

Training Needs Assessment and Human Resource Development Plan

Requested by

MEMA
P. O. Box 148
Iringa, Tanzania

By

S. A. O. Chamshama & C. M. Kilasile

For

FORCONSULT
Faculty of Forestry & Nature Conservation
Sokoine University of Agriculture
P. O. Box 3009
Morogoro, Tanzania

March, 2001

Table of Contents

ABBREVIATIONS AND ACRONYMS	iii
EXECUTIVE SUMMARY	v
ACKNOWLEDGEMENTS	vii
LIST OF TABLES	viii
LIST OF FIGURES	viii
1. INTRODUCTION	1
2. STUDY METHODOLOGY	3
2.1 Study Team	3
2.2 Terms of Reference	3
2.3 Study Approach	3
2.4 Study Limitations	4
3. THE MEMA PROJECTS	5
3.1 Background	5
3.2 Objectives	5
3.3 Organisation and Management	5
3.4 Project Activities	6
4 FINDINGS AND RECOMMENDATIONS	7
4.1 Skills and Competencies	7
4.2 Present Status of Staff	7
4.3 Training Needs and Human Resource Development Plan	8
4.3.1 Background	8
4.3.2 Management/Technical Staff	9
4.3.3 Villagers and Village Functionaries	11
4.4 Training Institutions	13
4.5 Gender Issues in Relation to Training	16
4.6 Organisational Set-up	17
5. CONCLUSIONS	20
BIBLIOGRAPHY	21

ANNEXES	22
Annex 1: Terms of reference for the training needs assessment and human resource development plan for the MEMA projects.	22
Annex 2: Itinerary for the training needs assessment and human resource development plan study for the MEMA projects.	25
Annex 3: List of persons/groups of persons met.	26
Annex 4: Guide questions to management and technical personnel.	28
Annex 5: Questionnaire for training needs assessment for MEMA staff	29
Annex 6: Guide questions to village council and village natural resources committee members.	32
Annex 7: Present status of management and technical staff participating in MEMA projects activities.	33
Annex 8: Training conducted by MEMA projects to management and technical staff.	36
Annex 9: The five year training plan for management and technical staff participating in MEMA projects activities	37
Annex 10: Training conducted by MEMA projects to villagers and village functionaries.	41
Annex 11: Responses of Village Council and Village Natural Resources Committee members on preferred courses.	43

Abbreviations and Acronyms

AA	Administrative Adviser, MEMA
B.Sc	Bachelor of Science
CARMATEC	Centre for Agricultural Mechanisation and Rural Technology
CBFM	Community Based Forest Management
CD	Community Development
Cert	Certificate
C&I	Criteria and Indicators of JFM
Cons	Conservation
Danida	Danish International Development Assistance
DBO	District Beekeeping Officer
DCDO	District Community Development Officer
DCMO	District Council Manpower Officer
DCFO	District Catchment Forest Officer
DED	District Executive Director
DFBD	Director, FBD
DFO	District Forest Officer
DFSO	District Fisheries Officer
DGO	District Game Officer
Dip	Diploma
DNRO	District Natural Resources Officer
DS	Divisional Secretary
EIA	Environmental Impact Assessment
Environ	Environment
EPSF	Environment, Peace and Stability Facility
ESAMI	Eastern and Southern African Management Institute
FBD	Forestry and Beekeeping Division, MNRT
For	Forestry
FR	Forest Reserve
GIS	Geographical Information System
Ha	Hectare
HIMA	Hifadhi Mazingira, Iringa
HRDP	Human Resource Development Plan
IDC	Iringa District Council
IDM	Institute of Development Management, Mzumbe
IDERO	Iringa District Environmental Rehabilitation Organisation (NGO)
IRA	Institute of Resource Assessment, UDSM
IWEDEF	Iringa Women Economic Development and Environmental Foundation (NGO)

JFM	Joint Forest Management
JPMU	Joint Project Management Unit (MEMA)
JPSC	Joint Project Steering Committee (MEMA)
	iv
LAMP	Land Management Programme, Babati
LFA	Logical Framework Analysis
MBOMIPA	Matumizi Bora ya Malihai Idodi na Pawaga
MEMA	Matumizi Endelevu ya Misitua ya Asili
Mgt	Management
Mil	Million
MLHUD	Ministry of Lands, Housing and Urban Development
MLNRT	Ministry of Lands, Natural Resources and Tourism
MNRSA	Management of Natural Resources and Sustainable Agriculture
MNRT	Ministry of Natural Resources and Tourism
M.Sc	Master of Science
MT	Management Team
NGO	Non-Governmental Organisation
NR	Natural Resources
NTSP	National Tree Seed Programme
NWMP	Natural Woodlands Management Project
PC	Project Co-ordinator
PGDip	Postgraduate Diploma
PRA	Participatory Rural Appraisal
SFM	Sustainable Forest Management
SIP	Sustainable Iringa Project
SUA	Sokoine University of Agriculture
TREE CARE	Tree Research, Education and Environment Care (NGO)
TA	Technical Adviser
TNA	Training Needs Assessment
ToR	Terms of Reference
ToT	Training of Trainers
UCLAS	University College of Lands and Architectural Studies
UDSM	University of Dar es Salaam
UMFM	Udzungwa Mountains Forest Management and Biodiversity Conservation Project
VC	Village Council
VEO	Village Executive Officer
VETA	Vocational Education and Training Authority
VEW	Voluntary Extension Worker
VORENA UTF	VORENA United Trust Fund (NGO)
VNRC	Village Natural Resources Committee
VP	Vice- Presidents Office
WEO	Ward Executive Officer
Yr	Year

Executive Summary

Background

Following the revision of the Tanzania Forest Policy in 1998 and other relevant policies, projects (e.g MEMA) have been designed and are being implemented on a pilot scale to assist local communities, district authorities and Tanzania as a whole to achieve the formulated policy goals. The outlined policy changes require adoption of new management paradigms. However, the technical and managerial staff as well as the communities have inadequate skills/knowledge for the effective and sustainable management of the natural resources.

MEMA wishes to train some of its staff and its primary stakeholders (the communities) to enhance their performance for effective implementation and realization of the project overall objective. The Project requested FORCONSULT to conduct a training needs assessment (TNA) and prepare a human resources development plan (HRDP) for the staff attached to the project and recommend appropriate training for the communities in the pilot areas. This report is the result of that request.

Methodology

The study to conduct a TNA and prepare a HRDP for the MEMA Projects was carried out between 29th January and 2nd March 2001. Information/data was collected using the following approaches: a) review of various documents, b) informal discussions with various people, c) interviews, d) observations during field visits, and e) administering questionnaires.

Major Findings and Recommendations

Management and Technical staff

The majority of the staff (about 70%) participating in MEMA projects are foresters and only a few are from beekeeping, fisheries, game and community development. Only 5 (14%) of natural resources staff are females. Of the foresters, nearly 50% do not have formal forestry training and have only attended the three months forestry course at Sao Hill which mainly emphasises plantation forestry management. The other foresters have received natural as well as plantation forestry management aspects but it is only recent that natural forest management is being given adequate coverage in the syllabi. As a consequence, most forestry staff in the field have much more knowledge of plantation forestry than of natural forest management. The other natural resources fields (beekeeping, fisheries and game) other than having inadequate staff, all staff have only received technical level training and none at professional level. The general natural resources staffing situation in the district is thus characterised by inadequate number of staff and most of them lack the necessary professional qualifications. This has resulted in unqualified staff manning divisions and wards and some wads without personnel. This situation cannot allow effective extension services.

From the foregoing, the present status of the management and technical staff shows deficiencies in attitude, skills and knowledge necessary in realising the overall objective of MEMA. The individual responses to the questionnaire confirm this and staff have indicated short as well as long courses to bridge the gap. This, in addition to our own knowledge and experience has resulted in recommendations of short and long courses within the following broad areas where

attitude, skills and knowledge are necessary to achieve the MEMA objectives: general management, participatory/socio-economic/policy aspects as well as resource planning, resource assessment, resource management and resource utilisation. In addition, staff should participate in relevant conferences, seminars, workshops and study tours. Senior staff should as a routine offer on-job training to junior/inexperienced staff.

Relevant institutions to offer short and long courses have been proposed. For the short courses, adequate and appropriate training facilities and “user- friendly” reading materials must be available.

Due to inadequate technical staff in certain natural resources fields, staff of other departments involved in extension services and NGO’s should be utilised in the training of farmers. Also, the paraprofessional/ Voluntary Extension Worker approach should be used for selected topics. These approaches would not only improve the gender ratio of technical staff, but would also further enhance the interdisciplinary approach necessary in natural resource management.

Villagers and Village Functionaries

There is considerable awareness among Village Council (VC) and Village Natural Resources Committees (VNRC) of the importance of natural resources and the urgent need for the sustainable management of the resources. To what extent this awareness has trickled down to the communities could not be established. The awareness among the VC and VNRC seems to have contributed to these committees suggesting several relevant short courses to further improve their capacity to manage the natural resources.

Based on the proposals by the VC and VNRC, suggestions by policy, management and technical staff and our own knowledge and experience, several short courses have been recommended for the VC/VNRC and/or relevant communities. Other recommendations include: courses should as much as possible be held in the villages and they should involve all VC and/or VNRC to avoid situations where few selected members do not share skills/knowledge with other members. The short courses should be implemented within the first two years to enable communities have the necessary competencies to effectively implement project activities.

Organizational Set-up

The organizational setup of the forest resources management in Iringa district should remain like in other districts where the District Catchment Forest Officer (DCFO) reports directly to the Forestry and Beekeeping Division (FBD). The current problems in the District relate with MEMA coordination, and following discussions with various stakeholders have recommended some changes in the organizational set-up.

Conclusions

Based on discussions with primary as well as secondary stakeholders and our own knowledge and experience, we have recommended appropriate short and long term courses which upon

implementation would enhance the technical/management staff and communities performance for effective implementation and realization of the project overall objective. Adherence to the proposed plan after approval by relevant authorities is important. Personal interests if allowed would jeopardise the objective of the training. We consider organised and timely training of the primary stakeholders (communities) crucial as this would build the necessary capacity in their new role as managers of the forest resources.

Acknowledgements

We wish to thank MEMA JPMU/JPSC for contracting FORCONSULT, the Consultancy Unit of the Faculty of Forestry and Nature Conservation, SUA to conduct a TNA and prepare a HRDP for project staff as well as training needs for the communities and for approving our engagement to execute the same.

We most sincerely thank the FORCONSULT Co-ordinator Prof. A.G. Mugasha for assistance in various ways during the course of this study. We are grateful to MEMA JPMU members: Mr. H. Lerdorf (TA), Mr. A. Mallango (DNRO), Mr. J. Mchomvu (DFO) and Mr. G. Anyimike (DCFO) for assistance with relevant information, literature and logistical support during the course of this assignment. We sincerely thank the Udzungwa Catchment Forest Officer Mr. J. F. Massao for making appointments, able guidance during field visits, assistance with relevant information, literature and logistical support.

