# Options for a National Integrated Coastal Management Policy

TANZANIA COASTAL Management Partnershii

# Options for a National Integrated Coastal Management Policy

Prepared by Tanzania Coastal Management Partnership Support Unit

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# Acronyms

COSTECH	Commission of Science and	NEMC	National Environmental
	Technology		Management Council
CTWG	Core Technical Working Group	NGOs	Nongovernmental Organizations
CZCDP	Coastal Zone Conservation and	NLUPC	National Land Use Planning
	Development Programme		Commission
DAS	District Administrative Secretary	NORAD	Norwegian Agency for
DED	District Executive Director		Development
DMI	Dar es Salaam Maritime Institute	RAS	Regional Administrative Secretary
DNRO	District Natural Resources Officer	RC	Regional Commissioner
DoE-VPO	Division of Environment-	REMP	Rufiji Environment Management
	Vice President's Office		Project
DTV	Dar es Salaam Television	RIPS	Rural Integrated Project Support
EAF	Eastern African Fund of the	RNRO	Regional Natural Resources Officer
	Convention for the Protection,	RPO	Regional Planning Officer
	Management and Development	SAMP	Special Area Management Plan
	of the Marine and Coastal	SHIHATA	Shirika la Habari Tanzania (Tanzania
	Environment of the Eastern		News Agency)
	African Region (Nairobi	SHIRIKISHO	Shirikisho la kuhifadhi Mazingira ya
	Convention)		Bahari Kanda ya Kusini
EEZ	Exclusive Economic Zone		(The Southern Zone
EPIQ	Environmental Policy and		Confederation for the
-	Institutional Strengthening		Conservation of the Marine
GDP	Gross Domestic Product		Environment)
GESAMP	Group of Experts on Scientific	STWG	Science and Technical Working
	Aspects on Marine Pollution		Group
HSD	Human Settlement Development	TAFIRI	Tanzania Fisheries Research
ICM	Integrated Coastal Management		Institute
ILFEMP	Institutional and Legal Framework	TCMP	Tanzania Coastal Management
	for Environmental		Partnership
	Management Project	TCZCDP	Tanga Coastal Zone Conservation
IMCIC	Inter-Ministerial Coastal Integration		and Development Programme
	Committee	TD	Town Director
IMS	Institute of Marine Sciences	THA	Tanzania Harbours Authority
IRA	Institute of Resources Assessment	TICMO	Tanzania Coastal Management
ISWG	Issue Specific Working Group		Office
ITV	Independent Television	TPDC	Tanzania Petroleum Development
JET	Journalists for Environment in		Corporation
	Tanzania	UDSM	University of Dar es Salaam
KICAMP	Kunduchi Integrated Coastal	UNEP	United Nations Environment
	Management Project		Programme
MACT	Marine Action Conservation	UNIDO	United Nations Industrial
	Tanzania		Development Organization
MEAMCOT	Marine Ecosystem Assessment and	URI-CRC	University of Rhode Island's Coastal
	Monitoring Coordination Team		Resources Center
MIMP	Mafia Island Marine Park	USA	United States of America
MLHSD	Ministry of Lands Human and	USAID	United State Agency for
	Settlement Development		International Development
MMP	Mangrove Management Project	WCST	Wildlife Conservation Society in
MP	Member of Parliament		Tanzania
MPAs	Marine Protected Areas	WWF	World Wildlife Fund

# PREAMBLE

e are fortunate that Tanzania is a coastal state. The coast contains many riches. It gives us access to international shipping routes, reserves of gas and gemstones. It is home to a quarter of our population, houses 75 percent of our industry, and includes Dar es Salaam, our largest urban center. Eight million Tanzanians share the coastal area with some of the most diverse and biologically important species on the planet. In truth, its full potential and importance is unknown. Our coastal area is of national significance. Being a coastal state, we undertake an additional responsibility not required of land-locked countries: governance of the coastal area.

Tanzania is endowed with a scenic, diverse and resource rich-coastal area. This strip of land and water supports a diversity of important natural systems, including coral reefs, beaches, estuaries, seagrass beds and extensive mangrove stands. It is of critical importance to the development of the country like a "blood vein" in the body. The coastal communities rely on the coast's resources for their livelihood the primary provider of food and income. It is of immense strategic importance to many social and economic sectors, such as shipping, fishing, tourism, trade, agriculture, settlements and industrial development. Coastal tourism, mariculture development and natural gas exploration, which are just beginning, are potential activities in national economic development and, over time, will contribute to gradual improvement of the quality of life of the coastal communities.

The coast area is a place of social importance where people of the world meet and interact. It's a place for relaxation and enjoyment with strong cultural values. Being important economically, socially and biophysically, the coastal area is indeed a national asset that requires special attention.

These resources provide a wide range of human uses. As a result, our coastal resources are under increasing pressure from the people that depend on them for food and income. In addition, new powerful forces are also competing for these resources. Today, coastal resources are barely sustaining our coastal population, and unless action is taken quickly, coastal resources will not support tomorrow's coastal communities.

Today there are large economic developments being proposed and built, and more are expected to come. Such large economic undertakings will obviously affect a number of sectors. Under the current management system, there is no place within government to organize these undertakings, connect them to good practices and procedures, and ensure that they contribute to the nation's development goals. This is not to say that nothing is being done. Many responsive measures are being taken at local and national levels, by local and central governments, companies, nongovernmental organizations and local communities to manage coastal resources sustainably. However, these measures are often done independent of one another and are implemented within existing sectoral policies. As a result there are often conflicting uses of coastal resources, ongoing and wide-scale resource degradation, and a lack of coherency in addressing coastal problems.

The challenge we are now facing is how to harness and manage the coastal resources in an equitable and sustainable manner. This can be achieved through a well-coordinated and integrated approach that unites the government with the community, science, management and sectoral interests, at both the local and national level.

Tanzania is committed to sustainable coastal governance and has been in the forefront in advocating integrated coastal management (ICM). Tanzania is a party to a number of international and regional conventions that recognize the need for an integrated approach in managing the coastal area. The need to initiate a national process for developing policy for ICM is recognized by all these framework conventions. In translating regional and global agreements into efforts to address our needs, several locally based coastal programs have been initiated. However, a clear mechanism to link and coordinate these programs and scale up the experience to the national level has been lacking. A policy framework that links and coordinates these fragmented local and sectoral coastal experiences is needed. The purpose of the coastal policy is not to replace the sectoral policies but rather to fill existing gaps and strengthen them.

Tanzania needs to guide and direct the future of coastal and marine development. A balance between development and conservation of coastal and marine resources is achieved when people respect, value and responsibly manage the resources. A policy that embraces the integrated management approach is critical for this endeavor. It is anticipated that a coastal policy would enhance the efficiency of sectoral policies.

This document reflects the collective views of the sectors and stakeholders as to why a coastal policy is needed and what the policy should address. Its creation began in early 1998 with the formation of a 15-member inter-sectoral working group (including private sector) to capture Tanzania's coastal management issues. They began by collecting, reviewing and synthesizing available information from sources in and outside the country. Annex A contains a list of the synthesis documents that contribute directly to this document. The working groups then spent five weeks visiting each coastal district and talking to people from government and civil society. They presented issues to a meeting for directors in October 1998. The working group then returned to the districts and villages to develop a vision, principles and strategies for addressing these issues. These were presented and confirmed at a meeting of directors in April 1999. These discussions have led to the production of this document that includes the thoughts and hopes of our coastal people. It starts with the issues discussed in October 1998, incorporates the vision, principles and strategies accepted in April 1999, and moves towards policy by providing options on how to carry forward ICM in Tanzania. In September 1999, these options were reviewed by the working groups and by representatives from each of the five local coastal management programmes at a three-day retreat hosted by the Tanzania Coastal Management Partnership.

This document demonstrates that sectors can work together, and central government can work with local governments and resources users to identify and develop solutions to pressing problems. It demonstrates how an open and transparent process can be conducted.

It is hoped that by applying the principles and practices of ICM, Tanzania can acquire maximum benefits of the coastal resources for our people's development, without degrading the associated delicate resources.

# INTRODUCTION

Tanzania's coastal resources'. The coastal and marine environment represents one of the country's most important areas. It requires an integrated approach to achieve sound management of these areas. The options presented in this paper are drawn from the experience of existing initiatives working to address coastal issues and problems at the local level. This paper also draws on 16 months of forums and meetings to discuss how Tanzania's coastal and marine resources could be managed in a sustainable way<sup>2</sup>. This paper is based on experience and reality, not theory. Integration and coordination have always been the keywords towards sound management and sustainable utilization of resources. The main challenge is how to put into action the integration and coordination called for by the people of the coast.

An integrated coastal management (ICM) policy, as this paper proposes, is the starting point. It is intended to provide a foundation for improving the quality of life for human communities that depend on coastal resources, while maintaining the biological diversity and productivity of coastal ecosystems. Tanzania does not have, but critically needs, an integrating policy that specifically addresses coastal resources use and allocation. A coastal policy will guide and direct future actions and help strike a balance between development and conservation of the coastal and marine environment. It will enhance the efficiency of sectoral policies by linking them and filling the existing gaps. Without an ICM policy, Tanzania and her people will continue to experience sector-by-sector decisionmaking. In the face of growing economic, social and political pressure, this could not only be disastrous for the coastal resources, but for the people of the coast and those that wish to invest there.

The population on the coast is already poor. By 2025 the population will be much larger, perhaps as large as 20 million. Unless serious and strong action is taken now, the future population will be much poorer than today.

In the intervening 25 years, Tanzania will be challenged to answer many difficult questions. If answered properly, opportunities can be siezed for economic growth that supports local needs. If unanswered, economic opportunities, both large and small, will either be lost or have unfavorable consequences.

Accompanying these lost opportunities will be a steady and continuous degradation of the natural environment as the growing population struggles to feed themselves. Today's system of sectoral management does not consider the uniqueness of the coastal area and is not strong enough to reverse these trends. The business-as-usual attitude (the practices of the last two decades) must change. ICM moves from the business-as-usual attitude to an enhanced system that is capable of linking sectors and connecting them to district decisionmakers and resources users.

### FACTS ABOUT the COAST

- Tanzania's coastline stretches for 800 km. It has five regions Tanga, Coast,
   Dar es Salaam, Lindi and
   Mtwara and three large islands: Mafia, and Unguja and Pemba (which make up Zanzibar).
- About two-thirds of the coastline has fringing reefs, often close to the shoreline, broken by rivers and outlets such as the Pangani, Ruvuma, Wami, Ruvu and Rufiji Delta.
- The continental shelf is
   5.8-km wide, except at the Zanzibar and Mafia channels where the continental shelf reaches a width of about 62 km. The nation's total estimated shelf area is 17,500 km<sup>2</sup>.
- The Exclusive Economic Zone (EEZ) (shared with Zanzibar) has an estimated area of 223,000 km<sup>2</sup>.



The United Republic of Tanzania is located on the eastern coast of Africa, about 1°-11° 48' S and 29° 30'-40° 30'E. It is composed of Mainland Tanzania and the islands of Zanzibar (Unguja and Pemba). The Indian Ocean bounds the country on its entire eastern frontier. Tanzania has an estimated total land area of 945,200 km<sup>2</sup> with Mainland Tanzania covering an area of 942,800 km<sup>2</sup>. The Zanzibar islands cover an area of 2,400 km<sup>2</sup>; however, this policy addresses the issues of Mainland Tanzania, not those of Zanzibar.

### OUR COAST, OUR PEOPLE

The five coastal regions encompass about 15 percent of the country's land area and are home to approximately 25 percent of the country's population. Recent estimates indicate that the population of the five coastal regions has increased to about eight million, with a growth rate ranging between two and six percent (Linden and Lundin, 1996). A doubling of the coastal population can be expected in as little as 12 years. That could mean 16 million people living on the coast in 2010, which is about 110 people per square kilometer. These people will be catching decreasing fish stocks, cutting down mangrove forests and farming the limited land suitable for agriculture.

