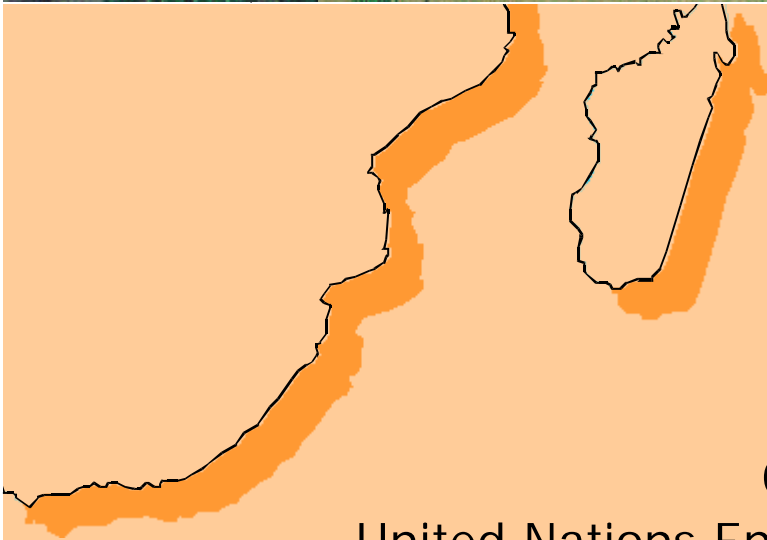
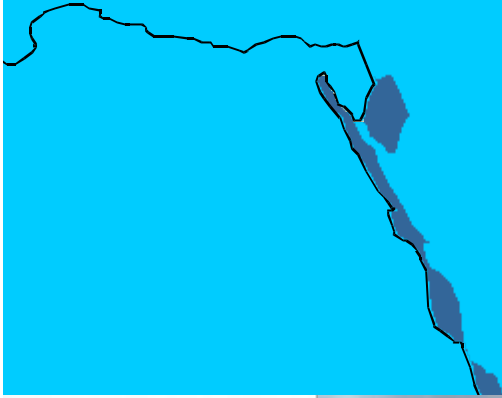


# ASSESSMENT OF INTEGRATED COASTAL MANAGEMENT IN AFRICA



Government of Finland  
United Nations Environment Programme  
Priority Actions Programme  
1998

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## ABBREVIATIONS

<b>ADB</b>	African Development Bank	<b>NOAA</b>	National Oceanographic and Atmospheric Administration
<b>CAMP</b>	Coastal Area Management Programme	<b>NORAIID</b>	Norwegian Agency for International Development
<b>CCA</b>	Carrying Capacity Assessment	<b>PACSIKOM</b>	Pan African Conference on Sustainable and Integrated Coastal Management
<b>CIDA</b>	Canadian International Development Agency	<b>PAP</b>	Priority Actions Programme
<b>CDA</b>	Coastal Development Authority (Kenya)	<b>PDF</b>	Project Development Fund
<b>COI</b>	Commission de l'océan Indien	<b>PERSGA</b>	Persian Sea and Gulf of Aden Action Plan
<b>CWMP</b>	Coastal Wetlands Management Project	<b>SAP</b>	Strategic Action Programme
<b>EAP</b>	Environment Action Plan	<b>SEACAM</b>	Secretariat for Eastern Africa Coastal Area Management
<b>EIA</b>	Environmental Impact Assessment	<b>SICOM</b>	Sustainable integrated coastal management
<b>FAO</b>	Food and Agriculture Organization	<b>SIDA</b>	Swedish International Development Co-operation Agency
<b>FED</b>	Fonds Européen de Développement	<b>TCMP</b>	Tanzania Coastal Management Partnership
<b>GEF</b>	Global Environment Facility	<b>TCZCD</b>	Tanga Coastal Zone Conservation and Development Programme
<b>GERMP</b>	Ghana Environmental Resources Management Project	<b>UNCED</b>	United Nations Conference on Environment and Development
<b>GIS</b>	Geographical Information System	<b>UNEP</b>	United Nations Environment Programme
<b>GOG/LME</b>	Gulf of Guinea Large Marine Ecosystem	<b>UNIDO</b>	United Nations Industrial Development Organization
<b>ICAM</b>	Integrated Coastal Area Management	<b>USAID</b>	United States Agency for International Development
<b>ICM</b>	Integrated Coastal Management	<b>WACAF</b>	Integrated Coastal Area Management in West and Central African Countries
<b>ICZM</b>	Integrated Coastal Zone Management	<b>WB</b>	World Bank
<b>IMS</b>	Institute of Marine Studies	<b>WCED</b>	World Commission on Environment and Development
<b>IOC</b>	International Oceanographic Commission	<b>WWF</b>	World Wildlife Fund
<b>IUCN/EAARO</b>	East African Regional Office of the International Union for the Conservation of Nature		
<b>KMFRI</b>	Kenya Marine and Fisheries Research Institute		
<b>KWS</b>	Kenya Wildlife Services		
<b>LME</b>	Large Marine Ecosystem		
<b>MAP</b>	Mediterranean Action Plan		
<b>METAP</b>	Mediterranean Environmental Technical Assistance Programme		
<b>NGO</b>	Non-Governmental Organization		



## EXECUTIVE SUMMARY

*This Study had been commissioned by the Finnish Government through UNEP to PAP (Priority Actions Programme) of MAP (Mediterranean Action Plan) with a view to assist in the discussions on Sustainable Integrated Coastal Management issues in the Pan-African Conference (PACSICOM) with the same theme held in Maputo, Mozambique on July 23-25, 1998.*

*The Study presents an assessment of Integrated Coastal Management (ICM) initiatives in African countries with the purpose to identify common elements in the approach, as well as success factors and weaknesses so as to improve ICM projects/plans/programmes development, preparation and implementation.*

### Issues

*Coastal areas of Africa face increasing pressures and conflicts over the use of resources resulting often in degradation of the environment which may threaten their development potential. African states need an integrated approach to coastal zone management to incorporate environmental and development issues, sectoral, local and supra-local, short- and long-term concerns in a strategy leading to sustainable development.*

*Over the past two decades African countries have taken a number of initiatives towards integrated coastal management, demonstrating their political will to face the problems and challenges of their coastal zones.*

*Adopting a proper perspective on coastal management is necessary. What is even more important, though, is implementation and periodic review and adjustment to take into account possible changes. In this respect, assessment is a necessary activity, as it can lead to improvements in the design and preparation of plans,*

*programmes and projects so as to lead to more effective action.*

*This Study examines projects, plans and programmes of integrated coastal management in Africa in terms of three basic dimensions:*

- *performance, or the fulfilment of stated objectives;*
- *integration (multisectoral co-ordination, governance, environment-development linkages, science in policy and participation);*
- *sustainability, or the prospects of maintaining the activity measured in terms of financial and institutional viability and political commitment.*

### Assessment

*A large number of potential case studies were investigated, but a limited number was selected for a more in-depth study on the basis of their representativity in terms of geographic region, scope and scale of intervention.*

*The examination of Africa's experience in integrated coastal management activities has demonstrated the following:*

- *Overall, there are positive signs of incorporating gradually the basic principles of integrated coastal management into public policy, whether at local, regional/sub-national or even national levels. This evidence is encouraging given the inherent difficulties in the region stemming from lagging development, scarce availability of resources, and inappropriate institutional capacities to manage complex interventions. Although direct impacts are long-term and might not be visible everywhere, in most cases there have been significant indirect effects as a result of these interventions, whether*



in the form of better knowledge and understanding of conflicts and opportunities, development of data bases on the state of the coastal environment, training and education of scientists and administrators, public awareness on coastal issues, or the like. In addition, coastal management activities have produced indirect benefits to local communities in stimulating dialogue and involvement in development-environment decisions, but also to government agencies, by initiating in several cases cross-sectoral co-ordination.

- International agencies and donors have significant influence on project development in Africa. In general, small-scale interventions have better chances of success, but their multiplier effects are limited, as they are also less amenable to duplication and transfer of experiences. Very large-scale projects of regional character seem to have much broader benefits and political support, but are less successful due to the level of complexity involved and the need for long-term effort and persistence, as well as substantial commitment of resources.
- The African experience demonstrates that success depends, to a great extent, on pragmatic approach and careful plan/programme/project development on the basis of few key issues. Political support, proper institutional arrangements, participatory mechanisms, commitment of adequate resources, and adaptive governance systems taking advantage of existing patterns and practices of coastal resource management are essential elements of successful examples.
- The overview of the various coastal management initiatives in Africa has demonstrated varying patterns of initiatives, reflecting the socio-economic, political and institutional complexity of each geographic area. Namely, there is a high concentration of integrated coastal management activity in East and

Southern Africa, while Central and West Africa is the sub-region with few initiatives. North Africa has the longest experience in integrated coastal management as it benefits from the early development of the Mediterranean Action Plan of UNEP. The Red Sea and Gulf of Aden has quite limited experience in coastal management initiatives.

## Conclusions

*Africa, at least at the institutional level, is far beyond the stage of awareness of the need for integrated coastal management. However, in spite of a large number of initiatives taken, there is still the need to develop further activities, whether programmes, plans or projects, regarding integrated coastal management, particularly in the area of implementation, and especially beyond the very small local scale. This type of activity would strengthen institutional cooperation across sectors and levels of government, with the ultimate benefit of improving policy making and project performance in integrated coastal management.*

*Although a number of initiatives in integrated coastal management have been successfully implemented in Africa, there seems to be lack of a learning process, or of effective mechanisms by which successes and failures can be shared. This is evident already at the national level, and much more so at sub-regional and Africa-wide levels. Regional dialogue and co-operation are important, and this requires the development of an appropriate mechanism (such as PACSICOM), which should be seen not as an ad hoc opportunity but as a concrete process leading to sustainable coastal management in Africa.*

*Although there is a wide diversity of social, economic, cultural, political and environmental conditions, so that programme/plan/project design might differ from area to area, there is still a great margin of identifying common methodologies and harmonising activities in*

*information gathering and processing, programming and project preparation, programme monitoring and evaluation.*

*In programme/plan/project preparation there is the need to develop mechanisms to capture the potential multiplier effects of successful interventions by building mechanisms of training and capacity building to strengthen the existing scientific and administrative institutions. It is also important to expand scientific knowledge on coastal ecosystems (both human and natural) which is a prerequisite for better policies, plans and programmes.*

*Integrated coastal management initiatives do not necessarily lead to better management of African coasts. What is needed is to develop, on the basis of project experience, proper regulatory and institutional measures at the national level to initiate a process of sustainable coastal management for Africa. PACSICOM provides a good opportunity for joining efforts in order to achieve that goal. Initiatives in integrated coastal management should be seen as steps in a national process leading to sustainable development and contributing to the compliance to international conventions.*

*From this assessment it is evident that there is a growing activity in integrated coastal management in Africa, but to lead to sustainable development it is critical to maintain partnerships with, and obtain support from bilateral and multilateral donors and international agencies.*



# 1. INTRODUCTION

Africa is in great need for development and coastal and marine resources have the potential of making significant contribution to the socio-economic well being of coastal communities in the region. African coastal zones are endowed with high diversity of plant and animal life and therefore the conservation of biodiversity is critical. However, the current coastal and marine resources uses and practices are not promoting sustainable development and in many instances conflicts of uses have arisen with displacement and denial of user rights of coastal people. We are all aware of the common conflicts between tourism development and coastal villages as well as between large-scale fishing and our artisanal small-scale fishermen. Coastal resources are dwindling at an accelerated rate and the diversity of life is diminishing. The livelihood of coastal communities is at great risk. Why should it be that when such conflicts arise, it is the local communities who lose?

To reverse this potentially dangerous trend, African coastal zones, therefore, need co-ordinated and concerted actions in a manner to integrate, that is, to combine environmental and development issues, sectoral, local and supra-local, short and long-term concerns. The process to achieve this is "Sustainable integrated coastal management" (SICOM). The long-term goal of SICOM is to improve the quality of life of human communities that depend on coastal resources while maintaining the biological diversity and productivity of coastal ecosystems.

Integrated Coastal Management is now accepted in many parts of the world as the most effective approach for managing, in a sustainable way, the development in coastal zones. In the last two decades there have been many ICM initiatives in Africa supported by bilateral and multilateral

agencies. However, the impacts of these initiatives are far from being visible partly because a continent-wide evaluation has not been conducted. Therefore the experiences in terms of successes and failures in the existing ICM initiatives are not contributing towards improving the planning and implementation of coastal and marine project/plan/programs at the continent. This is a major weakness, which must be addressed.

This Study presents an evaluation of Integrated Coastal Management initiatives in African countries with the purpose to identify common elements in the approach, as well as success factors and weaknesses so as to improve project/plan/programme development, preparation and implementation.

This Study had been commissioned by the Finnish Government through UNEP to PAP (Priority Actions Programme) of MAP (Mediterranean Action Plan) with a view to assist in the discussions on Sustainable Integrated Coastal Management issues in the Pan-African Conference (PACSICOM) with the same theme held in Maputo, Mozambique on July 23-25, 1998. During last decade PAP has acquired an extensive and unparalleled experience in ICM in general, and in North Africa in particular, as well as in a number of other African countries.

The approach adopted relied on recent experience in assessing integrated coastal management initiatives, particularly the one developed for the assessment of the Mediterranean experiences (METAP, 1997).

The scope of the Study was limited by focusing on available information on integrated coastal management experience in Africa, and by time/resource factors set for this assessment.

The Study was prepared by a study team consisting of:

- **Professor Harry Coccossis**, University of the Aegean, Greece, as coordinator;
- **Dr. Julius Francis**, Director, Institute of Marine Sciences (IMS), University of Dar Es Salaam, Tanzania;
- **Dr. Magnus Ngoile**, IMS, University of Dar Es Salaam, Tanzania; and
- **Dr. Tolu Orekoya**, environmental management consultant, Accra, Ghana.

The structure of this Study follows:

- a brief presentation of the **methodology** adopted for the review and evaluation of African experiences in integrated coastal management;
- an **overview** of integrated coastal management projects/plans/ programmes, and their **assessment**;
- a **synthetic review** of the region's experiences in integrated coastal management; and
- a discussion of **major findings** on common experience and **key policy issues** as a possible agenda for future action.

The Study Team wishes to thank all those organizations, agencies and individuals that have directly or indirectly contributed to the elaboration of this Study.

