SOCIO-ECONOMIC INDICATORS OF DEVELOPMENT PROGRESS WITHIN THE OECD FRAMEWORK IN SOUTH AFRICA

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ABSTRACT

International organisations have developed or proposed socio-economic indicators to measure development progress across countries. In addition to meeting international obligations, there have been a number of initiatives in South Africa to develop indicators that take into consideration the country's specific needs. As the official agency for the collection of national statistics, Statistics South Africa has played a crucial role in the development of indictors in South Africa including the compilation of the core set of 21 indicators within the framework of the Organisation of Economic Co-orporation and Development (OECD)/World Bank/United Nations initiative. This paper provides background information on broad economic indicators in South Africa. In addition, the paper situates the levels of socio-economic development in South Africa within the framework of the OECD/World Bank/United Nations core set of indicators.

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BACKGROUND

International Initiatives in measuring and monitoring development

The development, regular compilation and publication of some objective quantitative and qualitative criteria (indicators) are necessary to measure, monitor and inform policies with regard to socio-economic development in any country. A number of initiatives have been undertaken in this regard internationally. Williams and Smith (2000) provide a comprehensive review of such initiatives, which include:

The United Nations' (UN) Minimum National Social Data Set (MNSDS);

The UN Basic Social Services for All (BSSA);

The Organisation for Economic Co-operation and Development (OECD) Development Assistant Committee (DAC)/World Bank/UN's working core set of indicators of Development Progress (IDP);

United Nations Development Assistance Framework's Common Country Assessment Indicators (CCA);

International Monetary Fund's (IMF) General Data Dissemination System (GDDS) and Special Data Dissemination Standard (SDDS);

The Word Bank's Comprehensive Development Framework (CDF), Highly Indebted Poor Countries (HIPC) and Poverty Reduction Strategy Plans (PRSP).

The indicators that have been developed or proposed internationally overlap. The initiatives emphasise cross-country comparison through uniform methods and definitions in the computation of the indicators.

In a series of UN global conferences there was concern on major development issues including education (Jomtien, Thailand, 1992), children (New York, 1990), the environment and development (Rio de Janeiro, 1992), population and development (Cairo, 1994), social development (Copenhagen, 1995) and women (Beijing, 1995). In response to these issues, in 1996, development ministers of OECD countries formulated a strategy for development based on seven international goals. These were the priorities to be achieved before 2015 in order to improve the quality of life in developing countries. The goals are in the fields of economic well being, social development and the environment as follows:

- Reduction by half of proportion of people living in extreme poverty by 2015,
- Universal primary education by 2015,
- Elimination of gender disparity in primary and secondary education by 2005,
- Reduction of infant and child mortality by two-thirds the 1990 levels by 2015,
- Reduction of maternal mortality by three-fourths the 1990 level by 2015.
- Access to reproductive health services through the primary health-care system for all individuals of appropriate ages, including safe and family planning methods by 2015,
- Reversal of trends of loss in environmental resources by 2015,

(see OECD, 1998, 2000).

To assess progress with regard to the goals indicated above, a core set of 21 indicators (Indicators of Development Progress, (IDP) was defined by OECD DAC, World Bank and the UN. In addition to monitoring progress in various fields of development, the core indicators provide a yardstick for assessing the effectiveness of strategies in those fields. (OECD, 1998). However, aggregate measures such as the IDP and other international indicators do not adequately reflect the diversity of a country's population including South Africa.

Measuring and monitoring development in South Africa

Although South Africa is a member of the international development partnerships strategy, in addition to meeting international obligations there have been national initiatives to develop indicators that take into consideration, the country's specific needs with regard to the monitoring of transformation of hitherto apartheid South Africa. The goals of transformation are embodied in Government's Reconstruction and Development Programme (RDP), and the Growth, Employment and Redistribution (GEAR) strategy.

The RDP is an integrated, coherent socio-economic policy framework and its programme of action is structured around its principal policy thrusts, which brings together clusters of Ministries and Departments (Republic of South Africa, 1998; Department of Welfare, 1998). Five major policy programmes have been linked. These are designed to meet the overall goal of the RDP - *a better life for all*– namely: meeting basic needs, developing the country's human resources, building the economy, democratizing the State and Society, implementing the RDP (Republic of South, 1998).

