Tanzania Coastal Management Partnership

Proceedings for TCMP Retreat and Local ICM Programs meeting

Tanzania Episcopal Center, Dar es Salaam 20 - 22 September 1999

Prepared by:
Tanzania Coastal Management Partnership

Working Document: 5024 TCMP

A joint initiative between the National Environment Management Council, the University of Rhode Island/Coastal Resources Center and the United States Agency for International Development

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Towards shared vision in coastal management policy

1.0 Summary of the retreat and meeting

The Tanzania Coastal Management Partnership organized a three day retreat and meeting for the TCMP working groups members and representatives of local ICM programs from 20th to 22nd September 1999 at the Tanzania Episcopal Center in Dar es Salaam.

The retreat meeting was attended by 35 members from the working groups - the Core Working Group (CWG), the Mariculture Working Group (MWG) and the Science and Technical Working Group (STWG), 12 senior management and technical officers of eight local programs and 5 observers.

The TCMP made progress on developing the ICM Policy Green Paper through inputs, comments and observations by participants. TCMP further made progress in enhancing effective link between coastal management initiatives at local and national level by providing a forum for local programs and central government representatives to meet and share ideas and information.

The three days were effectively used by local programs and the working groups to share experiences and learn from each other, learn about the coastal policy process, and plan for the future with a shared vision in sustainable coastal management policy in Tanzania.

The participants also made recommendations that will guide the TCMP policy process in its Year Two tasks.

1.2 Retreat Objectives

- Working groups update each other on progress and problems related to their activities;
- Identify specific overlaps where information exchange between working groups is necessary;
- Provide written and verbal feedback on draft Green Paper;
- Update from each local ICM program on progress, problems and experiences;
- Identify areas of overlaps between TCMP/working groups and local programs that provides opportunity for cooperation and information sharing;

- Develop an action plan to ensure follow-up on areas of overlap; and
- Comments by local ICM programs on draft Green Paper with specific focus on approaches and institutional mechanism.

2.0 Follow-up Actions

Following recommendations and observations from the retreat meeting, it was resolved to make follow-up on the following issues:

- Facilitate a meeting with the Division of Fisheries, to discuss raised complains on industrial trawler operations;
- Include articles in Pwani Yetu about the revised KICAMP activity, ODINEA and the PDF for Reducing the Impact of Tropical Shrimp Fisheries on Marine Resources through the adoption of environmentally friendly techniques and practices;
- Circulate a copy Memorandum Of Understanding of the Tanga CZDP and Mangrove Management Project Northern Zone in respect of the KISA mangrove management partnership;
- An exchange between Menai Bay and Mafia Island Marine Park regarding coral mining- with the focus on the use of land based fossil corals in lime making;
- Continue having outside observers (in limited numbers) and mixing the Working Groups and Local Programs;
- Connect the ODINEA and STWG activities to strengthen the overall support to science for management;
- Ensure that local programs contribute to the science for management research and monitoring agenda; and
- Tourism should be considered as the next intersectoral issue to be addressed.

3.0 Review of TCMP working groups activities

Members of the TCMP working groups - the Policy Core Working Group, the Mariculture Working Group and the Science and Technical Working Group reviewed their activities in the past six months. Each group convened individually to review its performance of activities before making presentations with the focus on the following areas:

- Status:
- future activities (next six months);
- success and problems; and

• areas of overlaps and need for information exchange with other groups

3.1 Working Groups presentations of activities

3.1.1 Core Working Group (CWG)

Status:

The CWG continued to undertake its activities through a series of meetings and workshops to verify and confirm on identified issues that culminated in the development of a Draft Issue Profile. The Issue Profile was approved by the Directors Policy Meeting of October, 1998.

Through a consultative and participatory approach, the working group moved ahead and developed Initial Elements of a coastal policy. The consultations were made in coastal districts.

The Second Directors' Meeting of May 1999 reviewed the initial elements, made comments and set pace for the preparation of the ICM Policy Options - the Green Paper.

After including the Directors' comments in the Initial Elements, the working group embarked on the preparation of the draft of the Green Paper. This again involved consultations which, with further assistance from the Director General of NEMC, Dr. Magnus Ngoile and the TCMP Support Unit Leader, Mr. Jeremiah Daffa, inputs were obtained from Regional and District Commissioners and some Members of Parliament.

Further contributions in the CWG activities came from the Coastal Resources Center (CRC), the Legal and Social Economic teams and the Makaramba Institutional Arrangement Team.

The draft Green Paper is now in its final polishing before it is presented at the Third Directors' Meeting expected to be hosted by the Vice President's Office in early November 1999.

Future Activities:

- 1. Improve the Green Paper document based on the 20th-22nd Retreat and Local ICM Programs Meeting;
- 2. Prepare for the November meeting of Directors and Local Government Representatives from coastal districts;
- 3. Incorporation of comments from the November Directors meeting and finalize Green Paper;

- 4. Commence working on the White Paper between November 1999 and January 2000;
- 5. Present the Draft White Paper to Directors as well as the Permanent Secretary to solicit comments individually;
- 6. Fine tuning of the White Paper;
- 7. Convene Directors meeting chaired by the Permanent Secretary;
- 8. Expect approval from Directors Meeting, and aim to finalize the White Paper in February.

Success

- Activities carried out in good pace within the time schedule:
- Multidisciplinary consultation maintained; and
- Positive input from regional and district consultations.

Problems:

- Building ICM constituency e.g. Non-continuity of participants at the Directors' meetings; and
- Inadequacy of data and statistics on the state of the coast.

Areas of overlaps and need for information exchange

- Mariculture Working Group input required;
- No information from Science and Technical Working Group.

3.1.2 Mariculture Working Group (MWG)

Status:

Inspired by the endorsement of the Mariculture Strategic Plan and approval of the Mariculture Action Strategy, by the January 1999 Directors' Meeting convened by the Director of Fisheries, the MWG has made progress in the development of the Mariculture Guidelines and the Learning Document.

Re-energized after expansion of the group from 8 to 16 people including the sectors of Water, Forestry, Lands, NEMC, Fisheries, Tanzania Investment Center (TIC), TAFIRI, UDSM, TCZCDP and the private Sector, the group was able to produce the first draft of the Mariculture Guidelines in May 1999.

The MWG process has been based on writing teams meetings, workshops, case studies and consultations with CRC. These include the April Bagamoyo Case Study Workshop that led to

the production of the First Draft and the July Workshop that helped in the production of the Second Draft.

Future Activities

- 1. Finalization of guidelines
- 2. Review comments from CRC on 2nd draft and improve the document.
- 3. Carryout institutional consultation
- 4. Produce 3rd draft and send to external reviewers (foreign and local)
- 5. Incorporate Reviewers' comments
- 6. Produce 4th draft and submit to Directors' meeting (January 2000) for approval
- 7. Follow-up on applicability of guidelines,
 - Training
 - Extension etc.
- 8. Finalize Learning Document
 - Prepare outline (make use of April workshop)
 - Prepare questionnaire
 - Document to be ready by December.

Success

- Directors approval of Action Strategy;
- Guidelines document preparation on schedule;
- Intersectoral approach has improved; and
- Awareness raising among Directors enhanced

Problems

- Time constraints (volunteer nature); and
- Intersectoral approach good but can potentially slow down process

Areas of overlaps and need for information exchange

- Group needs to understand activities of other groups especially STWG; and
- Need for information exchange
 - CWG-Institutional options
 - STWG-Monitoring activities

3.1.3 Science and Technical Working Group (STWG)

Status:

The STWG originates from the Marine Ecosystem Assessment and Monitoring Coordination Team (MEAMCOT), initiated by

the July 1998 workshop on ecosystem monitoring for better coastal management organized by IMS Zanzibar in cooperation with TCMP.

For the period between January and May 1999, MEAMCOT was able to establish Directory of Marine Scientists; made survey of literature (bibliographies, annotations, syntheses and maps); and carried out discussions on how to design a monitoring plan and on the formalizing a science for management group.

The STWG was formed in July 1999, and six Thematic Expert Leaders (TELs) were appointed and assigned to complete survey of literature.

STWG held its first major meeting from 16-17 September 1999, at which TELs presented their work.

Future Activities

- Complete survey of literature
 - October 15 deadline for final draft
 - Review process consideration
 - Publication
- Web-site posting of survey of literature.
- Updating mechanism of bibliography on internet
- Collection of grey literature at IMS/TCMP (also inaccessible lit) & posting on web when possible.
- Report on ongoing monitoring activities
- January 2000 workshop
 - Research and monitoring agenda in support of coastal management priorities
 - Monitoring design
 - Science questions
- External links to funding agencies and international organizations.

Successes

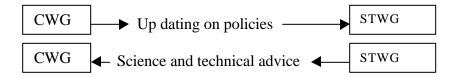
- Literature reviewed:
- Output from the effort relative to the budget is high
 - Significant amount of information gathered;
- Directory for scientists prepared;
- Scientists brought together to focus on National issues; and
- Collection of scattered information on specific management and science theme.

Problems

- Mismatch of resources and science and technology workload/agenda
- Inadequate funds for meetings

Areas of overlaps and need for information exchange

- 1. Mariculture
 - Mangroves management activities
 - Fisheries activities
 - Other marine living resources
- 2. Exchange with Core Working Group



4.0 Review and comments on draft Green Paper

The TCMP Support Unit Leader, Mr. J. Daffa, presented an overview of the draft Green Paper focusing on approaches and institutional mechanisms. Participants divided in three mixed groups, and each group reviewed the green paper draft and made comments. Feedback was given in two ways:

4.1 Comment sheets

Using the "comment sheets", designed to collect comments that are focused on editorial observations, participants pointed out a good number of mistakes like spelling mistakes, missed commas, word misplacement etc. The filling in the comment sheets was both on individual basis and by groups.

4.2 Comments related on information and approach

Groups made the following comments:

Group one

- 1. Policy 2 (page 21)
 - Paragraph 2 of option 1 should also apply to option 2
- 2. Policy 3 (page 23)
 - In addition to identifying new critical areas, there is also a need to strengthen implementation of the existing protected areas
 - Identify opportunities for increasing benefits from the resources

- 3. Policy 4 (page 24)
 - Add another bullet to say something about "Pollution hot spot"
- 4. Institutional structures
 - National Integrated Coastal Management Office (page 30)
 - Fourth bullet from No. 1 to 2 since advice is not an administrative issue
- 5. Intersectoral Working Groups (page 32)
 - Also include (somewhere) the need to include indigenous knowledge
- 6. Boundary of an ICM Policy (page 34)
 Option 1, the word "boundary"

Group 2

1. The word "United Republic of Tanzania" should be remove/placed somewhere because the policy will be for Tanzania mainland only.

Group 3

- 1. Page 1, paragraph starting with "The population..." Why particularly the year 2025?
- 2. Issues, page 15: the comments by the coastal managers is accusing and it should be put in a diplomatic language.
- 3. Page 16: there are experts in coastal management but probably no experts in integrated coastal management.
- 4. Policy 1: page 19, how about projects that are initiated at local level i.e. in village ICM agenda in which the districts are not implementing agents. How does it link to the national level. The group recommend: The districts should be informed of or involved in the projects because of extension and technical services that might be required from district staff and also the issue of by-laws.
- 5. Policy 2: Remove the word "new" from the statement because the policy caters for both major **new** and **existing** economic issues.
- 6. Policy 3: page 23, substitute the word "protect" with "conserve and restore" critical habitat.
 - Define the word critical habitat.
 - Therefore para. 2 should read "Identify, conserve and restore locally important critical..."
- 7. Policy 6: Include support to institutional capacity building by other agencies other than the National office.
 - Existing institutions that will deliver the human capacity building should be mentioned just as it was done in policy 3-critical habitats where existing programmes were mentioned.

