

**BUDGETING FOR LONG-TERM SUSTAINABILITY OF THE  
ECONOMY: BUILDING CAPACITY IN THE DEPARTMENT OF  
ENVIRONMENTAL AFFAIRS AND TOURISM (DEAT)**

**Leanne Seeliger (Unit for Environmental Ethics, University of  
Stellenbosch), Carlene van der Westhuizen (Budget Information  
Service, IDASA) and  
Albert van Zyl (Department of Sociology, University of Stellenbosch)**

**September 2003**

## **ABSTRACT**

In order to ensure the long-term sustainability of the economy, environmental issues should be given a higher priority in the South African budget. This should begin with an increase in the budgetary allocation of the Department of Environmental Affairs and Tourism in order for the Department to increase its capacity to fulfil its mandate as guardian of the environment. In the paper we present survey data and an analysis of the DEAT budget that suggest that the Department does not have the necessary capacity to fulfil this role. If the necessary remedial shifts are not made the present expansionary fiscal policy of government, which is expected to increase economic growth, risks resulting in serious environmental degradation in some sectors.

## INTRODUCTION

South Africa, as a developing country situated in Southern Africa, has environmental problems that are common to the entire region. Southern Africa has no serious lack of awareness about environmental concerns, but rather, a lack of financial and human resources to translate global conventions and agreements into national environmental management policies and then implement them. (Salih 1999:7,8)

Salih lists many common factors concerning the implementation of environmental policy in Southern Africa, three of which we believe are of concern in South Africa at present:

a) Legal instruments are mostly used to implement environmental policy and these are often too inadequate due to lack of trained staff and a dysfunctional regulatory framework.

b) Governmental organisations are weak and operate on a sectoral basis, with inadequate co-ordination and often overlapping responsibilities.

c) Fiscal and socio-economic incentives are rarely used as environmental policy instruments because of a lack of trained human resources and institutional constraints (Salih 1999: 10,11)

The issue of capacity is also highlighted by Desai who states that there are serious limitations in developing countries governments' capacity to implement existing environmental policies and regulations. The management capabilities of government agencies entrusted with environmental policy implementation are generally weak. There is also a serious lack of resources, personnel and expertise. This is compounded by the fact that, environmental ministries and agencies are generally weaker than the economic and industry ministries and agencies in the government and that there is also often a lack of co-ordination among various local bodies responsible for environmental protection. This weak governmental capacity to implement environmental policies and enforce environmental regulations unfortunately

constrains effective environmental protection in developing countries. Powerful economic interests often win over environmental concerns. (Desai 1998: 16,17)

## **SIGNIFICANT RECOGNITION OF ENVIRONMENT IN SOUTH AFRICAN LAW**

In South Africa, we have made significant progress in the legal recognition of the need to protect our environment. The Constitution is sensitive to sentiments regarding the earth's capacity to sustain unlimited growth. It goes so far as to protect everyone's right, including future generations, to an environment that is not harmful to their health or well-being. Moreover, it condones reasonable measures to secure "ecologically sustainable development and use of natural resources while promoting justifiable economic and social development". (SA Constitution 1996: 10, 11 in Landman 2000: 80)

Apart from sectoral legislation that protects the environment, there is also framework legislation like the National Environmental Management Act that recognises the Department of Environmental Affairs and Tourism as the lead organisation tasked with environmental protection in South Africa is in place. The policy document behind this Act attempts to give teeth to the protection that is afforded the environment in the Constitution. It claims that "the 'growth and development' needed to improve the quality of life enjoyed by South Africans must be integrated with the sustainable use of environmental resources".(Landman 2000: 81)

The development of South Africa's environmental impact assessment process is also an important step forward for environmental protection. Environmental Impact Assessment is an important, though limited new instrument, attempting to mitigate potential adverse environmental consequences in decision-making. Section 26 of the Environmental Conservation Act 1989, another framework environmental law, provides explicit and clear guidance to engage in Environmental Impact Assessment. There is also a host of sectoral legislation, which regulates specific sectors or industries, however, it is not the focus of this paper to elaborate on this. (Markandya 2002: 222, 224)

