WORKSHOP PROCEEDINGS

Lessons learned on resource mobilization and allocation for Nature Reserves under Joint Forest Management in Tanzania

2nd – 3rd June, 2016
Amani Nature Reserve, Tanga
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Executive summary

In 2002, the government of Tanzania introduced into law the Forest Act which provides the legal basis for communities/villages, group of individuals across the mainland Tanzania to own, manage forest under a wide range of conditions. The law provided two systems of Participatory Forest Management (PFM). These are described as Joint Forest Management (JFM) whereby the Tanzania Forest Service Agency (TFS) and a village government jointly manage a Government Forest Reserve and formally share revenues. Under JFM, the government and a village institution jointly manage a government forest reserve via a formal co-management agreement. JFM has been promoted by various projects with the approval of the Ministry of Natural Resources and Tourism since the late of 1990s. The other system of PFM is known as Community-Based Forest Management (CBFM) whereby a village owns and is the sole management authority over a forest on village land.

To support the law, TFCG through the project ‘Adding Value to the Arc: Forests and Livelihoods in the South Nguru Mountains’ (AVA), conducted a two-day workshop to promote learning, experience sharing and brainstorming on how to improve resource mobilisation and allocation for the management of nature reserves under joint forest management. The workshop was attended by 24 experts, including the conservators of ten Nature Reserves and 8 representatives of local communities surrounding Amani and Mkingu Nature Reserves.

It was a participatory workshop involving presentations, interactive plenary discussions and group work.

Both the plenary sessions and the group work presentations raised issues around the challenges facing joint forest management in nature reserves. These include challenges that many joint management agreements are still unsigned by the Government with no clear reasons provided. The issue of ambiguities surrounding benefits and cost sharing was also raised despite the publication, in 2013, of the JFM guidelines. This is a significant source of frustration for communities in participating in the JFM process.

It was also highlighted that the nature reserves have limited incomes with only one out of twelve nature reserves managing to share revenues with communities. The average cost of managing nature reserves under joint forest management ranges from TZS 0.5 billion to TZS 1.7 billion however it was noted that most of the nature reserves receive less budget than is needed. Funds received by the Tanzania Forest Service and by the Nature Reserves Conservators are minimal and are rarely allocated to forest management activities. Working collaboratively with local communities has therefore been critical in ensuring some level of forest management but significant changes are needed for the current system to operate more effectively and equitably.

Despite the challenges of meeting the costs of conserving the nature reserves under joint forest management, there are potential sources of revenue that could contribute to paying for the costs of reserve management. These include donor funds from EAMCEF, UNDP, UNEP and NGOs such as TFCG, MJUMITA, AWF and others. Tourism was also considered to offer opportunities for nature reserves to generate an income.

The workshop participants compiled lessons learned and recommendations to improve the financial sustainability and equitability of Joint Forest Management as well as generating some recommendations related to the guidelines for preparation of management plans for natural forests in Tanzania.

Lessons learned to improve the financial sustainability and equitability of Joint Forest Management

• Communities receive negligible revenues from Joint Forest Management of Nature Reserves under the current system because it ties community payments to reserve revenues. As most reserves generate very little income, and communities only receive a fraction of those low incomes, community payments will remain negligible and disproportionate to the value of the
management work that is expected of them. This undermines the JFM approach as communities, like Government staff, require payment for reserve management activities.

- Community involvement in the JFM planning process is crucial for sustainability.
- TFS do not receive enough funding to pay for the management of the Nature Reserves. As such, they are not in a position to make payments to communities.
- Equitable cost and benefit sharing remains a problem for JFM in nature reserves because of low revenues and because payments are linked to reserve revenues rather than to the costs incurred by the communities.
- Financial planning for nature reserves is a long process that needs different stakeholders, including communities, to be involved.
- Whilst communities are aware of and value the benefits of the natural forests, the additional benefits to communities of entering into joint forest management are less clear.

Recommendations to improve the financial sustainability and equitability of Joint Forest Management

- TFS should allocate funds to pay VNRCs to implement their planned activities.
- Planning for financing Nature Reserves needs to involve more stakeholders.
- More funding is needed from the Central Government to pay for the management of nature reserves, particularly given the value of the ecosystem services that they generate.
- More effort is needed to involve the private sector in Nature Reserve tourism.
- Donors should continue providing financial support nature reserves, particularly given the reserves’ globally important biodiversity values.
- Planning should be done to meet the objectives of the nature reserve.
- Fund raising skills and proposal-writing skills should be strengthened for staff involved in nature reserve management in order to secure funds for conservation and livelihood projects for communities adjacent to the reserves.
- Conservators should be trained on how to use the JFM guidelines.
- JFM guidelines needs improvement particularly in relation to equitable benefit sharing
- For JFM to be successful there is a need to define clearly the rights, returns and responsibilities for each stakeholder in JFM.

Recommendations related to the guidelines for preparation of management plans for natural forests in Tanzania

- Better to have separate management planning guidelines for nature reserves. There is a difference between nature reserves and other natural forests.
- Nature Reserve management planning guidelines should include details on how to develop an eco-tourism management plan and eco-tourism business plan.
- More detailed guidelines are needed on managing fire and invasive alien species in Nature Reserves.
- Management plans for NRs should also help to guide other stakeholders including local government, private sector, NGOs etc.
- More details needed in the guidelines on how to engage other stakeholders in management planning and implementation.
- Nature reserve Management planning process needs additional technical support.
- Guidelines should include a section on resource mobilisation.
- Need funding bodies to assist more in funding implementation of the activities that are in the management plans i.e. management plans should include linkages with other funding bodies.
- Guidelines for nature reserve management plans should include specific information about signing agreements with private sector / concession management etc. This should build on experience form e.g. TANAPA.
### List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANR</td>
<td>Amani Nature Reserve</td>
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<tr>
<td>AVA</td>
<td>Adding Values to the Arc</td>
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<td>AWF</td>
<td>Africa Wildlife Foundation</td>
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<tr>
<td>CBFM</td>
<td>Community-Based Forest Management</td>
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<tr>
<td>EAMs</td>
<td>Eastern Arc Mountains</td>
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<tr>
<td>EAMCEF</td>
<td>Eastern Arc Mountains Conservation Endowment Fund</td>
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<tr>
<td>ED</td>
<td>Executive Director</td>
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<tr>
<td>EFS</td>
<td>Endowment Fund Secretariat</td>
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<td>GEF</td>
<td>Global Environmental Facility</td>
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<tr>
<td>IGA</td>
<td>Income Generative Activities</td>
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<td>JFM</td>
<td>Joint Forest Management</td>
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<tr>
<td>KNR</td>
<td>Kilombero Nature Reserves</td>
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<tr>
<td>MJUMITA</td>
<td><em>Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania</em></td>
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<tr>
<td>MNRT</td>
<td>Ministry of Natural Resources and Tourism</td>
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<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NNR</td>
<td>Nilo Nature Reserve</td>
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<tr>
<td>NIMR</td>
<td>National Institute of Medical Research</td>
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<tr>
<td>NRs</td>
<td>Nature Reserves</td>
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<td>PAs</td>
<td>Protected Areas</td>
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<td>PFM</td>
<td>Participatory Forest Management</td>
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<td>TaFF</td>
<td>Tanzania Forest Fund</td>
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<tr>
<td>TAFORI</td>
<td>Tanzania Forest Research Institute</td>
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<tr>
<td>TANAPA</td>
<td>Tanzania National Park</td>
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<td>TFCG</td>
<td>Tanzania Forest Conservation Group</td>
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<td>TFCMP</td>
<td>Tanzania Forest Conservation and Management Project</td>
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<td>TFS</td>
<td>Tanzania Forest Service</td>
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<tr>
<td>UNDP</td>
<td>United Nation Development Program</td>
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<td>UNEP</td>
<td>United Nation Environment Program</td>
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<tr>
<td>VEC</td>
<td>Village Environment Committee</td>
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<td>VCDC</td>
<td>Village Conservation Development Committee</td>
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<tr>
<td>VNRC</td>
<td>Village Natural Resources Committee</td>
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<tr>
<td>VNRMP</td>
<td>Village Natural Resource Management Plan</td>
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1. **Workshop Rationale**

The workshop was intended to promote learning, experience sharing and brainstorming on how to improve resource mobilisation and allocation, for the management of nature reserves under joint forest management. Over the last 20 years, the Ministry of Natural Resources and Tourism has up-graded the legal status of some Central Government Forest Reserve to become ‘Nature Forest Reserves’. These forests have exceptional biodiversity values. Most are located in the Eastern Arc Mountains. Over the last few years TFS have allocated more resources to the management of these reserves and in some cases the reserves have established joint forest management with surrounding communities. TFS have recently published draft guidelines for the preparation of management plans for natural forests in Tanzania including a section on finances and budgets. The workshop aimed to contribute lessons learned and recommendations to enrich these guidelines. TFS have also published benefit-sharing guidelines for forests under joint forest management; and are currently developing and reviewing management plans for several nature reserves.

Within the natural resources sector, TANAPA also have valuable experiences to share on resource mobilization and allocation in the context of National Parks. Furthermore, other stakeholders are interested to support the management of Nature Reserves including funding bodies such as the Tanzania Forest Fund and the Eastern Arc Mountains Conservation Endowment Fund as well as NGOs such as the Tanzania Forest Conservation Group. There are also opportunities for strengthening linkages with private sector particularly in relation to tourism.

Alongside these opportunities, a number of challenges exist in relation to Nature Reserve management including:
- Ongoing deforestation and forest degradation in many nature reserves, in part linked to challenges associated with mobilisation and allocation of operational funds for management activities including joint forest management activities;
- Mobilisation and allocation of adequate funds for the development of the reserves’ physical and human resources.
- An assumption underlying JFM implementation in some contexts, that communities will contribute their labour freely;
- How to strengthen linkages with private sector particularly in the context of eco-tourism.
- How to strengthen linkages with NGO partners interested to support improved reserve management.
- Allocation of funds to community partners engaging in joint forest management in ways that sustain community engagement in JFM and promote more effective JFM.

The workshop brought together stakeholders to deliberate on these issues including representatives from TFS, TANAPA, trust / endowment funds, private sector, NGOs and communities (Annex 12. 3 list of participants).
2. Session 1 - Introduction

Mr. Isack Bob Matunda, Amani Nature Reserve Conservator, provided opening remarks. He emphasized that the stakeholders who participated in the workshop should contribute their views, suggestions and recommendations on how to improve joint forest management in Tanzania Forest nature reserves.

Mr. Charles Meshack, Executive Director, Tanzania Forest Conservation Group (TFCG) outlined the objectives of the workshop.

2.1 Objectives and Expectations

The overall objective of the workshop was to identify lessons learned in relation to resource mobilization and allocation for Nature Reserves under joint forest management.

In order to accomplish this objective, the facilitator presented four expected workshop outcomes:

i. Increased understanding between stakeholders on the current procedures, options and challenges associated with resource allocation and mobilization for nature reserves under joint forest management.

ii. Lessons learned and recommendations to contribute to the ‘TFS draft Guidelines for preparation of management plans for natural forests in Tanzania’

iii. Lessons learned and recommendations to improve the financial sustainability and equitability of Joint Forest Management.

iv. Lessons learned and recommendations to improve stakeholder collaboration in resource mobilization and planning for Nature Reserves.

After the facilitator presented the expected workshop outcomes, the participants were requested to write down their expectations of the workshop. The results showed that most of the participants’ expectations reflected the expected workshop outcomes but were presented in different ways. Participant expectations were as follows:

1. To identify ways of increasing stakeholder cooperation and coordination to raise enough funds to manage nature reserves effectively.

2. To understand community perspectives on how to support their roles and responsibilities in JFM financially.

3. To identify common challenges facing JFM implementation in NR.

4. Identify new sources of income to NRs to support management/increase financial sources

5. To learn on workable incentives to attract JFM in NRs.

6. To come up with concrete solutions on issues related JFM.

7. What is the financial contribution of TFCG for the coming 5 years?

8. How TFCG is resolving management challenges of Tanzania NRs.

9. How JFM can be made effective in improving management of NRs

10. Getting experience from other nature reserves on how JFM is practiced.

11. Find solution for benefit sharing.

12. Way forward for approval of management plan.

13. To find more IGAs which contribute directly to incomes at the household level?

14. Come up with action plan and options to sustain funding and management of nature reserves in Tanzania.

15. Improved guidelines for preparation of Management plans for NRs.

16. To get clarity on how to coordinate partners in NRs.

17. Business-oriented initiatives option for financial sustainability.

18. Understand if JFM is still operating in NRs where previously established.

19. Understand JFM income levels in NRs.

20. Understand good governance in JFM.

21. To understand on how community will be paid when they participate in JFM activities.

22. To understand on how the NRs can get money for IGAs.

23. Understanding different ways of adding values to the forests and livelihood.

24. Understanding on communities benefits from JFM.

25. To get experience from TFCG and TANAPA on how other areas can be helped.
4. Workshop methodology

Experts representing various disciplines made four presentations on:
1. Financial planning for protected areas: a review of best practice and current guidelines;
2. Linkages between JFM effectiveness and protected area financial planning,
3. Financial planning in National Park management including fund allocation for community outreach and linkages with private sector and NGOs: experiences and lessons learned.
4. Financial planning in Amani Nature Reserve including funding for joint forest management and linkages with private sector, NGOs and EAMCEF: experiences and lessons learned and how EAMCEF is supporting the management of Nature Forest Reserves in Tanzania.

Working groups

The workshop also used group work. The community representatives formed their own group whilst other participants formed three groups based on the size of their respective nature reserves. For this, the nature reserves were classified into three groups based on the area of their reserve: large, middle and small.

Groups

Each Group was assigned a topic for discussion and someone with close knowledge of the particular area to start off the discussion. The groups debated the questions for about an hour and then drew together the main points for report back to the plenary session after the tea break. A note taker was provided for each group to help in this process and facilitator was passing for helping the groups where they need clarification.

The topics for discussion were as follows:
Phase1: Areas of discussion for group 1, 2 & 3
1. Financial Planning for Nature Reserves
   - Mapping the budgeting/funds allocation/resource mobilization process at present.
   - Strengths and weakness in the current process
2. How much does it cost to manage a Nature Reserve under Joint Forest management?

Phase2: Areas of discussion for group 1, 2 & 3
1. What are the actual and potential sources of revenues for the Forest Nature Reserves?
2. How can we effectively market our Nature reserves so as to increase its revenues?