Institutional structures:

In consistence in naming-Tanzania Integrated Coastal Management Office (TICMO) or National Integrated

5.0 Update from local ICM Programs

Representatives of local ICM programs presented their programs' activities with focus on progress in their initiatives, experiences, achievements and problems. Following is summary of presentations.

5.1 Tanga Coastal Zone Conservation and Development Programme (TCZCDP)

The Tanga Coastal Zone Conservation and Development Programme is Tanzania's largest local ICM programme. Supported by the Tanga Regional Fisheries Office, the programme works at the district and village levels to address critical coastal management issues like dynamite fishing, mangrove conservation, and the development of alternative livelihoods. The programme is a partnership between the regional authorities, along with district governments of Tanga, Pangani and Muheza, Irish Aid and the Eastern African Regional Office of IUCN – 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 of residents as well as other people in Tanzania and the Eastern African Region in general. The programme adapts an approach of listening, piloting, demonstrating and mainstreaming to obtain its goals. Through the application of collaboration mechanisms, participatory activities and a series of 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.

In phase one (July 1994-June 1997), the programme successfully conducted participatory socio-economic and resource appraisals. Also, it achieved positive results using specific management actions. Government officers were trained in problem analysis, work planning, facilitation, basic coastal ecology, coastal culture and communications skills. These activities have led to a noticeable change in attitudes and behavior on the part of villagers and government staff. After the initial training, the officers then facilitated a participatory planning process in three pilot villages. In 1998, three more villages were trained. The villages used their training to form committees to address specific issues identified during the planning process. Since the initial planning stage, the villages

have developed and undertaken specific action plans. Village initiatives include the formation of enforcement of by-laws; use of patrols to prevent destructive fishing and illegal mangrove cutting; gear restrictions as well as replanting of mangroves in degraded areas. The Kipumbwi/Sange partnership between the programme, the villages government and the Mangrove Management Project whereof a MOU in mangrove management is having great results is one of the successes.

The programme is further successfully addressing a broad spectrum of identified issues that range from resource conservation to socio-economic services to the general livelihoods of the Tanga people. However, an evaluation of the first phase of work recognized that although the programme's goals were valid and relevant, and many of the activities planned activities were completed, the programme was spread over too many issues, thus draining the available human resources.

Therefore, basing on the Phase Two mid term review recommendations, the programme will focus on establishing district collaborative resource management programmes, incorporating gender consideration into all levels of programme planning, and encouraging sustainable fishery and agriculture practices in order to improve the well-being of coastal communities at the grassroots level. This is being pursued on the following trends:

- Moving from independent village committees and village government committees to civic groups;
- From Pilot Village approach to management area approach;
- From districts as implementers to village implementers of resource management

5.1.1 Areas of constraints in achieving results

The TCZCDP pointed out the following constraints in the program's targeted results:

- Lack of effective cross-sectoral coordination in the districts;
- There is still too much dependence of directives from central government;
- Future role of regional government (Confusion following the government reforms);
- Lack of timely support from central government agencies;
- Unsatisfactory performance of some extension workers and district linkages;
- Unsastifactory performance of outside agencies supporting enforcement;
- Long term sustainability (improving revenue collection and cost sharing mechanisms);
- Poor community participation in some villages;
- Unrealistic expectations in programme ventures;

- Lack of female government officers in Pangani and Muheza districts:
- Lack of appreciation of monitoring data (e.g. reef closure at Kigombe);
- Lack of security for development of alternatives;
- Non conducive economic environment for developing alternatives;
- Lack of appreciation from government officers for the obstacles to develop economic alternatives (e.g. mariculture, tourism);
- Bush-fire control not given priority;
- Low level of success of mangrove replanting at some places;
- Lack of land security;
- Lack of government policy;
- Low soil fertility; and
- Low level of success of vermin control

5.1.2 Participants comments and observations

The programme's achievements through the partnership between the MMP and the villages of Kipumbwi and Sange (KISA), was viewed as a good example of village level integration in management of resources. TCZCDP was thus requested to circulate the Memorandum of Understanding to other programmes which, may wish to set up such partnerships in their areas of operation.

5.2 Rufiji Environmental Management Project (REMP/MUMARU)

In its first phase, REMP is making progress in setting up mechanism and planning for effective management of the lower Rufiji forests, woodlands and wetlands. So far it has established an Environmental Management Team (EMT), collected the necessary information and identified four pilot villages. These are initial encouraging early steps towards achieving REMP's goal - to promote the long-term conservation through wise-use of the area's rich resources such that biodiversity is conserved, critical ecological functions are maintained, renewable resources are used sustainably and the livelihoods of the area inhabitants are secured and enhanced.

5.2.1 Success and constrains

Though REMP has not been able to achieve measurable results in this short time of its operations, it is highly encouraged by the sense of awareness and cooperation of communities in pilot villages. The local community is positively accepting REMP as their facility for environmental issues and sustainable development.

However, there are problems the project has to address urgently. These include:

- Serious soil erosion that is leading to loss of houses and coconut trees;
- Irrational mangrove tree harvesting for poles;
- Industrial trawling for prawns which, is disturbing the biodiversity balance as the multi-species by-catch is destroyed and thrown away. In terms of weight the by-catch is more than the targeted prawns. The sea bed over which the operations take place is subjected to continual ploughing by the nets; and
- Clearing of mangroves for rice farming.

5.2.2 Participants Comments and Observations

- Mariculture activities: Participants raised concern on why REMP was not promoting mariculture activities. In response the REMP representative explained that mariculture was not in the programme's activity components, but that it would not hesitate to encourage any initiative provided the mariculture operations were not destructive of the environment.
- **Prawns trawling**: The issue of industrial trawling attracted lengthy discussion with concern to increasing conflicts in the fishery industry. Mr. W. Haule the Assistant Director in the Division of Fisheries who is also a member of the TCMP Core Working Group, took the opportunity to inform participants of initiatives through the UN Project Development Facility (PDF) aimed at reducing the impact of tropical shrimp trawling on marine resources.

Explaining that the industrial trawling fisheries was a complex issue not only to Tanzania but a global issue, Mr. Haule said the government expects to address the trawling problems with the PDF assistance, that is being processed through the Division of Fisheries. Other countries involved in PDF project are Bahrain, Bangladesh, Brazil, Cameroon, Costa Rica and Columbia. Others are Cuba, Indonesia, Iran, Nigeria and Philippines.

According to the assistant director, the primary objective of the PDF proposal is to prepare a costed Global Environment Facility (GEF) project consisting of regional and national activities aimed at reducing the effects of tropical shrimp trawling operations on habitats and species by:

- Promoting the use of best practices and technologies, including by-catch exclusion technology; and

- Facilitating the development of strategies and revision of national policies so as to remove existing barriers to adopting practices designed to minimize impacts on non-target species and habitats.

Expressing his hope that the project will help the government in addressing existing conflicts, he further elaborated that the PDF activities will identify barriers to the use of appropriate by-catch minimization technologies, and measures to reduce habitat degradation and destruction. The barriers include *inter alia* lack of information concerning the availability and effectiveness of such devises; inadequate national legislation; and lack of economic incentives and in some instances economic disincentives to their use.

• REMP relations with the MMP Central Zone: It was clarified that REMP was receiving cooperation with the MMP.

5.3 Mafia Island Marine Park

The Mafia Marine Park is the first marine park to be established in Tanzania. It was gazzetted under the auspices of the *Marine Parks Reserves Act No. 29 of 1994*. The park seeks to conserve critical habitats in cooperation with the island's community. MIMP receives technical advice from WWF.

In its activities since establishment, MMP has faired well and continues to make impact to all stakeholders. This is demonstrated by the increasing sense of awareness and ownership which has enhanced concern and responsibility in the protection, conservation, rational use of resources and increased community participation.

5.3.1 Successes

- Protection and Conservation: Through a collaborative management approach that involves communities and local government agencies dynamite fishing, mangroves cutting and coral mining practices have been reduced.
- Development of unexploited resources: Seaweed farming and modern beekeeping have been introduced and are carried out with success. Community based programs in tourism activities have also been initiated with the focus on local tourist guides.
- Resource use sustainability: Through permit system, pressure on high valued stocks such as octopus, sea cucumber and lobsters has been reduced. Other measures taken include the promotion of Wandodema an

environmentally friendly passive gear in place of the *Juya*-beach seine; the mangrove and tree replanting in degraded areas; and the use of land-based fossil corals in the lame industry.

• Stakeholder involvement: Villages are represented in all management and technical committees.

Problems

MIMP like other coastal programs is faced with problems ranging from financial and human capacity, poor facilities and several others. Problems highlighted include:

- Delay in construction of own offices and staff houses
- Acute shortage of technical staff
- Uncompleted community based activities
- Impended activities due to the lack of Approved General Management Plan (AGM) and regulations
- Large scale projects within the boundaries or vicinity of the marine park without the Environment Impact Assessment (EIA) and investment guidelines
- Lack of Resource Use Monitoring Program
- Inadequate government funds to meet budgeted activities
- Lack of development funds
- Restriction on small mesh-sized nets: The recommended *Wandodema* nets are rather expensive to the local fishermen.
- Live coral mining for lime making which the only building material in the island.

5.3.2 Participants comments and observations

Lime industry: While coastal communities claim dead corals do not produce quality lime, which is the reason for live coral mining, the use of land-based fossil corals is said to be working well in Zanzibar where live coral mining is no longer in practice. MIMP as well as other coastal districts and programs were advised to tap the Zanzibar experience through Menai Bay Marine Park.

5.4 Board of Trustees Marine Parks and Reserves Tanzania

Establishment:

From 1990s the Government in collaboration with other stakeholders worked seriously to ensure that the idea of establishing Marine Parks and Reserves in the country became a reality. In 1994 the Legislation to specifically deal with the management and administration of the Marine Parks and Reserve was enacted by the Parliament. The *Marine Parks and Reserves Act No. 29 of*

1994 provided the legal framework for the conservation and wise use of Marine Waters with its prolific animals and plant's life. It also provides for all reasonable use by fisher folks, commercial operator, and holiday markers, scientists, divers, photographers and reef watchers.

In the course of establishing MPR and for speedy (immediate) purpose it was not considered wise to establish them as a large administrative organization. It was envisaged that during initial stages of establishment the role of MPR would be of facilitating, overseeing and monitoring. The MPR was therefore designed to accommodate future expansion should the activities of MPR increase. A mechanism for flexibility was therefore included in the law that established MPR.

The establishment of a Marine Park at Mafia Island in 1995 therefore, was to provide a prototype project, upon which, if successful, all future marine parks would be based. In so doing a national framework was established and vested in the Board of Trustees as a custodian and overseer of the Marine Protected areas. Within the framework of the Act No. 29 of 1994, the Board of Trustees (BOT) for Marine Parks and Reserves was established in 1996 as a semi-autonomous governing body responsible for the management and administration of marine protected areas in the country.

