Journal*, 83. 137–148.

Jansen van Veuren, E. 2001b. 'Capitalising on indigenous cultures: cultural village tourism in a post-apartheid context.' Paper presented at the *International Conference on Tourism as a Catalyst for Community-Based Development*. Centre for AfrikaTourism, Pretoria. 1–3 October.

Jansen van Veuren, E. 2002. *The developmental impact of cultural villages in South Africa*. Unpublished MA Dissertation. University of the Witwatersrand, Johannesburg.

Johannesburg Water Report. 2002. *Affordability Survey Results, Ivory Park project, Midrand.*

Kahn, M.J. 1996. 'Five Years Gone: A Case Study of Education Policy Implementation in the Transition to Democracy in South Africa.' *International Journal of Educational Development*, 16(3): 281–289.

Kaiser Family Foundation. 2002. *Hitting home: how households cope with the impact of the HIV/AIDS epidemic.* A survey of households affected by HIV/AIDS in South Africa.

Kaldor, N. 1960. *Essays on Economic Stability and Growth.* Duckworth, Free Press.

Kanbur R. and N. Lustig. 1999. 'Why Is Inequality Back on the Agenda?' Paper presented at the Annual World Bank Conference on Development Economics, 28 April, Washington D.C..

Karuri, Geci, Dennis Macozoma and Lucy Chege. 2002. *Sustainability and Social Infrastructure Delivery in South Africa.* Report produced for the UNDP South Africa.

Kenny, B. and E. Webster 1999. 'Eroding the Core: Flexibility and the Re-Segmentation of the South African Labour Market.' *Critical Sociology*, 24(3).

Kepe, Thembela. 1997. *Environmental entitlements in Mkambati: Livelihoods Social institutions and environmental change on the Wild Coast of the Eastern Cape.*

Kepe, Thembela. 1998. *The problem of defining 'community': Challenges for the land reform programme in rural South Africa*.

Kesper, A. 2001. 'Making a living in the city: success and failure of small enterprises in the Johannesburg inner city.' In *Africa Insight*, 31: 50–58.

Keynes, J.M. 1936. *The General Theory of Employment, Interest, and Money*. First Harbinger Edition, 1964. New York: Harcourt, Brace and World.

Khan, M.M. 1997. 'Tourism development and dependency theory: mass tourism vs. ecotourism.' *Annals of Tourism Research*, 24: 988–991.

Khosa, M. 2002. *Empowerment Through Service Delivery and the Sustainable Development Challenge in South Africa*. Report prepared for the UNDP South Africa.

Kirsten, J.H. and K. Naicker. 2000. 'Nature-based tourism on communal land: the Mavhulani experience.' *Development Southern Africa*, 17: 135–148.

Korten, D.C. 1995. *When Corporations Rule the World*. London: Earthscan Publications Ltd.

Korzeniewicz, P. and T. Moran. 1997. 'World Economic Trends in the Distribution of Income, 1965–1992.' *American Journal of Sociology*. Vol. 102, no. 4.

Kuznets, S. 1955. 'Economic Growth and Income Inequality.' *American Economic Review* 45: 1–28.

Laurie, N. and S. Marvin. 1999. 'An Emerging Logic of Urban Water Management in Cochabamba, Bolivia.' *Urban Studies*.

Lahiff, E. 2001. 'Land Reform in South Africa: is it meeting the challenge?' In *PLAAS Debating Land Reform and Rural Development Policy Brief 1*. September 2001.

Landau, R. and N Rosenburg (eds.). 1986. *The Positive Sum Strategy*. Washington D.C.: National Academy Press.

Leballo. 2000. *Study of Best-practice in Community-based Tourism Initiatives in South Africa.* Unpublished paper prepared for the Land and Agriculture Policy Centre. Johannesburg.

Leibbrandt, M., I. Woolard and H. Bhorat. 2001. 'Understanding contemporary household inequality in South Africa.' In H. Bhorat, M. Leibbrandt, M. Maziya, S. van der Berg and I. Woolard. *Fighting poverty: Labour Markets and Inequality in South Africa*. Cape Town: University of Cape Town Press.

Lewis, P. and L. Eldring. 2002. *Underemployment in the South African labour market – dimensions and significance for development*. Report prepared by Fafo for the UNDP South Africa.

Lipietz, A. 1995. 'Enclosing the global commons: global environmental negotiations in a North-South conflictual approach.' In. V. Bhaskar and A. Glyn (eds.) *The North the South and the Environment: Ecological constraints and the global environment*. London: Earthscan.

Lindbeck, A. and D.J. Snower. 1989. *The Insider-Outsider Theory of Employment and Underemployment*. Cambridge, MA: MIT Press.

Lipton, M. 1996. 'Rural Reforms and Rural Livelihoods: The Contexts of International Experience.' In M. Lipton, M. de Klerk and M. Lipton (eds). *Land, Labour and Livelihoods in Rural South Africa, 1. Western Cape*. Durban: Indicator Press.

Loewenson, R. and A. Whiteside. 2001. *HIV/AIDS implications for poverty reduction.* UNDP Background Policy Paper for the UN General Assembly. June.

Loftus, A.J. and D.A. McDonald. 2001. 'Of Liquid Dreams: A Political Ecology of Water Privatization in Buenos Aires.' *Environment and Urbanization*. Vol. 13(2): 179-199.

Luckey, P. 2002. 'Workplace environmental justice: trade unions and the struggle for an environmental platform.' In D. McDonald (ed.). *Environmental Justice in South Africa*. Cape Town: UCT press.

Lund, F. 1998. 'Women Street Traders in Urban South Africa: A Synthesis of Selected Research Findings.' In *CSDS Research Report 15*. University of Natal, Durban. http://www.nu.ac.za/csds/.

Lund, F. and S. Srinivas. 2000. *Learning from Experience: A Gendered Approach to Social Protection for Workers in the Informal Economy*. Geneva: International Labour Organization. http://www.wiego.org

Lundvall, B.-Å. 1992. *National Systems of Innovation - Towards a Theory of Innovation and Interactive Learning.* London: Pinter Publishers.

Mabin. 2002. 'Local Government in the Emerging National Planning Context.' In Parnell *et al* (eds). *Democratising Local Government: The South African Experiment*. Cape Town: University of Cape Town.

MacNeill, J., P. Winsemius and T. Yakushiji. 1991. *Beyond Interdependence. The Meshing of the World's Economy and the Earth's Ecology*. New York: Oxford University Press.

Macroeconomic Research Group (MERG). 1993. *Making Democracy Work: A framework for macroeconomic policy in South Africa*. Bellville, Cape Town: CDS Publication

Maddison, A. 2001. *The World Economy: A Millennial Perspective.* Organisation for Economic Co-operation and Development, Paris.

Mafisa. 2001. *Developing tourism and conservation skills for economic sustainability in small businesses and tourism enterprises through trans-frontier conservation areas, national parks and provincial conservation authorities*. Unpublished discussion document for Theta Workshop, 9–10 August.

Mahony, K. and J. van Zyl. 2001. 'Practical Strategies for Pro-Poor Tourism: Case Studies of Makuleke and Manyeleti Tourism Initiatives'. In *Pro-Poor Tourism Working Paper 2*. Overseas Development Institute, London.

Manning, C. 1996. *Market access for small and medium-sized producers in South Africa: the case of the furniture industry*. Unpublished Ph.D. dissertation. University of Sussex, Brighton.

Marais, Hein. 1998. *South Africa: Limits to Challenge – the Political Economy of Transformation*. Cape Town: University of Cape Town Press. 1st edition.

Marais, Hein. 2000. *South Africa: Limits to Challenge – the Political Economy of Transformation*. Cape Town: University of Cape Town Press. 2nd edition.

Marvin, S., S. Graham and S. Guy. 1999. 'Cities, regions and privatized utilities.' *Progress in Planning*. Vol. 51 (2): 91-169.

Maseko, S.S. 2001. *From Pavement Entrepreneurs to Stock Exchange Capitalists: The Case of South African Black Business Class*. Ph.D. Dissertation submitted to the School of Government, University of Western Cape.

May, J., I. Woolard and S. Klasen. 2000a. 'The nature and measurement of poverty and inequality.' In J. May (ed). *Poverty and Inequality in South Africa: Meeting the Challenge*. Cape Town and London: David Phillip and Zed Press 19–50.

Mayoral-Phillips, A.J. 2001. 'Community-based tourism development in Southern Africa: rhetoric or reality?' Paper presented at the *International Conference on Tourism as a Catalyst for Community-Based Development*. Centre for AfrikaTourism, Pretoria, 1–3 October.

Mbeki, T. 1998. *Two-Nations speech*. National Assembly, May.

McCoy. 2000. 'Restructuring the health services of South Africa.' In M.M. Khosa (ed). *Infrastructure Mandate for Change*. Pretoria: HSRC Publishers 142–159.

McDonald, D. 2002. 'What is environmental justice?' In D. McDonald (ed.). *Environmental Justice in South Africa*. Cape Town: UCT Press.

McDonald, D., and J. Pape. 2002. *Cost Recovery and the Crisis of Service Delivery in South Africa*. Johannesburg, South Africa, Rural Development Services Network.

McKinley, T. 2000. *Macroeconomic Policies, Growth and Poverty Reduction.* London: Palgrave.

McMichael, P. 1996a. 'Globalisation: myths and realities.' *Rural Sociology*. 61(1): 25-55.

McMichael, P. 1996b. *Development and Social Change*. California: Pine Forge Press.

Mead, D. 1999. 'MSEs tackle both poverty and growth (but in different proportions).' In K. King and S. McGrath (eds). *Enterprise in Africa: Between Poverty and Growth*. London: Intermediate Technology Publications 61–70.

Medical Research Council. 2002. *Health Review 2002*. Pretoria.

MetroPlan 2000 (Metropolitan Area Planning Council, 1991).

Mhone. G. 2002. *Sustainable Development and the Labour Market in South Africa.* Report prepared for the UNDP South Africa.

Michie, J. and V. Padayachee. 1997. *The Political Economy of South Africa's Transition: policy perspectives in the late 1990s*. London: Dryden Press.

Milanovic, B. 2002. 'True World Income Distribution, 1988 and 1993: First Calculation Based on Household Surveys Alone.' In *Economic Journal.* Vol. 112 (476).

Ministry for Agriculture and Land Affairs. 2001. *Land Redistribution for Agricultural Development: A Sub-Programme of the Land Redistribution Programme.* Pretoria.

Ministry of Education. 2002. *Fifth Report on the Provinces to the President from the Minister of Education Professor Kader Asmal, MP.*

Mitchell, W.C. and R. Simons. 1999. 'Political pursuit of private gain: environmental goods.' In J.S. Dryzek and D. Scholsberg. *Debating the Earth: The Environmental Politics Reader.* Oxford: Oxford University Press.

Mlambo, P. 2000. *Determinants of Poverty in South Africa*. Masters Thesis. University of the Witwatersrand, Johannesburg.

Mlambo, P. 2001. 'Determining Absolute Poverty Lines for South Africa'. NIEP Report submitted to the Committee of Inquiry into a Comprehensive System of Social Security for South Africa.

Monterrey Consensus. 2002. *Final outcome document adopted by acclamation at the Summit Segment of the International Conference on Financing for Development on 22 March 2002 in Monterrey, Mexico*.

Mosha, A.C. 2001. *Africa's Future: Africa's cities must be transformed if the continent is to keep pace with the rest of the developing world.* Forum for Applied Research and Public Policy. Summer.

Mowforth, M. and I. Munt. 1998. *Tourism and Sustainability: New Tourism in the Third World*. London: Routledge.

Munslow, B., P. Fitzgerald and A. McLennan. 1997. 'Sustainable Development: Visions and Realities.' In P. Fitzgerald, A. McLennan and B. Munslow (eds). *Managing Sustainable Development in South Africa*. Second Edition. Cape Town: Oxford University Press.

Muradian, R. and J. Martinez-Alier. 2002. 'Globalisation and poverty: an ecological perspective.' *Heinrich Boll Foundation paper*. Berlin.

Napier, M. *et al*. 2002. *Special Integrated Presidential Projects Evaluation*. Department of Housing Publication.

Narayan, D. 2000. *Voices from the poor: Can anyone hear us?* World Bank and Oxford University Press, Oxford and New York.

Narayan, D., R. Chambers, M.K. Shah and Petesch. 2000. *Voices of the Poor: Crying out for Change*. World Bank and Oxford University Press, Washington D.C. and New York.

National Land Committee-convened Technical Committee (NLTC). 2001. *Tenure reform for communal areas in the former 'homelands': secure land rights or continuing insecurity?* Position on communal tenure, 21 Nov (mimeo). NLC: Johannesburg.

Nelson, R. 1993. *The Rate and Direction of Inventive Activity*. Princeton University Press.

NEPAD 2001. *New Partnership for Africa's Development.* www.gov.za/issues/nepad.htm

Newton, J. 1997. 'Reforming the South African Public Finances.' In *NIEP Occasional Paper Series*, 6. Johannesburg: National Institute for Economic Policy.

Ngobese and Cock. 1997. *Development and the Environment*. In P.A. Fitzgerald, McLennan and B. Munslow (eds). *Managing Sustainable Development in South Africa*. Second Edition. Cape Town: Oxford University Press.

Nielsen, R. and R. Martin. 1997. 'Creation of a new fisheries policy in South Africa: the development process and achievements'. *Fisheries Co-management Working Paper*. No. 18.

Norton, P. 2001. 'Looking for win-win-win: implementation of economically, environmentally and socially sustainable tourism development.' Paper presented at the *International Conference on Tourism as a Catalyst for Community-Based Development*. Centre for Afrika-Tourism, Pretoria, 1–3 October.

O'Riordan, T. 2000. *Globalism, Localism and Identity: Fresh Perspectives on the Sustainability Transition in Europe.* Earthscan, London.

Ohiorhenuan, J.F. 1990. 'The Industrialisation of the Very Late Starters: History, Experience, Prospects and Strategic Options for Nigeria.' In *IDS Discussion Papers* 273. Institute of Development Studies, University of Sussex.

Ohiorhenuan, J. and L. Ohiorhenuan. 1998. 'An Institutionalist Perspective on Sustainable Development.' In *Challenges and Prospects for Sustainable Human Development in Africa*, UNDP.

Okun, A. 1975. *Equality and Efficiency: The Big Tradeoff*. Washington D.C.: Brookings Institution.

Oliver, M..L. and T.M. Shapiro. 1995. *Wealth: A New Perspective on Racial Inequality*. New York: Routledge.

Osmani, S.R. 2002. 'Exploring the Employment

Nexus: Topics in Employment and Poverty.' Report prepared for the Task Force for the Joint ILO-UNDP Programme. March.

Parnell, S *et al*. 2002. *Democratising Local Government: the South African Experiment.* UCT Press.

Paterson, M. 1996. *Global Warming and Global Politics*. London: Routledge.

Payne, A.I. and K.L. Cochrane. 1995. 'How management and science are trying to develop fisheries policy in South Africa'. Paper prepared for *ICES Annual Science Conference*, 21-29 September, Aalborg, Denmark.

Pillay, P. 2000. 'South Africa in the 21st century: key socio-economic challenges.' In *Friedrich Ebert Stiftung Occasional Paper Series*, 1. Johannesburg.

Pillay, P. 2002a. *Policy and Implementation: Problems and Possible Solutions to Filling the Gap*. Report prepared for the United Nations Development Programme, South Africa.

Pillay, P. 2002b. *Governance for Sustainable Development: Policy Integration and Coherence in South Africa*. Reported prepared for the United Nations Development Programme, South Africa.

Poultney, C. and A. Spenceley. 2001. 'Practical Strategies for Pro-Poor Tourism: Wilderness Safaris South Africa: Rocktail Bay and Ndumu Lodge.' In *Pro-Poor Tourism Working Paper 1*. Overseas Development Institute, London.

Qotole, M. and M. Xali. 2001. *Selling Privatisation to the Poor: The Billy Hattingh 'Community Based Refuse Removal Scheme' in Khayelitsha.* Municipal Services Project, Queen's University, Kingston, Canada.

Qotole, M., M. Xali and F. Barchiesi. 2001. 'The commercialisation of waste management in South Africa.' *Municipal Services Project Occasional Paper No. 3.* ILRIG, University of Cape Town.

Qualmann, R. 2000. *Economic development and employment promotion in South Africa: analysis with special reference to SMME promotion and strategy options for German Development Cooperation*. Unpublished report prepared for the GTZ, Bonn.

[Quantec] Van der Merwe, C. 2002. 'Data related submission for the NHDR 2003' Quantec Inc. (Pty)

Ramathlodi, N. 2001. 'Social Emancipation and National Liberation.' *Umrabulo*, 11. June–July.

Ravallion, M. 2002. *The Debate on Globalization: Poverty and Inequality: Why Measurement Matters.* World Bank, Development Research Group, Washington D.C.

Reserve Bank. 2000. *Reserve Bank Quarterly Bulletin*, September.

Reserve Bank. 2002. *Reserve Bank Quarterly Bulletin*, September.

Reserve Bank. 2003. *Reserve Bank Quarterly Bulletin*, March.

Roe, D. and P. Urquhart. 2001. *Pro-Poor Tourism: Harnessing the World's Largest Industry for the World's Poor*. International Institute for Environment and Development, London.

Rogerson, C.M. 1999. 'Small enterprise development in post-apartheid South Africa: gearing up for growth and poverty alleviation.' In K. King and S. McGrath (eds). *Enterprise in Africa: Between Poverty and Growth*. Intermediate Technology Publications, London: 83–94.

Rogerson, C.M. 2001a. 'In search of the African miracle: debates on successful small enterprise development in Africa.' In *Habitat International*, 25: 115–142.

Rogerson, C.M. 2001b. 'Tracking South Africa's Spatial Development Initiatives.' In M. Khosa (ed). *Empowerment Through Economic Transformation*. Durban: African Millenium Press 249–269.

Rogerson, C.M. 2001c. 'Growing the SMME manufacturing economy of South Africa: evidence from Gauteng province.' In *Journal of Contemporary African Studies*.

Rogerson, C.M. 2002. *Tourism in South Africa: Potential economic driver, potential for poverty alleviation*. Prepared for the UNDP.

Rogerson, C.M. and P.M. Sithole. 2001. 'Rural handicraft production in Mpumalanga, South Africa: organization, problems and support needs.' In *South African Geographical Journal*, 83: 149–158.

Rosenburg, N. 1982. *Inside the Black Box: Technology and Economics.* Cambridge: Cambridge University Press.

Ruschmann, D. 1992. 'Ecological tourism in Brazil.' In *Tourism Management*, 13: 125–128.

Russell, Bev. 2002. *The Contribution of the South African Volunteering Sector to Sustainable Development*. Reported prepared for the United Nations Development Programme, South Africa.

Sachs, A. 1990. *Protecting Human Rights in the new South Africa*. Cape Town: Oxford University Press.

Sachs, W. 2002. *Planet Dialectics: Explorations in Environment and Development.* London: Zed Press.

SAFIRE (Southern Alliance for Indigenous Resources). 2002. *Regional community-based tourism association consultation: discussion paper*. Unpublished document. SAFIRE, Harare.

Sala-i-Martin, X. 2002. 'The Disturbing "Rise" of

Global Income Inequality'. In *NBER Working Paper* 8904. Cambridge, Mass.: National Bureau of Economic Research.

Samoff, Joel. 1996. *Frameworks! South African Education and Training Policy Documents, 1994–1996*. Macro-Education Policy Unit, University of Durban Westville (December).

SANGOCO. 1998. *Poverty Hearings*.

Saul, J. and S. Gelb. 1981. *The Crisis in South Africa: Class Defence and Class Revolution*. New York: Monthly Review.

Sayed, Yusuf. 2001. In *Explaining the Policy Gap in Education,* in *Education Policy Implementation: The South African Experience*. Cape Town: University of Cape Town Press.

Schultz, T. 1998. 'Inequality in the Distribution of Income in the World: How It is Changing and Why.' In *Journal of Population Economics*. Vol. 11, no. 3.

Schumacher, E. F. 1973. *Small is beautiful: Economics as if people mattered.* New York: Harper and Row.

Scotney. 1995. 'The interrelationship between soil erosion, sediment transport and the living environment.' Proceedings of Water Research Commission Workshop: *The Interrelationship between Soil Erosion, Sediment Transport and the Living Environment*. Pretoria. November.

Sekhesa, A. and M. Sowman. 2002. 'Review of Local Agenda 21 in South Africa.' Background Paper prepared for the Department of Environmental Affairs and Tourism's Analytical Review of Sustainable Development and Agenda 21.

Sen, A. 1995. *Inequality Re-examined*. Harvard University Press.

Sen, A. 1999. *Development as Freedom.* Oxford: Oxford University Press.

Sen, A.K. 1998. 'Social Exclusion and Economic Measurement.' Paper presented at the 25th General Conference of the International Association for research in Income and Wealth. Cambridge, United Kingdom.

Sen, P. 1995. 'National development and local environmental action – the case of the river Narmada.' In V. Bhaskar and A. Glyn (eds.). *The North the South and the Environment: Ecological constraints and the global environment.* London: Earthscan.

Shackleton, S., C. Shackleton and B. Cousins. 2000. 'Revaluing the communal lands of southern Africa: new understandings of rural livelihoods.' *Natural resource perspectives*, 62. http://www.odi.org.uk/nrp/62.html

Skinner, C. 1999. *Getting institutions right?: local government and street traders in four South African cities*. Unpublished report for the MSc URP degree. University of Natal, Durban.

Skinner, C. 2000. 'Securing Livelihoods: A Gendered Analysis of Support Interventions available to Street Traders in the Durban Metropolitan Area.' In *CSDS Research Report, 34*. University of Natal, Durban.

Skinner, C. 2001. *Rising to the Challenge of Supporting Very Small Businesses*.

Skinner, C. and I. Valodia. 2001.'Labour Market Policy, Flexibility, and the Future of Labour Relations: The Case of Clothing.' Paper presented at the *Development Policy Research Unit Conference*, Pretoria. November.

South Africa Foundation. 1996. *Growth for All: an economic strategy for South Africa*. Johannesburg, South Africa. February.

South African Institute of Race Relations. 1991/1992. *Race Relations Survey*. SAIRR.

South African Institute of Race Relations. 1998. *Annual Review of the Institute of Race Relations Survey*. SAIRR

South African Police Service. 2002. September.

Sowman, M. and R. Wynberg. 2002. *Safeguarding South Africa's Environmental Wealth*. Report prepared for the UNDP National Human Development Report for South Africa.

Sowman, M., L. McDaid and E. Witbooi. 2002. *Policy, Legal and Institutional Framework for Sustainable Development in South Africa*. Report Prepared for the UNDP National Human Development Report for South Africa.

Sowman, M. and P. Urquhart. 1998. *A Place Called Home: Environmental Issues and Low Cost Housing*. Cape Town: University of Cape Town Press.

Sowman, M. and R. Wynberg. 2002. *Safeguarding South Africa's environmental wealth*. Report prepared for the United Nations Development Programme, South Africa.

Spalding-Fletcher, R. 2002. 'Energy and sustainable development in South Africa.' *Sustainable Energy Watch paper*. Helio International

Spenceley, A., P. Relly, H. Keyser, P. Warmeant, M. McKenzie, A. Mataboge, P. Norton, S. Mahlangu and J. Seif. 2002. *South African Responsible Tourism Manual*. Department of Environmental Affairs and Tourism, Pretoria.

Sprout, R. and J. Weaver. 1992. 'International Distribution of Income: 1960–1987.' *Kyklos* 45.

Standing *et al*. 1996. *The South African challenge: restructuring the labour market*. An ILO country review. Geneva: International Labour Organization.

Statistics South Africa. *Causes of Death*. Statistics South Africa: Pretoria.

Statistics South Africa. 'Manufacturing: utilisation of production capacity.' *Statistical Release* P3043. Statistics South Africa: Pretoria.

Statistics South Africa. 1995. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 1996. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 1997. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 1998. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 1999. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 2001. *October Household Survey*. Statistics South Africa: Pretoria.

Statistics South Africa. 2002. 'Causes of death in South Africa 1997-2001'. *Release number P0309*: 2.

Statistics South Africa. 2003. *Statistical release*, P0210. Statistics South Africa: Pretoria.

Stewart, F. 1978. *Technology and Underdevelopment*. 2nd edition, Macmillan.

Stiglitz, Joseph. 1997. 'More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus.' *WIDER Annual Lectures 2*. UNU World Institute for Development Economics Research. January.

Sutcliffe, B. 1995. 'Development after ecology.' In V. Bhaskar and A. Glyn (eds.). *The North the South and the Environment: Ecological constraints and the global environment.* London: Earthscan.

Terreblanche, S. 2002. *A History of Inequality in South Africa 1652–2002*. Pietermaritzburg: University of Natal press and KMM Review Publishing Company.

Tobin, J. 1987. 'Unemployment, Interest, Deficits, and Money.' In P. M. Jackson (ed). *Policies for Prosperity: Essays in a Keynesian Model*. Cambridge: MIT press.

Tobin. J. 1997. 'The Future of Macroeconomics'. *Challenge.* Vol. 40, no. 4. July–August.

Tørres, L. 2000. *We are emerging; emerging slowly and painfully! Infrastructure Delivery in South Africa*. Fafo Institute for Applied Social Science (Fafo) Report 336.

Tørres. L., D. Drury, L. Eldring, P. Lewis, and J. Vass. 2001. *The Mesebetsi Labour Force Survey: Top Line Report. Fafo Report 360.* Johannesburg

Turner, S. 2001. 'Sustainable development: What's land got to do with it?' In *PLAAS Debating Land Reform and Rural Development Policy Brief 2*. November.

Turner, S. and S. Meer. 2001. 'Conservation by the people in South Africa: Findings from TRANSFORM monitoring and evaluation 1998.' *Research Report No. 7*. Programme for Land and Agrarian Studies, University of Western Cape.

UNAIDS. 2000. *Report on Global HIV/AIDS Epidemic*. UNAIDS: Washington. www.unaids.org

UNDP. 1997. *1997 Human Development Report 'Resisting new forces of poverty in a changing world.'* New York: Oxford University Press.

UNDP. 1999. *1999 Human Development Report 'Globalization with a human face.'* New York: Oxford University Press.

UNDP. 2000. *2000 Human Development Report South Africa: Transformation for Human Development*. Pretoria.

UNDP. 2002. *Public-Private Partnerships for the Urban Environment*. Bureau for Development Policy: UNDP. http://www.undp.org.ppp

UNDP. 2002. *World Population Prospects: the 2002 revision*.

UNDP. 2002. *Sustainable development and millennium development goals: a concept paper.* UNDP input to WSSD. United Nations Development Programme, New York.

UNDP. 2003. *Human Development Report*.

UNESCO. 2000. *February 2000 literacy assessment*.

United Nations Conference on Trade and Development. 2002. *World Investment Report*. New York and Geneva.

United Nations Volunteers. 2001. *Volunteering and the United Nations System*. Bonn: UN Volunteers.

UNPD. *World Population Prospects*. Department of Economical and Social Affairs (UNDESA). United Nations Population Division.

Urquhart, P. 2001. *Stimulating Sustainable Tourism Trade in South Africa*. Policy briefing. Khanya, IIED. www.khanya-mrc.co.za

Valodia, I. 1996. 'Productivity, Trade and Employment: A Contribution to the Bell-ISP Debate.' *Transformation* 31.

Walpole, M.J. and H.J. Goodwin. 2000. 'Local economic impacts of dragon tourism in Indonesia.' *Annals of Tourism Research*, 27: 559–576.

Weaver, D.B. 1995. 'Alternative tourism in Montserrat.' *Tourism Management*, 16:593–604.

Weaver, D.B. 1998. *Ecotourism in the Less Developed World*. CAB International: Wallingford.

Weeks, J. 2000. 'Stuck in Low Gear? Macroeconomic Policy in South Africa, 1995–1998.' *Working Paper Series 85*. School of Oriental and African Studies, Department of Economics.

Weiler, H. 2001. 'How Universities Change, and Why They (Often) Don't: The Politics of Ambivalence in German Higher Education.' Prepared for a volume on *An Experiment in Cross-Cultural Higher Education: The Viadrina Project*. Edited by Martin Glaum, Susanne

Pickel, Detlef Pollack and Anna Schwarz.

Whiteside A, N. Wilkins, B. Mason and G. Wood. 1995. *The Impact of HIV/AIDS on Planning Issues in KwaZulu-Natal*. Prepared for the Town and Regional Planning Commission of KwaZulu Natal.

Wildschut, A. and S. Hulbert. 1998. *A Seed Not Sown: Prospects for Agrarian Reform in South Africa*. Johannesburg: Interfund/Deutsche Welthungerhilfe.

Wood, A. 1997. 'Openness and Wage Inequality in Developing Countries: The Latin American Challenge to East Asian Wisdom.' In *World Bank Economic Review*, 11(1): 33–57.

Wood, E. *et al*. 2002. *Entrepreneurship and poverty in South Africa*. Report prepared for the UNDP South Africa.

World Bank. 1997. *World Development Report*.

World Bank. 2000a. *Cities in Transition: World Bank Urban and Local Government Strategy*. World Bank: Washington D.C.

World Bank. 2000b. *World Development Report 2000/2001: Attacking Poverty*. Oxford University Press.

World Bank. 2002. *World Development Report 2003: Dynamic Development in a Sustainable World.* Washington: World Bank.

World Bank. 2002a. *Globalization, Growth and Poverty: Building an Inclusive World Economy*. World Bank, Washington, D.C.