Areas of discussion for group 4
1. How much cost to manage forest government under joint forest management?
2. Do you get the share for managing the forest and if you get how much and after how long?
3. What are the main sources of income are you getting from NR?
4. Does the income are getting related to the cost?
5. Presentations

5.1 Financial planning for protected areas: review of best practices and Current Guidelines

Kideghesho, JR. Sokoine University of Agriculture, Morogoro, Tanzania.

See Annex 3 for the full text of the presentation.

Professor Kideghesho gave an overview of financial planning for protected areas. He started by giving the meaning of the protected area, he said that there are many definitions define protected area but for the sake of this workshop, he used definition developed by CBD, 1992 which states that a protected area (PAs) is “a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives”. He highlighted also that management challenges of these protected areas are increasing. These challenges include conflict with human, human population growth, poverty, illegal grazing, Lumbering and climate change.

Despite the management challenges of PAs, they are important for the national economy growth. PA have many potential sources of income for example 80% of the income from the PAs based on tourism sector. PAs can compete effectively with alternative land uses which are ecologically destructive.

For PAs to generate income, they need investment. In the course of the last decade many efforts have been made to increase funding for PAs. A range of innovative financing mechanisms have been developed and implemented. However, the extent to which these mechanisms have improved the financial sustainability of PAs or have made an appreciable contribution to biodiversity conservation remains less clear. For instance, the activities of Tanzania’s 16 national parks are financed by 4 parks only: Serengeti, Kilimanjaro, Lake Manyara and Tarangire.

For that reason, financial planning is needed to increase funds for PAs so has to have sustainable PAs and improved local community’s livelihoods. Professor identified a good approach of financial planning for PAs in Tanzania. The financial planning needs prioritize and identify new sources of funds. He said there are many needs in the PAs but if you fail to prioritize your activities will not be able to come up with implementable budget. Then after prioritization, the second to have to identifies various potential sources of fund.

Hence, in order plan we need to understand the following concepts

- Objective of finance planning which is to ensure sufficient and timely availability of funds for PAs and conservation objective of PA realised.
- What if financial planning is lacking will have Inadequate and untimely funding for PAs, Failure of the PAs to meet their conservation objectives and Paper Park Syndrome. A ‘Paper park’ is a legally established PAs where current protection activities are insufficient to halt degradation.” Or PAs exist on maps and in legislation but offer very minimal protection of natural resources and biodiversity.
5.2 Linkages between JFM effectiveness and protected area financial planning

Charles Meshack, Tanzania Forest Conservation Group

See Annex 4 for the full text of the presentation.

Participatory forest management is one of the approaches used to address deforestation in Tanzania. In this presentation he looks at some of the challenges of participatory forest management on its own and in the context of Joint Forest Management in the Nature Reserves. From there he outlined some of the lessons learned in relation to JFM that can contribute to designing more effective JFM. The challenges and lessons learned are drawn from the experiences of the Tanzania Forest Conservation Group through its work with more than 150 communities involved in participatory forest management in Tanzania over the last 15 years including its most recent work in implementing JFM in the Nature Reserves in the Eastern Arc Mountain Forest of Tanzania. The challenges that he described also reflected the priority issues that have been raised by communities through the Community Forest Conservation Network of Tanzania known by its Swahili acronym MJUMITA, a network of more than 450 communities involved in participatory forest management.

5.2.1 Participatory forest management in Tanzania

Tanzania practises two approaches to participatory forest management: joint forest management and community based forest management. Joint forest management is where communities and government jointly develop management plans and enter into joint management agreements for the management of Government forest reserves. JFM has been established with more than 700 villages around both Central and Local Government Forest Reserves.

The most widespread form of PFM is Community Based Forest Management where communities manage forest on village land. Approximately 10% of forest on village land is now in village forest reserves and about 10% of Tanzania’s 10,000 villages are involved in community based forest management. Given that most deforestation in Tanzania occurs on village land, CBFM is a potentially powerful tool for reducing emissions from deforestation and forest degradation.

5.2.2 JFM forests are in better condition than non-JFM forests

Various research projects have demonstrated that relative to government reserves managed solely by the Government and unprotected forest on village land, forests under joint forest management are in better condition. As such, JFM appears to be a good strategy for reducing deforestation and forest degradation. Whilst JFM appears to be more effective it is also clear that for those forests that are not under JFM, there is effectively no in-situ management. Many forest reserves are not visited by government officials from one year to the next. Law enforcement is primarily achieved through roadside checks of forest products being transported. Funds received by the Tanzania Forest Service and by Nature Reserves Conservators are minimal and are rarely allocated to forest management activities. Working collaboratively with local communities has therefore been critical in ensuring some level of forest management but significant changes are needed for the current system to operate more effectively and equitably.

5.2.3 Challenges of JFM in Tanzania

Whilst research shows that JFM improves forest condition, various issues have undermined its effectiveness. The issues differ for joint forest management and community-based forest management.

In the case of joint forest management, TFCG conducted a survey amongst 15 randomly selected villages from the villages listed by the Forestry and Beekeeping Division as having joint forest management in place. Of those 15 villages only 1 had received a signed agreement. None of the 15 villages had received any revenue. This is a significant source of frustration for communities.
With 78% of the forest area officially under joint forest management being in reserves managed primarily for their water catchment and biodiversity values, even if benefit sharing were operating properly, communities would be entitled to negligible amounts as the revenues for protective reserves are very low. As such there are significant challenges associated with communities receiving equitable benefits from joint forest management.

Linked to this, the concept of joint management assumes some investment in in-situ management activities from the government side. In the absence of reserve management, the reality is that communities are left to shoulder the entire burden of management. That communities have been willing to do this has contributed to the success of joint forest management in terms of improving forest condition. However, there is some evidence that the incentive for communities to participate is because an elite within a community is able to capture revenues from confiscated goods thus motivating them to carry out patrols and restrict access to the reserve. This points to the need for a re-think of the way that communities are rewarded.

MJUMITA members have requested that community members be paid for their work in carrying out patrols; be supplied with equipment to carry out forest management work; and be provided with a share of any revenues. So far, such requests have not been heeded.

Finally, there is the issue of accountability for forest condition. Whilst the Government is vested with responsibility for managing 12.5 million ha of forest, there is no mechanism in place whereby their performance is monitored or evaluated in terms of what is happening to those forests. This lack of accountability trickles down to the lowest level such that there is little incentive for poorly-paid forest officers on the ground to stop illegal activities in the forests and the focus is instead on revenue collection and capturing illegal produce whilst in transit.

However, this opens up numerous governance loopholes not least being the difficulty of identifying the source of timber. So far, TFS being a semi-autonomous agency given forest management responsibilities do not appear to be addressing this challenge.

In addition to a lack of awareness on the JFM package, there is still a poor understanding of whether and when a community has any incentive to take on responsibilities for JFM. In most cases, local communities are not sure of what kind of additional benefits they are going to obtain from the jointly managed forest, beyond what they used to enjoy. For JFM to be successful there is a need to define clearly the rights, returns and responsibilities for each stakeholder in JFM.

**Lessons learned**

Despite widespread criticisms of village natural resource management committees, our experience indicates that one of the most important outcomes of JFM is improved local level governance. VNRCs have been established in many villages across Tanzania, but in many cases, they are “dormant” and provide few clear benefits. Where JFM is implemented, on average, these committees are empowered and motivated to take on responsibilities, and their work appears to promote elements of good governance in the local community.

The study found no impact from JFM on household livelihoods. Furthermore, only 15% of JFM sites in the study were generating any forest-based revenue and only 20% had a functional and legally recognised benefit-sharing mechanism in place (regardless of whether it was being used). Although MNRT recently issued JFM guidelines that specify how benefits will be shared under JFM, much work will be needed to update and formalise agreements. In Catchment Forests, where harvesting is not permitted, there are even greater challenges to generating forest-based benefits, and fewer incentives for villagers to engage in forest management.

Although the study indicates that forest protection is no worse in JFM forest reserves, few of the JFM sites in the study were implemented according to the 2002 Forest Act. For example, 8% of the JFM sites in the study had a signed Joint Management Agreement (JMA), while 45% had their bylaws approved by local government but no signed JMA. Of the 47% of sites still awaiting this first step of bylaw approval by local government, the average time in pending status at the time of our study exceeded 3 years. Thus, many villagers are effectively implementing JFM through an informal set of
management arrangements. Despite these obstacles, the study has shown positive impacts on governance even when agreements and bylaws are not ratified by government. It is possible that impacts could be further magnified if government takes steps to speed the approval and legalisation process within JFM.

It is also clear that there are significant challenges with communities accessing finance from the government for participatory forest management and that the issues around benefit sharing under joint forest management in Tanzania, highlight the risks of channelling REDD revenues through existing Government funding mechanisms.

**Recommendations**

- JFM should continue to be a strategy to achieve the forest condition, livelihoods and governance BUT needs to be accompanied by strategies that directly address the relevant deforestation drivers.
- TFS should take steps to speed the approval and legalisation process within JFM.
- Adequate, reliable and accessible finance needs to be made available to communities
- The Tanzania Forest Service and Tanzania Forest Fund need to adopt a different approach to forest management that rewards improvements in forest condition.

5.2.4 Discussions, questions, clarification and comments on Linkages between JFM effectiveness and protected area financial planning

The first question raised was about the challenge of why so many joint management agreements are not signed. One of the participants asked why these management agreements are not signed while the process of establishing the JFM is jointly with the owner of the forest which is TFS. Clarity was requested as to which side does not sign? Or introduction of JFM concept in Tanzania, the FBD by that time they didn’t understand what the community will get if they did understand where the fears come from?

The question was answered as follow; the process of establishment of JFM is participatory approach, where the TFS/FBD staff with some staff from the district raised awareness to the communities on the important of JFM and the other process started. Entire process facilitated by TFS and sometimes supported by NGO or other stakeholders. Those agreements have been signed at the village level but not at TFS level. Hence one side of agreement have been signed but other side not yet. As you know the Joint Management Agreement (JMA) is a document that refers to, and formalizes the management arrangement for the Village Forest Management Area or for the entire forest. It is signed by the forest owner (usually the central or local government) and the villages surrounding the forest engaging in management. It can either be signed on a village by village basis (many agreements) covering the management of a particular VFMA, or for all villages in a single agreement. Once the JMA is signed, active management and benefit sharing can begin.

Other reasons provided by participants are that most JFM is Donor-driven and is not initiated by TFS themselves; and that it is the TFS director who has delayed the process of signing.

The 2013 guidelines grants responsibility to the conservators and districts to sign the agreements so we hope more agreement will be signed after this workshop.

**Another question**: if the TFS were part of the process of establishing JFM and they know that they will not sign the JMA why did they let the process carry on? This is a waste of resources. Most of these resources came from donors. If Donors see that the targets were not accomplished as requested, it will bring some negative impacts to our country and other sectors which need donor funds. I suggest that if conservators know that they will not sign the agreements then they should not initiate the process.

**Suggestion**: The delay of signing the JMA is due to lack of enough income to the protected areas. As we have seen in the presentation, only 3 or not 4 PAs manage to use their own sources for operations and supporting the others. Conservators need to think more on how they can get more funds for investments so to enable to generate more incomes their nature reserves. They should be creative on how they can work with stakeholders like UNDP, TFCG, WWF, AWF and others.
Also, the JFM implementation structure needs amendment. We know that the guidelines have been released and indicate that communities will get a percentage of incomes from nature reserves. But our nature reserves income is very low and others have nothing to share with communities. So, if the communities will participate in the management activities and still get nothing do you think this will be sustainable or the equitable sharing will be paper JFM syndrome? That is why MJUMITA and others have suggested that the Village Natural Resources committees should be paid directly whenever they participate in the JFM activities.

**Comment:** One of the conservators commented that, the issue of sharing responsibilities and benefit in JFM is complicated and not well known with the most of conservators. They said that they received the guidelines last year and have not yet been shown how they will use it. For instance, the guidelines stipulate that 32% of fines should be retained in the village from offences committed in the VFMA, the remaining part to go to the owner of the forest. The question is, when do the community get that percentage because the forest officer has to write an ERV document for any income from forest products and has to submit the amount of money as indicated on the ERV form. Probably, but they were not sure, the village will request their percentage later. If the village request their amount later, how do they participate to the JFM activities because they need money for some allowances for communities who participate in the patrol? Therefore, we suggest TFS to conduct a technical workshop to describe how some benefits will be shared in order to remove those ambiguities.

**Question:** Did conservators participate on the development of JFM guideline. If you didn't participate why didn’t you request the explanation on how will you implement the guidelines?

**Answer:** Some conservators participated in the process but the others they didn't get a chance but even the one who participated have already shifted or retired. The issue of asking on how to use it already asked the TFS zone manager so we are waiting their responses.
5.3 EAMCEF support for conservation and management of protected areas in the eastern arc mountains of Tanzania

Raymond R. Killenga, PROGRAMME OFFICER, Eastern Arc Mountains Conservation Endowment Fund (EAMCEF)

See Annex 5 for the full text of the presentation.

5.3.1 Background of the Eastern Arc Mountains (EAMs)

The Eastern Arc Mountains (EAMs) are a long chain of ancient mountains stretching from Southern Tanzania to South Eastern Kenya. It comprises of thirteen mountain blocks that form a broad arc that is 600 kilometres in length and covers an area of 23,000 square kilometres. The mountains include the North and South Pare, West and East Usambara, Nguu, Nguru, Ukaguru, Uluguru, Malundwe, Rubeo, Udzungwa and Mahenge in Tanzania as well as Kenya’s Taita Hills (see map 1 and 2).

The Eastern Arc is recognized globally as part of one of the 34 biodiversity hotspots characterized by high concentrations of endemic species now under serious threat. The biodiversity of the Eastern Arc Mountains is of great value locally and globally for mitigating the impacts of climate change and rural poverty.

The Eastern Arc Mountain forests cover several major catchment areas which collectively provide water for many regions such as Morogoro, Dodoma, Iringa, Coast, Tanga and Dar es Salaam and most of the major industries in the country. In total, these mountain catchments supply water to over 25% of the Tanzania Mainland population. About 60% of Tanzania's hydroelectricity is generated by Kidatu, Kihansi, Nyumba ya Mungu, Hale and Mtera hydropower stations.

These hydropower stations use water whose sources are the Eastern Arc Mountain forests. Thus the bulk of hydroelectricity energy production in Tanzania is heavily dependent on maintaining the integrity of these forests. Due to high rainfall and fertile soils the Eastern Arc Mountains are famous for large scale agriculture, e.g. sugarcane (Kilombero and Mtibwa Sugar Estates), tea in Amani, rice in Kilombero and Mtibwa as well as tree plantations.

The Eastern Arc Mountains harbour a number of wildlife which is an important tourist attraction e.g. Udzungwa Mountains National Park and Amani Nature Reserve.