Besides Mafia Marine Park, the BOT is responsible for the establishing of new parks and reserves and the overseeing of existing marine reserves of Mbudya Island, Bongoyo, FunguYasini, Pangvini and Maziwi Island.

Goal: The Goal of establishing Marine Parks and Reserves (MPRs) is to conserve the marine waters and its prolific animals and plant life while providing for sustainable resource utilization of both extractive and non-extractive in nature. The strategy is to integrate conservation activities into the social economic well being of the user - community.

Purpose: Ensure sustainable conservation of coastal and marine resources and the environment for the benefit of mankind especially Tanzanians.

Vision: efficient and sustainable community based conservation of aquatic resources aimed at providing high quality services to the people.

User Fees: In order to supplement management funding of MPRs, the government has with effective from July, 1999 introduced User Fees

New Marine Parks: The BOT will continue to collaborate with other organizations and stakeholders in establishing new parks and reserves. In the meanwhile, collaborative initiatives are at hand on the establishment a marine park in the Mnazi Bay and the Ruvuma estuary in Mtwara district. The BOT is also involved in the development of a transboundary natural

resources management regime to conserve the lake Nyasa Basin Biodiversity involving the three countries of Malawi, Mozambique and Tanzania.

5.5 Mangrove Management Project (MMP)

The mangroves management project is a bilateral development co-operation between Government of Tanzania and Norway. The executing bodies are Ministry of Natural Resources and Tourism through the Forest and Beekeeping Division. The project is supported by NORAD.

Now in phase two, (1998/99-2001/2002), the project's goal, is to enhance socio-economic contribution of mangroves on a sustainable basis by improving the management of the mangroves ecosystem.

The project area remains the same as in phase one - 115,500ha, with the total length covered by mangrove ecosystem along Tanzania's 800km coastline. The largest area is the Rufiji delta. Fairly large areas are also found in Tanga, Bagamoyo and Kilwa.

The Forest and Beekeeping Departments have the legal mandate to manage mangrove forests in the country.

The relevant strategy to this mandate is:

- Increasing assistance to rural communities, NGOs and private sector in planning and implementing forestry activities by mainly relying on existing local resources; and
- Enhancing inter-sectoral co-ordination and cooperation in developing solutions for conservation of biodiversity.

For the easier follow up, monitoring and administering the mangrove resources, there are three administrative zones i.e. Northern zone (Tanga), central zone (Coast/Dar es salaam) and Southern zone (Lindi/Mtwara). The head office coordinates the zones.

5.5.1 Successes and constrains

The project has achieved tangible successes in awareness raising and integrating village communities in mangrove management. Through Village Natural Resources Committee, communities are participating in patrolling and monitoring illegal activities and replanting mangroves in degraded areas.

Other measurable successes include:

- 245 ha of mangrove replanted in Tanga Region;
- Regeneration of mangroves in Northern Zone due to consistent patrolling;

- 60 teachers from 20 primary schools in Tanga trained on coastal ecology;
- 20 active Village Natural Resources Committee (VNRC) established in Tanga Region; and
- A Memorandum Of Understanding signed between MMP and Kipumbwi and Sange village on the management of the village's mangrove forest.

Problems: Some of the problems experienced in the MMP operations and activities include:

- Members of some Village Natural Resources Committees are sometimes the ones who carry out illegal harvesting;
 e.g. Saadani's Committee which, is mostly composed of mangroves smugglers;
- Other Committees are having the thought that they are there to benefit directly from the mangroves;
- Illegal harvesting of mangroves is still going on in some areas where communities are living very far from mangrove areas; and
- Unrecognition of legal ownership of the Mangroves forests/areas by NGOs, Private sectors, and other ministerial sectors.

5.5.2 Participants Comments, Observations

Clarification was sought on the community's rights on using mangrove trees which are planted by the communities themselves, who, if restricted from harvesting the trees they planted may discourage them in taking initiatives in replanting mangroves in degraded areas. In response, the MMP representative explained that the question is not to restrict people from benefiting from mangrove resources, but it is to abide to principles and binding regulations which aim to ensure the conservation needs and sustainable development. People only need to seek necessary permits to harvest mangroves even if they planted them. This is the only way law and order can be sustainably maintained as far as mangroves are concerned.

5.6 Saadani Mkwaja Game Reserve

Located on the northern coast, Saadani Mkwaja Game Reserve comprises of three important features, which are the game reserve (Ca.260 km²), Southern Mkwaja Ranch (Ca.210 km²) and Zaramiage Forest Reserve (Ca.180 km²). In this area where the beach meets the bush, the focus of the project is to

ensure sustainable development of the high number of endemic fauna and coastal flora.

Several types of mangroves are found along the Saadani coast and the Wami River areas. These mangroves which support a number of wildlife species are of critical concern to the game reserve. Efforts are therefor being made to conserve and protect the mangroves in order to sustain biodiversity of the area. Anti-poaching patrols both on land and in the sea are effectively undertaken.

Partnership with the Mangrove Management Project Central Zone has been established whereby management of the mangroves will be carried out jointly. The MMP will support the activity by paying some allowances to participating game scouts who will conduct patrols at least four days a month; pay allowances for the game scouts who will attend court prosecution proceedings in case of arrests; and will employ a boat driver who will work hand in hand with the game reserve staff.

5.6.1 Success and constrains

Due to regular patrols destructive activities have been considerably cut down. As a result forest patches opened by excessive cutting of mangroves and charcoal wood are closing up due to rapid regeneration.

Despite this success, the game reserve activities are handicapped by a few problems, including:

- Inadequate funds for operation both on land and along the Wami River (riverine mangrove forests);
- Shortage of fuel to run boat patrols and the lack of a boat driver; and
- Inadequate resources for pursuing court cases in Bagamoyo

5.6.2 Participants comments and observations

As a way to curb poaching for wildlife and mangroves, it was suggested that the Game Reserve should look in the possibility of adapting to the community based conservation approach that entails involving the communities in resource management.

5.7 Rural Integrated Project Support (RIPS)

Now in its second phase (1994-1999), RIPS is a bilateral development cooperation between Tanzania and Finland. The objective is to provide framework for supporting local initiatives and projects for sustainable livelihoods. RIPS has been facilitating and supporting marine

environment protection since 1994.

Through RIPS support, the coastal communities in the southern regions of Lindi and Mtwara have been able to establish an NGO – SHIRIKISHO that is successfully mobilizing rural and urban coastal residents to participate in marine conservation and sustainable management of coastal resources.

Focusing on the participatory approach, RIPS and SHIRIKISHO have contributed hugely in the campaign to eradicate dynamite fishing which has been successful as the community is now taking full responsibility of monitoring and enforcement.

RIPS that works closely with the regional and district governments, is also taking a key role in community development with a focus on education, health, agriculture, fisheries and natural resources sustainable development. This role aimed at improving the quality of life of the local communities, has been performed on the community initiation and involvement of the community in planning and management of activities. Some of the activities include:

- Promotion and initiation of alternative activities;
- Establishment of a revolving fund;
- Sea patrols; and
- Learning by doing activities.

5.7.1 Successes and constrains

RIPS has made some successes. These include:

- The establishment of SHIRIKISHO;
- High level of coastal environmental awareness within the community that has led to the community participation in the anti-dynamite fishing campaign;
- Community ownership of the marine resources communities are taking full control of the monitoring to make sure 'their sea is not tempered'. The communities are also taking a leading role in environmental advocacy;
- The emergency of alternative activities like seaweed farming, beekeeping etc.; and
- Over 300 people who practiced dynamite fishing voluntarily surrendered to the local government and are now taking effective role in patrolling the sea.

Constrains: There are some constrains, including:

- Poor education amongst the rural communities;
- Poverty: some environmental degradation and destructive resource use is due to the high poverty levels in rural villages;

- Easy access and cheap dynamites. The source is suspected to be road construction firms;
- The revolving fund did not revolve as expected. People are not paying back as agreed;
- Lime industry unfortunately seen as an alternative income generating activity to dynamite fishing (former dynamite fishers are now lime makers), the lime industry is encouraging live coral mining. It is a serious issue haunting the local governments of Lindi and Mtwara;
- High cost of fishing gear compared to cost of dynamite. While fishing nets cost to the tune of 50,000/= and 150,000/= per net, dynamite is said to cost only 2500/=; and
- Poor financial resources in local government agencies.

5.7.2 Participants Comments and Observations

- Coral mining: The local community in Mtwara and Lindi need to be educated on the adverse impact of live coral mining. It has been observed that while the community is now full aware on dynamite fishing and mangrove conservation, it is taking it for granted that coral mining is legal. On the other hand government leaders have been encouraging the lime industry as an alternative to dynamite fishing. The government at all levels need to focus its attention on this issue which, is not only for the southern coastal districts, but for the whole coastline;
- Tourism: Since Mtwara has many tourism resources, it was suggested that SHIRIKISHO could look in the possibility of initiating community based ecotourism as a way of enhancing economy opportunities to coastal communities. The RIPS representative made a note to bring this to the attention of SHIRIKISHO.
- The Mtwara success in fighting dynamite fishing through community participation was highly commended. Other coastal districts and local programs were urged to learn from the Mtwara experience as it guarantees sustainability and enhances community ownership.

5.8 Kunduchi Integrated Coastal Area Management Program (KICAMP)

Participants got an opportunity to get a briefing on the KICAMP revised proposal and renewed program presented by Mrs. Saada Juma a member of

the TCMP Core Working Group who is participating in the programme document preparation. The earlier KICAMP proposal, prepared by NEMC and the ministry of Finance (Treasury) was to a large extent a national program, with the Kunduchi area as an illustration. The role and focus of KICAMP has now been changed, partly due the fact that Tanzania, with a support of USAID, through NEMC, has established the TCMP, an initiative that is laying a foundation for a national ICM program.

The new propasal and renewed KICAMP program is focusing on improved understanding and management of marine and coastal area resources in the district of Kinondoni. KICAMP will aim to support the district in the establishment of coastal development and management structures basing on the external assistance and the district resources.

The KICAMP program will adopt an integrated approach that involves different sectors and stakeholders to address identified problems which are visibly experienced by stakeholders in the Kunduchi coastal area. These include:

- Decline in fisheries resources:
- Beach erosion:
- Mangroves cutting;
- Degradation of coral reefs;
- Uncontrolled mining and unsightly quarries;
- Expansion of saltworks;
- Dynamite fishing;
- Coastal marine degradation;
- Environmental pollution;
- Conflicts over plots and haphazard building etc.

From the context of instituting good governance, these problems will be addressed through organization components. The components are:

- Information, Education and Communication;
- Community Development;
- Land and Water Use Planning; and
- Surveys/Assessment and Research

KICAMP, through the land use planning, will also focus on urban expansion issues such as infrastructure, industry, sanitation and social economics.

5.8.1 Participants Comments and Observations

Much as KICAMP is a new program, participants had no much to comment apart from airing questions on some issues. These included:

- Program sustainability - has the Kinondoni district resources to ensure the long-term sustainability of the program?

- How is the program going to fit in the planning system of the city development since the program area is within the surveyed areas?
- How will research by UDSM help management issues of the program?

In response Mrs. Juma explained that the programme document is still being worked on and that the concerns raised at the meeting have been noted and will be given keen consideration.