Most rural coastal communities are very poor. Hence, addressing the issues associated with the small-scale, sustainable use of coastal resources is critical to poverty eradication and slowing rural to urban migration. The economy of the coastal communities depends mainly on small holder farming, subsistence forestry, artisanal fishing, lime and salt production, seaweed farming, livestock husbandry, and small-scale trade handicrafts. Most families in the coastal regions must be involved in more than one economic activity so that if one income to the household—fishing for instance—fails, the family still has other sources of food and income. The daily struggle for food and household income keeps people from improving their situation. Underlying this difficult situation is the poor communication and transportation infrastructure, lack of social services and lack of nonresources dependent jobs.

### Declining Resources, Poorer People

Pressures on the coast are increasing. More and more people depend on the water and land to generate income and provide food. They are vying for the same limited resources; this competition, coupled with the desire to increase income, has increasingly led to destructive practices. Dynamite fishing, although in-check today, ran rampant just a year ago. International fishing trawlers are impacting fishery resources key to local users. These resources have declined rapidly in the last five years. Fish catches steadily rose until 1990 when they reached 52,000 tonnes, 5,000 tonnes above the estimated optimal yield. Catches dropped by 32 percent from 1990 to 1994 while effort remained the same, a clear signal of overfishing. Exploitation and uncontrolled use of forests and mangroves occurs every day. Coastal forests have been reduced from 59,300 km<sup>2</sup> to only 1,050 km<sup>2</sup> during the last two decades. Approvals for large-scale development, which threaten large tracks of coastal area and the people that live there, are becoming more frequent. Coral mining is increasing to feed construction along the coast. In the south during

# Tanzania's Coastal People

#### Per Capita GDP (1994)

Tanga – 60,021 Tsh Lindi – 38,340 Tsh Coast – 22,624 Tsh Mtwara – 59,533 Tsh

- A boy born in Tanzania today would have an average income of 308,000Tsh when he is 15 years old.
- The regions of Mtwara and Lindi have the country's highest mortality rate for infants and those under five.
- Coast, Lindi and Mtwara are among the regions with the highest percentage of underweight children.
- Only 22 percent of the people in coastal rural areas have access to safe water.
- Only 50 percent of the population in Lindi have access to piped water.
- Men living in coastal regions usually die by age 47, women by age 50.

# Threats *to the* Coast

- Seventy-five percent of Tanzania's heavy industries are located along the coast, primarily in Dar es Salaam and Tanga.
- Extraction activities like sand mining, quarrying, salt production and coral mining destroy coastal habitats but are seen as important income generators.
- Salt production that involves construction of salt pans is common in Dar es Salaam, Bagamoyo, Tanga, Lindi, Kilwa and Mtwara. This activity causes soil erosion, mangrove clearing and salination of underground water in coastal areas.
- Coral mining results in loss of scenic value due to abandoned pits, shore erosion and loss of biodiversity.
- Coastal agriculture exerts pressure and may cause clearing of forests due to shifting cultivation, soil erosion and land degradation. Agro-chemical pollutants are associated with intensifying coastal agriculture.
- Overexploitation and uncontrolled use of coastal forests and mangroves leads to the destruction of breeding and nursery grounds of finfish and shellfish.
- Destructive fishing methods like dynamiting, beach seining, poisoning and bottom trawling put enormous pressure on the reef fishery and reef habitat.

1998, in just two regions, 80,000 tonnes (the equivalent of 8,000 lorries) of live and dead coral were estimated to be mined and used for lime production.

In population centers, sprawl and uncontrolled land use is rampant. This is made worse by unplanned settlements, both in urban and rural areas, where there is no access to potable water and sanitary systems. In some regions, 15 to 23 percent of today's households do not have toilets, leading to health problems like cholera and diarrhea.

On the horizon is increased pressure from tourism, industry and population growth. As new infrastructure such as roads and airports is developed, quiet coastal communities will be facing the same challenges as Dar es Salaam or Mombasa, our neighbour to the north. These include severely degraded water quality (both marine and fresh), uncontrolled land use, restricted access to the coast for traditional users, and a resource base that can no longer support fishers and mangrove cutters. In less developed areas, pressures still pose a serious threat. Managing local resources will become increasingly challenging as the population grows and the number of investors, both foreign and domestic, increases.

# SIGNIFICANCE of the COAST to the NATION'S DEVELOPMENT

Tanzania's 800 km of coast is of critical importance to the development of the country. The five coastal regions contribute about one-third of the national gross domestic product. Currently, 75 percent of the country's industries are in these coastal regions. Newly initiated activities include coastal tourism, mariculture development and natural gas exploitation. These are seen as potential resources for national economic development.

There is also a substantial and untapped potential for agriculture, fisheries, shipping, urban development, small-scale mining and manufacturing. These important opportunities have not been realized. In Mtwara, the area under cultivation is about 270,300 hectares, about 55 percent of the region's total arable land. In some years, the region is a net importer of food. Another example, export of cashew nuts was over 100,000 metric tonnes during 1972-74, compared to less than 60,000 metric tonnes in 1997. Clearly, much of Tanzania's agricultural potential has not yet been developed. This is just one of many potential sectors to be developed. Consider tourism, arrivals could, with the proper infrastructure, double between 1994 and 2000. The Songo Songo gas field is preparing to come on-line and contribute significantly to the nation's economy. This is just one of several potential gas and oil fields in Tanzania. In 1996, 21 gemstone dealers were licensed to purchase and sell in the Mtwara region, but only half extracted and marketed minerals. Those 10 dealers marketed gems with a combined value of 113.2 million Tsh. This could easily double or triple under the right circumstances. These economic opportunities need to be developed for Tanzania as a nation and for her people. The coast's untapped potential must be harnessed, but it must be done with the appropriate safeguards that link growth to wise management. The pressures on these resources will grow and, like other countries faced with an expanding poor population, will likely collapse. People's quality of life, which is inextricably tied to the resource base, will continue to decrease unless development moves hand-in-hand with local goals and aspirations.

# WHY BUSINESS-AS-USUAL Isn't WORKINGthe CONSEQUENCES of DOING NOTHING

The current approach to coastal management is based on sectoral policies. The sectoral policies are substantial but only partly address coastal problems. The extent to which each of these policies addresses coastal and marine issues varies according to the extent of the resources being addressed and their associated issues and problems. Although these policies are in place, the coastal people are getting poorer, and resources continue to disappear at an alarming rate. The persistent coastal problems are clear indicators of inadequacies in the existing policy framework.

In addition to policy change, Tanzania needs enhanced implementation mechanisms and approaches to solve the complex challenges of coastal and marine management. It lacks feedback mechanisms between coordinating agencies, decisionmakers and implementing authorities at all levels. The lack of management capacity of relevant agencies, particularly at district and village levels, is further frustrating effective governance of the coastal resources. Existing laws and enforcement vehicles need to be strengthened and more widely supported.

Since management of the coastal environment is guided by fragmented policies, there is no mechanism to ensure sound management before development and the impacts from development. This is attributed to gaps and overlaps of sectoral policies; it is often unclear who has the mandate to manage resources and economic activities that cut across sectors. As a result, there are conflicting uses of coastal resources. A multi-sectoral dimension and focus is the best way of coordinating sectoral initiatives.

The existing situation is serious. Currently there are large economic developments being proposed and built and more are expected to come. People on the coast are getting poorer; they are not benefiting from the current economic expansion Tanzania is enjoying. Dependency on resources is paramount to the survival of coastal families; however, these resources are being degraded at an alarming rate.

The challenge facing Tanzania is how to harness and manage the coastal resources in an equitable and sustainable manner. This can be achieved through a well-coordinated integrated approach that unites the government with the commuImportant experience can be drawn from the existing local management programmes that currently apply coastal management approaches and principles. These include:

- Tanga Coastal Zone
   Conservation and
   Development Programme
   (TCZCDP)
- Kunduchi Integrated
   Coastal Area Management
   Project (KICAMP)
- Mafia Island Marine Park (MIMP)
- Rural Integrated Project
   Support (RIPS)
- Rufiji Environment Management Project (REMP)
- Mangrove Management
   Project (MMP)

### Definition of Integrated Coastal Management (ICM)

...a continuous and dynamic process that unites government and the community, sciences and management, and sectoral and public interest in preparing and implementing an integrated plan for the protection and development of coastal ecosystems and resources. (Source: GESAMP, 1991)

# Goal

...to improve the quality of life of human communities which depend on coastal resources while maintaining the biological diversity and productivity of coastal ecosystems. nity, science, management and sectoral interests at both national and local levels. Without this, opportunities for economic growth will be lost. Worse, economic development that does proceed may be less then optimal and take advantage of weaknesses in the management system. Unmanaged or undesirable economic growth could prevail in Tanzania, its impacts crushing her people. Possible impacts include reduced water quality and supply, reefs stripped clean of fish, and vast areas of mangroves lost for individual economic gain. Considering today's trends, this is not an unrealistic assessment.

### WHAT CAN an INTEGRATED COASTAL MANAGEMENT POLICY DO?

An ICM policy will improve the decisionmaking process by providing clarification and guidance on resource use and allocation at both the national and local levels. This translates to increased power and access to resources by the communities. Currently, agencies responsible for coastal resources management are governed by sectoral legislation. Thus, decisions about coastal resources are made individually by sectors. There is no policy linking the different sectors' decisionmaking criteria around key issues or problems. It is not clear where the final authority to make decisions on proposed development resides. Furthermore, proactive planning of coastal resources by the resource users is not clearly supported by the reactive management system currently in place.

The ICM policy will provide a framework and process for linking different sectors and harmonizing their decisions about coastal resources. A policy will support decentralisation and provide a structure that is conducive to local resources management. A national policy will support existing initiatives working to conserve, protect and develop coastal resources. It will build human and institutional capacity at all levels.

An ICM policy will facilitate and enhance partnerships among resource users and their actions and decisions on coastal resources utilization. It will also provide direction on management that acknowledges the interrelationship among all users and the effect each one imposes over the other. It will ensure rational decisions across sectors concerning the conservation and sustainable use of coastal and marine resources. This will overcome fragmentation inherent in single-sector management approaches on fishing, mining, gas exploitation, coastal agriculture, coastal forest conservation, tourism and many others. An ICM policy will also steer effective management through integration of all relevant sectors. Ultimately, it will lead to a maintained and improved coastal resource base that is among the mainstay of the country's economy. Further, a healthy coastal resource base will lead to improved well being and livelihood of communities that depend solely on coastal resources.

### Relationship of Integrated Management to Sectoral Management

Sectoral management is and will remain important to the wise use of Tanzania's coastal resources. A coastal initiative seeks to catalyze cross-sector planning and action, fill gaps and serve as a neutral facilitator. A coastal initiative places emphasis on stakeholder participation, compliance to laws and regulations, support for research, training, education and awareness at all levels. The relationship between an integrated approach to sectoral management is characterized by the current mariculture guidelines that are being created by an inter-sectoral team backstopped by the Tanzania Coastal Management Partnership. This will be implemented through the fisheries sector. Thus, ICM supports sectors, not replaces them.

At the national level, many government sectoral policy statements (including land, fisheries, environment, forestry, tourism, etc.) recognize the need for an integrated and participatory resource management approach to resolve issues and take advantage of development opportunities. A coastal initiative provides the mechanisms for achieving inter-sectoral management of resources and people in the coastal area. Currently, these mechanisms do not exist. Decisions are made sectorally with little coordination between offices in central government and less then optimal interaction with local decisionmakers.

# MEETING REGIONAL and INTERNATIONAL COMMITMENTS

### Integrated Coastal Management Experience at the Local Level

There are several locally based ICM programs in Tanzania. Tanga is home to Tanzaniaís largest coastal zone conservation and development programme. Supported by the Tanga Regional Fisheries Office, the programme works at the district and village levels to address critical coastal management issues such as dynamite fishing, mangrove conservation, and the development of alternative livelihoods. The programme is successfully addressing a broad spectrum of issues ranging from resource conservation to socioeconomic services. Since the initial planning stage, the villages have developed and undertaken specific action plans. Village initiatives include the adoption and enforcement of by-laws; use of patrols to prevent destructive fishing and illegal mangrove cutting; fishing gear restrictions; and replanting of mangroves in degraded areas. Capacity and issue awareness at the village and district level has been increased. There has been a noticeable change in attitudes and behavior between villagers and government staff and about their responsibility for safeguarding the coastís resources.