Despite their importance, the Eastern Arc Mountains (EAMs) are listed among the endangered eco-regions of Africa, together with the lowland coastal forests of East Africa, and are predicted to enter the critically threatened list of eco-regions in the next 20 years due to degradation.
5.3.2 The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF)

As one of the Government strategies to intervene the degradation, the EAMCEF was established through the Ministry of Natural Resources and Tourism under financial support from the World Bank and Global Environment Facility. This is a Trust Fund established as a mechanism to provide long-term reliable support for Community Development, Conservation Projects and Research Activities, which promote the biological diversity, ecological functions and sustainable use of the natural resources in the Eastern Arc Mountains of Tanzania. The main intention of establishing the Trust Fund is to address the need for a long-term sustainable approach to funding the conservation of forest biodiversity in the important ecosystem. EAMCEF’s vision is that Eastern Arc Mountains and the people who depend on them live in harmony as one sustainable ecosystem. Activities which contribute to the promotion of economic development and social welfare of the local communities in the target areas are given high priority for funding by EAMCEF.

It is a joint initiative of the Government of Tanzania, the World Bank and the Global Environment Facility (GEF) and was officially registered in Tanzania on 6th June 2001 under the Trustees’ Incorporation Act (Cap. 318 R. E. 2002). Governed by a Board of Trustees (BOT), the Fund operates as a Trust Fund Organization. Its day-to-day operations are run by the Endowment Fund Secretariat (EFS) based in Morogoro and headed by an Executive Director (ED).

Initially it operated as a component of the World Bank financed project under the Ministry of Natural Resources and Tourism – the Tanzania Forest Conservation and Management Project (TFCMP). Under the TFCMP, EAMCEF used a 2.4 million US$ credit facility to finance activities...
and operations of its 7 years. First phase was 2002 – 2009. This establishment phase also issued grants to 2 sites under three key thematic areas such as Community based conservation and development, Protected areas management and climate change mitigation and applied biodiversity and climate change research.

5.3.3 Funds Allocation for EAMCEF
It allocates 50% of its grants budget to Community Development Activities, 35% to Protected Areas and 15% to Applied Research Studies. It also offers a maximum of Tshs. 35mill. and a minimum of Tshs 3.5mill for macro and micro grants respectively in a single year.

The main beneficiaries during the 1st phase were Amani, Nilo, Kilombero and Uzungwa Scarp Nature Reserves. Community Development and applied Research Projects were also funded in 6 Districts (Kilolo, Mufindi, Kilombero, Muheza, Korogwe and Mkinga).

Funding of the second phase was initially planned to come mainly from incomes generated from the investment of the endowment capital secured from the GEF commitment of US$ 7.0 million as well as additional resources acquired from other sources through fundraising activities. Following the end of WB/TFCMP support in December 2009, EAMCEF operations and programme activities continued at a modest level using resources withdrawn from its capital investment. Some financial support was also provided by the MNRT.

In May 2011, EAMCEF secured a grant from the Royal Government of Norway through its Embassy in Dar Es Salaam for past five years, June 2011-May 2016, totalling US$ 5, 947,700.00. The grant enhanced the EAMCEF to extend its support from the earlier 2 target sites to 9 target sites i.e. Amani, Nilo, Kilombero, Uzungwa Scarp, Uluguru, Mkingu, Magamba & Chome Nature Reserves, and the Udzungwa Mountains National Park.

Since 2011, a total of Tshs 224Million has been allocated to the 9 target sites per year for management of 8 Nature Reserves and the Udzungwa Mountains National Park as shown table 1.

Table 1: Fund allocation for EAMCEF

<table>
<thead>
<tr>
<th>S/No</th>
<th>Nature Reserve/National Park</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amani Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Nilo Nature Reserve</td>
<td>22,000,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Kilombero Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Uzungwa Scarp Nature Reserve</td>
<td>26,000,000.00</td>
</tr>
<tr>
<td>5</td>
<td>Chome Nature Reserve</td>
<td>28,000,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Uluguru Nature Reserve</td>
<td>25,000,000.00</td>
</tr>
<tr>
<td>7</td>
<td>Magamba Nature Reserve</td>
<td>26,000,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Mkingu Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>9</td>
<td>Udzungwa Mountains National Park</td>
<td>25,000,000.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>224,000,000.00</td>
</tr>
</tbody>
</table>

Source: EAMCEF presentation, 2016

The funds were mainly used for Routine Forest Management and Ecotourism activities in the Target Sites i.e. boundary clearing, planting & weeding; fire-line maintenance, slashing of agriculture and narcotic crops in the reserves; enrichment tree planting; rehabilitation of mining areas in the reserves; surveillance; development and management of nature trails for eco-tourism, development and management of camp and picnic sites; rehabilitation of rest houses and information centers, training of local tour guides etc.

In order to reduce pressure from the protected areas, EAMCEF also supports livelihood improvement projects for the communities living adjacent to the protected areas such as beekeeping, tree planting, animal husbandry (dairy cows, dairy goats, piggery, improved chicken), horticulture, soil conservation, fish farming, etc.
5.3.4 Challenges facing EAMCEF
The EAMCEF facing challenges such as limited funds and ongoing degradation although at an improved level where have already supported.

5.3.5 Discussions, questions, clarification and comments on EAMCEF support for conservation and management of protected areas in the eastern arc mountains of Tanzania

**Question:** After Norway stops supporting EAMCEF, will EAMCEF continue to support nature reserves?

**Answer:** As highlighted previously the EAMCEF Trust Fund was established as a mechanism to provide long-term reliable support for Community Development, Conservation Projects and Research Activities, which promote the biological diversity, ecological functions and sustainable use of the natural resources in the Eastern Arc Mountains of Tanzania. EAMCEF is not a project it is an institution, so support will continue even beyond the lifespan of the Norwegian project.

**Question:** Based on your presentation, you mentioned that since 2012 the EAMCEF has 7 USD million in the World Bank. From that time up to day is about 4 years, why do you not request the World bank to give the money to EAMCEF so you can invest in Tanzania bank where you can get more profits than outside bank?

**Answer:** This is true because there is a period our money has increased up to 8.5 USD million but because the world economy was not stable the money was reduced to 5.5 USD million. You can see this is a lot of money if we deposited in the bank in our country, these money wouldn't be affected by world economy crises.

The EAMCEF have started procedures of requesting the money from the World Bank, for the World Bank have no problem they can release the money at any time provided that the board members will ratify. We have applied for board approval. Now we are waiting for response.

**Question:** Which criteria are used to support the nature reserves? Because some nature reserves have more serious problems than others. For instance, Mkingu Nature Reserve you cannot compare with Amani Nature Reserve.

**Answer:** EAMCEF will meet with them to review entire fund allocation then will discuss transparently on how this can be solved so each nature reserve can receive funds according to the nature of their activities.

**Question:** The proposal submitted to EAMCEF based on the old government payment rate; don't you see there are a need of make some amendments on the submitted proposal to reflect the current government allowances rate?

**Answer:** EAMCEF is always flexible whenever we see there is a change of rate is matter of communication and approve it. In addition, we have no problem even will make amendments to accommodate communities who are involved in conservation activities.

**Question:** EAMCEF is concentrated only in Eastern Arc Mountains Forest only; do you have an opportunity to expand to other nature reserves which are out of eastern arc mountains forest?

**Answer:** This issue it's more in policy, I cannot say yes we can expand outside the targeted area or not. But the essence of establish the EAMCEF was to support the Eastern Arc Mountains Forest.
5.4 Financial planning in Amani NR Funding JFM and Linkages with other stake holders

Presented by Isack Bob Matunda, Amani Nature Reserve Conservator

See Annex 6 for the full text of the presentation.

5.4.1 Legal status and history of Amani Nature Reserve

Amani Nature Reserve (ANR) was officially gazetted on 8th May, 1997 under Government Notice No. 151 and 152, as a Central Government Forest Reserve under Forest and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism. Amani Nature Reserve was created from amalgamation of gazetted six Forest Reserves decades ago namely; Kwamkoro, Kwamsambia, Mnyuzi scarp, Amani Zigi, Amani East and Amani West, the oldest ones existed back to the 1920s. However, their legal status was considered insufficient for an area of such high biodiversity conservation values and hence has to be combined to form Amani Nature Reserve proposed which was later on gazetted.

Amani NR is owned by the Central Government, Tanzania Forest Services Agency (TFS) under the Ministry of Natural resources and Tourism. The immediate in charge of the reserve is the Conservator of Amani Nature Reserve. The conservator has to report to the Northern Zonal Manager TFS (Same HQ). The administrative and managerial structure is divided into four (5) ranges namely Kwamkoro, Amani, Zigi Mashewa and Mnyuzi. These stations are managed by Range in charge.

Amani Nature Reserve has the total area of 8,380ha. The boundary has a length of 149 km. The boundary is demarcated by beacons and planted with Teak and Eucalyptus trees.

Buffer zones around ANR promote sustainable land and natural resource use practices through implementation of the Village Resource Management Plans, farm forestry activities including tree planting and income generating activities. The objective of the buffer zones is to decrease the dependency of the local communities on the natural resources of ANR and contribute to the social and economic development of the communities. Buffer zone can be found outside or inside the enclaves of the ANR.

The buffer zones area of the Nature reserve is 310 ha. It boarders 20 villages and the local residents have the right to utilize the resources of the buffer zones. One corridor namely Derema forest reserve has been established and gazetted. It connects conservation values of ANR and Kambai forest reserve; its finalization will add 956 ha to the Nature Reserve.

5.4.2 JFM implementation in Amani Nature Reserve

Amani NR is surrounded by 20 buffer zone villages all of them are implementing JFM. The JFM implementation facilitated through the participatory approach.

The whole process start with PRA-VGT-Village Resource Management plan (VRMP)-Village Environmental Committee (VEC)-Memorandum of Understanding (MOU) - Village Conservation Development Committee (VCDC). PRA considered all sectors of village development, special emphasis was given to natural resources matters as well as the expectations concerning the ANR management. The aim was to identify the best alternatives and developing strategies concerning sustainable utilization of natural resources and environmental services.

Village Resource Management Plans (VRMP) has been prepared for each village to guide the villages’ development activities. In the VRMP’s, the villagers have been able to identify problems and opportunities of their villages. An action plan arising from VRMP will continue to be supported by ANR management.
In Amani NR we have 20 VNRC that’s to say from each village and one VNRC consist of 15 members including the Chairman and secretary. The chairman and secretary of each VNRC are members in the VCDC and VCDC members elect their Chairman and secretary. The conservation of the ANR will not succeed without the support of local communities. Therefore, the involvement of local communities in the decision making and management of the ANR is essential. Benefit sharing mechanisms established by ANR contribute to the local communities’ economic development and promote ecologically sustainable production and utilization of natural resources.

5.4.3 The responsibilities of the Environmental Committees in relation to the implementation of the ANR management under MOU
- To supervise and control the utilization of forest products in the ANR.
- To ensure that the regulations concerning the conservation and utilization are obeyed as stipulated in the by-laws and MoU.
- Keep record on the amount of forest products collected and records on implementation of VNRMP’s and present them to VCDC and ANR Conservator.
- Report to the VCDC and ANR Conservator about offences against the ANR regulations.
- Promote the implementation of Village Resource Management Plans.
- Advice the village council on conservation and utilization of natural resources.
- In case of conflicts between the village and ANR, resolution is sought in three levels of decision making that is at the village council, VCDC and then to the Advisory Board. If resolution is not met, the ANR Regulations usually holds. The offences made by individuals in the village or by staff of ANR are dealt with by using the existing laws as stipulated in the MoU.

5.4.4 Instruments to facilitate community participation in Amani Nature Reserve
The ANR aims at frequent communication between the ANR management and the local communities in the implementation of the management plan and on decision making concerning the ANR management. The ANR management strategy is transparent in order to guarantee active participation, openness and confidence of the local communities. However, this needs to be strengthened by comprehensive extension activities which make the Rules, Regulations and Management Plan of ANR known to the stakeholders.

Community participation in decision making has been considered in all three levels namely, In implementing daily activities at village level (Environmental Committee), Co-ordination and overseer of implementation in all villages (VCDC) and In decision making at higher level (Advisory Board).

In each level of participation, gender and social groups within the respective society will be taken into consideration. Village Environmental Committee (VEC) is considered to be key player in linking implementation of VNRMP and the ANR Management Plan. All these parties are bounded by Memorandum of Understanding (MoU) signed by both parties.

Local communities usually are prepared to deliver good services to tourist in order to improve the cultural tourism. Local guides have received training and motivation in order to deliver good services to the tourist. Services rendered by ANR rest houses and restaurant, fees paid for entrance, guiding and camping fees, films, guidebooks, and other products as souvenirs are normally adjusted annually based on the inflation and devaluation of Tanzanian Shilling.

All fees stipulated in the Forest act and its subsidiary legislation has been instituted accordingly. These include entrance, research, camping, and such alike should be paid for. Private investors will be encouraged to invest in various ways in tourism industry at Amani. Private hotels, lodge, camp sites and handcraft makers should be given the priority. The local communities are entitled to a share of the revenues generated from the tourism, research and other activities in the ANR as stipulated in the Cost benefit sharing mechanism. The size of the share (20 %) is as approved in the stakeholders workshop and is shared once annually (Table 2).
Table 2: Distribution of share per village in Amani Nature Reserve

<table>
<thead>
<tr>
<th>YEAR</th>
<th>REVENUE COLLECTED</th>
<th>20% OF REVENUE</th>
<th>No. of Villages</th>
<th>Share per village</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/3</td>
<td>7,287,300</td>
<td>1,457,460</td>
<td>18</td>
<td>80,970</td>
</tr>
<tr>
<td>2003/4</td>
<td>7,287,300</td>
<td>1,457,460</td>
<td>18</td>
<td>80,970</td>
</tr>
<tr>
<td>2004/5</td>
<td>13,392,000</td>
<td>2,678,400</td>
<td>18</td>
<td>148,800</td>
</tr>
<tr>
<td>2005/6</td>
<td>22,986,000</td>
<td>4,597,200</td>
<td>18</td>
<td>255,400</td>
</tr>
<tr>
<td>2006/7</td>
<td>12,942,000</td>
<td>2,588,400</td>
<td>18</td>
<td>143,800</td>
</tr>
<tr>
<td>2008/9</td>
<td>31,655,735</td>
<td>6,331,147</td>
<td>19</td>
<td>333,218</td>
</tr>
<tr>
<td>2009/10</td>
<td>26,518,080</td>
<td>5,303,616</td>
<td>19</td>
<td>279,138</td>
</tr>
<tr>
<td>2010/11</td>
<td>28,258,250</td>
<td>5,651,650</td>
<td>19</td>
<td>297,455</td>
</tr>
<tr>
<td>2011/12</td>
<td>10,665,670</td>
<td>2,133,134</td>
<td>19</td>
<td>112,270</td>
</tr>
<tr>
<td>2012/13</td>
<td>11,270,000</td>
<td>2,254,000</td>
<td>19</td>
<td>118,631</td>
</tr>
<tr>
<td>TOTAL</td>
<td>266,986,615</td>
<td>40,280,183</td>
<td></td>
<td>2,157374</td>
</tr>
</tbody>
</table>

Source: ANR Conservator presentation, June 2016.