## 2. METHODOLOGY

Coastal zones are complex natural and human ecosystems with a high level of interdependence and interaction. Resources, human activities, infrastructure and organizations/institutions are basic components of such systems. Furthermore, coastal zones are often areas of intensive pressures for development. They fall under the jurisdiction of a number of public authorities with often fragmented responsibilities over the land and sea. In addition, a variety of actors (or stakeholders) may have interest in the coastal zone. All the above suggest that coastal zones need co-ordinated and concerted action in a manner to integrate, that is, to combine environmental and development issues, sectoral, local and supra-local, short- and long-term concerns. The process to achieve this is "integrated coastal (zone) management". (UNEP, 1995).

Integrated coastal management falls primarily in the realm of *public policy*, although in several cases there is increasing involvement of NGOs and the private sector.

The practice of integrated coastal management presents evidence of a wide variety of approaches, stressing occasionally conservation of species or management of resources or ecosystems, or development of certain activities as fishing or tourism, etc., or even attempting to deal with all those issues in a comprehensive way through planning, depending on the complexity and particularities of each case and the rationale of intervention. The emphasis might be occasionally on one aspect or another, but the basic concept rests in recognizing the need to see terrestrial and marine aspects together, cutting across sectors and geographic scales, while recognizing multiple interests and roles. The basic conceptual framework for putting values across sectors, scales and interests is *sustainable development*, as

expressed in Agenda 21 (UNCED, 1992), seeking a balance among the goals of economic efficiency, social equity and environmental conservation, and taking properly a long-term perspective.

Adopting a proper perspective on coastal management is necessary. What is even more important, though, is implementation and periodic review and adjustment to take into account possible changes. In this respect, evaluation is a necessary activity. Evaluation contributes also in another important way: it can assist in incorporating the experience gained from implementation with the purpose to improve the design and preparation of plans, programmes or projects so as to lead to more effective action.

The need for evaluating experiences in integrated coastal management has been recently widely proclaimed (Burbridge and Burbridge, 1992; Sorensen, 1993). However, as there is a diversity of coastal management initiatives, and the relevant experience is relatively recent, there is no wide agreement on the method of approach although some steps have been taken to that end (Olsen et al, 1997; Sorensen, 1997). Additional complications stem from the synthetic character of integrated approach to coastal management.

The basic conceptual framework adopted for the evaluation is the one developed for the Mediterranean (METAP, 1997) with slight adjustment of the questions asked to reflect existing organizational/institutional conditions and the types of initiatives found in Africa. The adopted framework examines the evaluation of a project, plan or programme of integrated coastal management on the basis of three basic *dimensions*:

- **Performance**, meaning effectiveness, or the fulfilment of the stated objectives

(i.e. establishing a regulatory system for human activities in a coastal area, or establishing a special administrative body, etc.). Performance may depend on:

- *internal* factors, relating to the design of the programme/plan/project judged in terms of:
  - *internal consistency* (relationship of goals with objectives and policy measures);
  - *scope* (relevance of objectives to problems); and
  - *adequacy* (commitment of necessary resources).
- *external* factors, such as lack of necessary implementation or general contingencies (i.e. economic recession, etc.).
- **Integration**, referring to co-ordination of various concerns in four ways:
  - horizontal or *multisectoral* coordination, considering linkages and cross impacts of sectoral perspectives;
  - vertical coordination or *governance*, across different geographic or hierarchical administrative levels;
  - *environmental*, meaning taking properly into account the environmental implications of developing human activities; and
  - *participation*, seeking for the degree of involvement of various actors and interests, such as government, private sector, etc.
- **Sustainability**, looking for the possibility of maintaining the activity – if it is desirable to do so – beyond the lifetime of the specific plan, programme or project. This can be measured in terms of three different dimensions:
  - *Financial* viability, seeking mechanisms to secure additional funds;
  - *Institutional* viability, seeking proper organizational measures; and
  - *Political* support, seeking a measure of political commitment.

Due to time and scope constraints, a qualitative approach was adopted in this Study, meaning that answers to the above

questions were given mostly in descriptive and relative terms on the basis of estimates relying on the Study Team's expertise and experience in integrated coastal management, and relevant experience in the Region, as well as information from published sources or other available documents in national agencies and international organizations and agencies with activity in the Region. Additional information was sought through a special questionnaire (Annex I) developed for the Mediterranean study and adapted to the needs and scope of the present Study during a special Workshop (organized in Split, Croatia in April 1998). The Questionnaires were sent to relevant authorities for the identified case studies.

The focus of the Study was on assessment of integrated coastal management in Africa. Although this is one geographical area for reasons of organizational convenience, experience in coastal management was reviewed in terms of three sub-continental regions: East and Southern, West and Central, and North Africa and the Red Sea.

A number of coastal management initiatives exist in the Region, and the Study Team had to select the ones that qualified as integrated coastal management, and for which information was readily available. For the North Africa, information from the recent evaluation by METAP on Mediterranean initiatives was partly incorporated. Narrow scope interventions (i.e. conservation of a specific coastal mangrove, or coastal tourist development, etc.) adopting a limited perspective (i.e. single sector or limited concern driven) were not selected. Furthermore, as the emphasis was on experience with integrated coastal management plans or policy, intentions or initiatives without on-the-ground implementation were also eliminated. For the purpose of representation of the three sub-continental regions, some exceptions to the above were accommodated, particularly for regional or large-scale projects.

The list of projects considered is presented in the following Tables I to III.

Table I:  
INTERVENTIONS CONSIDERED: NORTH AFRICA AND RED SEA

PROJECT/PROGRAMME/PLAN	COUNTRY	GEOGR. REGION	FUNDING AGENCY	ISSUE						AREA	
				ICZM	BIODIV	TOUR	POLL	OTHER	National	Regional	Area Project
Red Sea CZM Resource Management	Egypt	RS	GEF	X	X	X	X	R		X	
Al Hoceima, National Park	Morocco	M	METAP I		X			S			X
Martil CZM	Morocco	M	METAP I				X	S			X
CZM	Morocco	A,M	METAP II	X				N	X		
El Kala Mgt Plan	Algeria	M	GEF		X			S			X
Tlemcen CZM	Algeria	M	METAP I	X		X		R			X
Framework for ICZM Plan	Egypt	M, RS		X				Institutions	X		
Environment&Tourism Study	Tunisia	M				X		R	X		
Protection of Coastal Lagoons and Wetlands in Hammamet Gulf	Tunisia	M	METAP II		X		X	R	X		
APAL	Tunisia	M		X				S	X		
Sfax CAMP	Tunisia	M	CAMP	X		X	X	R			X
Fuka CAMP	Egypt	M	CAMP	X		X	X	R			X
Red Sea and Gulf of Aden SAP	Egypt, Somalia, Eritrea, Sudan, Djibouti	RS	GEF	X	X	X	X				

\* M = Mediterranean Sub-region  
RS = Red Sea Sub-region  
A = Atlantic Region

\*\* R=Resource Management  
S=Sectoral Development  
N=National Level Policy



Table II:  
INTERVENTIONS CONSIDERED: WEST AND CENTRAL AFRICA

PROJECT/PROGRAMME/ /PLAN	COUNTRY	GEOGR. REGION	FUNDING AGENCY	ISSUE						AREA		
				ICZM	BIODIV	TOUR	POLL	OTHER	National	Regional	Area Project	
WACAF/11 ICAM	Gambia	West Central (WC)	UNEP	X								X
	Guinea									X		X
	Togo								X			
Large Marine Ecosystem	Cote d' Ivoire	WC	GEF	X			X	Large Marine Eco- systems		X		X
	Ghana											
	Benin											
	Nigeria											
	Cameroon											
	Togo											
Biodiversity Conservation	Cameroon	WC	GEF	X							X	
Coastal Wetlands Project	Ghana		GEF		X						X	
Integrated Coastal Area Management Plan	Gambia	WC	ADB	X					X			

Table III:  
INTERVENTIONS CONSIDERED: EAST AND SOUTHERN AFRICA

PROJECT/PROGRAMME/ /PLAN	COUNTRY	FUNDING AGENCY	ISSUE						AREA			
			ICZM	BIODIV	TOUR	POLL	OTHER	National	Regional	Area Project		
Kiunga Marine Reserve	Kenya	WWF		X								X
Nyali-Bamburi	Kenya	UNEP/FAO/USAID	X		X							X
Tanga Project	Tanzania	IRISHAID	X	X			X					X
Mafia Island Marine Park	Tanzania	NORAD/WWF		X								X
Monai Bay Conservation Area	Tanzania	WWF		X								X
Chwaka-Pase Coastal Zone Management Project	Tanzania	UNEP/FAO	X		X							X
Tanzania Coastal Management	Tanzania	USAID	X						X			
Mecufi	Mozambique	NORAD	X									X
Xai-Xai	Mozambique	UNEP/FAO	X									X
Bazaruto National Park	Mozambique			X								X
Olifany River Project	South africa											X
Grande Anse	Seychelles	COI/FED	X									X
Park Marin	Reunion		X									X
COI/FED	Comores	EU (COI/FED)	X								X	
Management Strategy for the Xai-Xai District Coastal Area	Comores	UNEP-FAO	X									
	Mauritius	CIDA										
COI/FED	Mauritius	COI/FED										
COI/FED	Madagascar	COI/FED										
MANSUALA	Madagascar	WB										
SEACAM	South Africa	SIDA + WB + IOC	X							X		

### 3. CASE STUDY ANALYSIS AND EVALUATION

This section presents in detail the case studies examined (Table IV and Figure 1). From a large number of interventions, a limited number of case studies (thirteen) for more in-depth analysis was selected on

the basis of their representation in terms of geographic region, scope and scale of intervention.

**TABLE IV:  
LIST OF AFRICAN ICM PROJECTS EXAMINED**

<b>East and Southern Africa</b>			
Kenya	ICAM in Nyali-Bamburi-Shanzu Area	Integrated CM	Local
Tanzania	Tanga Coastal Zone Conservation and Development Programme	Integrated CM	Local
Mozambique	Mecufi CZM Project	Integrated CM	Local
Tanzania	Coastal Management Partnership	Institutional	National
Secretariat for Eastern Africa Coastal Area Management		Institutional	Regional
<b>West and Central Africa</b>			
Ghana	Coastal Wetlands Management Project	Biodiversity	National
Gulf of Guinea Large Marine Ecosystem Project		Biodiversity	Regional
ICAM in West and Central African Region		Integrated CM	Regional
<b>North Africa and Red Sea</b>			
Morocco	Al Hoceima Natural Park	Biodiversity	Local
Egypt	CAMP Fuka-Matrouh	Tourism	Local
Algeria	El Kala National Park and Wetlands	Biodiversity	Local
Red Sea Coastal and Marine Resource Management		Natural resource	Regional
Conservation of Wetlands and Coastal Ecosystems in Med.		Biodiversity	Regional/local

Figure 1: Locations of interventions

### 3.1. EAST AND SOUTHERN AFRICA

#### 3.1.1. Presentation and Evaluation of the Case Studies

##### a) The Integrated Coastal Area Management (ICAM) Initiative in the Nyali-Bamburi-Shanzu Area, Mombasa, Kenya

###### General Information

A coastal management demonstration plan was initiated by the Kenya Government at the Nyali-Bamburi-Shanzu Area, for the purpose of development of a national ICAM policy, as well as for creation of necessary experience in the ICAM practices. The area was chosen for the following reasons;

- Its coastal resources which are critical for the survival of local people and tourism industry are on decline.
- The Area is an important tourist area in Kenya, however there is concern that the growth of tourism is on decline.
- People in the Area requested assistance from relevant authorities to address problems caused by the declining coastal resources as well as tourism industry.
- Compared to other areas along the Kenyan coast, at least some information and data on the Area exist to facilitate planning.

A multi-institutional team made up of members from relevant institutions was formed in October 1994 and was responsible for the development of an ICAM Strategic Plan for the Nyali-Bamburi-Shanzu Area. The team members came from the Coast Development Authority (CDA), Kenya Wildlife Services (KWS), Fisheries Department, Mombasa Municipal Council, and the Kenya Marine and Fisheries Research Institute (KMFRI). The Coastal Resources Centre of the University of Rhode Island and the Department of

Environmental Education, Moi University, provided technical support during the development of the Strategic Plan. The United Nations Environment Programme (UNEP), the Food and Agricultural Organisation (FAO) and the United States Agency for International Development (USAID) provided the funding for the process. The preparation of the Strategic Plan was completed in 1996.

###### Natural Features

The area extends from Mtwapa Creek to Tudor Creek, including the mangrove forests of each creek. Seaward it extends to the reef crest, and inland to include the settlement located to the west of the Old Mombasa-Malindi Road.

The two creeks are joined by a continuous fringing reefs which extends seaward for one to two kilometres from the shoreline. The Bamburi area has many sandy beaches which attract tourists as well as being an ideal turtle nesting ground.

###### Socio-economic and Environmental Situation

The estimated population of the Area is about 153,000. The main economic activities include tourism, residential and commercial development, manufacturing industries, and fisheries. Tourism and related sectors are one of the largest employers in the Area. In 1993, the Area accounted for 24% of coastal tourism industry earnings in Kenya.

The economic opportunities brought about by the growth of tourism industry and other commercial industrial activities has led to more and more people migrating to Mombasa, and the Nyali-Bamburi-Shanzu Area in particular.

Traditional economic activities such as fishing and mangrove harvesting have been on decline. For the fisheries sector, this is attributed to the reduction of the fishing area as a result of creation of the Mombasa Marine Park and Reserve, as well as the

dramatic growth of tourism industry, leading to increased demand on fish. The areas outside the Marine Parks and Reserves are now overfished.

Tourism development and urbanisation have led to a number of social, economic and environmental problems that threaten the long-term sustainability of the resources which support the tourism industry and other commercial and industrial activities. The Area is experiencing an increase in conflicts between tourism industry and other national and local activities.

The main issues facing the Area include:

- inadequate infrastructure and public services;
- contaminated coastal waters (ground water, and marine and coastal waters);
- decline in reef fishery;
- degraded marine habitats and loss of coastal biodiversity (mangrove, coral reefs, seagrasses and beaches);
- coastal erosion; and
- resource use conflicts.

