# 9
# SEA in Southern Africa

*Michelle Audouin, Paul Lochner and Peter Tarr*

## Introduction

On a continent where the livelihoods of the majority of Africans are closely linked to the health of the natural environment, and where poverty and land degradation has increased in recent decades, there is a critical need for sustainable management of the resource base and the ecosystem services that this provides. Most southern African countries already have environmental assessment and management policies and legislation in place and specific provision for strategic environmental assessment (SEA) exists in a number of them. Despite these trends, however, the opportunities that SEA can offer to facilitate sustainable development are not being realized.

In this chapter, we describe the emergence of SEA in the post-colonial, democratic context of southern Africa, provide an overview of the recent developments and argue that there is considerable scope for SEA to have a greater impact on sustainable development than it does at present. The metaphor used is that current practice of SEA is but 'the ear of the hippo'... there is huge potential beneath the surface.

## African context of SEA

Placing SEA in the context of its potential application in southern Africa, requires understanding: firstly, of the intimate relationship of Africans to their predominantly rural environmental setting and the direct access to local natural resources that sustain them; and, secondly, of the socio-political context that has shaped the emergence of environmentalism and environmental assessment in post-colonial Africa.

### Africa's dependency on natural resources

The well-being of African people is intricately linked to the health of the continent's natural resources (MEA, 2005). Most communities in Africa are particularly vulnerable to environmental and resource degradation as a consequence of their relatively immediate economic and social dependency on these resources. These factors make it exceptionally difficult for many African

communities to adapt to deterioration in the state of their natural resource base, caused, for example, by natural phenomena such as droughts and floods (UNEP, 2002b). The connection to impoverishment of affected communities becomes obvious as the persistence of human demands compromises the capacity for essential ecosystem services to be provided on a sustained basis. This situation is well documented in the African Union's Action Plan of the Environment Initiative (NEPAD, 2003), which stated: 'At the beginning of the new millennium, Africa is characterized by two interrelated features – rising poverty levels and deepening environmental degradation.'

Both the formal and informal economies of most African countries are based on natural resources and activities such as agriculture, mining, logging and pastoralism (IPCC, 2001). Regarding the agriculture sector, the Intergovernment Panel on Climate Change (IPCC) reports that more than half of Africa's population is rural and directly dependent on locally grown crops or on locally harvested food. This renders Africans vulnerable from impacts on food security, for example, as a result of soil nutrient depletion and changes in rainfall, which is particularly important in the light of the future warming across Africa (IPCC, 2001).

Africa's dependence on natural resources is clearly illustrated in southern Africa, where the economies of all countries are heavily reliant on the agriculture (such as Tanzania, Malawi and Mozambique) or mining sectors (such as Zambia and Angola), or in several countries, a mixture of agriculture and mining (such as Botswana) (World Bank, 2006). The agricultural sector mostly uses traditional methods and employs more than 60 per cent of the labour force in the southern African region (SAIEA, 2003). In Malawi, for example, agriculture contributes to more than 45 per cent of gross domestic product (GDP) and supports 90 per cent of the population, while in Mozambique about 8 per cent of the estimated labour force of 8.8 million is employed in the agricultural sector (World Bank, 2006). Agricultural potential in the region, much like in many other parts of Africa, is negatively affected by land degradation caused by human-induced stresses, such as unsustainable farming practices, as well as natural factors, such as variable rainfall and fragile soils (SAIEA, 2003). Mining, much of it practised at an artisanal scale, is an important source of income in several countries in southern Africa, contributing up to 5 per cent of GDP (MMSD Southern Africa, 2002).

The unsustainable management of natural resources, leading, for example, to land degradation, desertification, decreasing water quality and quantity, decreasing biodiversity and increasing health risks, among other impacts, is a major constraint to the achievement of sustainable development (Regional Round Table for Africa, 2001). A significant proportion of Africa's biodiversity is either endangered or under threat of extinction, with some 2018 animal and 1771 plant species currently threatened with extinction (NEPAD, 2003). The status of the continent's forest resources are in overall decline and aquatic ecosystems are increasingly coming under stress due to altered hydrological processes attributable to catchment degradation, pollution, invasive aquatic species, urbanization and climate change, among several other factors (NEPAD, 2003).