There are, however, many challenges that need to be overcome before the full potential of ICM in Tanga will be realized. Several of these barriers that a national policy can address, include:

- Lack of effective coordination among sectoral agencies in the districts
- Too much dependence on directives from central government to solve local problems
- Future role of regional government (confusion following the government reforms)
- Lack of timely support from central government agencies
- Unsatisfactory linkages among districts to solve common problems
- Unsatisfactory performance of outside agencies to support enforcement
- Long-term financial sustainability of local ICM programmes (e.g., improving revenue collection and cost sharing mechanisms)

Tanzania is a leader within the Western Indian Ocean region in the field of ICM. This is a result of substancial experience in ICM and a long standing political commitment to make effective ICM a reality.

At the regional and international level, Tanzania has actively supported ICM principles and programmes. The government of Tanzania has signed and ratified international conventions that endorse the importance of ICM including the

# COASTAL MANAGEMENT: EXAMPLES of TANGIBLE BENEFITS

#### United States

- Federally-approved state coastal management programs cover 97 percent of the nation's shoreline.
- Tidal wetland losses have been dramatically reduced in six states; for example, as a result of a review for all oil and gas-related permit applications, wetlands loss in Louisiana has been reduced from 1,500 acres/yr in 1982 to 200 acres/yr in 1990.
- Public access to the shore has been increased; for example, in California, where this issue has been a priority, 2,300 new public access sites were established over the last 25 years.
- State coastal management programs helped more than 300 cities revitalize urban waterfronts through waterfront parks, boardwalks and fishing piers; conservation of historic buildings; protection of ports and water-dependent uses; clean-ups of contaminated sites; and organization of festivals that celebrate the coast.

#### Sri Lanka

- The spread of illegal coral mining has been stopped; in two areas with local-level ICM programs, illegal mining has been halted.
- New hotels are constructed with adequate setbacks, reducing the demand for public expenditures for expensive shorefront protection.
- Avoidable and costly environmental impacts from new development have been reduced through early, and typically positive, interaction between coastal program staff and developers.
- Incomes of Rekawa Lagoon residents are increasing as a result of implementation of an integrated management plan focused on fisheries rehabilitation and tourism development.

#### Australia

- Through CoastCare, multiple proactive coastal projects, including dune rehabilitation, provision of access and recreational facilities, have been completed that both improve Australia's coast and build much-needed linkages between civil society and government.
- The semi-autonomous Great Barrier Reef Marine Park Authority is implementing a multiple use management regime for the world's longest barrier reef.

#### Ecuador

- Citizens' rights and responsibilities for mangrove use in specific areas are being negotiated and recognized by government, then formalized in user agreements.
- Enforcement of existing coastal environmental laws is being improved through improved capacity and deployment of existing field personnel. This is through participation in a multi-agency ranger corps organized under the leadership of seven port captains along the coast.

#### **Philippines**

- Coral reef condition and fish catch have been improved in numerous locations through the creation and implementation of community fisheries reserves. New eco-tourism opportunities have also resulted.
- Through a multi-year, multi-faceted investment in training, the capacity for integrated planning and management has improved significantly at provincial and municipal levels.

Nairobi Convention and its Protocols, the Convention on Biodiversity, and the Convention on Climate Change. Tanzania also hosted and chaired the first regional inter-ministerial conference on ICM for Eastern Africa and the Island States held in Arusha (1993) and participated in the second conference on the same topic held in Seychelles (1996). Tanzania signed resolutions resulting from these conferences that provide the basic roadmap for ICM development and implementation at the national level. Most recently, Tanzania participated in the Pan-African Conference on Sustainable Integrated Coastal Management (PACSICOM) held in Maputo, Mozambique (July 1998). It was recognized that African coastal states need to move towards more integrated policies and practices of sustainable ICM for improving the quality of life for African coastal communities.

In addition to meeting regional and international commitments through the implementation of an ICM policy, Tanzania will be sending a clear message to possible development investors that the country has made a serious commitment to the practice of integrated management of coastal resources. Today's donor community is making significant investments in ICM programs around the world. Although this is not and will not be the focal point, being able to attract appropriate investment to solve real problems is understood to be necessary.

#### This paper contains elements of and options for an ICM policy. It is divided into five major sections:

- ICM Issues
- Vision, Goals and Principles for ICM
- Policy Statements and Options for Implementation Mechanisms
- Options for Institutional Structure
- Options for Institutional Placement

Sections one, two, and the policy statements in section three represent the final recommendations made by an inter-sectoral group of directors that met in April 1999. The options for implementation are included in sections three and four; section five presents options for consideration. Each option presents a different degree of power and authority for implementing a coastal policy. These options are here to stimulate discussion and dialogue between those who will ultimately be responsible for their implementation. They have been carefully engineered and are based on 18 months of dialogue with user groups, resource managers, private and nongovernmental partners, and decisionmakers (see Annex B). Most recently, the options have benefited from an extensive review by the Tanzania Coastal Management Partnership's working group members and by representatives from each of the five local coastal management programmes. These options seek to provide the appropriate range of authority and power to move ICM from a discussion to actions and solutions for the people of the coast.

"Activities and results coming from programs like the Tanga Coastal Zone are leaving no doubt the integrated management that involves all sectors and the community, is the only answer to coastal management problems. But we need a national framework to link local initiatives to national development aspirations."

Capt. Mkuchika, Regional Commissioner, Tanga.

Tanzania has ratified a number of international conventions concerned with natural resource and environmental management that reflect national policy, and require domestic legislation to implement. Many have substantial importance for coastal resources.

"We have been leading the Eastern African region on ICM issues—we should not be complacent but move quickly and boldly towards effective policy"

Hon. Edward Lowassa, Minister of State, Vice President's Office

# Integrated Coastal Management Issues<sup>3</sup>

International experience clearly suggests that successful policy formulation requires a series of clear choices be made, and these strategic choices be made at the appropriate time in the cycle of policy development, with sufficient consultation and information. The first strategic choice concerns the scope of policy. International experience emphasises the importance of maintaining a strategic focus in developing and implementing a coastal management programme. The programme must be selective about which issues to address and where and when to address them. Programmes fail when they try to do too much at once or are spread too thinly. The scale, scope and complexity of coastal policy usually increase through the successive completion of policy cycles.

The issues presented on the following pages frame the strategic focus of the policy. The issues have been developed during the last 18 months through an ongoing consultation and refinement process. This consultation process, which included over 150 institutions and organizations and over 300 individuals (see Annex B), culminated with a meeting of 32 directors from key sectors to review, revise and approve these issue areas. This meeting was held in October 1998 and was chaired by the Permanent Secretary in the Vice President's Office.

# ISSUES RELATED to IMPROVEMENT of the WELL BEING and LIVELIHOODS of ALL BENEFICIARIES of the COASTAL RESOURCES

Most rural coastal communities are very poor. The economy depends mainly on small-holder farming, subsistence forestry, artisanal fishing, lime and salt production, seaweed farming, livestock husbandry and small-scale trade handicrafts. While most families in the coastal region are involved in more than one economic activity, many remain well below the poverty line. Lack of food security, communication and transportation infrastructure, livelihood opportunities and social services, coupled with poor performance of agriculture and fishing, are major concerns which have resulted in a substantial rural-urban migration, especially to Dar es Salaam. To reduce the tendency of rural-urban migration and to improve village life, there is a need to identify actions to increase the productivity of current economic activities in rural areas; promote alternative, environmentally sustainable livelihood opportunities; and strengthen infrastructure and social programs in rural areas. Hence, addressing the issues associated with the small-scale, sustainable use of coastal resources is critical to poverty alleviation and slowing rural-urban migration.

### The following are the economic activities upon which coastal villagers mainly depend. Together they form an intricate and diverse economic support system.

*Small-scale agriculture* – Coastal agriculture is dominated by small holders who form the core of the economy. The majority of these farms are located in areas with poor infrastructure, limiting market opportunities. These areas have limited availability and timeliness of supplies such as fertilizer. In these cases, credit is important. Underlying this is that there are few crops well suited to the agro-ecological climate of the lowland coastal villages. In places like Tanga, much of the agricultural land has been planted with coconuts and is held in a tangle of inheritance rights. The rewards of maintaining the coconut trees do not justify the effort, thus they are left to bush, providing ample habitat for wild pigs and monkeys that damage the crops. For instance, in the more remote villages in Tanga where crops are left unguarded, these animals may devastate an entire crop. Because of the pressure from vermin, part-time farming is very risky in these villages. Conflicts also exist between livestock owners and farmers. Since few residents have invested in farming, much of the land around villages is natural bush. Cattle and goat owners have expanded their herds and allowed them to graze in potential agricultural land. Due to population increases in the coastal area, food security is urgently needed. With little success in increasing coastal agricultural productivity, more arable land has to be turned into agricultural production resulting in soil erosion and sedimentation.

*Artisanal fisheries* – Artisanal fisheries feed coastal residents and contribute more than 96 percent of the nation's total marine fish landings. The artisanal fishery is concentrated in inshore shallow waters because of the limited range of the fishing vessels. During the period between 1984 to 1994 (the last year for which data are available), the annual fish catch ranged between 45,000 and 54,000 tonnes for the mainland. Also during this period, the number of fishers increased each year. Until 1990, increased effort resulted in increased catches; however, during the last decade, catches have been in decline, perhaps signaling the fishery is over-exploiting the stocks. Coupled with increased overall fishing effort has been the introduction of destructive capture techniques–including dynamite fishing or blasting, beach seining and poison fishing–all of which exacerbate the problem. Commercial fishing trawlers are also encroaching on local fishing grounds, causing localized damage and reducing stocks.

*Small-scale mariculture* – Tanzania has an emerging, village-based seaweed farming industry that makes important contributions to the village economy. Continued growth and diversification of the small-scale mariculture industry in

# Messages from the VILLAGE

"The village communities are taking full responsibility for monitoring dynamite fishing.We have given them power and they are making sure dynamite fishing does not resurface again." — Mrs. Fatuma Mikidadi, DC Mtwara

"In this village people cannot let anyone tamper with their sea.We are organized under the village natural resources committee and we ensure that destructive fishing is not practiced." — Mwanashuru Mzee of SHIRIKISHO Mtwara

"We are grateful to the government action—dynamite fishing has stopped here and we now can get sardines," — Fishers at Msimbati Village in Mtwara

"Conflicts in fishery resource use are increasing between industrial and small-scale artisanal fisheries. Local fishermen complain about the destruction of artisanal fishing gear and damage to the sea floor by industrial trawlers."— Participant at the TCMP Retreat, Sept 1999

"Seaweed farming in Tanzania has great potential to contribute to the national economy and to improve the quality of lives of coastal communities whose livelihoods depend on coastal and marine resources." — Fazal Murtaza, Kingsway International Seaweed Marketing Company Tanzania is expected at the village level where mariculture is an alternative form of crop production and can provide income and protein.

*Coastal forests and mangrove cutting* – Only remnants of the once extensive ancient forests of East Africa remain in Tanzania, occurring as isolated patches on hilltops and offshore islands. Extensive mangrove stands still remain, occupying about 115,000 hectares of the coast. They are important and valuable resources to local communities, providing food, fuel and building materials for both home use and sale, as well as playing a vital role in Tanzania's rich coastal ecosystem.

*Small-scale businesses and informal sector* – In coastal regions, particularly in urban areas, the small-scale businesses and informal sector are becoming substantial components of the economy. The number of people involved in these economic activities has increased, while the economic situation has worsened and real wages have declined. The activities have expanded faster than official GDP, but they are not measured by official statistics. The small-scale businesses and informal sector have an important role to play because they provide income-earning opportunities for large numbers of unskilled and jobless people.

*Extraction of coastal resources* – Extraction activities along the coastal areas of Tanzania are important contributors to the local economy, both in terms of monetary input and supply of raw materials for construction. There are three main extraction activities along the coast: (1) Sand mining—for use as a building material within the area it was mined; (2) Quarrying—targeting materials other than sand, especially coral, for construction; and (3) Coral extraction—one of the most destructive activities now allowed and even encouraged by some regional and district authorities. Live and dead corals are extracted from reefs using pick axes, crowbars and other implements.