World Bank. 2002b. *World Development Report*.

World Bank. 2003. *World Development Report*.

World Conference on Environment and Development. 1987. *Our Common Future.* Oxford: Oxford University Press.

World Conference on Human Rights. 1993. *Report. A/CONF.157/24 (Part I)*. Vienna. 14–15 June.

World Summit for Social Development. 1995. *The Copenhagen Declaration and Programme of Action*. New York: United Nations.

WRI. 2001. *Wasting the Material World: The Impact of Industrial Economies, Earth Trends: Featured Topic*. World Resources Institute, Washington D.C.

Wuyts, M. 2001. 'Informal economy, wage goods and accumulation under structural adjustment theoretical reflections based on the Tanzanian experience'. *Cambridge Journal of Economics*. Vol. 25, no. 3: 417-438.

Wynberg, A. 2001. *A review of key issues facing the management of marine and coastal systems and resources in South Africa*. Unpublished paper prepared for the Department of Environmental Affairs and Tourism, Pretoria.

Wynberg, R. and T. Kepe. 1999. *Land Reform and Conservation Areas: towards a Mutually Beneficial Approach.* Department of Environmental Affairs and Tourism, Department of Land Affairs and IUCN-South Africa, Johannesburg.

You, Jp. 1995. 'Changing Capital-labour Relations in South Korea.' In Juliet Schor and J. You (eds). *Capital, the State and Labour*. Aldershot: Edward Edgar Publishing Co.

You, J.I. 1995. 'The Korean model of development and its environmental implications.' In V. Bhaskar and A. Glyn (eds.). *The North the South and the Environment: Ecological constraints and the global environment.* London: Earthscan.

Appendix

Table 1: Distribution of South Africa population (1970-2002)
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Table 1

Distribution of South Africa population (1970-2002)

	Total population						
	Black	Coloured	Indian	White	Total	Male	Female
1970	15 367 346	2 172 676	646 168	3 299 402	21 485 592	10 517 209	10 968 382
1971	15 792 554	2 228 414	662 509	3 372 119	22 055 596	10 792 000	11 263 596
1972	16 230 554	2 287 097	679 244	3 442 621	22 639 516	11 073 400	11 566 116
1973	16 681 729	2 347 201	696 373	3 508 952	23 234 254	11 359 889	11 874 365
1974	17 146 174	2 408 929	713 994	3 573 579	23 842 676	11 652 863	12 189 813
1975	17 625 130	2 470 556	732 008	3 642 889	24 470 583	11 955 150	12 515 434
1976	18 105 995	2 523 147	746 282	3 710 327	25 085 751	12 249 171	12 836 579
1977	18 603 948	2 576 956	760 950	3 757 499	25 699 353	12 542 139	13 157 215
1978	19 119 086	2 631 781	775 815	3 789 004	26 315 685	12 836 148	13 479 537
1979	19 651 789	2 687 823	790 975	3 821 615	26 952 202	13 139 710	13 812 492
1980	20 211 987	2 745 288	806 430	3 858 825	27 622 529	13 459 451	14 163 079
1981	20 793 092	2 800 112	822 377	3 915 363	28 330 945	13 795 953	14 534 991
1982	21 401 213	2 856 866	838 620	3 981 438	29 078 138	14 150 846	14 927 292
1983	22 027 092	2 914 330	854 863	4 044 107	29 840 392	14 512 554	15 327 838
1984	22 671 396	2 972 302	871 500	4 099 368	30 614 566	14 879 533	15 735 032
1985	23 334 602	3 032 507	888 136	4 147 477	31 402 722	15 252 772	16 149 950
1986	23 905 440	3 093 997	903 032	4 162 854	32 065 323	15 555 268	16 510 055
1987	24 480 599	3 154 950	917 767	4 169 224	32 722 539	15 853 786	16 868 754
1988	25 062 607	3 216 135	932 336	4 177 324	33 388 402	16 157 083	17 231 318
1989	25 637 143	3 277 832	946 749	4 187 682	34 049 406	16 457 827	17 591 579
1990	26 207 231	3 339 887	961 023	4 198 084	34 706 225	16 755 821	17 950 405
1991	26 842 580	3 402 104	975 172	4 204 252	35 424 108	17 079 839	18 344 269
1992	27 637 242	3 464 249	989 201	4 228 652	36 319 345	17 486 050	18 833 295
1993	28 483 785	3 526 060	1 003 096	4 247 318	37 260 260	17 911 282	19 348 978
1994	29 386 652	3 585 737	1 016 541	4 258 512	38 247 443	18 363 881	19 883 562
1995	30 334 212	3 644 565	1 029 751	4 261 252	39 269 780	18 843 382	20 426 398
1996	31 300 343	3 702 237	1 042 646	4 255 051	40 300 277	19 326 653	20 973 624
1997	32 266 018	3 758 437	1 055 141	4 246 424	41 326 020	19 807 155	21 518 865
1998	33 131 985	3 814 050	1 068 889	4 248 548	42 263 472	20 244 737	22 018 735
1999	33 907 316	3 868 271	1 082 471	4 253 448	43 111 506	20 637 436	22 474 070
2000	34 603 951	3 920 780	1 095 828	4 260 330	43 880 890	20 995 400	22 885 490
2001	35 211 679	3 971 442	1 109 028	4 268 852	44 561 000	21 310 287	23 250 713
2002	35 725 818	4 019 953	1 122 002	4 278 436	45 146 210	21 579 610	23 566 599

	Population 15–64			HIV+ population				
	Total	Male	Female	Total	Male	Female	Total 15–64	Male 15–64
1970	12 015 759	5 887 128	6 128 631	–	–	–	–	–
1971	12 299 847	6 029 253	6 270 594	–	–	–	–	–
1972	12 590 757	6 174 858	6 415 899	–	–	–	–	–
1973	12 888 666	6 324 037	6 564 629	–	–	–	–	–
1974	13 193 688	6 476 850	6 716 838	–	–	–	–	–
1975	13 505 835	6 633 308	6 872 527	–	–	–	–	–
1976	13 854 365	6 802 546	7 051 819	–	–	–	–	–
1977	14 212 351	6 976 328	7 236 024	–	–	–	–	–
1978	14 579 925	7 154 714	7 425 211	–	–	–	–	–
1979	14 956 980	7 337 649	7 619 332	–	–	–	–	–
1980	15 343 706	7 525 221	7 818 485	–	–	–	–	–
1981	15 828 891	7 756 654	8 072 237	–	–	–	–	–
1982	16 329 267	7 995 125	8 334 142	–	–	–	–	–
1983	16 845 559	8 240 970	8 604 589	–	–	–	–	–
1984	17 378 352	8 494 455	8 883 897	–	–	–	–	–
1985	17 928 189	8 755 826	9 172 363	–	–	–	–	–
1986	18 393 565	8 962 195	9 431 370	891	305	586	884	303
1987	18 857 132	9 166 301	9 690 831	3 087	1 219	1 868	3 042	1 199
1988	19 330 904	9 375 844	9 955 060	8 394	3 423	4 971	8 248	3 356
1989	19 810 502	9 588 177	10 222 325	20 734	8 586	12 148	20 347	8 408
1990	20 293 444	9 801 499	10 491 945	48 083	20 069	28 014	47 153	19 639
1991	20 846 366	10 045 424	10 800 942	105 123	44 110	61 013	103 031	43 138
1992	21 550 947	10 359 100	11 191 848	214 914	90 728	124 186	210 439	88 638
1993	22 319 011	10 700 756	11 618 256	406 452	173 327	233 125	397 602	169 169
1994	23 123 643	11 065 185	12 058 458	716 388	310 334	406 054	699 988	302 570
1995	23 954 262	11 452 778	12 501 484	1 185 356	523 062	662 294	1 156 846	509 461
1996	24 789 531	11 843 264	12 946 267	1 835 406	823 385	1 012 021	1 788 860	801 032
1997	25 621 844	12 232 592	13 389 252	2 643 499	1 202 236	1 441 264	2 572 138	1 167 771
1998	26 357 916	12 575 650	13 782 266	3 524 505	1 620 487	1 904 018	3 422 184	1 570 832
1999	27 001 482	12 873 240	14 128 242	4 392 089	2 035 227	2 356 862	4 254 285	1 968 089
2000	27 579 192	13 142 188	14 437 005	5 189 741	2 416 779	2 772 961	5 014 491	2 331 113
2001	28 084 207	13 377 375	14 706 831	5 887 287	2 747 725	3 139 561	5 675 088	2 643 675
2002	28 512 777	13 576 431	14 936 346	6 405 018	2 989 440	3 415 578	6 170 649	2 874 142

Notes

(1) Population numbers benchmarked on Census 1996 and 2001

(2) Population estimates up to 1985 based on JL Sadie and Bureau of Market Research

(3) HIV+, AIDS and normal death estimates since 1985 based on the ASSA 2000 demographic model

		AIDS deaths						Normal deaths					
	Female 15–64	Total	Male	Female	Total 15–64	Male 15–64	Female 15–64	Total	Male	Female	Total 15–64	Male 15–64	Female 15–64
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	NA	NA	NA	NA	NA	NA
	–	–	–	–	–	–	–	292 626	162 257	130 370	124 763	79 427	45 336
	581	3	2	2	0	0	0	299 747	167 077	132 670	131 155	84 019	47 136
	1 843	18	9	9	2	1	1	302 061	167 708	134 352	131 272	83 734	47 538
	4 891	58	28	30	10	4	6	306 090	169 701	136 389	134 981	85 763	49 217
	11 939	159	75	83	39	16	22	308 277	171 370	136 908	138 679	88 390	50 289
	27 515	400	189	211	119	50	68	308 615	171 994	136 622	139 809	89 322	50 487
	59 893	941	445	496	314	136	178	313 713	175 313	138 399	144 752	92 420	52 332
	121 801	2 084	981	1 102	779	339	441	319 293	178 961	140 333	150 737	96 173	54 564
9	228 433	4 341	2 036	2 304	1 809	789	1 020	326 227	183 353	142 874	157 315	100 290	57 025
0	397 417	8 536	3 991	4 545	3 933	1 723	2 210	332 937	187 447	145 490	162 994	103 349	59 645
1	647 384	15 876	7 410	8 467	8 028	3 544	4 485	337 943	190 576	147 367	166 713	105 372	61 341
2	987 828	28 002	13 065	14 937	15 416	6 865	8 551	348 061	196 312	151 748	174 547	109 845	64 701
71	1 404 368	46 879	21 888	24 991	27 939	12 558	15 381	358 349	202 097	156 253	182 714	114 498	68 216
32	1 851 352	74 394	34 772	39 622	47 680	21 611	26 069	372 387	211 081	161 306	194 018	121 852	72 165
39	2 286 196	112 243	52 534	59 710	76 857	35 096	41 761	373 067	208 711	164 356	192 322	119 392	72 930
3	2 683 378	161 467	75 671	85 796	117 207	53 850	63 358	378 084	211 707	166 376	195 747	121 751	73 996
75	3 031 413	220 368	103 324	117 045	169 595	78 270	91 325	382 434	214 263	168 171	198 618	123 741	74 877
32	3 296 507	287 363	134 648	152 716	233 651	108 101	125 550	386 141	216 371	169 770	200 898	125 326	75 572

Table 2

Composition of labour force (1970-2002)

	Population total			Population 15–64		
	Total	Male	Female	Total	Male	Female
1970	21 485 592	10 517 209	10 968 382	12 015 759	5 887 128	6 128 631
1971	22 055 596	10 792 000	11 263 596	12 299 847	6 029 253	6 270 594
1972	22 639 516	11 073 400	11 566 116	12 590 757	6 174 858	6 415 899
1973	23 234 254	11 359 889	11 874 365	12 888 666	6 324 037	6 564 629
1974	23 842 676	11 652 863	12 189 813	13 193 688	6 476 850	6 716 838
1975	24 470 583	11 955 150	12 515 434	13 505 835	6 633 308	6 872 527
1976	25 085 751	12 249 171	12 836 579	13 854 365	6 802 546	7 051 819
1977	25 699 353	12 542 139	13 157 215	14 212 351	6 976 328	7 236 024
1978	26 315 685	12 836 148	13 479 537	14 579 925	7 154 714	7 425 211
1979	26 952 202	13 139 710	13 812 492	14 956 980	7 337 649	7 619 332
1980	27 622 529	13 459 451	14 163 079	15 343 706	7 525 221	7 818 485
1981	28 330 945	13 795 953	14 534 991	15 828 891	7 756 654	8 072 237
1982	29 078 138	14 150 846	14 927 292	16 329 267	7 995 125	8 334 142
1983	29 840 392	14 512 554	15 327 838	16 845 559	8 240 970	8 604 589
1984	30 614 566	14 879 533	15 735 032	17 378 352	8 494 455	8 883 897
1985	31 402 722	15 252 772	16 149 950	17 928 189	8 755 826	9 172 363
1986	32 065 323	15 555 268	16 510 055	18 393 565	8 962 195	9 431 370
1987	32 722 539	15 853 786	16 868 754	18 857 132	9 166 301	9 690 831
1988	33 388 402	16 157 083	17 231 318	19 330 904	9 375 844	9 955 060
1989	34 049 406	16 457 827	17 591 579	19 810 502	9 588 177	10 222 325
1990	34 706 225	16 755 821	17 950 405	20 293 444	9 801 499	10 491 945
1991	35 424 108	17 079 839	18 344 269	20 846 366	10 045 424	10 800 942
1992	36 319 345	17 486 050	18 833 295	21 550 947	10 359 100	11 191 848
1993	37 260 260	17 911 282	19 348 978	22 319 011	10 700 756	11 618 256
1994	38 247 443	18 363 881	19 883 562	23 123 643	11 065 185	12 058 458
1995	39 269 780	18 843 382	20 426 398	23 954 262	11 452 778	12 501 484
1996	40 300 277	19 326 653	20 973 624	24 789 531	11 843 264	12 946 267
1997	41 326 020	19 807 155	21 518 865	25 621 844	12 232 592	13 389 252
1998	42 263 472	20 244 737	22 018 735	26 357 916	12 575 650	13 782 266
1999	43 111 506	20 637 436	22 474 070	27 001 482	12 873 240	14 128 242
2000	43 880 890	20 995 400	22 885 490	27 579 192	13 142 188	14 437 005
2001	44 561 000	21 310 287	23 250 713	28 084 207	13 377 375	14 706 831
2002	45 146 210	21 579 610	23 566 599	28 512 777	13 576 431	14 936 346

Source: Quatec Dataset
Note: Labour force participation benchmarked on various censuses, October Household Surveys (OHS) and Labour Force Surveys (LFS)

Labour force			Labour force participation rate %		
Total	Male	Female	Total	Male	Female
7 475 352	4 971 425	2 503 927	62.21	84.45	40.86
7 654 743	5 072 133	2 582 610	62.23	84.13	41.19
7 835 223	5 172 692	2 662 531	62.23	83.77	41.50
8 019 998	5 275 203	2 744 795	62.23	83.42	41.81
8 206 511	5 377 959	2 828 552	62.20	83.03	42.11
8 394 641	5 480 869	2 913 773	62.16	82.63	42.40
8 581 311	5 581 919	2 999 393	61.94	82.06	42.53
8 769 863	5 683 286	3 086 578	61.71	81.47	42.66
8 963 041	5 786 728	3 176 313	61.48	80.88	42.78
9 166 188	5 895 649	3 270 539	61.28	80.35	42.92
9 388 893	6 016 121	3 372 772	61.19	79.95	43.14
9 649 287	6 165 424	3 483 863	60.96	79.49	43.16
9 924 193	6 323 029	3 601 165	60.78	79.09	43.21
10 212 663	6 488 253	3 724 410	60.63	78.73	43.28
10 512 873	6 659 868	3 853 005	60.49	78.40	43.37
10 824 968	6 837 902	3 987 066	60.38	78.10	43.47
11 087 172	6 975 575	4 111 597	60.28	77.83	43.59
11 339 420	7 105 467	4 233 953	60.13	77.52	43.69
11 584 371	7 230 362	4 354 009	59.93	77.12	43.74
11 813 284	7 344 599	4 468 685	59.63	76.60	43.71
12 017 902	7 442 850	4 575 052	59.22	75.94	43.61
12 272 519	7 579 126	4 693 393	58.87	75.45	43.45
12 615 020	7 767 535	4 847 485	58.54	74.98	43.31
12 993 177	7 976 118	5 017 059	58.22	74.54	43.18
13 393 589	8 200 841	5 192 748	57.92	74.11	43.06
13 811 808	8 441 876	5 369 932	57.66	73.71	42.95
14 282 865	8 748 362	5 534 503	57.62	73.87	42.75
14 733 696	9 044 110	5 689 587	57.50	73.93	42.49
15 112 622	9 296 912	5 815 710	57.34	73.93	42.20
15 420 804	9 506 611	5 914 193	57.11	73.85	41.86
15 682 094	9 689 841	5 992 253	56.86	73.73	41.51
15 403 506	9 496 165	5 907 341	54.85	70.99	40.17
15 679 921	9 645 884	6 034 038	54.99	71.05	40.40

Table 3

Formal and informal employment – average annual estimates (1970-2002)

	Total excluding general government and domestic servants				Domestic servants			
	Total	Highly skilled	Skilled	Semi- and unskilled	Total	Highly skilled	Skilled	Semi- and unskilled
1970	4 893 588	198 097	1 493 198	3 202 293	881 800	–	–	881 800
1971	4 926 546	205 868	1 517 139	3 203 540	880 300	–	–	880 300
1972	5 043 722	222 773	1 575 634	3 245 315	879 000	–	–	879 000
1973	5 191 563	238 607	1 642 551	3 310 405	877 800	–	–	877 800
1974	5 354 550	252 374	1 720 339	3 381 837	876 500	–	–	876 500
1975	5 470 807	261 008	1 786 629	3 423 171	875 100	–	–	875 100
1976	5 531 132	267 346	1 823 644	3 440 143	873 800	–	–	873 800
1977	5 551 419	283 270	1 840 166	3 427 984	872 400	–	–	872 400
1978	5 583 744	303 102	1 856 041	3 424 602	871 100	–	–	871 100
1979	5 669 484	323 560	1 898 257	3 447 667	869 700	–	–	869 700
1980	5 810 590	334 719	1 962 851	3 513 020	868 200	–	–	868 200
1981	5 954 065	345 421	2 040 910	3 567 734	860 400	–	–	860 400
1982	6 010 036	353 587	2 099 872	3 556 577	852 800	–	–	852 800
1983	6 015 593	358 631	2 154 739	3 502 224	845 200	–	–	845 200
1984	5 967 488	359 036	2 173 348	3 435 104	837 800	–	–	837 800
1985	5 965 396	365 665	2 140 756	3 458 975	830 400	–	–	830 400
1986	5 969 886	387 803	2 099 730	3 482 352	823 200	–	–	823 200
1987	6 001 279	411 949	2 164 424	3 424 905	816 000	–	–	816 000
1988	6 036 985	441 809	2 254 735	3 340 441	808 700	–	–	808 700
1989	6 054 888	468 789	2 314 676	3 271 424	801 500	–	–	801 500
1990	6 000 552	479 132	2 256 656	3 264 764	794 400	–	–	794 400
1991	5 884 802	495 085	2 207 743	3 181 974	787 400	–	–	787 400
1992	5 737 119	497 652	2 166 550	3 072 918	780 600	–	–	780 600
1993	5 639 713	507 709	2 131 885	3 000 120	773 700	–	–	773 700
1994	5 589 471	524 488	2 117 824	2 947 160	767 100	–	–	767 100
1995	5 574 293	548 729	2 117 620	2 907 943	760 300	–	–	760 300
1996	5 544 465	568 169	2 135 588	2 840 708	761 800	–	–	761 800
1997	5 438 617	576 293	2 133 126	2 729 198	773 227	–	–	773 227
1998	5 316 299	574 529	2 126 961	2 614 809	780 959	–	–	780 959
1999	5 182 288	564 737	2 107 692	2 509 860	786 816	–	–	786 816
2000	5 104 341	557 508	2 094 658	2 452 175	791 931	–	–	791 931
2001	5 020 363	553 724	2 080 243	2 386 397	832 743	–	–	832 743
2002	5 013 403	555 220	2 077 148	2 381 035	832 111	–	–	832 111

Source: Quatec Dataset
Notes
(1) Formal sector employment based on SEE plus adjustments for underrepresentation in services industries utilising the DBSA standardised employment series as basis.
(2) The historical informal sector employment must be seen as a rough estimate – it has been benchmarked on the latest LFS's.

General government				Total formal employment				Informal employment	Total formal and informal employment	Total unemployment	Un-employment rate %
Total	Highly skilled	Skilled	Semi- and unskilled	Total	Highly skilled	Skilled	Semi- and unskilled				
696 767	200 672	227 132	268 963	6 472 154	398 768	1 720 330	4 353 056	376 416	6 848 571	626 781	8.38
733 120	214 095	241 072	277 952	6 539 966	419 963	1 758 211	4 361 792	387 131	6 927 097	727 646	9.51
760 384	227 736	252 987	279 662	6 683 107	450 509	1 828 621	4 403 976	432 992	7 116 099	719 124	9.18
817 943	250 246	272 554	295 143	6 887 307	488 853	1 915 105	4 483 348	474 261	7 361 568	658 431	8.21
864 899	271 458	289 172	304 270	7 095 949	523 832	2 009 510	4 562 607	530 393	7 626 342	580 169	7.07
1 014 856	324 875	348 039	341 941	7 360 763	585 883	2 134 668	4 640 212	582 833	7 943 596	451 046	5.37
1 049 694	339 373	374 592	335 729	7 454 626	606 719	2 198 235	4 649 672	615 687	8 070 313	510 999	5.95
1 076 959	351 014	394 967	330 978	7 500 778	634 283	2 235 133	4 631 362	649 214	8 149 993	619 871	7.07
1 102 709	362 216	403 997	336 497	7 557 553	665 317	2 260 037	4 632 199	695 033	8 252 586	710 455	7.93
1 119 371	366 030	406 277	347 063	7 658 555	689 591	2 304 534	4 664 430	761 488	8 420 043	746 145	8.14
1 161 783	373 172	421 920	366 690	7 840 572	707 891	2 384 771	4 747 910	854 995	8 695 567	693 326	7.38
1 208 739	385 202	438 507	385 030	8 023 203	730 622	2 479 417	4 813 164	959 673	8 982 877	666 410	6.91
1 264 783	411 424	457 164	396 195	8 127 619	765 011	2 557 036	4 805 571	1 059 014	9 186 633	737 560	7.43
1 335 974	450 892	495 419	389 662	8 196 767	809 523	2 650 158	4 737 086	1 205 120	9 401 888	810 776	7.94
1 393 533	484 423	541 567	367 544	8 198 821	843 458	2 714 915	4 640 448	1 368 403	9 567 224	945 649	9.00
1 398 077	491 386	552 394	354 297	8 193 873	857 052	2 693 150	4 643 672	1 514 238	9 708 112	1 116 856	10.32
1 472 298	508 514	582 621	381 163	8 265 384	896 318	2 682 351	4 686 715	1 598 786	9 864 170	1 223 002	11.03
1 520 769	506 252	628 276	386 241	8 338 047	918 201	2 792 700	4 627 146	1 640 435	9 978 482	1 360 938	12.00
1 557 122	520 208	656 948	379 966	8 402 807	962 017	2 911 683	4 529 108	1 692 296	10 095 103	1 489 268	12.86
1 570 754	533 484	671 081	366 188	8 427 142	1 002 273	2 985 757	4 439 112	1 725 604	10 152 747	1 660 537	14.06
1 567 725	554 950	652 865	359 910	8 362 677	1 034 081	2 909 521	4 419 074	1 742 754	10 105 431	1 912 471	15.91
1 596 504	572 964	677 678	345 862	8 268 706	1 068 049	2 885 420	4 315 236	1 796 290	10 064 996	2 207 523	17.99
1 625 284	592 212	705 313	327 759	8 143 003	1 089 864	2 871 863	4 181 276	1 895 990	10 038 993	2 576 027	20.42
1 629 828	597 914	713 486	318 428	8 043 241	1 105 622	2 845 371	4 092 248	2 093 317	10 136 558	2 856 619	21.99
1 654 063	618 188	726 328	309 548	8 010 634	1 142 675	2 844 152	4 023 807	2 330 791	10 341 425	3 052 164	22.79
1 576 813	609 178	690 553	277 082	7 911 406	1 157 907	2 808 174	3 945 325	2 579 809	10 491 214	3 320 594	24.04
1 638 916	654 094	718 214	266 609	7 945 181	1 222 262	2 853 802	3 869 117	2 807 452	10 752 633	3 530 232	24.72
1 640 431	659 596	722 446	258 389	7 852 275	1 235 889	2 855 573	3 760 814	2 992 547	10 844 822	3 888 875	26.39
1 619 225	642 369	718 615	258 241	7 716 484	1 216 898	2 845 576	3 654 010	3 187 838	10 904 322	4 208 299	27.85
1 570 754	606 762	703 504	260 488	7 539 859	1 171 499	2 811 196	3 557 164	3 357 241	10 897 100	4 523 704	29.34
1 514 710	572 784	683 763	258 163	7 410 982	1 130 293	2 778 421	3 502 268	3 465 367	10 876 350	4 805 744	30.64
1 493 504	558 427	677 363	257 715	7 346 610	1 112 150	2 757 605	3 476 854	3 539 634	10 886 245	4 517 261	29.33
1 505 622	563 505	683 764	258 353	7 351 135	1 118 725	2 760 912	3 471 498	3 545 284	10 896 420	4 783 502	30.51

Table 4

Industry share of total employment (%) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002
Primary	27.4	22.0	18.9	18.5	18.4	17.9	17.5	16.6	16.3	16.1	15.9	15.4
Agriculture, forestry and fishing	17.0	12.9	10.7	10.9	10.8	10.7	10.6	10.6	10.6	10.5	10.4	9.9
Mining and quarrying	10.4	9.1	8.2	7.7	7.5	7.2	7.0	6.0	5.7	5.6	5.5	5.5
Secondary	23.1	24.4	24.7	23.5	23.5	23.5	22.6	22.2	21.5	21.4	21.1	20.9
Manufacturing	17.4	18.7	18.6	18.0	18.2	18.4	17.8	17.6	17.4	17.4	17.1	17.1
Food, beverages and tobacco	2.6	2.8	3.0	2.8	2.8	2.8	2.7	2.6	2.7	2.5	2.5	2.4
Textiles, clothing and leather	3.4	3.5	3.2	2.9	3.0	3.3	3.1	2.8	2.9	2.9	2.8	2.8
Wood and paper; publishing and printing	1.7	1.7	2.0	2.2	2.2	2.1	2.1	2.3	2.3	2.5	2.4	2.4
Petroleum products, chemicals, rubber and plastic	1.6	1.9	2.3	2.2	2.3	2.2	2.2	2.5	2.4	2.5	2.4	2.4
Other non-metallic mineral products	1.2	1.1	1.0	1.0	0.9	1.0	0.9	0.7	0.6	0.6	0.6	0.5
Metals, metal products, machinery and equipment	4.1	4.4	3.9	3.4	3.5	3.5	3.4	3.3	3.1	2.9	3.0	3.1
Electrical machinery and apparatus	0.8	0.9	1.0	1.2	1.2	1.1	1.1	1.2	1.1	1.1	1.1	1.1
Radio, TV, instruments, watches and clocks	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2
Transport equipment	1.2	1.4	1.3	1.1	1.2	1.2	1.1	1.1	1.2	1.2	1.2	1.2
Furniture and other manufacturing	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Electricity, gas and water	0.7	1.0	1.1	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Construction (contractors)	5.0	4.8	4.9	4.6	4.5	4.1	3.9	3.6	3.1	3.0	3.0	2.8
Tertiary	49.6	53.5	56.4	58.0	58.1	58.7	59.8	61.1	62.2	62.4	63.0	63.7
Trade, catering and accommodation services	10.6	12.1	12.2	11.7	12.0	11.9	12.1	12.7	13.6	13.6	13.8	13.6
Transport, storage and communication	5.7	6.4	5.2	4.3	4.4	4.4	4.3	3.7	3.7	3.7	3.5	3.6
Financial intermediation, insurance, real estate and business services	3.0	3.7	5.4	5.9	6.1	6.2	6.5	6.7	6.6	6.5	6.7	7.1
Community, social and personal services	30.3	31.3	33.6	36.1	35.6	36.1	36.9	38.0	38.3	38.6	39.0	39.4
All industries	100	100	100	100	100	100	100	100	100	100	100	100

Note
Table is based on South African Standard Industry database

Table 5

Labour productivity by industry (index 1995=100) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 2002
Primary	85.4	89.0	100.8	109.8	100.0	110.5	114.6	119.3	124.8	130.6	131.1	135.9	2.84
Agriculture, forestry and fishing	55.2	88.1	118.5	124.0	100.0	123.6	127.1	120.2	127.8	140.7	140.5	151.9	3.26
Mining and quarrying	109.3	89.4	88.2	101.2	100.0	104.1	109.2	128.4	135.2	137.3	138.5	136.2	3.94
Secondary	69.4	85.5	89.5	94.6	100.0	103.0	110.2	113.6	118.6	126.1	133.5	137.9	4.83
Manufacturing	68.6	86.2	91.7	94.5	100.0	100.0	106.7	108.0	110.2	117.4	124.6	128.6	3.96
Food, beverages and tobacco	65.8	79.3	88.8	94.5	100.0	100.7	108.7	111.3	106.5	112.9	124.3	125.9	3.75
Textiles, clothing and leather	75.4	95.6	89.3	97.8	100.0	84.9	92.7	97.3	96.3	92.5	94.3	94.0	–0.26
Wood and paper; publishing and printing	89.0	108.8	97.5	96.8	100.0	99.4	103.4	94.4	94.5	92.9	96.6	100.2	0.52
Petroleum products, chemicals, rubber and plastic	53.3	65.1	87.3	93.9	100.0	105.5	110.3	105.9	115.2	109.4	117.7	118.4	3.06
Other non-metallic mineral products	69.2	83.1	83.4	89.3	100.0	97.4	100.9	121.3	131.7	164.8	175.7	183.3	9.74
Metals, metal products, machinery and equipment	76.5	98.6	86.7	92.5	100.0	106.2	114.9	116.5	119.4	142.2	147.1	151.3	6.47
Electrical machinery and apparatus	62.0	120.2	100.8	88.2	100.0	103.4	114.9	106.4	109.6	117.7	122.6	132.6	5.40
Radio, TV, instruments, watches and clocks	95.8	108.3	116.9	108.6	100.0	86.6	114.9	99.3	99.8	106.2	99.4	98.5	-0.33
Transport equipment	82.4	99.1	96.9	91.4	100.0	96.5	99.0	96.8	103.7	126.1	133.6	151.7	6.81
Furniture and other manufacturing	50.6	54.5	107.4	99.5	100.0	95.6	101.8	108.0	112.5	114.4	116.4	112.5	1.62
Electricity, gas and water	44.1	49.7	68.3	98.1	100.0	108.0	114.1	110.3	109.8	117.8	120.5	124.3	3.07
Construction (contractors)	108.2	118.7	95.1	93.7	100.0	111.0	119.6	136.2	158.9	171.0	183.0	193.2	9.52
Tertiary	67.9	78.1	89.7	95.2	100.0	103.2	104.3	106.8	109.8	115.2	118.7	119.7	2.91
Trade, catering and accommodation services	75.1	76.5	87.8	96.2	100.0	104.0	103.2	99.3	93.9	99.8	102.9	105.3	1.21
Transport, storage and communication	40.9	51.3	67.1	92.4	100.0	107.8	117.7	147.2	159.7	176.9	197.2	204.6	10.59
Financial intermediation, insurance, real estate and business services	128.1	118.3	98.6	98.8	100.0	104.3	104.7	109.3	121.9	131.1	134.0	130.0	3.57
Community, social and personal services	59.9	76.1	94.4	96.0	100.0	100.5	99.4	99.1	99.6	100.5	100.2	99.3	0.44
All industries	68.4	80.5	90.9	96.6	100.0	104.1	107.2	110.5	114.2	120.3	124.4	126.8	3.47

Notes: Table is based on South African Standardised Industry database
Labour productivity is the most widely used productivity concept. Labour productivity is the ratio between output (Q) and the labour input (LI) used to produce that output:
Labour productivity = Q/LI = output per unit of labour input.
Labour productivity can be expressed as output per worker (by dividing total output by total number of workers employed) or as output per hour (by dividing total output by the total number of hours worked).