We would also like to express our thanks to members of the JPSC, the Technical Staff attached to the Project, Villagers in the Pilot Areas, Officials of the IDC, NGO's, the FBD, the Royal Danish Embassy and all those who in one way or the other assisted us during the conduct of this consultancy work. Last but not least, we thank the MEMA driver Mr. E. Kihedu for expertly taking us around the muddy mountain roads.

While we acknowledge with thanks all those who availed information during the conduct of this study, we are however solely responsible for any omission and errors of interpretation.

List of Tables

Table 1: Skills and competencies required by staff participating in MEMA projects activities.	7
Table 2: Summary of present status of staff participating in MEMA projects activities.	8
Table 3: Proposed group training for staff participating in MEMA projects activities.	10
Table 4: Government and Regional institutions offering short/long courses on natural resources aspects.	13
Table 5: Danish Fellowship Programme: Examples of standard and tailor-made courses relevant to MEMA.	15

List of Figures

Figure 1: Proposed organisational structure for MEMA	19
--	----

1. Introduction

Tanzania forests cover a total area of 33.5 mil ha (MNRT1998a). Of these, about 13 mil have been gazetted as forest reserves (FR) and are predominantly owned and managed by the Central Government through the Forestry and Beekeeping Division (FBD) in the Ministry of Natural Resources and Tourism (MNRT). Over 80 000 ha of the gazetted area is under plantation forestry and about 1.6 mil ha are under water catchment management. Only about 600 000 ha are under the ownership and management of the Local Government. The forest on general lands (non-gazetted or non-reserved) covers 19 mil ha.

Forests are important in Tanzania due to a myriad of goods and services they offer to the national economy and society. The benefits include non-wood forest products (NWFP), timber, poles, firewood, catchment protection, soil conservation, preservation of biodiversity, carbon sequestration and moderation of climate. Despite these benefits, the forest estate has been declining over the years. The main reasons for the decline being: clearing for agriculture, over-grazing, wildfires, charcoal burning and over-exploitation of wood resources. Though the decline is mainly in general lands, encroachment and over-utilisation has also been taking place in the forest reserves. This is due to the Government's inadequate resources to implement sustainable forest management (SFM).

Unsustainable forest management, increased deforestation and environmental degradation have been attributed to policy failures (inadequate government financial and managerial capability, poorly defined property rights, low forest rent, old forest policy), market failures (pricing and valuation techniques) and implementation of the structural adjustment programme (SAP) (trade liberalisation and reduced Government expenditure) (Kaoneka 2000). There have been various attempts to address these aspects e.g the Tanzania Forestry Action Plan (TFAP) of 1989 (MLNRT 1989), the revised Forest Policy of 1998 (MNRT 1998a) and the current revision of the Forest Act. The revised policy is a product of long time efforts by various stakeholders and has addressed emerging opportunities and challenges.

The revised Forest Policy (MNRT1998a) has several policy statements and some of those which concern the Central and Local Government forest reserves and forests in general lands are:

- ☞ To enable participation of all stakeholders in forest management and conservation, joint management agreements, with appropriate user rights and benefits, will be established. The agreement will be between the central government, specialized executive agencies, private sector or local governments, as appropriate in each case and organized local communities or other organizations of people living adjacent to the forest.
- ☞ To enable sustainable management of forests on general lands, clear ownership for all forests and trees on those lands will be defined. The allocation of forests and their management responsibility to villages, private individuals or to the government will

be promoted. Central, local and village governments may demarcate and establish new forest reserves.

Other relevant policies to the outlined aspects include the Land Policy (MLHUD 1995), the National Environmental Policy (VP 1997), the Wildlife Policy (MNRT 1998b) and the Beekeeping Policy (MNRT 1998c).

On the basis of the above background, projects (e.g. MEMA) have been designed and are being implemented on a pilot scale to assist local communities, district authorities and Tanzania as a whole to achieve the formulated policy goals. The outlined policy changes require adoption of new management paradigms. However, the technical and managerial staff as well as the communities have inadequate skills/knowledge for the effective and sustainable management of the natural resources.

MEMA wishes to train some of its staff and its primary stakeholders (the communities) to enhance their performance for effective implementation and realization of the overall project objective. The Project requested FORCONSULT to conduct a training needs assessment (TNA) and prepare a human resources development plan (HRDP) for the staff attached to the project and recommend appropriate training for the communities in the pilot areas. This report is an outcome of that request.

2. Study Methodology

2.1 Study Team

The MEMA Projects (NWMP and UMFM) contracted the Consultancy Unit of the Faculty of Forestry and Nature Conservation (FORCONSULT) of Sokoine University of Agriculture (SUA), Morogoro, Tanzania to conduct a TNA and prepare a HRDP for the staff attached to the project and recommend appropriate training for the communities in the pilot areas. FORCONSULT engaged the following consultants as members of the study team to develop the same:

S.A.O. Chamshama	Team Leader, Department of Forest Biology, Faculty of Forestry and Nature Conservation, SUA.
C.M. Kilasile	Institute of Development Management (IDM), Mzumbe.

2.2 Terms of Reference

The detailed terms of reference (ToR) are given in Annex 1. At a meeting held in Morogoro on 9th December 2000 between FORCONSULT and some Joint Project Management Unit (JPMU) Members and the Udzungwa Catchment Forest Officer to discuss the ToR, additional work to include training needs of the communities in the pilot areas were added as well as the services of an additional consultant. A summary of ToR to conduct a TNA and prepare a HRDP were to:

- ✍ Assess the skills and competencies required to accomplish project objectives.
- ✍ Identify and document the present status of individual staff.
- ✍ Determine the training needs of staff and the communities.
- ✍ Assess and recommend on gender issues that require attention in relation to training.
- ✍ Identify and suggest relevant institutions capable of carrying out the training.
- ✍ Assess the organisational set up of the Forest Resources Management in Iringa District and propose organisational changes.

2.3 Study Approach

The study was done from 29th January to 2nd March 2001. Annex 2 presents the Study Team's itinerary while the list of people contacted and their respective positions is given in Annex 3.

Information for this study was collected through interviews and discussions with various people who play different roles in MEMA's efforts to develop community based sustainable management of natural forests and woodlands in Iringa District.

- ✍ Individual and group discussion approach was used to share information with MEMA management and technical staff (See guide questions in Annex 4) and a structured questionnaire (Annex 5) was used to seek specific information on present status of individual staff and training needs.
- ✍ Individual and group discussions were held in 13 villages with Village Council (VC) members, Village Natural Resources Committee (VNRC) members, Ward and Divisional Functionaries. The guide questions for VC/VNRC members are shown in Annex 6.
- ✍ Individual and group discussions were also held with Non-Governmental Organisations (NGO's) representatives, some Iringa District Council (IDC) officials, Joint Project Steering Committee (JPSC) and JPMP members.

- ✍ Visits were made to some sites with project activities, and participant observation was used throughout field visits while travelling and during discussions.
- ✍ Various documents provided by MEMA and HIMA and other relevant ones were reviewed. From these documents, secondary information was obtained.

Information from questionnaires was processed using frequency tables while some qualitative responses were organised and presented to verify some observations and discussions.

2.4 Study Limitations

There were two main limitations. First, because of time constraint, it was not possible to cover all the 23 pilot villages. However, the selection of the 13 sample villages was done such that all Wards were covered as well as ensuring coverage of villages adjacent to lowland and highland woodland areas. Secondly, for reasons not known to the Consultants, some staff members declined to fill the questionnaires while others took the questionnaires but never returned them.

3. THE MEMA Projects

3.1 Background

MEMA which is an acronym for the Kiswahili words “Matumizi Endelevu ya Mimitu ya Asili” (sustainable use of natural forest resources) is a three year preparatory project which became operational in June 1999. It operates in Iringa District and is funded by the Danish Government through the Environment, Peace and Stability Facility (EPSF). MEMA comprises of two projects namely: Udzungwa Mountains Forest Management and Biodiversity Conservation (UMFM) and Community Based Natural Woodlands Management Project (NWMP).

The documents for the two projects were developed through a dialogue between the Local Government, villagers, and natural resources users in Iringa, the FBD of the MNRT, the Regional Administrative Secretariat, the Royal Danish Embassy and Danida.

The current phase of the projects is concerned with developing, testing and implementing widely replicable participatory forest management models as well as capacity building. Phase two for the wider dissemination of the models is envisaged.

3.2 Objectives

The overall objective of MEMA is **“To develop community based sustainable management of natural forests and woodlands in Iringa District and through this effort conserve valuable biological diversity and improve the welfare of rural communities”**.

There are two immediate objectives namely:

- ✍ To develop, test and implement widely replicable *participatory forest management models* for environmentally sustainable production, use, management and protection of natural forests and woodlands in the pilot areas.
- ✍ To support capacity development in natural forests, woodlands and biodiversity in Iringa District.

3.3 Organisation and Management

The MEMA organisation utilises existing Central and Local Government structures to ensure institutional integration. Management and technical staff of the two structural arms of the Government are utilised in the implementation of project activities.

MEMA is managed by the JPMU. The members of JPMU are the Technical Adviser (TA), the District Natural Resources Officer (DNRO), the District Forest Officer (DFO) and the District Catchment Forest Officer (DCFO). The JPMU is accountable to the JPSC which is the policy level body for MEMA. The JPSC is composed of the District Commissioner who is the Chairperson; the Chairperson of the IDC Permanent Committee on Labour Development who is the Vice Chairperson; Four Ward Councillors from the project pilot areas; one representative from the Regional Secretariat; one representative from the FBD and one representative from the Royal Danish Embassy. The JPSC meets bi-annually and reviews progress, endorses work plans and attendant budgets of the projects.

3.4 Project Activities

Project activities are carried out in the following pilot areas: West Kilombero Scarp Catchment FR (5 000 ha pilot area out of 104 000 ha) and New Dabaga Ulongambi FR (3 728 ha) for UMFM and Nyang’oro woodlands (30 000 ha) and Kitapilimwa FR (3 683 ha) for NWMP. In all these areas, a total of 23 villages currently participate in project activities.

There are District and village level activities. District level activities include refurbishment/extension of infrastructure and equipment supply; capacity building; improved revenue generation, collection and retention; and research/bibliography support. The following are the main village level project activities:

- ✍ Negotiating and demarcating catchment FR and village forest boundaries.
- ✍ Preparing, implementing and monitoring JFM plans.
- ✍ Training of villagers, VC and VNRC.
- ✍ Assisting to increase revenue collection from natural resources and improve its distribution to the various stakeholders.
- ✍ Production and distribution of promotional materials.

4. Findings and Recommendations

4.1 Skills and Competencies

The MEMA's first immediate objective (See Section 3.2) should be the basis for indicating the attitude, skills and knowledge (ASK) necessary to achieve the stated project objectives. The attitude aspect is here emphasised because of the changed roles of the foresters from policing to facilitating and of the communities of being the managers of the resources (Willy 1994a,b, MEMA 1998a,b). Discussions with management and technical staff and our own views have resulted in the attitude, skill and knowledge requirements shown in Table 1. In JFM/CBFM, skills and knowledge on participatory, socio-economic and policy aspects among the facilitators and managers is necessary. In addition, SFM can only be competently pursued if there are skills and knowledge in resource planning, assessment, management and utilisation. Skills and knowledge in general management are also essential in the development of human and physical resource capacity necessary for JFM/CBFM and SFM.