On the other hand, GEAR is the government's macro-economic framework for rebuilding and restructuring the economy; it complements the RDP (Republic of South Africa, 1998; Department of Health, 1998). The twin objectives of the GEAR are transformation of the economy to meet the needs of the new democracy, and gearing it for the competitive world economy. The Strategy in place to achieve the objectives includes infrastructure development (including housing, health care and education facilities, municipal and rural infrastructure, and recreational facilities); measures to promote competitiveness and employment; restructuring of state assets; fiscal and financial discipline and the reprioritising of spending (Republic of South Africa, 1998).

The development, regular compilation and reporting on indicators in these areas are essential to monitoring changes, and informing policies regarding transformation in South Africa. It is against this background that indicators have been defined or proposed in South Africa. Some of the efforts in this regard are reviewed below.

A REVIEW OF INITIATIVES IN THE DEVELOPMENT OF INDICATORS IN SOUTH AFRICA

Arising from a workshop in 1999 regarding people's opinions about transformation in South Africa, Hercules (1999) identified areas in which "people's" indicators should be developed to measure progress in transformation. According to Hercules, measures of transformation should go beyond the existing conventional and national-level indicators. He argues that people's indicators allow for a close face-to-face exploration of the reality of ordinary South Africans, which goes beyond the limitations of the annual October household survey (OHS). He proposed 47 key indicators covering 8 broad areas namely: the economy, social trends, the environment, attitudes and values, politics, process, participation, personal freedom and growth. Hercules does not provide definitions and data sources for these indicators.

On the other hand, the Department of Health (1999) was explicit in defining indicators for the health sector with regard to definitions, data sources and responsibilities. They defined over one hundred indicators that are measurable through existing and planned information systems. The Department's indicators are intended to monitor progress toward achieving the year 2000 health goals and objectives. The indicators cover maternal, reproductive and women's health; child health; adolescent health; care of older persons; nutrition; oral health; environmental health; occupational health; emergency health services; human resource development; substance abuse; mental health; disability; sexually transmitted diseases and HIV/AIDS; chronic diseases; technology policies; drug policy; national information system; health research.

As a member country of SADC, South Africa has played a role in proposing benchmark indicators for essential data collection in monitoring health management and health status in the SADC region. The 34 benchmark indicators proposed cover the following areas: health status; equity in health; quality of services; cost efficiency; customer/client satisfaction; transparency, ownership and partnership in health (see, SADC Surveillance

Forum, undated).

Poverty alleviation, a critical issue in the transformation process, is a major concern to the Government. In this regard, the Cabinet instructed that all poverty work be co-ordinated by the Policy Co-ordination and Advisory Services unit (POCAS) formerly called the Co-ordination and Implementation Unit (CIU) in the Presidency. To ensure the success of Government's policies and programmes on poverty, the Poverty and Inequality Indicators and Monitoring Task Team (PIIM) in conjunction with the CIU held a workshop in 1998, to define and identify indicators that are best suited for measuring and monitoring poverty. Four types of poverty indicators were identified: Impact of policies/programmes and process indicators; input/output indicators; participation and empowerment indicators; and cost indicators. The workshop recommended that a team be appointed to identify indicators from each of the following categories:

Population and housing characteristics;

Access to services;

Resources, assets and opportunities;

Institutional arrangements;

Rights, responsibilities and choices;

Participation.

For more details, see Report of the technical workshop on poverty indicators measurement and monitoring, 1998.

Various other Government Departments have developed poverty monitoring indicators including the Departments of Agriculture, Constitutional Development, Education, Environmental Affairs and Tourism, Housing, Labour, Land Affairs, Public Works, Transport and Statistics South Africa (See Thorne-Erasmus, 1998 for a more detailed review).

The role of Statistics South Africa

As the official agency for the collection of national statistics, Statistics South Africa (Stats SA) has played a crucial role in the development of indicators as follows:

1. participation in various forums developing indicators including some of those listed above;
2. development of its own indicators;
3. compilation and publication of various indicators based on its regular surveys and the population census.

In relation to (2) above, Stats SA uses the following indicators for monitoring living conditions in South Africa: living in formal housing, access to electricity for lighting, tap water inside the dwelling, a flush or chemical toilet, telephone in dwelling, regular refuse removal, level of education of household head, average household size, children less than five years old, annual income and unemployment.

In addition, Stats SA has constructed two development indices – household infrastructure index and household circumstances index – to enable equitable allocation of resources, and monitor change in the life circumstances of people in different areas of South Africa. (See Orkin, Hirschowitz, Alberts and Lehohla, 1999).