5.9 Oceanographic Data Information Network For East Africa (ODINEA)

The representatives of ODINEA who participated at the meeting as observers made a presentation on the concept on the information networking with the focus on advantages of internet information sharing, how to join, who can be a member etc. Currently only few people have joined ODINEA

ODINEA is based in Zanzibar at the Institute of Marine Sciences, which is under the University of Dar es Salaam. The overall objectives of ODINEA are:

- To lead where and who holds information;
- To list scientists and institutions holding using coastal and marine data sets;
- To offer scientists and institutions a venue to advertise their research findings and ongoing projects;
- To offer information regarding existing, proposed and potential marine protected areas in Tanzania;
- To inform about national projects and programmes that are ecologically, economically or socially sensitive;
- To inform about district resource potentials and local initiatives and struggles; and
- To inform existing data sets and documentation at IMS and other institutions.

5.9.1 Participants Comments

- Participants commented that there should be a journal where people (scientists/managers working on coastal and marine research/management) can use in publish their information;
- Since ODINEA was found to be doing the similar activity as the TCMP Science and Technical Working Group (STWG), it was proposed that these groups should work in collaboration to reduce duplication of activities; and

• That ODINEA should publish itself to other departments/institutions so that they may benefit from its services.

6.0 Local ICM Programs Comments on Green Paper

The Draft Green Paper was presented to Local ICM programs with an aim for review and comment with a special focus on approaches and institutional mechanisms. Working in groups, representatives were able to make valuable comments as follows:

Group 1

- 1. Small-scale agriculture (page 10) should also include 'vermin control' as one of the constrains.
- 2. Agriculture (page 13) 'vermin control' should also be reflected as a problem.
- 3. Quotation of Makoloweka (page 16)
 - Name of Makoloweka is wrongly spelled
 - The quote should be modified to read: "With long, costly time we have been able to build resource management and conservation consistency in Tanga. People are responding well, and we could achieve greater success if all levels of the government developments and the like supports the initiative"
- 4. Policy 6: page 26 Implementation mechanisms
 - 1st bullet, should address the need for building capacity for the whole spectrum, that is professionals, districts, villagers and resource users
- 5. Institutions:
 - Consider the donor group when analyzing institutional structure, there
 is a tendency for donors to impose conditions that do not fit well in
 existing structures.
- 6. Suggestion:
 - The coastal management office present the coastal management plans to donors for information
 - Keep donors informed on what is in plan. accept their advice if inline with general context of the priority areas.

Group 2

- 1. Page 10: important issues to be mentioned:
 - Agriculture-vermin: low agriculture production/vermin package
 - Theft
 - Inputs: the lack of agriculture inputs
 - Land tenure/allocation of land
- 2. Page 12: additional sentence to highlight "large scale fisheries e.g. trawling"
- 3. Page 15: licensing/permission system National and Local levels

- 4. Page 18:
 - Principle 1: use word "consistence" instead of conformance. The same should be done on page 33
- 5. Policy 1: both options are feasible
- 6. Policy 2: para. 2 should be repeated in option 2: ...for small scale...
- 7. Policy 2: ...major **new** economic uses... (delete **new**)
- 8. Policy 3: (page 23) replace **protect** with "Conservation and restoration of critical habitats..." and implementation of these to be elaborated more.
- 9. Policy 4: option 1, boundaries should also be mentioned ...coastal SAMPs could not extend beyond the offshore limit territorial waters and the inshore edge of the coastal district boundary...
- 10. Special area management plans (SAMPs) ... degradation, **pollution** and use conflicts....(add the word **pollution**)
- 11. Policy 4: add bullet 5, "Include villagers in resource monitoring"
- 12. Policy 6: page 26: bullet saying "Learning by doing..."

 Professional development... should specify the audience or clients or targeted group....
- 13. Policy 7: page 27. Village involvement/participation should be clearly stated

Appendices

Appendix A: Tanga Coastal Zone Conservation and Development Programme

Appendix B: Rufiji Environmental Management Project

Appendix C: Board of Trustees Marine Parks and Reserves Tanzania

Appendix D: Mangrove Management Project

Appendix E: Conservation of Mangroves at Mkwaja Saadani Game Reserve

Appendix F: Status of Mafia Island Marine Park

Appendix G: List of Participants

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Appendix A

TANGA COASTAL ZONE CONSERVATION and DEVELOPMENT PROGRAMME

Overall Objectives:

"Sustainable use of the coastal resources of the Tanga Region for the benefit of present and future generations of residents, as well as other people and Program in Tanzania and the Eastern Africa Regional generally" (achieved through a series of integrated activities aimed at conservation and collaborative management of resources)

Phase I: July 1994 - June 1997 Phase II: July 1997 - June 2000

Phase III:

PARTNERS:

Tanga Regional Authority, Tanga Municipality, Muheza District, Pangani District, Irish Aid; IUCN (The World Conservation Union)

Project Model:

- 1. Listening: To ensure that the priority issues and actions are those of
 - the beneficiaries themselves; in this case, the resource users

and the resource managers.

2. Piloting: - to test how well proposed actions actually worked, and to

try alternatives.

3. Demonstration: - to fine tune and adopt processes and actions to wider range of

cases and to develop cost - sharing arrangements.

4. Main streaming: to adopt processes, actions and methods as normal practice throughout the region.

No 1 and 2 done in Phase 1 No 2 and 3 to be done in Phase 2 No 3 and 4 (?) to be done in Phase 3

Program is ACTION oriented, seeking to find:

what works

what achieves results

Important: - accountability

transparency

Important Environmental Issues

- declining fish catches
- poor enforcement
- rising demand for fuel wool / mangrove cutting
- beach & soil erosion
- beach pollution (human and sisal waste)
- low agricultural production (crop damage by vermin)
- lack of social and economic services

PHASE I

(learn to be effective)

The Program objectives in Phase I

- To build the capacity of integrated management of the coastal zone by working with regional resource management and planning authorities, and community leaders.
- Working with coastal communities to restore degraded environments, strengthen or revive traditional resources management and tenure system and implement management of coral reefs, mangroves, coastal forests and wildlife.

Activities

- 1. Participatory assessments
- 2. Training & reorientation of government staff
- 3. Piloting actions in 3 villages (Mwambani/Mchukuuni, Kigombe; Kipumbwi)

STEPS/ACTIONS

- 1. Participatory socio-economic and resource assessments (after training of extension workers in PRA techniques)
- 2. Annual Regional Workshop of stakeholders

1995 - Establish priority issues

- Recommend on actions

1996/7/8/9 - Review progress,

- Recommend on how to overcome problems

- 3. Training and Re-orientation of extension workers and government staff to be 'facilitators' instead of being 'directive'
- 4. Selection of Pilot villages

Criteria Strong reliance on natural resources Willingness to tackle destruction

- 5. Participatory Problem Analysis in Villages
 - → The priority issues
 - → The consequences / effects
 - → The causes
 - → Possible solutions
- 6. Formation of village committees to oversee planning and implantation.
- 7. Preparation of Village Action Plans after micro-planning training, stating:
 - Objectives,
 - Activities to achieve objectives,
 - Who will do what and when and
 - Indicators
- 8. Quarterly Village Feedback Meetings to review progress, share experiences and improve performance:
 - Review of action plans/progress
 - Prepare action plan for coming 3 months (used to be 6 months actions plans)
- 9. Provision of technical advice by District Technical Teams (DTT) and Program team
- 10. Monitoring the participatory process
 - → Assessment by committees
 - → Assessment of support + awareness for committees activities
 - → Assessment of women's involvement are their priority issues addressed?
 - → How well the committees represent villagers.

Village initiatives

- Village by-laws
- Village patrols
- Gear restrictions
- Replanting of mangroves
- Vermin control
- Latrines/garbage pits
- Fuel efficient stoves

Program initiatives

- Fisheries (2) and mangrove (1) management initiatives
- Mariculture trials
- Community Development Fund (phase 1)

EVALUATION FINDINGS FOR PHASE I

- Goals were valid, relevant, realistic, urgent
- Most planned activities successfully completed
- Activities have lead to changes, both in attitudes and behavior
- Successful introduction of participatory, bottom-up, community based and led process
- At district and village level different levels of achievement
- Many government staff with good appreciation of issues and practice of coastal management, and participatory approaches to decision making
- Program team well motivated and managed (modern management skills and procedures)
- Good internal monitoring and review
- Team learns from and corrects weaknesses
- Well functioning Regional Steering Committee
- More tangible inputs from Government required (e.g. improved enforcement)
- Mechanism to provide direct material assistance (CD Fund) failed.
- Technical support (IUCN) has been good
- High gender awareness, participation and motivation
- There is a need to expand socio-economic monitoring to cover a wider range of indicators and stakeholders.
- No real changes yet in people taking up alternative resource uses, in reduction of number of fishers, or improvements in food security.

PHASE II

(Learn how to be efficient)

Program Objective (Phase 2)

"Three coastal Districts with established programs of collaborative resource management that improve the well - being of the coastal communities and their environment in the program village"

Activities

- * Further decentralization to Districts
- * Fine tune and adapt processes to a wider range of cases (6 villages)

- * Develop cost-sharing arrangements
- * Pilot new activities e.g. agriculture, environmental education, mariculture

Additional Issues

- * Marketing (existing and new products) and profitability
- * Collaborative management institutions

SPECIFIC RESULTS

- 1. Three coastal districts coordinating and implementing coastal resource management
- 2. Region facilitates, supports coastal districts to implement coastal resources management and links the districts to central government, IUCN, Irish Aid and others.
- 3. Regional and District staff working to professional standards
- 4. Effective system of village based enforcement operating in all program villages
- 5. Communities empowered to undertake collaborative management of coastal resources in all Program villages
- 6. Gender considerations integrated at all levels of Program planning, management and implementation.
- 7. Monitoring, evaluation and reporting procedures defined and being implemented at all Program levels.
- 8. Livelihoods of coastal communities improved through use of sustainable fishery practices.
- 9. Improved and sustainable agriculture practices promoted as alternative coastal resource use.
- 10. Conservation, equitable access to, and sustainable use of forest resources secured for the coastal villagers.

Implementation

Result 1: Three coastal districts coordinating and implementing coastal resource management

- Appointment of new extension workers (12 EW)
- District Linkages (DL)
- Village support visits by District Technical Teams (DTT)
- District Environment by-laws
- Cost-sharing/improve revenue collection
- District annual and quarterly work plans and budgets
- Equipment for districts
- Develop official linkages (for village initiatives and activities) with District Council and Ward Development Committees
- Districts accounting for their own budgets

Concerns:

- * Still lack of coordination of planning in the districts (little cross-sectoral planning)
- * Still too much directive power from central government

Result 2: Region facilitates, supports coastal districts to implement coastal resources management and links the districts to central government, IUCN, Irish aid and others

- Annual Regional Workshops
- Technical Workshop
- Dynamite workshop (with Irish Aid)
- Regional coastal Environment Committees
- Regional Steering Committee meetings
- Annual and quarterly work plans and budgets
- Receive visits
- Attend/write papers for workshops
- Cooperation with other local e.g. MMP, MDDP), national (e.g. TCMP and international (e.g. SEACAM) programs.