Private and Government sect Initiative
At the upper plateau particularly in Amani Division, the degraded tea estates were restored under the private sector initiatives. The tea out grower scheme started to be introduced, and some more areas formally used for peasant agriculture was turned to protected forest reserves. Tanzania Forest Research Institute (TAFFORI) conducts forest research activities in Amani Botanical Garden, Kwamkoro arboretum and other parts of the ANR;

National Institute of Medical Research (NIMR) conducts research activities in Enclave I of the ANR. It has a title deed to an estate of 132 ha, which includes those parts of the Amani Botanical Garden which fall outside the ANR. Mlingano Agricultural Institute conducts fruits and spices research in the Amani Botanical Garden (15ha). The other potential donors indicated in Table 3.

Table 3 Potential Donors

<table>
<thead>
<tr>
<th>S/N</th>
<th>POTENTIAL DONOR</th>
<th>MAIN INTERESTS/OBLIGATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICRAF</td>
<td>Domestication of Allanblackia Research to link with community based projects</td>
</tr>
<tr>
<td>2</td>
<td>UNILIVER/NOVELLA</td>
<td>Supporting Conservation as one of their concern.</td>
</tr>
<tr>
<td>3</td>
<td>WORLD BANK/ UNDP (Conservation and Management of Eastern Arc Mountain Forest Project)</td>
<td>Working with management of protected areas, supporting Community based projects</td>
</tr>
<tr>
<td>4</td>
<td>FBD /TFS (Tourism Division, MNRT)</td>
<td>Conservation and management of ecosystem to favor biodiversity and water catchment value while supporting livelihoods Community based project in buffer zone</td>
</tr>
</tbody>
</table>
### POTENTIAL DONOR | MAIN INTERESTS/OBLIGATIONS
---|---
5 | **EAMCEF**  
Conservation of forest biodiversity, Community Development, Capacity Building.
6 | **UNESCO/MAB-KOICA**  
Biodiversity survey, socio – economic survey and farmers training in relation to Conservation of biodiversity of the East Usambara MAB
7 | **TFCG**  
Landscaping in East Usambara and Conservation of forest biodiversity (Handei Village FR)
8 | **TBA(Tropical biology Association)**  
Supporting Conservation through research as one of their concern and support communities (Mgambo Village)

Source: ANR Conservator presentation, June 2016.

#### 5.4.5 Challenges facing Amani Nature Reserve

The forests of the East Usambara are nationally and globally important for their water catchment properties and high biodiversity values. Amani Nature Reserve as a Government institution faces many challenges; In past five years, it was observed illegal alluvial gold mining, timber harvesting being the major problems in most of areas of Amani Nature Reserve others were forest fire, pouching, encroachment, invasive species and poor infrastructure like tourist’s accommodation and road, inadequate advertisement of eco – tourism attractions and inadequate working facilities.

These forests contain endemic flora and fauna. The East Usambaras, particularly Amani nature reserve is the source of the Zigi River which feeds the Tanga municipality. Both the biodiversity values and the catchment values have been threatened by the illegal timber harvesting, pouching and influx of miners.

The communities collect forest products, such as fuel wood, medicinal plants and vegetables in the ANR. The pressure towards utilizing forest products from the ANR is considerable, even though the people are aware of the forest conservation needs.

The geographical location of the Amani Nature Reserve in relation to local communities provides a great challenge in the management of natural resources both inside and outside the reserve. The ANR is surrounded by villages with a dense population. The need for more farmland and forest resources has risen along with the growth of population and has resulted in accelerated deforestation of ungazetted forests in many areas.

Fire is often used in the farmlands for land preparation, and it sometimes causes forest fires in the ANR. More effective farming methods are required to ensure efficient use of land. Furthermore, cardamom, one of the superior cash crops in the area, has for a long time threatened the forests. Cultivation involves clearing the forest undergrowth and smaller trees, with the establishment of cardamom under a canopy formed by the remaining large trees.

Villagers depend on subsistence farming of food or cash crops for their living. The farming methods practiced is still poor, soil conservation activities such as terracing as well as manuring and other soil improvement practices are not commonly used. This leads within a few years to soil infertility and hence to low crop production. Once the soil is exhausted the area is abandoned, which creates further pressure on forest land in search for more fertile land.

Mining has also brought many negative social and economic problems to the surrounding communities like crime. Rapid immigration and the breakdown of normal social structures may accelerate the spread of HIV. Some farmers have neglected their fields.

The EUTC0 tea estates have also suffered from an exodus of workers and individuals were found dead in the mining pits for example at Monga tea field no.4. Water quality for many communities downstream of the mines has declined. The Tanga municipal town has been affected by
deterioration water in quality and quantity from Zigi river. These challenges need to be addressed
time to time.

5.4.6 Lesson learn for Amani Nature Reserve

- Proper management practices are essential for ecologically sustainable utilization of forest
products inside the ANR. However, searching and developing alternative sources of forest
products is of major importance when aiming at the conservation of the forest ecosystem.
- The possible method of using agroforestry system for managing the cardamom may be
considered as alternative for clearing the new forest for the same.
- The recent increase of dairy farming activities in areas next to the ANR may reduce the
people’s dependence on resources of the ANR by offering additional income.
- The conservation of the ANR will not succeed without the support of local communities.
Therefore, the involvement of local communities in the decision making and management of the
ANR is essential. Benefit sharing mechanisms are required which contribute to the local
communities’ economic development and promote ecologically sustainable production and
utilization of natural resources.
- Some affected farmers are complaining of land shortage in general but the most farmers
specifically need shady forest which suits cardamom cultivation. The possible method of using
agroforestry system for managing the cardamom may be considered as alternative for clearing the
new forest for the same.
- Initiatives for revenue generation and sharing. This will be done through improving of
sources of revenue and developing some supporting projects. Based on the experience during the
implementation of the first ANR General Management plan it was learnt that the Government
budgetary allocation cannot sustain the conservation activities of ANR. Therefore, for the
sustainability in conservation of Amani Nature Reserve local sources of revenue will be well
developed and where possible project proposals for specific activities should be prepared and
submitted to various sources of funding for financial support.
- The already established Ecotourism activities will be improved further as it is one of the
best alternative sources of income for ANR. Improving the services and facilities of the ANR rest
houses will add value to the tourism attractions of ANR and hence attract more visitors to the area.
Other tourism supporting facilities including camp sites, picnic sites, hiking routes, drive routes,
marketing materials like Trails guidebook and trees of Amani Book, calendars Brochures, Posters,
symposiums and communication facilities should be improved to attract more visitors and hence
more revenues.
- Some other artificial attractions including canopy walk, hotels and standard conference
facilities will be established to add value to the natural attractions of Amani Nature Reserve and
collect more revenue. This is one of the best ways to improve the tourism in Amani. The Nature of
the landscape and type of forest trees available shows a great potential to support these types of
infrastructures. Local communities will be sensitized to deliver good services to tourist in order to
improve the cultural tourism. Local guides should receive adequate training and motivation in order
to deliver good services to the tourist industry.
- Private investors should be encouraged to invest in various ways in tourism industry at
Amani. Private hotels, lodge, camp sites and handcraft makers will be given the priority. ANR in
collaboration with the government machinery will facilitate the private sector to invest at Amani.
- These sectors will continue to be involved in management of Nature Reserve through
consultation meetings as need arise.
- The payable fees for goods and services rendered by ANR should be adjusted based on
the quality of goods and services rendered. Services rendered by ANR rest houses and restaurant,
fees paid for entrance, guiding and camping fees, films, tapes, hiring of camping facilities and
values for sold posters, guidebooks, and other products as souvenirs should be adjusted annually
best on the inflation and devaluation of Tanzanian Shilling.
- Technical services provided by staff to either private sector, community and such alike
should be considered in monitory terms and should be paid for.
- Means of communication will be further being improved. The internet service available
seems not to be sustainable as it is not self-propelling. The service is to be commercialized and
expanded further as there is great potential of needs in the area.
Moreover, ANR will seek funding from Conservation organizations for both conservation and improvement of local people livelihood. This will be dealt with by writing of project proposals which geared into implementation of ANR General Management Plan. Possible funding bodies might include EAMCEF, UNDP, and GEF, UNESCO–MaB Programme, ICRAF, Conservation International, CEPF and others as it might seem necessary. Projects will be both short and long term, and emphasize will be kept also in inventing on those which will be sustainable and geared into revenue improvement and well-being of communities surrounding the reserve.

Carbon stock in tree biomass revealed ≥400tons/ha existing in Amani Nature Reserve. Negotiation initiatives should be geared towards compensating the conservation efforts. This can be achieved through the giant carbon emissions compensating the stock of carbon Amani NR preserve.

These sectors will continue to be involved in management of Nature Reserve through consultation meetings as need arise.

5.4.7 Discussions, questions, clarification and comments on financial planning in Amani NR
Funding JFM and Linkages with other stake holders

Question: How do villagers react to the issue of conservation whereas the share they got from Amani Nature Reserves is small amount?
Answer: There are complaints from some villagers but we convinced them to join together because the dividend they get is a little bit so if they will join forces they can do something with that little money. For instance they want to build a class room in one village so the second payment can allocate the money to next village and do the same project or other needs to that village.

Question: Other nature reserves are in the process of reviewing their management plans. Amani NR is highly developed to compare with other nature reserves so how do you do during the review of your management plan?
Answer: The general management plan for Amani NR was developed in participatory ways by involving our stakeholders and also the village management plan included as annex in the general management plan. But during the review to involve many stakeholders is limited due to limit of fund.

Question: The issue of benefit sharing for the villages that have no ecotourism, do they get equal share as other villages have potential for ecotourism?
Answer: Yes are not all villages are potential for tourism but Amani Nature Reserve share the benefits equally to all villages regard less of the potentiality on not.

Question: I want to know if the other nature reserves they can formulate advisory board like Amani NR or that board is special for Amani NR only?
Answer: This board exists legally and formulated by conservator but it cost. The major task of this board is to manage and make decision on the funds.

Question: Which guideline does Amani NR use to give the villages 20% of the share? Or do you have your own guideline and if you use own guideline is it allowed?
Answer: For Amani NR, we have an agreement with communities and this agreement was in place before the national guidelines (2013) were published. So for the time being we are using those agreements. But we have a plan to review the agreements in order to conform to national joint forest management guideline.

Question: I want to get experience on how do Amani NR use the local tour guides while the tour company most of time they have their own tour guides?
Answer: Legally, you cannot force tourists to use your local tour guide because the law does not prohibit anyway so the tour operator can use their own tour guides. But in Amani NR we try to talk with tour operators and individual visitors on the importance of use the local tour guide. So the challenges how to force them to use the local tour guide while the law allow them to use their own tour guides.
**Suggestion:** Prioritization of partners is very important, you have to know your close partners and how can you contact them. Because if will not know your partners you cannot use them. In the Amani NR list of partners mentioned during the presentation were very few, I think there are other partners you ignored them. For example, the presentation didn’t mention Tangawasa as a partner or UNDP and others.

**Question:** How do you organize boundary clearing in Amani Nature Reserve?
**Answer:** We involve local communities who are border the nature reserves and specific to the area where boundaries are being cleared. For those villagers who are involved in this activity we pay them. According to experience if we involve the other villagers which are not part of the NR it will bring a conflicts so we involve them because villagers can get some money and strengthening the relationship between Amani NR and the communities.

**Question:** Do this activity of clearing of boundary is coordinated by conservator or others?
**Answer:** In Amani NR we have ranges and each range have an officer in-charge. So the in-charge of each range will coordinate the activities with respective villages.
5.5 Advancing Equity in protected Areas conservation

By Professor Adrian Martin, University of East Anglia

Professor Adrian gave overview of his research namely advancing equity in protected areas conservation. This research is looking if the target of CBD AICH target 11 which state that by 2020, at least 17 per cent of terrestrial and Inland water areas conserved through effectively and equitably managed. The research was guided by the framework with triangle shape which included three elements (Recognition which stand at the pick of triangle, Procedures and Distribution as base of the triangle). He asked a question on how cost and benefit shared in the protected areas (Distribution), how decision are made and by whom (Procedures) and respecting rights and variety of culture values and knowledge (recognition).

Professor described each identity in the framework separately as outline here below;

1. Recognition
   - Recognition and respect for human right.
   - Recognition and respect for statutory and customary resources rights.
   - Recognition and respect the right of indigenous peoples to self – determination.
   - Recognition of different identities, values, knowledge system and institutions.
   - Recognition of all relevant actors and then diverse interests, concerns, capacities and power to influence.
   - Non discrimination by age, ethnicity, language, class or beliefs.

2. Procedures
   - Full and effective participation of recognized actors in decision making.
   - Clearly defined and agreed responsibilities of the actors.
   - Accountability for actions and inactions
   - Access to justice including an effective disputes resolution process
   - Transparency supported by timely access to the relevant information in appropriate forms
   - FPIC for actions that may affect the right of indigenous peoples and local communities
   - Build on right holders customary governance and management arrangements.
   - Identification and assessment of cost benefits and risks, and their distribution and trade offs.

3. Distribution
   - Effective mitigation of any costs to indigenous peoples and local communities.
   - Benefit shared among relevant actors according to one or more of the following five criteria.
     - Equally between relevant actors or
     - According to contribution to conservation, costs incurred recognized rights and / or the needs of the poverty.
   - Benefits to the current generation do not compromise to the future generations.

5.5.1 Summary of Results
The presentation highlighted some results although does not reflect all the three elements in details. The results revealed the positive and negative results.

Here are the positive results, Amani Nature reserve have MoU with a villages. Within the MoU agreed that villagers can access firewood, medicinal plant collection, laboring and 20% revenue sharing. Also Amani NR attracts investment and climate change control.