## **LACK OF A CO-ORDINATED ENVIRONMENTAL VISION FOR THE SOUTH AFRICAN ECONOMY**

Another concern, regarding the environment is the lack of priority that environmental concerns are given in the South African economy. For example, the national Department of Finance's Growth, Employment and Redistribution policy of 1996 is silent on environmental concerns. In the absence of any further formal statement from the Department of Finance on macro-economic strategy, it appears that this green silence continues. In 1999, concern regarding this was highlighted in the State of the Environment Report published by the Department of Environmental Affairs and Tourism where the authors noted that DEAT has published a number of discussion papers and research reports on the added value of environmental and resource economics to policy but so far without tangible support from macro-economic policy makers. It is claimed that South Africa's macro economic policy makers: the Department of Finance and the South African Reserve Bank, did not perceive the linkages between economics and the environment to be part of their immediate concerns. Socio-economic issues such as education, unemployment and price stability are considered a higher priority, the report states (State of the Environment Report 1999: Economic Overview)

This silence on environmental issues is a cause for concern given the emphasis on growing the economy. The State of the Environment Report mentions that increased economic growth and trade are likely to result in an increase in resource use, waste and pollution, that in turn will result in either an increase in social costs (e.g. poor health) or direct expenses in the form of waste management, pollution control and rehabilitation. Costs such as these, the report claims could result in negative impacts on the economy by drawing investment away from other, financially more viable opportunities, for example money that would be better spent on education. (State of the Environment 1999:Economic Overview)

Some environmental economists believe that macro-economic policies have a widespread impact on the use of a country's resources and ecological services. Markandya et al state the following: "The economic reforms change patterns and levels of public expenditures as well as cause relative price shifts. The policies change

economic signals throughout the economy, influencing decisions on which and how much of a resource or service will be used. Macro-economic policies, whether or not successful in generating economic growth, also indirectly impact the environment due to changes in income, taxes, subsidies, public revenues and innovative capacity.”

(Markandya et al 2002: 43)

While it is true, that it is not easy to determine the impact of macro-economic policies on the environment, given that GDP doesn't account for environmental damage, the costs of ignoring it, we argue are too high. Taiwan found this out when it produced a high Gross National Product accompanied by high gross national pollution. This resulted in growth that was obtained at the expense of the environment. (Desai 1998:141) South Africa cannot afford to make the same mistakes, given the importance of our environment for our agricultural and tourism sectors.

While it is unlikely that macro-economic reforms will be arrested on the grounds that they have unfavourable environmental consequences, Markandya et al makes some general suggestions about how one can go about reconciling macro-economic objectives with environmental concerns so as to introduce instruments that mitigate negative environmental impacts or sustain positive ones. Their suggestions include economic measures such as environmental taxes, or legal measures such as pollution licences. They claim the goal should be to find instruments that are able to be set more or less independently of the macro-economic instruments and that these environmental instruments should try not to create further distortions in the economy. (Markandya et al 2002: 43,44,68,69)

Markandya et al also warn against relying on the general proposition that economic growth can eventually resolve the environmental problems in a country and that some degradation is the inevitable cost of the pursuit of such growth. They state it is important to remember that some environmental degradation caused by extreme poverty is irreversible and will never be recovered. (Markandya et al 2002: 69,70). In the next few paragraphs we attempt to form an initial impression of the adequacy of the DEAT budget to deal with the progressive demands being put on it.

## BUDGETING FOR ENVIRONMENTAL PROTECTION

Table 1 below shows that the total budget for the DEAT increased by a total of 7.3% in real terms between 2000/01 and the end of the current MTEF period. For the purposes of our analysis, though, this trend can be misleading. Over this period, the budget of the DEAT is inflated by allocations that are either once off in nature, or is not central to the functions that we are discussing here. An example is spending on the “Environmental Planning and Coordination” programme that has been inflated heavily in 2002/03 by the costs of hosting the World Summit on Sustainable Development. The 2002/03 allocation to this programme includes R247,6 million that was transferred to the Johannesburg World Summit company (National Treasury, 2003: 649).