Table 1: Skills and knowledge required by staff participating in MEMA Projects activities.

Broad Field	Specific Areas
1.Participatory, Socio-economic and Policy Aspects	Participatory Rural Appraisal (PRA), Indigenous knowledge, Communication skills, Gender, Extension, Policy Aspects
2.Resource Planning	Management planning, Strategic planning, Monitoring and Evaluation (M&E), JFM/CBFM
3.Resource Assessment	Wood, NWFP, Biodiversity, Catchment, Non consumptive use
4.Resource Management	Establishment, Management, Criteria & Indicators of SFM, Protection
5.Resource Utilisation	Sustainable harvesting, Processing, Marketing
6.General Management	Managerial Skills, Human Resources Management, Supervisory Skills, Laws & Legal Perspectives

4.2 Present Status of Staff

The staff participating in MEMA activities belong to the FBD and IDC. Table 2 summarises the present status of the staff while the details are in Annex 7. The majority of the staff (over 60%) are foresters and only a few are from Beekeeping, Fisheries, Game and Community Development. Only 5 (14%) of the natural resources staff are females. Of the forestry staff, nearly 50% do not have formal forestry training and have only attended the three months forestry course at the Sao Hill Vocational Training Centre. The training at the vocational centres (now closed) mainly emphasises plantation forestry management. Natural and plantation management aspects are covered at technical and professional level training in forestry, but it is only recent that natural forest management is receiving adequate coverage. As a consequence, most forestry staff in the field have much more knowledge of plantation forestry than of natural forest management. The other natural resources fields (beekeeping, fisheries and game) other than having inadequate staff, all staff have only received technical level training and non has professional level training.

The age structure (Annex 7) shows that only one staff member has less than 30 years of age, 9 are between 30-39 years, 23 are between 40 and 49 years and 7 staff are over 50 years of age. The data shows that most staff have advanced age and limits possibilities for long courses and also poses future problems if no recruitment is done.

Table 2: Summary of present status of staff participating in MEMA Projects activities.

Department		Below Cert.	Cert.	Dip.	B.Sc	PGDip/ M.Sc	Total
Forestry	M	10	2(1)*	7(4)	1	3(3)	23
	F	4	-	-	-	-	4
Beekeeping	M	-	1	1	-	-	2
	F	-	-	1	-	-	1
Fisheries	M	-	1	2	-	-	3
	F	-	-	-	-	-	0
Game	M	-	3	-	-	-	3
	F	-	-	-	-	-	0
Others	M	-	-	-	-	-	0
	F	1	3	-	-	-	4
Total		15	10	11	1	3	40

() * No. of FBD staff

Other than the 3 months nursery and plantation forestry management course attended by all forest attendants, only a few of them have attended other courses like soil and water conservation, community development, environmental conservation and agroforestry (Annex 7). On the other hand, other technical and management staff in all the natural resources fields have attended several natural resources courses some of which were

organised by MEMA (Annexes 7 and 8). Almost all of them including those involved in managerial functions, have never been exposed to general management aspects.

From the foregoing, and as indicated by the staff themselves, further short and long term training is required, for effective implementation and realisation of MEMA objectives.

4.3 Training Needs and Human Resource Development Plan

4.3.1 Background

Training needs analysis can be defined from the generic perspective as the search for solution to performance problems through training. In the assessment of training needs, the tasks to be performed and the skills and knowledge for effective performance of these tasks are analysed. In this way the job qualifications profile is established. The individual in that job is then analysed in terms of competence to effectively perform the job. The analysis includes knowledge, skills and experiences possessed by the individual with the view to determining the match between the qualifications demanded by the job and those possessed by the job holder, any gaps then constitute areas which training needs to be provided. After the establishment of the training needs, the recommended types of training are incorporated in the HRDP.

The HRDP is the integrated use of systems, policies, and management practices to procure, maintain and develop employees in order for the organisation to meet its desired goals. Essentially therefore, a comprehensive human resources system provides a framework and tools to achieve higher levels of staff performance and employee satisfaction on a sustainable basis.

Training as part of the HRDP is important because the initial training is never adequate, and even when it is adequate at a given time, future developments create challenges for which staff need to be equipped with additional knowledge, skills and attitude to perform at the same or better level of performance.

4.3.2 Management/Technical Staff

The present status of technical and management staff shows deficiencies in attitude, skills and knowledge necessary in realising the overall objective of MEMA (see Section 4.2). Individual responses to the questionnaire, confirm this and staff have indicated short as well as long courses to bridge the gap. This, in addition to the proposed topics in the MEMA projects documents and our own knowledge and experience has resulted into the courses proposed in Table 3 and Annex 9. Though we consider short/long courses as the most effective training approach, staff should participate in relevant local and international conferences, seminars, workshops and study tours. Staff attending meetings should give presentations to the rest of the staff on return. Senior staff should as a routine offer on-job training to junior/inexperienced staff. We do not currently see much local excellency in JFM/CBFM and SFM and thus the attachment approach is for the time

being not recommended. The short course training is proposed to be in groups, but relevant individual courses should be funded.

Recommendations for long courses and timing took into consideration willingness and qualifications of the staff member and the need to have some staff on station at any one time. It is noteworthy that some forest attendants declined consideration for certificate courses because of lack of English proficiency. Others declined due to advanced age.

We have indicated in Annex 9 that all short courses be finished within the first two years so that the technical staff acquire the necessary competency fast enough in implementing project activities for the remaining one year of the project and hopefully phase two if secured. Although all the indicated courses are relevant, we have however, prioritised them by indicating the ones for 2001 and 2002. Training should be taken as a continuous process, and courses which cannot be completed during the indicated periods be carried over.

Table 3: Proposed group training for staff participating in MEMA Projects activities.

Category of Group	Positions involved	Recommended Training
1. Management Staff	DNRO DFO DCFO DFSO DBO DGO DCDO Catchment For. Officers	2001 ✗ JFM/CBNRM (2)* ✗ Catchment/Biodiversity & Miombo woodlands mgt and protection.(4) ✗ Other NR** mgt and protection (4) ✗ Participatory project planning and mgt.(2/4) ✗ M&E of projects (2) ✗ Participatory Approaches and Awareness Creation (PA & AC)*** (1) ✗ Report writing skills (6) ✗ ToT (1) 2002 ✗ Computer skills (6) ✗ Financial mgt.(6) ✗ Performance mgt. & budgeting (6) ✗ Strategic mgt (6) ✗ Human resources mgt.(6) ✗ Laws & legal perspectives(6) ✗ EIA (2) ✗ Record management (6) ✗ GIS (3)
2. Technical Staff	Assist. For. Officers Assist. Beekeeping Officers Assist. Fisheries Officers Assist. Game Officers Forest Assistants Beekeeping Assistants Fisheries Assistants Game Assistants CD Assistants Agriculture extension staff	2001 ✗ JFM/CBNRM (2) ✗ Catchment/Biodiversity & Miombo woodland mgt and protection (4) ✗ Other NR mgt and protection (4) ✗ NR policies and legislation (1) ✗ Agroforestry (incl.soil cons.) (4) ✗ PA & AC (1) ✗ ToT (1) 2002

	Teachers	<ul style="list-style-type: none"> ✍ NR assessment (3) ✍ NR harvesting, processing and marketing (5) ✍ EIA (2) ✍ Supervisory skills (6) ✍ GIS (3) ✍ Report writing (6) ✍ Record management (6)
	Forest Attendants	<p>2001</p> <ul style="list-style-type: none"> ✍ JFM/CBNRM (2) ✍ Catchment/Biodiversity & Miombo woodland mgt and protection (4) ✍ Other NR mgt and protection (4) ✍ NR policies and legislation (1) ✍ Agroforestry (incl. soil cons.) (4) ✍ PA & AC (1) <p>2002</p> <ul style="list-style-type: none"> ✍ NR assessment (3) ✍ NR harvesting, processing and marketing (5) ✍ Report writing (6)
3. WEO, Councillors and DS		<p>2001</p> <ul style="list-style-type: none"> ✍ Supervisory/administrative skills (6) ✍ Record management (6)
4. VC, VNRC and Communities		<p>2001</p> <ul style="list-style-type: none"> ✍ JFM/CBNRM (2) ✍ Catchment/Biodiversity & Miombo woodland mgt and protection (4) ✍ Other NR mgt and protection (4) ✍ NR policies and legislation (1) ✍ Agroforestry (incl. soil cons.) (4) ✍ Fuel efficient cooking stoves (5) ✍ Gender aspects (1) ✍ Seed collection and handling (4) ✍ Tree nurseries and Tree planting (4) <p>2002</p> <ul style="list-style-type: none"> ? Eco-tourism (3) ✍ NR assessment (3) ✍ NR harvesting, processing and marketing (5) ✍ Planning and M&E of village plans (2) ✍ By-law drafting, administration and supervision (6) ✍ Entrepreneurial skills (5) ✍ Small business and management skills (5) ✍ Record management (6)

* Number in bracket refers to the broad field in Table 1.

** NR: is taken to include Beekeeping, Fisheries, Forestry and Game

*** PA & AC: A broad title that includes Participatory skills, PRA; Gender aspects; Extension, Communication, Meeting skills; Team building skills; Facilitation/Group skills.

4.3.3 Villagers and Village Functionaries

Findings

According to the NWMP and UFMF project documents (Danida 1998a, b), MEMA should build the villager's capacity to manage the natural forests and woodlands. In fulfilling this obligation, a number of training courses have already been carried out (Annex 10). The courses should have been preceded by a TNA as per the project documents.

Although the courses already given are relevant, as per the interviews with the villagers, the project Review Team (MEMA 2000c) as well as the Study Team observed that in some situations, insufficient notice was given to villages before training activities started and that the training should reflect village priorities. One villager even mentioned that women may be refused permission by their husbands to go for a course at short notice. The Study Team was informed that even where a course/seminar should have involved all VNRC members (e.g. responsibilities of the committee), only a few were selected and these have in some cases not shared the information with other members. We consider conducting a course at village level as being relatively cheap and consequently for certain fundamental courses all VC and/or VNRC members should be involved.

Communities have in almost all cases indicated courses that are relevant to fulfilling project objectives (Annex 11). This gives an impression that the initial awareness seminars were well understood. It is noteworthy that women members of VNRC in some villages mentioned the improved cooking stoves and agroforestry courses. The villagers proposals, those of technical staff and our own knowledge and experience have resulted in the courses shown in Table 3 for VC, VNRC and Ward and Divisional Functionaries and for certain courses the communities themselves.

The project documents, have outlined the **dual** strategy of not only focussing on management of forest, biodiversity and wildlife resources inside the forest but also taking into consideration the management of land-use based resources outside and adjacent to the forest areas. The study team considers this to be important given the low technology and input levels of the mainly small holder subsistence farmers. Agroforestry (including ex situ conservation of indigenous fruit trees) was mentioned by some VC/VNRC (e.g. Chamndindi Village) and is also listed as one possible activity in the project documents and should therefore be one of the courses to be offered to the VC/VNRC members. The agroforestry approach would not only improve soil fertility and crop production and thus limit opening up of new areas (shifting cultivation) but would also lessen pressure on the natural forests for firewood, pole and fodder supply.