Concerns:

- * Still lack of coordination of planning in the districts (little cross-sectoral planning)
- * Still too much directive power from central government

Result 3: Regional and District staff working to professional standards

- Training of new Extension Workers, District Linkages and new DTT members
- TOR for District Linkages and other staff
- Training of new Advisors
- Formal training of Advisors and District Coordinators
- Feedback meetings with Extension workers
- Training of administrative staff
- Staff assessments (participatory)
- Study tour Ulanga (IA District Development Program)

Concerns:

- * Unsatisfactory performance of some extension workers and district linkages (proposed solutions: monthly work plans & progress reports, performance related allowances, closer support)
- * Lack of time to establish institutional index (opportunity: Muheza District Development Program)

Result 4: Effective system of village based enforcement operating in all Program villages:

- Continue with village patrols
- Navy support
- Village by-laws

- Guidelines for arrest procedures
- District Natural Resources enforcement officers and prosecutors
- Radio equipment
- Police posts in pilot villages
- New boats an engine
- Cross border management

Concerns:

- * Performance of outside agencies supporting enforcement
- * Long-term sustainability (improving revenue collection, cost sharing mechanisms)

Result 5.1: Communities empowered to undertake collaborative management of coastal resources in all program villages

- Feedback meetings (+other villagers)
- Village assembly meetings
- Develop procedure for material assistance
- Material assistance
- Village animators training in pilot villages
- Annual assessment of participation and support
- Mini SES and animation in three new villages (Tongoni, Moa, Ushongo)
- Training of new committee members in micro-planning.

Concerns:

- * Participation in some villages
- * Unrealistic expectations from Program (e.g. fisheries management in Mwambani/Mchukuuni; fish cage culture)

Result 5.2: Involvement of primary school children and village youth in environmental activities in Program villages:

- Development of Coastal Environmental Education Curriculum
- Training of teachers (33), together with Mangrove Management Program (MMP)
- Environmental Education in primary schools in 6 villages +MMP villagers)
- Youth clubs in 3 pilot villages.

Result 6: Gender considerations integrated at all levels of Program planning, Management and implementation

- Training of gender trainer (CK)
- Gender training for Advisors, District Linkages, EW, DTT and village animators
- Gender profiling (3 villages)
- Gender monitoring matrix Consultancy
- 14 government staff (7F7M) trained in gender profiling
- Gender committees in Tongoni, Kigombe and Kipumbwi
- Addressing "gender" problems (e.g. woodlot Kigombe, seaweed area demarcation)

Concerns:

* Lack of female government officers in Pangani and Muheza districts

Result 6: Gender considerations integrated at all levels of Program planning, Management and implementation

- Progress reports (annual & Quarterly)
- Monitoring matrices developed (all levels)
- Team meetings (2 weekly)
- Training of villagers in reef monitoring
- Reef monitoring, census of fishes
- Collection of fisheries statistics
- Monitoring of trials
- Ecological monitoring of KISA
- Annual assessment of participation and support in program villages
- Gender monitoring
- Annual audits/budget monitoring/financial reports

Concerns

* Lack of appreciation of monitoring data (e.g. reef closures Kigombe)

Result 7: Monitoring, evaluation and reporting procedures defined and being implemented at all Program Levels

- Progress reports (Annual & Quarterly)
- Monitoring matrices developed (all levels)
- Team meetings (2 weekly)
- Training of villagers in reef monitoring
- Reef monitoring, census of fishes
- Collection of fisheries statistics
- Monitoring of trials
- Ecological monitoring of KISA
- Annual assessment of participation and support in program villages
- Gender monitoring
- Annual audits/budget monitoring/financial reports

Concerns

* Lack of appreciation of monitoring data (e.g. reef closures Kigombe)

Result 8.1: Livelihood of Coastal Communities improved through use of sustainable fisheries practices

- New fisheries management agreement in Ushongo
- Fisheries management (Kigombe and Kipumbwi)
- Fisheries management agreements/reef closures review (Kigombe and Kipumbwi)
- Deployment of FADs
- Artisanal fishing zone

Net exchanges

Result 8.2: Reduced fishing pressure on reef fisheries through developing mariculture alternatives

- Oyster trial
- Seaweed/raft trial
- Fish cage culture
- Crab culture

Concerns (8.1 and 8.2)

- * Lack of security for development of alternatives
- * Non-conducive economic environment for developing alternatives
- * Lack of appreciation from government officers for the obstacles to develop economic alternatives (e.g. mariculture, tourism)

Result 9: Conservation equitable access to, and sustainable use of forest resources secured for the coastal villages

- KISA plan / cutting trials / ecological baseline
- Nurseries / woodlots
- Mangrove rehabilitation / planting
- Bamboo nursery
- Coastal forest assessment (Pangani)
- Bushfire control

Concerns (8.1 and 8.2)

- * Bushfire control is not a priority issue, should we address it?
- * Low level of success of mangrove replanting at some places

Result 10: Improved and sustainable agriculture practices promoted as alternative coastal resource use

- Assessment of present farming practices in pilots
- Assessment of present vermin control practices in pilots]
- Identification of alternatives for agriculture and agroforestry trials in pilots
- Establishment of horticulture trials (Mwambani, Kigombe and Kipumbwi) and agroforestry trials (Mwambani and Kipumbwi)
- Training of 15 farmers and 3 extension workers on horticulture and agroforestry
- Training in Organic farming Advisor and District Linkages
- Consultancy for marketing and vermin
- Training in organic farming in pilot villages

Lack of security for development of alternatives

- * Lack of land security
- * Government policy
- * Low soil fertility

* Low level of success of vermin control (proposed solutions: block farming, associate hunters)

Appendix B

RUFIJI ENVIRONMENTAL MANAGEMENT PROJECT REMP/MUMARU

(STATUS OF PROJECT ACTIVITIES) By E.B. Chirwa

Background

Project Goal: The goal of the project is to promote the long-term conservation through wise-use of the lower Rufiji forests woodlands and wetlands such that biodiversity is conserved, critical ecological functions are maintained, renewable resources are used sustainably and the livelihoods of the areas inhabitants are secured and enhanced.

Objectives

The project needs to promote: The integration of environmental conservation and sustainable development through environmental planning within Rufiji delta and floodplain.

To promote the sustainable use of the natural resource and enhance the livelihoods of local communities by implementing sustainable pilot development activities based on wise-use principles.

To promote awareness of the value of forests, woodlands and wetlands and the importance of wise use at district, regional and central government levels and to influence national policies on natural resources management emphasizing the non-sectoral multi-biome, integrated approach to the environment.

Present Status and Feature Activities (Next six months)

Introduction

The project which is in its first phase continues to set up mechanism and to collect information that will eventually help the operation of the management plan. Having established an environmental management team (EMT), having setup the necessary information and having identified four pilot villages the project is now doing village studies since July 1999.

Expected Results

The studies aim at getting an understanding of the villagers relationship with their natural resources under the prevailing situation. The project expects to come up with a detailed

demographic and socio-economic profile of the selected pilot villages. The project also expects to have a detailed description of Land and natural resources use by the villagers. (Use, cultural values and economic values)

Trends and changes over time will also be considered.

Socio-economic studies

The EMT study team with the participation of villagers are

- (a) Making rough estimates physical areas of each pilot village by taking GPS readings of the village extremities and plotting them on a 1:50000 topographic
- (b) Collecting details of economic activities of each house held by using semi structured interviews
- (c) Estimating the value of each source of income of a household
- (d) Preparing a detailed social map in which people houses, family names with number of occupants are included

Land and Natural Resources Studies

- (a) Making maps of terrestrial and aquatic resources of the villages with sizes of the resource areas and descriptive notes regarding the type of vegetation and the places used for harvesting the various resources.
- (b) Providing a description of users of each resources (who they are, where they are from, what they use and how they use it).

Other Activities

- (a) Aerial Survey
- (b) Flood warning model
- (c) Vegetation Studies
- (d) Training of staff
- (e) Production of draft plan

PROBLEMS

- 1. There is serious soil erosion along our shores resulting in the loss of houses and coconut trees.
- 2. Sea turtles are being caught on the beaches for their meat. (Carcasses have been found along the shores).
- 3. Mangrove harvesting or poles.
- 4. Trawling for prawns which is done by our industrial fishing companies is not all an environmentally friendly activity. The practice disturbs the biodiversity balance when the multi-species by-catch is destroyed and thrown away. In terms of weight the by-catch is more than the targeted prawns. The sea bed over which the operations takes place is subjected to continual ploughing by the nets.

Probably it is the right time now to start thinking about the ways of focusing the prawn fishing industries to introduce selective trawl nets to replace the traditional ones.

5. Mangrove destruction to allow for rice farming

SUCCESS

Although the project has not done much, one sign of success is clear. Villagers in the selected villages are showing a high degree of cooperation. This means that they have accepted it as their facility for environmental issues.

We are beginning to believe that at the end of the day there will be no need to seek assistance of police to enforce some of all of their environmental by-laws. They will be organizing themselves to take responsibility in safeguard their resources and hence their environment.

Appendix C

STATUS ON MARINE PARKS AND RESERVES IN TANZANIA.

A PAPER PRESENTED AT THE TANZANIA COASTAL MANAGEMENT PARTINASHIP RETREAT MEETING 21ST SEPTEMBER 1999 – DAR ES SALAAM

1. GENERAL INTRODUCTION:

Establishment of Marine Parks and Reserves

Development of Marine Parks and Reserves dates back to the 1960s when surveys of the reefs were conducted and several sites were recommended as having the potential for marine protected areas. Although some of the sites were legislated as marine reserves in mid 1970, no specific management and institutional mechanism was put in place to effectively manage these reserves apart from allocating the Authority to the Department of Fisheries. Lack of resources and human technical capacity left the reserves virtually unmanaged. Degradation of the marine and coastal environment due to unsustainable resource use and destructive practices contributed to the deterioration of the marine and coastal resource base. Conservation and protection of the marine and fisheries' resource became imminent.

The desire by the villagers of Mafia district to establish a protected area in their waters in the late 1980's rekindled the national interest in the creation of marine parks in Tanzania. This time, however, marine parks were to be established to incorporate a range of areas including those, which are for strict preservation and those allowing for sustainable utilization and involving the communities in the management of the resources. Subsequently a number of studies to investigate marine resources and their use were

conducted in Mafia. The studies identified Mafia Island as a suitable site for the establishment of the first marine park.

The need to balance utilization and conservation of the natural resource base as well as providing for human residence in the protected areas; called for change in management approach. This new approach relies on participatory, integrated and collaborative management principles. The goal therefore, was to integrate conservation into the socioeconomic plan of the local communities while protecting natural resources and biodiversity of local, national and international value.

For sustainability and success of the marine parks, safeguards for cultural values of the local communities were to be protected by law as well. All these called for the formulation of a new legislation. The new legislation was to provide for multiple resource use; and ensuring both conservation of the species and habitats within a marine protected area and the protection of the lives and life styles of the local community who depend for their livelihood on the resources of that area. The creation of Marine Parks and Reserves required zoning for sustainable multiple resource use as an integral component as well as for conflict resolution in resource use.