Rapid urbanization and the associated deterioration of urban infrastructure compounds Africa's sustainability challenges (NEPAD, 2003). In particular, these

are manifest as human health impacts as population concentrations result in the breakdown of services and supplies of essential resources such as potable water.

The vulnerability of African communities to environmental degradation is increased by a number of social factors, of which poverty is one of the most significant. The greatest hardships associated with resource depletion and deterioration are experienced by poor people (UNEP, 2002b). In a cyclical process, poverty is exacerbated by environmental change such as land degradation and deforestation (UNEP, 2002a).

Africa contains 34 of the 48 least-developed countries in the world (Regional Round Table for Africa, 2001), with 50 per cent of the population living on less than $1 per day (NEPAD, 2003). The amount of food produced per person in Africa has, contrary to global trends, decreased in the last two decades, leading to malnutrition and a greater reliance on aid, among other factors (IPCC, 2001). The African Round Table Report to the 2002 World Summit on Sustainable Development (Section II, 2, (21)) stated that: 'Poverty is projected to increase in Africa, and within two decades some 60 per cent of the population could live in abject poverty.'

Human vulnerability in Africa is also compromised by the pattern of external trade, which reflects low local levels of industrial beneficiation, in particular, of minerals (IPCC, 2001). This leaves many countries highly vulnerable to changes in the global market for raw materials. Wars and civil unrest are other key factors that increase the vulnerability of African communities, through the disruption of societies and the destruction of infrastructure (Regional Round Table for Africa, 2001).

This strong, close link between the current and future well-being of Africans and the natural resources of the continent highlights the critical need for effective environmental management at a strategic level. There are a number of policies, strategies and other initiatives, such as the New Partnership for Africa's Development (NEPAD), that articulate an African-derived plan for the sustainable development of the continent. The realization of these initiatives and the social development priorities that they promote will be achieved only through sustained access to ecosystem services. SEA, as a tool for integrating sustainability objectives into planning and policy-making, can perform a valuable role in this respect. However, to understand this role, it is necessary to first understand the context and factors influencing the emergence of environmental assessment in post-colonial Africa.

### Environmental assessment in post-colonial southern Africa

The process of decolonization of southern Africa has revealed a fascinating, if not fully appreciated, coalition of parties eager to establish a sustainable new democratic order in many countries in the region. A common experience of colonial repression explains much of this phenomenon. Colonial rule inevitably led to well-documented liberation struggles in many southern African countries. The forced exile of indigenous leaders resulted in an interesting mix of political ideologies in the respective liberation movements that later became powerful political parties.

In this regard, the 'East' was important as it reinforced the desire among Africans for social justice, centralized planning and top-down rule. This contrasted with the ideologies espoused by a smaller number of exiled leaders who graduated from universities in the 'West' where they mostly studied law, politics, philosophy, education and the economics of capitalism. Thus, it was that diametrically opposing ideologues laid new platforms for governance in most countries in the region. Political leaders who had returned from exile, the private sector that had benefited from the colonial era, academics, trade unionists and human rights activists, suddenly found themselves around the same table, contemplating the best way to ensure a sustainable future for their country.

New constitutions, policies, laws and practices soon emerged in order to accommodate the vastly different perspectives from outside and within. Moreover, the citizenry in the respective countries increasingly demanded services and rights that were generally denied them during colonialism or apartheid, in the case of South Africa and Namibia. Balancing these demands with the political hype of liberation wars was (and continues to be) a tricky business. It was the need to meet these demands that forced the merging of seemingly antagonistic ingredients that in some cases was nothing short of a miracle.

In this context of political change, it is apparent that environmental assessment, as a new planning tool, had no currency in the powerful political and economic streams of influence that shaped the new post-colonial governments of southern Africa. Instead, the introduction of environmentalism within the region was predominantly externally imposed through donor funding, international lending institutions and other Western influences.