The issues that a national policy must address include:

- Maintaining and enhancing coastal resources for local use
- Identifying and supporting new opportunities to supplement village incomes
- Reducing pressure on the resource base
- Developing mechanisms that encourage local stewardship and management of coastal resources

ISSUES RELATED to PLANNING and MANAGING ECONOMIC OPPORTUNITIES WITHIN the COASTAL AREA, INCLUDING TOURISM, AGRICULTURE, MARICULTURE, INDUSTRY and OIL and GAS EXPLORATION

Development and use of the coastal area is expected to increase, creating economic opportunities as well as putting unprecedented pressure on both the people and resources of the coast. To maximize benefits of current and future development, careful shorefront planning guided by clear principles and backed by enforceable practices is necessary. Shorefront planning seeks to balance competing uses for land and natural resources, resolve conflicts among users, and balance national and local interests. It guides development as it is happening, promoting development in suitable areas and away from sensitive areas, as well as mitigating the impacts of existing activities. It does not replace the sectoral responsibilities for reviewing and approving development. Instead, it seeks to coordinate among the sectors and fill gaps that exist between them.

In addition to bringing a rational approach to siting shorefront development, a national coastal policy needs to promote integrated and sustainable approaches to the development of major new economic uses of the coast and its supporting infrastructure. New roads, airports and access to water and power encourage growth. Economic activities are expected to grow. Their associate issues include:

*Tourism* – The coastline is endowed with numerous potential sites for tourism, including historic and scenic sites. Old beach hotels are being rehabilitated, new hotels built, and plots are continuously being allocated for tourism development along the entire coast from Tanga to Mtwara. Coastal tourism, which is expected to nearly double between 1994 and 2000, has the potential to generate significant employment and foreign exchange earnings. However, the expansion of tourism could also lead to:

- Pressure on existing infrastructure and services
- Beach erosion from poorly sited hotels, and the resulting call for increased government expenditures to rehabilitate and protect private-sector investments as well as downstream areas
- · Localized pollution due to increased waste load
- Cultural issues, reduction of public access to the beach, and other conflicts between villagers and tourists
- Degradation of habitats, especially damage to coral reefs due to trampling and anchors
- Depletion of resources through collection of trophies, seashells and corals

Large-scale agriculture – In the coastal regions overall, agriculture is the most important sector in terms of employment and income. Most men and women are farmers. The agricultural potential needs to be harnessed, as current productivity is quite low. A main constraint is the need for appropriate technology, including reliable low-cost implements; extension service support; supply of inputs, including fertilizers, fuel and seeds; and provision of rural infrastructure including transportation and water resources. Large-scale agriculture activities include cashew nut and coconut farms and sisal plantations. With the liberalization of trade and free market, there is a potential for the development of this sector using inputs such as fertilizers, hence posing the risk of pollution.

Returns from agriculture are variable and generally low. At subsistence level, it would appear that income derived by fishing is comparable to income from agriculture, but it is more reliably obtained. Decline in fishing income is forcing people to diversify and to supplement their food/ income from agriculture, but the risks make it difficult for villagers to start and to succeed.

Excerpt from a report title The Potential for Agriculture Development in the Programme Village of the Tanga Programme.

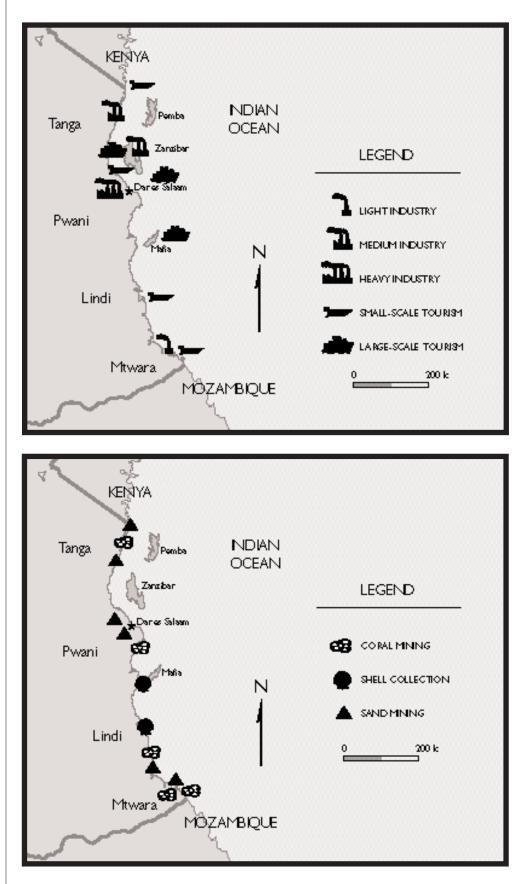
Year	No. of Tourist Arrivals
1994	261,955
1995	295,312
1996	326,188
1997	359,096
1998	401,331
1999*	446,650
2000*	495,950*

\* Estimated values

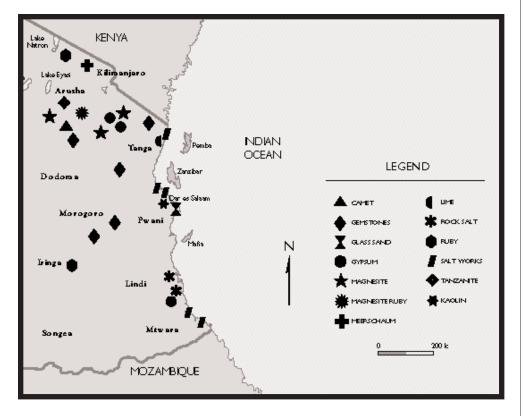
#### Locations of Coastal Economic Activities

Source: University of Dar es Salaam, Institute of Marine Science, with support from the UNEP EAF/14 project.





Coral Extraction and Sand Mining Sites



Mineral Deposits

*Large-scale mariculture* – Mariculture is the rearing of finfish, shellfish and seaweed in a process where at least one phase of growth is under human control. Tanzania already has an emerging, village-based seaweed farming industry and is just entering into shrimp culture. Continued growth and diversification of the mariculture industry in Tanzania is expected at both the village and national levels. At the local level, mariculture is an alternative form of crop production and can provide income and protein. At the national level, mariculture can provide many types of employment and generate foreign exchange. While mariculture can yield these benefits, it can also have major environmental and socioeconomic impacts<sup>4</sup>.

*Industrialization* – Seventy-five percent of the industry that exists in the country is located on the coast. Most industrial development is either light manufacturing industries or agro-processing plants and mills located in the urban centers of Dar es Salaam and Tanga. Industrial operations generate effluents that are regularly discharged into coastal waters because the industries do not have waste treatment facilities.

*Mining and gas/oil exploration* – Tanzania has mineral, oil and gas resources in coastal areas that could contribute significantly to the national economy. While none of these resources have yet been exploited, Tanzania is about to embark on development of the Songo Songo gas field. This will include large-scale offshore gas extraction and an extensive pipeline system that will deliver the product to Dar es Salaam. It is expected that the gas will be converted to electricity and contribute to the national grid. There are also confirmed gas reserves at Mnazi Bay and specific plans are in place.

# Issues Related to Managing Geographical Areas of Concern Including Critical Habitats

Along Tanzania's 800 km of coast there are areas that require intensive, proactive planning and management because of especially important ecological or economic value or because of intense user conflicts.

*Critical coastal habitats including mangrove and coral reef areas* – Tanzania's critical coastal habitats include estuaries, mangrove forests, beaches, coral reefs and seagrass beds. These systems interact with each other and together supply

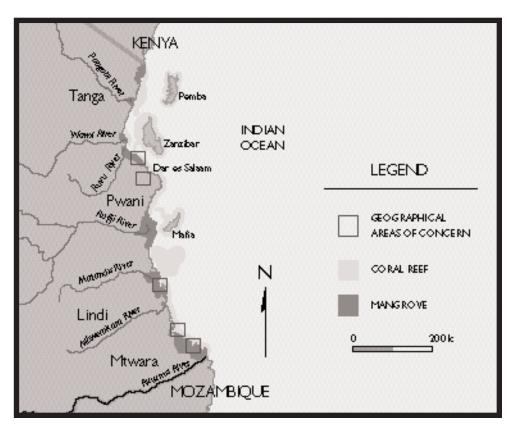
The coast and marine waters contain some of the richest resources in the country, including some excellent coral reefs and valuable species of both land and water-based life. The diversity of coastal and marine habitats supports a wide range of important and valued species, including:

- 127 species of coral in 13 families on Tanzania's coast
- 8,270 species of invertebrates
- 5 species of marine turtles
- I,000 species of fish
- Breeding and sheltering areas for seabirds
- Approximately 8 million people

the natural wealth upon which the nation's resource-dependent activities depend. The biodiversity of these systems is an important asset for the nation. There is growing concern this resource base is already degraded, and increasing pressures from a growing population and emerging economic developments will cause further damage. Currently, Tanzania is using a number of tools to promote good planning and management of critical coastal habitats. The National Mangrove Management Plan, prepared in 1991 under the auspices of

the Forestry Department, provides a framework for sustainable use of mangroves. Marine parks are "special management areas" for critical coastal and marine habitats with high biodiversity. They are managed under the authority of the Marine Parks and Reserves Act with management responsibility vested in the Board of Trustees. Currently there is only one marine park in Tanzania (Mafia Island Marine Park); however, there is potential for a system of marine parks to play a central role within the nation's overall ICM strategy. Finally, there are important local coral reef management initiatives in Tanga and elsewhere that provide promising models for critical habitat management.

*Geographic areas of concern* – There are currently no mechanisms in place to initiate proactive planning and management of other coastal geographic areas of



Location of Critical Habitats and Geographic Areas of Concern

This map illustrates examples of critical habitats and geographic areas of concern. Specific criteria for selecting areas that require special protection will be developed.

concern. Greatly needed is proactive planing for coastal areas having existing important economic facilities and infrastructure (e.g., ports), and where major new economic developments are planned. Also needed is to initiate processes to proactively identify and resolve potential user conflicts. (e.g., Kunduchi, Mnazi Bay). In addition, there is a need to identify and manage high-risk hazard areas from natural and man-made forces (erosion and flooding).

### ISSUES ASSOCIATED with SUPPORTING LOCAL INITIATIVES, DECISIONMAKING for INTER-SECTORAL DEVELOPMENTS, and BALANCING LOCAL with NATIONAL INTERESTS

Several local-level coastal management programmes are ongoing in Tanzania. These programmes are making progress on a host of local issues, but are also identifying barriers that exist at higher levels of government that need to be removed if the full promise of community management is to be realized. Any national programme must "solve problems" for these existing programmes, as well as develop mechanisms to promote the replication of successful models. Furthermore, the lessons that have been learned at these specific sites need to be applied broadly by a national programme.

Many sectoral-based ministries share coastal and marine resource planning, management and enforcement duties. These include the Ministries for Natural Resources and Tourism (with forest, fishery, tourist and park regulatory responsibilities); Lands and Human Settlement; Trade and Industry; Water; Agriculture and Co-operatives; "With institutions promoting the lime industry and government, and community leaders participating in launching a group of lime-making projects, there is every reason to fear for the worst for coral reefs."

One of the many comments made by coastal managers and scientists visiting a lime production facility that was using live coral Foreign Affairs and International Relations; Energy and Minerals; Communications and Transport; and Home Affairs. Responsibilities are divided among the many divisions within each ministry. In addition, the Vice President's Office (NEMC and the Division of Environment), the Ministry for Regional Administration and Local Government, and the Ministry for Justice and Constitutional Affairs have important coastal and marine responsibilities.

The institutional framework is even wider, however, because of local government. Its precise role in natural resource management depends on the particular sectoral legislation. Currently, the only act specifically requiring central government coordination with local governments is the Marine Parks and Reserves Act of 1994. Too often local decisions and desires are overruled by the central government. The ability of district and village governments to manage resources is hampered because revenue collected for resource use is rarely re-distributed to the local level.