Table 6

Fixed capital productivity by industry (index 1995=100) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	198.3	133.9	107.2	110.9	100.0	107.7	108.6	104.0	105.4	107.2	104.7	104.3	–0.65
Agriculture, forestry and fishing	73.2	84.9	116.0	125.1	100.0	120.7	121.5	113.5	120.1	131.1	129.3	133.6	1.46
Mining and quarrying	370.5	178.0	101.1	102.7	100.0	99.8	100.8	98.5	97.2	94.3	91.8	89.3	–1.73
Secondary	161.6	118.5	102.9	96.8	100.0	100.3	100.9	99.0	98.5	102.9	106.7	110.3	1.68
Manufacturing	166.6	126.3	115.8	98.0	100.0	97.6	96.4	92.0	89.9	93.3	95.7	98.5	0.10
Food, beverages and tobacco	138.4	131.7	122.8	102.2	100.0	97.8	97.5	93.9	89.6	87.6	95.4	96.4	–0.66
Textiles, clothing and leather	68.8	95.7	88.3	97.2	100.0	90.6	92.3	84.9	87.2	83.8	82.8	83.0	–1.86
Wood and paper; publishing and printing	116.9	123.0	102.5	105.7	100.0	88.9	86.1	80.2	80.0	82.7	83.6	87.7	–2.17
Petroleum products, chemicals, rubber and plastic	174.8	85.5	102.7	93.2	100.0	101.2	100.1	102.9	103.8	101.0	100.8	99.4	0.85
Other non-metallic mineral products	132.7	103.6	91.6	94.4	100.0	95.4	90.7	83.2	76.8	88.0	92.4	95.9	0.48
Metals, metal products, machinery and equipment	199.8	160.0	138.1	100.7	100.0	99.7	98.1	90.5	85.7	98.0	105.4	115.1	1.94
Electrical machinery and apparatus	60.9	84.8	85.5	90.8	100.0	94.6	104.4	102.3	100.4	108.9	107.4	114.8	3.15
Radio, TV, instruments, watches and clocks	77.3	87.1	113.7	117.5	100.0	91.6	98.5	105.8	102.9	98.6	76.6	66.7	–6.32
Transport equipment	182.8	194.8	136.3	89.8	100.0	96.2	90.8	83.4	82.9	91.2	90.7	94.1	0.81
Furniture and other manufacturing	55.1	63.5	117.0	100.1	100.0	100.3	96.8	90.0	88.6	89.5	90.3	92.8	–0.90
Electricity, gas and water	76.5	69.4	76.0	96.7	100.0	111.0	116.7	121.3	127.7	133.1	139.3	145.1	5.23
Construction (contractors)	211.8	104.1	102.4	95.6	100.0	102.2	104.9	106.7	104.1	106.5	109.8	108.4	1.60
Tertiary	106.7	93.4	97.2	96.9	100.0	102.6	103.0	102.5	104.1	106.4	108.3	109.7	1.57
Trade, catering and accommodation services	108.1	97.4	100.0	95.7	100.0	101.0	99.1	95.9	93.1	94.6	95.6	95.3	–0.02
Transport, storage and communication	88.2	85.9	87.0	91.2	100.0	105.1	110.5	111.4	116.2	122.1	127.7	132.9	4.84
Financial intermediation, insurance, real estate and business services	114.2	103.1	96.8	98.2	100.0	104.6	106.7	110.1	117.0	120.9	124.6	126.5	3.23
Community, social and personal services	107.1	88.6	100.8	99.1	100.0	100.8	99.6	98.5	97.4	96.9	96.2	96.5	–0.34
All industries	129.7	104.7	100.0	98.4	100.0	102.6	103.1	101.7	102.6	105.3	107.2	109.0	1.30

Notes:
Fixed capital productivity
Fixed capital productivity is a measure of output per unit of fixed capital input. Fixed capital productivity is equal to total output (Q) divided by the fixed capital input (C), i.e. the capital stock:
Fixed capital productivity = Q/C = output per unit of fixed capital input.
Table is based on South African Standard Industry database

Table 7

Multi-factor productivity by industry (index 1995=100) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	156.4	123.2	104.4	110.4	100.0	108.9	111.3	110.9	114.2	117.3	115.0	115.3	0.66
Agriculture, forestry and fishing	67.2	85.7	116.7	124.8	100.0	121.5	123.1	115.7	122.7	134.3	132.8	138.6	1.96
Mining and quarrying	265.2	157.4	94.4	101.9	100.0	102.1	105.4	114.4	117.0	114.8	112.0	107.3	0.72
Secondary	102.6	98.8	95.5	95.6	100.0	101.7	105.6	106.8	109.3	114.9	120.1	123.6	3.27
Manufacturing	105.1	101.8	102.4	96.1	100.0	98.9	101.7	100.8	101.2	106.0	110.4	113.1	2.09
Food, beverages and tobacco	105.3	105.7	106.2	98.6	100.0	99.1	102.2	101.9	97.7	99.6	108.1	108.6	1.28
Textiles, clothing and leather	73.8	95.6	89.1	97.6	100.0	86.1	92.6	95.4	94.5	91.0	92.2	91.8	–0.59
Wood and paper; publishing and printing	96.9	113.8	99.6	100.2	100.0	94.7	96.0	89.3	89.4	89.2	91.8	95.5	–0.53
Petroleum products, chemicals, rubber and plastic	114.8	76.0	95.4	93.5	100.0	103.2	104.7	104.4	109.2	105.1	108.5	107.3	1.78
Other non-metallic mineral products	95.0	91.4	86.6	91.4	100.0	96.6	96.4	104.3	106.8	123.0	128.7	132.4	4.89
Metals, metal products, machinery and equipment	110.0	115.9	103.7	95.3	100.0	103.7	108.1	106.4	107.6	122.6	128.0	133.5	4.39
Electrical machinery and apparatus	61.6	107.2	95.3	88.8	100.0	100.2	110.0	104.5	105.6	113.8	116.3	125.2	4.53
Radio, TV, instruments, watches and clocks	91.1	101.7	115.8	111.9	100.0	88.2	108.9	100.5	100.7	104.1	93.5	89.3	–2.22
Transport equipment	117.5	125.4	110.9	90.8	100.0	96.3	96.1	93.0	97.1	112.4	115.9	126.7	4.45
Furniture and other manufacturing	52.7	59.8	114.4	99.9	100.0	99.0	98.2	95.1	95.4	96.6	97.9	98.8	–0.14
Electricity, gas and water	66.9	64.4	73.8	97.1	100.0	110.0	115.8	117.8	121.1	127.8	132.9	138.0	4.52
Construction (contractors)	117.0	115.9	96.3	94.2	100.0	108.0	114.1	125.2	138.3	145.2	152.7	157.0	6.62
Tertiary	82.5	84.0	92.6	95.9	100.0	103.0	103.8	105.0	107.4	111.4	114.1	115.3	2.34
Trade, catering and accommodation services	90.9	86.3	93.4	96.0	100.0	102.5	101.2	97.7	93.5	97.2	99.0	99.9	0.55
Transport, storage and communication	49.9	62.8	75.4	91.8	100.0	106.5	113.9	128.9	135.9	145.5	157.3	163.4	7.50
Financial intermediation, insurance, real estate and business services	119.3	109.0	97.5	98.4	100.0	104.5	106.0	109.8	118.7	124.5	127.9	127.7	3.34
Community, social and personal services	67.9	78.5	95.3	96.4	100.0	100.5	99.5	99.0	99.3	99.9	99.6	98.9	0.33
All industries	93.7	92.5	94.8	97.4	100.0	103.4	105.4	106.6	109.1	113.4	116.3	118.1	2.45

Notes:
Multi-factor productivity is a measure of the growth in output that is not explained by the growth in the quantity of inputs. Multi-factor productivity includes technical progress, improvements in the workforce, improvements in management practices, and economies of scale. In the short to medium term, factors such as the weather and variations in capacity utilisation associated with the business cycle can affect multi-factor productivity.
Multi-factor productivity (A(t)) = Q(t) / [(WL(t)*L(t)) + (WK(t)*K(t))].
Where Q(t) = Real output at time t.
WL(t) = Labour's income share at time t.
= Remuneration of employees divided by total income at time t.
L(t) = Real labour output at time t.
WK(t) = Capital's income share at time t.
= Gross operating surplus divided by total income at time t.
K(t) = Real capital input at time t.
Table is based on South African Standard Industry database

Table 8

Capital-labour ratio by industry (index 1995=100) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	43	66	94	99	100	103	106	115	118	122	125	130	3.52
Agriculture, forestry and fishing	75	104	102	99	100	102	105	106	106	107	109	114	1.74
Mining and quarrying	29	50	87	98	100	104	108	130	139	146	151	153	5.77
Secondary	43	72	87	98	100	103	109	115	120	123	125	125	3.14
Manufacturing	41	68	79	96	100	102	111	117	123	126	130	131	3.89
Food, beverages and tobacco	48	60	72	92	100	103	111	119	119	129	130	131	4.48
Textiles, clothing and leather	110	100	101	101	100	94	100	115	110	110	114	113	1.67
Wood and paper; publishing and printing	76	88	95	92	100	112	120	118	118	112	116	114	2.96
Petroleum products, chemicals, rubber and plastic	30	76	85	101	100	104	110	103	111	108	117	119	2.22
Other non-metallic mineral products	52	80	91	95	100	102	111	146	171	187	190	191	9.59
Metals, metal products, machinery and equipment	38	62	63	92	100	107	117	129	139	145	140	131	4.74
Electrical machinery and apparatus	102	142	118	97	100	109	110	104	109	108	114	115	2.27
Radio, TV, instruments, watches and clocks	124	124	103	92	100	95	117	94	97	108	130	148	6.91
Transport equipment	45	51	71	102	100	100	109	116	125	138	147	161	5.99
Furniture and other manufacturing	92	86	92	99	100	95	105	120	127	128	129	121	2.72
Electricity, gas and water	58	72	90	102	100	97	98	91	86	89	87	86	–2.05
Construction (contractors)	51	114	93	98	100	109	114	128	153	161	167	178	7.89
Tertiary	64	84	92	98	100	101	101	104	105	108	110	109	1.32
Trade, catering and accommodation services	69	79	88	101	100	103	104	104	101	106	108	111	1.21
Transport, storage and communication	46	60	77	101	100	103	107	132	137	145	154	154	5.61
Financial intermediation, insurance, real estate and business services	112	115	102	101	100	100	98	99	104	108	108	103	0.30
Community, social and personal services	56	86	94	97	100	100	100	101	102	104	104	103	0.78
All industries	53	77	91	98	100	102	104	109	111	114	116	116	2.15

Note
Capital-labour ratio is the real capital stock divided by the labour input
Table is based on South African Standard Industry database

Table 9

Real profit rate by industry (index 1995=100) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	230	188	112	118	100	113	110	105	106	112	118	125	1.07
Agriculture, forestry and fishing	72	93	125	134	100	127	127	114	118	128	132	143	1.87
Mining and quarrying	477	295	105	106	100	103	97	100	101	106	112	118	1.46
Secondary	122	100	97	94	100	101	104	97	95	104	111	119	3.18
Manufacturing	133	105	110	94	100	99	101	88	86	94	101	108	1.99
Food, beverages and tobacco	138	122	115	99	100	100	104	93	86	85	98	104	0.87
Textiles, clothing and leather	67	93	93	104	100	81	94	54	70	58	63	67	–2.76
Wood and paper; publishing and printing	72	94	92	88	100	87	80	63	62	65	67	71	–2.01
Petroleum products, chemicals, rubber and plastic	168	87	103	92	100	105	105	98	104	99	104	110	2.45
Other non-metallic mineral products	121	94	80	88	100	89	90	83	78	107	116	125	5.40
Metals, metal products, machinery and equipment	148	122	124	93	100	104	108	96	82	118	131	154	7.78
Electrical machinery and apparatus	65	97	96	62	100	105	152	148	138	152	138	148	13.90
Radio, TV, instruments, watches and clocks	60	83	121	134	100	92	110	60	93	80	60	58	–5.65
Transport equipment	154	129	117	87	100	93	79	58	64	86	90	99	3.22
Furniture and other manufacturing	36	52	120	99	100	102	100	91	90	90	90	91	–0.96
Electricity, gas and water	76	73	76	99	100	104	109	115	113	122	128	134	3.97
Construction (contractors)	60	66	54	86	100	117	130	132	129	141	151	153	7.69
Tertiary	98	89	91	96	100	103	104	102	107	114	117	119	2.83
Trade, catering and accommodation services	105	93	93	94	100	103	99	93	88	96	101	104	1.43
Transport, storage and communication	34	57	73	90	100	108	116	114	128	141	147	153	6.96
Financial intermediation, insurance, real estate and business services	114	99	93	99	100	106	108	111	119	123	126	128	3.31
Community, social and personal services	125	116	100	97	100	98	96	99	102	104	104	104	0.85
All industries	121	117	97	98	100	104	104	100	103	110	115	120	2.58

Notes
Profit rate is calculated as the real value of gross operating surplus relative to the real value of fixed capital stock
Table is based on South African Standard Industry database

Table 10

Profit share by industry (%) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	62.9	76.1	56.5	57.8	54.2	57.0	55.0	54.6	54.6	56.9	60.8	65.1	1.61
Agriculture, forestry and fishing	66.7	73.9	72.7	72.8	67.8	71.4	71.1	67.8	66.7	66.1	69.4	72.7	0.08
Mining and quarrying	59.7	76.7	48.0	48.0	46.4	47.9	44.7	46.9	48.0	52.4	56.8	61.5	3.30
Secondary	36.0	40.4	44.9	46.4	47.9	48.3	49.6	46.9	46.1	48.5	49.9	51.8	1.42
Manufacturing	37.3	38.8	44.5	44.8	46.7	47.4	48.8	44.9	44.7	47.2	49.0	51.3	1.79
Food, beverages and tobacco	54.4	50.4	51.1	52.7	54.4	55.4	58.0	54.1	52.2	52.8	56.1	58.6	1.43
Textiles, clothing and leather	24.0	24.0	25.9	26.4	24.7	22.0	25.2	15.8	19.8	17.2	18.7	20.0	–1.56
Wood and paper; publishing and printing	28.3	35.4	41.4	38.4	46.1	44.9	42.8	36.0	35.4	36.4	37.1	37.4	0.09
Petroleum products, chemicals, rubber and plastic	50.6	53.3	52.7	51.9	52.5	54.5	55.2	50.2	52.6	51.2	54.1	58.4	1.61
Other non-metallic mineral products	40.6	40.7	39.2	41.7	44.8	41.5	44.2	44.4	45.4	54.5	56.4	58.2	4.49
Metals, metal products, machinery and equipment	27.2	28.1	33.1	34.1	36.8	38.5	40.6	38.8	35.0	44.4	45.7	49.2	5.16
Electrical machinery and apparatus	34.5	36.7	36.1	21.8	32.2	35.8	46.9	46.6	44.3	45.0	41.5	41.6	9.78
Radio, TV, instruments, watches and clocks	25.4	31.4	35.1	37.3	32.9	33.2	36.7	18.6	29.6	26.8	25.8	28.8	1.03
Transport equipment	35.0	27.5	35.5	40.1	41.5	40.1	36.1	28.9	31.8	39.1	41.3	43.5	1.77
Furniture and other manufacturing	46.8	58.5	73.0	70.3	70.9	72.1	73.3	71.6	71.8	71.5	70.8	69.8	–0.07
Electricity, gas and water	70.4	74.8	71.4	72.7	71.3	66.8	66.4	67.8	63.3	65.5	65.8	65.9	–1.15
Construction (contractors)	8.5	19.1	16.0	27.1	30.2	34.7	37.4	37.2	37.5	40.1	41.4	42.6	5.94
Tertiary	37.5	38.8	38.0	40.2	40.7	40.8	41.0	40.6	41.9	43.5	44.0	44.3	1.23
Trade, catering and accommodation services	47.9	47.2	46.1	48.5	49.6	50.5	49.5	48.2	47.0	50.3	52.4	54.0	1.40
Transport, storage and communication	19.0	33.2	42.0	49.1	49.7	51.1	52.3	51.1	54.7	57.3	57.4	57.4	2.01
Financial intermediation, insurance, real estate and business services	63.6	61.4	61.0	64.0	63.7	64.3	64.7	64.0	64.7	64.7	64.6	64.4	0.08
Community, social and personal services	17.0	19.0	14.4	14.2	14.5	14.1	13.9	14.5	15.1	15.6	15.7	15.6	1.20
All industries	41.2	49.4	42.8	44.1	44.2	44.6	44.7	43.7	44.2	46.1	47.3	48.6	1.25

Notes
Profit share is calculated as the nominal gross operating surplus (i.e., profits) relative to the nominal gross value added at factor cost.
Table is based on South African Standard Industry database

Table 11

Wage share by industry (%) (1970-2002)

	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth rate (average annual) 1994–2002
Primary	37.1	23.9	43.5	42.2	45.8	43.0	45.0	45.4	45.4	43.1	39.2	34.9	–2.15
Agriculture, forestry and fishing	33.3	26.1	27.3	27.2	32.2	28.6	28.9	32.2	33.3	33.9	30.6	27.3	0.53
Mining and quarrying	40.3	23.3	52.0	52.0	53.6	52.1	55.3	53.1	52.0	47.6	43.2	38.5	–3.54
Secondary	64.0	59.6	55.1	53.6	52.1	51.7	50.4	53.1	53.9	51.5	50.1	48.2	–1.26
Manufacturing	62.7	61.2	55.5	55.2	53.3	52.6	51.2	55.1	55.3	52.8	51.0	48.7	–1.48
Food, beverages and tobacco	45.6	49.6	48.9	47.3	45.6	44.6	42.0	45.9	47.8	47.2	43.9	41.4	–1.52
Textiles, clothing and leather	76.0	76.0	74.1	73.6	75.3	78.0	74.8	84.2	80.2	82.8	81.3	80.0	1.19
Wood and paper; publishing and printing	71.7	64.6	58.6	61.6	53.9	55.1	57.2	64.0	64.6	63.6	62.9	62.6	0.41
Petroleum products, chemicals, rubber and plastic	49.4	46.7	47.3	48.1	47.5	45.5	44.8	49.8	47.4	48.8	45.9	41.6	–1.63
Other non-metallic mineral products	59.4	59.3	60.8	58.3	55.2	58.5	55.8	55.6	54.6	45.5	43.6	41.8	–3.89
Metals, metal products, machinery and equipment	72.8	71.9	66.9	65.9	63.2	61.5	59.4	61.2	65.0	55.6	54.3	50.8	–3.04
Electrical machinery and apparatus	65.5	63.3	63.9	78.2	67.8	64.2	53.1	53.4	55.7	55.0	58.5	58.4	–3.26
Radio, TV, instruments, watches and clocks	74.6	68.6	64.9	62.7	67.1	66.8	63.3	81.4	70.4	73.2	74.2	71.2	2.23
Transport equipment	65.0	72.5	64.5	59.9	58.5	59.9	63.9	71.1	68.2	60.9	58.7	56.5	–0.52
Furniture and other manufacturing	53.2	41.5	27.0	29.7	29.1	27.9	26.7	28.4	28.2	28.5	29.2	30.2	0.25
Electricity, gas and water	29.6	25.2	28.6	27.3	28.7	33.2	33.6	32.2	36.7	34.5	34.2	34.1	3.04
Construction (contractors)	91.5	80.9	84.0	72.9	69.8	65.3	62.6	62.8	62.5	59.9	58.6	57.4	–2.93
Tertiary	62.5	61.2	62.0	59.8	59.3	59.2	59.0	59.4	58.1	56.5	56.0	55.7	–0.87
Trade, catering and accommodation services	52.1	52.8	53.9	51.5	50.4	49.5	50.5	51.8	53.0	49.7	47.6	46.0	–1.35
Transport, storage and communication	81.0	66.8	58.0	50.9	50.3	48.9	47.7	48.9	45.3	42.7	42.6	42.6	–2.15
Financial intermediation, insurance, real estate and business services	36.4	38.6	39.0	36.0	36.3	35.7	35.3	36.0	35.3	35.3	35.4	35.6	–0.12
Community, social and personal services	83.0	81.0	85.6	85.8	85.5	85.9	86.1	85.5	84.9	84.4	84.3	84.4	–0.20
All industries	58.8	50.6	57.2	55.9	55.8	55.4	55.3	56.3	55.8	53.9	52.7	51.4	–1.04

Notes
Wage share is calculated as the remuneration of employees (i.e. wages) relative to the nominal gross value added at factor cost
Table is based on South African Standard Industry database

Table 12

Output growth rates by industry (%) (1970-2002)

	1971	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Average annual growth rate 1971–1981	1982–1993	1994–1996	1997–2002	1994–2002
Primary	1.9	1.8	–3.8	2.2	–10.2	7.8	1.2	–3.7	1.2	1.9	–1.8	1.2	0.52	0.26	–0.06	–0.02	–0.03
Agriculture, forestry and fishing	18.6	10.0	–8.2	5.2	–20.1	22.5	1.0	–7.2	4.4	7.8	–2.3	3.6	4.93	1.74	2.55	1.21	1.65
Mining and quarrying	–3.6	–2.3	–0.5	0.2	–3.2	–0.8	1.3	–1.2	–0.9	–2.3	–1.5	–0.7	–1.13	–0.20	–1.26	–0.88	–1.00
Secondary	7.8	8.0	–1.4	2.8	5.5	2.8	2.7	–1.1	–0.5	4.0	3.3	3.3	5.27	–0.25	3.68	1.95	2.53
Manufacturing	6.5	7.8	–2.3	2.2	6.3	1.6	2.3	–2.1	–0.6	4.9	3.4	3.8	5.66	–0.28	3.39	1.95	2.43
Food, beverages and tobacco	1.5	2.2	–3.7	–0.9	2.9	1.7	2.2	–1.6	–3.5	–2.0	7.4	–1.1	4.89	1.53	1.25	0.23	0.57
Textiles, clothing and leather	7.4	7.9	–12.3	1.8	5.3	–6.6	3.5	–8.4	1.1	–5.4	–2.6	–0.2	5.50	–2.10	0.18	–1.98	–1.26
Wood and paper; publishing and printing	7.3	2.1	–4.4	3.1	3.5	–4.0	3.1	–3.6	1.7	3.1	–0.1	4.7	4.42	0.36	0.86	1.49	1.28
Petroleum products, chemicals, rubber and plastic	5.7	11.0	–4.3	4.5	8.8	3.2	1.4	5.1	3.5	0.0	2.7	1.7	7.15	3.45	5.50	2.38	3.42
Other non-metallic mineral products	6.8	12.4	–5.2	2.6	8.2	–0.9	–1.5	–7.0	–8.1	13.0	3.3	2.7	3.78	–0.94	3.27	0.41	1.36
Metals, metal products, machinery and equipment	11.5	8.1	–3.3	2.2	8.9	8.1	4.6	–4.8	–5.1	12.0	4.7	6.2	6.07	–3.47	6.42	2.94	4.10
Electrical machinery and apparatus	16.1	11.9	–0.1	8.1	11.5	–5.3	9.3	–3.7	–3.0	8.2	–1.2	7.6	11.76	–1.73	4.78	2.86	3.50
Radio, TV, instruments, watches and clocks	11.3	18.2	–5.5	2.9	–10.7	–5.9	8.0	6.1	–1.8	–0.5	–16.8	–7.6	7.64	1.56	–4.58	–2.10	–2.92
Transport equipment	5.7	12.2	–2.8	3.1	15.8	–1.3	–3.6	–4.2	6.0	20.6	8.6	11.6	6.11	–3.07	5.88	6.49	6.29
Furniture and other manufacturing	–10.1	10.2	19.0	0.4	–0.3	2.9	0.9	–1.8	2.0	3.3	2.0	4.2	4.27	7.18	0.98	1.73	1.48
Electricity, gas and water	6.2	8.6	2.0	6.0	2.1	10.7	4.5	1.3	1.8	0.4	1.1	1.5	7.32	3.51	6.25	1.79	3.27
Construction (contractors)	12.9	8.5	0.9	3.0	3.6	2.1	3.3	2.6	–2.6	2.6	5.2	1.9	3.01	–2.68	2.88	2.16	2.40
Tertiary	6.1	7.5	1.6	2.9	4.6	4.4	2.5	2.2	3.2	3.5	3.2	2.7	4.49	1.79	3.95	2.87	3.23
Trade, catering and accommodation services	6.7	12.8	0.7	2.5	6.0	3.7	–0.1	–1.4	–0.1	4.5	3.3	2.1	4.25	0.93	4.07	1.40	2.29
Transport, storage and communication	5.1	7.0	0.3	4.7	10.8	6.6	7.4	6.3	6.9	6.9	6.4	5.9	5.82	0.83	7.35	6.63	6.87
Financial intermediation, insurance, real estate and business services	2.8	6.5	1.1	3.4	3.5	6.8	4.6	5.3	7.4	4.8	4.5	3.0	3.69	1.81	4.59	4.94	4.82
Community, social and personal services	8.9	4.7	3.1	2.0	2.1	2.2	0.5	0.1	–0.1	0.1	0.0	0.9	4.85	2.86	2.11	0.24	0.87
All industries	5.7	6.8	0.0	2.8	3.0	4.3	2.4	0.6	1.9	3.5	2.7	2.7	4.01	0.96	3.35	2.30	2.65

Notes
Sector's output growth rates are calculated using gross value added at factor cost in 1995 prices
Table is based on South African Standard Industry database

Table 13

Macroeconomic indicators (1980-2002)