Surprisingly, the small number of local non-governmental organizations (NGOs) and environmentalists in early post-colonial Africa were often able to exert a disproportionate influence in promoting their environmental agendas in their countries. Emerging NGOs were successful in mobilizing resources from overseas and their relatively well-educated staff and volunteers could articulate coherent policies and mission statements for local application. They became useful partners for Western governments that needed to ensure that their development assistance programmes included environmental safeguards. Growing access to the internet enabled like-minded individuals to network at previously unprecedented levels.

Environmental management policy development in Africa was helped by the 1992 Rio Earth Summit and the international conventions that were developed at that time. Newly formed governments were quick to sign Multinational Environmental Agreements – perhaps in the expectation that they would boost their international profile and result in a fresh wave of donor support. In turn, regional economic organizations such as the Southern African Development Community (SADC) strengthened the environmental aspects of their own treaties or protocols, or created new ones.

In spite of the rapid emergence of environmental governance, the general reluctance of the political and economic stream of influence to actually embrace concepts such as sustainable development and environmental assessment (EA) is completely understandable under the circumstances. However, the limited

appreciation among many politicians of the importance of ecosystem services for the development and maintenance of economies and livelihoods remains a cause of great concern for environmentalists.

To date, the environment has not featured prominently in the manifesto of any liberation movement or ruling party. Environmentalism remains on the fringe of mainstream thinking – kept alive mostly by small citizen interest groups, universities and NGOs. This explains why so many SADC countries look good on paper in terms of environmental assessment legislation and policies but their institutions remain severely underfunded, understaffed and politically weak. This is somewhat paradoxical given the entrenched and clearly appreciated human-environment relationships that exist in Africa.

Currently, however, there is an emerging realization within African governance structures that health and safety in the workplace, livelihoods and general quality of life can be promoted through the application of environmental assessment in development planning. Also, many communities are becoming concerned that industrial, mining and agricultural projects potentially cause impacts that compromise their well-being and development options for future generations. The environmental agenda is gradually becoming relevant to the general public and it can be argued that it is only a matter of time before it also becomes a mainstream political priority. Environmental assessment will then no longer be regarded as a green handbrake imposed by the West, but as an essential development planning tool. This change in mindset is emerging in some recent examples of policy and legislative developments concerning environmental assessment and management in the region. These are described in the section that follows.

## Legislative and policy context of environmental assessment and management in southern Africa

### Promotion of environmental assessment and management within SADC

SADC, which was established in 1992, is a key institution through which developmental challenges can be addressed on a regional scale and within member countries. The forerunner of SADC was the Southern African Development Coordination Conference, which was established in the late 1970s. The current members of SADC are Angola, Botswana, Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe (www.sadc.int/english/about/profile/index.php).

The principles according to which SADC and its members are expected to act are articulated in Chapter 3, Article 3 of the Treaty of the Southern African Development Community (SADC, 1992) as follows:

• Sovereign equality of all member states.
• Solidarity, peace and security.
• Human rights, democracy and the rule of law.

- Equity, balance and mutual benefit.
- Peaceful settlement of disputes.

SADC has developed a number of policies and protocols that have been ratified by member states and generally have influence on the way that development projects are implemented (Brownlie et al, 2006). With regard to the environment, these include protocols concerning shared watercourses, forestry, mining, fisheries, energy and wildlife conservation (www.iss.co.za/af/RegOrg/unity_to_union/SADC.html). In 2004, SADC approved a Regional Indicative Strategic Development Plan (RISDP) to provide clear strategic direction for future SADC policies and programmes (SADC, 2004). Twelve priority intervention areas were listed for which key strategies and broad targets were identified. Section 4.7 of the Plan relates to the environment and sustainable development. It includes a commitment by SADC to integrated and sustainable development and a recognition that 'encouraging progress' has been made in environmental management, but also notes that the SADC region still experiences high rates of land degradation, loss of biodiversity, pollution and other environment problems which undermine the sustainability of socio-economic development in the region (Section 4.7.1).

