

# Integrated Coastal Management Policy Meeting Executive Summary

Prepared by:

**Tanzania Coastal Management Partnership Support Unit  
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Prepared for:

**TANZANIA COASTAL MANAGEMENT PARTNERSHIP ICM POLICY  
MEETING  
WHITE SANDS HOTEL, 29 OCTOBER 1998**

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# Preface

**The purpose of this ICM Policy Meeting Executive Summary is to:**

- ❑ **Summarize the background documents that have been prepared for the ICM policy meeting**
- ❑ Clearly and concisely describe the issue areas that have been identified through the TCMP's process
- ❑ Provide context and information for the meeting's discussion.

The information contained in this document has been extracted from a series of background documents prepared for this meeting. These include:

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*Policy and Legal Analysis of Tanzania's Coastal and Marine Resource Management.* TCMP Legal Team, members include: National Environment Management Council and the University of Dar es Salaam. Assistance was provided by the International Resources Group through the EPIQ/Tanzania project. Individual names are listed in the actual document.

*Application of International Experience to Formulation of a National Policy for Coastal Management for the United Republic of Tanzania.* Coastal Resources Center, University of Rhode Island, National Environment Management Council. Individual names are listed in the actual document.

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# TABLE OF CONTENTS

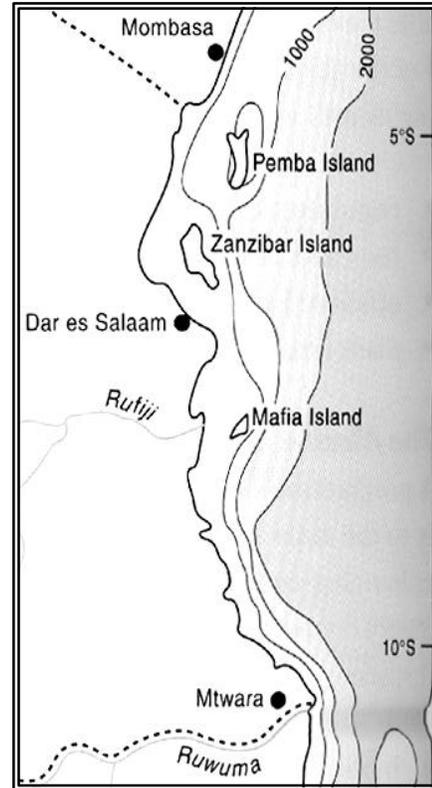
<b>PREFACE .....</b>	<b>i</b>
<b>TANZANIA’S COAST IS IMPORTANT FOR THE COUNTRY’S DEVELOPMENT.....</b>	<b>1</b>
<b>TANZANIA IS COMMITTED TO INTEGRATED COASTAL MANAGEMENT (ICM) AND HAS MUCH EXPERIENCE UPON WHICH TO BUILD A NATIONAL PROGRAMME .....</b>	<b>1</b>
<b>TANZANIA IS ACTIVELY WORKING TO ESTABLISH AN EFFECTIVE NATIONAL COASTAL MANAGEMENT POLICY AND PROGRAMME..</b>	<b>3</b>
<b>GLOBAL EXPERIENCE CAN INFORM THE TANZANIA NATIONAL ICM POLICY PROCESS .....</b>	<b>3</b>
<b>PROGRESS TOWARDS A NATIONAL ICM PROGRAMME IN TANZANIA</b>	<b>5</b>
<b>TANZANIA IS FACED WITH A VARIETY OF COASTAL ISSUES THAT REQUIRE URGENT ATTENTION .....</b>	<b>6</b>
<b>1. ISSUES RELATED TO THE IMPROVEMENT OF THE WELL-BEING AND LIVELIHOODS OF ALL BENEFICIARIES OF COASTAL RESOURCES.....</b>	<b>6</b>
<b>2. ISSUES RELATED TO COASTAL PLANNING AND MANAGEMENT OF RELATED ECONOMIC OPPORTUNITIES WITHIN THE COASTAL AREA INCLUDING TOURISM, AGRICULTURE, MARICULTURE, AND OIL &amp; GAS. ....</b>	<b>7</b>
<b>3. ISSUES RELATED TO EXTRACTION OF COASTAL RESOURCES LEADING TO COASTAL EROSION .....</b>	<b>10</b>
<b>4. ISSUES RELATED TO MANAGING GEOGRAPHICAL AREAS OF CONCERN INCLUDING CRITICAL HABITATS.....</b>	<b>10</b>
<b>5. ISSUES ASSOCIATED WITH SUPPORTING LOCAL INITIATIVES, DECISIONMAKING FOR INTERSECTORAL DEVELOPMENTS, AND BALANCING LOCAL AND NATIONAL INTERESTS .....</b>	<b>11</b>
<b>6. ISSUES RELATED TO INFORMATION AVAILABILITY FOR, AND USE IN, DECISIONMAKING.....</b>	<b>12</b>
<b>7. ISSUES ASSOCIATED WITH THE INADEQUACY OF HUMAN AND INSTITUTIONAL CAPACITY .....</b>	<b>12</b>
<b>MOVING FORWARD – NEXT STEPS TO DEVELOP A NATIONAL ICM PROGRAMME .....</b>	<b>13</b>