	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Average annual 1980–1993	Average annual 1994–2002
Real expenditure on GDP (R bn at constant 1995 market prices)													
GDP	460	524	532	548	572	587	591	603	624	642	661	498	596
Private consumption	236	312	324	343	358	370	375	381	394	406	419	282	374
Government consumption	72	101	107	100	104	106	104	104	107	111	115	90	107
Gross fixed investment	98	83	79	87	95	100	105	96	97	100	107	87	96
Exports of goods and services	88	102	114	126	137	145	149	151	163	168	165	93	146
Imports of goods and services	82	78	104	121	132	139	141	130	140	140	144	78	132
Change in inventories	15	–10	9	12	6	1	–3	3	5	2	4	0	4
Domestic demand	455	499	521	543	566	580	583	583	601	615	640	483	581
Real expenditure on GDP (% change)													
GDP	9.2	–0.7	3.2	3.1	4.3	2.6	0.8	2.0	3.5	2.8	3.0	1.5	2.8
Private consumption	8.6	2.9	4.0	5.9	4.5	3.3	1.4	1.4	3.5	3.1	3.2	2.6	3.4
Government consumption	9.1	2.3	0.8	–6.0	3.8	2.1	–2.1	0.1	3.1	3.3	3.7	3.5	1.0
Gross fixed investment	17.1	–2.3	8.2	10.7	9.0	5.7	4.6	–8.1	0.8	3.2	6.5	–0.6	4.5
Exports of goods and services	0.0	1.7	4.3	10.3	9.2	5.6	2.5	1.4	8.4	2.5	–1.4	1.7	4.8
Imports of goods and services	19.1	–5.8	16.1	16.8	8.7	5.4	1.5	–7.4	7.1	0.3	3.1	2.6	5.7
Domestic demand	12.9	–2.0	5.3	4.3	4.2	2.6	0.5	–0.1	3.0	2.3	4.2	1.7	2.9
Origin of GDP (R bn at constant 1995 prices)													
GDP at basic prices	414	479	486	500	522	535	540	552	571	588	606	454	544
Agriculture	20	24	24	19	24	24	23	24	25	25	26	21	24
Mining	37	35	36	35	35	35	35	34	34	33	33	36	34
Industry	134	137	132	139	143	147	146	145	152	157	162	135	147
Services	223	283	294	307	320	329	336	348	361	373	385	262	339
Origin of GDP (real % change)													
GDP at basic prices	6.7	–0.6	3.0	3.0	4.2	2.6	0.8	2.2	3.6	2.9	3.0	1.4	2.8
Agriculture	10.0	–7.1	7.9	–19.9	24.0	0.8	–6.8	5.1	7.6	–1.7	4.0	2.6	2.3
Mining	–2.2	–0.8	0.5	–3.1	–0.8	1.7	–0.8	–1.1	–2.3	–1.5	–0.6	–0.3	–0.9
Industry	9.3	–1.8	3.1	5.6	2.6	2.9	–0.9	–0.3	4.2	3.5	3.4	0.4	2.7
Services	6.4	0.6	2.9	4.5	4.3	2.7	2.3	3.5	3.6	3.4	3.1	2.3	3.4

Table 13

Macroeconomic indicators (1980-2002) (continued)

												Average annual	
Income and market size	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	1980–1993	1994–2002
GDP (US$ bn at market exchange rates)	81	112	136	151	144	149	134	131	128	114	104	92	132
GDP per head (US$ at market exchange rates)	2 929	3 209	3 522	3 828	3 565	3 597	3 156	3 031	2 909	2 554	2 303	2 817	3 163
GDP per head (R)	2 281	8 304	12 503	13 886	15 318	16 574	17 457	18 530	20 176	21 971	24 217	5 805	17 848
GDP per head (R at 1995 prices)	16 436	15 045	13 785	13 886	14 171	14 184	13 968	13 962	14 186	14 351	14 573	15 351	14 118
Private consumption (US$ bn)	41	68	84	95	90	94	84	82	80	71	65	54	83
Private consumption per head (US$)	1 156	5 065	7 733	8 690	9 534	10 427	11 022	11 671	12 647	13 605	15 040	3 432	11 152
Private consumption expenditure per head (R)	8 589	8 929	8 398	8 690	8 883	8 944	8 865	8 809	8 947	9 075	9 238	8 718	8 872
Private consumption expenditure per head (R at 1995 prices)	8 589	8 929	8 398	8 690	8 883	8 944	8 865	8 809	8 947	9 075	9 238	8 718	8 872
GDP (US$ bn at PPP)	178	292	318	339	357	366	367	384	409	431	448	247	380
GDP per head (US$ at PPP)	6 477	8 353	8 242	8 582	8 853	8 851	8 678	8 876	9 293	9 623	9 882	7 562	8 987
Economic structure (% of GDP at current market prices)													
Private consumption	50.7	61.0	61.8	62.6	62.2	62.9	63.1	63.0	62.7	61.9	62.1	57.7	62.5
Government consumption	14.3	19.7	20.0	18.3	19.1	19.2	19.0	18.6	18.7	18.9	19.2	18.1	19.0
Gross fixed investment	25.9	19.1	15.2	15.9	16.3	16.5	17.0	15.4	14.8	14.7	15.1	21.2	15.7
Change in inventories	4.0	–1.9	1.7	2.1	1.1	0.1	–0.4	0.5	0.7	0.4	0.7	0.2	0.8
Exports of goods and services	35.4	24.7	22.2	23.0	24.6	24.6	25.7	25.7	28.6	30.6	34.0	26.9	26.5
Imports of goods and services	27.3	18.8	19.9	22.1	23.2	23.4	24.6	23.1	25.8	27.1	30.5	22.1	24.4
Origin of GDP (% of factor cost GDP)													
Agriculture	6.2	4.6	4.6	3.9	4.2	4.0	3.6	3.4	3.2	3.5	3.8	5.1	3.8
Mining	20.6	9.2	7.3	7.0	6.9	6.5	6.4	6.3	6.8	7.5	8.1	12.1	7.0
Industry	27.8	30.9	27.7	27.9	26.6	26.2	25.7	24.7	24.3	24.0	24.0	29.9	25.7
Services	45.4	55.3	60.4	61.3	62.4	63.3	64.2	65.5	65.6	65.0	64.2	52.9	63.6
Policy indicators (% of GDP)													
Government expenditure	21.8	25.5	27.2	27.1	27.9	27.5	27.3	26.5	25.4	25.6	25.9	25.3	26.7
Government revenue	20.6	24.8	22.4	22.2	23.0	22.9	24.0	24.4	23.4	24.9	25.1	22.2	23.6
Budget balance	–1.3	–0.7	–4.8	–4.9	–4.9	–4.6	–3.3	–2.2	–2.0	–0.7	–0.8	–3.2	–3.1
Disposable income and savings													
Real personal disposable income (R 1995 prices)	266	320	333	349	365	376	378	382	395	407	421	297	379
Real personal disposable income (% change)	8.6	0.4	2.0	4.8	4.6	3.0	0.5	1.1	3.4	2.9	3.5	1.9	2.9
Real personal disposable income per capita (R 1995 prices)	9 687	9 170	8 637	8 848	9 048	9 088	8 931	8 847	8 984	9 098	9 278	9 177	8 973
Net national savings ratio (% of GDP)	33.9	19.1	16.8	16.5	16.1	15.0	14.8	15.4	15.1	14.8	16.1	22.4	15.6

												Average annual	
Wage and price inflation (%)	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	1980–1993	1994–2002
Consumer prices (average)	13.7	14.3	8.8	8.7	7.3	8.6	6.9	5.2	5.4	5.7	9.1	14.3	7.3
Average nominal wages per worker	16.9	16.9	14.3	11.8	11.4	11.3	13.8	7.1	9.2	9.1	10.0	16.1	10.9
Average real wages per worker	–7.3	–0.3	4.8	1.6	2.3	2.8	6.8	0.9	1.6	1.9	1.8	0.5	2.7
Nominal unit labour costs	17.2	16.5	10.9	6.1	6.9	6.3	8.7	2.9	2.7	4.1	7.0	15.5	6.2
Labour productivity	0.3	0.3	3.2	5.3	4.2	4.5	4.9	4.2	6.3	4.8	2.9	0.5	4.5
Exchange rates (average)													
Exchange rate R:US$	0.78	2.59	3.55	3.63	4.30	4.61	5.53	6.11	6.94	8.60	10.52	2.0	6.0
Purchasing power parity R:US$	0.35	0.99	1.52	1.62	1.73	1.87	2.01	2.09	2.17	2.28	2.45	0.7	2.0
Nominal effective exchange rate index (R:FCU)	22.6	73.7	92.8	100.0	112.6	112.1	127.0	138.8	146.2	171.2	216.5	51.6	135.3
Real effective exchange rate index (R:FCU)	89.9	102.6	98.5	100.0	106.8	100.3	110.1	116.2	119.7	138.4	167.3	98.2	117.5
Interest rates (average)													
Lending interest rate (%)	9.5	21.0	15.6	17.9	19.5	20.0	21.8	18.0	14.5	13.8	13.8	17.3	17.2
Deposit interest rate (%)	5.5	18.9	11.1	13.5	14.9	15.4	16.5	12.2	9.2	9.4	9.4	13.5	12.4
Money market interest rate (%)	4.4	19.5	10.2	13.1	15.5	15.6	17.1	13.1	9.5	8.8	8.8	14.2	12.4
Long-term bond yield (%)	10.1	16.2	14.8	16.1	15.5	14.7	15.1	14.9	13.8	11.4	11.4	14.9	14.2
Terms of trade													
Export price index (1995=100)	143.9	121.8	110.4	100.0	91.5	86.7	84.9	83.8	76.1	75.1	76.2	136.7	87.2
Export prices (% change)	–0.6	–2.7	–4.1	–9.4	–8.5	–5.2	–2.1	–1.3	–9.1	–1.3	1.4	–1.5	–4.4
Export (excluding gold) price index (1995=100)	483	145	108	100	93	86	78	72	64	55	45	254	78
Export (excluding gold) prices (% change)	–10.1	–7.7	–10.0	–7.3	–7.4	–7.1	–9.8	–6.7	–11.9	–13.8	–18.8	–10.0	–10.3
Import price index (1995=100)	394	144	107	100	91	86	78	73	64	55	44	233	78
Import prices (% change)	–25.2	–4.5	–10.7	–6.3	–9.3	–4.9	–9.7	–6.1	–12.0	–13.8	–20.2	–9.8	–10.3
Terms of trade (1995=100)	82.0	99.6	98.5	100.0	98.6	99.8	100.7	103.6	105.7	105.5	103.0	97.3	101.7
Terms of trade (excluding gold) (1995=100)	100.3	100.2	99.6	100.0	100.7	99.5	100.3	102.7	104.8	104.5	103.8	104.0	101.8

Table 13

Macroeconomic indicators (1980-2002) (continued)

												Average annual	
Current account (R bn)	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	1980–1993	1994–2002
Current-account balance	2.6	5.5	0.3	–8.0	–8.1	–10.4	–12.9	–3.9	–3.7	–2.8	3.3	2.8	–5.1
Current-account balance (% of GDP)	4.1	1.9	0.1	–1.5	–1.3	–1.5	–1.7	–0.5	–0.4	–0.3	0.3	0.9	–0.8
Merchandise exports f.o.b.	10.1	44.7	69.9	86.6	103.9	118.0	135.2	150.6	193.2	233.2	283.4	28.7	152.7
Net gold exports	10.1	18.2	23.7	22.5	26.3	25.8	25.9	24.3	26.8	29.4	42.6	15.5	27.5
Merchandise imports f.o.b.	14.6	44.7	77.7	99.4	118.7	133.1	150.7	150.0	189.8	221.6	279.8	32.8	157.9
Trade balance	5.67	18.21	15.86	9.69	11.55	10.77	10.42	24.87	30.21	41.01	46.10	11.4	22.3
Service receipts	1.9	8.8	13.3	16.8	21.6	24.6	29.1	31.0	33.9	38.6	47.1	5.4	28.4
Service payments	2.5	9.7	18.1	21.7	24.7	27.7	30.9	34.9	39.6	44.4	55.8	7.1	33.1
Services balance	–0.63	–0.87	–4.77	–4.92	–3.09	–3.07	–1.86	–3.87	–5.72	–5.72	–8.69	–1.6	–4.6
Income receipts	0.4	1.7	3.5	4.1	4.7	6.0	7.2	9.6	15.7	19.2	18.9	1.9	9.9
Income payments	3.0	12.7	12.1	14.6	18.0	20.8	24.5	28.8	37.4	51.1	47.2	8.2	28.3
Income balance	–2.59	–11.04	–8.60	–10.43	–13.38	–14.80	–17.33	–19.26	–21.72	–31.85	–28.29	–6.4	–18.4
Current transfers balance	0.1	–0.8	–2.2	–2.3	–3.2	–3.3	–4.1	–5.7	–6.4	–6.3	–5.8	–0.6	–4.4
Foreign direct investment (R bn)												–	–
Inward direct investment		0.20	1.33	4.53	3.51	17.56	3.04	9.19	6.72	61.62	7.89	0.4	12.8
Inward direct investment (% of GDP)		0.07	0.28	0.83	0.57	2.56	0.41	1.15	0.76	6.27	0.72	0.2	1.5
Inward direct investment (% of gross fixed investment)		0.35	1.82	5.20	3.48	15.51	2.43	7.45	5.10	42.66	4.74	1.1	9.8
Outward direct investment		–0.07	–4.48	–9.05	–4.50	–10.71	–9.04	–9.68	–1.92	31.71	4.21	–1.0	–1.5
Net foreign direct investment		0.12	–3.15	–4.52	–1.00	6.85	–6.00	–0.50	4.80	93.33	12.09	–0.6	11.3
Stock of inward direct investment		109	111	115	119	136	139	149	155	217	225	122	152
Stock of inward direct investment per head (R)		3 116	2 874	2 922	2 946	3 297	3 294	3 440	3 530	4 850	4 956	3 567	3 568
Stock of inward direct investment (% of GDP)		38	23	21	19	20	19	19	17	22	20	55	20
External debt													
Total external debt (R bn)	9.2	50.2	76.9	92.0	111.9	116.4	136.9	146.1	172.4	206.9	259.4	40.2	146.6
Total external debt (% of GDP)	14.7	17.3	16.0	16.8	18.1	17.0	18.5	18.3	19.4	21.0	23.6	23.1	18.7
Debt/exports ratio (%)	41.7	69.9	72.0	73.1	73.7	69.1	72.0	71.0	67.9	68.7	69.5	85.6	70.8
Debt-service ratio, paid (%)	6.7	4.7	9.3	9.5	11.6	17.3	12.3	12.2	9.9	12.9	10.5	6.3	11.7

International comparison	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Average annual 1980–1993	Average annual 1994–2002
Share of world population (%)	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8
Share of Africa population (%)	9.9	9.5	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.3	9.2	9.6	9.3
Share of Sub-Saharan Africa population (%)	13.1	12.4	12.2	12.2	12.2	12.1	12.1	12.1	12.0	11.9	11.8	12.6	12.1
Share of SADC population (%)	35.3	33.7	33.6	33.4	33.8	33.9	33.9	33.9	33.8	33.7	33.6	34.3	33.7
Share of world GDP (% at market exchange rates)	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.6	0.4
Share of Africa GDP (% at market exchange rates)	22.7	28.5	33.9	38.2	34.2	34.6	32.8	32.8	31.5	29.4	27.5	26.4	32.8
Share of Sub-Saharan Africa GDP (% at market exchange rates)	33.6	47.1	50.0	57.4	52.6	53.1	51.2	51.2	50.4	47.9	45.0	41.0	51.0
Share of SADC GDP (% at market exchange rates)	74.3	70.3	76.2	77.8	75.1	75.9	76.6	77.8	77.0	75.7	74.1	71.9	76.2
Share of world GDP (% at PPP)	1.3	1.2	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	1.2	1.0
Share of Africa GDP (% at PPP)	37.9	36.9	35.0	35.3	34.7	33.9	32.8	33.1	33.9	34.1	34.3	37.7	34.1
Share of Sub-Saharan Africa GDP (% at PPP)	58.5	57.6	54.8	55.0	54.4	53.1	51.4	51.5	52.3	52.6	52.8	59.3	53.1
Share of SADC GDP (% at PPP)	97.3	88.7	85.8	86.3	84.9	83.0	81.1	81.6	83.0	84.2	84.8	90.4	83.8
Share of world exports (%)	1.3	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.5
Share of Africa exports (%)	24.1	25.6	25.1	29.3	27.1	28.2	30.5	28.8	25.7	25.6	26.0	26.6	27.4
Share of Sub-Saharan Africa exports (%)	38.2	40.3	34.8	43.1	39.5	41.3	43.8	42.9	41.3	41.8	42.4	41.1	41.2
Share of SADC exports (%)	79.7	66.2	59.2	62.4	62.6	64.4	67.5	68.6	70.9	71.3	74.8	69.8	66.9

Sources: South African Reserve Bank Quarterly Bulletin 2003 q1; EIU CountryData; World Bank Global Development Indicators; IMF International Financial Statistics

Table 14

Macroeconomic indicators (real per capita) (1980-2002)

	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	Average annual 1980–1993	Average annual 1994–2002
Per capita real expenditure on GDP (constant 1995 market prices, Rand)													
GDP	16 661	15 090	13 897	13 957	14 186	14 200	13 990	13 994	14 229	14 408	14 645	15 467	14 167
Private consumption	8 550	8 979	8 467	8 735	8 893	8 954	8 879	8 829	8 975	9 111	9 284	8 728	8 903
Government consumption	2 604	2 898	2 793	2 557	2 587	2 576	2 466	2 419	2 449	2 492	2 550	2 784	2 543
Gross fixed investment	3 537	2 399	2 056	2 217	2 354	2 428	2 483	2 238	2 217	2 253	2 368	2 740	2 290
Exports of goods and services	3 180	2 934	2 984	3 205	3 410	3 511	3 519	3 498	3 725	3 759	3 660	2 868	3 475
Imports of goods and services	2 974	2 235	2 711	3 084	3 267	3 357	3 332	3 024	3 183	3 142	3 199	2 421	3 144
Change in inventories	527	–274	226	293	149	20	–62	65	104	38	96	5	103
Domestic demand	16 455	14 391	13 624	13 836	14 043	14 046	13 803	13 520	13 687	13 791	14 184	15 020	13 837
Origin of GDP (constant 1995 prices, Rand)													
GDP at basic prices	14 975	13 812	12 701	12 741	12 943	12 954	12 767	12 795	13 022	13 198	13 419	14 100	12 949
Agriculture	715	684	631	492	594	584	533	549	580	562	576	643	567
Mining	1 330	1 013	940	887	857	850	824	800	768	745	731	1 130	822
Industry	4 851	3 952	3 451	3 549	3 549	3 563	3 451	3 375	3 454	3 521	3 594	4 206	3 501
Services	8 079	8 163	7 679	7 814	7 943	7 956	7 959	8 072	8 220	8 370	8 518	8 122	8 059
Disposable income and savings													
Real personal disposable income	9 644	9 221	8 708	8 894	9 057	9 098	8 944	8 867	9 011	9 134	9 324	9 188	9 004
Current account (R bn)													
Merchandise exports f.o.b.	367	1 289	1 827	2 205	2 578	2 856	3 199	3 494	4 403	5 233	6 277	850	3 564
Net gold exports	367	524	619	574	653	625	613	563	611	660	943	471	651
Merchandise imports f.o.b.	529	1 288	2 031	2 532	2 944	3 220	3 566	3 480	4 326	4 973	6 198	983	3 697
External debt													
Total external debt	335	1 445	2 011	2 342	2 777	2 818	3 240	3 390	3 929	4 643	5 746	1 213	3 433

Sources: South African Reserve Bank Quarterly Bulletin 2003 q1; EIU CountryData; World Bank Global Development Indicators; IMF International Financial Statistics

Table 15

Income and expenditure of general government (Rm current prices) (1990-2002)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1 Income from property	3 442	7 487	4 022	4 396	4 998	5 357	6 948	5 713	7 015	6 579	8 049	7 491	6 569
2 Taxes on production and imports (indirect taxes)	34 033	36 301	40 643	50 249	57 990	64 161	69 746	77 925	87 171	96 191	105 597	117 662	135 985
3 Current taxes on income and wealth	39 115	42 508	46 013	50 178	59 845	67 911	84 143	95 984	111 465	120 679	127 649	153 925	170 673
4 – Households	23 831	28 961	35 050	37 599	45 280	52 152	60 291	68 992	84 093	92 628	97 825	99 427	105 249
5 – Incorporated business enterprises	15 284	13 547	10 963	12 579	14 565	15 759	23 852	26 992	27 372	28 051	29 824	54 498	65 424
6 Domestic and international transfers received	802	874	717	806	869	1 998	1 051	1 647	1 291	1 459	1 867	1 979	2 166
7 Current income (1+2+3+6)	77 392	87 170	91 395	105 629	123 702	139 427	161 888	181 269	206 942	224 908	243 162	281 057	315 393
8 Less: Interest on public debt	11 998	15 040	19 021	22 157	26 631	32 551	39 392	42 098	47 093	49 358	51 612	53 483	54 397
9 Less: Subsidies	4 304	4 364	7 820	9 453	8 998	8 251	8 361	7 652	8 087	6 940	5 592	5 207	6 175
10 Less: Current transfers to households	9 727	10 534	15 214	14 660	17 357	18 452	24 203	27 145	27 804	28 226	29 871	31 644	38 284
11 Less: Transfers to the rest of the world	1 146	1 727	1 332	2 401	2 543	2 877	3 243	3 823	4 280	5 851	6 955	7 121	7 011
12 Disposable income (7-8-9-10-11)	50 217	55 505	48 008	56 958	68 173	77 296	86 689	100 551	119 678	134 533	149 132	183 602	209 526
13 Final consumption expenditure (14+22 or 31+32)	56 991	65 667	75 257	85 551	96 503	100 424	118 013	131 903	140 170	149 089	166 330	185 348	211 443
14 Compensation of employees by function	32 356	38 781	48 068	55 255	63 435	72 021	86 292	96 416	103 526	108 704	115 850	124 504	137 660
15 – General administration	4 418	4 922	6 063	6 656	8 416	9 049	9 334	11 778	12 647	13 279	14 152	15 209	16 816
16 – Defence	2 895	3 175	3 746	4 005	4 029	5 158	6 506	6 766	7 265	7 628	8 129	8 737	9 660
17 – Law and order	4 814	6 172	8 002	9 343	10 207	11 820	14 060	15 683	16 839	17 681	18 844	20 251	22 391
18 – Education	12 086	14 852	18 325	21 917	24 808	28 930	35 035	38 527	41 368	43 437	46 292	49 750	55 007
19 – Health	5 154	6 145	7 363	8 119	9 641	10 171	12 391	14 038	15 073	15 827	16 868	18 128	20 043
20 – Social security and welfare	1 220	1 546	2 072	2 340	2 941	3 148	4 205	4 461	4 790	5 029	5 360	5 760	6 369
21 – Economic services	1 770	1 969	2 497	2 876	3 394	3 745	4 762	5 164	5 545	5 822	6 205	6 668	7 373
22 Expenditure on goods and services by function	24 635	26 886	27 189	30 296	33 068	28 403	31 721	35 487	36 644	40 385	50 480	60 844	73 783
23 – General administration	4 591	3 985	2 981	8 504	7 023	4 615	5 064	4 130	5 900	9 566	13 057	15 539	18 309
24 – Defence	7 902	8 063	6 992	5 936	6 054	5 509	5 214	4 617	3 882	3 330	5 189	6 616	7 872
25 – Law and order	1 866	2 379	2 324	1 776	2 128	1 739	2 809	3 342	4 829	5 035	5 431	7 065	8 953
26 – Education	3 972	4 801	5 363	2 897	2 810	2 213	4 231	5 143	3 404	2 502	3 466	3 136	4 577
27 – Health	2 902	3 556	3 710	4 052	3 176	4 280	5 848	7 260	7 270	6 853	7 922	9 165	11 002
28 – Social security and welfare	1 102	1 178	1 221	2 697	2 847	4 106	3 814	5 439	6 350	7 255	8 399	9 821	11 498
29 – Economic services	2 300	2 925	4 597	4 434	9 030	5 941	4 740	5 557	5 009	5 843	7 015	9 502	11 571
30 Expenditure on goods and services by aim													
31 – Individual consumption expenditure (transfers in kind to households)	24 215	27 914	34 109	38 905	43 084	45 423	51 746	62 068	64 916	66 097	75 294	85 444	96 702
32 – Collective consumption expenditure	32 776	37 753	41 148	46 646	53 419	55 001	66 267	69 835	75 254	82 992	91 036	99 904	114 741
33 Current expenditure (13+7-12)	84 166	97 332	118 644	134 222	152 032	162 555	193 212	212 621	227 434	239 464	260 360	282 803	317 310
34 Saving of general government (7-33)	–6 774	–10 162	–27 249	–28 593	–28 330	–23 128	–31 324	–31 352	–20 492	–14 556	–17 198	–1 746	–1 917

Table 15

Income and expenditure of general government (Rm current prices) (1990-2002) (continued)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
35 Capital expenditure (gross fixed capital formation)	11 286	11 480	10 611	10 685	11 358	13 123	16 134	18 586	19 195	20 096	20 278	21 601	23 779
36 – Economic infrastructure 1)	6 663	6 572	6 161	5 875	6 622	6 016	8 222	8 622	8 363	8 804	9 167	10 080	10 483
37 – Social infrastructure 2)	3 651	3 851	3 177	3 635	3 598	5 073	5 410	6 744	6 686	6 574	6 574	6 936	7 943
38 – Economic services 3)	972	1 057	1 273	1 175	1 138	2 034	2 502	3 220	4 146	4 718	4 537	4 585	5 353
39 Capital expenditure (gross fixed capital formation) by function													
40 – General administration	1 590	2 042	1 769	1 557	1 803	2 221	1 994	2 918	3 014	3 155	3 184	3 391	3 733
41 – Defence	4	2	8	0	0	6	597	551	569	595	601	640	704
42 – Law and order	655	854	849	750	761	893	1 596	1 259	1 300	1 361	1 373	1 463	1 611
43 – Education	2 056	2 046	1 950	2 352	2 432	2 877	3 383	3 912	4 040	4 230	4 268	4 546	5 005
44 – Health	577	493	443	477	484	857	1 025	1 163	1 201	1 258	1 269	1 352	1 488
45 – Social security and welfare	1 686	1 783	1 986	1 942	2 495	2 925	3 387	4 166	4 302	4 504	4 545	4 842	5 330
46 – Economic services	4 719	4 260	3 607	3 608	3 382	3 344	4 150	4 618	4 769	4 993	5 038	5 367	5 908

Sources: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget
General government includes central government, provincial governments, provincial authorities and extra budgetary institutions. It does not include public corporations.
1) Roads, bridges, dams, electricity and water supply
2) Schools, hospitals, etc. and administrative services
3) Business enterprises not included in economic infrastructure

Table 16

Real income and expenditure of general government (Rm constant 1995 prices) (1990-2002)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1 Income from property	6 074	11 725	5 599	5 446	5 534	5 357	6 137	4 612	5 215	4 602	5 201	4 489	3 577
2 Taxes on production and imports (indirect taxes)	60 056	56 850	56 576	62 252	64 204	64 161	61 609	62 901	64 805	67 287	68 238	70 504	74 040
3 Current taxes on income and wealth	69 023	66 571	64 051	62 164	66 258	67 911	74 326	77 478	82 866	84 417	82 488	92 233	92 927
4 – Households	42 053	45 355	48 790	46 580	50 132	52 152	53 257	55 690	62 517	64 795	63 215	59 577	57 305
5 – Incorporated business enterprises	26 971	21 216	15 261	15 584	16 126	15 759	21 069	21 788	20 349	19 622	19 273	32 656	35 622
6 Domestic and international transfers received	1 415	1 369	998	999	962	1 998	928	1 329	960	1 021	1 206	1 186	1 179
7 Current income (1+2+3+6)	136 568	136 515	127 223	130 861	136 958	139 427	143 001	146 320	153 846	157 327	157 134	168 412	171 723
8 Less: Interest on public debt	21 172	23 554	26 478	27 450	29 485	32 551	34 796	33 981	35 010	34 527	33 352	32 047	29 618
9 Less: Subsidies	7 595	6 834	10 886	11 711	9 962	8 251	7 386	6 177	6 012	4 855	3 614	3 120	3 362
10 Less: Current transfers to households	17 165	16 497	21 178	18 162	19 217	18 452	21 379	21 911	20 670	19 745	19 303	18 961	20 845
11 Less: Transfers to the rest of the world	2 022	2 705	1 854	2 975	2 816	2 877	2 865	3 086	3 182	4 093	4 494	4 267	3 817
12 Disposable income (7-8-9-10-11)	88 614	86 925	66 828	70 564	75 478	77 296	76 575	81 165	88 972	94 108	96 370	110 016	114 081
13 Final consumption expenditure (14+22 or 31+32)	100 568	102 840	104 759	105 987	106 844	100 424	104 245	106 472	104 206	104 290	107 484	111 062	115 125
14 Compensation of employees by function	57 096	60 734	66 911	68 454	70 233	72 021	76 225	77 827	76 964	76 040	74 863	74 604	74 952
15 – General administration	7 796	7 709	8 440	8 246	9 318	9 049	8 245	9 507	9 402	9 289	9 145	9 114	9 156
16 – Defence	5 109	4 973	5 214	4 961	4 460	5 158	5 747	5 461	5 401	5 336	5 253	5 235	5 260
17 – Law and order	8 495	9 665	11 139	11 574	11 301	11 820	12 420	12 659	12 519	12 368	12 177	12 135	12 191
18 – Education	21 328	23 260	25 509	27 152	27 466	28 930	30 947	31 099	30 754	30 385	29 915	29 811	29 950
19 – Health	9 094	9 624	10 249	10 059	10 674	10 171	10 946	11 332	11 206	11 071	10 900	10 862	10 913
20 – Social security and welfare	2 152	2 420	2 884	2 898	3 256	3 148	3 715	3 601	3 561	3 518	3 464	3 452	3 468
21 – Economic services	3 123	3 084	3 476	3 563	3 757	3 745	4 206	4 168	4 122	4 073	4 009	3 996	4 014
22 Expenditure on goods and services by function	43 472	42 106	37 848	37 533	36 611	28 403	28 020	28 645	27 242	28 250	32 621	36 458	40 173
23 – General administration	8 101	6 240	4 150	10 536	7 776	4 615	4 474	3 334	4 386	6 692	8 437	9 311	9 969
24 – Defence	13 944	12 627	9 733	7 354	6 703	5 509	4 606	3 727	2 886	2 330	3 353	3 964	4 286
25 – Law and order	3 293	3 725	3 235	2 201	2 356	1 739	2 481	2 698	3 590	3 522	3 510	4 233	4 875
26 – Education	7 009	7 518	7 466	3 589	3 111	2 213	3 738	4 151	2 531	1 750	2 240	1 879	2 492
27 – Health	5 120	5 570	5 165	5 020	3 516	4 280	5 166	5 860	5 405	4 794	5 119	5 492	5 990
28 – Social security and welfare	1 945	1 844	1 700	3 341	3 152	4 106	3 369	4 390	4 721	5 075	5 428	5 885	6 261
29 – Economic services	4 059	4 581	6 399	5 493	9 997	5 941	4 187	4 485	3 724	4 087	4 533	5 694	6 300
30 Expenditure on goods and services by aim													
31 – Individual consumption expenditure (transfers in kind to households)	42 731	43 716	47 480	48 198	47 701	45 423	45 709	50 101	48 260	46 236	48 656	51 199	52 652
32 – Collective consumption expenditure	57 837	59 124	57 279	57 789	59 143	55 001	58 536	56 371	55 946	58 054	58 828	59 863	62 473
33 Current expenditure (13+7-12)	148 522	152 430	165 154	166 284	168 323	162 555	170 671	171 628	169 080	167 509	168 247	169 458	172 767
34 Saving of general government (7-33)	–11 954	–15 915	–37 931	–35 423	–31 366	–23 128	–27 670	–25 307	–15 234	–10 182	–11 114)	–1 046	–1 044