#### Description of the Intervention

The main objective of the Nyali-Bamburi-Shanzu ICAM initiative was to identify the pressing coastal issues facing the area including those that are typical for the whole coast of Kenya and develop both short and long-term management strategies to address them. The expected end result was that the resources in the Area could be utilised by all stakeholders in a sustainable manner.

Decision-makers from the three levels of government (local, district and national), private sector groups, academic institutions, non-governmental organisations, as well as international support agencies participated in meetings and work sessions to develop this ICAM strategy.

The process of developing the strategy involved:

- formation of a multi-institutional mechanism responsible for research and planning;
- profiling of issues experienced in the area;
- establishment of consensus among stakeholders on priority issues through holding of two stakeholder workshops and private consultations; and
- development of management strategies, demonstration, and activity plans with national stakeholders at a national workshop.

The strategy provides a framework for implementation of the proposed actions; defines and identifies leadership roles for the institutions that have clear mandates and expertise for the implementation of strategies; and defines the functions of the multi-institutional committee. Coastal Management Steering Committee (CMSC), was proposed to be responsible for overseeing the implementation of the strategies proposed. The implementation of the strategy has not yet begun as funding has not been secured.

#### Evaluation

##### Performance

With regard to the goal of the Nyali-Bamburi-Shanzu ICAM Initiative, of identifying the pressing coastal issues and developing short and long-term management strategies to address, the intervention can be considered successful.

The strategy was developed after extensive cross-sectoral consultation and inputs from relevant stakeholders who will play a key role in its implementation. The strategy was prepared basically by the local institutions based in Mombasa with minimal support from the national and international institutions. However, the strategy was endorsed by national institutions and supported by international institutions during the National Workshop on ICAM in Mombasa.

In light of their active involvement in its preparation, as well as their endorsement of the strategy, the stakeholders of the Area own the strategy and believe it is for addressing their issues.

The contents of the strategy focus strategically on few priority and manageable issues. The strategy does not attempt to address all the issues facing the area at the same time. It has also identified leading institutions for each task proposed. In this way the implementation of the Strategy will be co-operative and participatory.

The strategy lacks concrete proposals on alternative income generating activities to alleviate pressures on resources. For example, the action strategies for reef fisheries focus only on improvement of fisheries infrastructure, and increasing enforcement and surveillance activities of Kenya Wildlife Services, which by itself is conflicting and may not lead to sustainability. No alternative is offered to the affected fishermen as a result of the establishment of the Marine protected area.

### Integration

In terms of the preparation process, as well as the contents of the strategy, the level of integration is high. During the preparation process, all three levels of government were involved, i.e. the local, provincial and national. The strategy proposes the involvement of the three levels of government during the implementation phase. Furthermore, the strategy recognises the importance of non-governmental organisations in assisting government institutions and donor agencies in implementation of the proposed actions for all issues of concern.

The Strategy links well the environmental with social and economic issues, and therefore takes into consideration the existing as well as the emerging issues in the Area.

### Sustainability

The Initiative identified and initiated a number of demonstration projects, designed to test the ICAM approach, thus laying a foundation for implementation of the Strategy in the future when larger funding becomes available. These projects include:

- development and rehabilitation of the facilities at the Kenyatta Public Beach;
- installation of mooring buoys in the Marine Park;
- demonstration of water conservation measures in hotels; and
- production of posters and coral reef brochures.

Some of these projects are being undertaken with financial support from the local institutions. For example, the Mombasa Municipal Council, local business and community groups have contributed to covering the costs of the rehabilitation and development of the Kenyatta Public Beach.

Depending on the availability of funds, the implementation of the strategy is feasible due to the existence of the necessary factors including:

- political commitment and support to the strategy by government institutions at all levels;
- existence of technical and human capacity at the lead institutions such as CDA, KMFRI, and KWS; and
- local support to the strategy.

## **b) Tanga Coastal Zone Conservation and Development Programme, Tanzania**

### General Information

The Tanga Coastal Zone Conservation and Development Programme (TCZCD) is a well known and publicised project. The overall goal of the Programme is to develop

sustainable use of Tanga Region coastal resources through;

- improvement of the institutional capacity up to the regional level to undertake ICZM; and
- assisting coastal communities to use coastal resources in a sustainable manner.

The Programme, which was initiated in 1994, was implemented by the Regional Development Director's Office until 1996. Following the restructuring of the local government set-up by the Government in 1996, the implementation of the project is by the Office of the Tanga Regional Administrative Secretary and district authorities of Muheza and Pangani, and the Tanga municipality.

Technical assistance to the Programme is provided by the World Conservation Union (IUCN) through the East Africa Region Office (EARO). It is funded by the Irish Aid. The first phase of the Programme was from July 1994 to June 1997. Phase II is being undertaken from July 1997 to June 2000. Phase II is more specifically aimed at mainstreaming, which should result in improvement of the well-being of coastal communities and their environment in the region's three coastal districts.

### Natural Features

The coast of Tanga Region is 150 km in length, stretching from the Kenyan border in the north to the Saadani Game Reserve in the south. The coastal and marine environment is characterised by a complex of offshore islands, fringing and patch reefs, mangroves, seagrass beds, estuaries, tidal and salt flats, sand and rocky beaches, raised Pleistocene reefs and remnants of coastal forests.

### Socio-economic and environmental situation

More than 150,000 people are living along the coast of Tanga Region, and these are spread in 87 villages, of which 45 are

fishing villages. Their main economic activities are:

- fishing and harvesting of other marine natural resources such as octopus and sea cucumber;
- harvesting of mangrove poles and firewood from coastal forests;
- agriculture (sisal and cashew nuts); and
- tourism, based on sport fishing.

Major coastal management issues are:

- institutional framework for coastal zone management is inadequate;
- coral reefs are being destroyed by destructive fishing methods such as dynamite fishing;
- decline in fish catches due to over-fishing and critical habitat destruction;
- mangroves and coastal forests are being destroyed by excessive cutting and encroachment; and
- beach erosion.

### Description of the Intervention

The Programme has adopted an approach that has four stages: Listening → Piloting → Demonstration → Mainstreaming. Phase I of the Programme basically consisted of two stages of Listening and Piloting. Priority issues to be addressed by the programme, options for actions and strategies to overcome problems were identified and agreed on during the listening stage. In addition to the above, relevant stakeholders were involved through participation in socio-economic and resource assessments and regional workshop.

During the Piloting stage three villages (Kipumbwi, Kigombe and Mwambani), one from each district, were chosen to test the performance of the proposed actions for resolving their priority environmental issues. Activities undertaken included the formulation and enforcement of bylaws, patrols to prevent destructive fishing and illegal mangrove cutting, replanting of mangroves in degraded areas, closing of



reefs to extractive use, and testing mariculture. These activities were testing methods of management and enforcement, as well as potential ways of generating income to the local communities.

Phase II consists of Demonstration and Mainstreaming. This phase will draw twelve villages including the three pilot villages of Phase I. This Phase will demonstrate successful methods and practises more widely, as well as address other important environmental issues. Cost-sharing arrangements will be developed during this stage.

As more experiences are gained and threshold human capacity is built, the proven methods and processes will be adopted by the national government and communities as standard practices, thus completing the mainstreaming and leading to sustaining the activities of the project.

The Programme is guided by a Regional Steering Committee with the following members: Regional Administrative Secretary, District Executive Directors of Muheza and Pangani, the Tanga Municipal Director, and representatives of Irish Aid and IUCN-EARO. The Committee approves annual work plans, reports and budgets, and makes policy decisions.

A team of government staff at Regional and District levels is responsible for undertaking the Programme activities. Project staff include a Programme Co-ordinator, Advisors, District Co-ordinators and supporting staff. These are assisted by IUCN technical advisors.

In Phase II, Programme staff will play an advisory rather than a co-ordinating role. Also, districts will take the leading role in co-ordinating and implementing activities.

## Evaluation

### Performance

The design and implementation of the Programme can be described as successful, most of the planned activities have been

implemented to the satisfaction of the relevant stakeholders. The project has been implemented as designed leading to achievement of the planned objectives of the Programme. As part and parcel of strengthening of local institutional capacity to undertake ICM, many government staff at the regional and district levels (including magistrates and police officers) have a good appreciation and understanding of the issues and practice of coastal management, as well as participatory approaches to decision-making. This has led to government staff now acting as facilitators rather than "instructors" as it were before. The period between arresting offenders to prosecution has been reduced from one year to three months, and increase of fines for offenders to T.shs 100,000 and one year in prison.

The objective of assisting local communities implement effective coastal management has also been achieved successfully as shown by the following:

- villagers, including women, implement patrols and take other alternative livelihood initiatives themselves;
- management agreements (for mangrove and fisheries) initiated by the Programme are currently being implemented by the villagers;
- gender balanced multi-stakeholder committees have been established;
- improvement of sanitation in their villages;
- initiation of alternative income generating activities such as seaweed farming and mariculture.

These actions have consequently led to reduced levels of dynamite fishing and mangrove cutting, replanting of degraded mangrove areas, and increased numbers of latrines and fuel efficient stoves.

The success of the Programme is attributed to the approach adopted during its implementation. The four stage approach: listening → piloting → demonstration →

mainstreaming. has the following main features:

- Participatory approaches were used in socio-economic and resource assessments, issue identification and analysis, prioritising, decision making, implementation monitoring and evaluation.
- Started small and maintained a strategic focus throughout Phase I. During the Phase I only three pilot villages were selected, one from each District, and each pilot village selected only two issues for action.
- Learning and adaptive approach. Proposed actions were tested to see whether they are working efficiently before being adopted as a strategy for a wider application.

#### Integration

Generally, the Programme has achieved high levels of integration in many aspects. The following are salient examples:

- Multidisciplinary Programme staff. The Programme Advisors are engaged in the field of coral reefs and fisheries management, forestry, mangroves and wildlife, training and awareness, mariculture, community development education and agriculture.
- Integration among governance levels. The Programme has successfully managed to combine both "top-down" and "bottom-up" approaches in establishing coastal resource management. A major traditional weakness in Tanzania's governance structure is the weak link between central and local government, especially between district authorities and sub-district functionaries. The programme has been successful in strengthening these links by engaging extension staff in surveys, seminars and workshops involving users and community leaders.
- Integration of science into management. The design of the project was based on

scientific and qualitative data on the status of the Tanga coastal resource base. The earliest surveys were conducted with assistance from IUCN in 1986. Monitoring programmes on the status of resources is regularly carried out by the Programme Staff as well as some trained villagers.

- Integration among sectors, institutions and disciplines. Since the issues being addressed by the Programme cut across many sectors, institutions and disciplines, the Programme has succeeded in forging partnerships among institutions and among resource user groups.
- Integration of indigenous knowledge into management. Knowledge on resources from villages was used in identifying issues and possible actions, particularly during the Listening and Piloting stages.

#### Sustainability

The prospects that the impacts of the Programme during Phase I will be sustained through Phase II and beyond are high. This is attributed to the following:

- Political Commitment. The Programme is well supported at all levels of government and at the community level, and there exists a high degree of ownership of the programme at all these levels.
- Institutional and legal framework. The Programme has succeeded to have: formulation of by-laws; enforcement of regulations and by-laws; strengthening of the management capabilities of government departments at the regional and district levels; strengthening of management capacity at village level; and establishment of effective partnerships and trust between different levels of government and resource users.
- Emphasis on self-reliance and empowerment of villagers. The Programme has adopted a model based on "pyramid of actions". This model assumes that most of the actions and

initiative can be undertaken by villages without support from central government or outside experts or donors (bottom of the pyramid), and fewer actions that need to be done by outside agents (top of the pyramid).

In line with this, through the development of fisheries and mangrove management agreements, a basis for community empowerment has been created. Tasks, responsibilities and actions to be undertaken by communities have clearly been identified.

Furthermore, a number of income generating activities, such as seaweed farming and mariculture, have been initiated.

- *Financial Commitment.* Irish Aid financial support to the Programme will continue to the end of Phase II, i.e. June 2000. The Government has been urged to reactivate its budget line dedicated for the Programme. Also during the ongoing Phase, cost-sharing arrangements are being developed. Effective revenue collection mechanism will also be tested and put in place.

### c) Mecufi Coastal Zone Management Project, Mozambique

#### General Information

The long-term goal of the project is the establishment of sustainable socio-economic development in the Mecufi District. The main targets are:

- reduction of the pressure on the marine and coastal natural resource through the introduction and adoption of sustainable management practises;
- creation of awareness and understanding of environmental issues, as well as encouragement of local participation in the management of their environment;

- overcoming existing institutional barriers to integrated coastal management; and
- establishment of an adaptable strategy for integrated coastal management in Cabo Delgado.

Phase I of the project was from 1993-1995. The Project was evaluated in 1996 and the overall goal of the project has been modified to take into consideration the emerging issues such as land tenure and natural resource use rights for local communities in relation to new commercial interests especially coastal tourism.

The overall goal for Phase II is to improve the management and conservation of coastal and marine natural resources and to increase benefits derived from resources through community-based approaches. This goal will be achieved through:

- involvement of the community in the development process and in the management of the natural resources;
- contribution to the improvement of public policies and regulations;
- promotion of arrangements which ensure that communities benefit from their natural resources base;
- development of marketable products derived from the natural resource; and
- in collaboration with the communities identify appropriate management strategies for management of natural resources.

The planned activities for Phase II are:

- community-based natural resource management pilot projects;
- environmental and socio-economic surveys, land-use planning;
- environmental education and awareness programmes; and
- elaboration of a sub-regional tourism development plan.

The project is implemented by the Ministry for Co-ordination of Environmental Affairs (MICOA) and guided by a Steering

Committee composed of members from the following institutions: MICOA, Fisheries Department, University of Eduardo Mondlane, Planning Department, Tourism, Local Administration and local traditional chiefs. The Project is funded by the Norwegian Agency for International Co-operation and Development (NORAD).

### Natural Features

The Mecufi district is located in the southern-most part of the Cabo Delgado Province. It extends from 13°26'S in the South (the mouth of the Megaruma River) to 13°06'S in the north.

The coastal area of the Mecufi District lies within a coastal belt of varying width that extends along much of the Mozambican coast.

This coastal belt is characterised by secondary grassland and wooded grassland. Within this landscape, a mosaic of agricultural crops, mangroves, dune vegetation, riverine forest and seasonally flooded edaphic grassland are found. The mangrove forests, though well developed in the Area, are semi-continuous along the coast.

