

INTERNATIONAL AND NATIONAL POLICIES CONCERNING MARINE AND COASTAL BIODIVERSITY

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International policies

Mounting concern about the impacts of human activities on marine and coastal biodiversity is reflected in numerous international, regional and national policies. The past twenty years in particular have seen a rapid increase in the number of international instruments aimed at addressing the threats to marine and coastal biodiversity, and protecting, understanding and using marine resources sustainably (see Box 1). The most comprehensive and significant of these is the legally binding United Nations Convention on Biological Diversity (CBD). Signed at the United Nations Conference on Environment and Development in 1992, the treaty came into force in December 1993 and has 175 member countries as parties (as of 15/1/99), including South Africa. Its three objectives, all of which have relevance to marine and coastal biodiversity, are:

1. the conservation of biological diversity;
2. the sustainable use of its components; and
3. the fair and equitable sharing of benefits arising from the use of genetic resources.

These objectives are to be met through the enactment of a number of measures at both international and national levels. These include:

- the development of national strategies;
- the integration of biodiversity considerations into sectoral and cross-sectoral plans;
- the establishment of monitoring programmes;
- extensive measures for *in-situ* and *ex-situ* conservation (e.g. establishing protected areas, controlling alien organisms, restoring degraded ecosystems);
- the adoption of incentive measures;
- the establishment of research and training programmes;
- public education and awareness-raising activities; and
- the introduction of measures to facilitate access to genetic resources and benefit-sharing.

The Convention advocates an ecosystem approach in fulfilling these measures. This is especially pertinent to the marine context, and the Convention explicitly provides for implementation to be consistent with the Law of the Sea.

A noteworthy development is the adoption in 1995 by the second Conference of Parties to the CBD of “The Jakarta Mandate on Marine and Coastal Biodiversity”. This declaration articulates a programme of action for implementing the CBD with respect to marine and coastal biodiversity, and singles out the following issues for special attention:

- integrated marine and coastal area management;
- marine and coastal protected areas;
- sustainable use of marine and coastal living resources;
- mariculture; and
- alien species.

The Jakarta Mandate is significant in that it provides - within the legal context of the CBD - an overarching political and scientific framework within which to address concerns relating to marine and coastal biodiversity. Implementation of the Mandate has subsequently been considered by a meeting of experts, including a representative from South Africa, and a programme of work has been adopted for 1998-2000 (UNEP 1998). The programme of work (see Box 2) identifies key operational objectives and priority activities within the five programme elements described above, as well as a general programme element to encompass the coordination role of the Secretariat to the Biodiversity Convention, and the effective use of experts. A key task in relation to these programmes will be to consider the wide range of existing multilateral instruments concerning the marine environment. Thus it is intended for the CBD to build on and strengthen aspects in other agreements that relate to marine and coastal biodiversity.

Box 1. International agreements having relevance to the conservation and sustainable use of marine and coastal biodiversity^{1[1]}

- Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995^{2[2]}
- FAO Compliance Agreement and Code of Conduct for Responsible Fisheries, 1995^{3[3]}
- United Nations Convention on Biological Diversity, 1992
- United Nations Framework Convention on Climate Change, 1992
- Agenda 21, 1992
- Rio Declaration, 1992
- Montreal Protocol on Substances that Deplete the Ozone Layer, 1987
- Convention on the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention), 1985^{4[4]}
- Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region (Abidjan Convention)^{5[5]}
- United Nations Convention on the Law of the Sea, 1982 (UNCLOS)^{6[6]}
- Convention on the Conservation of Antarctic Marine Living Resources, 1980 (CCAMLR)
- Convention on International Trade in Endangered Species, 1973 (CITES)
- International Convention for the Prevention of Pollution from Ships, 1973-1978 (MARPOL)
- London Convention on Prevention of Marine Pollution by Dumping of Wastes, 1972
- Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 (World Heritage Convention)
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971 (Ramsar Convention)
- International Convention for the Regulation of Whaling, 1946

Box 2. Implementing the Jakarta Mandate. Programme of work on marine and coastal biological diversity 1998-2000

- Implementation of Integrated Marine and Coastal Area Management (IMCAM)*
- Review existing instruments relevant to IMCAM and their implication for the implementation of the CBD
 - Promote development and implementation of IMCAM at local, national and regional level.
 - Develop guidelines for ecosystem evaluation and assessment
- Marine and Coastal Living Resources*
- Promote ecosystem approaches to the sustainable use of marine and coastal living resources for the purpose of assessing and monitoring the conservation and use of biodiversity
 - Make available information on marine and coastal genetic resources, including bioprospecting
- Marine and Coastal Protected Areas*
- Facilitate research and monitoring activities related to the value and effects of marine and coastal protected areas on sustainable use of resources
 - Develop criteria for the establishment and management of marine and coastal protected areas
- Mariculture*
- Assess consequences of mariculture for marine and coastal biodiversity and promote techniques which minimise adverse impacts

^{1[1]} Unless indicated otherwise, South Africa is a party to all of the listed agreements.