Table 16

Real income and expenditure of general government (Rm constant 1995 prices) (1990-2002) (continued)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
35 Capital expenditure (gross fixed capital formation)	19 916	17 979	14 771	13 237	12 575	13 123	14 252	15 003	14 270	14 057	13 104	12 943	12 947
36 – Economic infrastructure 1)	11 758	10 292	8 576	7 278	7 332	6 016	7 263	6 960	6 217	6 159	5 924	6 040	5 708
37 – Social infrastructure 2)	6 443	6 031	4 422	4 503	3 984	5 073	4 779	5 444	4 971	4 599	4 248	4 156	4 325
38 – Economic services 3)	1 715	1 655	1 772	1 456	1 260	2 034	2 210	2 599	3 082	3 300	2 932	2 747	2 915
39 Capital expenditure (gross fixed capital formation) by function													
40 – General administration	2 805	3 198	2 462	1 929	1 997	2 221	1 762	2 355	2 240	2 207	2 057	2 032	2 033
41 – Defence	7	3	12	0	0	6	528	444	423	416	388	383	384
42 – Law and order	1 156	1 337	1 181	929	843	893	1 410	1 016	967	952	888	877	877
43 – Education	3 627	3 205	2 714	2 913	2 692	2 877	2 988	3 158	3 003	2 959	2 758	2 724	2 725
44 – Health	1 017	772	616	590	536	857	906	939	893	880	820	810	810
45 – Social security and welfare	2 976	2 792	2 764	2 406	2 762	2 925	2 992	3 363	3 198	3 151	2 937	2 901	2 902
45 – Economic services	8 327	6 672	5 021	4 470	3 745	3 344	3 666	3 727	3 545	3 493	3 256	3 216	3 217

Sources: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget
Note: Constant 1995 prices where calculated with the appropriate national accounting deflators
General government includes central government, provincial governments, provincial authorities and extra budgetary institutions. It does not include public corporations.
1) Roads, bridges, dams, electricity and water supply
2) Schools, hospitals, etc. and administrative services
3) Business enterprises not included in economic infrastructure

Table 17

Real per capita income and expenditure of general government (R constant 1995 prices) (1990-2002)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1 Income from property	174	328	153	145	144	136	152	111	123	107	118	100	79
2 Taxes on production and imports (Indirect taxes)	1,721	1,593	1,542	1,654	1,665	1,625	1,527	1,520	1,531	1,557	1,550	1,576	1,632
3 Current taxes on income and wealth	1,978	1,865	1,746	1,652	1,718	1,720	1,842	1,873	1,958	1,954	1,874	2,062	2,048
4 – Households	1,205	1,271	1,330	1,238	1,300	1,321	1,320	1,346	1,477	1,500	1,436	1,332	1,263
5 – Incorporated business enterprises	773	594	416	414	418	399	522	527	481	454	438	730	785
6 Domestic and international transfers received	41	38	27	27	25	51	23	32	23	24	27	27	26
7 Current income	3,913	3,825	3,469	3,478	3,552	3,532	3,545	3,537	3,635	3,641	3,570	3,764	3,785
8 Less: Interest on public debt	607	660	722	730	765	825	863	821	827	799	758	716	653
9 Less: Subsidies	218	191	297	311	258	209	183	149	142	112	82	70	74
10 Less: Current transfers to households	492	462	577	483	498	467	530	530	488	457	439	424	459
11 Less: Transfers to the rest of the world	58	76	51	79	73	73	71	75	75	95	102	95	84
12 Disposable income	2,539	2,435	1,822	1,875	1,957	1,958	1,898	1,962	2,102	2,178	2,189	2,459	2,514
13 Less: Final consumption expenditure	2,882	2,881	2,856	2,817	2,771	2,544	2,584	2,573	2,462	2,414	2,442	2,483	2,537
14 Compensation of employees by function	1,636	1,702	1,824	1,819	1,821	1,825	1,889	1,881	1,818	1,760	1,701	1,668	1,652
15 – General administration	223	216	230	219	242	229	204	230	222	215	208	204	202
16 – Defence	146	139	142	132	116	131	142	132	128	123	119	117	116
17 – Law and order	243	271	304	308	293	299	308	306	296	286	277	271	269
18 – Education	611	652	695	722	712	733	767	752	727	703	680	666	660
19 – Health	261	270	279	267	277	258	271	274	265	256	248	243	241
20 – Social security and welfare	62	68	79	77	84	80	92	87	84	81	79	77	76
21 – Economic services	89	86	95	95	97	95	104	101	97	94	91	89	88
22 Expenditure on goods and services by function	1,246	1,180	1,032	998	949	720	695	692	644	654	741	815	885
23 – General administration	232	175	113	280	202	117	111	81	104	155	192	208	220
24 – Defence	400	354	265	195	174	140	114	90	68	54	76	89	94
25 – Law and order	94	104	88	58	61	44	61	65	85	82	80	95	107
26 – Education	201	211	204	95	81	56	93	100	60	41	51	42	55
27 – Health	147	156	141	133	91	108	128	142	128	111	116	123	132
28 – Social security and welfare	56	52	46	89	82	104	84	106	112	117	123	132	138
29 – Economic services	116	128	174	146	259	151	104	108	88	95	103	127	139
30 Expenditure on goods and services by aim													
31 – Individual consumption expenditure (transfers in kind to households)	1,224	1,225	1,294	1,281	1,237	1,151	1,133	1,211	1,140	1,070	1,105	1,144	1,160
32 – Collective consumption expenditure	1,657	1,656	1,562	1,536	1,534	1,393	1,451	1,362	1,322	1,344	1,337	1,338	1,377
33 Current expenditure	4,256	4,270	4,503	4,419	4,365	4,118	4,231	4,148	3,994	3,877	3,823	3,788	3,808
34 Saving of general government	–343	–446	–1,034	–941	–813	–586	–686	–612	–360	–236	–252	–23	–23

Table 17

Real per capita income and expenditure of general government (R constant 1995 prices) (1990-2002) (continued)

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
35 Capital expenditure (gross fixed capital formation)	323	322	289	284	295	332	400	449	453	465	461	483	524
36 – Economic infrastructure 1)	191	184	168	156	172	152	204	208	198	204	208	225	231
37 – Social infrastructure 2)	105	108	87	97	93	129	134	163	158	152	149	155	175
38 – Economic services 3)	28	30	35	31	30	52	62	78	98	109	103	102	118
39 Capital expenditure (gross fixed capital formation) by function													
40 – General administration	46	57	48	41	47	56	49	71	71	73	72	76	82
41 – Defence	0	0	0	0	0	0	15	13	13	14	14	14	16
42 – Law and order	19	24	23	20	20	23	40	30	31	31	31	33	35
43 – Education	59	57	53	62	63	73	84	95	95	98	97	102	110
44 – Health	17	14	12	13	13	22	25	28	28	29	29	30	33
45 – Social security and welfare	48	50	54	52	65	74	84	101	102	104	103	108	117
46 – Economic services	135	119	98	96	88	85	103	112	113	116	114	120	130

Sources: SA Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget
Note: Constant 1995 prices where calculated with the appropriate national accounting deflators
General government includes central government, provincial governments, provincial authorities and extra budgetary institutions. It does not include public corporations.
1) Roads, bridges, dams, electricity and water supply
2) Schools, hospitals, etc. and administrative services
3) Business enterprises not included in economic infrastructure

Table 18

Income and expenditure of general government (% contribution) (1990-2002)

Description	% contribution												
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1 Income from property	4.4	8.6	4.4	4.2	4.0	3.8	4.3	3.2	3.4	2.9	3.3	2.7	2.1
2 Taxes on production and imports (indirect taxes)	44.0	41.6	44.5	47.6	46.9	46.0	43.1	43.0	42.1	42.8	43.4	41.9	43.1
3 Current taxes on income and wealth	50.5	48.8	50.3	47.5	48.4	48.7	52.0	53.0	53.9	53.7	52.5	54.8	54.1
4 – Households	30.8	33.2	38.4	35.6	36.6	37.4	37.2	38.1	40.6	41.2	40.2	35.4	33.4
5 – Incorporated business enterprises	19.7	15.5	12.0	11.9	11.8	11.3	14.7	14.9	13.2	12.5	12.3	19.4	20.7
6 Domestic and international transfers received	1.0	1.0	0.8	0.8	0.7	1.4	0.6	0.9	0.6	0.6	0.8	0.7	0.7
7 Current income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
8 – as % of gross domestic product	26.7	26.3	24.6	24.8	25.7	25.4	26.2	26.4	28.0	28.1	27.4	28.6	28.7
9 Less: Interest on public debt	14.3	15.5	16.0	16.5	17.5	20.0	20.4	19.8	20.7	20.6	19.8	18.9	17.1
10 Less: Subsidies	5.1	4.5	6.6	7.0	5.9	5.1	4.3	3.6	3.6	2.9	2.1	1.8	1.9
11 Less: Current transfers to households	11.6	10.8	12.8	10.9	11.4	11.4	12.5	12.8	12.2	11.8	11.5	11.2	12.1
12 Less: Transfers to the rest of the world	1.4	1.8	1.1	1.8	1.7	1.8	1.7	1.8	1.9	2.4	2.7	2.5	2.2
13 Disposable income	59.7	57.0	40.5	42.4	44.8	47.6	44.9	47.3	52.6	56.2	57.3	64.9	66.0
14 Final consumption expenditure (15+23)	67.7	67.5	63.4	63.7	63.5	61.8	61.1	62.0	61.6	62.3	63.9	65.5	66.6
15 Compensation of employees by function	38.4	39.8	40.5	41.2	41.7	44.3	44.7	45.3	45.5	45.4	44.5	44.0	43.4
16 – General administration	5.2	5.1	5.1	5.0	5.5	5.6	4.8	5.5	5.6	5.5	5.4	5.4	5.3
17 – Defence	3.4	3.3	3.2	3.0	2.6	3.2	3.4	3.2	3.2	3.2	3.1	3.1	3.0
18 – Law and order	5.7	6.3	6.7	7.0	6.7	7.3	7.3	7.4	7.4	7.4	7.2	7.2	7.1
19 – Education	14.4	15.3	15.4	16.3	16.3	17.8	18.1	18.1	18.2	18.1	17.8	17.6	17.3
20 – Health	6.1	6.3	6.2	6.0	6.3	6.3	6.4	6.6	6.6	6.6	6.5	6.4	6.3
21 – Social security and welfare	1.4	1.6	1.7	1.7	1.9	1.9	2.2	2.1	2.1	2.1	2.1	2.0	2.0
22 – Economic services	2.1	2.0	2.1	2.1	2.2	2.3	2.5	2.4	2.4	2.4	2.4	2.4	2.3
23 Expenditure on goods and services by function	29.3	27.6	22.9	22.6	21.8	17.5	16.4	16.7	16.1	16.9	19.4	21.5	23.3
24 – General administration	5.5	4.1	2.5	6.3	4.6	2.8	2.6	1.9	2.6	4.0	5.0	5.5	5.8
25 – Defence	9.4	8.3	5.9	4.4	4.0	3.4	2.7	2.2	1.7	1.4	2.0	2.3	2.5
26 – Law and order	2.2	2.4	2.0	1.3	1.4	1.1	1.5	1.6	2.1	2.1	2.1	2.5	2.8
27 – Education	4.7	4.9	4.5	2.2	1.8	1.4	2.2	2.4	1.5	1.0	1.3	1.1	1.4
28 – Health	3.4	3.7	3.1	3.0	2.1	2.6	3.0	3.4	3.2	2.9	3.0	3.2	3.5
29 – Social security and welfare	1.3	1.2	1.0	2.0	1.9	2.5	2.0	2.6	2.8	3.0	3.2	3.5	3.6
30 – Economic services	2.7	3.0	3.9	3.3	5.9	3.7	2.5	2.6	2.2	2.4	2.7	3.4	3.6
31 Expenditure on goods and services by aim													
32 – Individual consumption expenditure (transfers in kind to households)	28.8	28.7	28.7	29.0	28.3	27.9	26.8	29.2	28.5	27.6	28.9	30.2	30.5
33 – Collective consumption expenditure	38.9	38.8	34.7	34.8	35.1	33.8	34.3	32.8	33.1	34.7	35.0	35.3	36.2
34 Current expenditure (14+9+10+11+12)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
35 – as % of gross domestic product	29.0	29.3	31.9	31.5	31.5	29.7	31.3	31.0	30.8	29.9	29.3	28.8	28.9
36 Saving of general government	–8.0	–10.4	–23.0	–21.3	–18.6	–14.2	–16.2	–14.7	–9.0	–6.1	–6.6	–0.6	–0.6

Table 18

Income and expenditure of general government (% contribution) (1990-2002) (continued)

Description	% contribution												
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
37 – as % of gross domestic product	–2.3	–3.1	–7.3	–6.7	–5.9	–4.2	–5.1	–4.6	–2.8	–1.8	–1.9	–0.2	–0.2
38 Capital expenditure (gross fixed capital formation)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
39 – Economic infrastructure 1)	59.0	57.2	58.1	55.0	58.3	45.8	51.0	46.4	43.6	43.8	45.2	46.7	44.1
40 – Social infrastructure 2)	32.3	33.5	29.9	34.0	31.7	38.7	33.5	36.3	34.8	32.7	32.4	32.1	33.4
41 – Economic services 3)	8.6	9.2	12.0	11.0	10.0	15.5	15.5	17.3	21.6	23.5	22.4	21.2	22.5
42 Capital expenditure gross fixed capital formation) by function													
43 – General administration	14.1	17.8	16.7	14.6	15.9	16.9	12.4	15.7	15.7	15.7	15.7	15.7	15.7
44 – Defence	0.0	0.0	0.1	0.0	0.0	0.0	3.7	3.0	3.0	3.0	3.0	3.0	3.0
45 – Law and order	5.8	7.4	8.0	7.0	6.7	6.8	9.9	6.8	6.8	6.8	6.8	6.8	6.8
46 – Education	18.2	17.8	18.4	22.0	21.4	21.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0
47 – Health	5.1	4.3	4.2	4.5	4.3	6.5	6.4	6.3	6.3	6.3	6.3	6.3	6.3
48 – Social security and welfare	14.9	15.5	18.7	18.2	22.0	22.3	21.0	22.4	22.4	22.4	22.4	22.4	22.4
49 – Economic services	41.8	37.1	34.0	33.8	29.8	25.5	25.7	24.8	24.8	24.8	24.8	24.8	24.8

Sources: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget
Note: Constant 1995 prices where calculated with the appropriate national accounting deflators
General government includes central government, provincial governments, provincial authorities and extra budgetary institutions. It does not include public corporations.
1) Roads, bridges, dams, electricity and water supply
2) Schools, hospitals, etc. and administrative services
3) Business enterprises not included in economic infrastructure

Table 19

Income and expenditure of provincial administrations (Rm current prices) (1996-2002)

Description		1996	1997	1998	1999	2000	2001	2002
1	Total revenue and grants	82 081	94 218	99 454	102 331	108 467	123 802	135 190
2	Current revenue	3 997	3 673	3 484	3 672	3 605	4 697	5 916
3	Grants from central government	78 084	90 545	95 970	98 659	104 862	119 105	129 274
4	Total current expenditure	79 180	91 639	89 825	92 492	98 382	110 063	125 085
5	Interest	2 051	272	31	55	279	94	3
6	Subsidies and current transfers (Pensions)	20 444	21 517	20 841	21 011	21 683	23 671	29 838
7	Eastern Cape	4 486	4 389	4 231	4 235	4 575	4 726	5 808
8	Free State	1 300	1 326	1 210	1 205	1 244	1 364	1 711
9	Gauteng	2 516	2 578	2 520	2 588	2 618	2 803	3 470
10	KwaZulu-Natal	4 245	4 596	4 401	4 340	4 390	4 972	6 476
11	Limpopo	2 178	2 465	2 538	2 696	2 726	2 983	3 853
12	Mpumalanga	1 145	1 275	1 258	1 325	1 409	1 618	2 027
13	North West	1 220	1 531	1 587	1 724	1 885	2 165	2 714
14	Northern Cape	756	762	722	653	613	640	775
15	Western Cape	2 598	2 593	2 373	2 246	2 223	2 399	3 003
16	Current expenditure on goods and services by function	56 685	69 850	68 953	71 426	76 420	86 298	95 244
17	Education	26 526	33 557	33 341	33 931	35 938	40 200	44 122
18	Health	15 390	19 865	20 096	20 682	21 992	24 442	26 825
19	Social and welfare services	778	1 182	1 358	1 524	1 758	2 026	2 217
20	Other services by province	13 992	15 246	14 157	15 289	16 733	19 630	22 080
21	Eastern Cape	9 145	10 762	10 603	11 160	11 674	13 207	14 523
22	Free State	4 055	5 215	4 865	4 937	5 370	6 019	6 578
23	Gauteng	9 352	12 245	12 281	12 437	13 454	15 375	17 080
24	KwaZulu-Natal	11 625	13 643	13 166	13 889	15 078	17 016	18 846
25	Limpopo	6 827	8 775	8 860	9 368	9 896	11 216	12 442
26	Mpumalanga	3 598	4 437	4 536	4 598	5 102	5 877	6 588
27	North West	4 793	5 769	5 738	5 958	6 206	6 839	7 492
28	Northern Cape	1 244	1 559	1 568	1 612	1 744	1 992	2 215
29	Western Cape	6 046	7 446	7 336	7 467	7 896	8 757	9 479
30	Labour remuneration by function	36 897	48 921	49 361	49 921	51 834	57 415	62 820
31	Education	23 234	30 343	30 265	30 777	31 797	34 887	37 910
32	Health	9 298	12 639	12 917	12 934	13 422	14 815	16 095
33	Social and welfare services	365	589	677	719	771	859	934
34	Other services	4 000	5 350	5 501	5 491	5 738	6 430	7 075
35	Goods and services by function	19 788	20 929	19 592	21 505	24 586	28 883	32 424
36	Education	3 292	3 213	3 077	3 154	4 141	5 313	6 212
37	Health	6 092	7 226	7 178	7 749	8 569	9 627	10 730
38	Social and welfare services	413	594	681	805	987	1 166	1 283
39	Other services	9 991	9 896	8 656	9 798	10 888	12 777	14 199
40								
41	Total capital expenditure	4 837	7 774	7 227	6 503	5 245	8 749	14 227
42	Eastern Cape	445.56	676.80	645.90	615.56	590.71	1 232	2 127
43	Free State	381.76	548.71	298.27	254.51	298.08	477	724
44	Gauteng	758.89	1 755.85	1 950.54	1 611.93	1 217.31	1 972	3 118
45	KwaZulu-Natal	1 329.26	1 915.28	1 566.18	1 424.04	1 128.75	1 786	2 949
46	Limpopo	266.77	518.06	655.88	616.60	588.92	1 025	1 705
47	Mpumalanga	447.40	630.39	569.52	514.76	364.35	601	942
48	North West	612.38	633.62	544.92	528.22	447.61	760	1 279
49	Northern Cape	118.42	207.80	170.38	144.77	103.38	156	258
50	Western Cape	476.56	887.48	825.41	792.60	505.90	740	1 124
51	Total expenditure	84 017	99 413	97 052	98 995	103 627	118 812	139 312
52	Net lending	285	193	158	92	156	82	91
53	Deficit(-) /surplus(+)	–2 221	–5 388	2 244	3 244	4 684	4 908	–4 213

Source: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget

Table 20

Real income and expenditure of provincial administrations (Rm constant 1995 prices) (1996-2002)

Description		1996	1997	1998	1999	2000	2001	2002
1	Total revenue and grants	72 505	76 053	73 937	71 582	70 092	74 183	73 607
2	Current revenue	3 531	2 965	2 590	2 569	2 330	2 814	3 221
3	Grants from central government	68 974	73 088	71 347	69 013	67 763	71 369	70 386
4	Total current expenditure	69 942	73 971	66 778	64 700	63 575	65 951	68 105
5	Interest	1 812	220	23	38	180	56	2
6	Subsidies and current transfers (Pensions)	18 059	17 369	15 494	14 698	14 012	14 184	16 246
7	Eastern Cape	3 962	3 543	3 145	2 962	2 956	2 832	3 162
8	Free State	1 148	1 070	899	843	804	818	932
9	Gauteng	2 222	2 081	1 873	1 810	1 692	1 680	1 889
10	KwaZulu-Natal	3 750	3 710	3 272	3 036	2 837	2 979	3 526
11	Limpopo	1 924	1 990	1 887	1 886	1 761	1 787	2 098
12	Mpumalanga	1 011	1 030	936	927	911	969	1 104
13	North West	1 077	1 236	1 180	1 206	1 218	1 297	1 478
14	Northern Cape	668	615	537	456	396	384	422
15	Western Cape	2 295	2 093	1 764	1 571	1 437	1 437	1 635
16	Current expenditure on goods and services	50 072	56 383	51 261	49 964	49 383	51 710	51 858
	by function							
17	Education	23 431	27 087	24 787	23 735	23 223	24 088	24 023
18	Health	13 594	16 035	14 940	14 467	14 211	14 646	14 605
19	Social and welfare services	687	954	1 010	1 066	1 136	1 214	1 207
20	Other services	12 359	12 307	10 525	10 695	10 813	11 762	12 022
	by province							
21	Eastern Cape	8 078	8 687	7 882	7 806	7 544	7 914	7 908
22	Free State	3 582	4 209	3 617	3 453	3 470	3 607	3 581
23	Gauteng	8 261	9 884	9 130	8 700	8 694	9 213	9 300
24	KwaZulu-Natal	10 269	11 013	9 788	9 716	9 744	10 196	10 261
25	Limpopo	6 030	7 083	6 587	6 553	6 395	6 721	6 775
26	Mpumalanga	3 178	3 581	3 372	3 217	3 297	3 522	3 587
27	North West	4 234	4 656	4 266	4 168	4 010	4 098	4 079
28	Northern Cape	1 099	1 258	1 165	1 128	1 127	1 194	1 206
29	Western Cape	5 341	6 010	5 454	5 223	5 102	5 247	5 161
30	Labour remuneration by function	32 592	39 489	36 696	34 921	33 427	34 150	33 765
31	Education	20 523	24 493	22 500	21 529	20 547	20 905	20 641
32	Health	8 213	10 202	9 603	9 047	8 674	8 877	8 763
33	Social and welfare services	322	475	504	503	498	515	509
34	Other services	3 534	4 318	4 090	3 841	3 708	3 853	3 852
35	Goods and services by function	17 480	16 894	14 565	15 043	15 887	17 307	17 654
36	Education	2 908	2 594	2 287	2 206	2 676	3 184	3 382
37	Health	5 381	5 833	5 337	5 420	5 537	5 769	5 842
38	Social and welfare services	365	479	506	563	638	699	698
39	Other services	8 826	7 988	6 435	6 854	7 036	7 656	7 731
40								
41	Total capital expenditure	4 273	6 275	5 373	4 549	3 389	5 242	7 746
42	Eastern Cape	393.58	546.31	480.18	430.59	381.72	738.16	1 158.12
43	Free State	337.22	442.92	221.74	178.04	192.62	285.53	394.36
44	Gauteng	670.36	1 417.32	1 450.08	1 127.57	786.64	1 181.67	1 697.70
45	KwaZulu-Natal	1 174.18	1 546.01	1 164.34	996.13	729.41	1 070.33	1 605.80
46	Limpopo	235.65	418.18	487.60	431.32	380.57	614.46	928.25
47	Mpumalanga	395.20	508.85	423.40	360.08	235.44	359.83	512.74
48	North West	540.94	511.46	405.11	369.50	289.25	455.33	696.40
49	Northern Cape	104.60	167.74	126.66	101.27	66.80	93.59	140.60
50	Western Cape	420.96	716.37	613.63	554.44	326.91	443.57	612.25
51	Total expenditure (4+41)	74 215	80 246	72 151	69 248	66 965	71 193	75 852
52	Net lending	252	156	117	64	101	49	50
53	Deficit(-) /surplus(+) (1-51-52)	–1 962	–4 349	1 668	2 269	3 027	2 941	–2 294

Source: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget

Table 21

Real per capita income and expenditure of provincial administrations (R constant 1995 prices) (1996-2002)

Description	1996	1997	1998	1999	2000	2001	2002
1 Total revenue and grants	1 797	1 838	1 747	1 657	1 592	1 658	1 622
2 Current revenue	88	72	61	59	53	63	71
3 Grants from central government	1 710	1 767	1 686	1 597	1 540	1 595	1 551
4 Total current expenditure	1 734	1 788	1 578	1 497	1 444	1 474	1 501
5 Interest	45	5	1	1	4	1	0
6 Subsidies and current transfers (Pensions)	448	420	366	340	318	317	358
7 Eastern Cape	724	632	549	506	494	464	509
8 Free State	467	428	354	328	309	312	353
9 Gauteng	362	333	288	268	241	231	252
10 KwaZulu-Natal	513	495	427	387	354	365	425
11 Limpopo	459	463	428	418	381	379	436
12 Mpumalanga	405	404	360	350	338	354	398
13 North West	373	418	389	388	382	397	440
14 Northern Cape	999	890	747	611	511	477	505
15 Western Cape	701	624	509	440	390	379	419
16 Current expenditure on goods and services	1 241	1 363	1 211	1 156	1 122	1 156	1 143
by function							
17 Education	581	655	586	549	528	538	529
18 Health	337	388	353	335	323	327	322
19 Social and welfare services	17	23	24	25	26	27	27
20 Other services	306	297	249	248	246	263	265
by province							
21 Eastern Cape	1 477	1 551	1 375	1 332	1 261	1 296	1 272
22 Free State	1 455	1 683	1 425	1 344	1 335	1 375	1 355
23 Gauteng	1 346	1 581	1 402	1 286	1 240	1 270	1 241
24 KwaZulu-Natal	1 404	1 470	1 276	1 239	1 217	1 249	1 236
25 Limpopo	1 439	1 647	1 493	1 452	1 385	1 424	1 407
26 Mpumalanga	1 274	1 405	1 296	1 214	1 224	1 287	1 294
27 North West	1 465	1 577	1 407	1 340	1 258	1 253	1 214
28 Northern Cape	1 643	1 820	1 621	1 511	1 455	1 484	1 442
29 Western Cape	1 632	1 793	1 575	1 461	1 385	1 383	1 322
30 Labour remuneration by function	808	954	867	808	759	763	744
31 Education	509	592	532	498	467	467	455
32 Health	204	247	227	209	197	198	193
33 Social and welfare services	8	11	12	12	11	12	11
34 Other services	88	104	97	89	84	86	85
35 Goods & services by function	433	408	344	348	361	387	389
36 Education	72	63	54	51	61	71	75
37 Health	133	141	126	125	126	129	129
38 Social and welfare services	9	12	12	13	14	16	15
39 Other services	219	193	152	159	160	171	170
40							
41 Total capital expenditure	106	152	127	105	77	117	171
42 Eastern Cape	72	98	84	73	64	121	186
43 Free State	137	177	87	69	74	109	149
44 Gauteng	109	227	223	167	112	163	227
45 KwaZulu-Natal	161	206	152	127	91	131	193
46 Limpopo	56	97	111	96	82	130	193
47 Mpumalanga	158	200	163	136	87	132	185
48 North West	187	173	134	119	91	139	207
49 Northern Cape	156	243	176	136	86	116	168
50 Western Cape	129	214	177	155	89	117	157
51 Total expenditure (4+41)	1 840	1 940	1 705	1 603	1 521	1 591	1 672
52 Net lending	6	4	3	1	2	1	1
53 Deficit(-) /surplus(+) (1-51-52)	–49	–105	39	53	69	66	–51

Source: South African Reserve Bank: Quarterly Bulletin, 2003 q1; National Treasury: Overview of the 2003 national budget

Table 22

Distribution of basic services, 1995 (% of total)