Most of the village VC/VNRC indicated the need for study tours to other areas with similar activities. It will not be possible to accommodate all villagers or VC/VNRC members and the cost effective way would be to establish on and off farm demonstration facilities in selected villages. For on-farm demonstrations, interested farmers (at least two) in each pilot village be assisted to demonstrate relevant agroforestry technologies. Relevancy is emphasized as a given technology may not be appropriate to all pilot

villages. Assistance should also be given to the establishment of off-farm demonstrations. A half ha piece of forest could be developed to demonstrate appropriate catchment/biodiversity and miombo management. This activity require the interest of VC.and VNRC.

Recommendations

- ✍ We recommend that the courses summarised in Table 3 be offered to VC, VNRC, Ward and Divisional functionaries.
- ✍ Courses should as much as possible involve all VC and/or VNRC to avoid situations where few selected members do not share skills/knowledge with other members.
- ✍ Sufficient notice should be given before a course is mounted to enable villagers to plan for their participation. Some villages even indicated the period April – October as being appropriate since it is not the peak of agricultural activities.
- ✍ Topics for training should reflect village priorities.
- ✍ Courses should as much as possible be held in the villages and a course may be held for two or three near-by villages.
- ✍ Assistance be given on the establishment of demonstration plots.

4.4 Training Institutions

Findings

Government and Regional Institutions

There are many institutions in Tanzania with capability to offer short/long courses on natural resources and general management aspects. Table 4 summarises the institutions and the courses they offer.

Table 4: Government and Regional Institutions offering short/long courses on natural resources aspects.

Name of Institution	Course(s) offered
Forestry Training Institute, Olmotonyi, Arusha	<ul style="list-style-type: none"> ✍ Short courses ✍ Certificate in beekeeping ✍ Certificate in forestry ✍ Diploma in beekeeping ✍ Diploma in forestry
Pansiasi Wildlife Institute, Mwanza	<ul style="list-style-type: none"> ✍ Short courses ✍ Certificate in wildlife management
College of African Wildlife Management, Mweka, Moshi	<ul style="list-style-type: none"> ✍ Short courses ✍ Certificate in wildlife management ✍ Diploma and post graduate diploma in wildlife management
Nyegezi Fisheries Institute, Mwanza	<ul style="list-style-type: none"> ✍ Short courses ✍ Certificate in fisheries
Kunduchi Fisheries Institute, Dar es Salaam	<ul style="list-style-type: none"> ✍ Short courses ✍ Diploma in fisheries
Mbegani Fisheries Institute, Dar es Salaam	<ul style="list-style-type: none"> ✍ Short courses ✍ Certificate in fisheries

	☞ Diploma in fisheries
Faculty of Forestry & Nature Conservation, SUA, Morogoro	☞ Short courses ☞ B.Sc (Forestry) ☞ B.Sc (Wildlife management) ☞ M.Sc (Forestry) ☞ M.Sc (MNRSA)
Institute of Resource Assessment (IRA), University of Dar es Salaam (UDSM), Dar es Salaam	☞ Short courses
University College of Lands and Architectural Studies (UCLAS), UDSM. Dar es Salaam	☞ Short courses ☞ B.Sc (land use planning)
Kivukoni Academy of Social Sciences, Dar es Salaam	☞ Short courses ☞ Diploma
Institute of Development Management (IDM), Mzumbe, Morogoro	☞ Short courses
Eastern and Southern African Management Institute (ESAMI), Arusha	☞ Short courses
National tree Seed Programme (NTSP), Iringa	☞ Short courses

Other Local Institutions and Trainers

The MEMA Projects documents clearly stipulate the involvement of other service providers like NGO's and Consultancy Companies in the implementation of activities. A Consultancy Company INFO BRIDGE was conducting a GIS course during the period of this assignment.

Discussions with a number of local NGO's showed interest to participate in the training of farmers and some had already been involved in some activities. The NGO's however vary greatly in natural resources human capacity, some with several technical/professional staff and some without. We recommend that NGO's with appropriate human capacity be utilised and be offered relevant training of trainers (ToT) courses so as to assist in the training of communities especially in fields where MEMA has shortage of extension staff (See Section 4.2 and Table 2). Over stretching the limited human capacity in those fields may lead to courses taking unnecessarily long time to be completed in all the pilot villages.

Some VC/VNRC members and management and technical staff proposed using the paraprofessionals/Voluntary Extension Workers (VEW) approach in the training of communities. Paraprofessionals/VEW are farmers identified from the village community and subjected to training in specific issues/topics in order to act as trainers in those specific topics. This approach has successfully been used in LAMP Babati and HIMA Njombe (Chamshama *et al.* 1995, HIMA 1999). The main objectives of training paraprofessionals/VEW include (Chamshama *et al.* 1995, HIMA 1999):

- ☞ Unsatisfactory coverage and quality of extension services at village level. Factors contributing to the low quality of extension services include: level of education, remuneration and working conditions.

- ✍ It is unlikely that the Government will have sufficient resources to train and deploy extension staff in each village/sub-village.
- ✍ Minimising the gap created by retrenched extension staff.
- ✍ Move extension services to as close to farmers as possible.
- ✍ Building up farmers capacity to sustain activities in case project support is scaled down or removed.
- ✍ Facilitate technological transfer and networking among farmers in priority villages.

We recommend that the paraprofessional/VEW approach be used for selected topics especially for fields with few extension staff. The Activity Co-ordinators (AC) should propose issues/topics for the training of paraprofessionals/VEW.

Danish Institutions

There is a Danida Fellowship Programme intended to give candidates additional knowledge and skills within their professional field and thus assist in fulfilling the need for capacity building within Danida funded projects and programmes (Danida 2000). The fellowship programme is administered by the Danish Fellowship Centre. Successful applicants may enrol in standard courses or tailor-made courses. The later are designed to address the needs of individual projects/programmes.

The major limitation of fellowship programme is the age limit (Applicants must be 25-45 years of age). As the retirement age has been extended to 60 years, a consideration to extend the age limit would benefit more applicants. Examples of standard and tailor made courses relevant to MEMA are shown in Table 5.

Table 5: Danish Fellowship Programme. Examples of standard and tailor-made courses relevant to MEMA.

Standard Courses	Tailor-made Courses
✍ Project Management	✍ Community Forestry and Management
✍ Extension Co-ordination	✍ Seed Technology
✍ Training Management	
✍ Soil Fertility Management	
✍ Environmental Management	

Other Foreign Institutions

There are many institutions worldwide, which can offer courses relevant to MEMA. For courses, which may require specialised expertise not available locally, or in the Danish Institutions, use should be made of other institutions.

Recommendations

- ✍ Upon approval of the proposed short courses, the Output Training Coordinator – MEMA should visit institutions with capability to offer the courses and assess their human and physical resources relevant to the planned courses. Upon approval of an Institution to mount a given course, a tailor-made course outline should be developed for approval by MEMA. Venue should depend on the nature of the course.
- ✍ Opportunities in the Danish Fellowship Programme should as much as possible be utilised as costs for these courses may be met by the Fellowship Programme.
- ✍ All training courses must have adequate and appropriate training materials. Information in handouts must be “user-friendly” i.e in a form that can easily be used and applied in the management of natural resources by extension staff and/or the communities.
- ✍ Staff of NGO’s with appropriate background be involved in the training of farmers and ToT courses be mounted for them.
- ✍ Paraprofessional/VEW approach be considered for selected topics. Villagers should select interested and trainable individuals. The village government should arrange for any incentives.

4.5 Gender Issues in Relation to Training

Background

Gender issues and changes in gender relations are important aspects being considered during MEMA projects implementation. This is intended to facilitate equal access by both women and men to various types of resources or benefits accruing from these (Danida 1998b). The extent to which women will benefit will depend on proper organisation of the management of funds, rules for use of village incomes and on the power structure in individual households and in the community at large (Danida 1998b). Increased women participation in formal decision making bodies will be facilitated by offering leadership training to women and by offering general gender training to both women and men in the villages (Danida 1998b).

Findings

Village Natural Resources Committees

During village visits, we were informed that members in VNRC ranged from 8 to 11 and women members ranged from 1 to 5, the lower numbers being due to drop out for various reasons. In our meetings, women participation ranged from 1 to 3. In the 13 villages visited, 114 VC/VNRC members attended our meetings and out of these 24 were women

(25%). Women were fairly active in the discussions, and in a number of villages they were the ones who proposed courses on fuel efficient stoves and agroforestry.

We found that where training courses/workshops did not involve all VC/VNRC members (i.e. in cases where VC Chair, VNRC Chair and VNRC Secretary etc were invited and were all men), there were no deliberate efforts to include women participants and this defeats the whole purpose of increasing women participation in various activities. We recommend that future invitations to courses/workshops should include women, if the group being invited consists of only men.

Technical Staff

Certain training courses and gender related studies can more effectively be handled by women technical staff or jointly with men. However, the number of women natural resources technical staff is very low (See Section 4.2 and Table 2). Even if IDC may employ more extension staff, the number is unlikely to satisfy the requirements of all natural resources sectors. Therefore, MEMA should actively involve technical staff of other Departments e.g. Community Development, Agriculture and Education (Primary School Teachers) in some of its activities. This would not only improve the gender ratio of technical staff but would further enhance the inter-disciplinary approach necessary in natural resource management. Increased women participation in extension activities can also be by encouraging women in villages to become paraprofessionals/VEW.

Recommendations

- ✍ Future invitations to courses/workshops should include women, if the group being invited consists of only men.
- ✍ MEMA should actively involve technical staff of other Departments e.g. Community Development, Agriculture and Education (Primary School Teachers) some of its activities.
- ✍ Increased women participation in extension activities can also be by encouraging women in villages to become paraprofessionals/VEW.

4.6 Organisational Set-up

Findings

In districts with DCFO like Iringa, these report to FBD. Our experience shows that this arrangement has been working well in Arusha, Kilimanjaro, Morogoro and Tanga and there have been good working relations with DFOs and DNROs. We are told that this was the situation in Iringa district before MEMA projects became operational. We feel that problems concerning the organisational set-up of the forest resources management in Iringa district are due to the weaknesses of MEMA organisation. MEMA is composed of two different projects, working together in the same district, with shared management

structure, with different areas of intervention (Catchment FR on one hand and miombo woodlands in a public area and a FR on the other) and reporting to two different national institutions, FBD and IDC, managed by a JPMU but without a co-ordinator (MEMA 2000c). This set-up has resulted in a number of problems which have been discussed in various fora (JPMU, JPSC, the Review Mission Report and in other relevant meetings). As the problems relate more to MEMA, the major problems and issues will be highlighted and relevant recommendations given.