As a means of improving the country's labour market statistics including employment and unemployment indicators, Stats SA recently introduced a bi-annual labour force survey (LFS). The first of these surveys was implemented in February 2000, and is currently being processed for analysis.

Additionally, Stats SA has played a key role in co-ordinating the compilation of the core set of 21 indicators of development progress within the framework of the OECD DAC, World Bank and the UN initiative. Stats SA is also responsible for the provision of specific core indicators. This is discussed in the next section.

To conclude this review, the following may be noted. The national initiatives to develop indicators are intended to meet the specific needs of the country especially with regard to transformation of hitherto apartheid South Africa. Although the national indicators within this context, go beyond the international indicators of development progress, they are not radically different from those being developed internationally. Some of the weaknesses of the national indicators include: overlap resulting in duplication of efforts; lack of reliable data; and, in some cases, the methods of measuring the indicators are not always clear.

OBJECTIVES

Given the above background and review, the objectives of this paper are

- Provide background information on broad economic indicators in South Africa;
- Situate the levels of socio-economic development in South Africa within the framework of the OECD DAC, World Bank and the UN core set of indicators.

DATA

Most of the indicators discussed in this paper are based on Stats SA's regular surveys, and censuses. These are briefly outlined below.

The October Household Surveys (OHS)

Stats SA has carried out an annual October household survey (OHS) since 1993. Although the first of these series in 1993 excluded certain parts of the country (the former TBVC states – Transkei, Bophuthatswana, Venda and Ciskei) subsequent ones covered the entire country. The sample size ranges between 12 000 and 30 000 households. Hirschowitz and Orkin (1996) provide information regarding the general principle in the OHS sample design. The OHS is an omnibus survey and thus, a rich source of data for various development indicators including poverty, social development, gender equality, infant and child mortality, fertility and access to services. The OHS is also a valuable tool in monitoring transformation in South Africa.

The 1996 population census (Census '96).

Stats SA carried out the first non-racial nationwide census in October 1996. Various development indicators can also be obtained from Census '96. The census data also

provide denominators for computing various other indices. Statistics South Africa (1998,1999) gives methodological details regarding the final results and how the census was conducted.

Economic Surveys and Censuses

The Income and Expenditure Survey (IES)

Stats SA conducts an IES every five years in accordance with international practice. The primary purpose of the survey is to collect information on income and expenditure patterns of households throughout South Africa. The information is used to determine the product and service categories to be included in the CPI basket. It is also used to calculate weights for the different product and service categories in the CPI basket.

The last IES was conducted in October 1995; the next is planned for October 2000. The 1995 IES was based on a sample of 30 000 households. Information regarding approximately 1 000 different goods and services groups was collected in the survey; this was further broken down to approximately 1 500 consumer goods and service groups using supplementary sources. Prices were collected for the items identified during this process and used in the calculation of the CPI.

Monthly CPI Survey

The survey of retail prices conducted by Stats SA is a sample survey based on retail trade and service outlets. It collects prices of 1 500 selected consumer goods and services groups sold by these retail trade and service outlets to consumers in the 14 metropolitan and 39 other urban areas in the nine provinces of the country. Approximately 110 000 price quotations are collected monthly through 6 700 questionnaires from a sample of 2 200 retail trade and service outlets. The information is used to track the influence of underlying demand and supply in the economy on prices of consumer products and services. This information is also used in the compilation of the CPI.

Sectoral Economic Censuses and Surveys

Stats SA conducts periodic sectoral economic censuses and surveys. The sectors covered include agriculture; mining and quarrying, manufacturing; construction; wholesale, retail and motor trade; catering and accommodation; transport; real estate and business services. The information from these censuses and surveys supplements other data sources used in estimating the GDP.

Since Stats SA does not collect information on some of the indicators various Government Departments and Organizations were requested by Stats SA in an inter-departmental meeting on core indicators to fill in the gaps in Stats SA’s data sets on a regular basis.

METHODS

Unless otherwise stated in the footnotes, the indicators shown in Appendix 1 were computed using the definitions and methods specified in OECD DAC (1998).

LEVELS AND TREND OF INDICATORS OF DEVELOPMENT PROGRESS IN SOUTH AFRICA

Broad Economic Indicators

GDP

Stats SA in co-operation with the South African Reserve Bank revised its national accounts in order to implement the new international guidelines – the System of National Accounts 1993 (1993 SNA). The revised estimates and annual growth in GDP are shown in Table 1.