Although there are positive benefits but also there are negative results reported as outlined below;
a. Revenue sharing issues, the 20% of small total revenue is small so were complain by villagers. For example last year according to Shebomeza villagers, the village received 363,000 Tsh per village.

b. Villagers’ responsibilities/cost for village natural resource committee meetings, patrols and clear of fire line were not paid.

c. Kwezitu village which consider themselves as qualified to be part of Amani NR do not get share of 20%.

d. Generational problem, how will the youth engaged?

5.5.2 Discussions, questions, clarification and comments on Advancing Equity in protected Areas conservation

Comment: Different heard from community most of it are true but how come you list a long list of negative and just a short list of positive impact of Amani NR to communities. Also the expectation of the communities should be clearly at the beginning so should know what do they expect and what Amani NR expect from them also otherwise they can expect more than on what intended or capacity of the reserve for supporting them.

In your results you didn’t tell us how much Tangawasa have been supporting Amani or the communities surrounding Amani NR.

On the issues of 20% as you said that Kwezitu village do not get share from Amani NR is true because Kwezitu not among of 20 villages which manage Amani NR. So according to agreement the 20% is going only to those villages boarder Amani NR.

Question: How many villages did you surveyed?

Answer: Two villages as a pilot. The instant are messages to get and share. We thought could visit more villages but according to experience in Amani NR we couldn’t get different messages.
5.6 A link between the parks and adjacent communities

Presented by Deogratius N. Ndelolia, Outreach program officer, Mkomazi National Park, TANAPA

The representative from TANAPA present the overview of TANAPA and its outreach program and how does it work to the communities adjusted to the park.

See Annex 8 for the full text.

5.6.1 Tanzania National Parks (TANAPA)

TANAPA established in accordance with the National Parks Ordinance (Cap 412) of 1959, and its revision (Cap 482) of 2002. The role being managing all national parks within the country and establish new ones whenever deemed necessary with a main objectives being protecting and managing national parks for sustainable tourism.

In order to meet the objectives the local community participation must be involved through Outreach Program.

5.6.2 Outreach program

A program aim to involve local community adjacent to National parks in managing natural resources, this is the results of Scientific meeting seated at Serengeti National Park in 1985 to discuss the drivers for mass killing of big animals. Therefore, they made decision to involve local community in conservation. In 1988 started with 3 pilot villages (Ololosokwani, Soitsambu and Oloipiri) adjacent to Serengeti NP in Ngorongoro District and the after seen positive impact extended to more 3 parks which are Tarangire, Arusha and Manyara NPs.

Main objective of Outreach Program

To enhance awareness, understanding and good relations to park adjacent communities in protecting and managing natural resources

Specific objectives

- To deliver conservation Education to park adjacent communities
- To enhance relations between parks and adjacent communities
- To update local communities with information which assist them to attain sustainable development
- To coordinate and ensure benefit sharing

Benefit sharing

The benefit sharing has been divided into two categories, Support for Community Initiated Projects (SCIP) and TANAPA Income Generating Projects (TIGPs).

a. Support for Community Initiated Projects (SCIP)

The SCIP is community development projects initiated by local communities, the costs being contributed by the community itself and TANAPA. The project should be initiated from village level (Village assembly, village Council), then Ward level and Later District level. The technical part (Bill of quantity (Cost of the Project) and technical drawings are prepared by respective District experts). After the project cost known TANAPA contribution 70% of the project cost while local Community contributes 30% of the project cost through labour force, material and cash. The essence of involving communities in the cost sharing is to creates sense of ownership and ensure sustainability.

The SCIP targeted to education Sector (classrooms, dormitories, laboratories, teachers houses, furniture, lab equipments, school desks/chairs and tables), health Sector (dispensary building, Health Centre wards, laboratory equipments, furniture), clean and Safe water (running water/piping networking, drilling of deep borehole, construction of water reservoir tanks), infrastructure (Road construction and rehabilitation in park adjacent villages) and Community Safety and Security (construction of police post buildings and furnishing). Also Livestock Sector (Infrastructure: water
troughs) and Land use sector (preparation of land use plans in adjacent villages are the areas of target.

b. **TANAPA Income Generating Projects (TIGPs)**
TIGP is an environmental friendly projects supported to local communities with the aim to provide immediate alternative source of income such as Beekeeping/apiary, tree nurseries and tree seedlings, diary cattle and goats, poultry (local breed) and piggery. Initially this project started with 3 NPs namely Tarangire, Rubondo and Udzungwa and currently implemented in all 16 NPs.

**Mode of operation**
- Local community derive income generating project
- Support is targeted to community groups, which are registered and legally recognized
- More emphasis on Community Conservation Banks (COCOBA)
- Members contribute their capital and start to operate, then TANAPA support them with equipments and training (capacity building)
- In Udzungwa and Serengeti some of these groups have proven success

5.6.3 **Resource mobilization for Outreach program**

**Mode of securing the fund**
- Annual budget
- Project Write Ups

**Benefit sharing - resource allocation**
Allocation of fund for both SCIP and TIGP is based on SCIP committee Meetings decisions which set up various criteria such as proximity of the community to park, contribution of the community towards conservation, effects of wildlife to respective community -human/wildlife conflict, cost of the project and technical drawings.

**Expected Impact: SCIP and TIGP**
- Increased local community income
- Improved local community livelihood and standard of living
- Win local support in conservation of natural resources
- Sustainable utilization of natural resources
- Reduced illegal activities (poaching) in national parks

5.6.4 **Challenges facing Outreach program in TANAPA**
- Over ambition and expectation of local communities
- Limited park resources: Manpower, finance and equipments
- Low commitment by local communities to contributes their part (30%)in SCIP project
- Low entrepreneurship skills (TIGPs)

5.6.5 **Discussions, questions, clarification and comments on A link between the parks and adjacent communities**
**Question:** Which activities villagers do for conservation?
**Answer:** After introduced outreach program to the villages, now the villagers value the wild animals even the case of killing animals has reduced, we have good informal in the villages also they are participating in tree planting and other friendly environment activities as presented in the presentation.
**Question:** In the presentation you said that TANAPA banned the people to collect firewood in Udzungwa National Park. If that the case don’t you see that we create enmity with adjusted communities?

**Answer:** Communities have been prepared for long time through awareness raising, tree plants at their own woodlot program for fire wood. The essence of banning is that there no buffer zone at Udzungwa Park and this park is very important sources of water.

**Question:** What happen if villages would fail to contribute 30% while the project has started?

**Answer:** When it happen TANAPA still help them to finalize the project.

**Question:** Does TANAPA still help communities to establish Wildlife Management Areas (WMAs)?

**Answer:** Yes, and there some WMAs doing good, for example IKONA which sponsor pupils and students from primary school to University?

**Comment:** I have doubts about the social support for the park because it supports groups and not a person. If you exclude these poor from support we just create a loop for the entry point of poachers and it will become difficult to assess the impact of the project to individuals. We have an experience for long time in Tanzania of supporting groups such as formulating Village banks (VIKOBA), beekeeping groups and other project related to that but still the poorer villagers left behind. We should now think how to help individual particularly the poor household as TASAF did.

**Clarification from presenter:** To support household is a good thing and it can help much in conservation but there are many challenges on these. One of the biggest challenges these the donor fund, as you in the presentations only 3 or 4 out 16 parks can operate itself.
5.7 Group works presentation

The session aimed to examine Financial Planning for Nature Reserves through mapping the budgeting / fund allocation / resource mobilisation processes at present and Strengths and weakness in the current process. The other points where the session focused were cost to manage a Forest Nature Reserve under Joint Forest Management and the actual and potential sources of revenue for Forest Nature Reserves.

The communities group which included villagers from Mkingu NR and Amani NR gave presentations based on procedures of managing forest under joint, exactly activities they are doing to manage the forest reserves owned by the government and how do collaborate with other stakeholders such as non-governmental organizations in managements of these forests.

The other group 1, 2 and 3 focused on financial planning for nature reserves, resources mobilization, cost of management forests under JFM, actual and potential sources of revenues for the Forest Nature Reserves and effectively market for Nature reserves so as to increase its revenues.

The session ended with debate on a number of issues including to involve communities in the budgeting process and other stakeholders. Participants were worried if the communities were not involved or their plan was not included in the nature reserves is it possible to manage the forest together or the meaning of joint forest management is the paper work agreement. Also the issues of optimize the resources at the maximum was discussed. The highlighted that the nature reserve need coordination in order to avoid duplication of efforts so it’s better to know which stakeholders and doing what in each nature reserve.

In addition, the participants asked the conservators to be transparent when the project or donor want to implement the activities should make a discussion with them and make agreement so will help during the plan. Based on this the nature reserve can focused on the activities which is not in the donor or project so we can move forward.

Advised that all conservators during the budget preparation should concentrate to the general management and prioritize the activities and share with zone managers which will help to minimize incontinence where the some important activities will be cut off.

In other hand, the communities we complaints about the sharing cost, the mentioned some activities which suppose to be paid but they get nothing. The mentioned activities were patrol and fighting with fire. The issues of fire was discussed in details an noted that if the communities will be paid or group of people should be paid will bring a disaster because fire is an big events and spread faster so whole the communities need to be involved and its legal required. So don’t need to pay them for fire management or if the establishment of line is fine for them to paid.

Moreover, the participants requested the communities to help to educate the other villagers on the issue of conservation is the role of every citizens not only for few groups in the villages by doing that will create the ownership and will reduce jealous and illegal activities in the nature reserves.
5.7.1 Presentation from community group (group 4)  

*Procedures the communities used to manage nature reserves under JFM*
- Village natural resource committee or Village Environment Committee proposed activities
- The proposed activities submitted to the village council for further discussions
- The village council present the proposed activities to Village Assembly for discussions and approve for implementation. During this meeting the experts from Amani NR were welcomed.

**Activities conducted by villagers in management of forest**

- Frequently patrol in the forest
- Boundary clearance
- Meetings and inform other villagers on the issue of forest management
- Fighting with forest fire
- Refill the holes which left by illegal miners at the forest
- Participate in the eviction
- Carry confiscated forest product from the forest to Amani NR
- Identification of tourist attraction sites
- Participate in the installation of signboards and beacon around the nature reserve.

**Stakeholders**
- Nongovernmental organizations
  - TFCG
  - KOIKA
  - EUTCO
  - MJUMITA
- EAMCEF and Tourists

**Activities which the community incur cost and need to be paid**
- Patrol in the forest
- Fire fighting

**Source of income for nature reserves**
- Fine
- Ecotourism

**Income from nature reserves**
For Amani nature reserve communities get 20% of the total income while Mkingu nature reserve no share. However, the villagers in Amani NR still complain about the share. They said 20% is little amount to compare with activities carried by the communities.
Discussions, questions, clarification and comments based on Presentation from community group (group 4)

**Procedures the communities used to manage nature reserves under JFM**

Comment: the participants agreed on the issue of paying communities during the participation in the patrol but the issue fire fighting raised a discussions and agreed don’t pay for the fire fighting because bush fire is an emergence event and need immediately action. Out of the emergence need to involve more people than group so if will pay a group we expect on time going on no one from the village will participate to this activities rather than VNRC.

Comment: the participants request the conservators to involve also the other villagers who are not a member of village council and VNRC to the activities which need payment. This will bring unit to the communities and reflect the meaning of joint forest management.

Comment: Education is needed to our communities; they need to understand the issue of JFM or conservation is not a group of people. All the members in the village should be responsible.

Also the information concern the management should be presented to the Village Assembly meeting as described in the MoU.

There is also miss understanding between VNRC and VC even in the Nature reserves and police there are groups which are supporting poachers which make the activities to difficult to be implemented.

Comment: each nature reserve should have a fire strategy and should conduct research to identify the possible sources of fire and points where there fire happen frequently.

**Question:** If the villagers get injured during the patrol, who will responsible for her/his treatment?
**Answer:** According to JMA, Amani NR covers the cost.

**Question:** When you identify the activities, where did you get those activities?
**Answer:** VNRC develop the activities but during the discussion we request an expert from Amani NR to participate.
5.7.3 Presentation from Kilombero Nature Reserve (KNR-group 1)

Financial Planning process in KNR

1. Starts from the range managers
2. Submit proposed budget to conservator (compilation)
3. Conservator submit to zonal manager (discussion and approval)
4. Zonal manager submits to TFS HQ (Discussion and final approval)
5. TFS HQ bring back the approved budget to Zonal Manager (incorporate comments)
6. At the end each station gets its approved budget

Strength
1. Participatory and transparent planning process
2. Flexibility

Weakness
1. Removing of some activities at HQ is not participatory
2. Small amount of budget ceiling which does not reflect the reality
3. Delay of fund disbursement
4. Disbursement of funds less than approved budget

Cost of manage nature reserve under joint forest management (for the biggest NR)
- It costs about Tsh1.7 billion per year (according to 2015/2016 budget) to manage Kilombero Nature Reserve under JFM
- Approved budget for FY 2015/2016 for KNR was TSH 223,000,000/-
- Deficit was Tsh 1.5 billion

A: Potential sources of revenue
   i. Research fee
   ii. Entry fee
   iii. Camping fee
   iv. Filming fee
   v. Lease and concessions
   vi. Payment for ecosystem services (PES)
   vii. Installation fee from communication towers
   viii. Hydro-electric power stations
   ix. Carbon trading
   x. Accommodation fee

B: Actual sources of revenues
   i. Research fee
   ii. Entry fee
   iii. Camping fee
   iv. Hydro-power stations

C. Marketing of our Nature Reserve
   i. Improve Infrastructure
   ii. Publication
5.7.4 Presentation from Uluguru Nature Reserve as an example of a mid-sized Nature Reserve (Group 2)

Description of the budgeting and resource mobilisation process

1. **TFS Funds**

Section heads prepare a budget and present to the Conservator e.g. Head of research and training presents the activities and budgets relating to research and training. For activities involving communities TFS staff go around 5 the ranges (villages zones) to talk with the communities e.g. for joint patrols and boundary clearing. Planning is done with community representatives. The Conservator then collates the budgets.

The budget is then presented at a TFS Zonal Meeting for submission to TFS HQ. No joint planning with other stakeholders like the private sector or Local Government.

2. **EAMCEF Funds**

EAMCEF has an MoU with each for each year describing the activities and budgets to be completed.

The Zonal Managers and Conservators sign the agreement with EAMCEF.

For EAMCEF-funded projects for other stakeholders, TFS and local government must endorse the application.

3. **UNDP Funds**

Plans and budgets developed based on the UNDP / GEF project framework.

4. **UNESCO (for Amani NR)**

UNESCO comes with a lump sum for a particular activity. TFS can then request funds for specific activities working through the UNESCO staff on the ground.