### Socio-economic and Environmental Situation

The Mecufi District has an area of 1,192 km<sup>2</sup>. Mecufi has a relatively high population density, living on a narrow strip of the coastal area (32 individuals/km<sup>2</sup> in 1995). About 37,000 people are living in 13 villages scattered along the narrow strip of the coastal area. Within the District, there are seven traditional chiefs, who have recently regained their former importance as upholders of the village traditions and social life, as well as in resolving conflicts among the villages. The main activities of the coastal communities are:

- subsistence agriculture (maize, rice, vegetables and sorghum);
- weaving of cloths, baskets and mats; and

- fishing.

The District has inadequate social infrastructure. There is only one health centre, no public transport system and the only financial institution in the vicinity is about 50 km away in the provincial capital of Pemba.

The main issues of concern the Project is attempting to address are:

- poverty;
- lack of awareness of environmental issues, and of capacity to address the emerging challenges;
- lack of baseline data on the coastal and marine environment of the District; and
- non-existence of the institutional structure at the Province level to provide the necessary advice and guidance for sustainable management of natural resources.

### Description of the Intervention

In light of the existence of the limited scientific information and development problems of Mecufi District, the Project had to have an initial preparatory phase which included, among others:

- establishment of necessary contacts with relevant stakeholders at the local, district, provincial, national and even international levels; and
- conducting of coastal resources and community surveys. These surveys provided information on the distribution and status of the main resources, as well as, major issues as far as the local communities are concerned.

During implementation, a number of activities have been initiated such as:

- establishment of community based small-scale projects on agro-forestry and mariculture;
- environmental education and training of extension workers and field assistants;

- studies on the role of the traditional structures in the management of natural resources;
- empowerment of the local communities in order to influence planning and decision-making;
- establishment of the Village Management Nucleus, which are responsible for co-ordination and implementation of the strategic plan of action developed by the communities themselves. They also represent the village in the contracts with the projects, government institutions and other co-operating organisations. In addition, they are also responsible for assessing resources potential and setting quotas for subsistence and commercial exploitation.

## Evaluation

### Performance

Based on the number of activities that have been completed successfully, particularly for some of the objectives of Phase I, the Mecufi Coastal Zone Management Project, could be regarded as successful. It is too early to assess the measurable outcomes of Phase II. The following activities have been achieved during the Phase I:

- completion of socio-economic survey, as well as survey and analysis of natural resources;
- establishment of training system for village extension workers, primary-school teachers and the farming population, on resource conservation;
- development of participatory land-use planning approach at the village level; and
- creation of a Village Management Nucleus for co-ordinating and leading development and resource-conservation measures at the village level.

The following factors have contributed to the successful implementation of the project:

- the Project has received support from all levels of government;
- the existence of village level organisations, such as the chiefdoms; and
- the involvement of local community from designing to implementation stages.

The Project has also succeeded to establish the multi-disciplinary and multi-institutional Project Advisory Committee, and two students from the University of Eduardo Mondlane have obtained their degrees through research activities undertaken within the framework of the Mecufi Project.

One of the weaknesses of the Project is the initiation of income generating activities. The activities that have been identified are not sustainable. These include lime and charcoal production. However, this has been recognised by the Project, and the Phase II is re-addressing the issue of income generation and alternative livelihood.

However, the establishment of a strategy for CZM in Cabo Delgado Province was not achieved, and there is no activity planned for that objective in Phase II.

The activities planned for Phase II are numerous and may have an impact on the performance of project to achieve its outputs. Phase II should have focused on community-based natural resource management pilot projects, as well as environmental education and awareness programme. Land-use planning and tourism could have been carried out more satisfactorily at the provincial level or national level by the relevant Ministry.

### Integration

The success of the Project could, to certain extent be attributed to the decision to integrate the Project into the existing government structures. These include:

- Village level organisations. The existence of both traditional and government structures at the village level provided communication channels between the Project and the village. Also, these

structures facilitated active participation of the villagers in the Project.

- National institutional framework for implementation of the project. The fact that the Project is being hosted at MICOA is advantageous to both the Project and the Ministry. The Project has benefited from the expertise at the Ministry and has provided information that could be used in development of policies.

Furthermore, the Project, particularly in Phase II, is promoting the recognition of traditional knowledge systems and their application to natural resource management. The integration of science into management of natural resources is achieved through University students, as well as village-based research on environmental and socio-economic surveys.

#### Sustainability

In light of the interest and support, the Project has provided, at the village, district, provincial and national levels, the likelihood of maintaining the successes achieved during Phase I. Sustenance of the activities planned for Phase III is high.

As stated earlier, the income generating activities initiated during Phase I are not sustainable in the long run. Phase II is addressing the issues with the intention of coming up with more sustainable activities.

The financial support for the Project activities is currently secured. Nevertheless, in the current Phase no mechanisms have been established or proposed for ensuring financial sustainability when the NORAD support ends after completion of Phase II.

### **d) Tanzania Coastal Management Partnership**

#### General Information

The goal of Tanzania Coastal Management Partnership (TCMP) is to establish the foundation for effective coastal governance,

which is an essential precondition to improvement of the quality of coastal environment, sustainable coastal development and improvement of the quality of life of coastal residents. The Partnership is working to achieve the following results:

- formulation of ICM policy that is applicable to coastal problems at both the national and local levels;
- establishment of intersectoral mechanisms for addressing emerging coastal economic opportunities such as mariculture and coastal tourism;
- development of mechanisms to facilitate national support for ICM;
- increasing institutional and human capacity for ICM; and
- sharing of Tanzania's coastal management experience regionally and globally.

The Partnership is a co-operative initiative between the Government of Tanzania through the National Environmental Management Council (NEMC), the United States Agency for International Development and the University of Rhode Island's Coastal Resources Centre (URI-CRC). The lifespan of the Project is five years, from 1997 to 2001.

During Phase I (1997-1999), the Programme's focus is on learning from existing experience, policy articulation, development and testing of sustainable practices, and building the process, support and structure necessary for a sustainable ICM programme. In Phase II (2000-2001), emphasis will be on the application and refinement of articulated policy for the whole coastline of Tanzania.

#### Natural Features

Tanzania has over 800 km of coastline, characterised by a mixture of estuaries, muddy tidal flats, sandy beaches, cliffs, seagrass beds, coral reefs and extensive mangrove stands especially around river deltas. The continental shelf is narrow, with

the 200 m depth contour about 4 km offshore, except at Mafia and Zanzibar channels, where the shelf width reaches up to 60 km. The islands within continental shelf include Unguja and Mafia, as well as a number of small islets and reefs. Pemba Island is not within the continental shelf, it is separated from the mainland by a channel which is about 800 m deep.

### Socio-economic and environmental situation

The total population of Tanzania is about 27 million, with the coastal population accounting for about 15% of this. Further, the largest concentration of the population is found in coastal urban areas, particularly Dar es Salaam, Zanzibar, Tanga and Mtwara.

Coastal ecosystems are of great importance to the well being of coastal communities, as well as to the nation's economic development. In coastal rural areas, slash and burn based agriculture, fishing and seaweed farming are the important economic activities, that provide both subsistence and commercial benefit to local populations, while in coastal urban centres the important economic activities include industries, fisheries, transport, trade, recreation, tourism and residential development.

Much of Tanzanian coastline is still relatively undeveloped. However, some areas are starting to show signs of degradation due to impacts of human activities. These activities include unplanned coastal development, especially in the urban centres, destructive fishing methods, uncontrolled harvesting of mangroves and coastal forests, coastal erosion, and sand and live coral mining.

### Description of the Intervention

In principle, TCMP aims at uniting the government and community, science and management, as well as sectoral and public interests to conserve and develop coastal and marine environment and their

resources. The Work Plan of the TCMP is organised by Life Of Partnership Results (LOPR). It is the forward looking results that the TCMP is seeking to achieve during the lifespan of the Project. Each result is supported by a list of tasks and outputs, which are providing the framework for implementation. The tasks are carried out by multidisciplinary cross-sectoral working groups and in some cases by consultancy teams made of inter-disciplinary experts.

The institutional structure for management of the project includes: the Principal Secretary, Vice President's Office, National Environmental Management Council, TCMP-Support Unit, working groups, a network of existing demonstration projects and external technical support.

The TCMP-Support Unit, established under NEMC, is co-ordinating and ensuring that the results of the project are brought to the attention of appropriate institutions for necessary actions.

The Support Unit is responsible for the co-ordination and day-to-day activities of the Project such as secretariat support to the Core Working Group and other working groups, and providing logistic and administrative and technical support to the policy development process.

The Core Working Group and the Mariculture Working Group are composed of experts representing different disciplines and sectors. The Groups have been established for the purpose of conducting a consultative and collaborative process with the relevant stakeholders to identify issues and problems, and recommend solutions to them.

### Evaluation

#### Performance

It is too early to evaluate the performance of TCMP. However, it could safely be said that the few activities that have been undertaken so far have been implemented according to the agreed Work Plan of the TCMP. The following evaluation focuses on

the design of the project, implemented and planned activities, and approach.

Within a short time of its establishment, TCMP has succeeded to complete a number of activities including:

- meetings with senior government officials from different departments to solicit their input in the development of the work plan; and
- establishment of Core Working Group consisting of representatives from government departments that influence coastal management, scientists, as well as NGOs members. (The Group is making good progress in the drafting of an issue profile for presentation to the Coastal Management Policy meeting scheduled for October, 1998.)
- Mariculture Working Group made-up of leading experts in mariculture and aquaculture in Tanzania from both public and private sector. (The Group has completed the first draft of the mariculture issue profile and a document that identify the existing issues and opportunities for mariculture in Tanzania as well as the action to be taken.)

Since TCMP aims at improving policy on ICM, its achievements will be judged mainly through its influence on policy development process in Tanzania. The activities currently being undertaken will clearly contribute to this process.

#### Integration

By its design, for successful operations as well as implementation of its activities, TCMP has to establish horizontal and vertical inter-linkages with different sectors. Through its host, NEMC, and the Working Groups, TCMP has succeeded to establish formal and informal inter-linkages with relevant ministries, institutions, NGOs private sector and existing ICM projects in Tanzania. For instance, the following formal arrangements have been concluded:

- TCMP and Institute of Marine Sciences (IMS) of the University of Dar es Salaam

to carry out the training needs assessment, and develop a short course in coastal management;

- TCMP and WWF/Tanzania to jointly formulate a strategy that will assist the Government, develop and implement a monitoring framework for existing and future mariculture projects; and
- TCMP and the Tanga Coastal Zone Conservation and Development Programme to jointly define issues of national concern, a national ICM policy and related changes in sectoral policies and implementation frameworks.

TCMP has strived to involve the appropriate range of stakeholders from all levels of government, private sector, scientists, NGOs and CBOs in its deliberations and decision making process.

The whole process is very involving and participatory with the stakeholders providing most of the information and data. It has been and continues to be a good learning experience particularly to the experts from government institutions, who are normally not familiar with participatory methodologies. Through the Working Groups Meetings, close working relationships have been developed between experts from government institutions, scientists, NGOs and private sectors.

#### Sustainability

The prospects that the Partnership will be able to achieve its planned activities are very high in light of the strong support and interest which the Project has succeeded to generate within a very short time of its existence. There is a strong political support for the project. Technocrats in the government institutions have been supportive of the project and they have been of great assistance to TCMP, particularly those who are in the Working Groups.

Financial support for the Project activities for the period 1997-2001 is secure as USAID is committed to that.



### e) Secretariat for Eastern African Coastal Area Management (SEACAM)

#### General Information

SEACAM was established in August 1997 by ten Eastern African Coastal Countries to assist them to implement and co-ordinate coastal management activities in the Region drawing from the Arusha Resolution (1993) and the Seychelles statement on Integrated Coastal Zone Management (1996). The main focus of the Secretariat is capacity building and information sharing in: environmental assessment, capacity building for local NGO's, database of coastal management activities and practitioners, public sector management and sustainable financing of coastal management activities.

The Secretariat is based in Maputo, Mozambique, and is hosted by the Ministry for Co-ordination of Environmental Affairs (MICOA). The Swedish International Development Co-operation Agency (SIDA) provides the core funding of the Secretariat, as well as supporting about half of the activities. Additional funding for selected activities is provided by the World Bank and Intergovernmental Oceanographic Commission (IOC) of UNESCO.

It is expected that the Secretariat will complete its activities by the end of 1999 and transfer its ongoing activities to the existing regional organisations and programme.

#### Natural Features

The Region covered by the SEACAM is comprised of six coastal states (Eritrea, Somalia, Kenya, Tanzania, Mozambique and South Africa) as well as five Island States (Madagascar, Mauritius, Reunion (France), the Comores, and the Seychelles).

The Coastal ecosystems are generally both very rich in natural resources and high biodiversity. The coastal ecosystems include estuaries, mangrove forests, coral reefs,

sand and rocky beaches, cliffs, seagrass beds and muddy tidal flats. These ecosystems sustain a tremendous diversity of marine life and are important source of food, employment and income in most coastal communities.

#### Social and Environmental Situation

In 1994, the combined coastal population of nine countries of the region was estimated at 24 million with Mozambique, Tanzania and Madagascar constituting over 85% of the total. The population growth rates of the mainland states and Madagascar are generally high, particularly in Kenya (4.1%) and Tanzania (3.7%). The island states, particularly Mauritius and Seychelles, have relatively low population growth rates, at 1.2% and 0.8% respectively.

About 10 to 15% of the population of Kenya and Tanzania lives in the coastal zone, while in Mozambique and Madagascar, about 75% of the population inhabits this area. In large coastal cities, such as Dar es Salaam, Maputo and Mombasa, growth rates are considerably higher than the national average due to urban migration.

The level of industrial development in the Region (with exception of South Africa) is still relatively low. However, the rate of industrialisation is accelerating along the coastal zone of some countries. The existing industries range from textile, food based industries, leather, and beverage processing to forestry and timber production, sand mining and salt extraction. In addition, there are oil refineries as well as ports and harbours.

Agriculture forms the basis of the economy and accounts for the majority of foreign exchange earnings. In the continental countries and Madagascar, agriculture industry employs between 76% and 86% of the work force and provides 28% to 66% of the Gross Domestic Product (GDP). The exceptions are Mauritius and Seychelles, where manufacturing and tourism

respectively contribute significantly to their economies.

