



NACOMA

Policy and Legal Working Group

DISCUSSION PAPER

No.1

September 2007

Elements for Coastal Zone Definition

Box 1: Policy and Legal Working Group (PLWG)

The ICZM Policy and Legal Working Group (PLWG) was established to facilitate the development process for the Coastal Vision and the Namibia Coastal Management White Paper (NACOWP) from start-up to final endorsement, together with the Integrated Coastal Zone Management Committee (ICZMC) and the Project Steering Committee (SC).

This PLWG's terms are to direct and conduct a comprehensive policy, legal and institutional review process to generate recommendations for new or improved tools and frameworks to mainstream biodiversity conservation and management into planning and decision-making for the coastal zone. It will also be responsible for integrating these inputs with the results of consultations undertaken with relevant stakeholders and assisting in drafting the Common Coastal Vision, Green Paper, NACOWP and Plan of Action for NACOWP Implementation.

1.) Why a coastal zone definition

One of the initial planned outcomes of the NACOMA White Paper (WP) development process is to define "coastal zone" in the context of developing a Namibian coastal policy. Why is this important? Although there is no single definition of the coastal zone, it is important for the relevant parties to agree on the geographic area that the policy will address. Of course, influences on the coast can originate way beyond the coastal zone, and therefore the policy may not be restricted to the coastal zone itself. However, it is nonetheless a good idea to agree on what is meant by "the coastal zone".

Although the NACOMA project has a strong biodiversity management and conservation focus, it is clear that a Namibian coastal policy needs to be much broader and address sustainable development issues including on environmental, social and economic grounds. Environmental issues, for example, may have to be addressed in a so-called "ecosystems approach" context, which would take "upstream" environmental issues into consideration. An example would be that water supply to the coast can be considered a serious constraint when development opportunities are considered. Currently all fresh water utilised at the coast is provided by the west-ward flowing ephemeral rivers. Continued and increased abstraction that would be needed to fuel economic development may be unsustainable and the ICZM policy would need to

look at strategic policy options that would have strong inland implications. This example of water availability makes one case for calling upon a coastal policy that includes a "coastal zone" definition that would go far beyond just looking the inter-tidal areas and the "beach".

Box 2: NACOMA

The **Namibia Coast Conservation and Management (NACOMA) Project** is a 5 year project that was officially launched in March 2006. NACOMA is co-funded by the Global Environmental Facility (GEF) and the Government of the Republic of Namibia (GRN) and is being implemented by the GRN and the World Bank on behalf of GEF.

The NACOMA project is part of the **GRN's strategy to promote sustainable economic development in the coastal zone** and address its local, regional, national and global environmental responsibilities.

The NACOMA Project's Global and Project Development Objective is to **strengthen conservation, sustainable use and mainstreaming of biodiversity in coastal and marine ecosystems in Namibia**.

The project **supports the Namibian Government through Regional Councils, Local Authorities and Line Ministries by putting in place a coastal zone management system** for sustainable development of the coast and to conserve its unique environment and biodiversity. This ought to be achieved through the mainstreaming of biodiversity conservation and sustainable use into coastal policy, legislative framework, and institutional and technical capacity and, by supporting targeted investments for biodiversity conservation in critical ecosystems on the coast.

Read more about NACOMA at www.nacoma.org.na!

From a practical point of view different role players probably have different ideas of what the “coastal zone” is. Local, municipal, regional, and national governments for instance may very well use different definitions of coastal zone. In addition, different pieces of legislation, academic definitions and international treaties all may define coastal zone differently.

The coast is generally accepted to be the area of land that directly influences or is influenced by the sea. The coast can be defined as an area with a landward and a seaward boundary that includes:

- coastal waters, which extend from the low water mark into the sea, up to the point where these waters are no longer influenced by land and land-associated activities
- the coastline or sea shore, which is the area between the low and high water marks
- coastlands, which are inland areas above the high water mark that influence or are influenced in some way by their proximity to coastal waters (these areas may stretch many kilometres inland depending on topography, climatic conditions, and a variety of other factors).

In the Namibian context it is important to consider that the definition of the “coastal zone” needs to satisfy the scope of the intended coastal policy that may include issues of Integrated Coastal Zone Management (ICZM) as well as other important sustainable development parameters, which may include rectifying skewed patterns of utilisation or benefit sharing that have their origins in the pre-independence era. The definition of the Coastal Zone in terms of putting comprehensive ICZM and other processes in place may therefore need to go far beyond some of the traditional descriptions, as outline in the bullet points above.

So what is the coastal zone in the context of Namibia, and what are some of its peculiar characteristics?

- The coast is a unique part of Namibia’s environment; it is a meeting place of land and sea. Four regions of Namibia have coastal areas: Kunene, Erongo, Hardap and Karas.
- Our coast extends for about 1570 km from the border with Angola to South Africa, along the Atlantic Benguela current.



Figure 1: Map of Namibia. The coastal areas stretch along 1570 km between Angola and South Africa, mainly made of protected areas, conserving the Namib desert biome. Source: <http://www.fao.org/fi/fcp/en/Nam/zoom.htm>

- Peculiar to the Namibian coast, all fresh water sources supplying coastal settlements and industry stem from sources that have their origins far inland, i.e. ephemeral river systems (Koichab, Kuiseb, Omaruru, and particularly other west-ward flowing ephemeral rivers for small scale usage).
- Large tracks of coastal areas fall into formally protected areas and thus are under the jurisdiction of MET. In Hardap and Kunene regions the entire coast line falls under protection and people living in these coastal regions have no direct access to the coast – and currently obtain very limited benefits from the coast.
- Generally coasts are considered extremely dynamic and complex areas. This is certainly true for Namibia where the inshore waters and a desert that is nurtured by fog from the sea includes many different creatures and ecosystems, ranging from microscopic organisms to insects, shellfish, fish, plants, animals and birds. Many of the interactions between natural processes and human activities in coastal areas are not always well understood.