From 1990s the Government in collaboration with other stakeholders worked seriously to ensure that the idea of establishing Marine Parks and Reserves in the country became a reality. In 1994 the Legislation to specifically deal with the management and administration of the Marine Parks and Reserve was enacted by the Parliament. The Marine Parks and Reserves Act No. 29 of 1994 provided the legal framework for the conservation and wise use of Marine Waters with its prolific animals and plant's life. It also provides for all reasonable use by fisher folks, commercial operator, and holiday markers, scientists, divers, photographers and reef watchers.

In the course of establishing MPR and for speedy (immediate) purpose it was not considered wise to establish them as a large administrative organization. It was envisaged that during initial stages of establishment the role of MPR would be of facilitating, overseeing and monitoring. The MPR was therefore designed to accommodate future expansion should the activities of MPR increase. A mechanism for flexibility was therefore included in the law that established MPR.

The establishment of a Marine Park at Mafia Island in 1995 therefore, was to provide a prototype project, upon which if successful; all future marine parks would be based. In so doing a national framework was established and vested in the Board of Trustees as a custodian and overseer of the Marine Protected area. Within the framework of the Act No. 29 of 1994, the Board of Trustees (BOT) for Marine Parks and Reserves was established in 1996 as a semi-autonomous governing body responsible for the management and administration of marine protected area in the country

2. THE GOAL

The Goal of establishing Marine Parks and Reserves (MPRs) is to conserve the marine waters and its prolific animals and plant life while providing for sustainable resource utilization of both extractive and non- extractive in nature. The strategy is to integrate conservation activities into the social economic well being of the user - community.

2.1. Purpose:

Ensure sustainable conservation of coastal and marine resources and the environment for the benefit of mankind especially *Tanzanians*.

3. THE SUPPORTING VISION:

- 1. Marine and Coastal resources are managed for sustainable development
- 2. Communities are involved and fully *participate* in the conservation of marine and coastal resources.
- 3. Efficient management of marine resources and delivery of high quality services.

From above core value statements therefore, the guiding Board's Vision is efficient and sustainable community based conservation of aquatic resources aimed at providing high quality services to the people.

Objectives:/ operating mission

I Preamble:

These objectives are in line with the broad goal of the Marine Park and Reserves.

- i. To manage marine and coastal areas so as to promote sustainability of the existing resource use, and the recovery of areas and resources that have been over exploited or otherwise damaged.
- ii. To ensure that stakeholder and local communities in the vicinity of the marine protected areas who depend on the resources for their livelihood are involved in all phases of the planning, development and management; share in the benefits of the operation of the protected areas; and have the priority in the resource use and economic opportunity afforded by the establishment of the protected area.
- iii. To promote community oriented education and dissemination of information concerning conservation and sustainable use of the marine protected area.
- iv. To stimulate the rational development of under utilized natural resources.

- v. To protect, conserve and restore the species and genetic diversity of living and non living marine resources and the ecosystem processes of marine and coastal areas; and
- vi. To facilitate research and to monitor resource conditions and uses within the marine protected area

In order to realize the above-mentioned objectives the government entrusted this responsibilities to the Board of Trustees for Marine Parks and Reserves whose, mandates are to manage and the Administer Marine Protected Areas (MPAs) in the country.

II. Functions of the Board:

The Board was established as a Trusteeship by the Act of the Parliament No. 29 of 1994 whose Specific functions include:

- i. Formulation of policies on MPAs related facilities and activities.
- ii. Advice the Minister on the approval, revision and amendment of management plans.
- iii. Oversee the use of the Marine Parks and Reserves Conservation and Development Trust Fund (CDTF)
- iv. Directs the Unit Manager on the designation of specified marine and Coastal areas as Marine Parks, Marine Reserves or buffer zones:
- v. Drafting and implementation of regulations, and other matters affecting Marine Parks and Marine Reserves.

III. Area of operations

The present area of operations covers the following:

- 1. Co-ordination and Administration of Marine Parks and Reserves issues including identification on new sited that would fit the criteria of being considered a Marine Protected Area.
- 2. Management of gazetted five Marine Reserves covering an estimated area 302 km²
- 3. Conservation of Marine Resources and Environment Protection of Mafia Island Marine Park (MIMP) covering an area of 822 km²; and

- 4. Conservation of Mnazi Bay Ruvuma Estuary (CMBRE) covering an estimated area of about 502 km².
- 5. Planning for the development of the transfrontier conservation Area at Lake Nyasa to protect the Lake biodiversity and promote multi purpose sustainable resource use.

IV Marine Reserves:

Marine Reserves provides protection of the Marine ecosystem, educational as well as tourist destination. An effort towards promoting collaborative management and cooperation of user communities, local government authority, Non Governmental organization and private sector agencies to contribute and share responsibility in the management of the protected areas has been initiated. The goal is to provide an opportunity for the public and local communities to participate in the protection and conservation of marine protected area. The listed below are the gazzeted marine reserves with their geographic location, which have now been transferred from the Fisheries and placed under the administration of MPRU.

1. Fungu Yasini Marine Reserves:

All that area consisting of land and ocean waters contoured at latitude 06 degrees 36 minutes 00 seconds South and Longitude 39 degrees 14 minutes 30 seconds East and extending to a depth of 5 fathoms below the mean low tide mark from the centre point described above.

2. Mbudya Island Marine Reserve:

All that area consisting of land and ocean waters contoured at Latitude 06 degrees 39 minutes 30 seconds South and Longitude 39 degrees 15 minutes 00 seconds East and extending to a depth of 5 fathoms below the mean low tide mark in all directions from the centre point described above.

3. Bongoyo Island Marine Reserve:

All that land and ocean waters centered at latitude 6 degrees 43 minutes 12 seconds south and Longitude 38 degrees 16 minutes 00 seconds extending to a depth of 5 fathoms below the mean low tide mark in all direction from the centre point described above.

4. Pangavini Island Marine Reserve:

All that area consisting of land and ocean waters centered at latitude 6 degrees 40 minutes 42 seconds South and Longitude 38 degrees 14 minutes 12 seconds East and extending to a depth of 5 fathoms below the mean low tide mark from the centered point described above.

5. Maziwi Island Marine Reserve:

All that land and ocean waters centered to the North and south by 5 degrees 29 minute 48 seconds East and 5 degrees 31 minutes 00 seconds East and extending to a depth of 5 fathoms below the mean low mark in all directions commencing from the centre point described above.

4.0 FUTURE OUTLOOK

Given the huge tasks faced by the Marine Parks and Reserves Board in the year ahead, efforts will be directed towards improving operating performance at the MPRU and strengthening of the Mafia Island Marine Park as well as the Five Reserves. Sites ideal for development of the marine protected Areas would be identified and included in the corporate plan. We shall continue to co-ordinate efforts to establish new conservation area like Mnazi bay in Mtwara and the transfrontier conservation area in the lake Nyasa basin. We shall also continue to provide technical support to other initiatives aiming at conserving the coastal and marine resources. Such efforts include the ongoing process of developing and integrated coastal management policy as well as other coastal programmes like Tanga and Rufiji. In so doing, the following activities were identified for implementation in the years 1999 and 2000.

FACILITIES

The Marine Parks and Reserves Unit has inadequate facilities. To be effective, the unit shall secure and make available all required basic facilities such as office space accommodation, communication, transport and office equipment.

FUNDING

A review on the sustainable management and administration of Marine Parks and Reserves (MPRs) in Tanzania conducted in 1998 revealed that Marine Parks and Reserves have an immense potential to contribute to life, social and the economic well being of local communities and the national economy as a whole. The assessment among other thing found out that MPRs are lacking dependable revenue sources to support own programme. Following this a study was commissioned to initially look into whole issue and advise on the forward. One of the recommendations that came out of this study was

to introduce user fees for activities conducted in the MPR. Effective from July 1999, the Government introduced user fees as one area to help raise fund for MPR.

MARINE PARKS AND RESERVES STRUCTURE AND MANAPOWER

In order for the Board to address itself to its responsibilities, requires an elaborated management structure. The unit has ensured that the scheme of services was developed and approved by the relevant government machinery. It will therefore ensure that right staffs are recruited to fill the vacant position. The priority in staffs' recruitment shall be in the fields of licensing, law enforcement, scientific monitoring and information management system, community conservation, planning, tourism, information, and awareness and education.

ESTABLISHMENT AND MANAGEMENT OF NEW MARINE PROTECTED AREAS:

Establishment and management of these Marine Resources however take cognizant of the involvement of institutions, organization and population categories whose activities complement or affect each other such as local communities, district authorities, State organs etc. The proposed Marine Protected Area in the pipeline is the establishment of the Mnazi Bay and Ruvuma Estuary Marine Park in Mtwara District. This site was selected after conducting a rapid resource assessment surveys on three sites along the coast were conducted. The study was part of GEF/WOLRD BANK/IUCN Development of Marine Protected Area project. The three sites included Mwamba Kuni in Bagamoyo District, Jange Reef in Lindi district and Mnazi bay itself. The result from the study was presented at the partnership meeting held in April 1998 in Dar Es Salaam. Basing on the information presented Mnazi Bay ranked highly and recommended for a detailed study that will help develop a full proposal for a marine protected area project.

Other planned areas include the current initiatives to develop a transboundary natural resources management regime to conserve the lake Nyasa basin Biodiversity involving the three countries sharing the lake of Malawi, Mozambique and Tanzania. The purpose of these trilateral initiatives is to develop through a joint program, strategies for the establishment of the proposed Lake Malawi/Nyasa TFCA. This general consensus was arrived at a one-day meeting held at the White Sands Hotel in Dar es Salaam in May 1999. The meeting was convened by the SADC/GEF Lake Malawi/Nyasa Biodiversity Conservation Project at the request of the government of Tanzania and with the financial support of WWF.

The key outcome of the Dar es Salaam meeting was the endorsement of the concept of Transfrontier Natural Resource Management Area (TFNMA) for the Lake Malawi/Nyasa Basin and adjacent areas by the representatives of stakeholder governments of Mozambique, Malawi and Tanzania. Other representation came from local and international organizations such as WWF, UNEP, SADC/GEF Lake Malawi/Nyasa Biodiversity Conservation Project, and PPF.

The overarching goals of the Lake Malawi/Nyasa Transfrontier Natural Resource Management Area are to (1) create jobs and therefore alleviate poverty that is rife among the poor rural communities through tourist development, and (2) conserve biological diversity of the Basin.

The concept, goals, strategies and processes to be followed in order to establish the TFNMA for the Lake Malawi/Nyasa Basin was discussed and agreed upon. A strategies and action plan in order to initiate activities in each country was developed. A follow up mechanism was endorsed by appointing an Interim Project Steering Committee (ISC) for a period of six months. The committee composed of a representative from each of the three countries represented is helping to push these initiatives. A series of awareness and consultative meetings at local, national and international levels are planned.

5.0 Conclusion:

The underlying principle in the MPA management is collaborative and integrated management approaches. We shall ensure that we continue to participate in the ICM process as well as the follow up activities.

Appendix D

MANGROVES MANAGEMENT PROJECT (MMP)

By *M.A Mwanuo* - MMP HQ

Local ICM programme Workshop 21st-23rd September,1999

1. STATUS OF THE PROJECT

The mangroves management project is a bilateral development co-operation between Government of Tanzania and Norway. The executing bodies are Ministry of Natural Resources and Tourism; under Forest and Beekeeping division and NORAD as donor argency.