**Table 1: Total Budget for the Department of Environmental Affairs & Tourism.<sup>i</sup>**

<b>Programme Description (R ‘000)</b>	<b>2000/01 Audited</b>	<b>2001/02 Prelim. Outcome</b>	<b>2002/03 Revised Est.</b>	<b>2003/04 MTEF</b>	<b>2004/05 MTEF</b>	<b>2005/06 MTEF</b>	<b>Real Change</b>	<b>Annual Ave. Change</b>
Administration	47,415	73,820	65,500	66,808	65,670	88,213	34.28%	6.86%
Environmental Planning & Coordination	18,717	57,674	274,972	35,540	33,803	47,416	82.84%	16.57%
Marine & Coastal Management	114,146	232,299	234,490	300,806	265,477	170,067	7.53%	1.51%
Tourism	228,560	235,058	237,713	318,642	335,256	366,670	15.79%	3.16%
Environmental Quality and Protection	80,755	95,043	108,099	116,136	128,648	135,706	21.29%	4.26%
Biodiversity & Conservation	108,019	151,608	156,435	220,881	243,640	269,085	79.80%	15.96%
Auxiliary & associated services	152,991	222,063	290,126	354,449	64,032	38,892	-81.65%	-16.33%
<b>TOTAL</b>	<b>750,603</b>	<b>1,067,565</b>	<b>1,367,335</b>	<b>1,413,262</b>	<b>1,136,526</b>	<b>1,116,049</b>	<b>7.32%</b>	<b>1.46%</b>

In table 2 below we remove two such allocations from the budget in order to get a clearer idea of trends in allocations that are key to protecting the environment. These are: the above expenditure on the WSSD that we remove because of the distorting effect that once-off expenditure has on longer term trends and the allocation for Tourism because of its being a discrete function.

Removing these two functions we see that the budget after adjusting for inflation has increased by 3.7% over the period under discussion, and by an average of 0.7% per

year. In pure percentage terms the largest increases went to the Environmental Planning and Coordination, and Biodiversity and Conservation programmes. The Environmental Planning and Coordination programme provides information to support effective environmental management and public participation in environmental governance. It aims to build capacity in the sector and manage the reform on environmental law (National Treasury, 2003: 643). The Biodiversity and Conservation programme aims to promote and conserve the country's biodiversity and ensure the sustainable utilisation of its resources (National Treasury, 2003: 644).

In rand terms the Marine and Coastal Management and Biodiversity & Conservation Programmes dominate the budget. The latter two take up the total increase in the budget over this period, with the other variations being explained by shifts between other programs in the DEAT. The large variations in the Auxiliary services programme is the result of increased funding for Poverty Alleviation projects allocated to the Department from the Poverty Alleviation. These projects are aimed at the construction of infrastructure, job creation and the provision of training (National Treasury, 2003: 660). They potentially play a key role in the environmental strategy of government since they could address the environmental impact of the survivalist strategies of the poor and marginalized. Earmarked funding for these projects are being phased out over the medium term as a decision has been made by national government to abolish the Poverty Alleviation Fund and no longer earmark funding for Poverty Relief projects. This is because such projects are expected to revert to being the core business of the relevant departments.

**Table 2: Adjusted Budget for the DEAT (allocations for Tourism and WSSD removed)**

<b>Programme Description</b>	<b>2000/01 Audited</b>	<b>2001/02 Prelim. Outcome</b>	<b>2002/03 Revised Est.</b>	<b>2003/04 MTEF</b>	<b>2004/05 MTEF</b>	<b>2005/06 MTEF</b>	<b>Real Change</b>	<b>Annual Ave. Change</b>
Administration	47,415	73,820	65,500	66,808	65,670	88,213	34.3%	6.9%
Environmental Planning & Coordination	18,217	21,474	26,518	30,040	33,303	47,416	87.9%	17.6%
Marine & Coastal Management	114,146	232,299	234,490	300,806	265,477	170,067	7.5%	1.5%
Environmental Quality and Protection	80,755	95,043	110,382	116,136	128,648	135,706	21.3%	4.3%
Biodiversity & Conservation	108,019	151,608	156,435	220,881	243,640	269,085	79.8%	16.0%
Auxiliary & associated services	152,991	222,063	290,126	354,449	64,032	38,892	-81.7%	-16.3%
<b>TOTAL</b>	<b>521,543</b>	<b>796,307</b>	<b>883,451</b>	<b>1,089,120</b>	<b>800,770</b>	<b>749,379</b>	<b>3.7%</b>	<b>0.7%</b>

In the next section we look at the DEAT budget in the context of the national budget as well as the national economy. A comparison between trends in the total national budget and the DEAT budget will give an indication of the relative priority that the DEAT budget, as a proxy for environmental issues, has enjoyed in the national budget. Comparing DEAT budget trends to trends in the growth of the national economy, will give a first indication of whether the DEAT budget is being increased sufficiently to deal with the greater demands that a larger economy would place on it.