Many well-intentioned actions and decisions are being taken to manage coastal resources at local and national levels, by central and local governments, companies, nongovernmental organizations, local communities and individuals. However, these actions are often taken independently of one another due to the lack of clear mechanisms for multi-sectoral and collaborative approaches. In an increasing number of cases, this sectoral approach has led to unanticipated consequences and the transfer of problems from one sector or geographic area to another. There are inadequate feedback mechanisms between coordinating agencies, decisionmakers and implementing authorities at all levels of government. This makes it difficult to balance differing local and national interests.

# Issues Related to Information Availability for Decisionmaking

Lack of data on coastal and marine resource status, trends and uses inhibits good planning and proper management. It also hinders the practical determination of coastal planning, management and enforcement priorities. Priority data acquisition needs include trend data on sand mining, dynamite fishing, coral reef condition, mangrove condition and loss, and ambient water quality and effluent discharges. In addition, available data is often not used in decisionmaking.

Currently, Tanzania's research institutes are not mobilized or coordinated to address these critical and practical data gaps. Research concerned with the protection of the coastal and marine environment is carried out on a sectoral basis. These include a diverse group of institutions: the Tanzania Commission for Science and Technology, the Tanzania Fisheries Research Institute, the University of Dar es Salaam-Institute of Marine Sciences, the Kunduchi Fisheries and Training Institute, and the Mbegani Fisheries Development Center. While all these institutions are

"It has taken us a long, costly time to build awareness about resource management and to build a constituency for conservation in Tanga. People are responding well but we could achieve even greater success if all levels of government—including courts and enforcement officers—supported our efforts."

S. Makoloweka, Coordinator, Tanga Coastal Zone Conservation and Development Programme interested in directing research on management issues, the mechanisms are not in place to bring managers and scientists together to establish priorities or exchange findings.

# ISSUES ASSOCIATED with the INADEQUACY of HUMAN and INSTITUTIONAL AWARENESS and CAPACITY

Tanzania has only limited individual and institutional capacity to manage the diverse resources within the coastal area. In the needs assessment prepared by the Tanzania Coastal Management Partnership, one of the major constraints identified for effective ICM was lack of human and institutional capacity at all levels. Training and education in Tanzania is delivered in a sectoral manner; hence, what capacity exists tends to be narrow and highly technical. In recent years, it has become clear that sectoral specialists alone cannot meet the challenges of managing the coastal area. Coastal managers need skills and attitudes that promote participatory processes es and integrative thinking and action. A capacity-building strategy that addresses these needs is essential.

A second issue associated with lack of capacity is the need to match programme goals and aspirations with existing capacity. While in Tanzania the needs are great and the issues urgent, creating a programme that outstrips the country's capacity for implementation will result in failure.

There is a noticeable deficiency in the ability of agencies to jointly coordinate their activities. There are currently no systems in place that allow heads of key agencies to make joint decisions. Instead, decisions on a single issue are taken independently.

Finally, present and future generations living within and outside coastal districts must be made aware of the importance of coastal resources and their wise use. To achieve this, the efforts of the local authorities, which are essential for building awareness, must be strongly supported. "Coastal management involves different sectors. Therefore, the training on this important new approach should be initiated as soon as possible. For the time being, there are no experts in integrated coastal management but people trained in different professions, such as forestry, minerals, fisheries, etc."

From the TCMP Needs Assessment Final Report

# RECOMMENDATIONS for an INTEGRATED COASTAL MANAGEMENT POLICY

The challenge of effective policy development is to find the right balance between regulatory and non-regulatory approaches to solve the problems facing Tanzania. The policy will fail if it depends on one or the other approach entirely; instead approaches need to be properly blended to suit the country's needs and abilities. his section presents recommendations for what Tanzania should do to address its critical coastal issues<sup>5</sup>. Presented first are the broad goal, vision and principles upon which policy implementation will rest. Next, seven policy statements are made. Each policy statement is followed by recommended implementation actions.

For most policy statements, two options are given for how implementation will occur. Both options promote an approach that facilitates policy implementation. They promote cooperation and voluntary compliance to policies, recognizing that without the support and active participation of the people of the coast a policy can not be effective. *Option I* assumes the coastal policy will rely only on existing laws and authorities. Option I implementation mechanisms enhance the effectiveness of existing implementation tools (e.g., strengthen district planning processes) and create new, or strive to improve, existing coordination and review structures and mechanisms. *Option II* implementation mechanisms require that new authority be vested with a new ICM institutional structure. In both implementation options, the authorities of sectoral agencies remain unchanged; rather, new authority is granted to promote ICM and give the policy the force of regulation, rather than relying on more voluntary types of compliance.

To focus discussion, implementation mechanisms and options are presented after each policy. This is to help clarify precisely how implementation will affect historic and scenic sites. This will allow reviewers of this paper to reflect upon the level of authority necessary to achieve each policy's objective. It is possible to favor different options for different policies.

A recommended institutional structure for ICM policy implementation in Tanzania concludes this section. Attributes and responsibilities for proposed "functional units" are given. Options are then provided for the level of authority that each entity will have and where in government policy implementation responsibilities should reside. Throughout this document, the term "Tanzania Integrated Coastal Management Office" (TICMO) is used generically to describe the implementing structure for this policy. It does not refer to a functional entity of government. This will be defined in future iterations of this document.

### OVERALL ICM POLICY GOAL

It is the goal of the Tanzania ICM policy to preserve, protect and develop the resources of Tanzania's coast for use by the people of today and for succeeding generations to ensure food security and to support economic growth.

### **PRINCIPLES and ATTRIBUTES**

- 1) Coastal development decisions will be consistent with the government's priority of poverty alleviation and food security.
- 2) Local stewardship and decisionmaking will be promoted and supported as required by the Local Government Reform Programme. In cases where there is a clear and explicit national interest that overrides local decisions, a consultation process will occur to find an equitable balance among the interests.
- 3) Integrated approaches to the development of major new economic uses of the coast will be promoted to optimize benefits and minimize negative impacts. Coastal development and management of economic opportunities will be guided in a way that is compatible with national development goals and local needs, and in a way that protects the environment from unnecessary and irreparable damage.
- 4) Development and conservation interests will be balanced by protecting areas of high biodiversity and cultural/historic importance and identifying and steering large-scale economic developments to suitable areas.
- 5) Tanzania will adhere to the relevant regional and international ICM conventions to which it is a signatory.
- 6) Scientific information will be used to inform decisionmaking and readjust policy implementation as new information becomes available.
- 7) The capacity of Tanzania to sustainably manage the country's coastal resources will be increased and strengthened by providing information and knowledge to resources users, decisionmakers and other stakeholders.
- 8) Coastal management activities in Tanzania will proceed incrementally and in-step with the available human and institutional capacity.

# Our Vision

"We envision a coast with thriving coastal settlements where people who rely on the sea and its abundant resources for their food and livelihood are actively working to protect and sustain the resource base. We also envision the development of new coastal economic opportunities that sustainably contribute to both local and national development and new and diversified employment opportunities for coastal residents. Lastly, we envision a partnership between government and all segments of Tanzanian society—resource users, the private sector, academic and research institutions and others-working together to turn this vision into reality." - The People of Tanzania

**Policy Statement I.** Support planning and integrated management of coastal resources and activities at the local level and provide mechanisms to balance national and local interests

#### Implementation Mechanisms:

District Integrated Coastal Management Action Plans – Create and support a district level ICM process to develop, approve and implement ICM action plans. National guidelines for preparing action plans will be developed. However, they will encourage each district to focus on their own priority issues. It is anticipated that the action plans will specify local ICM goals and issues and will identify how to effect change (immediate voluntary actions, infrastructure, comprehensive planning, change in by-laws, etc.). Preparation of action plans will be voluntary but encouraged through incentives. The national coastal program will facilitate national input and assistance to districts to prepare action plans, then monitor consistency of national actions with the local action plans. Districts will be empowered to prepare an ICM action plan for a specified geographic area (defined by the district, but could be district, sub-district or village). The specific area could extend offshore to the seaward edge of the territorial waters and inshore to the edge of the district boundary. If sub-district or village action plans are prepared, they will include inputs from the district. District, ward and village ICM committees will coordinate and execute the development and implementation of action plans (see section on Local Government Responsibility).

#### Option I

- District councils will approve district action plans and the inter-ministerial coastal integration committee (IMCIC) (see section on Institutional Structures) will review and endorse district plans. Endorsement means that the national agencies agree to carry out their activities in a manner that supports local ICM goals and objectives.
- No new authority is created by the district action plans. District action plans will use existing powers (by-laws, permitting, zoning, etc.) to implement planning and management actions.
- The TICMO will act on behalf of the citizens to review national consistency with district action plans, and seek to mediate between districts and sectoral agencies when differences in interpretation exist.

#### **Option II**

- The IMCIC will approve district action plans after they have been reviewed and approved by district councils.
- Once approved by the IMCIC, the district action plan will have the force of law, as if it were a by-law. Authority will be conveyed to districts to carry out the

plan within the jurisdiction specified in the plan, including off-shore areas.

• Within that jurisdiction, national decisions will be required to be consistent with the district action plan. The IMCIC would serve as an arbitrator if a consistency review is needed. Their decisions will be binding.

# Lessons from the Tanga Coastal Zone Conservation and Development Programme

- The Tanga Region is home to Tanzania's largest coastal zone conservation and development programme. Supported by the Tanga Regional Fisheries Office, the programme works at the district and village levels to address critical coastal management issues such as dynamite fishing, mangrove conservation, and the development of alternative livelihoods. The programme is a partnership between the regional authorities and the district governments of Tanga, Pangani and Muheza, Irish Aid and the Eastern African Regional Office of the World Conservation Union. Established in 1994, the programme has built the foundations of integrated coastal area management.
- The overall objective of the programme is to achieve sustainable use of the coastal resources of the Tanga region for the benefit of present and future generations, as well as other people in Tanzania and the Eastern African region. The programme adopts an approach of listening, piloting, demonstrating and main-streaming to obtain its goals. Through the application of collaborative mechanisms, participatory activities and integrated management techniques, the programme has demonstrated that management of coastal resources and development initiatives can be effectively undertaken and implemented at the local level.
- The programme is successfully addressing a broad spectrum of identified issues that range from resource conservation to socioeconomic services to the general livelihoods of the Tanga people through local planning and action. The process began with the identification of priority issues through rapid appraisal surveys. These surveys were undertaken in a collaborative, participatory manner that included village resource users, regional and district extension officers and programme staff. Once the priority issues where identified, government staff and resource users interactively analyzed the causes, impacts and possible solutions to the issues. Committees where then established around the priority issues to develop action plans. These committees where made up of representatives from the villages and were facilitated by government extension workers and programme staff.
- The committees developed action plans and management agreements. These plans and agreements outline
  overall management objectives, options for action and indicators of success. In addition, responsibilities,
  authorities, controls and penalties for non-compliance were defined. The proposed action plans and agreements where vetted at the village, district and central level of government. Plans and agreements included
  a range of actions that were implemented by the committee in cooperation with the resource users.
  Actions ranged from reef areas being closed to fishing and assuring access to long-term use of common
  resources (such a wood lot), to building pit latrines and planting mangroves to stabilize eroded areas.
- The Tanga programme embodies the key attributes of local-level integrated coastal management and provides an important example of how resource management can be successfully carried out at the sub-national level. The Tanga experience was drawn upon extensively during the development of the suggested implementation mechanisms included in this document.

(Adapted from Actions Speak Louder than Plans, TCZCDP, Tanga, Tanzania, June 1997)

# Policy Statement 2. Promote integrated and

sustainable approaches to the development of major economic uses of the coast to optimize benefits and minimize negative impacts

**Policy 2A.** Ensure that coastal activities and opportunities are developed according to the national and local needs and plans

**Policy 2B.** Establish project review procedures that are consultative, multi-sectoral and inter-disciplinary in order to promote efficiency and transparency in the decisionmaking process

#### Implementation Mechanisms:

*Coastal Activity Guidelines* – Convene and facilitate interagency public/ private working groups to develop guidelines for major coastal economic development activities including mariculture, tourism, oil/gas development, industrial fisheries and industrialization. Guidelines will include special sections on whether and how such economic development activities should occur in marine protected areas<sup>6</sup>. New guidelines will consider previously established guidelines to avoid repetition and conflicting instructions.