^{2[2]} South African ratification of this Agreement has been approved by Cabinet and is in the process of being submitted to Parliament for final acceptance and signing.

^{3[3]} These Agreements have been submitted to Cabinet for consideration.

^{4[4]} South Africa is in the process of acceding to this Convention and its Related Protocols on (a) Protected Areas and Wild Fauna and Flora; and (b) Combating Marine Pollution in Cases of Emergency.

^{5[5]} South Africa is in the process of acceding to this Convention and its Related Protocol on (a) Combating Pollution in Cases of Emergency.

^{6[6]} Ratified by South Africa on 23 December 1997.

Alien Species and Genotypes

- Achieve better understanding of the causes of the introduction of alien species and genotypes and impact of such introductions on biodiversity
- Identify gaps in legal instruments, guidelines and procedures to counteract introduction and adverse effects of alien species and genotypes and collect information to address these problems
- Establish an “incident list” on introductions of alien species and genotypes

National policies

At the national level, policies to conserve biodiversity have historically focused upon the terrestrial environment, and marine and coastal biodiversity has been relatively neglected. Although a substantial body of law exists which has application to marine conservation (see Box 3), its efficacy is hindered by a number of factors.

Chief amongst these is an extremely high degree of fragmentation, resulting from legislation being spread across many different government departments, at both provincial and national levels. Additionally, there has been no coherent policy or strategy to ensure the conservation and sustainable use of marine and coastal biodiversity, and inadequate attention has been given to the comprehensive and holistic approach so critical to addressing marine conservation effectively. Instead, initiatives have been piecemeal and largely uncoordinated, resulting in the *ad hoc* establishment of marine protected areas and a predominantly species-orientated approach towards resource management. A further problem is the enforcement of legislation, rendered ineffectual by inappropriate penalties, the lack of an appropriate incentive system to reward good practice, and insufficient capacity within government agencies to monitor infringements.

These concerns are well recognised, and the past two years have seen the development of an impressive array of new policies and laws to develop a stronger and more integrated framework for environmental management in general, and for marine resources in particular. These include: -

- ***A new Constitution***, which provides for environmental protection and conservation within its Bill of Rights (Sections 24 and 25) and, importantly, allocates marine resources as an exclusive national competence (Schedule 4);
- ***A White Paper on an Environmental Management Policy for South Africa***, which gives effect to the environmental rights embodied in the Constitution and provides an overarching framework policy that sets out the general vision, principles, goals and regulatory approach for environmental management in South Africa;
- ***A National Environmental Management Act***, which provides for “cooperative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote cooperative governance and procedures for coordinating environmental functions exercised by organs of state”;
- ***A White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity***, which articulates South Africa's response to the requirement of the Convention on Biological Diversity to develop national strategies to address the agreement's provisions;
- ***A White Paper on a Marine Fisheries Policy for South Africa***, and a ***Marine Living Resources Act*** which spell out new approaches towards the management of marine resources in South Africa; and
- ***A White Paper on a National Water Policy for South Africa***, and a ***National Water Act*** which contains important provisions relating to the control of marine pollution; and
- ***A Draft White Paper for Sustainable Coastal Development***, which will shortly be submitted to Cabinet for approval. The key thrust of this policy is on maximising opportunities for economic and social development connected with coastal resources through maintenance of the health, diversity and productivity of coastal ecosystems.

Other initiatives include the development of a policy on integrated pollution control and waste management, and the establishment of a Marine Biodiversity Working Group, as part of the work of the Chief Directorate: Marine and Coastal Management, Department of Environmental Affairs and Tourism.