### **DEAT budget compared with the national budget and GDP**

Table 3 below shows that the DEAT budget as a share of the national budget, increases from about 0.2% of the budget to about 0.3% in 2003/04, but then drops back to 0.2% in 2005/06. A strict reading of this trend indicates a reduction of the relative budgetary priority accorded to environmental issues in the budget over the next two years. More generously it may be safe to say that there is definitely not increased priority being given to the DEAT budget in the context of the national budget.

We see a similar pattern when comparing DEAT budget trends with the size of the economy. The DEAT budget reaches 0.09% of GDP in 2003/04, but drops back to

about half that in 2005/06. The drop off in DEAT budget as % of the GDP is therefore even sharper than the drop-off in share of the national budget.

**Table 3: Share of DEAT budget in total national budget and GDP<sup>ii</sup>**

	2000/01	2001/02	2002/2003	2003/2004	2004/2005	2005/2006
Adjusted DEAT Budget (Rm)	522	796	883	1,089	801	749
Adjusted National Budget	233,705	262,635	291,338	333,641	363,010	395,239
<b>DEAT Budget as % of National Budget</b>	<b>0.22%</b>	<b>0.30%</b>	<b>0.30%</b>	<b>0.33%</b>	<b>0.22%</b>	<b>0.19%</b>
Nominal GDP (Rm)	913,221	1,007,810	1,120,100	1,234,600	1,344,300	1,466,600
<b>DEAT Budget as % of GDP</b>	<b>0.06%</b>	<b>0.08%</b>	<b>0.08%</b>	<b>0.09%</b>	<b>0.06%</b>	<b>0.05%</b>

### **LACK OF CAPACITY**

It is questionable that DEAT has sufficient capacity to undertake the complex tasks involved in enforcing the environmental legislation like for example, monitoring fuel and gas emissions, or determining environmental impacts. Such actions, Markandya et al point out will often require careful co-ordination between different government agencies. (Markandya et al 2002: 232) Unfortunately, despite this legal recognition of the environment in framework environmental legislation, the overall confidence in the ability of our legal system and our government officials to protect the environment is low, a recent survey on environmental decision-making in Cape Town conducted by the Unit for Environmental Ethics suggests. The survey, which has yet to be published included among others officials from DEAT, local government and provincial government as respondents, showed:

- a) 53% of respondents thought that unethical behaviour in the environmental decision-making process in Cape Town and surrounds is caused by a lack of training among government staff who are implementing environmental policy
- b) 53% of respondents thought that unethical behaviour in the environmental decision-making process in Cape Town and surrounds is caused by the high workload of officials who have to make decisions.

c) 62% of respondents claimed that officials are often ignorant about all the relevant legislation impacting on environmental impact assessments

d) 66% of respondents claiming that unethical behaviour in the environmental decision-making process in Cape Town and surrounds is caused by the inadequate enforcement of legislation and regulations

e) 64% of respondents were of the opinion that judges are not sufficiently informed about environmental issues and only 12% of respondents are of the opinion that magistrates are well-informed of environmental issues

f) 77% of respondents saying that penalties for the enforcement of environmental legislation are not severe enough

(Unpublished survey of the Unit for Environmental Ethics, Stellenbosch University)

In order to ascertain just how much is being spent on staff so as to enable DEAT to perform its regulatory role, we will assess budgetary investment in human resources by looking at overall personnel expenditure; comparative unit labour costs and the comparative per capita human resource investment of the DEAT.

Table 4 below shows that expenditure on personnel decreased by an average of 2.5% per year between 2000/01 and the end of the current MTEF period. While in itself indicating reduced capacity at some level, personnel expenditure also loses part of its share of the total budget (from 26% to 13% of the budget).