## **Tanzania's coast is important for the country'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 (GDP). These areas are very important to the future social and economic growth of the nation. They are rich in natural resources and currently contribute more than a proportionate share of the nation's income. Currently, 75 percent of the country's industries are located in coastal regions. The coast also contains resources that will be the engine for the nation's development. Coastal tourism, mariculture development, agriculture, and natural gas exploitation are just beginning. These resources are seen as potential activities for national economic development and the gradual improvement of the quality of life of coastal communities.

Tanzania's coast is home to about a quarter of the country's population. About eight million people, live in coastal regions, with the largest population concentrations in Dar es Salaam, Tanga and Mtwara. The rest of the coastal population live in coastal villages, with little access to infrastructure or services. They depend on coastal resources for food, security and very modest livelihoods. Difficult conditions and few opportunities in these villages resulted in substantial migration, especially by young people, to urban centers. At the same time, high rates of population growth have increased overall numbers of people in coastal villages who, in turn, increase the pressure on declining resources.



The challenge is to maintain and improve the resource base on which the rural coastal economy depends, while developing new economic opportunities in ways that benefit the people of the coast and the nation as a whole.

## **Tanzania is committed to integrated coastal management (ICM) and has much experience upon which to build a national programme**

Tanzania is in the forefront within the Western Indian Ocean region in the field of coastal management. This is a result of varied experience in coastal management and a long standing political commitment to make coastal management a reality.

## Local ICM Programmes in Tanzania

### **Tanga Coastal Zone Conservation Development Programme (TCZCDP)**

This is the largest coastal programme which, through the regional fisheries office, works at the district and village levels to address critical coastal management issues such as dynamite fishing and the development of alternative livelihoods. This programme has demonstrated that management of coastal resources and development activities can be effectively undertaken at the local level. The Tanga Programme has placed a heavy emphasis on capacity building and awareness.

*Lead Agency: Tanga Regional Authority*

### **Kunduchi Integrated Coastal Area Management Project (KICAMP)**

This project has already completed an extensive "listening phase" where coastal issues were identified and a strategy for addressing those issues was developed. Priority issues identified include coastal tourism development, erosion, and dynamite fishing.

*Lead Agency: National Environment Management Council*

### **Mafia Island Marine Park (MIMP)**

This Park was established in 1995 under the National Legislation on Marine Parks and Reserves Act of 1994. MIMP is managed by the Fisheries Division with assistance from the World Wildlife Fund and Norwegian Agency for Development Cooperation (NORAD). The initial work of the MIMP focused on the problem of dynamite fishing in the Park area, and MIMP now works with Mafia Island communities to revise the Park management plan and operationalize management activities.