In most of the countries, tourism has become an important economic activity and this has led to large-scale infrastructure development in the coastal zone.

The combination of poverty, rapid population growth in urban centres, poor understanding and management of resources and limited institutional capacity has resulted in a number of environmental problems in some coastal areas. The key problems include:

- over-exploitation of resources and the use of destructive fishing methods;
- coastal erosion;
- a loss of coastal and marine habitats and biodiversity; and
- marine pollution.

These problems have consequently led to a lot of local concern about the integrity of coastal fish stocks, the integrity of coastal ecosystems, the significance of coastal pollution, and the potential impact of human activities on the different coastal biotopes such as mangroves, coral reefs and seagrasses, and loss of property caused by coastal erosion. These aspects are becoming of particular interest in certain areas because of the continued introduction and development of activities such as aquaculture (e.g. algae farming, prawn farming and fish farming), and tourism related activities.

#### Description of the Intervention

Reviewing and approval of the Work Program of the Secretariat is the responsibility of the SEACAM Reference Group. The Group is composed of government representatives from the ten participating countries.

Among the proposed activities the following have been completed or initiated:

- Workshop on Local and Community ICZM Projects – Lessons Learned to Date, 4-6 March, 1998, Zanzibar, Tanzania;
- capacity building for local NGOs;
- NGO capacity building program has begun with the preparation of an NGO training manual and organisation of training seminars on project development and management;
- Eastern Africa Coastal Area Database;
- Environmental Assessment Training Program; and
- preparation of hands-on technical guidelines and training seminars in mariculture and tourism.

The Workshop on Local and Community ICZM Projects was organised jointly with WIOMSA while the other activities are being implemented by short term consultancies.

#### Evaluation

##### Performance

It is too early to assess adequately the performance and achievement of SEACAM in regard to its set objectives. The evaluation hereafter is therefore mainly focused on the design of the Project, the planned activities, and the approach adopted for their implementation.

Within a short period SEACAM has generated a lot of interest and expectation around its activities. The Secretariat has a daunting task to meet these expectations.

##### Design of the Project

The Project has not identified the entry point to the decision-making process at the regional and national levels for the information generated from its planned activities. Since the Arusha and Seychelles ICM commitments are not legally binding, the following two key questions are crucial to the success of SEACAM. First, how are the SEACAM outputs going to assist the member countries in implementing and co-ordinating coastal management activities in

the respective countries? And second, what mechanism does the SEACAM have at a national level or project level for this purpose?

#### Planned Activities

With a lifespan of two years, the planned activities are ambitious. All of the activities planned are critical for implementation of ICM in the region. However, they do not attribute equal importance in addressing the two issues that were identified by countries in Seychelles and Arusha as requiring urgent attention. These are:

- better co-ordination and collaboration between agencies/stakeholders at national and regional levels; and
- exchange of information and experience on successes, failures and lessons learned.

For that purpose, the project should focus more on the dissemination of ICM information as well as on public sector management training.

#### Approach Adopted for Implementation

Most of the planned activities that have been initiated so far are being undertaken by short-term consultants. Although these consultants have wide knowledge and experience on issues they are addressing, the external consultants should have been linked through a twinning arrangement with regional institutions, thus assisting in building capacity in the region through a transfer of knowledge. This type of arrangement also ensures appropriate ownership of the outputs generated by the region.

#### Integration

Since its establishment, the Secretariat has succeeded in developing formal and informal linkages with the regional organisations such as WIOMSA, IUCN-EARO and COI, as well as ICM projects on the ground. The intention is to make use of the existing organisations in distilling experiences and disseminating the information. A key

activity which has been implemented is the organisation of the Workshop on "Experience in Local and Community ICZM Projects-Research to-date", whereby WIOMSA and SEACAM were jointly involved.

Notably, implementation of some of its planned activities has involved institutions in the region as sources of information rather than as partners in their implementation. Since there are numerous institutions with a long-term experience in many fields, their integration or partnering would have been very valuable. For example, the activity to establish the Eastern Africa Coastal Area Database could have been undertaken by RECOSCIX as part of the institutional capacity building for the regional institutions/programme. These institutions should be given the opportunity to grow so that they can survive and compete for jobs and funding from international organisations.

#### Sustainability

The SEACAM in its present structure will complete its planned activities by December 1999. For most of the planned activities SEACAM has already secured funding and discussions are being held with different donors to secure funding for the remaining activities.

After December 1999, the plans are to shift the database to RECOSCIX, and other activities to the UNEP's Regional Co-ordinating Unit for Eastern Africa Action Plan.

In addition to the sustainability of SEACAM itself, it is important to also consider the sustainability of some activities and processes it is attempting to put in place. As indicated earlier there are a number of aspects such as integration of existing mechanisms which SEACAM needs to address in the immediate short-term to ensure long-term durability of the programs it might generate.

### 3.1.2. SUMMARY OF EVALUATION OF LOCAL LEVEL INTERVENTIONS

Several ICM projects in Eastern Africa were designed and financed for the purpose of generating management plans/strategies for the specific areas. The discussions below present the evaluation results of these plans based on the evaluation of Chwaka Bay – Paje Project, Kunduchi Integrated Coastal Area Management Programme (KICAMP), Xai Xai Coastal Area Project, and Nyali–Bamburi-Shanzu Project, as representative plans for the region. The purpose of this section is to provide additional perspective to the conclusions to be outlined in the sections below (4 and 5).

### 3.2. WEST AND CENTRAL AFRICA

The West and Central African region has had many initiatives in what may be given the generic term of coastal zone development. Many have been interventions that are within the coastal zone but had little to do with ICM because they were not conceived as such. Therefore, they are relevant interventions but with little of integration with other coastal processes and properties. Examples of these are some of the coastal erosion interventions that have been undertaken in places such as Lagos (Nigeria), Cotonou (Benin), Banjul (The Gambia) and Keta (Ghana). The reason for the inclusion of some of them is that these interventions have had (or will have) bearings on subsequent ICM activities in the countries. One intervention started out as a pollution control project but with ICAM components that have taken on greater significance in the region (Gulf of Guinea Large Marine Ecosystem Project), while the IUCN project in Guinea-Bissau was a combination of biodiversity and marine conservation, ICM policy formulation, and working with coastal communities on measures leading to sustainable use of resources. Not included in this survey are projects that are strictly sectoral – projects

such as the Integrated Development of Artisanal Fisheries (IDAF) which, despite the integrated approach, restrict themselves to sectors. On the other hand, there are also projects such as the Integrated Wetlands Management Project in Ghana that has all the elements of a country-wide framework for ICM, despite its name, and defined objectives. However, all interventions in the region are limited to projects, and projects only. Most of the countries have National Environment Action Plans, but, as the name implies, these are plans for the countries as a whole and, thus, the delimitation in the plans of the coastal area as an entity deserving of special attention (or planning) is not obvious in them.

### 3.2.1. PRESENTATION AND EVALUATION OF CASE STUDIES

Of the projects on which reliable information was obtained, three were regional in conception, and were (or are being) executed by international organizations. All others were national projects, five of which were operated by international organizations (albeit with national counterparts), and the rest, directly by national institutions responsible to the funding agencies. No intervention could be called a plan. All were projects, and almost all were devoted to institutional development and capacity building. In terms of the type of area addressed by the interventions, three of the projects (WACAF/11, GOG/LME, Coastal and Marine Resources Database Development (CMRDB)) were regional in conception and management, but national in execution (i.e. executed at country level by national institutions using regionally adopted methodology). One project – WACAF/11, had a local-level dimension, in that it sought to use case-study sites for its work. All other projects addressed problems at specific sites (wetlands, lagoons, islands, coastal strips, etc.), although projects such as the Coastal Wetlands Management Project and the IUCN project in Guinea-Bissau covered more than one specific site.

A detailed analysis of three of the interventions (listed below) follows. The analysis was based on check items in the questionnaire which was filled out for them from available information, or based on personal communications:

- The Coastal Wetlands Management Project in Ghana (funded by GEF, implemented by a national body – Department of Wildlife);
- The Gulf of Guinea Large Marine Ecosystem Project covering Cote d'Ivoire, Ghana, Benin, Nigeria and Cameroon (funded by GEF, implemented by an international organization, UNIDO, through national collaborating bodies);
- The WACAF/11 Project on Integrated Coastal Area Management Planning and Development, which operated in The Gambia, Guinea and Togo, was funded by UNEP, and implemented by FAO through national collaborating bodies.

### a) Coastal Wetlands Management Project of Ghana (CWMP)

#### General Information

The project was designed as part of the Ghana Environmental Resources Management Project (GERMP) and its Environment Action Plan (EAP); however, it was addressed to the management of five coastal wetlands that had been designated "Ramsar" sites to be protected because of birds that use the lagoons for resting and feeding during migration. The project also has the objective to develop an environmental resource management system, as well as deal with land resource management. The project sought, among other things, to "put in place the institutional and technical capabilities required for effective environmental monitoring, policy formulation and coordination..." The project was prepared by national institutions (assisted by the World Bank) and submitted to GEF for

funding. Implementation was by the Department of Wildlife (formerly the Department of Game and Wildlife), with communities being co-opted to be responsible for several activities. The five sites have different characteristics, but share the common feature of being wetlands and permanent lagoons within the coastal region, and brackish in nature. All are low-lying topographically, and carry essentially the same type of vegetation, where this has not been destroyed. The environmental situation in the wetlands varies from very stressed – e.g. the Sakumo lagoon which receives a lot of municipal waste – to mildly stressed (Densu Delta). All have human settlements around them, and it was the need to have a sustainable management of the resources of the wetlands that caused project to be formulated. Therefore, the intervention that the project introduced was based around the management of the resources by different interest groups (local communities, tourists, youth clubs). In the case of Sakumo lagoon, the primary objective was to *restore* the health of the lagoon that had been impaired by discharge of domestic effluent into a water body that had a restricted outlet to the sea. Funding was provided by GEF for the management of the sites, for public awareness campaigns and for *studies to solve* the effluent disposal problem of the Sakumo lagoon.

#### Evaluation

##### Performance

An evaluation of the performance of the project shows that it was relatively successful in achieving its objectives (estimated to be greater than 70%). It introduced successfully to the communities the concept and practice of management, it raised awareness through increase in the number of Wildlife Clubs in Ghana, and made recommendations based on the improvement of the quality of the badly degraded wetlands. Institutional capacity

for management was increased, and a scheme was recently introduced for alternative source of revenue for those whose livelihoods would be threatened by restrictions in use of resources (e.g. the use of mangroves for fuel and other wood products).

However, the project was not wholly successful in persuading all communities of the benefits of leaving tracts of land "unused", especially around those wetlands within urban areas. Also, in those communities that had agreed to undertake management measures, they wanted to have the benefits immediately, not in some nebulous future. In terms of ICM, the project provided the basis for a management plan for the sites, and for future funding of a second phase of the project.

#### Integration

Since the overall framework for management of the coastal zone was not yet in place, the project may not be regarded as integrated into an ICM. However, the project adopted measures that would complement an ICM whenever it is implemented. It is to be noted that the next project is attempting to put in place a framework for ICM in Ghana.

#### Sustainability

The sustainability of the project's work is partial, political support is present, but the financial support needed for the long-term functioning and achievement of ICM objectives remains locked up in the execution of the EAP. If the EAP is to be successfully implemented, a coastal management plan would have to be developed, and this should cater for the objectives of the coastal wetlands management project.

### **b) Gulf of Guinea Large Marine Ecosystem Project (GOG/LME)**

#### General Information

The project was conceived around the large marine ecosystem concept as the main theme, with five major elements (or modules/objectives):

- strengthening of regional institutions to prevent and remedy pollution;
- developing an integrated information management and decision-making system;
- establishing a national and regional sustainable programme for co-ordinating monitoring and assessment of the changing states of the health of the region's coastal ecosystem;
- preventing and controlling land-based sources of pollution; and
- developing national and regional strategies and policies for the long-term management and protection of the Gulf of Guinea LME.

The project was regional and covers the different types of coastal topography in the countries. A mixture of international experts prepared the project, but it was modified extensively by inputs from national scientists of the countries of the region. Execution of the project is by UNIDO, with technical inputs from NOAA and UNEP.

The design of the project is unusual in that it does not follow the norm in many ways. For example, it had major objectives which had outputs that were sometimes activities. For example, under element (Objective) 4 above, there were the following outputs:

- (i) Inventory and assessment of industrial pollution (with five activities);
- (ii) Case studies for demonstration of industrial waste treatment and management;
- (iii) Feasibility study of urban sewage waste management; and

- (iv) Development of a strategic plan outlining options for industrial and urban pollution control.

However, the most relevant section to the present study is element (Objective) 5 that has the following outputs: (a) Guidelines for Integrated Coastal Zone Management planning to guide development and conservation at the national and regional level, with (b) Mechanism for support to national institutions for long-term continuation of the LME monitoring programmes, GIS database development and coastal resources and environmental management activities, and (c) Mechanisms for regional policy and strategy formulation and implementation.

From the project concept, it would seem that the project tried to be all in all, from pollution monitoring, to policy formulation, biodiversity protection, and coastal zone management. In trying to do this, the project – at least in conception – does not seem to have co-ordinated the use of the outputs of each activity with that of the next “output”, i.e. it seems that the outputs of each activity had been arrived at, and harmonization and use of these then waited for another exercise. The project tried to achieve too many things in separate modules, and the objective of the project – pollution prevention and preservation of biodiversity – seems to be lost in the different “outputs” outlined in the project. For example the groupings under element (Objective) 5 seem disparate. Coastal Zone Management is (usually) taken as the umbrella under which to group other programmes, but not so in this project. In execution however, the project management has tried as much as possible to ensure that outputs are not just produced, but used as input into another sector of the project. Much of the criticism levelled against the project's disparate activities has been tackled through harmonization of “output” activities. The pollution assessment studies are highly relevant to planning coastal resources use,

and activities whose outputs would have ended up having nowhere to be used, have been postponed until needed. How well the project achieves the aim of harmonizing all its activities will become obvious when the project is evaluated at its completion. Since the project is nearing completion of the first phase, any evaluation can only be based on completed activities, and a thorough evaluation must await the end of the phase.