**Table 4: DEAT Budget by Economic Classification (WSSD & Tourism removed)<sup>iii</sup>**

	2000/01 Audited	2001/02 Prelim. Outcome	2002/03 Revised Est.	2003/04 MTEF	2004/05 MTEF	2005/06 MTEF	Real Change	Annual Ave. Change
<b>Current</b>								
Personnel	138,161	109,319	124,018	145,504	155,739	167,746	-12.4%	-2.5%
Transfer Payments	251,627	397,779	364,142	501,849	264,664	268,692	-22.9%	-4.6%
Other Current	103,926	108,686	119,003	153,478	161,196	208,498	44.8%	9.0%
<b>Total Current</b>	<b>493,714</b>	<b>615,784</b>	<b>607,163</b>	<b>800,831</b>	<b>581,599</b>	<b>644,936</b>	-5.7%	-1.1%
<b>Capital</b>								
Transfer Payments	20,048	172,000	230,501	250,001	186,001	93,001	234.8%	47.0%
Acquisition of Capital Assets	7,781	8,523	43,504	38,288	33,170	11,442	6.1%	1.2%
<b>Total Capital</b>	<b>27829</b>	<b>180523</b>	<b>274005</b>	<b>288289</b>	<b>219171</b>	<b>104443</b>	170.9%	34.2%
<b>TOTAL</b>	<b>521,543</b>	<b>796,307</b>	<b>881,168</b>	<b>1,089,120</b>	<b>800,770</b>	<b>749,379</b>	<b>3.7%</b>	<b>0.7%</b>

Table 5 below shows first that the total number of staff in the department decreased from 1092 to 978 with the largest decreases showing in the Marine and Coastal Management program.

While giving some indication of capacity, information on the number of staff must be supplemented by information on the relative capacity of the existing staff. Using unit cost as a proxy we see that unit labour costs in the DEAT has increased from around R120 000 in 1999/00 to about R149 000 in 2003/04, probably only representing inflation related adjustments.

Table 5 presents unit labour costs in two other national departments, and find that the unit labour costs in the National Treasury and Department of Public Enterprises significantly higher. This may be taken as an indication of relatively higher capacity in these two departments.

**Table 5: Staff numbers and Unit Costs<sup>iv</sup>**

Staff numbers	1999/00 Audited	2000/01 Audited	2001/02 Prelim Outcome	2002/2003 Adj Appr.	2003/04 MTEF
Administration	197	197	217	217	222
Environmental Planning & Coordination	60	60	58	58	59
Marine & Coastal Management	717	465	558	558	562
Environmental Quality and Protection	45	45	45	45	46
Biodiversity & Conservation	37	37	55	55	53
Auxiliary & associated services	36	36	37	37	36
Personnel Total	1092	840	970	970	978
Total Personnel Cost	130375	138161	109319	124018	145504
<b>DEAT Unit Cost (R thousand)</b>	<b>119.4</b>	<b>164.5</b>	<b>112.7</b>	<b>127.9</b>	<b>148.8</b>
<b>National Treasury Unit Cost</b>	<b>148.4</b>	<b>156.9</b>	<b>125.8</b>	<b>204.2</b>	<b>274.5</b>
<b>DPE Unit Cost</b>	<b>166.6</b>	<b>139.8</b>	<b>164.7</b>	<b>200.7</b>	<b>230.3</b>

While existing capacity is a significant indicator, capacity-building initiatives can give an idea of possible improvements in this regard. In table 6 below we look at per capita human resource investment in the same three departments as above. We see a significant decline from the late 1990s to the current year, but an average of around R1000 per staff member per year. This can again be compared to other national departments where we see significantly higher levels of investment in human resources.