Table 1: Growth domestic product and annual growth (revised estimates)

	1995	1996	1997	1998	1999
GDP at current prices (Rand billion)	548	618	684	741	801
GDP per capita at current prices (Rand thousand)	13,9	14,2	14,2	13,9	13,8
Annual % growth in GDP per capita at 1995 prices	0,9	1,9	0,3	-1,5	-0,9
Annual % growth in GDP at 1995 prices	3,1	4,2	2,5	0,6	1,2

Source: Stats SA and SARB

Real GDP growth slowed from 3,1% in 1995 to 0,5% in 1998. With annual population growth of around 2%, the growth in real GDP per capita has been positive except in 1998. In theory, this pattern of growth is conducive to investment. However, according to the findings from the 1995 IES, only about 2% of household expenditure go towards investments and savings (Stats SA, 1997).

CPI

Stats SA reports on three indices of inflation namely, the consumer price index (CPI) – since 1910; core CPI – since January 1997 and CPI excluding interest rates on mortgage bonds (CPIX).

Figure 1 shows the levels and trends in the different measures of inflation in South Africa since January 1995. According to the CPI, year-on-year inflation rate dropped from about 9,6% in January 1995 to about 2,6% in January 2000. The latter half of 1999 saw a large decline in consumer price inflation - reaching a year-on-year low of 1,7% in October 1999 - the lowest in 31 years.

Unemployment rate

According to the official definition the unemployment rate has increased slightly in recent years with over one-fifth of the economically active population unemployed in 1997 (Table 2). The official definition excludes those who have temporarily or permanently given up looking for work. Reflecting this, the level and increasing trend of unemployment is therefore higher in the expanded than in the official definition (Table 2).

Table 2. Unemployment rates

		1995	1996	1997
Official definition (%)		16.4	20.3	22.0

Expanded definition (%)		28.3	34.4	37.4

Source: Stats SA

Economic well-being: Poverty

Appendix 1 shows the levels of the other indicators in South Africa.

Poverty headcount ratio (% below $1 a day) The international development goal is to reduce the proportion of the population whose income/consumption falls below the poverty line (i.e. the prevalence of poverty or poverty headcount ratio) to less than 15% by 2015. At present, we can only provide information on this indicator for the year 1995. As can be seen in Appendix 1, according to this measure, the proportion of the population in extreme poverty was 18% in 1995. This is higher than the level of the international goal (less than15% by 2015). However, by this figure, South Africa had in 1995, attained the goal level set for sub-Saharan Africa (18% by the year 2015).

Poverty Gap ratio: Similarly, the poverty gap ratio (the combined measurement of prevalence and depth of poverty) in 1995 (6%) indicates that South Africa has attained the goal set for Sub-Saharan Africa (7% by 2015). However, the international goal is 5% by 2015.

Inequality of income: share of poorest 20% In 1995, the poorest one-fifth of all households in South Africa only had 3% of all household income.

Social Development

Net enrolment ratio in primary education and literacy and gender equality in education The percentage of children of primary school age who are enrolled in primary education (net enrolment ratio) increased slightly from 95% in 1995 to 96% in 1997. This level, though less than the international goal (99% by 2015), is much higher than the average level in sub-Saharan Africa in 1995 (56%). About 79% of those aged 15 years and over were literate in 1996 – this is much higher than the level for sub-Saharan Africa in 1995 (57%) but falls short of the international goal (88% by 2015). The female/male gross enrolment ratio was 108% in 1997. It would appear that South Africa by this figure, achieved the international goal (100% by 2005) unlike the general position in sub-Saharan Africa where the female/male gross enrolment ratio was 79% in 1995. However, the gross female/male enrolment ratio of 108% in South Africa should be interpreted with caution. It does not necessarily imply equal opportunity for boys and girls to participate in primary and secondary education. It is an indication that proportionately more girls than boys older than the school going age are enrolled at school. This is evident from the higher gross female enrolment ratio of 111% in 1997 compared with the male gross enrolment ratio of 110%.

Childhood mortality

Childhood mortality is still high in South Africa considering the international goal (reducing infant mortality to 22 per thousand live births, and under five mortality to 31 per thousand by 2015). It should also be noted that the infant mortality rate appears to have increased in recent years in South Africa. The level was estimated as 56 per thousand live births in 1996 while in 1990 it was estimated as 55 per thousand.