*Lead Agency: Division of Fisheries*

### **Rural Integrated Project Support (RIPS)**

This project in the Mtwara and Lindi regions works with coastal communities to reduce dynamite fishing and raise awareness about the importance of coastal resources. Although RIPS is a broad development project with a wider focus than just coastal management, the experience being generated by the project's activities have importance for national ICM.

*Lead Agency: Regional Authorities*

### **Rufiji Environment Management Project (REMP)**

REMP's goal is to promote long-term conservation through 'wise use' of the lower Rufiji forests, woodlands and wetlands. The project seeks to conserve biodiversity, maintain critical ecological functions, use renewable natural resources sustainably, and secure and enhance the livelihoods of the area's inhabitants. The project area is within Rufiji District in the ecosystems affected by the flooding of the river.

*Lead Agency: Rufiji District Authority*

At the local level, several programmes are attempting to put ICM principles into practice. There are five local-level ICM demonstration projects in Tanzania (summarized in box). Each has a different geographic scope, addresses different issues and has followed a somewhat different model for promoting integrated management. Together these programmes provide a rich experience which must inform the national policy process.

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. To make progress on developing a national ICM policy and programme, permanent secretaries of key government ministries with an important role in ICM convened at a national workshop in Zanzibar in 1995. Delegates to the meeting agreed to support the creation of a national ICM programme that will effectively

address coastal and marine problems. The current national policy initiative is one expression of the Government's commitment.

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 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 Island states held in Arusha (1993), and participated in the second conference on the same held in Seychelles (1996). As a result of these conferences, Tanzania signed resolutions that provided 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 (July 1998). The conference recognized the need for African coastal states to transition to policies and practices of sustainable integrated coastal management to improve the quality of life for African coastal communities.

### **Tanzania is actively working to establish an effective national coastal management policy and programme**

To build upon the Government of Tanzania's commitment to coastal management and to facilitate the establishment of a foundation for effective coastal governance, the Tanzania Coastal Management Partnership (TCMP) was formed. The TCMP is a cooperative initiative among the vice president's office through the National Environment Management Council (NEMC), the United States Agency for International Development, and the University of Rhode Island's Coastal Resources Center (URI-CRC). The TCMP works with the existing network of ICM programmes and practitioners to facilitate a participatory, transparent process to unite government and the community, science and management, and sectoral and public interests, to wisely conserve and develop coastal ecosystems and resources.

The **goal** of the Partnership is to *establish the foundation for effective coastal governance*. During the next five years, the TCMP will work towards achieving the following **results**:

- Develop an integrated coastal management policy that is effectively applied to coastal problems at both the national and local levels;
- Demonstrate intersectoral mechanisms for addressing emerging coastal economic opportunities;
- Improve enabling conditions for integrated coastal management;
- Build human and institutional capacity for integrated coastal management; and
- Tanzania's coastal management experience will be informed by and will contribute to ICM regionally and globally.

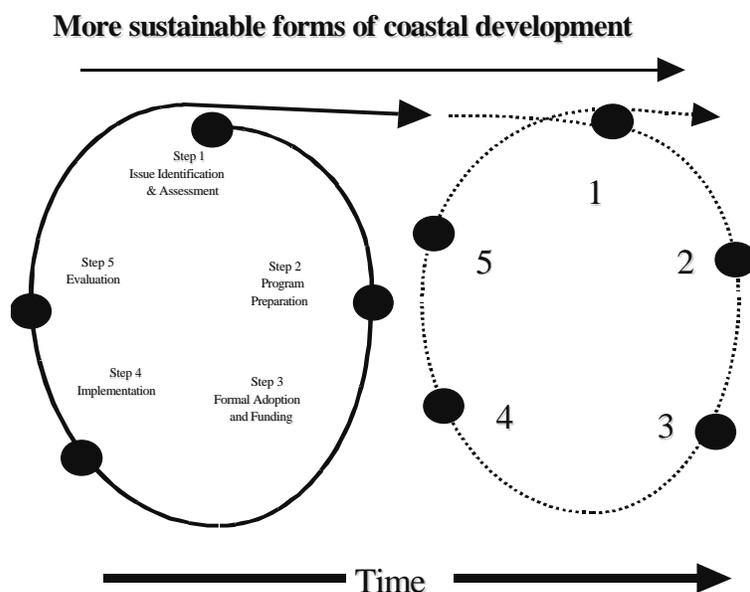
### **Global experience can inform the Tanzania national ICM policy process**

There is no 'formula' or one correct model for how to do ICM. Each country must invent a programme that reflects its societal aspirations, and is attuned to its unique sociopolitical and cultural context. There is, however, a large body of ICM

experience – both in failure and success – from around the world upon which Tanzania can draw. This experience highlights several important lessons.