The major problems and issues are as follows:

- ✍ Disagreements among JPMU members as to who should co-ordinate the two MEMA projects has resulted into the TA playing more of a leading role in managing instead of an advisory role. While the projects documents are silent on Co-ordination, lack of clear ToR for the Co-ordinator may have contributed to this state of affairs.
- ✍ The transfer of management of FR under UFM from FBD to IDC is considered as a major issue in improving harmony between the two projects. The FBD catchment staff are against this move on the grounds that IDC lacks the capacity for proper management of the catchment FRs. The Consultants were unable to find out the genesis of the transfer idea. The district has 8 catchment FR (about 153 105 ha). We feel that there should be a long term strategy by the district to manage all these FR rather than insisting on the transfer of only a small area under Donor support.
- ✍ Although the project is a NR one, other functional managers (i.e. Beekeeping, Game and Fisheries) are not members of JPMU. In lieu of this, there should have been regular Management Team (MT) meetings which would allow team work, clarity of roles and responsibilities as well as avoiding unnecessary personality clashes.
- ✍ Staff attachments to the MEMA have been done without ToR for the respective staff and this has resulted in complaints.

Recommendations

Based on the outlined problems and issues, we put forward the following recommendations:

- ✍ The DCFO should continue reporting to FBD.
- ✍ The MEMA organisational set-up be as shown in Figure 1. The DNRO being the overall overseer of all natural resources in the district (i.e. forestry, beekeeping, fisheries and game) should play an advisory role and not a co-ordinating role. Although we acknowledge that the MEMA projects have a significant forestry component however, tying the co-ordination role to DNRO assumes that future office bearers would be foresters.

- ✍ There should be a Project Co-ordinator appointed by the DFBD in consultation with the DED. The PC should have clear ToR. The major role of PC will be overall co-ordination, while the day to day management of the projects should be the responsibility of DFO and DCFO.
- ✍ The JPMU should be replaced by the Management Team to compose all District NR functional officers and the TA. Some functions of JPMU should be handled by MT while others should be the responsibility of the PC. The PC should chair MT meetings.
- ✍ The management of Udzungwa forests should continue being under FBD. The forests constitute critical watersheds and are internationally recognised as areas of high biodiversity and endemism. We consider these as being FR of national strategic importance and as per the Forest Policy (MNRT 1998 p. 16) should for the time being be under FBD.
- ✍ The DED should be a member of JPSC.
- ✍ All staff attached to MEMA projects should have clear ToR.

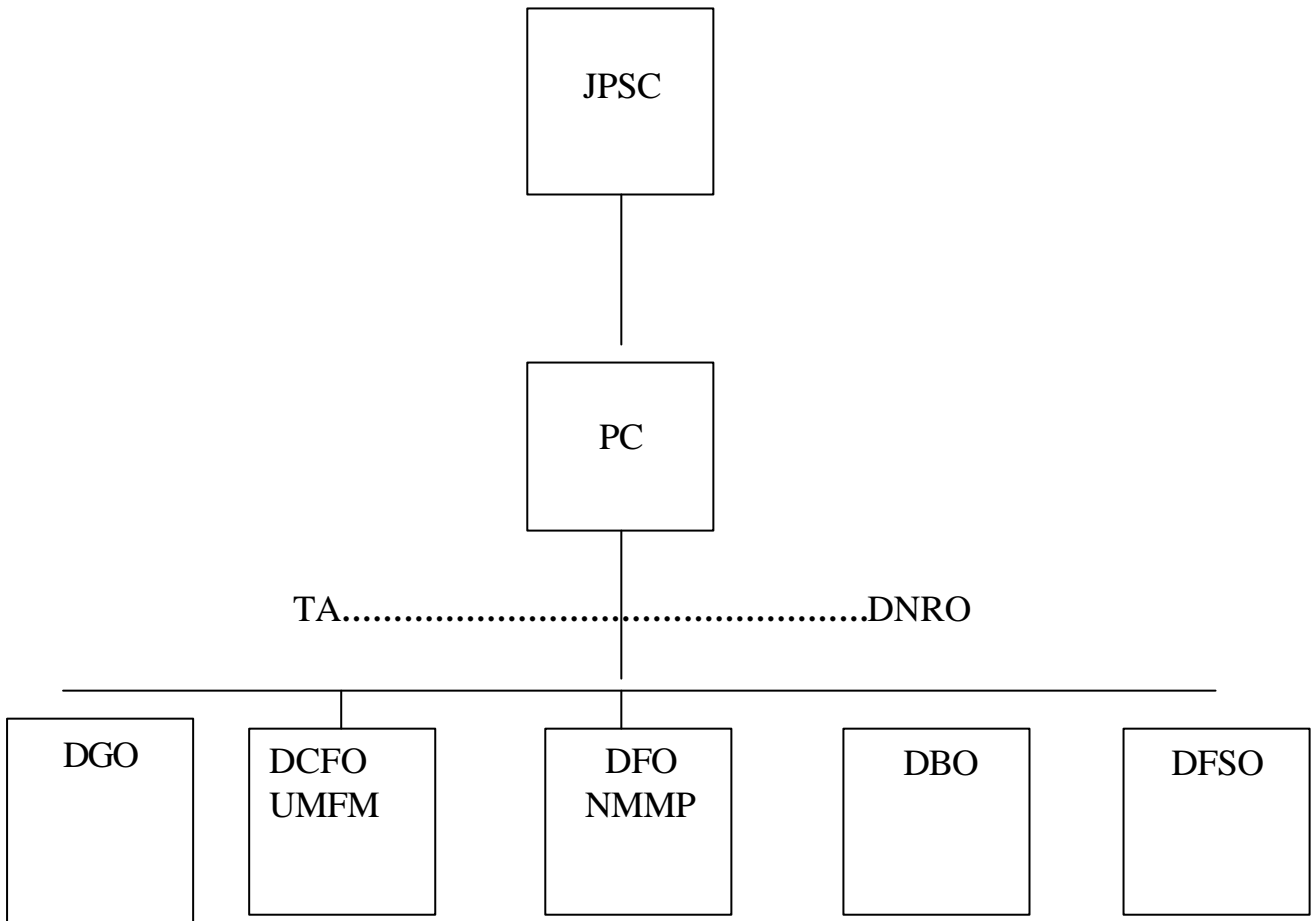


Figure 1: Proposed organisation structure for MEMA.

5. Conclusions

Based on discussions with primary as well as secondary stakeholders and our own knowledge and experience, we have recommended appropriate short and long term courses which upon implementation would enhance the technical/management staff and communities performance for effective implementation and realization of the project overall objective. Adherence to the proposed plan after approval by relevant authorities is important. Personal interests if allowed would jeopardise the objective of the training. We consider organised and timely training of the primary stakeholders (communities) crucial as this would build the necessary capacity in their new role as managers of the forest resources.

Bibliography

- Chamshama, S.A.O., Mtenga, L.A. and Sibuga, K.P. 1995. LAMP Babati. External Monitoring Report. Babati, Arusha. 36pp.
- Danida 1998a. Udzungwa Mountains Forest Management and Biodiversity Conservation. Environment and Disaster Relief Facility. Component Description. PEMconsult a/s. 37pp + 7 Annexes.
- Danida 1998b. Community Based Natural Woodlands Management. Project Document. Environment and Disaster Relief Fund. Danida, Dar es Salaam. 53pp + 11 Annexes.
- Danida 2000. Danida Fellowship Programme. Training Courses in Denmark. Danida Fellowship Centre. 19pp.
- ESAMI 2001. Short courses titles. ESAMI, Arusha, Tanzania.
- HIMA 1999a. Impact Study: A Consultancy Report. BACAS, SUA. 121pp.
- HIMA 1999b. Human Resource Development Masterplan 1999 – 2002. HIMA Regional Programme Management Unit. Iringa. 13pp.
- IDM 2001. Short course titles. IDM, Mzumbe, Morogoro, Tanzania.
- Kaoneka, A.R.S. 2000. A review of forest land management: retrospects and prospects. FBD, Dar es Salaam. 74pp.
- MEMA 2000a. Forest and vegetation survey. Danida/COWI. 29pp +11 Annexes.
- MEMA 2000b. Semi-annual progress report. September 1999 – May 2000. JPMU, Iringa. 24pp.
- MEMA 2000c. The first MEMA review: Danida, Dar es Salaam. 52pp + 10 Annexes.
- MEMA 2000d. Marketing survey and marketing strategies. Danida/COWI. 25pp + 7 Annexes.
- MEMA 2000e. Non-wood forest products baseline survey. Danida/COWI. 57pp + 9 Annexes.
- MEMA 2001. Semi-Annual Progress Report No. 2. May 2000 – December 2000. JPMU, Iringa. 22pp.
- MLHUD 1995. National Land Policy. Ministry of Lands, Housing and Urban Development. Dar es Salaam.
- MLNRT 1989. Tanzania Forestry Action Plan. 1990/91 – 2007/08. Ministry of Lands, Natural Resources and Tourism. Dar es Salaam. 117pp.
- MNRT 1998a. National Forest Policy. Ministry of Natural Resources and Tourism, Dar es Salaam. 59pp.
- MNRT 1998b. The Wildlife Policy of Tanzania. Ministry of Natural Resources and Tourism, Dar es Salaam. 35pp.
- MNRT 1998c. National Beekeeping Policy. Ministry of Natural Resources and Tourism, Dar es Salaam. 57pp.
- VP 1997. National Environmental Policy. Vice Presidents Office, Dar es Salaam. 41pp.
- Willy, L. 1994a. Helping villagers manage their own forests: guidelines for facilitation. Mimeo. 20pp.
- Willy, L. 1994b. The conservation of natural forests in villages: Finding the way forward. 45pp + 5 Annexes.

ANNEX 1

TERMS OF REFERENCE FOR TRAINING NEEDS ASSESSMENT AND HUMAN RESOURCE DEVELOPMENT PLAN FOR THE MEMA PROJECTS

Background

Udzungwa Mountains Forest Management and Biodiversity Conservation (UMFM)

The Udzungwa mountains forest resources form part of the Eastern Arc mountain range and are of economic, social and environmental importance. The forests constitute important sources of timber and non-timber forest products utilized by the local communities. These include building poles, fuel wood, household utensils, traditional medicines, honey, thatching materials and animal protein. The forest resources also provide areas of local cultural importance, constitute critical watersheds for Tanzania's hydro-electric power generation and are internationally recognized as areas of high biodiversity and endemism. Uncontrolled harvesting of forest products and ineffective forest management are the causes for the degradation of the biodiversity resources of the Udzungwa mountains. A key element of the new Forest Policy (1998) is the emphasis placed on Joint Forest Management (JFM) based on active community participation in the protection and management of the forest reserves (FR) currently managed by the Central and Local Governments.

Community Based Natural Woodlands Management Project (NWMP)

The aim of the Project is to introduce and promote community based natural resources management that provides long-term environmental benefits by safeguarding the future existence of selected natural woodlands in Iringa District as well as directs benefits to the rural communities in line with the new Forest Policy (1998), the Wildlife Policy (1998) and the proposed Land Bill and the Village Land Act (1998). If successful during the first phase the Project will be extended into a second phase during which the experiences gained will be applied to other woodlands in Iringa region. During phase one, models for management of natural woodlands and local structures will be developed and strengthened for initially one village owned forest area and one national forest reserve. The management plans will be developed and implemented jointly by the villagers, forestry staff at district level with support from Iringa District Council and financial assistance from Danida.