*Coordinated Permit Review for Major Coastal Activities* – Major coastal activities requiring permits from more than one sectoral agency will be reviewed and acted on through an open, transparent and coordinated review process (see Policy 7 for public input to this process). Guidelines will specify which activities, both in terms of scale and proximity to the coastline, will be included in the permit review and approval process.

#### Option I

- The IMCIC (see section on Institutional Structures) will review and endorse guidelines. Endorsement means that the national agencies agree to carry out their activities in a manner to support the guideline's goals and objectives.
- Guidelines will be implemented through: (1) The coastal program working with the private sector to voluntarily adopt good management practices; and (2) Through sectoral agencies agreeing to incorporate recommended guidelines directly into their sector's relevant regulations (e.g., environmental impact assessment procedures and permit approval processes).
- The TICMO, when requested by the responsible sector, will facilitate a coordinated permit review process within central and local government.

#### Option II

- The IMCIC will approve guidelines. Approval means that the national agencies will have to certify that their activities will be consistent with the guidelines.
- Guidelines will be implemented through a centralized permit review system coordinated by the TICMO. This does not necessitate that the TICMO conduct

# WHAT are Guidelines?

- Good Practices
- Monitoring Protocols
- Siting Requirements
- Permit Procedures

the review, but implies there will be a coordinated review for which the TICMO will have responsibility. The guidelines will be used to judge the activity and grant approval or disapproval.

- The IMCIC (see section on Institutional Structures) will approve, deny or conditionally approve coastal permits requiring a nationally coordinated review.
- For small-scale projects (as defined by the guidelines), districts will be empowered to make land allocation choices as well as grant access to the resources.

# INTERSECTORAL MECHANISMS *for* MARICULTURE DEVELOPMENT *and* MANAGEMENT

- Mariculture increasingly exerts pressures upon coastal habitats and residents presenting management challenges that are typical of many economic development activities. Mariculture is a productive activity with unique attributes, since it most commonly takes place at the interface of land and water. This interface presents special problems for management and sustainable development because institutional jurisdictions, responsibilities and roles are often weakly defined for this area.
- From a governance perspective, mariculture is a topic requiring close intersectoral coordination and crosssectoral policy development. From an environmental management perspective, mariculture exemplifies the complex challenges of coastal development. There is great economic potential for mariculture in Tanzania; however, the Tanzanian mariculture experience has largely been limited due to limited institutional attention.
- The challenge to the development of sustainable mariculture is careful integration of activities in selected sites to avoid damaging ecological critical areas and disturbing other economic activities. Additionally, environmental assessment, permitting procedures, procedures for acquisition of land and water use, environment standards and monitoring need harmonization to completely and efficiently guide mariculture projects. To address the above challenges, the Tanzania Coastal Management Partnership (TCMP) selected mariculture as the initial focus area because of its economic potential and rapid emergence worldwide as a coastal issue.
- Realizing that Tanzania was not fully prepared to deal with regulation of mariculture, and since the partnership
  was also in the planning period, TCMP chose mariculture to gain practical experience in intersectoral management of natural resources. In order to move the practical exercise forward, the support unit of TCMP formulated the Mariculture Working Group with the goal of learning how intersectoral mechanisms work, testing
  intersectoral approaches and clarifying governance processes for the future implementation of a national ICM
  program.
- The working group, composed of members drawn from various public and private sectors including individuals having a stake in coastal and marine development in Tanzania, began its research in January 1998. First, the group completed a Mariculture Issue Profile document. The document was prepared through a consultative process with relevant sectors and local programs. The experience of the working group provided valuable insights to TCMP about how government interfaces with local jurisdictions and the private sector. The test proved that government could work directly with both the private sector and communities to define and develop incentives and implementation mechanisms for achieving sustainable coastal management practices.
- TCMP continues to use mariculture to test intersectoral mechanisms and approaches. Presently, TCMP is addressing the findings of the group's Mariculture Issue Profile and implementing the associated action strategy. By the end of 1999, TCMP plans to develop guidelines for both large- and small-scale mariculture. These guidelines will provide developers and government reviewers with basic criteria for siting, operating and monitoring mariculture activities, as well as a blueprint for guiding mariculture development within Tanzania.

# **Policy Statement 3.** Conserve and restore critical habitats and areas of high biodiversity while ensuring the coastal people continue to benefit from the resources of these areas

Implementation mechanisms<sup>7</sup>:

The TICMO will identify critical coastal areas and areas of high biodiversity that should be included within Tanzania's existing or new protected area programs. Areas and their bounds will be identified through a consultative national process that includes input from local and national government, nongovernmental organizations and resource users. Protected area programs/projects include:

- Marine Parks and Reserves Unit<sup>8</sup>: The national coastal program will work with the Board of Trustees and Marine Park and Reserves Unit to establish new marine protected areas (MPAs) (under the Marine Parks and Reserves Act) in areas with significant biodiversity, and where local communities support the concept of a park
- The Mangrove Management Project (MMP)
- Terrestrial game parks that are created or exist in coastal areas

District action plans and special area management plans (SAMPs) will identify, conserve and restore locally important critical coastal areas and areas of high biodiversity as necessary and appropriate.

TICMO will strengthen the existing implementation mechanisms of General Park Management Plans and MMP by providing planning and management support during the development and implementation of plans as specified in the section on duties and responsibilities of the TICMO.

### Mafia Island Marine Park

The Mafia Island Marine Park (MIMP) was established in April 1995. It was the first marine park in Tanzania. It seeks to conserve critical habitats in cooperation with the island's community. The first years of MIMP were devoted to tackling those issues that are pertinent to community involvement in the management of the marine park resources. Working in partnership with the Mafia District authority, World Wildlife Fund, Tanzania Programme office and NORAD, the MIMP has initiated means for interaction between the park, the villages and the Mafia District authority. Assisting communities in the design and implementation of small community based self-help programmes will also be included. Initiation of these activities was considered paramount in order to gain confidence of the parties involved and to form the basis for implementation of the marine park concept. Already implemented is the joint enforcement and patrol with the villagers to curb the problem of dynamite fishing. Currently, there are more than 10 community development activities aimed at creating alternatives to unsustainable resource use and providing support for the communities that are traditionally dependent on the marine resources and are the most affected by the park.

(Adapted from the Mafia Island Marine Park Brochure. Marine Parks Unit, Department of Fisheries, Tanzania. 1999)

# Policy Statement 4. For coastal areas of

high economic interest or high hazard, establish an integrated planning and management mechanism

#### Implementation mechanisms:

Special Area Management Plans (SAMPs) will be developed for geographic areas of particular concern, potentially including:

- Areas with existing important economic/infrastructure facilities where resource degradation and use conflicts are occurring
- Areas where major new economic developments are planned
- Areas of high risk from the effects of natural hazards, e.g., erosion and flooding
- Pollution hot-spots

SAMPs allow concerted and focused effort to promote and manage economic activities that are of national interest or are being developed in high-risk areas along the coast. SAMPs gives central government—in partnership with local government the ability to plan and manage geographic areas of particular national concern or interest. The SAMP process includes stakeholder input from both local and national levels. Central government will work with districts and other planning and management functionaries within the sites to complete a detailed management plan that appropriately guides development. A SAMP area can encompass multiple districts, be a single district, a sub-district or only a village. SAMPs include management goals, objectives, and implementation strategies and actions. Detailed guidelines for preparing SAMPs will be developed.

The TICMO will provide technical assistance for SAMP preparation. The SAMPs will not extend beyond the offshore limit of territorial waters and the inshore edge of the coastal district boundaries.

#### Option I

- The TICMO, with advice from the IMCIC, will identify areas requiring a SAMP.
- The IMCIC will review and endorse SAMPs. Endorsement means the national agencies agree to carry out their activities in support of achieving SAMP's goals and objectives.
- No new authority will be created by the SAMPs. SAMPs will use existing powers (by-laws, permitting, zoning, etc.) to implement planning and management actions. Implementation actions are specified in the plan and are the responsibility of both local and national governments.
- The TICMO will act on behalf of the citizens in reviewing national consistency

with SAMPs and will mediate between the SAMP functionary and sectoral agencies when differences in interpretation exist.

#### **Option II**

- The IMCIC will identify and establish, by resolution, areas requiring a SAMP.
- The IMCIC will approve SAMPs after they have been reviewed and approved by the appropriate local planning functionaries.
- Once approved, new rules and regulations, as specified in the SAMP, will become effective. These rules and regulations would supercede pre-existing local and national rules affecting the same issue.
- Within the Special Area, national decisions would be required to be consistent with the SAMP. The IMCIC would serve as an arbitrator if a consistency review is needed. Their decisions will be binding.

# INFORMATION NEEDS *for* Coastal Management

- Lack of data on coastal and marine resource conditions and trends inhibits good management as well as practical determinations of enforcement priorities.
- Critical habitat mapping; trend data on sand, fish dynamiting, coral reef conditions and losses, mangrove conditions and losses, and ambient water quality and effluent discharges are among the key needs for managers and enforcers.

**Policy Statement 5.** Develop and use a simple but effective coastal ecosystem research, monitoring and assessment system that will allow already available—as well as new—scientific and technical information to inform ICM decisions

Implementation mechanisms<sup>9</sup>:

*Science and Technical Working Group* – Appoint a Science and Technical Working Group (STWG) to facilitate scientific inputs into coastal management at the national and local levels. The STWG will assist the national coastal program to:

- Serve as the bridge between resource managers and scientists
- Identify priority management-related research needs with national and local ICM practitioners and researchers and ensure that this information is used to drive data acquisition
- Make information about ICM and ongoing monitoring available to resource managers and the public
- Recognize the importance of indigenous knowledge and ensure that it is included in the science for management process
- Recommend conservation and restoration techniques for implementation in local planning
- Design a simple monitoring program that nests local, national and international monitoring efforts that builds on and utilizes existing research and monitoring institutions. This program seeks to incorporate resource users in the effort.

STWG may pilot test the monitoring program but will rely on existing institutions for full implementation. STWG may also seek funding for implementation.

# Science for Management

- In 1998, the TCMP identified critical national coastal management issues. In response to the set of issues
  related to information availability, TCMP supported a workshop in July 1998 at the Institute of Marine Science
  on "Marine and Coastal Ecosystem Risk Assessment." At that time, it was decided that an interim committee
  should be formed to initiate work on science for coastal management. An interim work group called
  MEAMCOT (later called STWG) was created.
- The STWG provides advise and guidance related to scientific questions, studies and investigations, data management, and sampling and monitoring efforts that are necessary to improve the scientific foundation of the activities of the national coastal management program. STWG members suggest the specific activities necessary to address the issues identified by TCMP related to information availability for and use in decision-making. STWG also conducts peer review of studies and reports on the status and trends of the coastal and marine ecosystems and alerts TCMP to emerging environmental problems.

# **Policy Statement 6.** Build both human and institutional capacity for interdisciplinary and inter-sectoral management of coastal resources

#### Implementation mechanisms<sup>10</sup>:

The integrated coastal policy will use three primary tools to build human and institutional capacity:

- *Learning-by-doing* Build the capacity to plan for and manage coastal resources in an integrated way for both practitioners<sup>11</sup> (local and national) and resource users<sup>12</sup> by providing in-service training and workshops, and by providing opportunities for learning through experience
- *Information exchange* The TICMO will serve as the backbone of a national ICM network where practitioners (local and national) can easily exchange information and ideas.
- Formal curriculum in coastal management Support the creation of a formal education track (higher education) within an existing institute or university for ICM. This extends beyond learning-by-doing by offering a formal curriculum for the next generation of coastal management practitioners.

This policy expects institutional capacity to be strengthened by improving the skills, attitudes and knowledge of the individuals who work there. This will be achieved through the implementation mechanisms described above. Limited assistance may also be provided to partner sectors to build their institutional capacity for carrying out ICM activities.