- The coastal areas of Namibia host a range of diverse ecosystems including water catchment areas, rocky shores, sandy beaches, coastal dunes, wetlands, estuaries and lagoons.
- The Benguela Current is considered one of the most productive marine up-welling systems in the world; this has a strong impact on the coastal zone of Namibia, and on transboundary considerations between South Africa, Namibia and Angola.
- Land and natural resource uses are diverse, and coastal mining, fishing, and tourism are amongst the key economic activities conducted along the coast. The activities generate divergent and considerable environmental impacts on the coastal environments as well as social patterns and welfare of humans.
- Fostering and generating broad based participation and ownership of the policy development process
- General acceptance that all people, institutions, enterprises, and tiers and departments of government have a responsibility to contribute to sustainable management of the coast and its resources

4.) Towards a Namibian definition of the “coastal zone”

As the definition of the “coastal zone” needs to satisfy the scope of the intended coastal policy, it is important that in the context of Namibia we carefully consider which key development issues ought to be covered. Additionally is it critical to identify what existing policies and mandates currently govern the issues identified, where there are gaps and how overlaps can be limited (see NACOMA, 2007a).

It is noted that the Strategic Environmental Assessment study carried out for Kunene and Erongo regions under NACOMA recently (NACOMA, 2007b) use primarily the existing National Park boundaries (although inconsistently). These boundaries may not satisfy the needs of the coastal policy.

From various workshops and formal and informal discussions, the following possibilities for a definition of the Namibian Coastal Zone (the list is not intended to be exclusive and more ideas can be added to it):

- The area inland from the High Water Mark (HWM) stretching as far as the fog belt reaches (definition based on one aspect of the bio-geography)
- The area inland from the coast stretching as far as the eye can see (definition based on line of sight)
- The area stretching inland from the HWM that ends at the eastern boundaries of the parks from the Orange to the Kunene River (an administrative border related to the park system)
- The area inland from the HWM to the eastern boundaries of the four coastal regions so that all four regions are included entirely (based on regional administrative borders)

Clearly each of the above possibilities has its failings. The inshore environment is not accommodated, and neither are certain influences that may impact heavily on the coastal

3.) Key issues for a coastal WP

It is important to consider the magnitude of issues that the ICZM WP needs to address to ensure sustainable coastal zone development and management. During a consultative workshop held in October 2006, the following key threats/themes to sustainable coastal zone development were scored according to significance as follows:

1. Coastal development
2. Extractive marine living resources
3. Tourism
4. Mining
5. Water
6. Pollution
7. Catchment issues
8. Mariculture
9. Alien Invasive Species

The top priority issues to be addressed were unpacked in much detail during workshops and consultations, and ideas for mitigation and policy guidance were brainstormed. Based on the consultations to date, key principles for developing a Namibian of a coastal policy would include, but are not restricted to:

- Focusing on economic and social empowerment of previously disadvantaged people, aiming at creating more equitable levels of benefiting from the coastal zone and its resources
- Addressing environmental sustainability in a broad context, i.e. applying an Ecosystem Approach

Some initially proposed key elements and issues to be addressed by a Namibian coastal policy

- Different definition elements for different purposes: economic development, may need to consider further inland reaching boundaries, whilst fresh water management may have to consider the entire river catchment; the management of sea-based resources may be tied to the inter-tidal zone, or may reach into the sea
- Focus on tidal areas & areas adjacent to water wards boundary especially where urban development is taking place at an increasing rate
- Inland boundary: west of National Parks; fringe areas for certain considerations in terms of applying an ecosystem approach and access and benefit sharing, especially in those regions with no direct access to "coast"
- In Namibia it is important to address high and low tide issues primarily in the context of clarifying mandates and enforcement of regulations
- Namibia's wetlands, bays and islands may need special consideration, even in the context of the existing protected areas framework
- Address identified principles – e.g. equitable development opportunities especially for previously disadvantaged Namibians

...

area *below* the Low Water Mark (LWM) and whether the eastern border ought to be a fixed line or rather be based on factors that impact on the coastal zone (or both). If the area below the LWM is included, then how far should it go? Also, care should be taken to not infringe on the various existing policies and laws including the Territorial Sea and Exclusive Economic Zone of Namibia Act of 1990, the Seashore Ordinance 37 of 1958, the Walvis Bay and Off-shore Islands Act 1 of 1994, all three with reference to coastal zone, and the Marine Resources Act 27 of 2000, amongst other (noting that comprehensive ICZM and other issues in the coastal policy will include much more than the ones dealt with in the above cited).

Please e-mail your suggestions to: Dr Francois Odendaal (francois@ecoafrica.co.za) or to Dr Juliane Zeidler (j.zeidler@iecn-namibia.com)

Key references

Ministry of Environment and Tourism, South Africa (2000). White Paper for Sustainable Coastal Development in South Africa, <http://www.deat.gov.co.za>

NACOMA, 2007a. Review of existing institutional mandates, policies and laws relating to coastal management, and proposals for change. SAIEA, Namibia, for the Government of Namibia, <http://www.nacoma.org.na>

NACOMA, 2007b. Strategic Environmental Assessment (SEA) for the coastal areas of the Erongo and Kunene regions. A technical report prepared by DHI Water & Environment, Denmark, for the Government of Namibia, <http://www.nacoma.org.na>

Post, J.C. and Lundin, C.G., 1996 (eds). Guidelines for integrated coastal zone management. The world Bank, US, downloadable from <http://www.nacoma.org.na>