By enhancing the villager's authority over the revenues derived from forest products and wildlife, both women and men of different ethnic and socio-economic backgrounds are expected to benefit. The Iringa District Council – through its Department of Natural Resources – will play a facilitating and monitoring role and will, in turn, have its

revenue base improved through increased district cess from forest related products in the two pilot areas.

Major activities will include training of villagers regarding natural resources management plans; development of markets for products from the woodlands, gender awareness training and training on management of funds at village level. Training will be directed at different groups of villagers and in particular to natural resource management committees operating under the auspices of the village councils. Training will also be directed at the Natural Resources Department staff at the District level.

Management

The Joint Project Management Unit (JPMU) manages the two components of Udzungwa Mountains Forest Management and Biodiversity Conservation (UMFM) and the Natural Woodlands Management Project (NWMP). The two components are jointly named: MEMA; which is an abbreviation for the Kiswahili sentence: Matumizi Endelevu ya Misitu ya Asili (Sustainable use of natural forests).

MEMA's Development Objective

To develop community based sustainable management of natural forests and woodlands in Iringa District, and through this effort conserve valuable biological diversity and improve the welfare of rural communities.

MEMA's Immediate Objectives

First, to develop, test and implement widely replicable Joint Forest Management models for environmentally sustainable production, use, management and protection of natural forests and woodlands in the pilot areas.

Second, to support capacity development in natural forest, woodlands and biodiversity resource management in Iringa District.

Overall Objective (Consultancy)

The objective of this consultancy work is to institute a focused training package that can be implemented following the project expectations. Thus the consultants will analyse and assess skills and competence required for achieving project objectives.

Tasks

- ? To identify and document the present status of individual staff at different levels in relation to nature of jobs being done, education background and previous training, age, duration of service, specific area of interest and future expectations.
- ? To visit the various district staff in offices and in the villages working with the project and have dialogue with them to determine their training needs. Based on the dialogue

and interview identify existing gaps and type of courses needed, levels of training and the training approach (e.g. on jobs training, workshops, seminars, study tours etc).

- ? To assess the skills and competencies required to achieve the project objectives as well as skills to ensure sustainability, with key consideration of miombo woodlands management.
- ? To assess and recommend on gender issues that require attention in relation to training.
- ? To identify and suggest relevant Institutions capable of carrying out the training.
- ? To assess the organizational set up of the Forest Resources Management in Iringa District and propose organizational changes taking into account present GoT structure and future plans for organization change.

Output

- ? To develop human resource training programme geared towards the employees of Central Government and the District Council office with timeframe of 5 years.
- ? To submit to the Project a draft on a virus free diskette and hard copy a report of maximum 20 pages without annexes. In two weeks time to follow submit a final working document.

Inputs

Review Project documents, In house projects development plans and reports, HIMA training needs assessment/training plans, District staff profiles, GoT development plans, Local Government Reform plans etc.

Time frame

The consultancy will take total of 25 working days including report writing. The work will start in week three of January 2001.

Remuneration

The consultancy fee shall be paid to FORCONSULT according to DANIDA regulations while the subsistence allowance will be paid directly to the consultant.

ANNEX 2

ITINERARY FOR THE TRAINING NEEDS ASSESSMENT AND HUMAN RESOURCE DEVELOPMENT PLAN STUDY FOR THE MEMA PROJECTS

Sun 28.1.2001	-Travel to Iringa.
Mon 29.1.2001	-Courtesy Call: TA, DNRO, DFO, DCFO, DFSO, DBO, MBOMIPA, AA. -Collection and going through relevant documents.
Tue 30.01.2001	-Meeting with JPMU. -Meeting with HIMA Team Leader/Agriculture Adviser and Project Manager. -Meeting with DCMO. -Going through relevant documents.
Wed 31.01.2001	-Meeting with TREE CARE, IDERO and VORENA UTF Officials. -Going through relevant documents.
Thu 1. 02. 2001	- Meeting with some JPSC members. -Meeting with MBOMIPA Community Conservation Warden. -Going through relevant documents.
Fri 2.02.2001	-Meeting with some JPSC members. -Meeting with IWEDEF official. -Going through relevant documents.
Mon 5.02.2001	-Going through relevant documents.
Tue 6.02.2001	-Interviews with VC and VNRC in Migoli, Izazi and Mangawe Villages.
Wed 7.02.2001	-Attend GIS course for Technical Staff at Baptist Centre. -Going through relevant documents.
Thur 8.02.2001	-Going through relevant documents.
Fri 9.02.2001	-Administering questionnaires to Technical Staff.
Sat 10.02.2001	-Interviews with VC and VNRC in Chamndindi and Ikengeza Villages
Mon 12.02.2001	-Interviews with VC and VNRC in Kinywang'anga, Mfyome and Kitapilimwa Villages.
Tue 13.02.2001	-Interviews with VC and VNRC in Udekwa and Ifuwa Villages.
Wed 14.02.2001	-Interviews with VC and VNRC in Magome, Isele and Lulanzi Villages.
Thur 15 – Fri 16.02.2001	-Interviews and administering questionnaires to Management Staff.
Sat 17.02.2001	-Travel to Dar es Salaam.
Mon 18.02.2001	-Meeting with the Director, FBD.
Tue 19.02.2001	-Meeting with Officials of the Civil Service Department and Local Government Reform Commission.
Wed 20.02.2001	-Travel to Iringa.
Thur 22.02.2001	-Visit NTSP Zonal Office, Iringa.
Thur 22.02 to Thur 1. 03. 2001	-Data analysis and report write up.
Fri 2.03.2001	-Debriefing.
Sat 3.03.2001	-Departure.

ANNEX 3

LIST OF PERSONS/GROUPS OF PERSONS MET

Name of person/Groups of persons	Position held at the time of meeting
Hon. P. Mhongole	Mufindi DC/Ag. JPSC Chairman
S. Wium-Andersen	Counsellor, Development, Royal Danish Embassy
Prof. S. Iddi	Director, FBD
S. K. Fimbo	Director of Training, Civil Service Department
R. H. Mollel (Ms)	Director, Management Services, Civil Service Department
D. Masome	Local Government Reform Commission
H. Lerdorf	MEMA Technical Adviser
A. C. Mallango	DNRO
G. Anyimike	DCFO
J. Mchomvu	DFO
T.R. Kahatano	DBO
J.J. Issack	DFSO
I.J. Kimaro	DGO
J. F. Massao	Udzungwa Catchment Forest Officer
M. R. Hansen	MEMA Administrative Adviser
S. Gossage	Team Leader/Agriculture Adviser, HIMA
A. A. L. Mgimwa	Project Manager, HIMA
E. Tandali	DCMO and Ag. DED
M. Shellimoh	Zonal Manager, NTSP, Iringa
G. N. Mwasongwe	TREE CARE
M. S. Mhina	TREE CARE
I. H. Mambo	IDERO
J. Mdegella	VORENA UNITED TRUST FUND
E. Mwakibinga (Mrs)	VORENA UNITED TRUST FUND
J. M. Mutabilwa	MBOMIPA
W.T. Singunda	Manager, Sao-Hill Forest Project/Represented DFBD in JPSC
Hon. A. Mwihana	Councillor, Mseke, Vice Chair JPSC
Hon. Y.R. Mbeju	Councillor, Kiwere, Member JPSC
Hon. E.J. Mhando	Councillor, Udekwa, Member JPSC
Hon. Y. Mgohamwende	Councillor, Dabaga, Member, JPSC
Hon. A. Ndilwa	Councillor, Izazi, Member, JPSC
I.S. Masam	Regional Secretariat, Member JPSC
E. Mwachusi (Ms)	IWEDEF
H. A. Kiseo	WEO, Kihorogota & Ag. DS, Ismani Division
M. H. Nyakongo	Chairman, Izazi Village
J. Saidi	VEO, Izazi Village
VC/VNRC (12 members-Izazi-3 women)	
V. Chang'ah	Chairman, Migoli Village
I. Balama	Forester, Migoli Village
F. Chaula (Ms)	Community Development Staff, Migoli

C.Nzwaga VC/VNRC (10 members-Migoli-3 women)	Ag. VEO, Migoli
M. Kihwele	Chairman, Mangawe Village
A. Mfikwa VC/VNRC (9 members-Mangawe-1 woman)	VEO, Mangawe Village
F. Mng'ong'o	Chairman, Chamndindi Village
H. Mkakala	VEO, Chamndindi Village
E. Luhanzu VC/VNRC (9 members- Chamndindi-3 women)	Chairman, VNRC, Chamndindi Village
B. Neassi	Chairman, Ikengeza Village
D. Nziku VC/VNRC (7members-Ikengeza-3 women)	VEO, Ikengeza Village
A. Ngelime	Chairman, Kinywang'anga Village
C. Mfilinge	VEO, Kinywang'anga Village
V. Kakingo VNRC (6 members- Kinywang'anga-2 women)	Chairman, VNRC, Kinywang'anga Village
Y. Kiwanga	DS, Kalenga Division
F. E. Nikata	Divisional Forester, Kalenga Division
I. Makassy VNRC (3 members)	Chairman, VNRC, Mfyome Village
B. Nyemba	VEO, Kitapilimwa Village
F. Kase VC/VNRC (20 members- Kitapilimwa- 3 women)	Chairman, VNRC, Kitapilimwa Village
A. A. Mwikoki	DS, Mahenge Division
B. M. Mbatta	WEO, Udekwa
L. Nyamoga	VEO, Udekwa
A. Kitalima VC/VNRC(14 members- Udekwa-3 women)	Chairman, Udekwa Village
G. M. Suliwe	Chairman, Ifuwa Village
B. J. Chahe	VEO, Ifuwa Village
E. M. Mkumbo VC/VNRC (9 members- Ifuwe-1 woman)	Chairman, VNRC, Ifuwa Village
L. Mamba	DS, Kilolo Division
H. Kimwaga	WEO, Dabaga Ward
L. Duma	Chairman, Magome Village
D. Mpesa	VEO, Magome Village
J. Mponzi VC/VNRC (13 members – Magome –3 women)	Chairman, VNRC Magome Village
P. Mhongole	Chairman, Isele Village
G. Gwimilo	VEO, Isele Village
B. Nyaulingo VC/VNRC (12 members – Isele – 3 women)	Chairman, VNRC, Isele Village
A. Myovela (Ms)	WEO, Mtitu Ward
C. Kihanza	Chairman, Lulanzi Village
F. Mwilapua	VEO, Lulanzi Village
J. A. Mpogole VC/VNRC (10 members – Lulanzi – 4 women)	Chairman, VNRC, Lulanzi Village

ANNEX 4

GUIDE QUESTIONS TO MANAGEMENT AND TECHNICAL * PERSONNEL

1. What do you consider as the key skills/competencies required to achieve the project objectives?
2. What is your overall impression of the technical staff with regard to skills/competencies required?
3. Which courses (short/long term) would you recommend to impart the necessary skills/competencies?
4. Do you have any suggestions of appropriate institutions to carry out the training?
5. Are there problems with the current organisational structure in relation to management of natural resources in the district?
 - (a) Yes/No
 - (b) If yes, list the problems
6. What organisational structure would you recommend to ensure effective management of natural resources in the District?