### Initial Human Capacity Needs Assessment

- The Institute of Marine Science, University of Dar es Salaam, has taken the first steps towards establishing ICM training capacity in Tanzania by completing a training needs assessment of coastal practitioners in Tanzania. The assessment was prepared to define the specific training needs as well as recommend a long-term strategy for building human and institutional capacity in ICM for Tanzania. The assessment represents a cross-section of respondents along the coastal areas of the country.
- Strong regional programmes in ICM training (Western Indian Ocean Marine Science Association and the Secretariat for East Africa Coastal Area Management) are emerging that target ICM practitioners and sectoral technical staff. These regional programmes can be used to support national capacity building.

**Policy Statement 7.** Provide for meaningful opportunities for involvement of those affected by the coastal development

process and the implementation of coastal management policies

#### Implementation mechanisms:

ICM in Tanzania will engage those who have a stake in wise use of coastal resources. The mechanisms by which stakeholders will be involved include:

- Public education and outreach programs to raise awareness of the need for sustainable coastal management
- Input to district action plans, SAMPs, protected areas plans and guidelines

Participation will be encouraged by the TICMO by having a 45-day<sup>13</sup> public review period for any action agenda item, SAMP, protected area plan and issue specific guidelines before they are submitted for final review. The TICMO will work with the planning functionaries to respond to each public comment. Specific review guidelines will have to be developed that describe the review process.

Special attention will be given to ensure that those most affected (resource users, private sector, etc.) by the proposed plan, action or guideline are included in the development, review and implementation process. This policy recognizes that without active participation by the people, the urgent problems facing Tanzania will not be solved. This policy seeks to create opportunities for participation and to empower people to become true stewards of the coastal environment.

# INSTITUTIONAL STRUCTURES

To carry out the ICM policy, three types of institutional structures will need to be created:

- Inter-ministerial coastal integration committee (IMCIC)
- Tanzania integrated coastal management office (TICMO)
- Interagency working groups

The recommended function of each group is discussed below. The term TICMO is used generically in this document because institutional placement has not been discussed. Placement will dictate the final name of the TICMO.

Before discussing the recommended functions for each institutional structure, general operating characteristics for the ICM initiative are set fourth.

# CHARACTERISTICS of INTEGRATED COASTAL MANAGEMENT in TANZANIA

Size and scope will not expand beyond capacity and need<sup>14</sup>—The number of staff at the TICMO shall remain small. Instead of being the primary provider of services, the TICMO supports its sectoral partner agencies to deliver ICM services and solve ICM problems. The TICMO will focus on a limited number of the most urgent issues.

*Use adaptive management* – The TICMO will develop mechanisms for sustained learning of ways to improve efficiency and effectiveness based on the results of monitoring and previous implementation experience. The TICMO will seize new opportunities and adapt their work plans and priorities to the often rapidly changing political, economic and sociocultural conditions in which they operate.

**Results and process oriented** – The TICMO will strive to achieve measurable results that have been agreed upon by the partners in a way that employs an open, participatory and transparent process for achieving those results.

#### INTER-MINISTERIAL COASTAL INTEGRATION COMMITTEE

An IMCIC must draw directors from appropriate sectors and representatives from the local level to coordinate actions and decisions related to ICM. The directors provide a filter between the technical-level activities and the more sensitive political decisions made at the ministerial level. Representatives from the local level provide a critical link between decisionmaking at the central level and locally-based goals and activities. The Permanent Secretary for the Vice President's Office will chair the IMCIC<sup>15</sup>. The group will meet at least quarterly. The minister responsible for coastal management will appoint members<sup>16</sup>. The TICMO will serve as the secretariat to the IMCIC.

#### Option I

This committee has coordination responsibility. Its functions will be to:

- Provide advise to the TICMO on program priorities and endorse formation of interagency working groups
- Review and endorse district plans. Endorsement means that the national agencies agree to carry out their activities in support of local ICM goals and objectives.
- Provide advise to the TICMO on areas requiring SAMPs
- Review and endorse guidelines. Endorsement means that the national agencies agree to carry out their activities in support of the guideline's goals and objectives.
- Facilitate the resolution of inter-sectoral conflicts: conflicts between national and local interests

#### **Option II**

This committee has approval responsibility. Its functions will be to:

- Provide instructions to the TICMO on program priorities and endorse formation of interagency working groups
- Approved district action plans after they have been reviewed and approved by district councils
- Identify areas requiring SAMPs
- Approve SAMPs after they have been reviewed and approved by the appropriate local planning functionaries
- Approve guidelines. Approval means that the national agencies will have to certify that their activities will be consistent with the guidelines.
- Approve, deny or conditional-approve coastal permits that are required to go through the national coordinated review process
- Serve as a final arbitrator for conflicts between sectors and between local and national governments

### TANZANIA INTEGRATED COASTAL MANAGEMENT OFFICE

- 1) Support ICM in Tanzania by providing accurate and timely information.
  - Information and communication systems that enhance contact between national government sectors and among national government and implementing districts will be developed and supported. This should include the dissemination of information about new and updated international agreements and national

# Inter-ministerial Coastal Integration Committee: Suggested Membership

Six government representatives from the coastal districts, three members from private sector and/or nongovernmental organizations, and eleven members from central government. Central government representation must include the ministries responsible for the following sectors plus two others: lands and human settlements, fisheries, forestry, tourism, industry and trade, agriculture, mining, water and environment.

### Cooperation

ICM depends on the cooperation of other authorities and agencies. Decisionmaking will be shared across sectors. There is a strong need for more efficient coordination of governmental actions expressed, for example, in the Forestry Policy. ICM involves bringing together many agencies/authorities that will work together toward common goals achieved through mutually agreed strategies. This will be achieved through the use of working groups. Working group members are drawn from key sectors and will be the primary source of technical input.

policies and legislation that affect coastal resources and management. Such communication should be in English and Kiswahili. The system will also maintain a record of coastal by-laws.

- In collaboration with relevant authorities, identify and facilitate the process for establishing new ICM projects and programmes for donor funding. The process should serve as a focus point for donors who are interested in developing new ICM activities and who play a role in the establishment of new coastal management pilot sites by connecting their contributions to this policy. Keep donors informed about progress.
- Advise the minister<sup>17</sup> responsible for ICM during the formulation and review of policies related to coastal management
- Provide support to districts as they prepare ICM action plans and SAMPs and take measures to protect critical habitats through MPA systems. Support will include technical assistance and advise, access to information and small planning grants.
- Provide support to districts that have approved and are actively implementing ICM action plans, SAMPs and MPA systems to protect critical habitats. Support will include:
  - Peer assessments and evaluations as requested. Lessons and experience from existing local programs will be adopted and applied by providing information about lessons learned to other local programs.
  - Address specific ICM problems and serve as a conflict management forum for addressing differences between national government, local management efforts and private sectors. This will be achieved by providing forums, technical advice through the core technical groups, and conflict management services.
  - Provide national servicing (access to information, networking, awareness-raising activities, research and monitoring)
  - Provide small grants to stimulate the implementation of plans and action plans
  - Seek additional sources of funding for full-scale implementation of plans and action plans
- 4) Raise awareness of and build support for ICM:
  - Target awareness-raising and general communication functions at all levels of decisionmaking and civil society
  - Link awareness-raising strategies to capacity-building efforts
- Work with the appropriate sector to ensure that cross-boundary and marine contingency issues and actions are incorporated, as appropriate, in district-level ICM planning and implementation
- 6) Facilitate participation and compliance with regional and international conventions and declarations pertaining to marine and coastal management. Work with the Ministry for Foreign Affairs and the Focal Ministry to internalize these

conventions and prepare delegations to participate in regional and international meetings.

- 7) Convene and support inter-sectoral working groups
- 8) Administrative responsibilities:
  - Receive and allocate funds; prepare an annual work plan that specifies annual activities and resources to implement those activities
  - Form and support interagency groups to carry out the work of the TICMO
  - Prepare, after consultation with districts and sectoral agencies, a coastal annex to the five-year development plan. Work with the planning commission to connect the annex with the national budget allocation
  - Serve as the secretariat to the IMCIC

### WORKING GROUPS: TCMP'S EXPERIENCE

- The TCMP has used working groups to carry out the main elements of its work. The *Core Technical Working Group* has developed the initial elements of the coastal programme. The *Mariculture Working Group* is addressing the findings of the Mariculture Issue Profile and implementing the action strategy approved by the directors in 1999. The *Science and Technical Working Group* serves as a focal point for the integration of coastal managers and the scientific community.
- The groups draw from all the TCMP partners, private and public, and focus on getting the best skilled and technically strong people to carry out the core task. The groups do not consist of a fixed number of people, but change over time depending on the tasks which TCMP focuses on in any given year. There is porosity between the groups to ensure that the experience of the other working groups is feeding the policy process.
- During the last two years, TCMP has convened these groups to carry out the work involved in developing this proposed policy. Because of the efficiency and effectiveness of these groups in developing inter-sectoral, integrated solutions to complex coastal problems, their formal continuation is suggested as one element of the implementation structure for the recommended coastal policy.

## Use of Existing Structures

The Tanga Programme found in its five years of implementation experience that it was important to work within existing structures, with government officers remaining as members of their own departments. They were responsible for keeping other government officers informed of progress, issues and activities. This was instrumental in preventing a separate "project culture" from developing. This experience has also been true for the TCMP. The TCMP has used inter-sectoral groups as its mainstay and has relied entirely on existing district structures and ICM programmes for implementation activities.

### INTER-SECTORAL WORKING GROUPS

Inter-sectoral working groups will be the engines for ICM in Tanzania. The working groups will be composed of experts representing different disciplines and sectors, and may include representatives from the private sector and communities. Working group members will be both technical experts and representatives of their sector. Formal agreements with their home institutions that specify the level of commitment will be established.

- Core Technical Working Group (CTWG) that draws its members from appropriate sectors. Members will provide technical assistance to districts as they develop local action plans; work with districts to solve specific problems; provide assistance during the development of district action plans, general management plans for MPAs and SAMPs; and develop new donor-supported ICM programs. Members will be asked to serve on the group by the TICMO. The TICMO will then seek written authorization by the home agency.
- 2) Issue Specific Working Group(s) (ISWG) that draws from appropriate sectors to develop issue specific guidelines. At least 25 percent of the membership of the ISWG will be drawn from the CTWG to ensure consistency and exchange of information. This group is not limited to government officials, but should also include representatives from the related industry: 10 percent of its make-up should be from the affected industry. The group provides a venue for sectors related to specific management issues to work together on specific problem solving, and engineer an implementation process for the guidelines that considers multiple perspectives.
- 3) A Science and Technical Working Group (STWG) provides advise and guidance related to scientific questions, studies and investigations, data management, and sampling and monitoring efforts that are necessary to improve the scientific foundation of the activities of the TICMO. The STWG will assist in peer review of studies and reports on the status and trends of the coastal and marine ecosystem, and will alert the TICMO to emerging environmental problems. To promote effective integration of science and ICM, the STWG will consult with coastal managers and those holding indigenous knowledge in carrying out its work. It may invite selected managers to its meetings when appropriate. Members will be asked to serve on the group by the TICMO who will seek written authorization by the home agency. STWG members should represent a balance of scientific disciplines.

### LOCAL GOVERNMENT RESPONSIBILITY

Local government will have significant responsibility for carrying out the policies herein.

- 1) Specific district responsibilities include:
  - Preparation and oversight of district and local ICM action plans
  - Formulation of local coastal policies and regulations
  - Initiation and implementation of local by-laws
  - Management of local resource users and resource use conflicts
  - Assessment, approval and evaluation of district and local ICM action plans
  - Education and mobilization of the local community to promote ICM objectives
- 2) ICM committees composed of government and nongovernment (civil society) representatives will coordinate and carry out the development and implementation of action plans. In order to do that effectively, local-level technical working groups will be established to interface with the CTWG. Together they will develop the action plans. It will, however, be the sole responsibility of the districts and other planning functionaries to implement these plans with support and service from the national government. If action plans or SAMPs are not implemented according to the agreed upon time-scale for reasons within the districts authority, the national government can withhold support services. Because the development and implementation of action plans and SAMPs is voluntary, districts are not required to establish committees and technical working groups unless they are planning to participate in the coastal management initiative.