### Evaluation

#### Performance

The project may be regarded as successful in terms of performance – reports on activities set out in the project document for the first Phase indicate a success rate of 70-75%.

#### Integration

Integration seems low; ICM profiles have been produced for some of the countries; pollution assessment of land-based sources of pollution have been done, but the relationships between these and other completed activities are difficult to assess.

#### Sustainability

Sustainability for the project is dependent presently on funding from outside the region. This is also the same for all the projects analysed. None so far has the full commitment of the nations in terms of funds.

### **c) Integrated Coastal Area Management Development in the West and Central African Region (WACAF/11)**

#### General Description

The project was one of the projects of UNEP for the West and Central African Action Plan, in response to demands from the countries on measures to protect the environment. The project began in 1994

and ended in 1997. It was conceived to assist the national institutions and their staff to be able to develop ICM modules (profiles, strategies, plans etc.), but it was – of necessity – vague on subsequent activities, since it had neither the means nor infrastructure to carry out these activities.

### Evaluation

#### Performance

An evaluation of the performance of the project indicated that it achieved moderate to high success in those countries where it was active, for the period it was active. However, in terms of the *overall* objectives (regionally), its success rate can only be described as low, since it was able to operate in three out of 21 countries.

The project involved decision-makers from the beginning of the execution of the project, and also planned the involvement of stakeholders in the preparation of the strategy for combating problems identified – the criticism laid was that this involvement should have been earlier, but this would have prolonged the project unduly, cost more, and affected the outcome little, since the profile preparation was better done by national institutions with means to do so. In the selection of experts, it took cognisance of regional and local communities' requests to use regional experts in addition to international (non-regional) experts.

#### Integration

Integration of the project with other activities was low; pollution assessment studies were done in some countries, but not *planned* as inputs into WACAF/11, although the project used them, where available. In terms of horizontal integration (between agencies), this was moderately successful; vertical integration cannot be evaluated since the project life span precluded the measure of the use of the outputs.

### Sustainability

Sustainability was low, since the project was planned only to a level where further funding would be sought.

## 3.3. NORTH AFRICA AND RED SEA

### 3.3.1. PRESENTATION AND EVALUATION OF CASE STUDIES

The countries of the sub-Region have long history of civilization and urbanisation as parts of the Mediterranean which is characterized by extensive and intensive intercultural exchange and linkages. As a result north African countries have benefited from participating actively in the early development of coastal zone management activities within the context of the Mediterranean Action Plan of UNEP.

A number of case studies exist and have provided input to this Study although not all of them have been selected for an in-depth examination since they have been the subject of a similar recent evaluation exercise (METAP, 1997).

#### a) Al Hoceima Natural Park, Morocco

##### General Description

The case study refers to the development of a natural park in Al-Hoceima, on the eastern section of the Mediterranean coast of Morocco. The Park is established as part of a national policy to develop several national parks along the coastline of the country. The envisaged role of the Park is to protect nature while at the same time serving as a natural barrier against adjacent urbanization and as a source of complementary income for local farmers and fishermen. The Park is at an early stage of development as a detailed survey of the area has been elaborated, a special Park Authority has been created and a



Management Plan has been developed using METAP funds. The Park has no legal status yet. It is conceived as part of central administration policy. As a result the Ministry of Agriculture and Agricultural Development is the leading agency but two more Ministries (Fishing and Merchant Marine and Environment) participate in setting the Park. The following steps involve developing a detailed Management Plan and securing the funds for implementing it.

#### Natural Features, Socio-Economic and Environmental Situation.

The Mediterranean coast of Morocco holds traditionally a special role as an interface with Europe particularly in terms of transport and tourism but also of agricultural production with Mediterranean products. Parts of the coastal zone face increasing pressures from urbanization mostly because of tourist development. Several conflicts in the use of coastal resources are evidenced mostly in terms of competition between agriculture and tourism as modern sectors versus traditional rural activities including fishing, but also in terms of nature conservation. Traditional rural management practices are gradually abandoned in favour of more profitable activities, and land is gradually converted to urban/tourist uses. The area to be developed as a Natural Park in Al Hoceima, at the eastern part of the Moroccan coast is a typical example of such conflicts. The neighbouring town of Al Hoceima needs space for expansion of its infrastructure for tourism threatening the surrounding natural areas and open rural space. The location of the Park is between the urban area of Al Hoceima and the tourist zone to its west and is prime area for urban expansion. The creation of a Park could provide for the protection of nature and open space along the coastal zone with a land and a marine area. It is envisaged that in the Park traditional rural activities can be maintained to provide locals with opportunities for complementary income.

#### Description

The Park is created to provide for nature conservation and rural management on the basis of ecosystem protection. The area is partly covered by natural forest while part of it is considered as area for biodiversity conservation with a terrestrial and a marine section. There is also sparse rural development envisaged to be managed as such in the future. Small-scale infrastructure is also needed, such as secondary roads and small buildings (e.g. for the Park Authority). As the emphasis is on nature and open space protection a regulatory system is to be imposed. Morocco has already experience in managing a natural park so implementation does not seem to have major obstacles in the organizational sphere.

#### Evaluation

##### Performance

This intervention is part of a broader national strategy to create a "network" of protected areas. The Park is conceived as a buffer area of conservation within a zone of intense development pressures and conflicts. There seems to be strong commitment at the central administrative level to meet these objectives. The proposals are realistic and well adapted to the existing institutional capacity and experience in managing nature conservation areas. Delays in implementing the project suggest the need for review and possible revision. Internally, there is coherence between the objectives set and the plan's results. "However, since the plan's objectives were limited only to the conservation issues the plan is less concerned with analyzing the pressures and influences emanating from the outside environment upon the zone itself. This could be considered as the weakness of the plan." (METAP, 1997).

##### Integration

Integration is limited in the management plan as it is based on eco-centrism with a

limited perspective on development with the environmental perspective being quite dominant in the plan. Although there is extensive analysis of natural ecosystems, there is a limited treatment of pressures and conflicts in the area. As a result there is limited treatment of socio-economic issues (costs and benefits) in the park management plan. There is the lack of a general integrating framework ensuring co-ordination of various sectoral policies and interventions in coastal areas and perhaps over-reliance on central administrative co-ordination and management capacity. Public participation provisions are non-existent, particularly for local residents and/or local/nearby potential visitors.

#### Sustainability

There are no provisions for specific financial resources for implementing the project particularly at an operational stage. The implementation of all actions envisaged in the Management Plan will require substantial commitment and mobilisation of resources.

### **b) Conservation of Wetlands and Coastal Ecosystems in the Mediterranean Region**

#### General description

The main objective of the project is to build capacity in the participating countries in the Mediterranean region to conserve threatened, globally significant biodiversity in coastal and wetland ecosystems, primarily of lagoon type. The project does not address navigational and marine pollution issues or marine biodiversity. The project refers to 16 important wetland and coastal sites in five Mediterranean countries three of which are in Africa (Egypt, Morocco, Tunisia). The project aims also at the "closing of the Mediterranean circle" in terms of biodiversity protection and sustainable management of wetlands and coastal zones through effective regional

networking for transfer of lessons, interchange and training.

#### Natural Features, Socio-Economic and Environmental Situation

The Mediterranean coastline (26,000 km) is an area of high biodiversity, where more than 50% of the 25,000 plant species are endemic to the region. It should be noted that data is dispersed and there is no internationally recognized baseline for assessing which plants are globally threatened. It is also a critical area for migratory birds in the Africa – Palearctic flyway. The major threats to the exceptional biodiversity of these wetland and coastal ecosystems relate to uncontrolled development, urbanisation, increasing national and international tourism, land-based pollution, and unplanned or over-exploitation of natural resources, in particular freshwater. Furthermore lack of legislation which deals with the coastal zone in its entirety proves to be a major constraint for conservation. Legislation concerning protected areas is also directed towards isolated areas and does not respond to pressures from socio-economic development.

#### Description

The project consists of *three components*:

- The first aims at the promotion and capacity building of *national* policies and tools to address policy related root causes of wetland and coastal biodiversity loss. Within this context interventions in the area of *land-uses, water and wetland policy* are included. In particular the following are suggested by the plan: review and adaptation of existing legislation concerning land and water use and application of this in specific sites, promotion of selected tools through the creation or reinforcement of appropriate institutions, definition of the mechanism for land acquisition, preparation of guidelines for integrated biodiversity management, support to the

development of a national wetland policy as prescribed under the Ramsar Convention.

- The second aims at the removal of root causes in key demonstration sites. That will include preparation of a detailed management process and concurrent implementation of urgent actions.
- The third component aims at training at all levels: training of governmental and NGOs staff on *public participatory mechanisms and design of awareness programmes*, training of national staff on *the implementation of intersectoral management techniques*, training on *conservation and monitoring techniques for species, habitats and environmental factors* at the local level.

## Evaluation

### Performance

The actions envisaged respond to priorities listed in the Convention on Biological Diversity, make part of the commitments under the Barcelona and Ramsar Conventions, and are in line with the Venice Declaration.

- The project is based on an assessment of the considerable groundwork laid by the beneficiary countries. The project will be building on a firm and existing base.
- The plan incorporates a broad variety of sectoral objectives, from both an environmental perspective, i.e. water and land, and an economic one, i.e. tourism, hunting, and infrastructure acquisition, for each of the proposed site activities that have been identified. Still the activities, suggested under each of these objectives, are of a rather general character (i.e. tourism plan, water management, legal protection, alternative urban plan, etc.) and will probably be of a preparatory type. National activities include in all cases legislation, regulation, land-use policies, and to accomplish these co-ordination,

participation, training, awareness, information and networking will be used.

- *Interim* Management objectives such as “long-term site protection to conserve biodiversity” do not really suggest interim objectives. Final sectoral objectives were not defined.
- It is not clear for which of the problems identified and therefore for which of the proposed site activities, actions will be elaborated within the envisaged project.
- *Component three* of the project, related with training, is quite analytical, including interventions at all levels. Component three, in comparison with 1 and 2, is after all, of a more limited scope.
- Sectoral interventions are envisaged, for which a management committee will be responsible. The Committee will be composed of the relevant institutions from the government, the resource users, local NGOs and principal economic actors, encouraging therefore intersectoral interaction.
- The project refers to conservation and economic development, since it will pursue the development of innovative activities providing economic benefits from conservation and promotion of awareness. Management plans are suggested to support local economic development programmes and proposals for an inter-sectoral management structure. Still, no further detailed information is provided on this important issue and how it may be accomplished.
- The plan includes very specific actions (i.e. demarcation and zoning of the area) till very broad issues (i.e. support to local economic development programmes).
- It includes quite complex problems like “adapting legislation”. These kind of changes require the study of a variety of rather complex processes like urbanisation.

### Integration

- Integration of ecological issues into socio-economic ones: The plan shows a broad perception of integrated management. It refers to the natural characteristics of the area and the conflicts arising from certain activities.
- Integration of tools: A variety of tools is also examined, like institutional, economic (i.e. water pricing), as part of an integrated management process.
- Integration among national partners: Linkages and technical exchanges between the five countries and the corresponding protected areas will be promoted. A network will be established within this context.
- Sectoral integration: Many sectoral issues will be confronted in each site by a multi-sectoral site management committee.
- Vertical integration: It combines innovative land-use and wetland policies at national level, site protection and management at local level, and regional networking and exchange of experience. Accordingly, the structure of the project includes a government National Coordinator (funded by the governments/authority and therefore no GEF funds) responsible for all national aspects, a Local Coordinator for each project site, supported by a local Site Management Committee, and a Regional Facilitator, charged with organizing the regional aspects of the programme, supported by an international Advisory Committee made up of donors and government/authority.
- Participation: It includes mechanisms for taking account of local concerns and ensuring local participation and economic returns. In the second component of the project local administration staff, NGOs and local users will be involved.

### Sustainability

- Financial: Each of the participating governments/authority has undertaken to fully finance recurrent costs and other longer-term commitments beyond the end of the project period.
- Institutional: National experts will be used for training who may provide technical assistance to trainees even after the courses end.

## c) Coastal Area Management Programme for Fuka - Matrouh, Egypt

### General description

The project area is located at the north-western part of Egypt extending along 100 km of the coast and 10 km inland. It is a CAMP (Coastal Area Management Programme) intervention based on the agreement between MAP (Mediterranean Action Plan) and the Egyptian Government signed in September 1993, with the main task to prepare an Integrated Coastal Area Management (ICAM) Plan for the coastal area of Fuka-Matrouh.

The main objectives of the ICAM planning process and the plan as a final product are to:

- promote cross-sectoral understanding of and learning about coastal resources and uses, as well as use conflicts and issues;
- formulate effective, participative approaches and strategies for addressing coastal management problems;
- encourage communication and collaboration among coastal resource stakeholders;
- provide on-the-job training for the National Team members;
- start building the local, national and global support required for the implementation at the ICAM strategy; and

- make contribution in the setting up of a GIS database on the coastal resources for the study area.

### Socio-economic characteristics and environmental conditions

Fuka-Matrouh is located in the Matrouh Governorate. The population of the Governorate is 160,000 (1986 census) and the density less than one inhabitant per sq. km. The soil productivity is low and the water for irrigation is insufficient. The main local activities are within the agriculture sector (farms), while tourism and second house industry are emerging as potential new activity areas.

The region is characterized by spatial variation in land-use patterns with a coastal agricultural strip.

### Evaluation

#### Performance

Since the present project is still at an initial stage, any attempt for evaluation meets inherent difficulties. However there is evidence that some of the objectives of the project are likely to be met as there is evidence of good results in co-operation and collaboration between officials and certain stakeholders. A local (national) team is the core of planning activities with assistance from international consultants offering expertise on a variety of specialized fields (i.e. carrying capacity assessment, etc.).

#### Integration

The intervention is conceived in an integrated way with a major thrust on integrated planning in coastal zone management. So, environmental concerns seem properly integrated in development issues at least in the plan preparation stage. Institutional integration is also demonstrating positive evidence both between local/regional (Governorate) and national agencies, as well as across central administration units.

### Sustainability

There are no concrete provisions as yet, as the programme is at an early design stage. However, it is certain that to be implemented it would require tremendous commitment of resources and institutional effort being a complex intervention.

## **d) El Kala National Park and Wetlands Complex Management, Algeria**

### General Description

The project refers to a National Park and a Wetland Complex covering a total area of 7,233 ha, located in the north-east part of Algeria, around the small village of El Kala. The Park covers 40 km of the coast from Cap Rose to Cap Roux. The area is protected as a National Park since 1983.