* Technical staff were only asked questions 1 and 6.

Educational Background (formal & professional)

School/College	Years	Qualifications

Short courses, workshops, seminars, study tours etc attended

	Year	Duration
Courses		
Workshops		
Seminars		
Study tours		

Problems/Constraints in your work

Most preferred area of interest and future expectations

Do you consider your skills/competency adequate for the JFM/community based management of natural resources? (Yes/No)

If not what skills/competency would you need (short or long term training)?

	Place/ Institution	Duration
Courses		
Workshops		
Seminars		
Study Tours		

Is performance assessed regularly/ (Yes/No). If yes how often? (Yearly/Half yearly).

How is the performance appraisal system? (Open/Confidential)

Do you get feedback on your performance appraisal? (yes/No).

ANNEX 6

GUIDE QUESTIONS TO VILLAGE COUNCIL AND VILLAGE NATURAL RESOURCES COMMITTEE MEMBERS

1. As members of VNRC what are your main duties?
2. Which courses/seminars have already been offered and to who among the members?
3. Were you given adequate notice to attend the courses/seminars?
4. Were the courses/seminars relevant?
5. Were the courses/seminars well delivered?
6. Were there handouts?
7. Have those who attended courses/seminars shared the information with other VNRC members and villagers?
8. What other courses/seminars do you need to improve your competency in natural resources management?
9. What is the gender desegregation in VNRC?

ANNEX 7

**PRESENT STATUS OF MANAGEMENT AND TECHNICAL STAFF
PARTICIPATING IN MEMA PROJECTS ACTIVITIES**

S/NO	NAME/ SECTION	AGE	SEX	HIGHEST FORMAL EDUCATION	SHORT COURSES ATTENDED
	FORESTRY				
1.	O. Mtavilalo	30	F	Std VII	-Plantation forest management (3weeks)
2.	I. I. Balama	31	M	Std VII	-Tree nurseries (1 week) -Tree management (2 wwks) -Fire protection (2 weeks)
3.	V. T. Mwinuka	35	F	Std VII	-Plantation forest management (3 weeks)
4.	F. E. Nikata	49	M	Std VII	-Forest management (3 weeks) -Mixed farming (1 month)
5.	J. M. Kalinga	48	M	Std VII	-Forest management (3 months) -Tree seed (3 weeks)
6.	S. P. Fute	50	M	Std VII	-Forest management (3 months)
7.	C. Lunyungu	41	F	Std VII	-Nursery management (3 weeks)
8.	H. Magova	49	M	Std IV	
9.	G. Saria	38	F	Std VII	-Forest management (3 months) -Forest management and environmental conservation (2 weeks)
10.	J. Hassan	45	M	Std VII	-Forest nurseries and fire control (2 weeks)
11.	B. Matagi	48	M	Std VII	-Forest management (3 months) -Plantation forest management (1 week)
12.	T. Mwampashe	51	M	Std VII	-Forest Management (3 months)
13.	E. M. Lupala	53	M	Std VII	-Community Development (3 weeks) -Soil and water conservation (3 weeks) -Seed collection (2 weeks) -Forest management (2 weeks)
14.	D. T. Kisoma	50	M	Std VII	-Agroforestry (2 months) -Soil and water conservation (3 months) -Nursery management (1 month)
15.	D. Lyamuya	50	M	Certificate	-Timber grading and marketing (3 months) -Botanical survey and tree species identification (1 week)
16.	E. S. Lema	49	M	Certificate	-ToT for rural development (1.5 years) -WP computer (9 months) -Agroforestry (1 month)
17.	J. S. Mchome	41	M	Diploma	-Soil and water conservation (3 weeks) -ToT (3 weeks)
18.	S. C. T. Madaha	37	M	Diploma	-Watershed management (1 week)
19.	Y. M. Kiungo	34	M	Diploma	-Refresher course in forestry (3 months) -GIS course (1 month) -Soil and water conservation and agroforestry (2 weeks) -Team building (2 weeks)
20.	P. R. Njau	40	M	Diploma	-Report writing (1 week) -Forest management (2 weeks) -GIS course (1 month) -JFM (1 week)

					-ToT (2 weeks) Soil and water conservation (1 week)
21	H. A. Mallinga	37	M	Diploma	-General management and administration (1 month) -Extension policy and social economics (1 month) -Rural energy planning and environmental management (1 month) -Forest management (woodlot and natural forest (1 month) -Policy and Law (weeks) -Environmental impact assessment (EIA) (1 week) -Disaster mitigation (1 week) Audio visual (3 weeks)
22.	J. J. Mchomvu	48	M	Diploma	-Soil and water conservation (1 month) -ToT (3 weeks) -Agroforestry (3 weeks) -EIA (1 month)
23	A. M. Gideon	45	M	Diploma	-PRA (2 weeks) -Personnel and financial management (2 weeks) -Management of natural resources and sustainable agriculture (3 months) -GIS and remote sensing application to natural resources (8 weeks)
24.	A. S. M. Mallango	47	M	B.Sc	-PRA (3 weeks) -Gender and development (2 weeks) -EIA (2 months) -LFA (1 week)
25.	I. S. Masam	46	M	B.Sc, PGDip.	-Improved charcoal production methods (4 weeks) -Silviculture (6 months) -Project Planning and implementation (3 weeks) -Natural resources and conservation management (3 weeks)
26.	M. Lema	42	M	M.Sc	-Personnel mgt and administration (1 month) -ToT (1 month) -Remote sensing and satellite imagery interpretation (1 month)
27.	J. F. Massao	49	M	M.Sc	-Teaching methodology (8 weeks) -Data handling and computers (6 weeks) -Forest inventory (9 weeks) -ToT in forest extension (6 weeks)
	BEEKEEPING				
1.	P. Mligo	41	M	Elementary certificate (VII)	-Wide impact study (1 month) -Beekeeping practices (1 week) -Forestry management (1 week)
2.	M. Kalinga	43	M	Certificate	-Beekeeping practices (1 week)
3.	E. Sarakikya	37	F	Diploma	-Team building (2 weeks) -PRA (3 weeks) -Conflict mitigation (2 weeks) -Gender issues (1 week) -GIS (3 weeks) -EIA (1 week) -Logical framework approach (LFA) (1 week) - Participatory forest management (1 week)

4.	T. Kahatano	46	M	Diploma	-General management (5 weeks) -General management (3 weeks) -PRA (2 weeks) -Capacity building PRA (2 weeks)
FISHERIES					
1.	S. Ramadhani	44	M	Certificate	
2.	M. Mahanyu	43	M	Diploma	-Leadership skills (1 week)
3.	J. J. Issack	55	M	Diploma	-Fisheries management (1 month) -Training for rural development (2 months)
GAME					
1.	V. Kitule	38	M	Certificate (VII)	-Catchment conservation (2 weeks) -Participatory forest protection -Game inventory (1 week)
2.	K. Luvanga	48	M	Certificate (VII)	
3.	I. J. Kimaro	51	M	Certificate	
OTHERS					
1.	E. Felix	40	F	Std VII	-Revenue collection (2 weeks) -English (3 months) -Finance management (2 weeks)
2.	M. Mwangala	43	F	Certificate (VII)	-English course (1 week) - Revenue collection (1 week)
3.	F. Chaula	27	F	CD certificate	-CD refresher course (3 months) -ToT (3 months) -Illegal literacy (3 months) -Team building (1 week) - Gender issues (1 week)
4.	R. Mtawa	37	F	CD certificate	

ANNEX 8

TRAINING CONDUCTED BY MEMA PROJECTS TO MANAGEMENT AND TECHNICAL STAFF

Date	Courses, Workshops and Study Tours undertaken.	Type/No of Participants	Location of Training
November 1999 (4 weeks)	GIS and remote sensing	DCFO	UCLAS Consultants – DSM
February 2000 (2 days)	Ecosystem conservation and management workshop	Mr Massao – Udzungwa Catchment Forest Officer (UCFO) and Technical Adviser (TA)	DSM
April 2000 (3 days)	National Forest Policy, Land and Village Act awareness creation Workshop	16 District Natural Resources Staff, 4 Divisional Secretaries and 4 WEOs	Huruma Baptist Centre – Iringa
April 2000 (12 days)	Environmental Impact Assessment Course phase 1	DNRO (Mr A. Mallango)	MS-TCDC Arusha
May 2000 (2 days)	Biodiversity values in Udzungwa mountains	14 District Natural Resources Staff, 2 DS and 2 WEOs	Kitonga Comfort Motel – Iringa
June 2000 (1 day)	Conservation and management of Tanzania eastern arc forests workshop	8 District Natural Resources Staff and District Stakeholders in the Region	Lutheran Centre – Iringa
July 2000 (4 days)	JFM Workshop	16 District Natural Resources Staff, 4 DS, 3 WEOs and 2 CD Officers	Mazombe - Iringa
August 2000 (2 weeks)	Study tour on management of natural forests	12 participants at District level	Zimbabwe and Malawi
September 2000 (2 weeks)	Plantation and woodlot management course	15 Forest Extension staff from both projects	Sao Hill Project – Iringa
September 2000 (7days)	Integrated conservation and development workshop	Regional Administrative Secretary (Mr Swai)	Denmark
September 2000 (5 days)	Environmental Impact Assessment Course phase 2	DNRO (Mr A. Mallango)	MS-TCDC Arusha
October 2000 (3 days)	Use of project cameras and video course	3 Extension and 2 drivers	DNROs office – Iringa
October 2000 (2 days)	Coordination workshop for biodiversity conservation and forest resource management in the Udzungwa mountains	Mr Massao – Udzungwa Catchment Forest Officer (UCFO)	Udzungwa Mountains National Park Headquarters, Mang'ula, Tanzania
October 2000 (20 days)	Iringa Development of Youth, Disabled and Children Care (IDYDC) Workshop	Mr Massao – Udzungwa Catchment Forest Officer (UCFO)	Njombe Nazereth – Iringa
December, 2000 (4 weeks)	GIS Course	1 staff from DNROs office, 3 from SIP and 2 from the District Council	2 weeks in DSM and 2 weeks in Iringa
February 2001 (4 weeks)	GIS application with MapInfo Professional	5 from MEMA supported, 4 from SIP and 2 from HIMA	2weeks in DSM and 2 weeks in Iringa
February 2001	Midterm internal evaluation Workshop	All Natural Resources Extension Staff and 2 CDs	Mgoli – Iringa