The introduction of this array of policies has significant implications for the conservation and use of marine and coastal biodiversity, especially with the enactment of new legislation. Important new approaches have been introduced through these policies and laws, the most notable being that for the first time in South Africa, policies concerning biodiversity have been developed in a participatory manner and enjoy widespread support. There is also a significant shift towards stronger environmental protection, and balancing such protection with the reconstruction and development of South Africa and the needs of her people.

Both the Biodiversity and Marine Fisheries White Papers (and the related Act on Living Marine Resources) recognise the need to protect ecosystems, as well as target and non-target species, and advocate a precautionary approach where there is a threat of significant reduction or loss of biodiversity. Provision is made in the Marine Living Resources Act to establish and control marine-protected areas, and to restrict certain fishing activities that may be detrimental to biodiversity. Additionally, the Minister may regulate on a number of activities that may threaten biodiversity (e.g. marine pollution, mariculture, fishing methods), and enforcement is made more effective through increased powers for law enforcement officials and more severe penalties.

Within the Biodiversity White Paper, most provisions apply generally to both terrestrial and marine and coastal biodiversity. Specific attention however is given to marine and coastal areas and to the need to adopt a cross-sectoral approach that treats the hydrological cycle as an integrated unit and governs actions on land as well as in the sea. The strengthening and rationalisation of South Africa's protected area system, including marine protected areas, is considered to be a priority action. Additional priorities refer to the urgency of establishing legislative and administrative mechanisms to control access to genetic resources ("bioprospecting") and ensure equitable benefit-sharing, and of instituting a national biodiversity education and awareness plan.

A concern often expressed is that South Africa does not have adequate capacity to monitor and manage its extensive coastline and marine resources, nor sufficient knowledge and understanding to conserve its biodiversity effectively. Noteworthy among many of the emerging policies is the emphasis given to approaches that enhance existing capacities, co-ordinate ongoing initiatives (e.g. the collection of data and information), and recognise the importance of incentives and public education. The importance of biological inventory work is likewise underscored, including the adoption of creative approaches to capacity problems such as the development and training of "parataxonomists". Research that is multi-disciplinary, that integrates socio-economic considerations, that informs decision-making, and that is based upon gaps in knowledge and the identification of conservation and management priorities is accorded a high priority. To guide such research, the Biodiversity White Paper proposes the development of a multi-disciplinary research plan.

This initiative to develop a status report on coastal and marine biodiversity represents an important opportunity to develop such a plan, and to identify the required capacity to effect the research. The recent establishment of the National Research Foundation provides an important supporting environment within which such multidisciplinary work can take place. This, together with a powerful package of new policies and laws, places South Africa uniquely to meet the challenges of the new century in ensuring the conservation and sustainable use of our magnificent coastal and marine heritage.

Box 3. Key South African national policies and legislation having relevance to the conservation and sustainable use of marine and coastal biodiversity.

Completed Policies

- The Constitution of South Africa, 1996
- White Paper on a Tourism Policy for South Africa, 1996
- White Paper on Environmental Management Policy for South Africa, 1997^{7[7]}
- White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity, 1997^{8[8]}
- White Paper on a Marine Fisheries Policy for South Africa, 1997
- White Paper on a National Water Policy for South Africa, 1997
- Draft White Paper on Integrated Pollution and Waste Management for South Africa, 1998
- Draft White Paper for Sustainable Coastal Development, 1999

Policy Processes Underway

- Policy on Climate Change
- Policy on Environmental Education

Relevant Legislation

- Sea Shore Act 21 of 1935
- Prince Edward Islands Act 43 of 1948
- Sea Birds and Seals Protection Act 46 of 1973
- Lake Areas Development Act 39 of 1975
- National Parks Act 57 of 1976
- Dumping at Sea Control Act 73 of 1980
- Combating of Pollution of the Sea by Oil Act 6 of 1981
- International Convention for the Prevention of Pollution from Ships Act 2 of 1986
- Environment Conservation Act 73 of 1989
- Minerals Act 50 of 1991
- Constitution of the Republic of South Africa, Act 108 of 1996
- National Environment Management Act 107 of 1998
- Marine Living Resources Act 18 of 1998
- Water Act 36 of 1998
- Various Provincial ordinances containing provisions *inter alia* to control development, overexploitation, pollution, and the introduction of alien species.

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^{7[7]} The policy has been accepted by Cabinet, and following minor changes will shortly be adopted by Parliament.

^{8[8]} The policy has been accepted by Cabinet and is likely to be considered by Parliament following adoption of the Policy on Environmental Management.

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