The project now is in phase two 1998/99-2001/2002. The project goal, objectives and strategies were not changed much from phase one. "Enhancement of socio-economic contribution of Mangroves ecosystem on a sustainable basis by improving the management of mangroves ecosystem". The project area remains the same as in phase one 115,500ha, with the total length covered by mangrove ecosystem along the coastline 800km. The largest area and unique one is found in Rufiji delta. Fairly large areas are also found in Tanga, Bagamoyo and kilwa.

The Mangroves forests are gazetted as forest reserves. Conservation of these forests are guided by both the Forest policy and Forest ordinance. All these were outdated e.g. participation of communities was not carted by the old Policy, this leads to revisions.

However, the new Forest policy is in place, the Forest ordinance still at the process of reviewing.

The Forest and Beekeeping have the legal mandate to manage mangrove forests in the country. The relevant strategies to this mandate are:

- Increasing assistance to rural communities, NGOs and private sector in planning and implementing forestry activities by mainly relying on existing local resources.
- Enhancing inter-sectoral co-ordination and cooperation in developing solutions for conservation of biodiversity

2. ORGANIZATION SET UP OF THE MANGROVES MANAGEMENT PROJECT

For the easier follow up, Monitoring and administering the mangrove resources, there are three administrative zones i.e. Northern zone (Tanga), central zone (Coast/Dar es salaam) and Southern zone (Lindi/Mtwara). The head office coordinates the zones. The daily field activities are executed by the block officers, therefore there are ten blocks; Tanga/Muheza, Pangani, Bagamoyo, Dar es salaam, Mkuranga, Rufiji, Mafia, Kilwa, Lindi and Mtwara, the boundary of the blocks follow the administrative district boundaries.

3. FUTURE ACTIVITIES

Following the project outputs, there are major five activities namely:

• Participation of Local Communities through Village Natural Resources Committees in conservation.

VNRCs are involved in:

- Forest protection (Patrolling for illegal activities),
- Climber/creeper cutting and planting,
- Forest survey and Inventory,
- Harvesting supervision,
- Socio-economic survey through (PRA),
- Gender sensitization on Mangrove Conservation.

• Intersectoral co-ordination

This will be implemented through:

- Seminars, Workshops and meeting with stakeholders. For the purpose of harmonising sectoral policies and promotion of rational utilization of mangrove resources.

• Training of personnel and interested groups

- Training of MMP staff on marine ecosystem
- Study tours (Local and abroad) for the staff and communities.

• Extension services in villages and coastal P/schools

- Facilitating teaching of P/schools on Coastal ecology.
- Sensitisation on Mangrove conservation and related ecosystem, through meetings, seminars, radio programmes and interactive video shows.

• Improve staff working condition

- Office construction, Central office is underway.
- Procurement of vehicle, M/bikes & Boats.
- Running and Maintenance for the offices, machines, tools and equipment.

4. SUCCESS

The project has the number of success just mentioning the few; Village Natural Resources Committees are very active in the pilot areas, e.g. Chongoleani, Kipumbwi, Sange and Moa (Northern Zone); Kiomboni, Kitame, (Central zone). These VNRCs were actively involved in Patrolling for illegal activities, replanting the depleted and other areas. Forested area was 115,467 ha, while non-forested areas (creeks, salt pans, bare saline areas) is 48,312. Therefore through Village Natural Resources Committee these areas have considerably changed, forested area becoming lager and less non-forested areas.

5. PROBLEMS [Present]

- These VNRCs are sometimes the ones who are doing illegal harvesting; e.g. Saadan's Committee formulated from the mangroves smugglers.
- Other Committees are having the thought that they are there to benefit directly from the mangroves.
- Illegal harvesting in some areas where communities are living very far.
- Unrecognition of legal ownership of the Mangroves forests/areas by NGOs, Private sectors, and other ministerial sectors.
- External factors.

Appendix E

Report on Mangrove Conservation along the Saadani Coastline: From March 1999 to September 20th, 1999

Presented by: Charles Gwera Assistant Project Manager Saadani/Mkwaja Game Reserve

Saadani/Mkwaja Game Reserve boundaries ends at the Indian Ocean coast to the east and Wami River to the south.

Several types of mangroves are found along the Saadani Coast and the Wami River areas. These include such species as *Avicennia Marina* (*verbenaceae*) and three species of *Rhizophoraceae* namely *Rhizophora mneronata* (mkoko), *Bruguiera gymnorrhiza* (*usindi*) and *Ceriops tasgal* (*mkandaa*) native mangroves with tall trees and mangrove shrubs exist in the areas forming the mangrove forests. The salt bush (*chenopodiceae*) species are also found mixed with the salt tolerant grass (*sporobolus sp.*) at the edge of forest/savannah mosaic.

Efforts are made by the Saadani/Mkwaja Project to conserve the mangrove in Saadani Ecosystem. Anti-poaching patrols both on land and in the ocean is the major activity of the project, several visits were made to stop and arrest poaching of mangroves along Wami River, Kitame and Porokanya areas.

Sixteen (16) poachers were arrested and sent to Bagamoyo for protection within the last nine months. Due to regular patrols especially during high tides of the month, poachers and destroyers of the mangrove trees for charcoal and wood were scared away. The incidences of destruction are now going down monthly and the forest patches opened by destroyers are closing up due to rapid regeneration of mangrove population the affected areas. In spite of all efforts to stop mangrove destruction, the Saadani/Mkwaja project faces several problems which include:

- (i) Inadequate funds to pay for its operation both on land and along the Wami River (riverine mangrove forests)
- (ii) Inadequate funds to pay for the scouts on follow-up during court sessions (for anti-poaching issues) in Bagamoyo
- (iii) Shortage of fuel for patrol works and lack of boat driver for marine operations.

Future Plans:

During a formal discussion between Saadani/Mkwaja project manager and the Central Zone Mangrove Manager some resolutions were reached and decisions made. These include:

- (i) To conduct joint patrols at the affected areas, while the Mangrove Project will support it by paying some allowances to the participant game scouts "at least four days in a month for six game scouts".
- (ii) The Mangrove Project will also pay NOA for the game scouts who will attend court session in case of any arrest.
- (iii) The project will assist Saadani Game Reserve with fuel (petrol) which will be used by the boat for marine operations.
- (iv) The project will also employ a boat driver who will work hand in hand with Saadani Game Reserve staff.
- (v) The joint patrols should be emphasized so that the pressure on uncontrolled/illegal harvest of mangroves may stop or minimized.

GREEN IS LIFE! LET US CONSERVE MANGROVES *CONSERVATION IS OU MOTTO*

Appendix F

STATUS OF MAFIA ISLAND MARINE PARK (MIMP)

By Msumi, G. and Mambosho, H.

ABSTRACT

The presentation highlights the Park goals and subsequent achievements made so far. In addition to the main problems hindering the successful implementation of development activities, planned activities during the next six months are outlined.

1.0 INTRODUCTION

The management goals of MIMP incorporate protection/conservation, sustainable resource use and economic development, with emphasis on the participation of local communities in the process.

In the wake of achieving these goals the Park has faired well and continues to make impact to all stakeholders. This is demonstrated by the increasing sense of awareness and ownership; responsibility and concern in the protection, conservation, use of the resources and increased involvement in community-based conservation and economic activities by the Park residents. Their willingness to discuss Park issues in several awareness seminars, workshops, meetings, training courses and study tours organized by the Park Management has been increasing. Women participation in Village Liaison Committees, handcraft groups, octopus fishing, seaweed farming and other self-help economic groups has significantly increased.

2.0 SUCCESS

2.1 Protection and Conservation

There have been significant achievements in protecting and conservation of ecosystems and areas of high species and genetic diversity. Ecosystems and areas being protected include coral reefs, mangroves, sea-grasses and coastal forest.

In collaboration with Village Liaison Committees, District Natural Resource Office and the Police, the Park Management (with the assistance of a powerful patrol boat and VHF radio network) has almost eradicated dynamite fishing and beach seines (Juya) in the Park waters. The Park has further managed to reduce mining of live corals, cutting of

mangroves and trees in the reserve forest through permits to well defined areas, education and promotion of alternative building material and fishing gears.

The Park has also scaled down the number of visiting fishermen and large scale commercial interests who are presumed to be responsible for resource and environmental degradation.

2.2 Development of Unexploited Resources

In an effort to stimulate the rational development of unexploited natural resources including tourism, the Park management is continuing to assist seaweed farming and modern beekeeping in five (5) villages in the Park. In a further attempt to utilize the increased tourism, the Park has prepared a community-based program to train youth to guide tourists to cultural, snorkeling, diving, fishing sites etc. Other aspects in the training program include financial and management of local tourist facilities such as restaurants, guest houses, cultural activities, stabilization and restoration of cultural sites, ruins etc.

In order to further publicise the Park resources, the Park Management has produced promotion material such as brochures, T-Shirts and articles in local and international media.

2.3 Promotion of Sustainability of Existing Resource Use.

In promoting sustainability of existing resource use incorporating recovery strategies for over exploited resources, the Park Management has managed to lessen pressure on the exploitation of high valued stocks such as octopus, sea cucumber and lobsters. This has been possible through permit system and making use of research results. The Park Management has started implementing recommendations given by researchers who conducted a rapid assessment of octopus fishery in the Park.

The recommendations include the imposition of 500 gm or 10 cm mantle length as the minimum size at first capture. Other recommendations include limiting the number of fishermen extracting octopus to 350 only and the number of octopus processing plants to two (2) only.

The Park Management has also banned the collection of sea cucumber by Scuba-diving in an attempt to protect the parental stocks in the deeper waters.

Closed season and zoning will be imposed when the Park regulations are in place and only after the revised General Management Plan has been approved.

Other current recovery strategies include the production of lime from land-based fossil corals, mangrove and tree replanting, the use of "Wandodema an environmentally-friendly passive gear to replace the die-hard beach seine "juya". Installation of mooring buoys to minimize damage of coral reefs by boat anchors is awaiting professional divers.

2.4 Stakeholder Involvement

The Park Management involves Park users especially Park residents in the planning, development and management of the Park and gives priority of resource use and economic opportunity to Park residents.

This collaborative management of the Park by all stakeholders is encouraged through their representation in Village Liaison Committees, Advisory Committee and Board of Trustees at the national level.

In an effort to increase community capability building of the Park residents in order to take a leading role in protecting and managing the resources, the Park Management continues to conduct various seminars, workshops meetings, short training courses and study tours on environmental education and offer awards to best environmental activities.

3. MAJOR PROBLEMS FACING THE PARK

In spite of the success mentioned in the preceding sections the Park still faces a number of constraints including the following:-

3.1 Delay in the Construction of Own Office Building and Staff Houses

The Park does not have its own office building nor staff houses. Presently all administrative work and operations (surveillance) are being done at borrowed or rented buildings located in Kilindoni and Utende respectively separated by a distance of 14 km. This has greatly (negatively) impacted the smooth running of the Park. Work coordination, supervision and logistical problems (motor vehicle expenses) have not been easy. The Park needs an appropriate and centralized administrative office building where all personnel would work together under the same roof. The construction of MIMP HQ is therefore, necessary as demonstrated by the Ministry of Natural Resources and Tourism (MNRT) and Board of Trustees decision to give it top priority.

The existing NORAD support to construct Phase 1 of permanent office block at Utende will not only unify Park management operations and lower high operational costs but it will demonstrate the *permanency* of MIMP, a wish of every conservation enthusiast. However, the building contract is yet to be signed.