ANNEX 9

**THE FIVE YEAR TRAINING PLAN FOR MANAGEMENT AND
TECHNICAL STAFF PARTICIPATING IN MEMA PROJECTS
ACTIVITIES**

S/ NO	NAME/ SECTION	SHORT/LONG COURSES REQUESTED	RECOMMENDED TRAINING*	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
	FORESTRY							
1.	O. Mtavilalo	-English language -JFM -Participatory For. Mgt. -Seed collection	Short courses in Table 3	V	V			
2.	I. I. Balama	-Cert. in For. -Natural forest mgt -Seed collection -English language	Short courses Cert. in For.	V	V		V	
3.	V. T. Mwinuka	-English language -JFM -Participatory For. Mgt -Seed collection	Short courses	V	V			
4.	F. E. Nikata	-Marketing -Forest mgt -Agroforestry -Inventory -Fire protection	Short courses	V	V			
5.	J. M. Kalinga		Short courses	V	V			
6.	S. P. Fute	-Mgt of indigenous forests -Seed collection and processing -Agroforestry -Nursery mgt	Short courses	V	V			
7.	C. Lunyungu	-English language -Nursery mgt	Short courses	V	V			
8.	H. Magova	-English language -Nursery mgt	Short courses	V	V			
9.	G. Saria	-JFM -Participatory For. Mgt	Short courses	V	V			
10.	J. Hassan	-JFM -Cert. in For.	Short courses Cert. in For.	V V	V V			
11.	B. Matagi	-Forest mgt	Short courses	V	V			
12.	T. Mwampashe	-JFM	Short courses	V	V			
13.	E. M. Lupala	-Natural forest mgt -Soil and water cons.	Short courses	V	V			
14.	D. T. Kisoma	-Agroforestry -Nursery mgt -Soil and water cons.	Short courses	V	V			

15.	D. Lyamuya	-Short courses general	Short courses	V	V			
16.	E. S. Lema	-Dip. in For. -JFM - Sustainable NR utilisation	Short courses Dip. in For	V	V		V	V
17.	J. S. Mchome	-M.Sc (extension) -M.Sc (Resource mgt & rural economy) -GIS -JFM -CBFM	Short courses B.Sc/M.Sc	V	V		V	V
18.	S. C. T. Madaha	-MNRSA	Short courses MNRSA	V	V		V	
19.	Y. M. Kiungo	-MNRSA -JFM -CBFM - B.Sc/M.Sc For	Short courses MNRSA Short courses MNRSA B.Sc/M.Sc For	V	V V		V	V
20.	P. R. Njau	-B.Sc/M.Sc For -MNRSA -JFM -CBFM -Natural forest survey and inventory -Botany	Short courses B.Sc/M.Sc	V	V		V	V
21	H. A. Mallinga	-M.Sc Agroforestry -M.Sc Participatory For. Mgt. & Extension -B.Sc Extension -GIS	Short courses B.Sc/M.Sc	V V	V V		V	
22.	J. J. Mchomvu	-Cert.Forest Mgt Plan -Cert. NR training & Education -PGDip. Environ. For. -Participatory techniques in for/NR -JFM -CBFM -Social forestry -Tropical for. Mgt.	Short courses PGDip.	V	V		V	
23	A. M. Gideon	-M.Sc Environ. For. -Biodiversity Cons. -Nature Cons. -JFM -CBFM	Short courses B.Sc/M.Sc	V	V		V	V
24.	A. S. M. Mallango	-M.Sc/PGDip. NR mgt. -Communication skills -Mgt planning -ecotourism	Short courses M.Sc/PGDip.	V	V		V	

25.	I. S. Masam	- M.Sc NR Mgt. - M.Sc Agroforestry - M.Sc Remote Sensing -Extension coordination -Environ mgt. -Project mgt. -Biodiversity mgt. -M&E -Biodiversity mgt -Biodiversity survey/research -GIS -Survey and Inventory -Silviculture of indigenous spp.	Short courses M.Sc	V	V		V	V
26.	M. Lema	- M.Sc Environ. Laws -Project planning, M&E	Short courses	V	V			
27.	J. F. Massao	- Biodiversity Cons. -JFM -M&E -Sustainable NR mgt. -GIS -Personnel & Financial Mgt -MNRSA	Short courses MNRSA	V	V V			
BEEKEEPING								
1.	P. Mligo	- Cert. Beekeeping	Short courses Cert. Beekeeping	V V	V V			
2.	M. Kalinga	- Dip. Beekeeping -Refresher course in beekeeping	Short courses Dip. in Beekeeping	V	V	V	V	
3.	E. Sarakikya	- Cert. GIS -Gender issues -Beekeeping issues -Environ. Cons. -ToT	Short courses PGDip.	V	V V			
4.	T. Kahatano	- Mgt. of NR -quality control and marketing of bee products -Computer skills -M&E -Biodiversity cons.	Short courses	V	V			
FISHERIES								
1.	S. Ramadhani	- Dip. fisheries -Fisheries practices -Fisheries statistics	Short courses Dip.in Fisheries	V V	V V			

2.	M. Mahanyu	- Cert. Fisheris mgt. - Cert. Fishing technology - M.Sc Fisheries -Fish handling & markteing	Short courses B.Sc/M.Sc	V	V	V	V	V
3.	J. J. Issack	- Cert. NR Laws -Computer skills	Short courses	V	V			
	GAME							
1.	V. Kitule	- Cert. Wildlife mgt -PRA -CBM	Short courses Cert. in wildlife	V V	V			
2.	K. Luvanga		Short courses	V	V			
3.	I. J. Kimaro	-Co mputer course -Wildlife mgt	Short courses	V	V			
	OTHERS							
1.	E. Felix	- Cert. For. -NR Mgt. -Botany	Short courses Cert. in For.	V	V	V	V	
2.	M. Mwangala	- Cert. Stores Mgt -English course	Short courses Cert. in Stores Mgt.	V	V	V		
3.	F. Chaula	- Dip. CD/gender -CBNR mgt -JFM/Participartory For. Mgt.	Short courses Dip. CD/Gender	V	V		V	V
4.	R. Mtawa	- Dip CD/gender -Women in devpt -Computer skills -JFM/Participartoy For. Mgt	Short courses Dip. CD/Gender	V	V		V	V

* Our emphasis is on group short courses, relevant individual short courses should also be considered for funding.

ANNEX 10

TRAINING CONDUCTED BY MEMA PROJECTS TO VILLAGERS AND VILLAGE FUNCTIONARIES

Date	Name of village(s)	Course undertaken	Type/No of Participants	Location of Training
March 2000	All villages under MEMA supported in Ismani, Kalenga, Kilolo and Mahenge Divisions	Tree seed collection calender	All VNRC	Within the villagers
May 2000 (5 days)	All MEMA supported Villages except Ifuwa and Udekwa	Leaders training course	Village and VNRCs chairpersons and VEOs	Nzihii – Iringa
May 2000 (24 days)	All MEMA supported villages in Ismani, Kalenga, Kilolo and Mahenge Divisions except Lusinga and Ifuwa	Sustainable beekeeping practices	All beekeepers in each village	Respective villages
June 2000 (5 days)	All villages under MEMA supported in Ismani, Kalenga, Kilolo and Mahenge Divisions	The roles of village leaders and VNRCs	Village chairpersons, VNRC chairperson and their secretaries (3 people each village)	Nzihii - Iringa
June 2000 (5 days)	All MEMA supported villages in Ismani, Kalenga, Kilolo and Mahenge Division	Honey harvesting, processing, parking and storage	32 participants (Beekeepers)	Nzihii – Iringa
June 2000 (10 days)	All MEMA supported villages in Ismani and Kalenga Divisions except Kinywang'anga	Nursery establishment	332 villagers originating from different villages	In each respective village
July 2000 (3 days)	All villages under MEMA supported in Ismani, Kalenga and Kilolo Divisions	Book keeping and accounts	Village clerks and VNRCs treasurer	Nzihii – Iringa
September 2000 (3 days)	Kitapilimwa, Mgongo, Mfyome, Kiwele and Itagutwa	Revenue collection	Village chairpersons, VNRCs chairperson and secretaries, timber and charcoal users	Iluka - Iringa
September 2000	Magome, Kidabaga, Ilamba, Lulanzi, Lusinga and Isele	Fire control and management	All villagers	Respective villages
October 2000 On going activity	Magome, Kidabaga, Ilamba, Lulanzi, Lusinga and Isele	Silvicultural tending operations to woodlots and plantations	Model plots in each sub village	On site training
November	All MEMA supported	Monitoring and reporting	VNRCs Village	In each respective

2000 on going activity	villages except Ifuwa and Udekwa	system	chairpersons and VEOs	village
November 2000 (7 days)	Magome, Kidabaga, Ilamba, Lulanzi, Lusinga and Isele	JFM Study Tour	Village and VNRCs Chairperson, Kilolo DS, 1 WEO, 2 Extension staff and 1 CDO	Babati, Arusha (SCAPA and CARMATEC) and Mtai FR in Tanga
November 2000 (5 days)	Kiwele, Mfyome, Kitapilimwa and Itagutwa	Tree planting and Management	43 villagers	Respective villages
January/February 2001 (8 days)	Kiwele, Mfyome, Kitapilimwa and Itagutwa	Identification of forest boundaries and mapping, identification of forest resources available, Home stead tree planting and Forest Protection	The village govt, resource users, village technical staff, traditional leaders and healers.	Respective village offices

ANNEX 11

RESPONSES OF VILLAGE COUNCIL AND VILLAGE NATURAL RESOURCES COMMITTEE MEMBERS ON PREFERRED COURSES

Name of Village	Preferred Courses etc
Migoli	<ul style="list-style-type: none"> ✍ Forest Management ✍ Forest Bye-laws ✍ Forest Protection ✍ Sustainable harvesting ✍ Fuel efficient cooking stoves ✍ Revenue collection ✍ Study tours
Izazi	<ul style="list-style-type: none"> ✍ Protection techniques ✍ Tree planting ✍ Study tours
Mangawe	<ul style="list-style-type: none"> ✍ Forest protection ✍ Forest tourism ✍ Fuel efficient cooking stoves ✍ Tree planting (indigenous trees) ✍ Forest bye-laws ✍ Administration ✍ Nursery techniques
Chamndindi	<ul style="list-style-type: none"> ✍ Natural forest management ✍ Study tours
Ikengeza	<ul style="list-style-type: none"> ✍ Forest protection ✍ Sustainable harvesting
Kinywang'anga	<ul style="list-style-type: none"> ✍ Protection tactics ✍ Agroforestry course and demo plot ✍ Fuel efficient cooking stoves ✍ Nursery techniques ✍ Study tours
Mfyome	<ul style="list-style-type: none"> ✍ Protection tactics ✍ Forest management ✍ Fuel efficient cooking stoves ✍ Agroforestry
Kitapilimwa	<ul style="list-style-type: none"> ✍ Protection tactics ✍ Tree planting ✍ Beekeeping
Udekwa	<ul style="list-style-type: none"> ✍ Fish culture ✍ Sustainable harvesting of wildlife resources ✍ Nursery techniques ✍ Fuel efficient cooking stoves

	<ul style="list-style-type: none"> ✍ Agroforestry ✍ Study tour
Ifuwa	<ul style="list-style-type: none"> ✍ Protection tactics ✍ Perma-culture ✍ Study tours
Magome	<ul style="list-style-type: none"> ✍ Indigenous tree seed production ✍ Resource assessment ✍ Soil conservation ✍ Woodlot management ✍ Marketing ✍ Cooperatives
Isele	<ul style="list-style-type: none"> ✍ Fish culture ✍ Indigenous tree seed collection and handling
Lulanzi	<ul style="list-style-type: none"> ✍ Agroforestry incl. Soil conservation ✍ Nursery techniques ✍ Catchment area management ✍ Study tours