First, international experience reveals that **coastal policy formulation is largely a governance process**; a process that is both cyclical and generational with the scale, scope and complexity increasing with each generation. The policy cycle begins by identifying and assessing the issues in the stretch of coast in question, and then

## The ICM Process



proceeds to set objectives and prepare a plan of policies and actions. Next comes formalization through a law, decree or interagency agreement, and the securing of funds for implementation of some selected set of actions. Policy implementation is the step in which procedures and actions planned in the policy formulation stage are made operational. Evaluation and adjustment are the crucial end steps of a cycle of policy, from which a new generation is launched.

No coastal management programme or policy achieves all of its aspirations in a single “generation.” If a programme is strategic, it will define in—general terms—an end goal, and then carefully and pragmatically define its intermediate objectives for a given generation of the policy cycle.

Second, there is an increasing international consensus on **critical success factors for initiating and sustaining effective ICM programmes**. These are summarized in the adjacent box.

Third, international experience clearly suggests that successful policy formulation requires that a series of clear choices be made; and that 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

### Critical Success Factors for Initiating and Sustaining ICM Programmes

- Leadership, both political and technical
- Participation by all key state and parastatal groups, resources users and private sector stakeholders throughout programme planning and implementation
- Ownership of the initiative at both local and national levels
- Strategic, issue-driven programme focus and goal-driven/action-oriented solutions
- Implementation occurs concurrently with planning
- Integration across sectors and scales of management
- Integration of scientific information into the policy process
- Sufficient professional capacity
- Matching programme activities to capabilities of the institutions.
- Periodic self-assessment and adjustment to promote learning and adaptive management

### Strategic Choices for an ICM Policy:

- 
1. What is the appropriate scope of the coastal policy?
  2. How should the coast be defined?
  3. What is an appropriate approach to policy development?
  4. What functions and institutional arrangements should be considered?
  5. What funding and resources are needed?
  6. How should the policy “learn” from experience, and adapt to

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 increases through the successive completion of policy cycles. Another major strategic choice will ultimately have to be made about appropriate functions, and institutional arrangements for the implementation of the coastal policy and programme. **A key**

**lesson from international experience is that discussions on institutional arrangements should not be made prematurely.** Until it is clear what the goals, objectives, functions, and approach of the programme will be, wise choices about the best institutional arrangements for its implementation cannot be made.

### Progress towards a national ICM programme in Tanzania

Tanzania is in the first step of the ICM policy process. This step focuses on identifying and assessing key coastal management issues. These issues are the basic building blocks for any ICM policy and programme. To make progress on this step, the TCMP has prepared a series of background documents and initiated a consultative process. These documents were developed to provide the necessary background information and an initial description of the issues, to stimulate a deeper and broader discussion and analysis of the key coastal management issues.

The *Towards an Issue Profile* and *Mariculture Issue Profile* reports were prepared by members of the Core (Policy) and Mariculture Working Groups of the TCMP. These working groups are inter-sectoral and inter-disciplinary; their members are experts drawn from relevant government, private and public institutions, including individuals having a stake in coastal and marine areas of the United Republic of Tanzania. The consultant teams were organized to support the working groups by addressing specific topical areas that required attention. Overall, more than 40 Tanzania professionals from over 15 institutions contributed to the background documents.