**Resource allocation**

Funds are released quarterly direct to the Nature Reserves bank accounts. % of the budget that is released varies. Prioritisation for resource allocation is decided at TFS HQ. Can be as low as 27% of the amount expected. Can be late resulting in all activities having to be implemented in 1 rather than 3 months.

**Resource mobilization**

Conservators are proactive to seek funds through:

- Requesting existing donors to ‘fill in budget gaps’ e.g. Amani requested UNESCO to finish the information centre.
- Submitting proposal for specific activities to TFF and EAMCEF
- Working with Universities conducting research in the Nature Reserves to develop joint proposals e.g. Leeds University (in the case of Amani) to develop proposals for specific activities e.g. for the Swiss-funded joint project on invasive species.

**Uluguru Nature Reserve Budgets**

Annual Budget: TZS 569,000,000
Received: TZS 165,000,000 from TFS (+ 25million from EAMCEF)

**Strengths, weaknesses and challenges of the existing system**

**Strength**

- Qualified people are there for the budgeting
- Detailed budgets are in place
- Transparency – involvement with the communities for the community activities
- Transparency - for the EAMCEF everyone know how each Nature Reserve is receiving, the activity targets and the budget breakdown.
- EAMCEF – flexibility to meet what is needed

**Weakness**
• Current system leaves a big shortfall in the NR budgets as the NRs receive only an (unknown-in-advance) proportion of the budget.
• System doesn’t take into consideration inflation within the year
• Delays in receipt of budgets resulting in activities having to be implemented in a short period of time.
• Transfer of staff resulting in loss of institutional knowledge
• Few staff available for doing resource mobilisation.
• Prioritisation process is not participatory.

Challenges
• To do more participatory budgeting requires more resources.
• Need more support on the resource mobilisation.
• Political influence on the budget overall
• Mobilisation of other resources e.g. allocation of personnel between the Nature Reserves is not proportional with area not linked to how challenging a reserve is to managed.
• Older reserves have old cars. Unreliable and expensive to maintain.
5.7.5 Financial planning for Nilo nature reserve as an example of small nature reserve
To manage Nilo NR for financial year 2016/2017 is about TSHS 599,930,000/ but the nature receive received only TSHS 134,510,900/= 

Strengths and weakness in Budgeting
Weakness:
- Inadequate fund – Annual approved Fund is not disbursed 100%
- Priorities activities are sometimes slashed down by Zonal Office due to the set sealing from headquarter.
- Inadequate staff
- The budget is not flexible – no room for accommodating emergences

Strengths
- Committed and hardworking Conservators
- Availability of Donors to support different activities

What are the actual and potential sources of revenues for the Forest Nature Reserves?

(a) Actual/existing sources of revenues:
- Entrance fees
- Camping fees
- Research fees
- Sales of confiscated forest products
- Compounding fees for other offences
- Photographic fees
- Beekeeping

(b) Potential sources of revenues
- Carbon marketing
- Payment for Environmental Services (PES)
- Reliable accommodation – Building of Eco-Lodge/Hostel
- Project write-ups - sale to Donors
- Fund raising

Effectively market our Nature reserves so as to increase its revenues
- Promotion/marketing of our nature reserves can be done through:-
- Preparing of brochures and distribute them to our main stakeholders e.g. TTB, Tour operators, Hotels and Airports.
- Designing developing and maintaining a Website that provides contextual information and markets the different tourism products and services available in Nilo Nature Reserve – Nilo Nature Reserve has already its website: www.nilonature.go.tz
- TV and Radio programmes, magazines, newspapers and social media like Facebook, Twitter etc.
- Installing signboards of different messages
- Preparation of stickers.

5.7.6 Discussions, questions, clarification and comments based on three nature reserve on financial planning

Comments: During the all presentations the plan and budget they didn't reflect your management plan because everyone said that development of budget based station rangers and then conservator compile it for submission to the zone manager. I propose that during the budget please concentrate on your management plan.
Comment: It seems that the conservator didn’t get a chance to review guideline plans for natural forests in Tanzania. This is your documents you have to make effort to understand the documents because it is tool you’re going to use in your station. Also, during the development of the management plan need more participation of stakeholders and is not matter of conservators to sit alone in the room and started writing or editing the previous.

Comment: Coordination is very important to avoid duplication of efforts but some other donors or NGOs comes with their objectives and specific activities so it very difficult to change them.

Clarification of change the objective of project to link with need of nature reserve; During the proposal development some of NGO or donor does not provide initial funds for proposal development so

most of writers depend on the information have from particular areas or sometime contact through phone. So after writing will become difficult to changes the targets because some donors are not flexible.

Comments: Tour operators have big influence so we have to create a good relation with them so they can advertise our nature reserves. Also it’s better to involve them during the workshop meetings.

Comment: TFS need to focus more on how to improve tourism in nature reserves. should make sure that all nature reserves have a tourism strategy attached to the general management plan of the nature reserve.
6. Lessons learned to improve financial sustainability and equitability of JFM

- Government financial system governing agencies including TFS hinders financial sustainability and equitability of JFM. For example, the percentage of retention fund for TFS is not enough to cover the actual expenses/running costs.
- Planning process (APOS) does not involve all stakeholders especially nature reserves adjacent communities and do not provide opportunities to engage with private sector.
- At national level, there is an uneven allocation of funds among the 7 TFS zones (the more you collect the more you get).
- There is uneven distribution of funds at the Zone level (priority is given to the stations that collects more revenue. (Production forests Vs protective forests).
- Ambiguity on revenue sharing mechanism among stakeholders based on the JFM guidelines. So many things require clarifications including mandate to conservators to share benefits with the communities especially those related to fines/penalties from illegal activities.
- Contribution of the TaFF to TFS operations is poor. For example, none of the nature reserves has received any funding from them.
- Due to insufficient of funds, JFM is yet priority at the TFS HQ.
- Generally revenues from these nature reserves are very low. Therefore the communities are getting very low contribution (benefits) which does not worth their time and resources.
- There is an eco-tourism strategic plan for TFS but it is not well known.
- Challenging to ensure that communities benefit from tourism in a Nature Reserve e.g. employing local tour guides vs tour guides provided by the Tour Operators.
- The tourism market is very competitive. Nature Reserves are competing with the National Parks. Need to find the right niche e.g. focusing on the hiking market.
- Innovation is needed including linking with cultural tourism. Cultural tourism has particular benefits because it brings direct benefits to the communities. There is potential e.g. the Wasambaa dances.
- Tour operators are an important stakeholder for the development of eco-tourism in nature reserves.
- Current Nature Reserve infrastructure is a barrier to tourism including accommodation, roads and communication.
- External support in developing management plans is valuable e.g. WCS support to Rungwe NR.
- Resource mobilisation is missing from the Reserve Management Planning guidelines.
- There are potential negative impacts from eco-tourism that need to be considered in planning.
- Most of the Donors lack co-ordination during planning and disbursement of their fund – top-down approach. We need to be involved right from the planning process.
- Lack of transparency on how much fund has been allocated (budget is not known), no time frame.
- Projects based on donor priorities – consequently is duplication of efforts.
- Lack of sustainability: Most projects phase out and leave no plan for sustainability.
- Donor support is very important in filling financial gaps available from TFS.
- Community willingness in conservation is still minimal.
- Contribution of private sector is not yet pronounced.
- Participation of Local Government is still minimal.
- Over ambitious budget: budget is not realistic - sealing not clear and untimely disbursed.
7. **Recommendations and responsibility for financial sustainability and equitability for JFM**

<table>
<thead>
<tr>
<th>Na</th>
<th>Recommendation</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To raise status of TFS from Agency to Authority so that all revenues collected be retained by the Authority hence improving administration and operation costs</td>
<td>MNRT &amp; TFS</td>
</tr>
<tr>
<td>2</td>
<td>Need to involve all stakeholders in the financial planning processes (APOs) (Communities).</td>
<td>TFS and Conservator</td>
</tr>
<tr>
<td>3</td>
<td>We need Orientation W/ shop to Conservators on how to implement the approved / endorsed JFM guidelines</td>
<td>TFS</td>
</tr>
<tr>
<td>4</td>
<td>Diversify sources of revenues for advanced NRs instead of relaying merely on the TFS allocations</td>
<td>MNRT, TFS (HQ, ZONES, NATURE RESERVES)</td>
</tr>
<tr>
<td>5</td>
<td>Development and implementation of the communication strategies (websites, newsletters, brochures, leaflets, media programs etc)</td>
<td>TFS (HQ, ZONES, NATURE RESERVES), TFCG, UNDP, GEF, EAMCEF</td>
</tr>
<tr>
<td>6</td>
<td>TFS to outsource funds to pay the adjacent communities (at least 2,000,000/year/ village) as their contribution for participating in conservation</td>
<td>TFS (HQ, ZONES, NATURE RESERVES)</td>
</tr>
<tr>
<td>7</td>
<td>TaFF should change its system of supporting conservation activities so that communities and other stakeholders including TFS can effectively benefit</td>
<td>MNRT &amp; TFS</td>
</tr>
<tr>
<td>8</td>
<td>Establishment of Coordination committee with TOR that will oversee issues related to resource mobilization and planning for all stakeholders</td>
<td>TFS, Donors</td>
</tr>
<tr>
<td>9</td>
<td>Realistic budget and timely disbursed fund</td>
<td>TFS HQ</td>
</tr>
<tr>
<td>10</td>
<td>Increased project write-ups for donor funding</td>
<td>Conservator, Head of natural forest</td>
</tr>
<tr>
<td>11</td>
<td>Management plans need to be in place and current. The plans need to include tourism development as a management objective</td>
<td>TFS HQ and Nature reserves</td>
</tr>
<tr>
<td>12</td>
<td>Adequate time and resources are needed for the development of management plans including eco-tourism management plans (e.g. TZS 500,000 is not sufficient to do participatory planning engaging with other stakeholders).</td>
<td>TFS HQ and Nature reserves</td>
</tr>
<tr>
<td>13</td>
<td>NR managements plans need to specify the kind of tourism that is wanted e.g. eco-tourism vs nature tourism vs mass tourism.</td>
<td>Nature reserves and TFS HQ</td>
</tr>
<tr>
<td>14</td>
<td>NR need to have eco-tourism management plans and tourism business plans. There is a need for external support from tourism experts to develop these.</td>
<td>MNRT</td>
</tr>
<tr>
<td>15</td>
<td>Need to bring in experts on tourism to support tourism plan implementation and to train the existing staff.</td>
<td>MNRT, Nature Reserves &amp; TFS</td>
</tr>
<tr>
<td>16</td>
<td>TFS should focus on developing eco-tourism in a few Nature Reserves with the highest potential as a pilot.</td>
<td>MNRT, Nature Reserves &amp; TFS</td>
</tr>
<tr>
<td></td>
<td>Need to identify new attractions including trails, camp sites, and picnic sites. This needs to be done in consultation with experts who understand the market.</td>
<td>TFS, NRs, NGOs and Donors</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>16</td>
<td>Need more coordination between the nature reserves in marketing e.g. have one website for all NRs.</td>
<td>TFS</td>
</tr>
<tr>
<td>17</td>
<td>Need to have functioning phone and e-mails for tourists to make bookings or look at outsourcing to booking agencies.</td>
<td>NRs</td>
</tr>
<tr>
<td>18</td>
<td>Need to link with the tour operators for marketing.</td>
<td>NRs and NGOs</td>
</tr>
<tr>
<td>19</td>
<td>Need to make sure that the fees are realistic e.g. when the fees went up demand dropped.</td>
<td>TFS and NRs</td>
</tr>
<tr>
<td>20</td>
<td>Need to promote the Nature Reserves in the international market e.g. through articles in in-flight magazines</td>
<td>TFS, NGOs and Board of Tourism</td>
</tr>
<tr>
<td>21</td>
<td>Need to work with Tanzania Tourist Board e.g. TTB have funds to support eco-tourism in the northern zone for training and marketing.</td>
<td>NRs, TFS and TTB</td>
</tr>
<tr>
<td>22</td>
<td>Need to participate in tourism marketing events e.g. The Karibu Fair in Arusha.</td>
<td>NRs, TTB and TFS</td>
</tr>
<tr>
<td>23</td>
<td>Need to look at risks and potential negative impacts of tourism and ensure that eco-tourism management plans include risk mitigation strategies.</td>
<td>NR and TFS</td>
</tr>
</tbody>
</table>
8. Recommendations related to the guidelines for preparation of management plans for natural forests in Tanzania

- Better to have separate management planning guidelines for nature reserves. There is a difference between nature reserves and other natural FRs.

- Nature Reserve management planning guidelines should include details on how to develop an eco-tourism management plan and eco-tourism business plan.

- More detailed guidelines are needed on managing fire and invasive alien species in Nature Reserves.

- Management plans for NRs should also help to guide other stakeholders including local government, private sector, NGOs etc.

- More details needed in the guidelines on how to engage other stakeholders in management planning and implementation.

- NR Management planning process needs additional technical support.

- Guidelines should include a section on resource mobilisation.

- Need funding bodies to assist more in funding implementation of the activities that are in the management plans i.e. management plans should include linkages with other funding bodies.