3.2 Acute Shortage of Technical Staff

The existing technical staff is too few and inexperienced in the management of marine protected areas. The Warden, two Community Development Officers and the Accountant are the only technical personnel building a management and administrative team. In an attempt to improve knowledge, attitude, sharpen skills, increase confidence and inspire more vision among the few and inexperienced technical staff, the Park Management encourages its staff to attend short training courses, workshops, seminars, conferences and study tours.

However, there is a need to upgrade the management skills of the existing personnel in order to properly address Park issues which are multi-dimension and involve multi-stake holders.

The approved Establishment and Scheme of Services which is awaiting implementation for lack of funds on the Government side will enable the Park to employ more technical staff and implement its staff development programme.

3.3 Uncompleted Community-based Activities

The twelve (12) local projects being supervised by MIMP with donor (WWF and NORAD) assistance have not been completed due to lack of funds. The completion of these projects is important in order to stop demoralizing and frustrating efforts already made by Park residents. Furthermore, the completion of these projects will reduce tension and maintain the earned trust between the communities and MIMP management team.

3.4 Lack of Approved General Management Plan (GMP) and Regulations

Most of the activities of the Park are being impeded because of lack of an approved GMP from which annual work plans should be based. Furthermore it has been difficult to assess and monitor the effectiveness of management measures without Park regulations. The Park management team still uses the draft GMP and Main Act for direction.

However, the Marine Parks and Reserves Unit is speeding up the finalization of these "missing link" documents after the necessary improvements have been made.

3.5 Lack of Environmental Impact Assessment (EIA) and Investment Guidelines

The Park Management is deeply concerned by the escalating events whereby investors are undertaking large-scale projects within the boundaries or vicinity of the Park before carrying out EIA studies. Tanpesca's Floating Fish Processing Plant, Ikon's Fish Processing Plant, Kinas Hotels Aerodrome and Chole Mjini Fish Market are cases in hand. There is a need to develop standard EIA and Investment Guidelines and procedure for Marine Protected Areas.

Experienced institutions such as IMS, IRA AGENDA should be requested to undertake the task of developing EIA and Investment Guidelines for all projects that are planned within or in the vicinity of Park area. However, process to contract the appropriate agency to undertake the task have already been initiated.

3.6 Lack of Resource Use Monitoring Programme

A complete absence of resource use monitoring programme has contributed to the Park failure to assess changes in state of ecosystems. The presence of such a programme would have ensured that conservation values are not compromised and therefore not impaired as is the case in the present situation where commercial fishing is threatening the octopus, sea cucumber, lobster and cray fish stocks.

The current efforts by the Park Management to subcontract rapid assessment on coral bleaching, mortality and its rehabilitation, octopus fishery and fishing gear trials are not systematic enough.

The recently recruited Technical Advisor whom the Park expect to facilitate and coordinate among other things, the initiating and running of resource use monitoring programme is yet to report.

3.7 Inadequate Government Funds

Inadequacy or Government funds to support budgetted management activities of the Park has also affected the Park performance. Occasional donor support in recurrent expenditure is not sustaining. Moreover, donors such as WWF and NORAD are already committed to activities, which are developmental in nature.

3.8 Lack of Development Funds

Lack of development funds during the past year has resulted into most planned visible or major activities to remain on the ground awaiting funds from Donors. Development funds approved by WWF and NORAD are yet to be released.

3.9 Restriction on Small Mesh-sized Nets

Restriction on the use of small mesh-sized nets especially the beach seine nets "juya" is a touchy issue to fishermen. To some fishermen this is the only means of fishing to provide food for their families. The Park is still working on "Wandodema" as an alternative fishing gear to replace the die-hard "juya"

3.10 Restriction on Live Coral Mining

Likewise, the restriction on live coral mining has been a thorny issue to the Park Management team as this is the only building material especially in the small islands of Juani, Chole, Jibondo and Bwejuu. The Park is still experimenting on land-based fossil corals, and clay bricks as alternative building materials.

4.0 PLANNED ACTIVITIES FOR THE NEXT SIX MONTHS

4.1 Implementation of Development Activities

The Park Management is anxiously awaiting the release of funds from WWF and NORAD in order to start implementing activities proposed in the respective project documents during the next six months. Such activities include the development of land and sea-based infrastructure, recruitment of technical personnel, local community and staff training, procurement of field equipment, identification of non-utilized resources, alternative fishing gears and income generating activities and outreach and promotion material.

4.2 To Oversee the Construction of Park HQ Building

The Central Tender Board in collaboration with Ministry of Works (Consultant) and the Ministry of Natural Resources and Tourism (Client) have already selected a contractor

for the construction of the Park HQ offices. The Park will closely follow and speed up construction of the much-awaited offices to be financed by NORAD.

4.3 Finalization of GMP, Regulations, EIA and Investment Guidelines

In collaboration with the Unit Manager of MPRs and WWF, the Park Management will continue to facilitate and speed up the finalization of these important documents to the Park. Currently the contracted consultants are still pooling up information from targeted sources.

4.4 Finalization of Permit System

The Park Management will finalize permit system for fishing and collection of fisheries and marine products within the Park. This will ensure that the control of fishing within the Park is held on Mafia itself. The implementation of the fishing permit system in an open and legitimate manner will maximize collection of revenue, retention and its subsequent distribution to the benefit of the community and the Park self-sustainability.

4.5 Installation of Simple Basic Infrastructure and Facilities

In order to capture the promising revenue potential from tourism and related activities, MIMP will purchase more material in order to put simple basic infrastructure and facilities in the form of posters, sign posts, mooring buoys, nature trails etc. Promotion in international media will be attempted to compliment the already started local publicity. This will be a basis for charging various fees already approved by the Board and signed by the Minister and finally gazetted.

4.6 Continuing with Surveillance and Law Enforcement

The scaling down of dynamite fishing has been one of the achievements made so far in the Park. Fish is now abundant in the core conservation areas, as reports indicate increase in the catches after the scaling down of dynamite fishing.

In collaboration with Village Liaison Committees (self-enforcement) and District Natural Resources Office and the Police, the Park Management team will continue with regular patrols in and outside the Park boundary.

Regular patrols, hopefully, will further deter dynamite blasting, use of small mesh-sized nets (Beach seines), mining of live corals and excessive collection of juvenile octopus by fish factories' agents.

Appendix G

List of Participants

	Name	Organization/address/tel/fax	e-mail	Profession	Title
1	Charles Ngwera (Mr.)	Saadani/mkwaja Game Reserve	-	Game/Wildlife	AGO
2	Chirwa, E.B. (Mr.)	REMP-(Rufuji Environment Management Project) Utete		Fisheries	DFO
3	Haule, A. (Mr.)	Private	-	Economist	Freelance
4	Haule, W. (Mr.)	Fisheries Division	fisheries@twiga.com	Fisheries Biologist	Assistant Director- Fisheries
5	Ingen, T. (Mrs.)	TCZCDP, Box 5036 Tel. 053-47463/4 Fax: 053-47465	tangacoast@twiga.com	Natural resources management	Chief Technical Advisor
6	Juma, Saada (Mrs.)	AGENDA Box 7266, DSM Tel. 700663	agenda@raha.com	environment	Executive Secretary
7	Kalangahe, B. (Mr.)	PRAWNTAN Ltd. P.O.Box 909 DSM	barakatza@netscape.net	Marine Biologist	Project Manager
8	Lema, R. (Mr.)	Private		Aquaculturist	-
9	Lugazo, Z. (Mr.)	TCZCDP, Box 5036 Tel. 053-47463/4 Fax: 053-47465	tangacoast@twiga.com	Mariculturist	Mariculture Advisor
10	Mahenge, J. (Mr.)	Buyuni Co. LTD Box 8661 DSM	-	Marine Biologist	-
11	Makoloweka, S. (Mr.)	TCZCDP, Box 5036 Tel. 053-47463/4 Fax: 053-47465	tangacoast@twiga.com	Fisheries	Programme Coordinator

12	Makundi, C. (Mrs.)	National Land Use Planning Commission Box 76550 DSM	nlupc@intafrica.com	Planner	Physical Planner
13	Mambosho, H. (Mr.)	MIMP Box 74, Mafia	-	Sociologist	Community Development Officer
14	Masalu, D. (Dr.)	UDSM-ISM Box 668, Zanzibar Tel. 054-230741, 232128	masalu@zims.usdm.ac.tz	Geophysist	Research Fellow
15	Masanja, W.F. (Mr.)	Ministry of Water	dwr-maji@intafrica.com	Hydrologist	Hydrologist
16	Mbwambo, Z. (Mr.)	MMP-Northern Zone	-	Forester	Zonal Mangrove Management Officer
17	Mgaya, Y. D. (Dr.)	UDSM – Dept Of Zoology 051-410500/8 Ext:2127/2137 Home: 450692	ymgaya@ucc.udsm.ac.tz	Marine Biologist	Senior Lecturer
18	Mhitu, H. (Mr.)	TAFIRI Box 9750, DSM	mhitu@yahoo.co.uk	Marine Biologist	Researcher
19	Mnguli, N.	Rural Integrated Project Support- Lindi Tel. (0525) 2400, 2046, 2351	-	Planning	RIPS-Coordinator
20	Msumi, G. (Mr.)	MIMP, Box 74, Mafia	-	Conservationist	Park Warden
21	Muhando, C. (Mr.)	UDSM-ISM Box 668, Zanzibar Tel. 054-230741, 232128	muhando@zims.usdm.ac.tz	Marine ecologist	Research Fellow
22	Mwaipopo, D. (Mr.)	NEMC Box 63154 DSM	-	Environmental Engineer	Environmental Impact Assessment Officer
23	Mwanuo, M. (Mr.)	Mangrove Management Project (MMP)	misitu@twiga.com	Forester	MMP Manager
24	Ndahani, Paul (Mr.)	MMP-Central Zone (Kibiti)	-	Forester	AZMO
25	Nhwani, L. (Mr.)	Private	-	Fisheries Biologist	-
26	Nkondokaya, S. (Mr.)	Division of Environment	vpodoe@intafria.com	Fisheries	Fisheries Officer

		Box 5380, DSM		Biologist	
27	Ntumbo, A. (Mr.)	Agriculture	-	Agricultural	Agricultural Officer
28	Rumisha, C. (Mr.)	Marine Parks and Reserve Unit	marineparks@raha.com	Marine Biologist	Manager
29	Semuguruka, E. (Mrs.)	Ministry of Land and Human Settlement Development	-	Land planner	Senior Town Planner
30	Senguji, F. (Mr.)	Ministry of Water	dwr-maji@intafrica.com	Hydrologist	Hydrologist
31	Shah, A.	REMP-Rufiji	-	Forester	Project Manger
32	Sichone Winley (Mr.)	WWF-Menai Bay Tel. (054) 233206	wwfmeani@zanznet.com	Fisheries	Technical Advisor
33	Sobo, F. A. S. (Mrs.)	Fisheries Division P.O.Box 2462, DSM.	fisheries@twiga.com	Biologist	Fisheries Officer
34	Tindiyebwa, J.B. (Mr.)	Mineral Dep.	madini@twiga.com	Giologist	Mine Officer
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37	Jim Tobey	TCMP			
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