Reproductive health

The estimated maternal mortality ratio of 150 per 100 000 live births in South Africa in 1998 is the lowest of any country in sub-Saharan Africa (except Botswana which has a similar level), and well below the international goal (245 per 100 000 live births in 2015). The average level in sub-Saharan Africa was 979 per 100 000 live births in 1990. The contraceptive prevalence rate (50% in 1998) in South Africa is also the highest of any country in sub-Saharan Africa (18% in1993-95 in the whole region) consequently; the total fertility rate in 1996 (3,2) is also the lowest in the region. Despite these levels, teenage pregnancy and HIV are quite common. As of 1998, about 35% of women had been pregnant before they reached the age of 19 years. Also, about 26% of women aged 20-24 years attending public antenatal clinics in 1999 were HIV positive.

Environment

South Africa has a new environmental management Act. As of 1998, about 18% of households had no access to piped water, 12% of households had no access to a toilet facility, while 10% of households had no access to refuse removal facilities. Thus daily, members of these households confront various health hazards related to environmental contamination including diarrhea.

By 1998, only 5% of the total land area of South Africa was protected to conserve biodiversity compared with the international goal of 10% for each major ecological region.

Carbon dioxide emissions increased from 299 million metric tons in 1995, to 314 million metric tons in 1998 reflecting increased industrial processes in the country.

DISCUSSION

It is evident from the above that South Africa has achieved some of the international development goals and also made substantial progress toward attaining others. The country's level of development as measured by the above indicators is well above the average level for sub-Saharan Africa. Despite this achievement nationally, there are large disparities in the levels of these indicators within the country among the so-called four main population groups: Africans, coloureds, Indians and whites. Our next challenge in the compilation of the core set of indicators is to provide a breakdown by other characteristics including population group. This would facilitate the appropriate focusing of Government policies and programmes on the risk groups in the society.

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Appendix 1: Core indicators of development in South Africa

Measuring	Selected Indicators	% or value	Year	Source	Responsible Institution/Dept
Economic well-being					
Poverty					
1. Incidence of poverty	Poverty headcount ratio (% below $1 a day)	18,2%	1995	Income Expenditure Survey	Statistics SA

2. Poverty gap	Poverty gap ratio	5,8%	1995	Income Expenditure Survey	Statistics SA
3. Inequality of income	Share of poorest 20%	3% of all household income	1995	Income Expenditure Survey	Statistics SA
4. Prevalence of child malnutrition	Underweight	1,4% (age 6-71 mths)	1995	S.A Vitamin A consultative Group	Dept. of Health
	Stunting	22,9% (age 6-71 mths)	1995	S.A Vitamin A consultative Group	Dept. of Health
Social Development					
Universal primary education					
5. Enrolment in primary education	Net enrolment ratio in primary education	95%	1995	Demographic Information Bureau	Dept. of Education/ Statistics SA
		97%	1996[1)]	Statistics SA	Dept. of Education
		96%	1997[1)]	Statistics SA	Dept. of Education
6. Completion of primary education	Survival rate to grade 5	Data not available	N/A	N/A	Dept. of Education/ Statistics SA
7. Literacy[a]	Literacy rate of 15-24 years old	88,9%	1996	Census	Statistics SA
			1997	OHS '97	Statistics SA
			1998	OHS '98	Statistics SA
Gender equality					
8. Gender equality in education	Gross enrolment ratio (GER) - female	110,9%	1995	Demographic Information Bureau	Dept. of Education/ Statistics SA
		111,4%	1996	Statistics SA	
		110,5%	1997[1)]	Statistics SA	
	Gross enrolment ratio (GER) - male	109,1%	1995	Demographic Information Bureau	Dept. of Education/ Statistics SA
		109,9%	1996	Statistics SA	
		109,7%	1997[1)]	Statistics SA	
	(GER-female/GER-male)	101,6%	1995	Demographic Information Bureau	Dept. of Education/ Statistics SA
		101,4%	1996	Statistics SA	
		108,8%	1997[1)]	Statistics SA	
9. Gender equality in literacy	Gender equality in literacy of 15-24 yrs old	102,7%	1996	Census/OHS	Statistics SA