- Guidelines for nature reserve management plans should include specific information about signing agreements with private sector / concession management etc. This should build on experience form e.g. TANAPA.
9. **Lessons learned by the workshop participants**

The participants requested to write down what have learnt in two days. The following topics were listed:

1) Community involvement in PFM planning process is crucial for sustainability
2) The importance of local communities on the management of nature reserves
3) How the insufficient of fund effect the overall management of natural resources
4) Challenges faced by TFS in the implementation of NR management due to financing shortfalls, delays etc.
5) How the communities organise their JFM activities and some of the challenges they face
6) Funding of PAs including NR is still big problem
7) Involvement of more stakeholders is still very crucial
8) Management of NRs relies mostly on external support and less from government
9) How to identify potential sources of revenues and increase incomes
10) JFM guideline still not clear
11) Financial planning is the long process and need more involvement of stakeholders including communities
12) JFM implementation in many nature reserves still not clear
13) Budget constraint is one of the hindrance factor in JFM implementation
14) Coordination and networking is needed in the nature reserves
15) The building capacity is needed in the nature reserves particularly on the issues of tourism
16) Challenges facing implementation of PFM in nature reserves
17) The planning and budgeting of nature reserves is not the issue of conservators and their subordinates but is an issue of all stakeholders
18) Tanzania Nature Reserves not yet has strategy for improve tourism
19) Nature reserves still need donor support
20) The communities are very important in conservation of nature reserves
21) How to improve tourist attraction sites in the local communities area and use of local material, culture and norms to attract tourists
22) Conservation of forest is important than money, so we need to be responsible for our nature
23) If the communities empowered they can improve conservation in the nature reserves
24) Communities and expertise need to trust each other
25) Equitable cost and benefit sharing still a problem because communities still not yet receive their shares from the nature reserves
26) Tree planting is important because one day will be banned to use forest for firewood collection like what happed in Udzungwa National park
27) No transparency in distribution of shares, communities should know how much nature reserves earned per year
10. **Recommendations from workshop participants**

1) Budget should be allocated for VNRCs to implement their planned activities.
2) Planning for financing PAs needs to be widened to involve more stakeholders.
3) More commitment to support the nature reserves from government is essential.
4) More effort needed to involve tourism sector, stakeholders and private sector.
5) Donor to continue supporting nature reserves in terms of financing aspects.
6) More stakeholders need to be involved, for example representatives from the Ministry of Health and Social Welfare.
7) Planning should be done based on the objectives of the nature reserves.
8) Proposal writing should be strengthened at all levels in nature reserves in order to get fund for conservation and improvement of livelihood of surrounding communities.
9) Improvement of tourism activities required for all nature reserves.
10) TFCG should expand to the other areas outside of Eastern Arc Mountains Forest.
11) Workshop like this should involve stakeholder from local government.
12) To build capacity to nature reserves on how to use cultural tourism.
13) To avoid duplication of resources.
14) Commitment is essential to all stakeholders.
15) Village Natural Resources Committee should be improved and trained.
16) Stakeholders should meet frequently to share ideas among the nature reserves in Tanzania.
17) Conservators should be trained on how to use the JFM guideline.
18) JFM guideline needs some improvement particularly issues equity.
Annexes
Annex 1. Workshop concept

The workshop is intended to promote learning, experience sharing and brainstorming on how to improve resource mobilisation and allocation for the management of nature reserves under joint forest management.

Over the last 20 years, the Ministry of Natural Resources and Tourism has up-graded the legal status of some Central Government Forest Reserve to become ‘Nature Forest Reserves’. These forests have exceptional biodiversity values. Most are located in the Eastern Arc Mountains. Over the last few years TFS have allocated more resources to the management of these reserves and in some cases the reserves have established joint forest management with surrounding communities.

TFS have recently published draft guidelines for preparation of management plans for natural forests in Tanzania including a section on finances and budgets. The workshop aims to contribute lessons learned and recommendations to enrich these guidelines.

TFS have also published benefit sharing guidelines for forests under joint forest management; and are currently developing and reviewing management plans for several nature reserves.

Within the natural resources sector, TANAPA also have valuable experiences to share on resource mobilization and allocation in the context of National Parks respectively. Furthermore other stakeholders are interested to support the management of Nature Reserves including funding bodies such as the Tanzania Forest Fund and the Eastern Arc Mountains Conservation Endowment Fund as well as NGOs such as the Tanzania Forest Conservation Group. There are also opportunities for strengthening linkages with private sector particularly in relation to tourism.

Alongside these opportunities, a number of challenges exist in relation to Nature Reserve management including:

- Ongoing deforestation and forest degradation in many nature reserves, in part linked to challenges associated with mobilisation and allocation of operational funds for management activities including joint forest management activities;

- Mobilisation and allocation of adequate funds for the development of the reserves’ physical and human resources.

- An assumption underlying JFM implementation in some contexts, that communities will contribute their labour freely;

- How to strengthen linkages with private sector particularly in the context of eco-tourism.

- How to strengthen linkages with NGO partners interested to support improved reserve management.

- Allocation of funds to community partners engaging in joint forest management in ways that sustain community engagement in JFM and promote more effective JFM.

The workshop aims to bring together stakeholders to deliberate on these issues including representatives from TFS, TANAPA, trust / endowment funds, private sector, NGOs and communities.

A workshop report shall be prepared and circulated.

The workshop is organised through the Adding Value to the Arc project. The project is financed by the European Union.

The workshop will be attended by 30 participants from different institution as indicated below:
1. TFS Representatives (10)
   - Conservator, Mkingu Nature Reserve
   - Conservator, Uluguru Nature Reserve
   - Conservator, Chome Nature Reserve
   - Conservator, Mount Rungwe Nature Reserve
   - Conservator, Nilo Nature Reserve
   - Conservator, Magamba Nature Reserve
   - Conservator, Kilombero Nature Reserve
   - Conservator, Uzungwa Nature Reserve
   - Conservator, Mount Hanang Nature Reserve
   - Conservator, Amani Nature Reserve.

2. Others (7)
   - TANAPA (Park Warden- Mkomazi National Park)
   - Tanzania Forest Fund (Dr. Tuli Msuya)
   - EAMCEF (Francis Sabuni)
   - SUA (Wildlife Dept- Prof. Kideghesho)
   - UNDP (Gertrude Lyatuu)
   - Tanzania Association of Tourism Operators (…)
   - Professor Edwin

3. NGO Staff (7)
   - TFCG ED
   - TFCG TA
   - AVA PM
   - AVA M&E Officer
   - GCCA PFM Officer
   - TFCG Chome NR Project Officer
   - Amani Butterfly Project Manager

4. Community representatives (6)
   Villagers from Mkingu NR, Kanga FR and Amani NR including Masambu collectors and VNRC members
   - 1 VNRC Representative from Dibago Village (Mkingu NR)
   - 1 Masambu collector representative from Gonja Village (Mkingu NR)
   - 1 Tour guide representative from Mafuta Village (Mkingu NR)
   - 1 VNRC Representative from Kanga Village (Kanga FR)
   2 Representatives from Amani NR
## Annex 2. Workshop programme

<table>
<thead>
<tr>
<th>TIME</th>
<th>ITEM</th>
<th>LED BY</th>
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<tbody>
<tr>
<td><strong>DAY 1: THURSDAY 2ND JUNE 2016</strong></td>
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<tr>
<td>08.45-09.00</td>
<td>Workshop opening &amp; objectives</td>
<td>TFCG Executive Director</td>
</tr>
<tr>
<td>09:00 – 09.45</td>
<td>Financial planning for protected areas: a review of best practice and current guidelines.</td>
<td>SUA (Prof J. Kideghesho)</td>
</tr>
<tr>
<td>09.45 – 10.30</td>
<td>Linkages between JFM effectiveness and protected area financial planning</td>
<td>TFCG ED (Charles Meshack)</td>
</tr>
<tr>
<td>10.30 – 11.00</td>
<td><strong>TEA BREAK</strong></td>
<td>ALL</td>
</tr>
<tr>
<td>11.00 – 11.45</td>
<td>Financial planning in National Park management including fund allocation for community outreach and linkages with private sector and NGOs: experiences and lessons learned.</td>
<td>TANAPA (Deogratius Ndelolia, Mkomazi NP).</td>
</tr>
<tr>
<td>11.45 – 12.30</td>
<td>Financial planning in Amani Nature Reserve including funding for joint forest management and linkages with private sector, NGOs and EAMCEF: experiences and lessons learned</td>
<td>Amani NR Conservator (Isack Bob Matunda)</td>
</tr>
<tr>
<td>12.30 – 12.45</td>
<td>How EAMCEF is supporting the management of Nature Forest Reserves</td>
<td>EAMCEF (Francis Sabuni)</td>
</tr>
<tr>
<td>12.45 – 13.00</td>
<td>How the Tanzania Forest Fund is supporting protected areas</td>
<td>Tanzania Forest Fund (Dr. Tulia Msuya).</td>
</tr>
<tr>
<td>13.00 – 14.00</td>
<td><strong>LUNCH</strong></td>
<td></td>
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<tr>
<td>14.00 – 15.00</td>
<td>Financial Planning for Nature Reserves</td>
<td>Group work including 1 group of community representatives focusing on JFM planning processes; and 1 group looking at linkages with other stakeholders including private sector, NGOs and Funds such as EAMCEF.</td>
</tr>
<tr>
<td></td>
<td>- Mapping the budgeting / fund allocation / resource mobilisation processes at present</td>
<td></td>
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<td></td>
<td>- Strengths and weakness in the current process</td>
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<tr>
<td>15.00 – 16.00</td>
<td>How much does it cost to manage a Forest Nature Reserve under Joint Forest Management?</td>
<td>Group work including 1 group of community representatives focusing on community costs for VFMA management</td>
</tr>
<tr>
<td>16.00 – 16.30</td>
<td>What are the actual and potential sources of revenue for Forest Nature Reserves? – Working Group</td>
<td>Group work including 1 group of community representatives focusing on JFM revenues</td>
</tr>
<tr>
<td>16.30 – 17.00</td>
<td>Group presentations and discussion</td>
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<tr>
<td><strong>17.00</strong></td>
<td>END OF DAY TWO</td>
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</tr>
<tr>
<td><strong>Day 3: Friday, 3rd June 2016</strong></td>
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<tr>
<td>09.00 – 10.30</td>
<td>Community meeting with members of the Amani NR JFM committee to discuss lessons learned on JFM revenue sharing with a focus on Amani NR</td>
<td>Interactive session with Amani NR community representatives</td>
</tr>
<tr>
<td>10.30 – 11.00</td>
<td>Tea Break</td>
<td></td>
</tr>
<tr>
<td>11.00 – 13.00</td>
<td>Comparing costs and revenues for nature reserve financing; and identifying ways to bridge the gap.</td>
<td>Working Group including 1 group of community representatives focusing on JFM planning processes</td>
</tr>
<tr>
<td>14.00 – 16.00</td>
<td>Lessons learned the guidelines on NR management planning and JFM benefit sharing.</td>
<td>Working groups</td>
</tr>
<tr>
<td>16.00 – 16.30</td>
<td>Way Forwards</td>
<td></td>
</tr>
<tr>
<td><strong>16.30 – 17.00</strong></td>
<td><strong>Workshop evaluation and closing remarks</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Annex 3. List of participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anson A. A.</td>
<td>0702335051</td>
</tr>
<tr>
<td>Emily E. S.</td>
<td></td>
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<tr>
<td>Salama K. E.</td>
<td></td>
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<tr>
<td>Elisa T. M.</td>
<td></td>
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<tr>
<td>Hassane C.</td>
<td>0724375957</td>
</tr>
<tr>
<td>Alaa M. K.</td>
<td>0781575784</td>
</tr>
<tr>
<td>Fatma S.</td>
<td>0713785858</td>
</tr>
<tr>
<td>Daniel D.</td>
<td>075453409</td>
</tr>
<tr>
<td>Delilah D.</td>
<td>074291111</td>
</tr>
<tr>
<td>Eugene E.</td>
<td>0764574573</td>
</tr>
<tr>
<td>Donald D.</td>
<td>0781585850</td>
</tr>
<tr>
<td>Yosif Y.</td>
<td>070808345</td>
</tr>
<tr>
<td>Joseph K.</td>
<td>070803333</td>
</tr>
<tr>
<td>Deborah M.</td>
<td>070803333</td>
</tr>
</tbody>
</table>

By J. R. Kideghesho, Sokoine University of Agriculture, Morogoro, Tanzania

Protected area

- **DEFINITION (CBD, 1992):**
  - A protected area is "a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives."

Protected areas

Protected areas are intended to meet one or more of the following purposes:
- scientific research; education; wilderness protection;
- preservation of species and genetic diversity;
- maintenance of environmental services;
- protection of specific natural and cultural features;
- tourism and recreation;
- sustainable use of resources from natural ecosystems; and
- maintenance of cultural and traditional attributes

- Each of these management purposes is related to a category of protected areas i.e., groups of protected areas assigned to cater for specific purpose or objective.

Protected area network in Tanzania

Area under legal protection has expanded exponentially:

- >30% as wildlife PAs and >15% Forest PAs
- The area covered by NPs, NCA & GRs has increased by 162%

  - from 50,000 km² in 1922 to 188,500 km² in 2015

### Tanzania’s Protected areas network

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Area (sq. km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature Reserves</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>National Parks</td>
<td>16</td>
<td>57,365</td>
</tr>
<tr>
<td>Ngorongoro CA</td>
<td>1</td>
<td>8,292</td>
</tr>
<tr>
<td>Game Reserves</td>
<td>28</td>
<td>114,783</td>
</tr>
<tr>
<td>Forest Reserves</td>
<td>50 (est)</td>
<td>99</td>
</tr>
<tr>
<td>Game Controlled Areas</td>
<td>42</td>
<td>50,565</td>
</tr>
<tr>
<td>WHAs</td>
<td>38</td>
<td>26,918</td>
</tr>
<tr>
<td>Ramsar Sites</td>
<td>4</td>
<td>48,684</td>
</tr>
</tbody>
</table>

International protection category

World Heritage Sites: (Selous GR, Kilimanjaro NP, Serengeti National Park, Ngorongoro Conservation Area)

Biosphere Reserves: (Serengeti National Park, Ngorongoro Conservation Area, Lake Manyara NP na Amani NR)

Protected area network in Tanzania

Management challenges are also increasing:
➢ Conflicts with humans
➢ Human population growth
➢ Poverty
➢ Illegal grazing
➢ Illegal hunting and
➢ Lumbering
➢ Climate change
➢ etc etc etc...

National development agenda
❖ Tourism - important economic engine and a development strategy for TZ
❖ PAs are key destinations of tourism industry. >80% of Tanzania’s tourism is nature-based.
❖ PAs have to improve local economy
  ➢ demonstrate that they can compete effectively with alternative land uses which are ecologically destructive

National development agenda

“I personally am not interested in animals. I do not want to spend my holidays watching crocodiles. Nevertheless, I am entirely in favour of their survival. I believe that after diamonds and sisal, wild animals will provide Tanganyika with its greatest source of income. Thousands of Americans and Europeans have the strange urge to see these animals” (Source: Nyerere 1961)

Need for financial resources
❖ Accomplishment of different objectives and tasks in PAs requires financial resources
❖ Financial resources in our PAs are scarce
❖ Only few PAs can generate adequate financial resources to meet their conservation priorities

Need for financial resources
➢ For instance: The activities of Tanzania’s 16 national parks are financed by 3 parks only: Serengeti, Kilimanjaro, Lake Manyara (or Tarangire??)

Need for financial Planning
❖ Need to prioritize
❖ Identifying new sources
  ➢ FINANCIAL PLANNING

What is financial planning?

It is an ongoing process to help managers to
➢ make sensible decisions about money that can help them to determine how a protected area can afford to achieve its strategic goals and objectives

Objectives of financial planning
**What is a paper park?**

- A ‘Paper park’ is a legally established PAs where current protection activities are insufficient to halt degradation.
- PAs exist on maps and in legislation but offer very minimal protection of natural resources and biodiversity.