Brownlie et al (2006) identify SADC policy for the environment and sustainable development as notably enlightened. Through this policy, SADC aims to, among other things, accelerate economic growth with greater equity and self-reliance, improve the living conditions of the poor, ensure the equitable and sustainable use of the environment for current and future generations, improve the use of tools such as impact assessment and ensure a governance system that secures effective stakeholder participation in decision-making (SADC in Brownlie et al, 2006). Despite this commitment, SADC has not made significant progress in raising the level of environmental consciousness in the region and in the view of Brownlie et al (2006) the policy seems to have been a 'flash in the pan', as evidenced by very limited follow-up and little mention in subsequent SADC policies and strategies.

A related development is the SADC Regional Biodiversity Strategy (2006), which aims to provide a framework for regional cooperation in biodiversity issues that transcend national boundaries, and to stimulate the combined and synergistic efforts by the SADC member states and their communities in biodiversity conservation and its sustainable use (SADC, 2006). Despite the commitments to the conservation of biodiversity presented in this strategy, Brownlie et al (2006) state that it is weak in the sense that it does not provide an argument showing that biodiversity will underpin future economic growth. In addition, the strategy does not explicitly warn decision-makers that alternative ways of stimulating growth need to be found, rather than relying so heavily on natural resources.

### Provision for SEA within SADC countries

Legal provision for SEA is made in a surprising number of countries within southern Africa. In several cases, however, this general provision is not supported by detailed regulations stipulating how an SEA should be undertaken

(such as in South Africa and Swaziland). A brief summary of the general policy and legislative requirements for SEA within southern African countries is provided in Table 9.1.

**Table 9.1** *Overview of policy and legal requirements for SEA in selected southern African countries*

| Country | Legislation |
| --- | --- |
| Botswana | The Environmental Impact Assessment (EIA) Act (No 6 of 2005) makes provision for authorities to require the assessment of proposed projects, programmes and policies. The legislation also requires that the development of policies and programmes is accompanied by an SEA (Section 6(1)(b)). The process of undertaking SEAs as well as their content is currently being elaborated through Regulations for the Act. |
| Lesotho | The Environment Act (2008) requires an SEA to be undertaken for any governmental bill, regulation, policy, programme or plan that could have a significant effect on the environment. The specific processes that need to be undertaken within an SEA and requirements for its content are not presented in the Act. |
| Malawi | The Environmental Management Act (No 23 of 1996) requires environmental assessment of 'major policy reforms'. A revised National Environmental Policy was published in June 2004 by the Ministry of Natural Resources and Environmental Affairs, replacing the previous such policy of 1996. The key objective of this revised policy is to integrate environmental considerations into Malawi's social and economic development programmes thereby promoting sustainable development. Although the latest policy does not specifically mention SEA, it does mandate the authorities or anyone undertaking major development work to undertake a strategic assessment of the potential impacts, thus including elements of an SEA process (Kambewa, 2006). |
| Mozambique | The Environment Law (No 20/97 of 1997) is the foundation for a set of legal instruments for enabling the preservation of the environment. The Regulations (Decree No 45 of 2004) promulgated in terms of Article 16(2) of the Act, list activities for which an environmental assessment is required, some of which can be seen as programme-level activities. |
| Namibia | In terms of the Environmental Management Act (No 7 of 2007), government agencies are required to appoint a professional environmental assessment practitioner to determine whether a policy, plan or programme is likely to have a significant effect on the environment and an SEA is therefore required. The procedure for undertaking an SEA is outlined in draft regulations. |
| South Africa | Chapter 5 of the National Environmental Management Act (NEMA) No 107 of 1998 makes provision for the development of procedures for the assessment of the impact of policies, plans and programmes. No such procedures have been developed yet. The Municipal Planning and Performance Regulations (Ch2, s2(4)(f)) promulgated in 2001, in terms of the Municipal Systems Act No 32 of 2000, state that a strategic assessment is required of the spatial development framework contained in the municipality's integrated development plan. Requirements for Environmental Management Frameworks (EMFs), which fulfil many of the objectives of an SEA, are outlined in the EMF regulations (No 33306) promulgated in June 2010. |