	Total	Gender *		Type of area		Population group **				Province			
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape	Free State
Population	a	b	c	d	e	f	g	h	I	j	k	l	m
1 Total (mil)	39.5	19.0	20.5	19.9	19.6	30.1	3.5	1.0	4.9	3.8	6.1	0.8	2.6
2 Total households (mil)	8.4	5.7	2.6	5.1	3.3	5.7	0.7	0.2	1.8	1.0	1.1	0.2	0.6
3 Average household size	4.7	3.3	7.7	3.9	6.0	5.3	4.9	4.4	2.8	3.9	5.3	4.0	4.2
Type of main dwelling the household occupies (%)													
4 Dwelling/house/brick structure on separate yard or on a farm	62.0	64.8	55.9	71.1	47.8	53.7	73.7	73.5	82.1	70.3	55.0	70.7	63.8
5 Traditional dwelling/hut/structure made of traditional materials	13.7	10.1	21.4	0.9	33.5	20.1	0.6	0.1	0.0	0.3	27.8	0.9	11.8
6 Flat or apartment in a block of flats	3.8	3.5	4.5	6.1	0.3	1.0	5.5	12.0	11.1	5.3	1.5	2.9	2.3
7 Town/cluster/semi-detached house (simplex/duplex/triplex)	2.8	2.5	3.3	4.0	0.8	0.7	12.1	10.6	4.5	8.7	2.0	6.9	0.3
8 Dwelling/house/flat/room in backyard	5.0	4.5	6.3	4.6	5.6	6.4	2.5	3.1	1.8	2.7	5.4	4.8	3.0
9 Informal dwelling/shack in backyard	2.3	2.4	2.0	2.3	2.2	3.2	1.2	–	–	1.0	1.6	2.5	3.8
10 Informal dwelling/shack in informal/squatter settlement or farm	4.8	4.8	5.0	6.3	2.6	6.8	3.0	0.3	0.0	7.9	6.1	7.6	5.8
11 Room in hostel/compound provided by employer/municipality	5.4	7.2	1.5	4.5	6.9	7.8	0.9	0.3	0.2	3.5	0.5	3.5	8.9
12 Other and unspecified	0.2	0.2	0.2	0.1	0.4	0.2	0.5	–	0.2	0.5	0.2	0.3	0.3
Energy source for cooking (%)													
13 Electricity from mains	58.7	64.3	46.8	82.6	21.6	42.9	75.0	96.6	97.9	80.0	28.2	58.7	56.3
14 Coal, gas and paraffin	17.9	16.3	21.3	14.6	23.1	24.6	10.5	3.0	1.5	12.2	37.1	20.6	19.3
15 Wood	22.6	18.8	30.9	2.7	53.5	31.5	14.4	0.4	0.3	7.7	32.5	19.7	22.4
16 Other	0.8	0.7	1.0	0.1	1.8	1.1	0.1	–	0.2	0.0	2.2	1.0	2.0
Energy source for heating (%)													
17 Electricity from mains	56.9	63.0	43.8	81.2	19.3	40.7	72.4	97.7	97.2	78.2	26.0	55.3	52.9
18 Coal, gas and paraffin	16.6	14.1	21.9	13.2	21.8	23.1	7.4	1.4	1.5	8.7	36.4	17.3	19.7
19 Wood	23.9	20.6	31.0	3.9	54.8	32.8	17.5	0.7	0.7	11.0	35.0	20.8	24.6
20 Other	2.6	2.3	3.3	1.7	4.1	3.4	2.7	0.2	0.6	2.1	2.6	6.6	2.7
Energy source for lighting (%)													
21 Electricity from mains	65.2	70.7	53.4	88.6	29.0	50.8	84.4	98.9	99.3	89.1	36.6	69.9	69.7
22 Electricity from generator	0.3	0.4	0.3	0.1	0.7	0.4	0.3	–	0.4	0.1	0.6	2.2	0.3
23 Gas, paraffin and candles	34.2	28.7	46.1	11.2	69.9	48.6	15.0	1.1	0.2	10.8	62.5	26.9	29.4
24 Other	0.2	0.2	0.2	0.1	0.4	0.3	0.3	–	0.0	0.1	0.3	1.0	0.6

Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	Household income distribution (annual) (1995 prices) R0–R7 199	R7 200–R14 399	R14,400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
8.2	3.3	7.3	2.7	4.7	6.4	7.3	5.2	5.0	3.5	5.7	3.6	1.5	1.3
1.4	0.7	2.1	0.5	0.7	1.4	1.5	1.1	1.0	0.7	1.2	0.8	0.4	0.3
5.6	4.6	3.4	5.7	6.8	4.6	4.9	4.9	5.0	4.8	4.6	4.3	4.2	4.9
50.4	73.0	67.2	57.2	57.7	44.7	50.8	52.3	62.1	67.6	78.2	85.3	91.6	49.1
26.4	5.7	2.7	16.8	27.4	30.5	21.8	13.5	8.6	5.8	2.9	0.9	0.1	30.0
4.4	3.5	6.3	0.5	0.7	0.9	1.4	2.3	3.2	8.6	7.1	7.0	3.9	2.4
3.5	0.6	2.4	0.3	0.5	1.5	2.2	3.2	2.5	4.3	4.1	2.6	2.6	2.2
4.8	2.9	5.8	12.2	4.8	6.0	5.7	5.8	5.7	5.2	4.7	2.5	1.2	5.1
1.2	4.1	2.6	4.1	1.8	3.2	3.4	3.5	2.8	2.0	0.6	0.3	–	2.5
3.8	4.5	4.6	3.5	1.1	6.9	8.0	7.7	5.9	2.3	0.9	0.4	0.1	6.7
5.1	5.6	8.2	5.3	5.8	5.9	6.4	11.5	9.2	4.2	1.3	1.0	0.5	1.9
0.3	0.1	0.1	0.1	0.1	0.3	0.4	0.3	0.1	0.2	0.1	0.0	0.0	0.1
53.5	45.6	86.7	49.3	27.3	25.6	32.5	54.1	63.7	76.2	87.2	94.3	97.0	35.3
19.9	26.4	7.2	11.0	16.5	22.7	29.4	23.6	20.7	14.4	7.7	3.5	1.9	18.7
26.0	27.3	5.9	38.6	55.9	51.3	37.6	22.0	15.5	9.1	4.9	1.8	0.4	31.7
0.5	0.8	0.2	1.1	0.3	0.4	0.5	0.3	0.1	0.3	0.2	0.3	0.8	14.3
52.3	45.0	85.8	41.9	26.6	20.9	30.5	52.2	62.4	75.3	86.5	94.4	94.6	36.1
15.0	21.4	8.5	19.2	13.3	24.2	25.0	21.5	18.4	13.1	7.3	3.3	1.9	18.6
29.1	31.0	4.9	36.4	54.4	51.5	40.7	23.3	17.7	9.9	5.6	1.9	0.9	33.0
3.6	2.6	0.9	2.5	5.8	3.4	3.8	3.1	1.6	1.8	0.6	0.5	2.6	12.3
58.1	51.9	89.4	54.8	36.2	33.4	43.8	62.2	70.5	80.6	89.4	96.3	98.4	47.5
0.3	0.3	0.1	0.2	0.8	0.2	0.4	0.2	0.3	0.2	0.5	0.6	0.7	0.2
41.3	47.8	10.4	44.9	62.8	65.9	55.6	37.3	29.1	19.1	9.9	3.1	0.8	52.1
0.2	0.1	0.0	0.1	0.3	0.4	0.2	0.3	0.1	0.1	0.2	0.0	0.0	0.1

Table 22

Distribution of basic services, 1995 (% of total) (continued)

	Total	Gender *		Type of area		Population group **				Province		
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape
	a	b	c	d	e	f	g	h	I	j	k	l
Main source of water (%)												
25 Piped: In dwelling	48.3	53.4	37.1	69.5	15.3	30.3	67.7	93.6	92.1	72.4	25.8	46.7
26 Piped: In yard	23.2	23.6	22.3	24.1	21.8	29.8	24.5	4.1	4.2	20.4	18.2	41.6
27 Piped: Off site	7.7	6.1	11.2	3.9	13.7	11.1	2.7	0.1	0.0	2.7	12.4	5.2
28 Water-carrier/tanker	1.2	1.2	1.2	0.4	2.3	1.6	0.8	–	0.0	0.8	1.2	1.0
29 Borehole/rain-water tank/well	8.5	7.5	10.7	1.3	19.7	11.2	2.1	2.0	3.2	1.9	10.3	3.0
30 Dam/river/stream/spring	10.7	7.7	17.0	0.4	26.5	15.4	2.0	0.2	0.4	1.2	31.6	2.3
31 Other	0.5	0.5	0.5	0.3	0.7	0.7	0.2	–	0.0	0.6	0.5	0.3
Water treated for drinking (%)												
32 Water safe for drinking –	–	–	–	–	–	–	–	–	–	–	–	–
Toilet facility (%)												
33 Flush toilet or chemical toilet	58.8	64.5	46.5	85.8	16.9	41.9	78.9	97.4	99.8	85.2	32.5	60.4
34 Pit latrine	24.1	20.6	31.5	4.6	54.2	34.7	6.4	2.2	0.1	4.0	37.4	9.4
35 Bucket latrine	4.5	3.9	5.6	6.4	1.4	5.4	9.2	0.0	0.0	4.8	9.1	16.3
36 Off-site toilet/pit or bucket latrine	4.9	4.5	5.9	2.5	8.7	7.0	2.3	0.4	0.1	4.6	4.9	6.6
37 None	7.7	6.5	10.5	0.6	18.8	11.0	3.2	0.1	0.1	1.4	16.3	7.3
Refuse removal (%)												
38 Removal by local authority	58.3	61.7	50.9	90.9	7.7	43.7	80.2	93.6	91.5	84.6	40.4	67.7
39 Removal by community members	3.6	4.2	2.4	1.4	7.0	4.2	6.4	0.7	1.1	6.4	3.0	5.4
40 Own refuse dump	25.5	23.7	29.5	5.9	55.8	33.9	11.9	5.6	6.8	8.6	33.0	21.8
41 No refuse removal	12.6	10.5	17.3	1.8	29.4	18.3	1.5	0.1	0.6	0.5	23.6	5.1
Basic services (%)												
42 Clinic/hospital within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
43 Primary school within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
44 Secondary school within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
45 Shop for basics within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
46 Street lighting –	–	–	–	–	–	–	–	–	–	–	–	–
Public transport (%)												
47 Train within 15 minute (1km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
48 Train within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
49 Bus within 15 minute (1km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
50 Bus within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
51 Taxi within 15 minute (1km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
52 Taxi within 30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–

							Household income distribution (annual) (1995 prices)								
rn	Free State	Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	R0–R7 199	R7 200–R14 399	R14,400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
	m	n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
	39.7	44.3	33.2	68.4	48.7	21.8	21.9	26.0	37.9	48.1	62.4	74.5	83.1	85.3	33.0
	42.3	13.0	34.3	22.8	23.0	24.0	28.4	28.2	30.6	27.5	21.4	15.6	11.3	8.4	19.9
	3.9	7.0	13.5	2.3	4.4	25.8	11.9	12.5	10.2	7.2	5.2	2.8	1.2	0.3	12.4
	3.9	1.1	1.8	0.4	2.0	0.7	2.4	2.1	1.2	0.9	0.6	0.2	0.1	0.2	1.4
	7.8	11.8	13.0	3.9	10.6	17.9	14.3	12.5	8.6	7.4	5.0	4.1	3.4	5.4	8.9
	2.3	22.6	1.7	2.0	11.2	9.5	20.3	17.9	11.2	8.2	5.3	2.7	0.8	0.5	23.4
	0.1	0.2	2.4	0.2	0.1	0.3	0.8	0.9	0.3	0.6	0.1	0.1	0.2	–	1.1
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	50.7	52.0	42.0	89.3	43.2	21.6	23.6	33.4	53.9	64.4	75.6	86.4	94.3	98.3	45.3
	15.5	28.2	42.5	6.2	41.1	57.0	39.6	38.1	28.3	22.6	16.9	10.2	4.7	1.7	28.0
	16.7	0.8	6.3	0.6	2.0	1.1	7.7	7.4	5.5	4.3	3.2	1.1	0.2	0.0	5.2
	7.7	7.3	4.4	2.2	4.4	6.8	9.2	7.9	5.2	5.0	2.5	1.6	0.8	–	7.4
	9.5	11.6	4.8	1.6	9.3	13.5	19.9	13.2	7.1	3.7	1.8	0.7	0.1	–	14.1
	60.3	48.3	42.6	83.1	42.7	18.7	28.0	36.2	51.5	62.5	74.4	83.2	90.3	89.5	48.5
	2.4	3.4	7.4	1.8	3.2	3.4	4.9	6.4	5.1	3.5	2.6	1.3	0.8	1.0	1.8
	19.5	32.6	39.4	10.8	34.4	52.8	41.5	38.2	29.9	23.8	15.2	11.7	6.9	9.1	32.4
	17.8	15.7	10.6	4.3	19.7	25.1	25.7	19.1	13.5	10.2	7.8	3.8	2.1	0.3	17.4
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Table 22

Distribution of basic services, 1995 (% of total) (continued)

	Total	Gender *		Type of area		Population group **				Province		
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape
	a	b	c	d	e	f	g	h	I	j	k	l
Postal services (%)												
53 Post office within –	–	–	–	–	–	–	–	–	–	–	–	–
30 minute (2km) walking distance –	–	–	–	–	–	–	–	–	–	–	–	–
54 Mail delivered to the dwelling –	–	–	–	–	–	–	–	–	–	–	–	–
55 Mail delivered to a post box	–	–	–	–	–	–	–	–	–	–	–	–
56 Mail delivered other means–	–	–	–	–	–	–	–	–	–	–	–	–
Household ownership of at least one (%)												
57 Fixed-line telephone in house	30.3	33.5	23.4	45.2	7.1	13.4	36.5	70.4	76.6	50.8	17.5	29.1
58 Cell-phone in house without fixed-line telephone	1.7	2.2	0.6	2.6	0.3	0.2	0.5	3.4	7.0	2.3	0.3	0.2
59 Television –	–	–	–	–	–	–	–	–	–	–	–	–
60 Radio –	–	–	–	–	–	–	–	–	–	–	–	–
61 Motor vehicle –	–	–	–	–	–	–	–	–	–	–	–	–
Household income distribution (annual) (1995 prices) (%)												
62 R0–4 799	16.7	12.3	26.1	8.2	29.8	22.2	12.8	1.7	2.4	7.1	27.9	26.0
63 R4 800–9 599	17.9	15.7	22.4	11.5	27.7	22.8	19.0	5.0	3.3	15.8	28.2	23.5
64 R9 600–14 399	12.6	12.4	13.1	12.0	13.5	14.9	15.1	8.8	4.8	14.9	11.4	12.7
65 R14 400–21 599	11.8	12.6	10.3	13.2	9.7	13.2	13.4	12.0	6.8	13.0	8.3	10.3
66 R21 600–29 999	8.8	9.0	8.3	11.1	5.2	8.1	12.7	15.2	8.4	11.9	6.1	5.9
67 R30 000–59 999	14.9	17.2	9.8	20.5	6.1	10.2	17.9	29.5	26.6	18.9	8.7	12.0
68 R60 000–119 999	9.9	12.7	3.8	14.5	2.7	4.0	7.1	19.1	28.6	12.0	5.0	5.7
69 R120 000 +	4.4	5.8	1.2	6.4	1.3	0.8	1.3	7.2	16.4	5.5	1.7	2.3
70 Not available	3.2	2.3	4.9	2.6	4.0	3.7	0.8	1.7	2.6	0.8	2.6	1.7
Hunger in the household during past year (%)												
71 At least one child under 7 hungry in the household –	–	–	–	–	–	–	–	–	–	–	–	–
72 At least one other person over 7 hungry in the household –	–	–	–	–	–	–	–	–	–	–	–	–

Source: October Household Survey – 1995
Notes:
* Gender of head of the household ** Population group of the head of the household

							Household income distribution (annual) (1995 prices)								
rn	Free State	Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	R0–R7 199	R7 200–R14 399	R14,400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
	m	n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	24.6	28.2	17.4	43.7	19.1	12.3	6.0	9.9	17.2	26.3	36.8	54.4	71.8	73.3	19.8
	0.3	0.9	0.7	4.4	0.8	0.3	0.0	0.2	0.2	0.4	0.7	1.8	5.2	17.4	1.1
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	31.7	12.3	22.9	6.8	17.8	27.5	–	–	–	–	–	–	–	–	–
	20.8	17.5	23.7	9.3	18.9	19.5	–	–	–	–	–	–	–	–	–
	11.7	14.3	11.5	11.1	16.0	11.9	–	–	–	–	–	–	–	–	–
	7.9	13.9	12.9	13.5	14.2	8.3	–	–	–	–	–	–	–	–	–
	6.3	9.6	7.3	10.4	8.4	7.1	–	–	–	–	–	–	–	–	–
	10.7	15.1	10.9	20.6	12.5	11.7	–	–	–	–	–	–	–	–	–
	5.6	8.3	7.1	17.0	7.3	5.8	–	–	–	–	–	–	–	–	–
	2.2	3.3	2.4	8.5	2.9	2.1	–	–	–	–	–	–	–	–	–
	3.0	5.7	1.4	2.8	1.9	6.1	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Table 23

Distribution of basic services, 2001 (% of total)

	Total	Gender *		Type of area		Population group **				Province		
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape
Population	a	b	c	d	e	f	g	h	I	j	k	l
1 Total (mil)	44.4	26.3	18.1	24.5	19.9	34.4	4.2	1.1	4.6	4.2	7.0	0.9
2 Total households (mil)	11.1	6.8	4.3	7.0	4.1	8.5	0.9	0.3	1.4	1.1	1.4	0.2
3 Average household size	4.0	3.8	4.2	3.5	4.8	4.0	4.4	4.0	3.4	3.7	4.9	4.4
Type of main dwelling the household occupies (%)												
4 Dwelling/house/brick structure on separate yard or on a farm	54.9	54.9	54.9	55.6	53.7	50.8	69.5	56.7	70.6	61.7	46.5	79.9
5 Traditional dwelling/ hut/structure made of traditional materials	10.0	7.2	14.5	0.8	25.6	12.9	0.8	–	0.2	1.2	30.1	1.3
6 Flat or apartment in a block of flats	5.6	5.9	5.1	7.8	1.7	3.7	9.0	13.8	13.3	9.4	2.8	2.7
7 Town/cluster/semi-detached house (simplex/duplex/triplex)	3.3	3.8	2.5	4.9	0.6	1.3	7.6	20.7	9.6	8.6	1.0	2.1
8 Unit in retirement village	0.2	0.1	0.3	0.3	0.0	0.0	0.1	–	1.3	0.3	0.3	0.2
9 Dwelling/house/flat/ room in backyard	5.9	5.1	7.1	6.4	4.9	6.7	2.6	4.9	3.0	1.4	8.2	2.1
10 Informal dwelling/ shack in backyard	4.2	4.5	3.7	5.5	1.9	5.1	2.6	0.3	0.1	2.9	1.7	2.5
11 Informal dwelling/ shack in informal/ squatter settlement or farm	9.8	10.3	9.0	12.6	5.2	12.2	5.0	2.5	–	11.8	7.6	3.9
12 Room/flatlet	2.7	3.1	2.1	2.4	3.3	3.1	2.4	1.0	0.8	2.3	1.5	4.8
13 Caravan/tent	0.1	0.1	0.0	0.0	0.1	0.1	0.0	–	–	–	0.0	0.1
14 Other and unspecified	3.4	5.0	0.8	3.7	2.9	4.2	0.5	–	1.1	0.5	0.3	0.3
Energy source for cooking (%)												
15 Electricity from mains	53.8	59.2	45.1	72.0	22.8	42.6	79.2	97.6	97.2	78.0	24.8	58.9
16 Coal, gas and paraffin	26.9	25.6	29.1	25.7	29.0	33.4	12.5	2.2	1.5	17.2	39.1	24.3
17 Wood	17.5	13.0	24.7	1.7	44.2	22.0	7.2	–	0.1	3.7	33.6	13.8
18 Other	1.8	2.2	1.1	1.0	3.1	2.0	1.0	0.3	1.2	1.2	2.4	3.0
Energy source for heating (%)												
19 Electricity from mains	50.1	55.9	40.8	68.1	19.5	39.3	70.1	96.2	94.2	67.3	18.5	49.0
20 Coal, gas and paraffin	19.8	18.5	21.9	20.2	19.2	24.8	7.0	1.1	1.2	12.4	32.2	12.8
21 Wood	19.1	14.6	26.3	2.7	46.9	23.9	8.5	0.2	0.4	5.4	40.1	17.0
22 Other	11.0	11.0	11.0	9.5	13.6	12.0	14.4	2.6	4.3	15.0	9.1	21.2
Energy source for lighting (%)												
23 Electricity from mains	71.4	74.7	66.2	84.9	48.6	64.6	86.3	98.5	98.5	88.1	45.8	77.7
24 Electricity from generator	0.3	0.3	0.3	0.1	0.7	0.3	0.2	–	0.2	–	1.0	0.7
25 Gas, paraffin and candles	27.6	24.3	32.9	15.2	48.7	34.5	13.0	1.4	0.2	11.2	52.4	20.5
26 Other	0.7	0.7	0.6	0.6	0.8	0.6	0.5	0.1	1.1	0.7	0.7	1.1

							Household income distribution (annual) (1995 prices)								
rn	Free State	Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	R0–R7 199	R7 200–R14 399	R14 400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
	m	n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
	2.8	9.1	3.6	8.0	3.1	5.7	6.5	10.4	6.0	4.9	3.6	5.2	3.3	2.0	2.4
	0.7	2.1	0.8	3.0	0.7	1.0	1.8	2.5	1.4	1.3	0.9	1.3	0.8	0.6	0.5
	3.8	4.4	4.3	2.7	4.7	5.5	3.6	4.1	4.1	3.8	4.1	4.0	4.0	3.7	5.0
	59.4	43.3	71.5	48.6	64.1	73.1	46.0	52.6	51.5	47.3	51.3	62.8	74.6	78.4	55.5
	5.9	18.1	1.4	0.5	6.4	16.5	20.3	17.3	10.4	4.9	3.5	1.8	0.7	0.1	7.0
	2.4	8.7	1.4	7.3	4.4	0.7	3.2	2.5	4.0	5.9	8.0	10.7	9.8	5.7	8.2
	1.1	4.2	0.3	4.9	0.9	0.3	1.5	1.4	2.3	2.5	3.1	4.7	8.1	10.5	5.6
	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.1	–	0.7
	2.3	5.6	2.6	10.3	3.8	2.5	5.4	6.5	7.1	6.6	5.5	5.5	3.1	4.1	7.0
	5.2	2.3	4.7	7.8	3.2	2.3	4.5	4.6	5.4	5.7	6.2	2.4	0.7	0.3	4.6
	11.5	11.5	7.9	12.0	10.1	2.5	14.0	10.7	12.9	12.6	10.1	6.6	1.1	0.1	7.9
	0.4	5.9	6.6	1.2	3.1	0.7	2.3	2.5	3.0	4.8	4.2	2.9	1.4	0.1	1.5
	0.1	0.1	0.5	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.0	–	0.0
	11.4	0.3	3.0	7.0	3.9	1.3	2.8	1.7	3.2	9.4	7.9	2.2	0.4	0.6	1.9
	50.0	50.7	47.4	75.6	40.3	26.4	27.9	33.7	44.9	57.9	65.7	79.9	91.4	96.4	65.6
	37.7	25.6	35.6	22.8	35.0	15.9	38.3	34.2	34.2	28.6	24.4	14.7	5.7	2.3	22.4
	6.4	22.8	13.0	1.0	20.7	56.9	31.3	30.7	19.7	10.5	7.8	3.7	1.8	0.4	10.3
	6.0	0.9	4.0	0.5	3.9	0.8	2.5	1.4	1.2	3.0	2.2	1.8	1.1	0.8	1.7
	47.3	47.6	43.2	74.4	37.3	26.2	25.4	29.4	40.5	54.8	61.0	75.3	88.1	95.2	61.4
	33.8	16.3	19.3	17.6	26.9	11.4	26.6	25.0	25.6	21.3	17.4	12.9	5.0	1.8	14.8
	8.8	25.6	13.3	1.2	20.0	55.3	33.6	33.2	21.4	11.8	9.5	4.3	2.3	0.3	12.0
	10.2	10.6	24.2	6.8	15.8	7.1	14.4	12.4	12.5	12.1	12.2	7.5	4.6	2.7	11.8
	82.0	62.6	74.8	84.1	74.6	56.3	52.0	57.5	65.4	77.0	81.8	90.0	95.1	98.7	78.9
	0.3	0.2	0.2	0.1	0.2	0.6	0.3	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.2
	17.3	36.7	24.4	15.5	24.5	41.4	46.5	41.6	33.5	22.4	17.6	9.4	3.8	0.4	20.2
	0.4	0.5	0.6	0.3	0.7	1.7	1.3	0.5	0.7	0.3	0.4	0.4	1.0	0.8	0.8

Table 23

Distribution of basic services, 2001 (% of total) (continued)

	Total	Gender *		Type of area		Population group **				Province		
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape
	a	b	c	d	e	f	g	h	I	j	k	l
Main source of water (%)												
27 Piped: In dwelling	39.7	44.0	32.8	58.5	7.8	25.2	72.9	97.6	95.5	74.9	22.9	44.6
28 Piped: In yard	28.9	29.2	28.4	31.4	24.7	35.5	16.7	1.6	1.1	13.1	15.1	39.2
29 Piped: Off site	13.8	12.2	16.3	8.1	23.4	17.4	4.8	–	0.0	8.4	20.6	5.8
30 Water-carrier/tanker	0.8	0.9	0.8	0.3	1.8	1.1	0.2	–	0.1	0.1	0.4	0.9
31 Borehole/rain-water tank/well	7.9	7.2	9.1	1.1	19.6	9.5	3.1	0.5	2.8	2.1	11.1	6.5
32 Dam/river/stream/spring	8.0	5.7	11.8	0.2	21.3	10.2	1.9	0.2	0.2	1.1	29.3	2.7
33 Other	0.9	0.9	0.9	0.5	1.5	1.1	0.3	0.2	0.2	0.3	0.5	0.3
Water treated for drinking (%)												
34 Water safe for drinking	72.8	75.8	67.9	88.9	45.4	67.7	84.6	92.8	91.2	90.5	50.5	79.0
Toilet facility (%)												
35 Flush toilet or chemical toilet	58.2	64.2	48.6	83.0	16.1	47.7	81.2	98.6	99.8	88.1	31.3	72.6
36 Pit latrine	26.6	22.5	33.3	9.2	56.1	34.1	5.0	0.7	0.1	1.8	32.7	9.3
37 Bucket latrine	2.4	2.4	2.5	3.5	0.6	2.7	4.3	–	–	1.8	5.3	9.5
38 Off-site toilet/pit or bucket latrine	3.5	3.4	3.7	2.3	5.6	4.4	2.1	–	0.1	4.6	1.6	2.6
39 None	9.2	7.5	11.9	1.9	21.7	11.2	7.4	0.7	0.1	3.7	29.1	6.0
Refuse removal (%)												
40 Removal by local authority	58.4	62.7	51.5	87.6	7.9	48.8	85.0	94.2	92.9	87.0	35.7	74.6
41 Removal by community members	4.7	5.5	3.4	3.6	6.6	5.4	4.1	1.0	1.4	4.8	2.6	1.6
42 Own refuse dump	27.3	22.9	34.3	4.8	66.2	34.0	7.8	3.7	3.7	6.6	40.4	17.1
43 No refuse removal	9.6	9.0	10.7	4.1	19.3	11.9	3.1	1.2	2.0	1.6	21.4	6.7
Basic services (%)												
44 Clinic/hospital within 30 minute (2km) walking distance	66.1	67.2	64.3	77.2	46.8	65.3	74.9	66.4	64.5	79.0	49.7	64.8
45 Primary school within 30 minute (2km) walking distance	83.9	81.9	87.3	87.1	78.5	84.9	81.8	87.9	78.7	85.6	88.9	72.6
46 Secondary school within 30 minute (2km) walking distance	71.9	70.2	74.5	80.1	57.6	72.0	68.0	84.3	71.2	74.4	63.0	53.6
47 Shop for basics within 30 minute (2km) walking distance	88.6	88.3	89.0	93.1	80.7	89.3	84.1	90.2	86.7	89.4	86.6	80.9
48 Street lighting	56.4	61.5	48.2	81.7	12.7	47.7	76.5	92.2	89.5	81.0	34.6	68.8
Public transport (%)												
49 Train within 15 minute (1km) walking distance	13.8	15.6	10.9	20.9	1.6	12.3	22.8	12.8	17.1	32.1	3.1	3.2
50 Train within 30 minute (2km) walking distance	12.1	13.0	10.6	17.6	2.6	11.2	14.5	19.4	14.7	20.9	4.2	4.5
51 Bus within 15 minute (1km) walking distance	61.0	60.5	61.8	63.9	56.1	62.6	53.0	75.4	53.7	61.3	40.9	25.4
52 Bus within 30 minute (2km) walking distance	8.1	8.0	8.1	8.2	7.8	8.2	8.2	4.0	8.1	10.5	8.2	5.5
53 Taxi within 15 minute (1km) walking distance	84.5	83.9	85.5	90.2	74.5	87.8	79.9	87.9	66.2	84.2	70.5	58.8
54 Taxi within 30 minute (2km) walking distance	5.5	5.5	5.5	3.8	8.6	5.3	3.7	3.1	9.1	5.8	7.1	5.1