Preparation of these reports started in February 1998, when the Core and Mariculture Working Groups and Socioeconomic and Legal Teams were formed by TCMP. The report preparation process then included the following key events:

- Collection, review and synthesis of available information, *the Working Group members consulted several sources of information in, and outside the country.*
- Working Group meetings and workshops—*through meetings, workshops and retreats, the TCMP working groups and consultant teams shared experiences and assessed the prevailing issues.*

- Consultations with relevant individuals and institutions at local, national and international levels—*over 40 institutions over 100 individuals participated in this process.*
- Field observations—*members of working groups visited all coastal districts for ground-truthing of the identified issues. The ICM field-based programmes and the local government officials who guided TCMP visits facilitated discussions about issues at the grassroots level in coastal village communities.*

The ICM field-based programmes were critical to the development of these background reports and served as the primary source of information about the local situation and the pressing coastal management issues at the sub-national level.

## **Tanzania is faced with a variety of coastal issues that require urgent attention**

Through the process outlined above, the TCMP has initially identified urgent issues related to the following seven themes.

### **1. ISSUES RELATED TO THE IMPROVEMENT OF THE WELL-BEING AND LIVELIHOODS OF ALL BENEFICIARIES OF 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 improve village life, there is a need to identify actions to increase 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 urban migration.**

Small-scale agriculture – Coastal agriculture, as in the rest of the country, is dominated by small holders, who form the core of the economy. Very low inputs and technology characterize small-holder farms. The majority of these farms are located in areas with poor infrastructure limiting market opportunities, as well as the availability and timeliness of supply of inputs such as fertilizer and credit. This has affected labor and land productivity. Due to population increases in the coastal area, the urgent need for food security, and few successes in increasing coastal agricultural productivity, more arable land has to be turned into agricultural production resulting in expanded impacts such as soil erosion and sedimentation.

Artisanal fisheries – Artisanal fisheries feed coastal residents and contribute to 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 of 1984 to 1994 (the last year for which data is available),

the annual fish catch ranged between 45,000 and 54,000 tonnes for the mainland. Also during this period, the number of fishermen increased each year. Until 1990, increased effort resulted in increased catches; but during the last decade, catches have declined, perhaps signaling that the artisanal fishery is over-exploiting the stocks. Coupled with increased overall fishing effort was the introduction of destructive capture techniques – including dynamite fishing or blasting, beach seining and poison fishing – all of which exacerbate the problem.

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 ha of the coast. They are important and valuable resources to local communities providing food, fuel and building materials both for home use and sale, as well as playing a vital role in Tanzania's rich coastal ecosystem.

Small-scale businesses and the informal sector – In coastal regions, particularly in urban areas, the small-scale business and the 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, as people migrate from resource-dependent areas to urban centers.

Maintaining and enhancing natural resources for local use, identifying and supporting new opportunities to supplement village incomes, reducing pressure on the resource base, and developing mechanisms that encourage local stewardship and management of coastal resources are all issues that a national policy and programme must address.

## **2. ISSUES RELATED TO COASTAL PLANNING AND MANAGEMENT OF RELATED ECONOMIC OPPORTUNITIES WITHIN THE COASTAL AREA INCLUDING TOURISM, AGRICULTURE, MARICULTURE, AND OIL & GAS.**

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 the benefit of current and future development, and balance it against the needs of the nation and the individuals living on the coast, careful shorefront planning that is guided by clear principles and backed by enforceable practices will be necessary. Shorefront planning seeks to balance competing uses for land and natural resources, resolve conflicts among users, and balance national and local interest. It guides development as it is happening, trying to promote development in suitable areas and away from sensitive areas, as well as mitigate the impacts of existing activities. It does not replace the sectoral responsibilities for reviewing and approving development. Instead it seeks to fill the gaps that exist between the sectors and coordinate among them.