*(continued)*

**Table 9.1** (*continued*)

| Country | Legislation |
|---------|-------------|
| Swaziland | Section 31 of the Environmental Management Act (No 5 of 2002) makes provision for the strategic environmental assessment of parliamentary bills, regulations, policies, plans and programmes, which may have a significant negative impact on the environment, or on the sustainable management of resources. |
| Tanzania | SEA is required in terms of Part VII of the Environmental Management Act of 2004. In this Act the type of information that must be included in an SEA is listed. |
| Zambia | The Environmental Protection and Pollution Control Act (1990) enables the Environmental Council of Zambia to identify plans and policies for which an environmental assessment is required. This can only be brought into effect through regulations, however, these have not been drafted as yet and therefore SEA is not formally enforced. |
| Zimbabwe | No formal requirements for SEA. |

*Source*: Dalal-Clayton and Sadler (2005); DBSA and SAIEA (2009)

## Current and emerging SEA practice in southern Africa

This section provides an overview of recent and emerging examples of SEA practice in southern Africa. It is not intended to repeat information provided in recent publications, but rather to supplement this information. For valuable reference material on SEA in southern Africa, the reader is referred to Dalal-Clayton and Sadler (2005), as well as DBSA and SAIEA (2009).

Countries within the SADC region are starting to experiment with SEA. There is a growing body of examples of SEA-type processes that have aimed to incorporate sustainability into the early stages of preparing policies, plans and programmes. There are various forms of SEA emerging, although such studies are not always given the title of SEA. Rather, these studies reflect certain principles of SEA and often aim to set strategic management objectives. Many of the studies undertaken in the region adopt a sustainability-led approach to SEA, rather than an EIA-based approach. This is possibly due, in part, to the sustainability-led approach to SEA advocated in the SEA Guidelines prepared for South Africa (DEAT, 2000) and a similar approach advocated by SEACAM (Audouin et al, 2003). Some examples of processes broadly reflecting the principles of SEA are provided in Box 9.1. These examples show that SEA tends to be undertaken as part of other processes, such as integrated land-use planning in South Africa, conservation planning, or resource management programmes (for example, fisheries management under the Benguela Current Large Marine Ecosystem (BCLME) Programme).

In general, little research on – or critical analysis of – SEA practice has been conducted within the SADC region. However, a review of 50 SEAs conducted in South Africa between 1997 and 2003 (Retief et al, 2006) was undertaken 'to evaluate the performance of SEA practice in South Africa in order to gain a better understanding of how SEA functions within a developing country context

**Box 9.1** *Examples of SEA-type processes in southern Africa*

## Management plan for the Okavango Delta

Several SEA processes have been undertaken in Botswana since the early 1990s. Most of these were for the water sector and include the development of the National Water Master Plan as well as management plans for the Okavango basin and delta. Others were done as part of the district development planning process (Keatimilwe and Kgabung, 2005).

A recent example of an SEA-type process is the development of the management plan for the Okavango Delta. The plan was prepared because of the need to resolve competing regional water demands through integrated management of the Delta's resources. Such planning is aimed at ensuring long-term conservation of the Delta, particularly in light of concerns regarding the importance of its ecological functioning, including threats to some species that live in it. The management plan (completed at the end of 2006) encompasses:

- A long-term vision for the Okavango Delta that includes development options and management scenarios.
- An integrated, dynamic management plan, providing the overarching framework and contextual guidelines for specific strategies and plans.
- Determination of levels of use in order to ensure sustainability and protection of the natural resources.
- Development options for the management of the entire basin (Okavango Delta Management Plan Project, 2005).

## SEA and conservation planning

The philosophy of providing high-level plans that set the overall vision, objectives and targets (strategic framework) for subsequent more-detailed projects has been incorporated into several conservation planning projects in southern Africa. The Cape Action Plan for People and the Environment (CAPE) was an early example of SEA thinking framing the overall planning process (Lochner et al, 2003). The CAPE process included: a situation assessment to understand regional opportunities and constraints for conservation of biodiversity; a strategy phase to develop the overall vision and objectives for conserving biodiversity in a manner that delivered sustainable socio-economics benefits; and an implementation programme phase that developed actions plans for realizing the strategic objectives. Other subsequent examples of SEA being used to inform conservation planning are the SEA for the creation of the Greater Addo Elephant National Park in South Africa and the SEA for the Wildcoast region of South Africa.