The management project has three objectives:

- to mitigate the degradation of biodiversity within the park and the wetland complex;
- to establish a methodology for conducting Environmental Impact Assessment Studies; and
- to serve as a model for the management and rational use of natural resources in populated protected areas.

### Natural Features, Socio-Economic and Environmental Conditions

The El Kala National Park and Wetlands Complex includes an extended humid area and two pine forests. It is an important wintering site for birds in Algeria, and includes four lakes and a marsh. Two of these lakes (Tonga and Oubeira) have been identified as areas of high ecological importance at international level under the RAMSAR Convention. Besides its ecological importance, the area has several important historic, prehistoric, neolithic, and Roman sites.

Some 100,000 people live in the villages of El Kala and El Tarf, while 50,000 to 100,000 tourists visit the park. There is one hotel and two camping sites. Educational and research activities related to the fauna and flora of the park, and particularly to the endangered species have been developed. There is a climatologic station and a laboratory. Agriculture, aquaculture, fishing, forestry and grazing are some of the activities which exist within the park and which are regulated. The main problem related with environmental protection is forest degradation due to overgrazing and fires, hunting (*chasse sur les rives des plans d'eaux*), drainage of the humid zones and dredging. The main problem related to management is insufficiency of resources and a lack of well trained personnel.

### Description

The project will:

- prepare and implement a national park and wetland complex management plan;
- launch priority surveys and studies to improve basic knowledge of the immediate actions to stop further degradation of the environment;
- initiate immediate actions to stop further degradation of the environment;
- begin studies and adaptive research programmes in specific sectors likely to trigger sustainable development from the use of natural resources;
- develop environmental assessment capabilities;
- launch environmental education and public awareness programmes to muster the population's support;
- introduce the participatory approach in the local communities and seek the participation of national and local non-governmental organizations; and
- strengthen government institutions.

### Evaluation

#### Performance

- The project has a broad perception of integrated management, including interventions for ecological protection, sustainable development of economic activities, strengthening of institutions and promotion of participatory procedures. Participation includes local community, while there is no information about the exact participation of the various administrative levels and the representatives of the various economic sectors.
- The project includes both long-term considerations reflected in the preparation of a management plan and immediate ones targeted towards urgent problems which need to be effectively confronted.
- Research, education, participation and work on institutions is also included indicating the integrated character of the project.

#### Integration

- **Multisectoral coordination:** In the project area there are several activities, from tourism, agriculture, aquaculture, fishing, till research and education. Some problems have been recorded, and among the main goals of the project are the rational use of natural resources, and the promotion of sustainable development in some of these sectors. These are not exactly mentioned though.
- **Vertical coordination:** It refers to the need to promote participation of national and NGOs along with local communities. No real information is included on what levels of administration will be involved, or what department of administration.
- **Participation:** There is particular reference in one of the projects.

#### Sustainability

No provision for sustainability.

### **e) Strategic Action Programme (SAP) for the Red Sea and Gulf of Aden**

#### General Description

In October 1995, the preparation of a Strategic Action Programme (SAP) for the Red Sea and Gulf of Aden was initiated with GEF (Global Environment Facility) support. The aims of the SAP are to develop and implement a regional framework for protection of the environment and sustainable development of coastal and marine resources. The long-term objective of the project is to safeguard the coastal and marine environments of the Red Sea and ensure sustainable use of its resources. The project will enable the implementation of a series of complementary, preventive and curative actions identified in the SAP. This project concerns – among others – four African countries: Djibouti, Egypt, Northern Somali Coast and Sudan. The SAP process was led by the Regional Organization for the Conservation of the Marine Environment of the Red Sea and the Gulf of Aden (PERSGA) and funded by the GEF PDF mechanism, with supplemental support from PERSGA, the Government of Norway, UNDP and the World Bank. The GEF funding is designed to achieve global environmental benefits by removing the barriers against implementation of the SAP, which addresses transboundary issues. The SAP provided the basis for a new GEF project approved in the November 1997 work program.

#### Natural Features, Socio-Economic and Environmental Situation

Located at the junction of three major biogeographical realms and characterized by an arid coastal zone with minimal freshwater input, the Red Sea contains some of the world's most important coastal and marine environments and resources. The great variety of reef types is astounding and the number of fish species recorded from the Red Sea is extremely

high. Although it is still one of the least disturbed seas relative to other enclosed international water bodies, it is in increasing jeopardy. The issues of concern range from maritime pollution caused by international shipping, to unregulated exploitation of shared fish stocks, to widespread habitat destruction by uncontrolled coastal zone development leading to loss of important species. There is a growing risk of marine pollution, notably from maritime transport of petroleum, and environmental degradation from rapidly expanding coastal zone development including tourism facilities. The rich cultural heritage of the region, including a number of significant archaeological, historical and sacred sites on the coast, may come under increasing risk due to development pressure.

#### Description

The proposed project intervention is the implementation of a series of complementary, preventive and curative actions identified in the SAP in the aforementioned group of African countries. The project components/objectives are institutional strengthening to facilitate regional co-operation; reduction of navigation risks and maritime pollution; sustainable use and management of living marine resources; development of a regional network of Marine Protected Areas (MPAs); support for Integrated Coastal Zone Management (ICZM); enhancement of public awareness and participation; and monitoring and evaluation of programme impacts. In this context, a Programme Co-ordination Unit (PCU) within PERSGA will be established in order to strengthen the capacity of PERSGA in co-ordinating and implementing SAP activities and ensure co-operation with other environmental and development programmes in the region. Also, the project activities include the establishment of a Regional Working Group on ICZM with experts from each participating county, as well as the consolidation of national ICZM working

groups in each of the participating countries, represented by all major relevant government agencies, academic institutions, NGOs and the private sector. The public awareness and participation will be achieved by the establishment of a Regional Working Group on Public Awareness and Participation.

### Evaluation

#### Performance

The project supports complementary policy and technical measures on a regional basis for the reduction of navigation risks and associated maritime pollution; management of important living marine resources which are shared by the co-operating countries; development of a network of representative Marine Protected Areas to conserve unique biodiversity; and support for Integrated Coastal Zone Management to protect the critical interface between the terrestrial and marine environments. The project also has a high potential for replication of key elements, such as the activities for navigation risk and the management of living marine resources, in other international water programmes of the GEF.

#### Integration

This is a well considered and comprehensive project proposal which provides an excellent basis for addressing conservation, sustainable use and management of natural resources in a global region of great significance in terms of economic and biodiversity considerations. However the concept of sustainable management of living resources appears to have been solely limited to fisheries, while it should also be integrated or linked to other non-harvesting uses such as tourism.

#### Sustainability

During the implementation of the PDF SAP project, PERSGA has proven that it has provided an effective forum for regional co-operation, especially at the technical level, despite complex relationships between the

countries in the region. The present project will further the work of the regional body in facilitating co-operation on a diversity of topics of mutual concern and interest. Moreover, the bottom-up approach, whereby technical bodies at the working level in the countries act as the main driving force in the design and implementation of independent and collaborative activities, will keep the momentum going in times of conflicts.



## 4. SYNTHETIC PERSPECTIVE

### 4.1 General Overview

African countries experience a critical phase of social and political transition, but also a continuing environmental degradation (UNEP, 1997). Coastal zones in particular face mounting pressures and conflicts in the use of terrestrial and marine resources and coastal space with risks for degradation of the environment which may threaten the development potential (UNEP, 1997). In this process African countries have demonstrated an increasing involvement and commitment to pursue integrated coastal management (Sorensen, 1997) as a process to lead to sustainable development of coastal resources.

The search of particular lessons to be learned from those integrated coastal management initiatives in Africa which have been implemented, even if only partially, has identified some key mechanisms (policies or policy tools) which have "worked well" locally in the sense of providing benefits to such projects, when adopted. They relate to participation, integration, adaptive management and capacity building aspects (Table V).

The assessment of Africa's experience in integrated coastal management activities has demonstrated the following:

- Overall there are positive signs of incorporating gradually the basic principles of integrated coastal management into public policy, whether at a local, regional/sub-national or even national levels. This evidence is encouraging given the inherent difficulties in the region stemming from lagging development, scarce availability of resources, and inappropriate institutional capacities to manage complex interventions. Although direct

impacts are long-term and might not be visible everywhere, in most cases there have been *significant indirect effects* as a result of these interventions in the form of:

- better knowledge and understanding of conflicts and opportunities;
- development of data bases on the state of the coastal environment;
- training and education of scientists and administrators;
- public awareness on coastal issues, etc.
- In addition, coastal management activities have had indirect benefits to local communities in stimulating dialogue and involvement in development-environment decisions, but also to government agencies by initiating, in several cases, cross-sectoral coordination.
- International agencies and donors have significant influence on project development in Africa, as external stimuli. In many respects they might also influence opportunities for integrated coastal management in African states. Recent interventions are conceived in a more integrated manner than earlier ones which focused on sector-specific or limited-range tasks or small area problems. In general, small-scale interventions have better chances of success, but their multiplier effects are limited as they are also less amenable to duplication and transfer of experiences. Very large-scale projects of regional character seem to have much broader benefits and political support but are less successful due to the level of complexity involved and the need for long-term effort and persistence, as well as substantial commitment of resources.

- The African experience demonstrates that success depends, to a great extent, on pragmatic approach and careful plan/programme/project development on the basis of few key issues, but recognizing inter-sectoral and inter-administrative level linkages properly, taking into consideration environmental concerns in development planning and coastal resource management. Political

support, proper institutional arrangements, participatory mechanisms, commitment of adequate resources and adaptive governance systems taking advantage of existing patterns and practices of coastal resource management are essential elements in successful examples. These are presented in summary form in Table VI.

**TABLE V:  
LESSONS LEARNED FROM ICM IN AFRICA**

Approach	Mechanism	Benefits
<b>Participation</b>	<ul style="list-style-type: none"> <li>• Programme/community committees</li> <li>• Workshops</li> <li>• Resource assessment by Government staff and communities</li> </ul>	<ul style="list-style-type: none"> <li>• Ownership</li> <li>• Raised awareness</li> <li>• Improved communication</li> <li>• Built trust</li> <li>• Ensured sustainability</li> <li>• Built constituency for ICM</li> </ul>
<b>Integration</b>	<p><b>Governance Structures</b></p> <ul style="list-style-type: none"> <li>• A two-track approach – top down/bottom-up</li> <li>• Traditional management systems</li> </ul> <p><b>National Development Policy</b></p> <ul style="list-style-type: none"> <li>• Alternative income generating activities</li> <li>• Providing social services to the communities</li> <li>• Regulating resource use</li> <li>• Regulating development</li> </ul> <p><b>Science/Research</b></p> <ul style="list-style-type: none"> <li>• Rapid appraisal</li> <li>• Resources assessment</li> <li>• Indigenous knowledge</li> <li>• Technical work groups</li> </ul> <p><b>Sectors/Institutions</b></p> <ul style="list-style-type: none"> <li>• Formal agreements between institutions and programs</li> <li>• Inter-agency committees</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional strengthening</li> <li>• Improved cooperation</li> <li>• Incorporation of local knowledge</li> <li>• Improved effectiveness</li> <li>• Sustainability strategy</li> <li>• Economic efficiency improvement</li> <li>• Improved social equity</li> <li>• Improved environmental conservation</li> <li>• Improved knowledge and decisions</li> <li>• Development of appropriate methods</li> <li>• Improved co-ordination</li> <li>• Improved implementation</li> </ul>
<b>Adaptive Management</b>	<ul style="list-style-type: none"> <li>• Early implementation of actions</li> <li>• Start small with few activities that are likely to succeed</li> <li>• Learning and adaptation – internal monitoring programs/self assessment</li> <li>• Use of existing structures</li> <li>• Careful selection of host institutions</li> <li>• Balanced needs for conservation and development</li> </ul>	<ul style="list-style-type: none"> <li>• Action orientation</li> <li>• Realistic expectations</li> <li>• Flexibility in programme development</li> <li>• Institutional strengthening</li> <li>• Improved chances for implementation and follow-up</li> <li>• Policy integration</li> </ul>
<b>Capacity Building</b>	<ul style="list-style-type: none"> <li>• Training of trainers – villagers train fellow villagers</li> <li>• Making use of experimental methods</li> </ul>	<ul style="list-style-type: none"> <li>• Improved local practices</li> <li>• Awareness</li> <li>• Expanded traditional knowledge</li> </ul>

**TABLE VI:  
BASIC SUCCESS FACTORS IN THE DESIGN OF INTEGRATED COASTAL  
MANAGEMENT INTERVENTIONS**

- *Focus on key issues.*
- *Build in performance criteria*, in terms of operational objectives.
- *Secure internal consistency*, in terms of relating objectives to key issues and measures to objectives.
- *Build on contingencies* which might influence performance in a positive or negative way.
- *Develop integration*, in terms of five aspects:
  - *multisectoral* coordination;
  - *governance* (across different geographic or hierarchical administrative levels),
  - *environmental* considerations in development activities;
  - *science* in policy formulation; and
  - *participation*, or involvement of various actors and interests in project/plan/programme preparation and implementation.
- *Provide for sustainability* to maintain the activity beyond the life time of the specific plan, programme or project in terms of:
  - *Financial* viability;
  - *Institutional* viability; and
  - *Political* commitment.
- *Develop monitoring and evaluation* as built-in mechanism for adaptation.

## 4.2 Sub-Regional Overview

The overview of the various coastal management initiatives in Africa provides evidence of diverse patterns of interventions reflecting the socio-economic, political and institutional complexity of each geographic area (Table VII). Namely, there is a high concentration of integrated coastal management activity in East and Southern Africa, while Central and West Africa is the sub-region with few initiatives. North Africa has the longest experience in integrated coastal management as it benefits from the early development of the Mediterranean Action Plan of UNEP. The Red Sea and Gulf of Aden has quite limited experience in coastal management initiatives.

**East and Southern Africa** provides evidence of a high concentration of efforts and resources (and presence of donors and international activities) in coastal

management. A number of these initiatives have performed well. Socio-economic development concerns have been integrated into conservation issues of most projects. Their achievements are particularly evident in ensuring project sustainability through mechanisms to support programme development and implementation (i.e. resource user groups, village committees, management agreements, etc.). They include proper preparation and project/plan/programme development, but are also due to early political commitment to initiate such activities and the existence of a number of institutions capable to provide administrative and scientific support to policy making.