In addition to bringing a rational approach to siting shorefront development, a national coastal policy and programme needs to promote integrated and sustainable approaches to developing major new economic uses of the coast so as to optimize

benefits and minimize impacts. It must also strategically address concerns such as the vulnerability of coastal structures to natural hazards, like flooding. Mitigation measures must be considered during the design and construction of emerging economic activities to reduce the potential impacts of natural disasters. Likely emerging economic activities and their associated issues include:

Tourism – The coastline is endowed with numerous potential locations for tourism including historical and scenic sites. Old beach hotels are being rehabilitated, new hotels built, and plots are continuously being allocated for tourism development along the whole coast from Tanga to Mtwara. Coastal tourism 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
- Degradation of habitats, especially damage to coral reefs due to trampling and anchors
- Depletion of resources through collection of trophies, seashells and corals
- Beach erosion from poorly sited hotels and the consequent call for increased government expenditures to rehabilitate and protect private sector investments as well as downstream areas
- Localized pollution due to increased waste load and
- Cultural issues, reduction of public access to the beach, and other conflicts between villagers and tourists

Agriculture – In the coastal regions, 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 productivity is quite low. The main constraints relate to 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 transport and water resources. Large-scale agriculture includes cashewnut and coconut farms and sisal plantations. With the liberalization of trade and free market, there is a potential for this sector to employ more intensive practices and increase the use of fertilizers.

Mariculture – Mariculture is the rearing of finfish, shellfish and seaweed in a process in which at least one phase of growth is under the control of people. 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 level where mariculture is an alternative form of crop production and can provide income and protein; and at the national level where 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 (see “Learning by Doing” box).

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 make significant contributions 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

### **Learning by Doing – Demonstrating Intersectoral Mechanisms for Mariculture Development and Management**

In order to learn about how intersectoral mechanisms work, and to test inter-sectoral approaches, mariculture was chosen as a pilot issue for analyzing the added value of using an integrated coastal management approach to an important economic development activity.

Mariculture development provides a good model for an ICM approach because it typifies many of the economic activities that are increasingly exerting pressure on coastal areas. From a governance perspective, it is a topic requiring close inter-sectoral coordination and cross-sectoral policy development. From an environmental management perspective, mariculture exemplifies the complex challenges of coastal development. Mariculture is most often conducted in the ecologically important area where terrestrial and aquatic habitats meet, and is closely linked to other coastal activities and characteristics. As with most coastal activities, the fundamental challenge in developing a sustainable mariculture industry lies in discovering ways to shape and guide economic development to enhance the quality of life for coastal residents, to improve the economy of the nation, and to maintain the quality of the resource base for future generations. Lessons learned in applying the tools and concepts of ICM to guide and integrate mariculture development will pave the way for addressing other development challenges.

As with the ICM policy process, the mariculture activity began by identifying and characterizing the environmental management and governance issues. Preliminary findings from the *Mariculture Issue Profile*, written by the Mariculture Working Group include:

- ❑ Objectives for mariculture development in Tanzania need to be carefully analyzed and chosen, recognizing the different issues and opportunities associated with small-scale, village-based mariculture; and large-scale commercial operations
- ❑ Since there is not a comprehensive mariculture policy, the various sectoral policies relating to mariculture must be harmonized and integrated into a single statement that emphasizes environmental quality, strict enforcement of existing laws and regulations, and clarification of the permitting process
- ❑ Mariculture guidelines that consider:
  - Innovative mechanisms for promoting “good practice” in Tanzania’s emerging mariculture industry
  - Clear EIA requirements that are part of the approval and permitting process
  - Monitoring frameworks, methods, criteria and procedures to provide feedback to regulatory and management institutions
- ❑ Local authorities need more support from the national government to facilitate village-based, small-scale mariculture initiatives
- ❑ A mechanism is needed in which the various stakeholders have an opportunity to participate in mariculture project planning and decision-making

The Mariculture Working Group, in close cooperation with the key sectors, will now begin to select strategies and actions for addressing these findings.

extensive pipeline system that will deliver the product to Dar es Salaam. There are also confirmed gas reserves at Mnazi Bay, however specific development plans are not yet in place.

### **3. ISSUES RELATED TO EXTRACTION OF COASTAL RESOURCES LEADING TO COASTAL EROSION**

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. However, these activities contribute significantly to coastal erosion. Other contributors to erosion include poor siting requirements and the degradation of natural features from destructive practices, such as mangroves and coral reefs which serve as natural protection against erosion.