This experience has generated valuable lessons on how to improve strategic processes, centred on two particular needs:

1   The need to improve the **usability** of the results, particularly by decision-makers (authorities, policy implementing agencies), for example, when identifying critical biodiversity areas, clear management guidelines must be provided as to what activities are appropriate in those areas and what should be avoided;

2 The need to provide clear **links to implementation**, for example though identifying who will implement the elements of the SEA (the 'institutional champion'), under what mandate, with what funding, and in terms of what existing statutory requirements/legal mechanisms.

### Benguela Current Large Marine Ecosystem (BCLME) Programme

BCLME is one of the most productive marine ecosystems on Earth and is a globally important centre of biodiversity concentration, commercial fisheries, marine diamond mining and offshore oil and gas production. Critical transboundary issues exist, such as the migration or straddling of valuable fish stocks across national boundaries, the introduction of invasive alien species via the ballast water discharged from ships moving through the region, and impacts of pollutants or harmful algal blooms that can move from the territorial waters of one country into another. These issues led to the initiation of the BCLME Programme, a joint initiative by the governments of Angola, Namibia and South Africa to manage and utilize the resources of the ecosystem in an integrated and sustainable manner (Hempel, 2008). The programme was designed to improve the structures and capacities of these countries to deal with environmental problems that occur across their boundaries, in order that the ecosystem may be managed as a whole.

The principles, objectives and actions for the BCLME Programme were embodied in the Strategic Action Plan, with the actions including, for example (Hempel, 2008):

- Developing an improved understanding of the ecosystem and monitoring priorities.
- Building capacity and institutional structures for ongoing management.
- Sustainable resource management (for example, coordinated management of fish catches among the three countries).
- Harmonizing of policy and legislation relating to human activities in the BCLME.
- Modelling of cumulative effects of these activities on the ecosystem.

with a voluntary SEA system' (Retief et al, 2006, p1). Although specific to SEA practice in South Africa, the findings of this study could be considered to have wider relevance in southern Africa.

From their research, Retief et al conclude that SEA is well-established in South Africa and they expect it to continue growing, in particular as a result of potential new legislation requiring SEA as an input to planning and decision-making processes (SEA would be implicit in this legislation, without explicit requirements). They also noted a diversity of forms of SEAs – for different sectors, different policy, planning or programme levels and from transboundary to local scales. Although there is reference to SEA in existing policies and legislation (see to Table 9.1), detailed and explicit requirements for SEA have not been promulgated in the form of regulations.

A strong consultancy sector in South Africa has, in the past, driven SEA practice, a feature that may be unique among developing countries. However, when analysing the performance of SEA using selected case studies,

Retief et al found that SEA was largely ineffective in influencing decision-making. This indicates that, while a strong consultancy sector can facilitate SEA practice, it cannot ensure effective implementation and the outcomes are likely to be ineffective without support from the public sector (Retief et al, 2006).

Further analysis by Retief et al identified three key features in the application of SEA in South Africa. They are shown in Table 9.2 with further responses provided by the authors of this chapter.

It is the impression of the authors, that since the study undertaken by Retief et al (2006), the number of SEAs conducted per year is, in fact, declining in some countries. A notable exception is Namibia, where four major SEAs were undertaken in the past five years.[1] A likely contributing factor for the decline in the number of SEAs in South Africa is the introduction, within legislation, of Environmental Management Frameworks (EMFs), which fulfil many of the typical requirements of an SEA. Regulations (No 33306, 2010) promulgated under the