Experience in **West and Central Africa** is comparatively recent, and the number of relevant initiatives is quite limited in spite of a large number of countries in the area,

serious environmental risks and a dense pattern of urbanization along the coasts.

The majority of integrated coastal management initiatives in the sub-region are addressing the issue of institutional development and capacity building, normally an early stage in instituting integrated coastal management as a process. Many of the projects which were area specific were addressing a limited number of issues (i.e. pollution, wetlands, lagoons, etc.), lacking a broader perspective of integrated coastal management. The sub-region features some of the few large-scale co-operation schemes of integrated coastal management, which are also the most difficult to implement (but also with potential far reaching effects). Project performance is limited due to recent start, the large scale of these projects, and the limited funding available. Among the factors which hamper the development of integrated coastal management in the sub-region could be adverse socio-economic conditions, political instabilities, lack of supporting institutions with administrative and research capabilities, etc.

**North African** countries benefit from over twenty years of the presence of regional co-operation and technical support mechanisms in the Mediterranean (the Mediterranean Action Plan) and developed institutional structures (at national and local levels) to deal with complex problems. A number of initiatives exist in the area among which are found some of the more complex interventions (i.e. CAMPs - Coastal Area Management Programmes), although implementation experience in such programmes is recent for north African countries. Political support is high, while significant opportunities exist to expand such experience in integrated coastal management benefiting from large-scale funding (Euro-Mediterranean partnership). By contrast, the Red Sea and Gulf of Aden area has limited evidence of activities in integrated coastal management.













## 5. CONCLUSIONS AND POLICY IMPLICATIONS

### Further efforts needed

Africa, at least at an institutional level, is far beyond the stage of awareness of the need for integrated coastal management. The large number of conferences and supporting activities present in the region in the last two decades is a testimony to that. However, in spite of a large number of initiatives taken there is still need to develop further activities, whether programmes, plans or projects, in integrated coastal management, particularly in the area of implementation, and especially beyond the very small local scale. This type of activity would strengthen institutional co-operation across sectors and levels of government with the ultimate benefit of improving policy making and project performance in integrated coastal management.

### Learn from experience

In spite of successful initiatives in integrated coastal management in Africa there seems to be *lack of a learning process* or effective mechanisms by which successes and failures can be shared even at a national level, much more so at a sub-regional and Africa-wide ones. Much of this stems from the fragmented and isolated way some of the initiatives are administered at national and international levels. In this respect it is important to develop mechanisms of cooperation and exchange of experience (like special purpose scientific, or programme management networks) to benefit from successes in project preparation and implementation. It is important to develop a mechanism for achieving this (like PACSICOM), not as an *ad hoc* opportunity

but as a concrete process leading to sustainable coastal management in Africa.

### Share experiences

Although there is a wide diversity of social, economic, cultural, political and environmental conditions, so that programme/plan/project design might differ from area to area, there is still a great margin for better *regional co-operation*, particularly in the areas of identifying common methodologies and harmonizing activities in information gathering and processing, programming and project preparation, programme monitoring and evaluation.

### Build capacity

In programme/plan/project preparation there is need to develop mechanisms to *capture the potential multiplier effect* of successful interventions by building mechanisms of training and capacity building to strengthen existing scientific and administrative institutions.

### Improve knowledge

In this context it is important to *expand scientific knowledge* on coastal ecosystems (both human and natural) which is a prerequisite for better policies, plans and programmes.

### Need for assessment mechanisms

In programme/plan/project preparation it is also important to build in appropriate *mechanisms for evaluation* with a view to use it as an adaptive management tool.

### Action at national level

Furthermore, integrated coastal management initiatives do not necessarily lead to better management of African coasts. What is needed is to develop, on the basis of project experience, proper *regulatory and institutional measures at national level* to initiate a process of sustainable coastal management for Africa. PACSICOM provides a good opportunity for joining efforts in order to achieve that goal.

It is also important to perceive such initiatives in integrated coastal management as steps in a national process leading to sustainable development, and contributing towards the compliance to international conventions.

### Regional co-operation

Coastal areas present important challenges for African states. There is need for extending the existing experiences in managing coastal problems in an integrated way. In this effort African states have a lot to share through co-operation and continuing commitment

### Need for international support

From this assessment it is evident that there is a growing activity in integrated coastal management in Africa, but to lead to sustainable development it is critical to maintain partnerships and support from bilateral and multilateral donors and international agencies, like UNEP.

**ANNEX I:**  
**Questionnaire on the**  
**Case Studies**



## **I. BASIC INFORMATION ON THE PROGRAMME/PLAN/PROJECT**

1. What is the name of the programme/plan/project?
2. Name the institution responsible for the preparation and implementation of the programme/plan/project?
3. Where did the programme/plan/project originate? (At the national level/At the local level)
4. What are the general goals and objectives of the programme/plan/project? Please, describe.
5. What are the administrative and planning areas of the programme/plan/project? Please, describe.
6. What were the criteria for the definition of the programme/plan/project? Please describe
7. What are the major phases of the programme/plan/project? Please, explain.

## **II. GENERAL ASSESSMENT OF THE PROGRAMME/PLAN/PROJECT**

1. List the major conflicts in resource use and spatial allocation in the coastal zone (e.g. tourism vs. agriculture, industry vs. fisheries) and the main actors.
2. Was the programme/plan/project successful as compared to its objectives? (Successful/Moderately successful / Not successful). Please, elaborate
3. What were the major constraints?
4. Were the main economic activities and social issues in the programmes/plan/ project area incorporated in the programme/plan/project in an adequate way? (Yes/ Partially/Not applicable).
5. Assess the degree to which the programme/plan/project incorporated relevant environmental issues? (Adequately/ Partially /Not at all). Please, elaborate.
6. Were results of the programme/plan/project linked to the policy making and managerial decisions? (Yes /Partially /No).

## **III. ASSESSMENT OF SPECIFIC ISSUES**

### **a. Institutional issues**

1. Administrative framework
  - 1.1. Is there a coastal zone management policy framework in your country and is this framework part of a sustainable development plan? Please, explain.
  - 1.2. Has your project/program/plan been developed as part of this coastal management policy framework? If yes, what mechanism (ad hoc or formal) has been used to integrate it with the overall framework? Please, elaborate.
  - 1.3. What administrative framework (e.g. interministerial committee, coastal commission, etc.) has been used for the planning and implementation of your programme/plan/project and how was your programme/plan/project coordinated with national, regional and local authorities? Please explain.
  - 1.4. Has the programme/plan/project led to a successful integration between various governmental authorities? (Yes / Partially / Not at all)
  - 1.5. Was EIA carried out in your programme/plan/ project? (Yes/ No)

2. Legal framework

- 2.1 Does your country have an adequate coastal law and laws dealing with coastal waters? If yes, are they enforced: (Effectively / Partially effectively / Not at all). Please, explain.
- 2.2 Have the various laws and regulations affecting the coastal area environment been harmonized? (Yes / No). Please, explain.

3. Economic/financing framework

- 3.1 How would the environmental measures or recommendations proposed in the programme/plan/project be financed? (National government sources / Local government sources / Private sources / International sources). Please, explain.
- 3.2 Is the government or local authority raising funds for financing environmental expenditures relating to the programme/plan/project from the following sources: (Local taxes, User charges on natural resources, User charges on local services (sewage, etc.), Other).

**b. Environmental issues**

1. List the main environmental issues in the programme/plan/project area
2. Was the available environmental information utilized for managerial decisions? (Yes / No).
3. Did the programme/plan/project make any recommendation regarding ecosystem conservation (protected areas, sanctuaries, etc.)? (Yes /No).

**c. Human activity issues**

1. Has population dynamics in the programme/plan/project area been taken into consideration? (Medium-Term projection (5-10 years), Long-term projection (more than 10 years).
2. Have the future economic growth issues been taken into consideration? (Yes / No)
3. Have changes in the economic activities and their impact on the coastal zone been taken into consideration? (Fisheries, Agriculture, Forestry, Mining, Manufacturing, Transport, Energy, Tourism, Other services, Other)

**d. Urbanisation and land/sea use issues**

1. Have trends in urbanisation and its impacts on the coastal zone been taken into consideration? (Yes / No)
2. Were the following issues important in the programme/plan/project? (Population growth, Anticipated urbanisation, Demand for land, Infrastructure development, Demand for social services, Uncontrolled development).
3. Is the existing and future use of the marine environment in the programme/plan/ project area taken into consideration? (Yes / No)

**e. Tools for Integrated Management**

1. Which technical tools for integrated management have been utilized during the preparation of the programme/plan/project?: (Geographic Information System, Remote sensing, Strategic Environmental Assessment, Multicriterial analysis, Carrying capacity assessment, Cost-benefit analysis, Development scenario, Other). Which of the applied tools were the most useful (name)?
2. Which policy tools for integrated coastal management have been used in the programme/plan/project?:

Economic instruments:

User fees and charges  
Resources prices  
Green taxes  
Tourist taxes  
Subsidies

Regulatory instruments:

EIA  
Zoning  
Emission standards  
Planning  
Environmental audits

Procedural instruments:

Reviews  
Public hearings  
Conflict resolution  
Negotiations  
Mediations  
Audits  
Voluntary agreements

**f. Participation/public awareness/attitudes**

1. Who are the major stakeholder (interest) groups in the programme/plan/project area (for example, tourist industry, mining industry, fisheries, etc.)? Please, list.
2. Was there provision for stakeholder (interest) group participation in implementing and designing the programme/plan/project? Please, elaborate.
3. Did the private sector, NGOs and general public participate in the programme/plan /project? (Extensively / To certain extent / Not at all). Please, describe.
4. Was there developed a sense of close association with the programme/plan/ project among the affected population? (High /Medium / Low)
5. Has the programme/plan/project contributed to community cohesion or led to conflict? Please, explain.
6. Are traditional attitudes, uses and rights to the coastal zone by local groups respected in current management regime? (Yes/ No)
7. Was a social assessment prepared in programme/plan/project preparation to determine potential impacts? (Yes / No)
8. Have social or cultural norms (e.g., attitudes/values) influenced the project design and implementation? Please, explain.
9. Have attitudes changed as a result of the programme/plan/project? (Significantly/Moderately / No change).
10. Who are the principle beneficiaries of the programme/plan/project?
11. Are there significant incentives for public participation/support for the programme/plan/ project over the long term? (Yes (specify) / No)
12. Was the enhanced know-how and methodological development applied in other projects in the country? (Yes / No)
13. Have you shared/exchanged information on the programme/plan/project with other initiatives in the region (other than METAP or MAP activities)? (Yes / No)





**ANNEX II:**  
**Summary of Recommendations Presented  
to the PACSICOM Ministerial Conference  
on the 24 July in Maputo, Mozambique**



## Summary of Recommendations Presented to the PACSICOM Ministerial Conference on the 24 July, 1998 in Maputo, Mozambique

- We should actively and in a concerted manner move towards implementation of tangible economically and ecologically sustainable projects beyond the small fragmented local scale ones.
- We should strengthen the learning process and effective mechanisms for sharing Africa-wide experiences in ICM. Experiences, which are proven to be successful in one project, should be shared and we should avoid reinventing the wheel. We would like therefore to appeal to your Excellencies that we institute mechanism for periodic reviews of our initiatives based on proven methodologies, for the purpose of taking stock on our progress in ICM initiatives. The results of these periodic reviews should be fed into the PACSICOM process. UNEP in collaboration with other UN and other bilateral and multilateral agencies should assist in co-ordinating these assessments as their contribution in promoting this Pan African activity. (The actual assessments could be versed in networked centres, one in West and Central Africa, one in the North Africa and the Red Sea, and the third in Eastern and Southern Africa.
- We should build mechanisms for training and capacity building to strengthen existing scientific and administrative institutions in order to expand and use the scientific knowledge on coastal ecosystems for better policies, plans and programs
- At national level, ICM initiatives should contribute towards the implementation of national development plans and should be part and parcel of the national planning processes leading to sustainable development of coastal zones. When these ICM initiatives are so factored, a sense of national ownership and accountability will be instilled.
- Africa alone will not be able to successfully implement Sustainable Integrated Coastal Management; it is therefore there is need to increase the existing partnerships and continued support from bilateral and multilateral donors as well as international agencies are continued. It is important that the funding provided to any initiative is sufficient to enlist positive developmental impacts.



## BIBLIOGRAPHY

Burbridge, P. and Burbridge, V., 1992. *"Review of the Experiences with Integrated Coastal Management Projects by UNEP, IUCN and WWF"* (mimeo).

Hatzios, M., Lundin, C.G. and Alm, A., 1996. *"Africa: A Framework for Integrated Coastal Zone Management"*. Washington, D.C.: The World Bank.

METAP (Mediterranean Environmental Technical Assistance Programme), 1997. *Assessment of Integrated Coastal Area Management Initiatives in the Mediterranean: Experiences from METAP and MAP (1988-1996)*. Split, Croatia: PAP.

Olsen, S., Lowry, K., Tobey, J., Burbridge, P. and Humphrey, S., 1997 *"Survey of Current Purposes and Methods for Evaluating Coastal Management Projects and Programs Funded by International Donors"*. Coastal Management Report #2200. Rhode Island: Coastal Resources Centre.

Shah, N. J., Linden, O., Lundin, C.G., and Johnstone, R., 1997 *"Coastal Management in Eastern Africa: Status and Future"*. *Ambio*. Vol.VI. pp. 227-234.

Sorensen, J., 1993. *"The International Proliferation of Integrated Coastal Zone Management Efforts"*. *Ocean and Coastal Management*. Vol. 21 (1).

Sorensen, J., 1997. *"National and International Efforts at Integrated Coastal Management: Definitions, Achievements and Lessons"*. *Coastal Management*. Vol. 25. pp. 3-41.

UNEP, 1995. *"Guidelines for Integrated Coastal Area Management "*. Split, Croatia: PAP/RAC (MAP-UNEP).

UNEP (United Nations Environment Programme), 1997. *"Global Environment Outlook"*. New York: Oxford University Press.

WCED (World Commission on Environment and Development), 1992. *"Our Common Future"*. Oxford: Oxford University Press.

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