# Trawlers and Shallow-Water Fishery Consistency Conflict

- A current example of an inconsistency involves the industrial trawler and shallow-water fishery. Since industrial trawlers started harvesting Tanzanian fish in the 1980s, conflicts in fishery resource use have increased between industrial and smallscale artisanal fisheries. Local fishers all along the coast complain about the destruction of artisanal fishing gear and damage to the sea floor by industrial trawlers. They feel that the trawler's actions violate existing regulations and their local plans. Trawler operators claim that they are operating legally and according to the known regulations.
- At present, there is no mechanism in place to call together the parties to resolve this use conflict.

# Consistency

Response to the set of the set of

#### Option I

- National government's decisions will remain consistent with the expressed goals, objectives and actions of the district level ICM action plans, MPAs and SAMPs. These plans, before being approved (see Policy Statement 1), will be reviewed to ensure that they are consistent with national policies and goals<sup>18</sup>.
- In cases where national government is inconsistent with local goals, the TICMO will serve as a mediator. National action can override local desires if the actions are consistent with the principles herein and serve national goals in terms of economic development and sustainable growth. It will be the responsibility of the local implementers to identify any inconsistent actions taken by the national government.
- The TICMO will have no authority to stop an inconsistent activity once it begins.

#### **Option II**

- The IMCIC will serve as a final arbitrator for conflicts between sectors and between local and central governments.
- National plans must be in conformance with district action plans, and any large-scale activity that needs national approval (to be defined by issue-specific guidelines) must also conform to the district action plans.
- The IMCIC will have authority to issue cease-and-desist orders if activities are shown to be inconsistent with approved district action plans, SAMPs or guidelines.

# BOUNDARY of an INTEGRATED COASTAL MANAGEMENT POLICY

Note that the form of the set of

Exactly where the coastal boundary is set depends on the implementation option selected. Programs where the coastal agency has its own regulatory mandate generally have a narrowly defined coastal zone; networked programs have wider boundaries because activities focus on issues, planning and coordination.

Individual district action plans, SAMPs, MPAs and specific guidelines will set planning and management boundaries for ICM in Tanzania. Activities of distinct and significant impacts on the coastal area (e.g., fresh water diversion) that take place outside of the boundaries established by individual district action plans, SAMPs, MPA and specific guidelines will be addressed directly by the TICMO. This creates a flexible system wherein the range of ICM is applied according to the issue being addressed.

Zanzibar, although a part of Tanzania, has a unique legal status. According to Article 2(1) of the Constitution, the territory of the United Republic consists of the whole area of Mainland Tanzania and the whole of the area of Zanzibar including the territorial waters. This policy addresses the issues of Mainland Tanzania, not those of Zanzibar. This is because the management of coastal resources is a non-union matter, and each place has different mechanisms in place to address coastal issues.

#### Defining Boundaries

Boundaries are always a thorny issue for coastal policies, especially national programs. Only in Sri Lanka does the National Coastal Management Act designate a legal coastal zone that is uniform throughout the country. In other nations, either the boundary is undefined (e.g., Ecuador) or the national program provides guidance and broad parameters under which local units (e.g., states, districts, etc.) delimit specific geographic boundaries (e.g., United States, South Africa, New Zealand). The setting of boundaries depends on what issues are being addressed and what is being managed.

# Options for Institutional Placement

CM should be under the ministry responsible for the environment. This provides the most effective point within government for inter-sectoral decisionmaking and coordination. It also provides the flexibility that will be necessary to carry out the range of implementation mechanisms described in this document.

Under the current structure, ICM would be in the Vice President's Office. This office is well positioned to coordinate and harmonize sectoral activities.

The institutional structure for ICM that includes the IMCIC, a national ICM office and working groups remains the same regardless of which option is selected. The functions and responsibilities of the TICMO are specified in the previous section.

Two institutional placement options are described below. Briefly, Option A suggests placing the TICMO within an existing environmental management institution that is housed by the ministry responsible for the environment. Option B suggests establishing a new government entity for ICM within the ministry responsible for environment.

The difference between the two options is whether the responsibility for ICM is given to an existing government body, or a new government body is created. Each option is described in more detail below.

*Costs* – There are substantial cost differences depending on which option is selected. Under Option A, the TICMO would be built into the existing National Environmental Management Council's administrative system. There will be marginal costs associated with recruiting new staff and increased overhead costs to National Environmental Management Council. National Environmental Management Council would include provisions within its annual budget for ICM activities. Option B involves significantly more costs because it seeks to establish a new office. Costs include salaries for professional and support staff, capital equipment and basic overhead expenses.

#### Institutional and Legal Framework for Environmental Management Project

(ILFEMP) – This document recognizes and supports the ongoing institutional study of Tanzania's environmental sector. These options are based on the current structure of the environmental sector so that once the policy is passed, implementation can begin. However, these options are transportable if the environmental structure is modified as a result of the ILFEMP study. For example, if a new ministry responsible for the environment is formed, the TICMO could be transported into that ministry and be part of a larger division or be a stand-alone division. A new environmental act, which would presumably be necessary to create a new environmental structure, creates an opportunity to include a component for ICM.

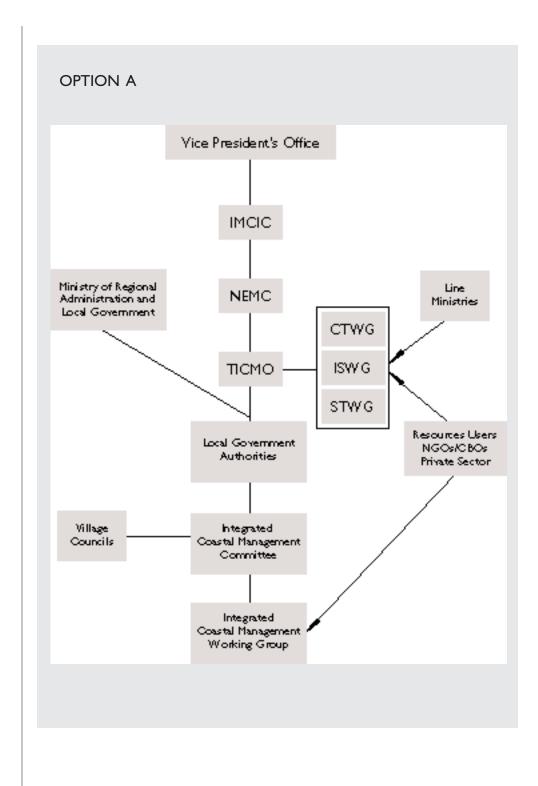
#### Option A.

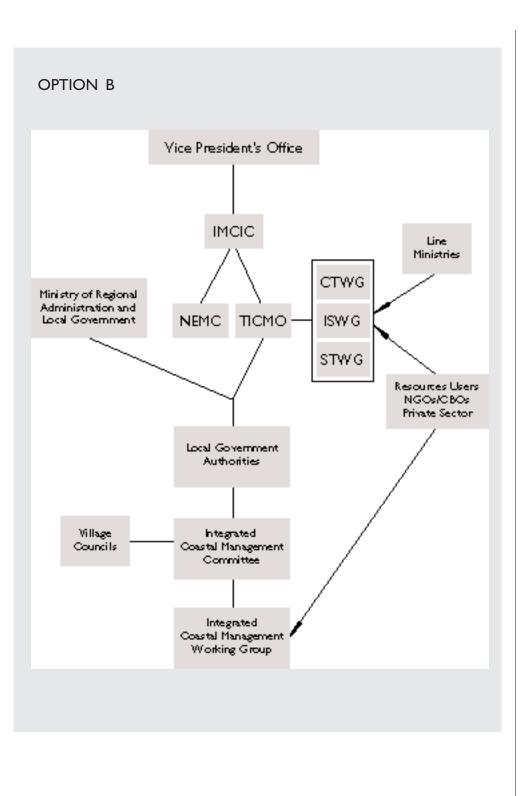
Placing the responsibility for ICM within an existing institution under the purview of the ministry responsible for environment – Under the existing structure, TICMO would be housed within the National Environmental Management Council. The National Environmental Management Council is under the supervision of the Vice President's Office, with the Minister of State (Environment) having direct responsibility. National Environmental Management Council already has the responsibility and mandate to facilitate coordination among sectors, and already plays an important cross-sectoral, integrative role on environmental issues. It has responsibilities for awareness raising and education, providing accurate information about environmental issues, coordinating the nation's environmental impact assessment process and facilitating implementation of environmental programmes at the local level.

If the coastal policy relies only on existing laws and authorities and defines itself through facilitation and coordination (Option I), no change would have to be made to the National Environmental Management Council's authority. If the coastal policy requires new authority to promote ICM and give the policy the force of regulation, rather than only rely on improved enforcement of existing sectoral authority and voluntary cross-sectoral and local-national cooperation (Option II), the National Environmental Management Council's Act would have to be modified.

#### Option B.

**Creating a new ICM office within the ministry responsible for the environment** – This would require that the TICMO be created by specific legislation that will give it the required regulatory and enforcement capacity. This would have to occur regardless of whether the policy relies only on existing laws and authorities and defines itself through facilitation and coordination (Option I), or if the coastal policy requires new authority to promote ICM (Option II).





# ENDNOTES

- Zanzibar, although a part of Tanzania, has a unique legal status. According to Article 2(1) of the Constitution, the territory of the United Republic consists of the whole area of Mainland Tanzania and the whole of the area of Tanzania Zanzibar, and includes the territorial waters. This policy addresses the issues of Mainland Tanzania, not those of Zanzibar. This is because the management of coastal resources is a non-union matter, and each place has different mechanisms in place to address coastal issues.
- The United States Agency for International Development and the University of Rhode Island's Coastal Resources Center (URI-CRC) have supported this process.
- 3) These issues and supporting documentation are based on the *Profile of ICM Issues in Tanzania: Executive Summary* and its source documents that were reviewed and approved in October 1998 at a meeting of directors hosted by TCMP.
- 4) These issues have been described in-depth by TCMP's Mariculture Issue Profile.(Maps have been provided by the University of Dar es Salaam, Institute of Marine Science, with support from the UNEP EAF/14 project.)
- 5) These recommendations are based on the TCMP document, *Initial Elements of a Coastal Policy Proposed Vision, Principles, Goals and Strategies*, reviewed and approved in April 1999 at a meeting of directors, hosted by TCMP.
- 6) This is a generic term meant to include all protected areas along the coast. These include marine parks, protected mangrove areas, terrestrial game parks, etc.
- This implementation mechanism does not have options, implementation will be through the existing structure.
- A national coastal management policy will not create new parks, but will seek to be involved in the process of their development and initial design.
- This implementation mechanism does not have options, implementation will be through the existing structure.
- This implementation mechanism does not have options; implementation will be through the existing structure.
- 11) Those people working to address coastal management issues and problems. This may include people from government (all levels), nongovernmental organizations and private sector. It also includes those directly or indirectly involved in implementing this policy and sectoral policies, rules, regulations and guidelines related to coastal management issues and problems.

- 12) Those people who use the resource for economic gain, food or recreation.
- 13) Forty-five days is proposed because it provides adequate time to circulate the document to be reviewed and receive comments. It was felt that 30 days was to short and, therefore, exclude certain groups from responding. Sixty or 90 days was to long, especially when the time it takes to respond to the comments is added to the process.
- 14) Need is often set by the current context. Today in Tanzania the context is bounded by intense donor interest in coastal management and strong in-country capacity at technical and political levels. Therefore, it is easier to move from principles to action in Tanzania, compared to other countries that do not share the same level of support and interest. However, this situation can change, requiring the size and scope of the program to be re-defined (e.g., less support, more effort needed). This structure defined herein allows for re-adjustments depending on the need (e.g., through re-defining the interagency working groups).
- 15) The Permanent Secretary in the Vice President's Office was selected because of its inter-ministerial position.
- 16) This ministry will be defined by the final institutional placement.
- 17) Either directly or through its host institution as defined by the final institutional placement.
- 18) The existing review process wherein the appropriate Ministries review district plans and by-laws will be applied to ensure that District level Integrated Coastal Management Action Plans are consistent with national policies and goals.

# ANNEXA: REFERENCES

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# ANNEX B: WORKING GROUPS

#### TEAMS USED IN THE POLICY DEVELOPMENT PROCESS

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