**Table 6: Per Capita Human Resource Investment in DEAT**

Expenditure on training R'000	1999/00 Audited	2000/01 Audited	2001/02 Prelim Outcome	2002/03 AdjAppr.	2003/04 MTEF
Administration	0.30	1.95	1.38	1.43	1.44
Environmental Planning & Coordination	1.75	2.03	5.60	5.60	5.56
Marine & Coastal Management	0.49	0.00	0.00	0.00	0.00
Tourism					
Environmental Quality and Protection	12.89	9.84	10.02	4.89	4.89
Biodiversity & Conservation	5.14	4.76	1.09	1.45	1.70
Auxiliary & associated services	1.67	0.89	0.41	0.54	0.83
<b>TOTAL</b>	<b>1.2</b>	<b>1.4</b>	<b>1.2</b>	<b>1.0</b>	<b>1.0</b>
<b>National Treasury</b>	<b>3.4</b>	<b>4.8</b>	<b>6.0</b>	<b>7.8</b>	<b>8.3</b>
<b>DPE</b>	<b>9.5</b>	<b>13.2</b>	<b>17.1</b>	<b>7.9</b>	<b>0.3</b>

The above indicators are at best proxies for human capacity in the DEAT. This data would need to be supplemented by an examination of qualifications and experience of

individual staff members before a reliable judgement could be made as to the available human resource capacity in the DEAT. However, from the above it seems clear that :

- ◆ DEAT has lost staff,
- ◆ Has not grown remuneration at above inflation levels (indicating at best stable rank levels)
- ◆ Has not invested in staff capacity at anywhere near the same levels as some other national departments.

There is indeed a tacit recognition of these challenges in some of DEAT publications. The 2003 Strategic Plan (DEAT, 2003: 23,28) for example refers to annual staff turnover of around 25% and expresses a desire to reduce this to a more acceptable 10%. It also refers to a lack of capacity to:

- Process Economic Impact Assessment applications
- Compliance monitoring & enforcement
- Draft planning frameworks and legislation

## **A WAY FORWARD**

Markandya et al suggest that to implement environmental laws and regulations requires among other resources skilled personnel and appropriate budgets. They claim that among the issues particularly affecting environmental institutions are: mismatches between assumed responsibilities and available resources and a lack of qualified personnel. (Markandya et al 2002: 231, 232)

In this paper, we suggest, that in order to ensure that growth in South Africa's GDP does not lead to increased pollution and environmental degradation, we need to allocate more resource to DEAT. It is advised that this expenditure be earmarked for its personnel function so as to improve capacity and training. While this is being achieved, it is suggested that mechanisms like pollution taxes, energy and water subsidies and socio-economic incentives should continue to be researched and amended to ensure that environmental externalities are appropriately being costed into

production prices. It is also suggested that staff be trained to employ this environmental policy instruments in South Africa

## **BIBLIOGRAPHY**

Department of Environmental Affairs and Tourism. 2003. Strategic Plan 1 April 2003 – 31 March 2006. Government Printer: Pretoria

Desai, U. (ed.)1998. *Ecological Policy and Politics in Developing Countries. Economic Growth, Democracy, and Environment*. State University of New York Press: Albany.

Markandya, A. Harou, P. Bellu, LG. and Cistulli, V.2002. *Environmental Economics for Sustainable Growth A Handbook for Practitioners*. Edward Elgar Publishing:Cheltenham.

Landman, L.(nee Seeliger) 2000. *Restoring Shalom in the Economy*. University of Stellenbosch Masters Thesis: Stellenbosch.

Salih, MMA. and Tedla, S.1999: *Environmental Planning, Policies and Politics in Eastern and Southern Africa*. Macmillan Press Ltd: Houndmills.

National State of the Environment Report 1999: Economic Overview) website:  
[www.environment.gov.za](http://www.environment.gov.za)

National Treasury. 2003. Estimates of National Expenditure. Government Printer: Pretoria

Unpublished survey of Environmental Decision-Making in Cape Town & Surrounds,. Unit for Environmental Ethics Stellenbosch University

## END NOTE:

---

<sup>i</sup> Source: National Treasury. 2003. Estimates of National Expenditure. Table 28.1. Environmental Affairs and Tourism. P. 646.

<sup>ii</sup> Source of National Budget figures and GDP: National Treasury. 2003 Budget Review. Table 3.3 Main Budget Framework 1999/00 – 2005/06. P. 59.

<sup>iii</sup> Source: National Treasury. 2003 Estimates of National Expenditure. Table 28.1 Environmental Affairs and Tourism. P.646.

<sup>iv</sup> Source: National Treasury. 2003 Estimates of National Expenditure. Table 28.13. Summary of personnel numbers and costs. P. 668.