Sand mining – Local operators generally do sand mining on a small to medium scale. The sand is primarily used as a building material within the area from which it was mined. Sand mining exists in most coastal towns but it is not done in coastal villages because they do not use cement for building. Sand mining has led to soil erosion along riverbanks and shorelines in Pangani, Muheza, Mtwara town (e.g. Chuno), Lindi (Mitema ), and Dar es Salaam (Kunduchi); as well as to the change of river courses (e.g. Pangani River). In Dar es Salaam, it has caused damage and threatened structures like roads and bridges. In some places, abandoned sandpits have been turned into refuse dumps, posing a health hazard to nearby residential areas.

Quarrying – Quarrying targets materials other than sand, especially coral rag, which is used for construction. Quarrying in the Tanga, Mtwara and Lindi regions is limited to areas near towns. Quarrying near shore in the Mtwara region has led to shore erosion, land subsidence (e.g. Mikindani, Kajima quarry) and landslides (e.g. in Lindi Hill quarries). Quarrying in Dar es Salaam creates unsightly pits that are not reclaimed by landfill. Currently there is no control of abandoned pits, and data on the extent of quarrying is limited.

Coral extraction – One of the most destructive activities now allowed and even encouraged by some regional and district authorities is coral mining. Live and dead corals are extracted from reefs using pick axes, crowbars and other implements. The corals are brought ashore where they are piled on kilns and burned to produce lime for local building and trade. The environmental impacts resulting from coral mining include shore erosion, land subsidence, loss of scenic value due to abandoned pits and loss of biodiversity. Coral extraction negates the efforts made to save the reefs from dynamite fishing.

### **4. 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 sea grass

beds. These systems interact with each other and together supply the natural wealth upon which the nation's resource-dependent activities rely. The biodiversity of these systems is an important asset for the nation. There is growing concern that this resource base is already degraded, and that increasing pressures from a growing population and emerging economic development will cause further damage. Currently, Tanzania is using a number of tools to promote good planning for, 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 which provide promising models for critical habitat management.

Other geographic areas of concern – There are currently no mechanisms in place to initiate proactive planning and management of other coastal geographic areas of concern. There is a great, but unfilled need to proactively plan for coastal areas where there are existing important economic facilities and infrastructure (e.g. ports), and where major new economic developments are planned. There is also the need to initiate processes to proactively identify and resolve potential user conflicts in areas undergoing rapid change (e.g. Kunduchi, Mnazi Bay). These mechanisms must provide a venue to address cross-boundary issues, especially those cross-jurisdictional ecosystems of mutual concern.

## **5. ISSUES ASSOCIATED WITH SUPPORTING LOCAL INITIATIVES, DECISIONMAKING FOR INTERSECTORAL DEVELOPMENTS, AND BALANCING LOCAL AND NATIONAL INTERESTS**

Several pilot ICM programmes are ongoing in Tanzania which are making progress on a host of local issues. These programmes are also identifying barriers which 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 learned in these specific sites need to be applied broadly by a national programme.

Many well-intentioned actions and decisions are made at local and national levels, by central and local governments, companies, Non-governmental organizations (NGOs) and local communities, to manage coastal resources. However, these actions are often independent of one another because Tanzania lacks clear mechanisms for multi-sectoral and collaborative approaches to face the complex challenges of coastal development and management. 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 local and national interests that are not always the same.

## **6. ISSUES RELATED TO INFORMATION AVAILABILITY FOR, AND USE IN, DECISIONMAKING**

Lack of data on coastal and marine resource status, trends and use inhibits good planning and proper management. It is also makes difficult the practical determination of enforcement priorities. Priority data acquisition needs to include trend data on sand mining (Commission of Minerals); dynamite fishing (Fisheries Division); coral reef condition (Fisheries Division and Commission for Minerals); mangrove condition and loss (Forestry and Beekeeping Division); and ambient water quality and effluent discharges (Ministry of Water). There is no centralized or coordinated approach to monitoring coastal ecosystems and human welfare along the coast to track impacts of policy decisions and guide management.