							Household income distribution (annual) (1995 prices)								
rn	Free State	Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	R0–R7 199	R7 200–R14 399	R14 400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
	m	n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
	32.7	38.1	21.3	54.6	27.1	11.4	14.4	19.1	27.1	36.9	44.8	64.0	84.9	94.2	71.8
	50.2	19.1	35.0	37.1	43.3	30.2	29.7	32.5	35.8	39.1	37.3	24.3	10.2	2.6	18.5
	12.1	13.8	24.3	5.5	17.9	25.3	24.7	20.3	16.6	12.6	8.5	5.0	1.3	0.2	3.7
	0.4	1.2	1.8	0.4	1.1	2.1	1.5	1.2	0.8	0.8	0.5	0.5	0.2	0.0	0.2
	3.3	12.3	13.7	1.7	5.5	19.4	11.9	12.3	9.5	6.2	5.3	4.1	2.0	2.6	1.7
	0.3	14.5	1.1	0.1	4.1	10.4	16.5	13.7	9.2	4.1	2.9	1.7	1.3	0.2	0.8
	1.1	0.9	2.8	0.5	1.0	1.2	1.3	1.0	1.1	0.3	0.7	0.3	0.1	0.0	3.4
	85.9	63.0	69.6	84.6	82.9	55.2	57.2	61.4	69.5	78.4	80.2	85.6	90.4	89.7	86.4
	61.6	46.7	43.9	87.3	44.7	16.9	31.3	36.3	48.8	66.1	72.0	81.1	92.2	98.8	87.1
	18.8	35.3	46.3	8.9	43.8	60.9	36.7	40.3	33.9	24.0	21.7	15.1	6.7	1.0	6.4
	12.3	0.2	3.1	0.8	1.5	0.1	4.0	3.3	3.0	2.6	1.8	1.2	0.3	0.1	0.8
	2.5	5.9	2.6	1.8	4.6	6.3	5.5	5.0	5.2	3.6	2.4	1.2	0.3	0.1	1.4
	4.8	11.8	4.1	1.3	5.5	15.8	22.6	15.0	9.1	3.7	2.2	1.3	0.5	–	4.3
	59.4	53.2	43.9	83.7	39.2	12.9	36.0	38.1	49.7	61.2	68.1	77.6	87.7	94.2	105.1
	11.9	2.3	3.2	5.8	7.6	3.9	4.5	4.9	5.8	6.9	6.4	3.4	1.8	1.3	4.5
	19.4	34.3	43.7	4.4	42.7	71.3	41.7	40.2	31.0	20.7	17.8	13.3	8.8	4.3	25.5
	9.3	10.2	9.2	6.1	10.6	11.9	15.9	12.8	9.7	8.6	7.6	4.5	2.4	2.1	11.2
	74.8	60.7	64.0	74.9	64.6	56.4	58.1	58.9	65.7	72.0	75.5	74.4	71.7	68.3	66.7
	78.5	83.3	76.0	84.0	81.1	90.3	83.4	84.5	83.2	80.0	83.1	86.4	88.4	83.5	83.9
	67.0	72.8	62.6	76.6	69.3	81.4	68.3	69.0	69.9	70.0	74.5	78.9	79.8	73.7	72.0
	87.7	83.8	89.4	91.7	89.5	91.2	86.1	86.2	88.8	88.9	91.2	91.1	91.7	90.2	89.5
	70.4	53.9	36.9	76.4	49.4	12.6	38.8	36.5	48.7	62.5	68.1	76.4	85.6	90.4	68.8
	4.9	12.4	6.7	24.3	1.8	1.8	9.4	9.1	12.2	15.2	17.5	20.3	21.0	16.0	17.1
	5.4	12.8	5.2	20.2	5.2	3.5	8.4	8.9	11.0	15.7	15.2	16.0	15.4	13.1	13.1
	39.1	66.6	68.8	63.8	73.6	77.1	56.4	57.3	60.2	63.5	64.5	67.4	67.0	59.8	60.8
	6.1	10.6	6.1	7.6	7.5	5.4	8.7	7.9	8.9	8.8	6.7	7.4	6.9	7.6	9.7
	83.7	86.9	86.5	89.8	82.6	88.7	81.1	81.7	85.7	90.1	91.5	89.2	82.4	75.2	81.7
	3.8	7.3	5.5	3.8	8.3	4.3	6.3	6.2	6.3	4.1	3.3	3.8	6.2	8.3	5.5

Table 23

Distribution of basic services, 2001 (% of total) (continued)

	Total	Gender *		Type of area		Population group **				Province		
		Male	Female	Urban	Non-urban	African	Coloured	Indian	White	Western Cape	Eastern Cape	Northern Cape
	a	b	c	d	e	f	g	h	I	j	k	l
Postal services (%)												
55 Post office within 30 minute (2km) walking distance	51.2	53.4	47.6	65.3	26.8	45.9	64.4	70.5	71.4	69.0	32.8	51.2
56 Mail delivered to the dwelling	37.5	39.6	34.1	58.1	2.0	30.3	63.5	69.6	58.3	69.7	26.3	38.9
57 Mail delivered to a post box	21.1	21.5	20.4	20.5	22.1	19.9	12.5	20.4	34.8	12.4	10.2	30.2
58 Mail delivered other means	31.3	29.2	34.6	13.0	63.0	38.7	14.3	3.7	2.0	13.3	56.9	21.3
Household ownership of at least one (%)												
59 Fixed-line telephone in house	26.8	29.5	22.5	38.3	7.0	15.4	44.1	73.1	77.3	54.8	17.4	34.7
60 Cell-phone in house without fixed-line telephone	12.4	14.0	9.8	14.1	9.5	12.4	6.9	10.2	17.0	8.8	9.0	10.3
61 Television	53.7	57.1	48.3	65.8	33.0	44.9	69.4	88.7	91.2	75.3	38.7	56.0
62 Radio	77.6	80.0	73.8	81.3	71.2	75.0	74.2	90.9	93.7	84.0	70.4	67.1
63 Motor vehicle	21.7	29.2	9.7	29.6	8.0	9.9	26.6	60.5	84.6	40.1	12.4	27.1
Household income distribution (annual) (1995 prices) (%)												
64 R0–4,799	16.1	13.3	20.5	11.5	23.8	20.0	6.5	2.9	0.7	5.2	27.1	14.8
65 R4 800–9 599	22.9	15.8	34.2	16.3	34.2	27.6	15.0	7.2	2.5	10.9	31.5	26.5
66 R9 600v14 399	13.0	12.4	13.9	11.6	15.3	14.9	10.4	8.1	3.7	10.0	13.2	13.8
67 R14 400–21 599	11.6	13.5	8.6	12.4	10.2	12.7	12.5	7.0	4.8	12.6	7.3	10.9
68 R21 600–29 999	7.9	9.4	5.6	9.1	5.9	8.1	11.0	7.1	5.1	10.6	4.4	7.5
69 R30 000–59 999	11.7	13.4	8.9	15.1	5.8	9.5	19.2	24.0	17.6	17.4	6.9	11.4
70 R60 000–119 999	7.4	9.6	4.0	10.4	2.4	3.7	11.5	21.7	25.0	13.0	4.4	9.0
71 R120 000 +	5.0	7.2	1.5	7.3	1.1	1.5	5.0	11.8	25.8	10.4	2.6	5.4
72 Not available	4.4	5.4	2.8	6.3	1.2	2.1	8.9	10.0	15.0	10.0	2.6	0.9
Hunger in the household during past year (%)												
73 At least one child under 7 hungry in the household	8.8	6.7	12.1	6.6	12.5	10.7	5.0	0.9	0.9	5.4	16.2	5.6
74 At least one other person over 7 hungry in the household	18.2	15.6	22.3	15.5	22.9	22.0	9.9	5.5	2.9	10.1	31.4	13.3

Source: Labour Force Survey 2000:2 and 2001:1

							Household income distribution (annual) (1995 prices)								
rn	Free State	Kwa-Zulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	R0–R7 199	R7 200–R14 399	R14 400–R21 599	R21 600–R32 399	R32 400–R44 999	R45 000–R89 999	R90 000–R179 999	R180 000 +	Not available
	m	n	o	p	q	r	s	t	u	v	x	y	z	ab	ac
	49.5	46.1	48.1	63.8	43.6	38.6	34.0	36.8	42.1	50.4	55.8	61.4	70.3	73.7	124.8
	47.6	24.6	20.4	59.1	10.3	2.7	19.2	22.6	28.8	35.9	43.1	50.2	59.1	61.2	104.4
	23.7	20.8	30.4	18.2	35.3	35.8	14.8	16.7	17.4	17.3	19.6	24.9	31.3	35.1	48.0
	24.0	44.4	32.0	12.4	38.9	46.7	42.5	40.7	35.0	31.4	28.6	17.0	8.2	5.1	42.2
	26.3	25.8	16.1	32.4	17.5	8.9	6.9	11.8	17.5	21.0	27.1	45.4	65.1	81.4	44.6
	9.7	8.2	14.5	17.0	19.2	11.8	6.7	6.6	11.0	13.1	14.7	20.5	24.9	19.2	11.8
	56.1	45.8	56.0	62.6	49.3	40.1	29.9	37.5	47.6	51.3	61.7	77.0	91.8	95.1	62.5
	79.2	76.4	74.8	80.1	79.5	78.1	64.5	71.3	77.1	77.4	80.6	88.2	94.7	95.4	78.3
	20.1	18.3	15.5	27.9	16.9	10.8	4.4	5.6	9.4	13.5	19.1	40.2	73.9	96.8	7.8
	22.2	16.9	17.2	9.9	16.4	23.5	-	-	-	-	-	-	-	-	-
	24.0	25.7	24.4	14.8	28.4	35.8	-	-	-	-	-	-	-	-	-
	11.9	14.3	14.3	12.2	14.8	13.9	-	-	-	-	-	-	-	-	-
	12.6	11.2	14.5	14.0	12.1	6.9	-	-	-	-	-	-	-	-	-
	7.3	6.9	9.5	9.9	8.1	5.5	-	-	-	-	-	-	-	-	-
	7.9	11.8	10.9	14.7	9.3	7.8	-	-	-	-	-	-	-	-	-
	7.5	6.7	4.3	9.6	5.7	4.0	-	-	-	-	-	-	-	-	-
	4.3	2.8	2.3	8.2	3.0	1.4	-	-	-	-	-	-	-	-	-
	2.2	3.7	2.5	6.6	2.0	1.1	-	-	-	-	-	-	-	-	-
	8.6	9.2	9.6	5.4	12.4	8.9	14.4	12.5	9.4	7.4	6.2	4.0	1.7	1.1	8.3
	22.3	17.9	20.0	13.4	27.5	14.0	30.6	22.3	16.6	13.2	11.8	8.6	3.3	1.2	51.0

Table 24

South African Human Development Index (1990-2003)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population – Total (Thousands)														
Eastern Cape	5 471	5 603	5 734	5 859	5 984	6 106	6 216	6 345	6 470	6 595	6 717	6 836	6 949	7,055
Free State	2 462	2 501	2 537	2 570	2 599	2 624	2 643	2 679	2 715	2 749	2 781	2 808	2 831	2,848
Gauteng	6 138	6 251	6 511	6 764	7 013	7 257	7 494	7 831	8 118	8 358	8 557	8 718	8 843	8,932
KwaZulu-Natal	7 315	7 492	7 670	7 839	8 005	8 162	8 303	8 482	8 655	8 818	8 968	9 101	9 214	9,304
Limpopo	4 189	4 301	4 410	4 514	4 617	4 720	4 816	4 891	4 967	5 048	5 131	5 216	5 299	5,380
Mpumalanga	2 495	2 549	2 602	2 650	2 695	2 736	2 771	2 825	2 875	2 924	2 968	3 008	3 043	3,071
North West	2 889	2 953	3 033	3 110	3 189	3 270	3 360	3 443	3 520	3 592	3 658	3 716	3 767	3,809
Northern Cape	669	692	719	747	775	804	836	864	889	913	935	956	974	991
Western Cape	3 272	3 353	3 463	3 574	3 684	3 793	3 903	4 016	4 120	4 214	4 300	4 379	4 450	4,514
RSA	34 899	35 694	36 679	37 627	38 560	39 473	40 342	41 374	42 329	43 211	44 015	44 738	45 369	45,902
Population – 15+ (Thousands)														
Eastern Cape	3 153	3 248	3 343	3 444	3 547	3 657	3 769	3 881	3 996	4 105	4 214	4 325	4 430	4,528
Free State	1 612	1 647	1 683	1 720	1 756	1 793	1 827	1 863	1 896	1 927	1 954	1 976	1 995	2,010
Gauteng	4 420	4 533	4 763	4 984	5 198	5 410	5 621	5 855	6 043	6 195	6 314	6 405	6 470	6,512
KwaZulu-Natal	4 465	4 617	4 764	4 912	5 059	5 202	5 346	5 480	5 611	5 734	5 847	5 950	6 039	6,105
Limpopo	2 277	2 349	2 426	2 507	2 594	2 681	2 768	2 830	2 896	2 970	3 055	3 134	3 215	3,294
Mpumalanga	1 529	1 568	1 609	1 650	1 692	1 735	1 776	1 817	1 857	1 895	1 929	1 962	1 990	2,014
North West	1 831	1 885	1 954	2 024	2 093	2 161	2 229	2 298	2 360	2 416	2 468	2 514	2 554	2,591
Northern Cape	437	453	472	494	515	537	559	582	604	625	643	661	677	693
Western Cape	2 265	2 335	2 427	2 515	2 601	2 687	2 775	2 864	2 946	3 018	3 084	3 145	3 200	3,250
RSA	21 988	22 634	23 442	24 249	25 055	25 861	26 669	27 468	28 207	28 884	29 507	30 071	30 570	30,998
Population – 6–12 (Thousands)														
Eastern Cape	1 060	1 082	1 107	1 124	1 137	1 147	1 153	1 156	1 159	1 154	1 147	1 139	1 131	1,136
Free State	388	389	389	389	388	386	381	377	375	373	371	367	365	370
Gauteng	725	722	747	769	786	797	804	850	899	943	983	1 020	1 057	1,093
KwaZulu-Natal	1 268	1 283	1 304	1 329	1 345	1 351	1 349	1 355	1 367	1 375	1 386	1 394	1 410	1,440
Limpopo	856	885	902	921	940	958	972	967	955	947	940	938	935	944
Mpumalanga	421	428	439	447	454	456	454	454	458	459	462	465	469	479
North West	487	489	491	494	499	504	508	516	526	532	540	549	559	564
Northern Cape	112	115	117	119	122	125	127	129	132	135	137	139	141	141
Western Cape	448	455	470	483	494	503	511	521	533	543	552	562	571	579
RSA	5 763	5 847	5 965	6 074	6 166	6 226	6 259	6 326	6 404	6 461	6 517	6 573	6 639	6,746
Population – 13–17 (Thousands)														
Eastern Cape	581	618	652	688	716	740	762	778	789	802	814	821	827	831
Free State	261	262	263	264	266	270	271	271	270	269	266	266	266	265
Gauteng	625	600	577	559	547	542	545	559	572	582	591	603	618	639
KwaZulu-Natal	849	863	876	882	886	896	907	917	931	944	958	965	967	969
Limpopo	478	506	536	559	583	598	610	615	630	641	654	669	678	675
Mpumalanga	273	276	279	283	288	294	300	304	307	312	315	318	320	322
North West	322	328	333	336	342	346	347	349	351	353	354	361	369	374
Northern Cape	66	68	72	76	80	84	88	91	92	94	95	96	97	98
Western Cape	344	336	330	327	327	330	339	349	358	365	370	373	378	384
RSA	3 797	3 857	3 917	3 974	4 035	4 100	4 168	4 234	4 300	4 362	4 416	4 471	4 520	4,556

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population – 18–22 (Thousands)														
Eastern Cape	447	467	491	513	544	575	612	645	681	709	733	754	770	781
Free State	251	255	258	260	259	257	258	259	260	263	266	267	268	267
Gauteng	655	670	699	718	719	712	695	672	647	626	610	603	602	603
KwaZulu-Natal	718	752	781	812	834	852	866	876	881	883	891	901	910	923
Limpopo	361	377	398	421	447	477	505	530	549	568	579	588	596	614
Mpumalanga	251	257	264	271	275	279	283	284	287	290	294	298	302	304
North West	281	290	302	313	320	326	332	337	340	346	350	351	351	353
Northern Cape	64	66	68	70	71	72	75	79	83	87	90	93	95	96
Western Cape	341	349	362	370	374	374	369	363	358	354	353	358	364	369
RSA	3,369	3,482	3,623	3,748	3,842	3,925	3,995	4,045	4,085	4,124	4,167	4,213	4,259	4,310
Life expectancy at birth (Years)														
Eastern Cape	60.1	60.2	60.3	60.4	60.4	60.2	59.9	59.4	58.6	57.5	56.2	54.5	52.6	50.5
Free State	62.1	62.2	62.2	62.1	61.9	61.6	61.0	60.0	58.7	57.1	55.1	52.9	50.5	48.1
Gauteng	65.4	65.3	65.2	65.0	64.7	64.2	63.6	62.6	61.4	59.8	57.9	55.8	53.6	51.2
KwaZulu-Natal	62.0	62.0	62.0	61.8	61.4	60.8	59.8	58.3	56.4	54.1	51.6	48.9	46.2	43.6
Limpopo	62.0	62.1	62.1	62.1	62.0	61.8	61.4	60.8	59.9	58.6	57.1	55.4	53.4	51.2
Mpumalanga	62.3	62.4	62.3	62.1	61.7	61.1	60.2	58.9	57.3	55.3	53.1	50.7	48.3	46.0
North West	62.2	62.3	62.3	62.2	62.1	61.8	61.2	60.4	59.2	57.7	55.9	53.9	51.6	49.3
Northern Cape	62.5	62.7	62.8	62.8	62.9	62.9	62.8	62.4	62.0	61.3	60.5	59.5	58.2	56.8
Western Cape	64.2	64.4	64.5	64.5	64.5	64.5	64.4	64.3	64.0	63.8	63.4	62.9	62.2	61.5
RSA	61.6	61.6	61.7	61.6	61.5	61.4	60.8	59.9	58.5	57.3	55.5	53.5	51.4	49.2
Population 15+ literate (Total, thousands)														
Eastern Cape	2 248	2 331	2 413	2 500	2 590	2 686	2 784	2 883	2 986	3 087	3 189	3 300	3 408	3,512
Free State	1 343	1 379	1 415	1 454	1 492	1 530	1 567	1 605	1 643	1 679	1 713	1 746	1 777	1,804
Gauteng	4 047	4 177	4 415	4 648	4 878	5 108	5 336	5 566	5 755	5 910	6 037	6 147	6 233	6,299
KwaZulu-Natal	3 707	3 859	4 005	4 155	4 306	4 455	4 604	4 747	4 890	5 029	5 162	5 296	5 420	5,526
Limpopo	1 653	1 716	1 782	1 851	1 926	2 001	2 077	2 136	2 198	2 268	2 347	2 428	2 511	2,593
Mpumalanga	1 138	1 174	1 210	1 248	1 285	1 325	1 363	1 401	1 440	1 478	1 514	1 551	1 586	1,618
North West	1 254	1 299	1 353	1 408	1 464	1 520	1 575	1 632	1 686	1 736	1 784	1 832	1 876	1,918
Northern Cape	344	358	376	394	413	433	452	474	494	514	532	551	569	586
Western Cape	2 129	2 190	2 270	2 346	2 419	2 493	2 566	2 654	2 736	2 810	2 879	2 949	3 014	3,075
RSA	17 863	18 483	19 239	20 003	20 773	21 550	22 325	23 098	23 827	24 511	25 158	25 800	26 393	26,931
Primary enrolment (Total, thousands)														
Eastern Cape	1 540	1 598	1 658	1 705	1 748	1 769	1 746	1 704	1 683	1 646	1 501	1 493	1 485	1,490
Free State	490	502	513	521	531	532	519	502	495	470	447	442	441	445
Gauteng	787	796	835	871	900	916	907	933	970	983	955	992	1 030	1,065
KwaZulu-Natal	1 542	1 600	1 666	1 737	1 797	1 829	1 811	1 786	1 792	1 801	1 669	1 677	1 693	1,723
Limpopo	906	971	1 025	1 082	1 141	1 190	1 210	1 194	1 186	1 098	1 095	1 093	1 090	1,099
Mpumalanga	504	528	556	580	604	617	611	602	605	583	564	567	572	582
North West	585	597	607	619	633	641	635	627	628	608	581	590	600	605
Northern Cape	117	121	126	130	135	139	139	138	139	133	130	133	134	134
Western Cape	540	556	581	604	623	636	633	627	630	607	586	596	605	612
RSA	7 011	7 270	7 566	7 848	8 112	8 268	8 210	8 112	8 130	7 929	7 528	7 584	7 650	7,757

Table 24

South African Human Development Index (1990-2003) (continued)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Secondary enrolment (Total, thousands)														
Eastern Cape	369	413	450	499	549	591	613	645	673	655	615	622	628	632
Free State	219	233	243	258	276	294	298	310	319	296	281	281	281	280
Gauteng	517	522	519	527	545	562	569	602	633	576	578	590	605	626
KwaZulu-Natal	622	671	710	759	813	866	891	937	988	924	917	924	926	928
Limpopo	338	383	428	479	538	587	615	652	702	657	671	686	695	692
Mpumalanga	214	230	243	262	286	308	320	339	356	326	332	335	337	339
North West	250	268	281	298	320	338	341	353	366	334	326	333	341	346
Northern Cape	37	40	44	49	55	60	63	67	70	66	64	65	66	67
Western Cape	254	261	264	274	289	303	313	332	349	314	318	321	326	332
RSA	2 821	3 020	3 183	3 404	3 671	3 910	4 022	4 237	4 458	4 148	4 102	4 157	4 206	4,242
Tertiary enrolment (Total, thousands)														
Eastern Cape	53	58	62	72	84	91	100	109	107	104	105	127	143	153
Free State	41	44	46	51	57	58	60	63	59	56	56	56	58	56
Gauteng	147	157	168	191	210	212	214	214	191	172	165	157	157	158
KwaZulu-Natal	41	45	49	57	65	68	72	76	72	68	68	78	87	100
Limpopo	23	26	29	34	41	45	50	56	55	54	55	64	72	90
Mpumalanga	32	35	37	43	48	51	54	57	54	51	52	55	60	62
North West	41	44	47	54	61	63	66	70	65	62	61	63	63	64
Northern Cape	14	15	16	18	20	21	23	25	24	24	24	27	29	30
Western Cape	54	58	62	69	77	78	80	81	74	68	67	71	77	82
RSA	446	482	515	589	662	687	720	750	701	658	652	699	744	795
Exchange rates														
Average US$/ZAR rate (SARB)	0.3865	0.3621	0.3506	0.3060	0.2816	0.2757	0.2326	0.2170	0.1809	0.1637	0.1441	0.1162	0.0861	0.0781
Average US$/ZAR PPP rate (World Bank)	1.1178	0.9654	0.8635	0.7809	0.7250	0.6775	0.6313	0.5820	0.5412	0.5215	0.4975	0.4788	0.4543	0.4346
Gross domestic product @ basic values (Rm 1995 prices)														
Eastern Cape	37 300	36 844	35 976	36 440	37 436	38 965	40 594	41 533	41 810	42 673	44 000	44 804	46 122	47,302
Free State	29 459	29 075	28 079	28 798	29 534	29 582	30 764	31 752	31 716	32 189	32 741	33 244	34 561	35,863
Gauteng	184 080	181 497	179 047	180 282	185 763	193 533	200 466	205 652	208 073	212 756	219 742	224 950	231 986	238,390
KwaZulu-Natal	71 779	70 942	69 099	70 054	72 279	74 782	78 468	80 856	81 699	83 926	87 670	90 072	93 201	96,041
Limpopo	16 685	17 489	17 117	17 544	17 638	17 340	18 255	18 753	18 709	18 967	19 254	19 445	20 217	20,946
Mpumalanga	35 344	35 502	34 469	35 397	36 651	37 165	39 614	40 610	40 562	41 465	43 288	44 086	45 288	46,321
North West	25 808	25 112	24 695	25 248	25 989	26 075	26 903	27 304	27 388	27 875	28 583	28 965	29 540	30,066
Northern Cape	9 910	9 999	9 787	10 041	10 165	10 077	10 336	10 679	10 694	10 784	10 857	11 030	11 495	11,958
Western Cape	68 670	68 596	66 890	67 867	70 328	72 835	76 211	78 180	79 047	81 295	84 618	86 753	89 426	91,873
RSA	479 036	475 056	465 159	471 670	485 783	500 354	521 611	535 320	539 698	551 931	570 753	583 350	601 836	618,760
Gross domestic product @ basic values ($m 1995 PPP)														
Eastern Cape	25 271	24 962	24 374	24 688	25 364	26 399	27 503	28 139	28 327	28 912	29 810	30 355	31 248	32,048
Free State	19 959	19 699	19 024	19 511	20 009	20 042	20 843	21 513	21 488	21 808	22 182	22 523	23 416	24,298
Gauteng	124 717	122 966	121 307	122 143	125 857	131 121	135 819	139 332	140 972	144 145	148 878	152 407	157 173	161,512
KwaZulu-Natal	48 632	48 064	46 816	47 462	48 970	50 666	53 163	54 781	55 352	56 861	59 398	61 025	63 145	65,069
Limpopo	11 304	11 849	11 597	11 886	11 950	11 748	12 368	12 706	12 676	12 850	13 045	13 175	13 698	14,191
Mpumalanga	23 946	24 053	23 353	23 982	24 831	25 180	26 839	27 514	27 481	28 093	29 328	29 869	30 683	31,383

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
North West	17 486	17 014	16 731	17 106	17 608	17 666	18 227	18 499	18 556	18 886	19 366	19 624	20 014	20,370
Northern Cape	6 714	6 775	6 631	6 803	6 887	6 827	7 003	7 235	7 245	7 306	7 356	7 473	7 788	8,102
Western Cape	46 525	46 475	45 319	45 981	47 648	49 347	51 634	52 968	53 555	55 079	57 330	58 776	60 587	62,245
RSA	324 553	321 857	315 151	319 563	329 124	338 997	353 398	362 686	365 653	373 941	386 693	395 227	407 752	419,218
Per capita GDP @ basic values ($ 1995 PPP)														
Eastern Cape	4 619	4 456	4 251	4 213	4 238	4 323	4 425	4 435	4 378	4 384	4 438	4 441	4 497	4,543
Free State	8 108	7 876	7 497	7 593	7 699	7 639	7 885	8 030	7 915	7 933	7 978	8 020	8 270	8,531
Gauteng	20 317	19 671	18 632	18 057	17 945	18 069	18 125	17 793	17 365	17 245	17 398	17 482	17 774	18,082
KwaZulu-Natal	6 649	6 416	6 104	6 055	6 118	6 208	6 403	6 458	6 396	6 449	6 624	6 705	6 853	6,994
Limpopo	2 698	2 755	2 629	2 633	2 588	2 489	2 568	2 598	2 552	2 546	2 542	2 526	2 585	2,638
Mpumalanga	9 599	9 437	8 977	9 051	9 215	9 203	9 686	9 741	9 557	9 609	9 880	9 929	10 084	10,220
North West	6 052	5 761	5 516	5 499	5 522	5 402	5 424	5 373	5 271	5 258	5 294	5 281	5 313	5,348
Northern Cape	10 037	9 796	9 225	9 113	8 889	8 487	8 375	8 378	8 149	8 003	7 866	7 820	7 993	8,173
Western Cape	14 219	13 862	13 085	12 865	12 934	13 008	13 230	13 190	12 999	13 069	13 331	13 423	13 616	13,790
RSA	9 300	9 017	8 592	8 493	8 535	8 588	8 760	8 766	8 638	8 654	8 785	8 834	8 987	9,133
Adjusted real GDP per capita (1995 PPP$) index (APPI)														
Eastern Cape	0.6397	0.6337	0.6259	0.6244	0.6254	0.6287	0.6325	0.6329	0.6308	0.6310	0.6330	0.6331	0.6352	0.6369
Free State	0.7336	0.7288	0.7205	0.7227	0.7250	0.7237	0.7290	0.7320	0.7296	0.7300	0.7309	0.7318	0.7369	0.7421
Gauteng	0.8869	0.8815	0.8725	0.8673	0.8662	0.8674	0.8679	0.8648	0.8607	0.8596	0.8610	0.8618	0.8646	0.8675
KwaZulu-Natal	0.7005	0.6945	0.6862	0.6849	0.6866	0.6890	0.6942	0.6956	0.6940	0.6954	0.6999	0.7019	0.7056	0.7089
Limpopo	0.5500	0.5534	0.5457	0.5459	0.5430	0.5365	0.5417	0.5437	0.5407	0.5403	0.5401	0.5390	0.5428	0.5462
Mpumalanga	0.7618	0.7589	0.7506	0.7520	0.7550	0.7548	0.7633	0.7642	0.7611	0.7620	0.7666	0.7674	0.7700	0.7723
North West	0.6848	0.6766	0.6693	0.6688	0.6695	0.6658	0.6665	0.6650	0.6617	0.6613	0.6625	0.6620	0.6631	0.6642
Northern Cape	0.7692	0.7652	0.7552	0.7531	0.7490	0.7412	0.7390	0.7391	0.7345	0.7314	0.7286	0.7276	0.7312	0.7349
Western Cape	0.8274	0.8231	0.8135	0.8107	0.8116	0.8125	0.8153	0.8148	0.8124	0.8133	0.8166	0.8178	0.8201	0.8223
RSA	0.7565	0.7514	0.7433	0.7414	0.7422	0.7432	0.7465	0.7466	0.7442	0.7445	0.7470	0.7479	0.7508	0.7535
Life expectancy index (LEI)														
Eastern Cape	0.5853	0.5875	0.5891	0.5900	0.5897	0.5874	0.5825	0.5738	0.5606	0.5419	0.5193	0.4915	0.4594	0.4247
Free State	0.6188	0.6196	0.6198	0.6188	0.6157	0.6097	0.5996	0.5839	0.5624	0.5345	0.5022	0.4652	0.4253	0.3850
Gauteng	0.6736	0.6717	0.6692	0.6659	0.6610	0.6537	0.6426	0.6268	0.6060	0.5794	0.5491	0.5141	0.4762	0.4373
KwaZulu-Natal	0.6162	0.6167	0.6159	0.6130	0.6068	0.5960	0.5792	0.5551	0.5238	0.4854	0.4433	0.3982	0.3529	0.3104
Limpopo	0.6167	0.6178	0.6185	0.6184	0.6169	0.6134	0.6070	0.5965	0.5812	0.5603	0.5358	0.5061	0.4727	0.4374
Mpumalanga	0.6225	0.6225	0.6214	0.6184	0.6125	0.6024	0.5871	0.5658	0.5383	0.5048	0.4682	0.4285	0.3881	0.3495
North West	0.6207	0.6214	0.6215	0.6206	0.6180	0.6127	0.6036	0.5898	0.5704	0.5450	0.5154	0.4810	0.4435	0.4051
Northern Cape	0.6248	0.6275	0.6294	0.6308	0.6315	0.6316	0.6308	0.6240	0.6162	0.6050	0.5916	0.5742	0.5531	0.5293
Western Cape	0.6531	0.6563	0.6575	0.6582	0.6586	0.6590	0.6571	0.6545	0.6495	0.6459	0.6396	0.6312	0.6204	0.6076
RSA	0.6095	0.6106	0.6110	0.6102	0.6085	0.6062	0.5959	0.5810	0.5580	0.5380	0.5090	0.4756	0.4394	0.4026
Adult literacy index – Total (ALI)														
Eastern Cape	0.7130	0.7176	0.7216	0.7259	0.7302	0.7346	0.7386	0.7428	0.7472	0.7519	0.7568	0.7630	0.7692	0.7756
Free State	0.8329	0.8374	0.8412	0.8453	0.8494	0.8536	0.8574	0.8619	0.8666	0.8716	0.8769	0.8837	0.8905	0.8975
Gauteng	0.9155	0.9216	0.9270	0.9326	0.9383	0.9441	0.9495	0.9508	0.9523	0.9541	0.9561	0.9598	0.9635	0.9672
KwaZulu-Natal	0.8303	0.8358	0.8407	0.8458	0.8511	0.8564	0.8613	0.8663	0.8715	0.8770	0.8828	0.8901	0.8975	0.9050
Limpopo	0.7260	0.7304	0.7343	0.7384	0.7425	0.7467	0.7505	0.7547	0.7590	0.7636	0.7685	0.7746	0.7809	0.7872