**Table 9.2** *Key features from recent analysis of the application of SEA in South Africa*

| Features of SEA in South Africa, as identified by Retief et al (2006) | Responses |
|---|---|
| **Lack of focus**: The SEAs tended to be too extensive with an unmanageable number of issues and objectives, and lacked a formal scoping process. | This is a reflection of the challenges in grappling with the concept of sustainability and the broad understanding of the term 'environment' used in South Africa (including the biophysical, social and economic spheres). These SEAs were usually done in the absence of higher level strategies or plans (for example, the National Sustainable Development Strategy, the National Biodiversity Strategy and Action Plan, and so on), which have been developed subsequently and would assist in focusing SEAs on recognized priorities. |
| **Lack of integration with decision-making:** The SEAs were overloaded with information (often in the form of 'hard science'), but weak in creating the link to how that information could be used effectively in the more subjective value-driven political realm of strategic decision-making. | A critical area for improvement in SEA is to ensure that the outcomes dovetail with existing decision-making processes and implementation programmes, wherever possible; and give more consideration to how value systems and opinions will influence the effectiveness of the SEA. |
| **Lack of 'assessment':** The SEAs were closer to planning and frequently did not include a formal 'assessment' of the policy, plan or programme. The more proactive the SEA, the more it moved towards planning. | This could be because the SEAs adopted a 'sustainability-led' approach rather than the 'EIA-based' model, in order to be more proactive. Using the former model, SEA provides a framework for planning and decision-making, rather than a formal 'assessment'. Both forms of SEA are useful, depending on the stage in the life cycle of the policy, plan or programme at which the SEA is being initiated. |

National Environmental Management Act (NEMA) (No 107 of 1998) enable the national or provincial Environmental Minister to initiate the compilation of an EMF, which aims to promote sustainability and cooperative governance and ensure environmental protection (DWEA, 2010, chapter 2, section 3 (a–c)). The process of compiling an EMF must be a participatory one that includes an analysis of the environmental attributes of a particular geographical area, as well as a description of the desired state of the environment and the way in which such a state will be reached (DWEA, 2010, chapter 3, section 3(b–d)). This information is then used to inform environmental management in the area in general, as well as to inform decisions concerning applications for environmental authorizations in particular (DWEA, 2010, chapter 2 (1)(b and c)).

## Future of SEA in southern Africa

Existing experience with SEA-type processes in southern Africa are, to use an African metaphor, just the 'ear of the hippo', meaning just the beginning, with huge potential beneath the surface. There are lots of opportunities for SEA-type studies and they are much needed. Several factors point to an increased use of SEA philosophy and process, for example:

- A growing pool of strategic-level plans that identify development priorities at various scales. These plans provide a crucial reference point in scoping and sourcing information for SEA applications, thus making the SEA process more efficient and focused. For example, for conservation planning in South Africa, there is now a national spatial biodiversity assessment, which is supported by equivalent sub-national assessments (either provincial or biome scales) and local scale assessments. A selling point for SEA is that it is intended to speed up subsequent project-level decisions and having these spatial assessments available to support this process enables this benefit of SEA to be realized more readily.
- The promulgation of regulations, in June 2010, specifically related to EMFs.
- Increasing intergovernmental cooperation, as indicated in the case study on the BCLME Programme.
- Results of SEA-type processes are becoming more usable, as experience enables the gap between 'science' and 'politics' to be narrowed through both parties moving closer together, as indicated in the conservation planning examples.

## Conclusion

Africa's natural resources are vulnerable and need to be managed holistically. There is a good policy and legislative framework in place – both political and technical (such as laws) to manage these resources. However, the SADC and NEPAD development protocols have weak environmental components. Consequently, the southern Africa region is missing the opportunity to apply

SEA effectively and thereby enjoy the benefits that such processes can provide. There is an abundance of opportunities for SEA-type studies and the examples to date only hint at the full potential of SEA to assist in growing the socio-ecological capital of the region in a sustainable manner, particularly at a transboundary scale. To start realizing the full potential of SEA, vision and commitment is needed to promote and apply SEA effectively in southern Africa.

## Note

1 The recent SEAs in Namibia are: SEA for the Coast, SEA for the Millennium Development Challenge Rural Development Programme, SEA for the central Namib Uranium Rush and SEA of the Karas Land Use Plan.

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