Currently, Tanzania's research institutes are not mobilized or coordinated to address these critical and practical data gaps. Research concerned with protection of the coastal and marine environment in Tanzania is carried out on a sectoral basis, by a diverse group of institutions including the Tanzania Commission for Science and Technology; the Tanzania Fisheries Research Institute; the University of Dar es Salaam-Institute of Marine Science; the Kunduchi Fisheries Training Institute; and the Mbegani Fisheries Development Center. While there is interest in all of these institutions to direct research to address important management questions facing the nation, there are not mechanisms nor structures in place to bring managers and scientists together to establish priorities or exchange findings.

## **7. ISSUES ASSOCIATED WITH THE INADEQUACY OF HUMAN AND INSTITUTIONAL CAPACITY**

Tanzania has only limited individual and institutional capacity to manage the diverse resources within the coastal area. In the design report prepared prior to the inception of the TCMP, 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 this is no longer an appropriate approach to meet the challenges of managing the coastal area. Coastal managers need proficiency in a broad range of technical areas, as well as skills and attitudes that promote participatory processes, and integrative thinking and action. A capacity-building strategy that addresses these needs is essential. There is a need of creating awareness in the next generation and in this context, local authorities are essential for building awareness programs.

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

## **Moving forward – next steps to develop a national ICM programme**

Tanzania is still in the early phase of the ICM process and is now focused on step one – identifying and assessing the issues, and goal setting. It is crucial that during this initial step, the programme seek a sufficient consensus among key stakeholders – representatives from national, regional, district and village levels of government, resource users, private sectors and NGOs – of the issues that will eventually form the initial focus of the national ICM policy and programme. Building on the participatory process used to develop the background documents which form the basis of this executive summary, the TCMP plans to continue its participatory process and work towards completing the first step of the ICM policy process by:

- Completing an **Issue Profile** that clearly states the critical issues a national ICM programme should address, as well as an initial **strategic focus**.
- Preparing the **goals and objectives** for an ICM policy.

This work will be completed by the end of June 1999, the end of project year one. Concurrent with this core activity, the TCMP will implement activities that seek to put in place the foundation for improved governance.

Demonstrate Intersectoral Mechanisms – Mariculture will continue to be used to test inter-sectoral mechanisms and approaches. Over the next several months, the TCMP will work towards addressing the findings of the *Mariculture Issue Profile*. In addition to addressing an immediate coastal issue of concern, the process will inform the ICM policy process both as to how it should address a specific issue, as well as provide valuable insights about how sectors can collaborate to formulate and implement policy.

Improve enabling conditions for ICM – The TCMP will seek to promote learning between national and local government, develop a network of coastal practitioners that can learn from one another by sharing ideas and information, and build an informed constituency for coastal management. Key activities include:

- Producing a “Voices from the Field” video which will capture local issues using voices and images from local coastal communities to show at national meetings and workshops
- Improving information flow among practitioners through a bi-monthly newsletter, an accessible email discussion group, and a coastal management web page
- Convening a “problem-solving workshop” to address pressing coastal management issues

Build human capacity – By the end of project year one, the TCMP, along with the appropriate educational and academic institutions, will design a short course for coastal management to be delivered to coastal management practitioners in year two. This short course will be the first of its kind in Tanzania and in the region, and will bring together a range of disciplines to learn about the practice of coastal management. The TCMP will also continue to provide opportunities for ‘learning by doing’ through its working groups and external training programmes.

Learn from existing coastal programmes – The TCMP will continue to learning from experience both from within Tanzania and from ICM activities globally. As part of the issue identification process, the TCMP will have extensive conversations with the existing ICM programmes in Tanzania to ensure that local issues are being adequately addressed. The TCMP will also work toward maintaining Tanzania’s position as a regional leader in the field by providing opportunities for its partners to participate in regional and international forums and meetings. At the same time, the TCMP will also continue to bring global experience to bear on the coastal issues faced in Tanzania.