Table 24

South African Human Development Index (1990-2003) (continued)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Mpumalanga	0.7446	0.7487	0.7522	0.7560	0.7598	0.7636	0.7671	0.7712	0.7754	0.7800	0.7847	0.7908	0.7970	0.8033
North West	0.6851	0.6890	0.6924	0.6959	0.6996	0.7033	0.7066	0.7104	0.7145	0.7187	0.7231	0.7288	0.7346	0.7404
Northern Cape	0.7879	0.7918	0.7952	0.7987	0.8024	0.8060	0.8093	0.8134	0.8178	0.8224	0.8272	0.8334	0.8398	0.8462
Western Cape	0.9401	0.9381	0.9353	0.9327	0.9303	0.9278	0.9249	0.9267	0.9288	0.9311	0.9336	0.9377	0.9419	0.9462
RSA	0.8124	0.8166	0.8207	0.8249	0.8291	0.8333	0.8371	0.8409	0.8447	0.8486	0.8526	0.8580	0.8634	0.8688
Combined gross enrolment index (CGEI)														
Eastern Cape	0.8201	0.8409	0.8572	0.8796	0.9037	0.9167	0.9085	0.9006	0.8952	0.8699	0.8034	0.8122	0.8186	0.8217
Free State	0.8155	0.8434	0.8661	0.8974	0.9317	0.9536	0.9531	0.9556	0.9576	0.9049	0.8680	0.8693	0.8706	0.8687
Gauteng	0.7565	0.7787	0.7952	0.8215	0.8504	0.8661	0.8621	0.8616	0.8570	0.8012	0.7673	0.7653	0.7657	0.7666
KwaZulu-Natal	0.7333	0.7602	0.7832	0.8117	0.8428	0.8650	0.8659	0.8688	0.8760	0.8500	0.7997	0.8023	0.8042	0.8062
Limpopo	0.6630	0.6952	0.7241	0.7593	0.7979	0.8284	0.8387	0.8519	0.8685	0.8071	0.8095	0.8134	0.8171	0.8240
Mpumalanga	0.7603	0.7916	0.8185	0.8533	0.8913	0.9185	0.9240	0.9323	0.9414	0.8825	0.8652	0.8676	0.8700	0.8698
North West	0.7666	0.7878	0.8038	0.8274	0.8533	0.8677	0.8617	0.8582	0.8547	0.8018	0.7651	0.7662	0.7661	0.7671
Northern Cape	0.6569	0.6762	0.6912	0.7146	0.7398	0.7530	0.7504	0.7489	0.7434	0.6927	0.6697	0.6772	0.6828	0.6856
Western Cape	0.7607	0.7801	0.7945	0.8164	0.8404	0.8528	0.8454	0.8402	0.8344	0.7697	0.7446	0.7477	0.7518	0.7552
RSA	0.7583	0.7829	0.8030	0.8302	0.8599	0.8788	0.8770	0.8769	0.8781	0.8319	0.7948	0.7973	0.7995	0.8016
Educational attainment index (EAI)														
Eastern Cape	0.7487	0.7587	0.7668	0.7771	0.7880	0.7953	0.7953	0.7954	0.7966	0.7912	0.7723	0.7794	0.7857	0.7910
Free State	0.8271	0.8394	0.8495	0.8627	0.8769	0.8869	0.8893	0.8932	0.8970	0.8827	0.8739	0.8789	0.8839	0.8879
Gauteng	0.8625	0.8740	0.8830	0.8956	0.9090	0.9181	0.9203	0.9210	0.9205	0.9031	0.8932	0.8949	0.8975	0.9004
KwaZulu-Natal	0.7979	0.8106	0.8215	0.8344	0.8483	0.8593	0.8628	0.8671	0.8730	0.8680	0.8551	0.8608	0.8664	0.8721
Limpopo	0.7050	0.7187	0.7309	0.7453	0.7610	0.7739	0.7799	0.7871	0.7955	0.7781	0.7822	0.7876	0.7929	0.7995
Mpumalanga	0.7498	0.7630	0.7743	0.7884	0.8036	0.8152	0.8194	0.8249	0.8308	0.8141	0.8115	0.8164	0.8213	0.8254
North West	0.7123	0.7219	0.7295	0.7398	0.7508	0.7581	0.7583	0.7597	0.7612	0.7464	0.7371	0.7413	0.7451	0.7493
Northern Cape	0.7442	0.7533	0.7605	0.7707	0.7815	0.7884	0.7897	0.7919	0.7930	0.7791	0.7747	0.7813	0.7874	0.7927
Western Cape	0.8803	0.8854	0.8883	0.8939	0.9003	0.9028	0.8984	0.8979	0.8973	0.8773	0.8706	0.8744	0.8785	0.8825
RSA	0.7944	0.8054	0.8148	0.8267	0.8394	0.8485	0.8504	0.8529	0.8558	0.8430	0.8333	0.8377	0.8421	0.8464
Human development index (HDI)														
Eastern Cape	0.6579	0.6599	0.6606	0.6638	0.6677	0.6705	0.6701	0.6674	0.6626	0.6547	0.6416	0.6347	0.6268	0.6175
Free State	0.7265	0.7293	0.7299	0.7347	0.7392	0.7401	0.7393	0.7363	0.7297	0.7157	0.7023	0.6920	0.6820	0.6717
Gauteng	0.8077	0.8091	0.8082	0.8096	0.8121	0.8130	0.8103	0.8042	0.7957	0.7807	0.7678	0.7570	0.7461	0.7351
KwaZulu-Natal	0.7049	0.7073	0.7079	0.7108	0.7139	0.7148	0.7121	0.7060	0.6969	0.6829	0.6661	0.6536	0.6416	0.6305
Limpopo	0.6239	0.6300	0.6317	0.6365	0.6403	0.6413	0.6429	0.6424	0.6391	0.6262	0.6193	0.6109	0.6028	0.5943
Mpumalanga	0.7114	0.7148	0.7154	0.7196	0.7237	0.7241	0.7233	0.7183	0.7100	0.6936	0.6821	0.6708	0.6598	0.6491
North West	0.6726	0.6733	0.6735	0.6764	0.6794	0.6789	0.6761	0.6715	0.6645	0.6509	0.6383	0.6281	0.6172	0.6062
Northern Cape	0.7128	0.7153	0.7150	0.7182	0.7206	0.7204	0.7198	0.7183	0.7145	0.7052	0.6983	0.6944	0.6906	0.6856
Western Cape	0.7869	0.7883	0.7865	0.7876	0.7902	0.7914	0.7903	0.7891	0.7864	0.7788	0.7756	0.7744	0.7730	0.7708
RSA	0.7201	0.7225	0.7230	0.7261	0.7300	0.7326	0.7309	0.7268	0.7193	0.7085	0.6964	0.6871	0.6774	0.6675

Notes

The HDI is calculated at both the national and provincial levels. (1) *Demographics projections:* The demographic projections are based on the ASSA 2000 Provincial Model by population group. The latest version of the ASSA model released during May 2002 was used. The ASSA model outcome was, however, scaled to conform to the Census 1996 population estimates. The complete reference to the model is: Aids Demographic Model 2000, Actuarial Society of South Africa, released May 2002. (2) *Literacy:* The adult literacy rate (% of people aged 15 years and above) is defined as those people that, with understanding, can read and write a short, simple statement on their everyday life. The historic calculations are based on the 1991 and 1996 Census, various October Household surveys and the latest released LFS. Take note that the RSA literacy rate is relatively high and future growth in it will have only a marginal effect on the HDI. (3) *Gross educational enrolment:* Primary and secondary enrolment numbers up to 2000 were obtained from the Directorate of Information Systems, Department of Education. Tertiary enrolment numbers up to 2000 were obtained from Edusource Date News. Note that the gross enrolment ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. South African gross enrolment at primary and secondary level is relatively high because many learners are older than the official age bands. (4) *Gross domestic product at constant prices:* From 2002 to 2015. Quantec forecasted GDP by industry and province, utilising the 'Macro-economic impact of HIV/AIDS in South Africa: 2002 to 2015'. October 2001, Bureau for Economic Research, Stellenbosch. The BER forecast were utilised in conjunction with Quantec's provincial input-output model. The forecast industries by province were aggregated to total GDP for each province. Total South African GDP figures correspond with the SARB Bulletin 2002 q1. (5) Historical GDP at basic prices (Rm, 1995 prices) has been calculated from Statistics South Africa releases on Regional GDP by province up to 1994. Regional GDP estimates for 1996 by province were obtained from the DBSA's Development Information Business Unit. Provincial estimates for 1996 to 2001 were derived utilising Quantec's provincial input-output model. (6) The US$/ZAR PPP exchange rate has been derived from the World Bank's PPP GDP estimates for South Africa as published in 'World Bank Global Development Indicators 2002', May 2002. The US$/ZAR PPP rate was forecast with the aid of the BER forecast referred to previously. (7) The GDP at constant 1995 US$ PPP is calculated from the above provincial estimates utilising the World Bank PPP exchange rate. Per capita GDP at 1995 US$ PPP is calculated by dividing by the relevant total population numbers. (8) *Human development index (HDI) calculation:* The HDI calculations were done according to the UNDP definitions in the 2000 HDI report for South Africa, pp. 221–222.

Table 25

Distribution of households deprived of quality basic services (1996, 2001)

	1996									2001								
Categories[2]	0	1	2	3	4	5	6	7	Total[3]	0	1	2	3	4	5	6	7	Total
Total	3 394 561	538 432	550 602	572 764	789 129	1 478 667	1 655 305	97 942	9 077 403	3 964 191	1 002 550	977 429	920 973	1 264 641	1 604 436	1 359 311	112 174	11 205 705
African	1 281 260	364 631	462 925	527 359	750 142	1 429 630	1 623 916	94 134	6 533 998	2 280 882	732 937	836 542	807 902	1 157 189	1 457 877	1 266 686	98 939	8 638 954
Coloured	486 622	69 970	44 667	36 800	33 598	42 276	23 947	3 324	741 206	533 572	118 144	65 967	47 589	41 180	53 695	29 813	3 871	893 831
Indian	232 731	4 777	2 706	1 683	516	598	571	59	243 639	196 217	19 120	12 078	12 081	13 802	19 407	11 330	2 225	286 261
White	1 342 226	94 249	37 424	4 642	1 777	1 211	865	97	1 482 492	953 521	132 348	62 841	53 401	52 470	73 456	51 483	7 138	1 386 658
Western Cape	663 402	91 562	53 305	50 226	35 126	47 285	36 179	8 405	985 489	747 092	154 029	81 793	55 515	43 056	61 775	25 034	5 009	1 173 304
Eastern Cape	256 427	53 095	46 055	69 025	111 233	207 663	578 427	11 936	1 333 862	262 868	99 553	94 709	116 085	183 874	303 267	439 964	12 344	1 512 664
Northern Cape	70 889	24 899	21 096	19 710	16 049	19 824	13 018	2 113	187 599	80 894	34 643	26 535	18 284	13 949	20 255	11 375	907	206 842
Free State	182 254	50 880	55 906	62 559	82 023	128 210	60 451	4 052	626 333	188 445	80 610	104 698	95 482	100 032	98 147	58 750	7 137	733 302
KwaZulu-Natal	594 163	63 836	91 161	98 461	101 964	221 015	476 556	18 149	1 665 304	660 782	158 608	174 529	165 388	204 511	331 789	375 605	15 038	2 086 250
North West	152 441	36 122	54 980	56 823	74 206	206 231	124 522	16 329	721 652	195 357	65 328	130 937	110 946	149 286	165 196	85 404	26 550	929 004
Gauteng	1 247 751	161 044	101 291	98 724	113 816	125 417	102 232	17 324	1 967 598	1 570 238	317 269	147 311	154 964	131 034	153 574	152 780	24 074	2 651 244
Mpumulanga	138 167	31 925	59 924	60 765	98 308	118 064	88 045	9 911	605 107	147 906	49 622	111 771	85 571	122 990	127 781	76 169	11 321	733 131
Limpopo	89 068	25 071	66 884	56 472	156 405	404 958	175 877	9 723	984 458	110 611	42 887	105 145	118 739	315 909	342 651	134 231	9 793	1 179 965
	% contribution									% contribution								
Total	37%	6%	6%	6%	9%	16%	18%	1%	100%	35%	9%	9%	8%	11%	14%	12%	1%	100%
African	20%	6%	7%	8%	11%	22%	25%	1%	100%	26%	8%	10%	9%	13%	17%	15%	1%	100%
Coloured	66%	9%	6%	5%	5%	6%	3%	0%	100%	60%	13%	7%	5%	5%	6%	3%	0%	100%
Indian	96%	2%	1%	1%	0%	0%	0%	0%	100%	69%	7%	4%	4%	5%	7%	4%	1%	100%
White	91%	6%	3%	0%	0%	0%	0%	0%	100%	69%	10%	5%	4%	4%	5%	4%	1%	100%
Western Cape	67%	9%	5%	5%	4%	5%	4%	1%	100%	64%	13%	7%	5%	4%	5%	2%	0%	100%
Eastern Cape	19%	4%	3%	5%	8%	16%	43%	1%	100%	17%	7%	6%	8%	12%	20%	29%	1%	100%
Northern Cape	38%	13%	11%	11%	9%	11%	7%	1%	100%	39%	17%	13%	9%	7%	10%	5%	0%	100%
Free State	29%	8%	9%	10%	13%	20%	10%	1%	100%	26%	11%	14%	13%	14%	13%	8%	1%	100%
KwaZulu-Natal	36%	4%	5%	6%	6%	13%	29%	1%	100%	32%	8%	8%	8%	10%	16%	18%	1%	100%
North West	21%	5%	8%	8%	10%	29%	17%	2%	100%	21%	7%	14%	12%	16%	18%	9%	3%	100%
Gauteng	63%	8%	5%	5%	6%	6%	5%	1%	100%	59%	12%	6%	6%	5%	6%	6%	1%	100%
Mpumulanga	23%	5%	10%	10%	16%	20%	15%	2%	100%	20%	7%	15%	12%	17%	17%	10%	2%	100%
Limpopo	9%	3%	7%	6%	16%	41%	18%	1%	100%	9%	4%	9%	10%	27%	29%	11%	1%	100%

Source: Adelzadeh (2003a)
Data source: 100 per cent censuses of 1996 and 2001
Note: (1) The seven basic services used are: housing type, source of energy for cooking, source of energy for heating, source of energy for light, water, refuse removal, and toilet facility. (2) 0 = not deprived, 1 = deprived of one basic services … 7= deprived of seven basic services (3) For the 1996 census, the total number of households using race and province differ in this table since the table does not include a relatively small portion of households for which the race of the head of households was 'unspecified ' or was 'other'.

Table 26

Environmental indicators for South Africa

	Theme	Indicator	Unit	Measurement
1.	Climate change	Energy use (fossil fuels vs. non-fossil fuels) CO_2 emission* intensities	Petajoules per annum Parts per million (PPM)	Total non-fossil fuels[1] 1992: 3 500 1997: 3 800 1999: 4 500 Total fossil fuels[1] 1992: 3 900 1997: 4 500 1999: 5 000 CO_2 emissions[2] 1980: 338 1990: 354 2000: 369
2.	Ozone layer	Consumption of ozone depleting substances	Tons per annum	CFC-113 1998: 57 2000: 25 HCFC-1243 1998: 78 2000: 9 HCFC-223 1998: 2 800 2000: 2 050
3.	Air quality	SOx and NOx emission intensities	Kilotons (109g) per annum	NOx emissions[9] 1990: 2 423 (energy, transport, industrial processes, agriculture) SOx emissions[4] 1990: 1 760 (energy, transport and industrial processes)
4.	Waste generation	Total waste generated in South Africa Breakdown of waste generated in South Africa	Million tons per annum	Total waste generated in SA[5] 1997: 538.1 1997 Mining: 470 Industrial: 16.3 Power generation: 20.5 Agricultural and Forestry: 20 Domestic and Trade Refuse: 11 Sewage Sludge: 0.3
5.	Inland water: water quantity	Total surface water resources available per capita Total surface water used per sector	m^3 per person per annum % of total surface water used per sector	Total surface water resources[6] 2000: 1584 Total surface water used per sector[7] 2001 rural: 4 urban: 1 bulk (mines): 2 bulk (other): 2 bulk (strategic): 2 irrigation: 43 afforestation: 7 alien vegetation: 8 environmental requirements: 31
6.	Fish resources	Fish catches	Mass (t)	Total commercial fishery catch[9] 1988: 950 000 1996: 460 000 1999: 590 000
7.	Energy resources	Total primary energy supply Annual electricity consumption per capita	Tons of oil equivalent (toe) per capita K/Wh/capita	Total primary energy supply[9] 2000: 2.51 Annual electricity consumption per capita[9] 2000: 4 533

8.	Biodiversity	Plants	Number of species	Number of species: 22 2117 Number of endemic species: 17 769 Number of endemic red data species: 3 091
		Invertebrates (butterflies)	Number of species	Number of species: 11 0007 Number of endemic species: unknown Number of endemic red data species: 117
		Fish (freshwater and estuarine)	Number of species	Number of species: 2577 Number of endemic species: 132 Number of endemic red data species: 32
		Fish (marine)	Number of species	Number of species: 2 2007 Number of endemic species: 286 Number of endemic red data species: no data
		Reptiles and amphibians	Number of species	Number of species: 4887 Number of endemic species: 256 Number of endemic red data species: 35
		Birds	Number of species	Number of species: 8007 Number of endemic species: 62 Number of endemic red data species: 16
		Mammals (terrestrial)	Number of species	Number of species: 2477 Number of endemic species: 35 Number of endemic red data species: 26
		Mammals (marine)	Number of species	Number of species: 457 Number of endemic species: 0 Number of endemic red data species: 0
9.	Habitats	Terrestrial habitats	% of terrestrial habitats transformed for cultivation of crops, forestry, industry and human settlements	% of habitat transformed[4]: 25%
			% of terrestrial habitats degraded through over-use and poor management	% of habitat degraded[4]: 5%
		Terrestrial and riparian habitats	% of terrestrial and riparian habitats that are heavily infested by alien vegetation	% of habitat infested[4]: 8%
		Wetlands	% of wetlands transformed for cultivation of crops, forestry, industry and human settlements	% of wetlands transformed[4]: 50%
10.	Land use	Desertification	% of land affected by dry land areas	Dry land areas[10] 2001 Hyper-arid: 8% Arid: 47% Semi-arid: 39% Dry sub humid: 5% Humid: 1%

Notes: *International data as no data available for South Africa.
1. Extrapolated from DME 1998, cited in DEAT 2002
2. Extrapolated from IPPC Climate Change 2001
3. Extrapolated from DEAT 2001, cited in DEAT 2002
4. Extrapolated from DEAT 1999
5. Extrapolated from DWAF 1997
6. Extrapolated from Ashton and Ramasar 2000
7. Extrapolated from DEAT 2002
8. Extrapolated from Fishing Industry Handbook 2001
9. Extrapolated from IEA 2001
10. Extrapolated from Hoffman and Ashwell 2001

Table 27

Distribution of South African Wealth (1960-2001)

	1960	1970	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001
US$ PPP adjusted ($m 1995 prices)*												
Natural capital	177 836	174 463	167 580	156 772	158 316	158 047	159 369	159 594	160 082	161 016	161 645	161 583
Agriculture	65 520	75 925	90 471	101 150	103 230	103 285	104 609	104 929	105 257	106 150	106 926	107 459
Mining	112 315	98 538	77 109	55 622	55 086	54 761	54 759	54 665	54 866	54 866	54 719	54 124
Produced assets*	151 758	255 696	491 332	641 280	652 088	656 190	663 227	678 876	694 539	684 273	708 958	713 342
Structures	116 976	195 747	339 977	437 834	453 038	455 914	459 435	462 936	465 319	466 044	466 305	467 115
Machinery and equipment	17 580	32 595	64 041	75 224	74 598	77 185	80 885	85 314	90 895	94 198	96 997	99 626
Urban land	38 992	65 249	113 326	145 945	151 013	151 971	153 145	154 312	155 106	155 435	155 435	155 705
Net foreign liabilities	–21 790	037 894	–26 012	–17 722	–26 561	–28 880	–30 238	–23 686	–16 781	–9 780	–9 780	–9 105
Human resources*	792 497	1 567 319	1 833 275	2 396 470	2 740 479	2 415 781	2 783 322	2 707 570	2 470 282	2 144 936	2 144 936	1 876 577
Total wealth	1 122 090	1 997 477	2 492 187	3 194 521	3 550 883	3 230 017	3 605 918	3 546 041	3 324 903	3 015 539	3 015 539	2 751 502
US$ PPP adjusted ($m 1995 prices) % distribution*												
Natural capital	15.8	8.7	6.7	4.9	4.5	4.9	4.4	4.5	4.8	5.4	5.4	5.9
Agriculture	5.8	3.8	3.6	3.2	2.9	3.2	2.9	3.0	3.2	3.5	3.5	3.9
Mining	10.0	4.9	3.1	1.7	1.6	1.7	1.5	1.5	1.6	1.8	1.8	2.0
Produced assets*	13.5	12.8	19.7	20.1	18.4	20.3	18.4	19.1	20.9	23.5	23/5	25.9
Structures	10.4	9.8	13.6	13.7	12.8	14.1	12.7	13.1	14.0	15.5	15.5	17.0
Machinery and equipment	1.6	1.6	2.6	2.4	2.1	2.4	2.2	2.4	2.7	3.2	3.2	3.6
Urban land	3.5	3.3	4.5	4.6	4.3	4.7	4.2	4.4	4.7	5.2	5.2	5.7
Net foreign liabilities	–1.9	–1.9	–1.0	–0.6	–0.7	–0.9	–0.8	–0.7	–0.5	–0.3	–0.3	–0.3
Human resources*	70.6	78.5	73.6	75.0	77.2	74.8	77.2	76.4	74.3	74.2	71.1	68.2
Total wealth	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per capita US$ PPP adjusted ($m 1995 prices)*												
Natural capital	10 087	7 816	6 028	4 508	4 134	4 021	3 951	3 859	3 786	3 734	3 683	3 626
Agriculture	3 716	3 402	3 254	2 908	2 696	2 627	2 594	2 537	2 489	2 461	2 436	2 411
Mining	6 370	4 415	2774	1 599	1 438	1 393	1 358	1 322	1 297	1 272	1 247	1 215
Produced assets*	8 608	11 455	17 673	18 439	17 028	16 693	16 444	16 417	16 426	15 867	16 153	16 007
Structures	6 635	8 770	12 229	12 589	11 831	11 598	11 391	11 195	11 005	10 807	10 625	10 482
Machinery and equipment	997	1 460	2 304	2 163	1 948	1 964	2 005	2 063	2 150	2 184	2 210	2 236
Urban land	2 212	2 923	4 076	4 196	3 944	3 866	3 797	3 732	3 668	3 602	3 542	3 494
Net foreign liabilities	–1 236	–1 698	–936	–510	–694	–735	–750	–573	–397	–726	–223	–204
Human resources*	44 950	70 217	65 944	68 906	71 564	61 455	69 008	65 476	58 422	56 250	48 871	42 109
Total wealth	63 645	89 489	89 645	91 852	92 727	82 168	89 403	85 753	78 634	75 851	68 708	61 742

Rand PPP adjusted (Rand m 1995 prices)*												
Natural capital	645 010	632 776	607 812	568 610	574 213	573 235	578 030	578 849	580 617	584 006	586 286	586 060
Agriculture	237 642	275 380	328 138	366 870	374 417	374 616	379 418	380 577	381 766	385 005	387 821	389 753
Mining	407 368	357 396	279 674	201 741	199 797	198 618	198 611	198 272	198 851	199 001	198 465	196 308
Produced assets*	550 426	927 409	1 782 059	2 325 924	2 365 122	2 380 002	2 405 525	2 462 285	2 519 094	2 481 859	2 571 390	2 587 290
Structures	424 272	709 973	1 233 096	1 588 024	1 643 170	1 653 600	1 666 371	1 679 070	1 687 712	1 690 341	1 691 290	1 694 227
Machinery and equipment	63 761	118 221	232 278	272 838	270 566	279 951	293 369	309 434	329 677	341 657	351 809	361 343
Urban land	141 424	236 658	411 032	529 341	547 723	551 200	555 457	559 690	562 571	563 447	563 763	564 742
Net foreign liabilities	–79 032	–137 443	–94 347	–64 279	–96 337	–104 749	–109 672	–85 909	–60 866	–113 586	–35 472	–33 023
Human resources*	2 874 386	5 684 665	6 649 290	8 691 995	9 939 716	8 762 036	10 095 108	9 820 356	8 959 713	8 798 426	7 779 684	6 806 347
Total wealth	4 069 822	7 244 850	9 039 163	11 586 529	12 879 051	11 715 273	13 078 663	12 861 489	12 059 424	11 864 291	10 937 360	9 979 697
Per capita Rand PPP adjusted (Rand m 1995 prices)*												
Natural capital	36 585	28 349	21 863	16 349	14 995	14 582	14 331	13 998	13 732	13 542	13 358	13 151
Agriculture	13 479	12 337	11 803	10 549	9 777	9 530	9 407	9 203	9 029	8 928	8 836	8 746
Mining	23 106	16 012	10 060	5 801	5 217	5 053	4 924	4 795	4 703	4 614	4 522	4 405
Produced assets*	31 220	41 549	64 102	66 877	61 762	60 545	59 641	59 545	59 576	57 550	58 588	58 057
Structures	24 065	31 807	44 355	45 660	42 909	42 066	41 315	40 604	39 914	39 196	38 535	38 018
Machinery and equipment	3 616	5 296	8 355	7 845	7 065	7 122	7 274	7 483	7 797	7 922	8 016	8 108
Urban land	8 022	10 602	14 785	15 220	14 303	14 022	13 772	13 535	13 305	13 065	12 845	12 673
Net foreign liabilities	–4 483	–6 158	–3 394	–1 848	–2 516	–2 665	–2 719	–2 078	–1 439	–2 634	–808	–741
Human resources*	163 034	254 678	239 178	249 920	259 563	222 897	250 292	237 482	211 897	204 019	177 257	152 731
Total wealth	230 839	324 575	325 143	333 147	336 320	298 024	324 265	311 025	285 205	275 110	249 203	223 939

* Only human resources and produced assets (structures) are adjusted for PPP (Natural resources are already valued at international trading prices).
Note: PPP = purchasing power parity

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