			1997	OHS '97	
			1998	OHS '98	
	proportion 15+ yrs with at least grade 3	79,3%	1996	Census	Statistics SA
	proportion 15+ yrs with at least grade 7	63,9%	1996	Census	Statistics SA
Measuring	**Selected Indicators**	**% or value**	**Year**	**Source**	**Responsible Institution/Dept**
Infant and child mortality					
10. Infant mortality rate	Infant mortality rate		1996	Census	Statistics SA
		45 per 1000 live births	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
11. Child mortality	Child mortality rate		1996	Census	Statistics SA
		15 per 1000 live births	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
Under five mortality	Under-five mortality rate		1996	Census	Statistics SA
		15 per 1000 live births	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
Maternal mortality					
12. Maternal mortality	Maternal mortality ratio	150 per 100 000 live births	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
13. Births attended by skilled personnel[b]	Births attended by skilled personnel	84%	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
				OHS '97	
		88,8%	1998	OHS '98	Statistics SA
Reproductive health and population					
14. Contraceptive use	Contraceptive prevalence rate	50%	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
15. Fertility	Total fertility rate	3,2 children per woman	1996	Census'96	Statistics SA
		2,9 children per woman 2)	1998	S.A Demographic Health Survey, (Dept. of Health	Dept. of Health

				Preliminary Report)	
16. HIV prevalence	HIV prevalence in pregnant women < 20yrs.	21%	1999	National HIV Sero-prevalence Survey of Women Attending	Dept. of Health
	HIV prevalence in pregnant women aged	26%	1999	National HIV Sero-prevalence	Dept. of Health
	20-24 yrs.			Survey of Women Attending Public Antenatal Clinics,	
				(Dept. of Health Preliminary Report)	
Teenage pregnancy	pregnancy of 15 and 15-19 yrs.	35%	1998	S.A Demographic Health Survey, (Dept. of Health Preliminary Report)	Dept. of Health
Measuring	**Selected Indicators**	**% or value**	**Year**	**Source**	**Responsible** **Institution/Dept**
Environment					
17. Government commitment	Environment related policies and programs		1998	The New Environmental Management Act	Environmental Affairs/Health
18(a) Access to safe water[c]	Population with access to piped water	79,8% households	1996	Census 1996	Statistics SA
		82,2% households	1997	OHS '97	Statistics SA
		82,0% households	1998	OHS '98	Statistics SA
18(b) Access to sanitation	Access to toilet facility	87,1% households	1996	Census 1996	Statistics SA
		91,5% households	1997	OHS '97	
		87,8% households	1998	OHS '98	
	Access to refuse removal facility	90,5% households	1996	Census 1996	Statistics SA
		91,7% households	1997	OHS '97	Statistics SA
		90,2% households	1998	OHS '98	Statistics SA
19. Intensity of fresh water use	Annual withdrawals of freshwater	Data not available			Water Affairs/Water research
					Commission
20. Biodiversity	Land area protected	5,5%	1998	National authorities, Dept. of Water Affairs and Forestry, Dept. of Energy Affairs and Tourism, and NBI	Environmental Affairs/Land Affairs

21. Energy efficiency	GDP/unit of energy use (1987 US$)	Waiting for figures			Dept. of Minerals and Energy
22. Carbon dioxide emissions	Carbon dioxide emissions per capita	299CO_2 (Mtons)	1995	Energy Research Institute (University of Cape Town)	Dept. of Environmental Affairs/Tourism
		304CO_2 (Mtons)	1996		
		309CO_2 (Mtons)	1997		
		314CO_2 (Mtons)	1998		

Notes:

1. Estimated values. Gross enrolment ratio for girls is the number of female students enrolled in school divided by the number of females in the school going age. The same definition applies for the gross enrolment ratio for boys.
2. Unadjusted for reporting errors.

a) The OECD defines literacy as the ability to read and write a short and simple statement with understanding. In this paper anyone with at least grade 3 is classified as literate.

b) The Dept. of Health defined the indicator for births attended by skilled personnel as the percentage of women who received medical assistance either from a doctor, or a trained nurse or a midwife at delivery five years before the 1998 SADHS. The OECD defines it as the number of births attended by a skilled health worker over one year as a percentage of the total number of births during the same period.

c) The figure presented is the percentage of the population with access to **piped** water. The OECD defines access to safe water as the share of the population with reasonable access to an adequate amount of safe water (including treated surface water and untreated but uncontaminated water such as from springs, sanitary wells, and protected bore holes).

Appendix 1: Core indicators of development in South Africa