**Is your NR not a ‘Paper Park’?**

**Financial planning roadmap**

1. National development & Conservation agenda
   - PA resources should contribute to GDP
2. PA Management Plan
   - Challenges, objectives, strategies and action plan
3. Financial assessment (needs/gaps)
4. Feasibility assessment of financial mechanisms
5. Formulation of financial plans with business principles
Financial analysis consists of quantifying the financial needs and gaps of an individual protected area or protected area system.
How much do we need?
How much do we have?
How much we do not have?

Financial Analysis

It covers a number of aspects, the most important of which are:
1. the analysis of protected area costs,
2. the review of different income sources,
3. the determination of current and potential resource use, and
4. the identification of cost-reduction opportunities; and
5. Determining the financial gap.

These financial elements

1. Make it possible to establish the size of the existing financial gap that must be covered to meet conservation priorities;
2. Facilitate the identification, design, and implementation of appropriate strategies for sustainable financing of PAs,

IDENTIFYING NEW SOURCES OF REVENUES

1. Valuing goods and services of a PA:
Traditionally these values are categorized according to their “use value”:
   a) Direct Use Values (DUV)
   b) Indirect Use Values (IUV)
   c) Option Value (OV)

IDENTIFYING NEW SOURCES OF REVENUES

2. Ranking key goods and services at a PA
Goods and services at a protected area that have the highest potential become the focus of a conservation finance mechanism at the site-level.

   1. Identifying consumers of key goods and services
Consumers are identified as part of the analysis of which stakeholders are crucial to the creation of an effective finance mechanism.
Consumers may be local communities, tourists, downstream beneficiaries of watershed services, hunters, biologists, global customers etc.

IDENTIFYING NEW SOURCES OF REVENUES

4. Identifying markets for key goods and services
   - Along with existing beneficiaries, it is important for a PA manager to identify the potential beneficiaries of a PA and also build them into the financial plan for the protected area in a way that is compatible with conservation goals.
1. Each good or service to be converted into revenue for conservation must have a market with a financial capacity to pay.

2. Having identified consumers for each good and service at a site, YOU NEED TO identify those consumer groups that have the greatest potential to pay for conservation at that site.

3. Rank consumer groups according to set criteria – including ability to pay, precedents for payment etc – in order to identify those markets with the greatest potential to pay for each good and service.

IDENTIFYING NEW SOURCES OF REVENUES

❖ The purpose of identifying a consumer base is to ultimately tap into markets that can provide sustainable income flows to secure the long-term financial sustainability of the protected area.

❖ Having markets is not an end in itself. It is therefore very important to ensure that any consumer base is compatible with the management objectives and other users of the protected area.

❖ It should also be compatible with the social, cultural, legal, institutional and geographic context of the protected area.

IDENTIFYING NEW SOURCES OF REVENUES

6. Identifying appropriate finance mechanisms

Finance mechanisms are tools designed to raise, generate, or mobilize funds to cover the different costs related to the implementation of conservation programs.

They contribute in building financial management capacity

1. Government Appropriations
Funds appropriated in national budgets for protected area management agency

2. Taxes, Levies, Surcharges
Fees and levies imposed on certain classes of activities, sales or purchases

3. Entry Fees
Charge for visitation, usually “per person” or “per vehicle”; may include such variations as seasonal or annual passes, charges to tour firms bringing escorted groups

Sources of financial mechanisms

4. Leases and Concessions
Legally binding agreements between the entity with authority over the protected area and private organizations or entrepreneurs, who market goods and services related to the protected area and return some share of the profits, or a flat fee

Sources of financial mechanisms

5. Retention Schemes
A PA is allowed to retain percentage of revenues generated from different sources (photographic tourism or hunting) in order to meet its management responsibilities.

Selous GR (50% of its revenues)

Amani NR Conservation Fund (100%?)

6. Endowment funds
A fund established in order to support conservation and management activities of PAs

5. Cause-related Marketing
❖ Sale of mostly intangible items (membership, “adopt an Acre,” voluntary add-ons to hotel and restaurant bills, etc.) whose primary value is the purchaser’s knowledge of having helped conservation

6. **Biodiversity Prospecting**
Contracts in which a pharmaceutical company or other entrepreneur secures rights to genetic resources (plant materials collected and processed for analysis) in return for cash payments and/or royalties on any medicines/products that may be developed

7. **Debt-for-Nature Swaps**
Transactions involving the forgiveness or buy-back of foreign debt in return for commitments to conservation (usually local-currency payments into a conservation project or fund)

8. **Global Environment Facility**
A funding mechanism that supports activities under the Biodiversity and Climate Change conventions, implemented by World Bank, UNDP, and UNEP

9. **Bilateral and multilateral Donors**
Aid agencies of developed countries, e.g. USAID, JICA, GTZ, EU etc.

10. **Philanthropic Foundations**
Grant-giving organizations

11. **Corporations**
Sponsorship or other types of voluntary payments by companies

12. **Individual Donations**
Gifts by individuals through a variety of mechanisms – direct gifts, memberships, wills and bequests, etc.

**Sources of financial mechanisms**
- Conservation Funds
- Tanzania Wildlife Protection Fund
- Tanzania Forest Fund

**Prioritizing finance mechanisms**
❖ Once potential financing mechanisms have been identified as viable for a particular protected area, a park manager must prioritize among them;
❖ One method of prioritizing compares the ease of implementation with the relative benefits (be they financial, programmatic or overall),

**Prioritizing among finance mechanisms**
Summary: Identifying new sources of revenues

Factors crucial to building a financially sustainable system include

❖ skilled personnel who can analyze financial needs and opportunities, and select approaches appropriate to each area;
❖ infrastructure sufficient to the needed management and visitor services, including accommodations, communications, and transportation;

Factors crucial to building a financially sustainable system include

❖ a policy environment in which necessary actions (such as dedicating revenues to the system) can be accomplished; and
❖ developing systems for community participation.
❖ Private sector involvement is important
❖ Effective marketing strategy

Feasibility Stability

Box 7. Reasons Why a Feasibility Study Should or Should Not Be Carried Out

Commonly-cited reasons for not carrying out a feasibility study:

n The protected area managers trust that the financial mechanism is feasible simply because other parks are already using it.
n If another feasibility study already exists from previous years, why do another one?
Feasibility studies are simply ways for consultants to make money.
n The feasibility study has already been carried out by the company that will be in charge of implementing the financial mechanism.
The feasibility study can be conducted internally using park staff.
Feasibility studies are a waste of time. It is better
to concentrate on conducting a survey, increasing park entrance fees, and allocating resources for urgent needs.

Feasibility study

Reasons for carrying out a feasibility study:
It serves to:
- Define the scope of the project.
- Identify the best business operating model.
- Reveal new opportunities through a research process.
- Identify reasons not to proceed.
- Increase the possibility of success by identifying risk-mitigating factors.
- Provide updated and accurate information for better decision making.
- Expand possibilities for investment in protected areas.
- Verify that opportunities for success and failure were investigated in sufficient detail.
- Help to secure financing from investors or donors.

Adapted from the article “What is a feasibility study?” published by Iowa State University. For further details, see: www.extension.iastate.edu/agdm/wholefarm/html/c5-65.html

AHSANTENI & MUBARIKIWE
Annex 5. Presentation 2. Linkages between JFM Effectiveness and Protected Area financial planning by Charles K. Meshack

Workshop on lessons learned on resource mobilisation and allocation for Nature Reserves under Joint Forest Management

Amani Nature Reserve
2nd – 3rd June 2016

Linkages between JFM effectiveness and protected area financial planning
Presented by Charles Meshack
Tanzania Forest Conservation Group
02nd June 2016

Presentation summary
Overview of Participatory Forest Management in Tanzania
Challenges of JFM in Tanzania
Challenges of linking JFM and PA financing planning
Lessons learned and recommendations

Participatory forest management in Tanzania
Two main approaches to participatory forest management in Tanzania:
1) Joint Forest Management = Gov’t + Communities jointly manage gov’t reserves
2) Community Based Forest Management = Communities manage forest on village land

Official Area under JFM = 1,612,246 ha in 210 Gov’t FRs
Official Area under CBFM = 2,060,608 million ha in 382 VFRs

JFM forests are in better condition than non-JFM forests
Comparative studies have found:
- Increases in basal area and volume over time in forests under JFM relative to declines in both variables in non-JFM forests;
- Lower rates of pole cutting and timber harvesting in forests under JFM than in non-JFM forests.

But traditional forest management = zero in-situ management for many forest reserves

Challenges of JFM in Tanzania
- Many joint management agreements are not signed.
- Inadequate cost and benefit sharing mechanism.
- Low revenues for protective reserves mean that communities would receive negligible amounts even if benefit sharing was functioning.
- Management budget for most reserves is zero so there is little opportunity for ‘joint’ actions.
- Elite capture by some community members may contribute to improved management effectiveness but undermines the broader development objective of JFM.
- Mechanisms are not in place to hold government accountable for forest condition.

Challenges of linking JFM and PA Financing Planning
JFM is about:
- Increasing cost to the communities with no direct benefits
- Improving forest condition

PA Financing Planning is about:
- Increasing Forest Accountability (Forest governance)
- Allocating resources to communities to perform forest management activities
For JFM to be successful, there is a need to define clearly the rights, returns and responsibilities for each stakeholder in JFM.

**Lessons learned**
- JFM is an important way in which village governance can be strengthened
- Limited or negligible livelihood benefits are being generated from JFM.
- Failure to legalize many JFM agreements may be undermining its potential impacts.
- The Current JFM model does not deliver adequate, reliable and accessible funds

**Recommendations**
- JFM should continue to be a strategy to achieve the forest condition, livelihoods and governance BUT needs to be accompanied by strategies that directly address the relevant deforestation driver.
- TFS should take steps to speed the approval and legalisation process within JFM.
- Adequate, reliable and accessible finance needs to be made available to communities
- The Tanzania Forest Service and Tanzania Forest Fund need to adopt a different approach to forest management that rewards improvements in forest condition.

Thank you for listening.

For more information please visit: [www.tfcg.org](http://www.tfcg.org)
EASTERN ARC MOUNTAINS CONSERVATION ENDOWMENT FUND (EAMCEF)

MFUKO WA HIFADHI YA MILIMA YA TAO LA MASHARIKI

EAMCEF SUPPORT FOR CONSERVATION AND MANAGEMENT OF PROTECTED AREAS IN THE EASTERN ARC MOUNTAINS OF TANZANIA

By Raymond Killenga

• Overview
• Eastern Arc Mountains (EAMs)
• The EAMCEF
• Financial Support for Protected Areas in the EAMs
• Challenges

BACKGROUND

The Eastern Arc Mountains (EAMs)

• The Eastern Arc Mountains (EAMs) are a long chain of ancient mountains stretching from Southern Tanzania to South Eastern Kenya. It comprises of thirteen mountain blocks that form a broad arc that is 600 kilometres in length and covers an area of 23,000 square kilometres.

• The mountains include the North and South Pare, West and East Usambara, Nguu, Nguru, Ukaguru, Uluguru, Malundwe, Rubeho, Udzungwa and Mahenge in Tanzania as well as Kenya’s Taita Hills.

• The Eastern Arc is recognized globally as part of one of the 34 biodiversity hotspots characterized by high concentrations of endemic species now under serious threat.

• The biodiversity of the Eastern Arc Mountains is of great value locally and globally for mitigating the impacts of climate change and rural poverty.

• The Eastern Arc Mountain forests cover several major catchment areas which collectively provide water for many regions such as Morogoro, Dodoma, Iringa, Coast, Tanga and Dar es Salaam and most of the major industries in the country.

• In total, these mountain catchments supply water to over 25% of the Tanzania Mainland population.

• About 60% of Tanzania’s hydroelectricity is generated by Kidatu, Kihansi, Nyumba ya Mungu, Hale and Mtera hydropower stations.

• These hydropower stations use water whose sources are the Eastern Arc Mountain forests.

• Thus the bulk of hydroelectricity energy production in Tanzania is heavily dependent on maintaining the integrity of these forests.

• Due to high rainfall and fertile soils the Eastern Arc Mountains are famous for large scale agriculture, e.g. sugarcane (Kilombero and Mtibwa Sugar Estates), tea in Amani, rice in Kilombero and Mtibwa as well as tree plantations.
• The Eastern Arc Mountains harbour a number of wildlife which is an important tourist attraction e.g. Udzungwa Mountains National Park and Amani Nature Reserve

• Despite their importance, the Eastern Arc Mountains (EAMs) are listed among the endangered eco-regions of Africa, together with the lowland coastal forests of East Africa, and are predicted to enter the critically threatened list of eco-regions in the next 20 years due to degradation

The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF)

• As one of the Government strategies to intervene the degradation, the EAMCEF was established through the Ministry of Natural Resources and Tourism under financial support from the World Bank and Global Environment Facility

• The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is a Trust Fund established as a mechanism to provide long-term reliable support for Community Development, Conservation Projects and Research Activities, which promote the biological diversity, ecological functions and sustainable use of the natural resources in the Eastern Arc Mountains of Tanzania.

• The main intention of establishing the Trust Fund is to address the need for a long-term sustainable approach to funding the conservation of forest biodiversity in the important ecosystem.

• EAMCEF’s vision is that *Eastern Arc Mountains and the people who depend on them live in harmony as one sustainable ecosystem*

• Activities which contribute to the promotion of economic development and social welfare of the local communities in the target areas are given high priority for funding by EAMCEF.

• The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is a joint initiative of the Government of Tanzania, the World Bank and the Global Environment Facility (GEF).

• EAMCEF was officially registered in Tanzania on 6th June 2001 under the Trustees’ Incorporation Act (Cap. 318 R. E. 2002).

• Governed by a Board of Trustees (BOT), the Fund operates as a Trust Fund Organization.

• Its day-to-day operations are run by the Endowment Fund Secretariat (EFS) based in Morogoro and headed by an Executive Director (ED).

• Initially EAMCEF operated as a component of the World Bank financed project under the Ministry of Natural Resources and Tourism – the Tanzania Forest Conservation and Management Project (TFCMP). Under the TFCMP, EAMCEF used a 2.4 mil. US$ credit facility to finance activities and operations of its 7 years first phase (2002 – 2009), the establishment phase.

The establishment phase also issued grants to 2 sites under three key thematic areas:

• Community based conservation and development
• Protected areas management and climate change mitigation
• Applied biodiversity and climate change research
• Funds Allocation
• EAMCEF allocates 50% of its grants budget to Community Development Activities, 35% to Protected Areas and 15% to Applied Research Studies
• EAMCEF offers a maximum of Tshs. 35mill. and a minimum of Tshs 3.5mill for macro and micro grants respectively in a single year.

• The main beneficiaries during the 1st phase were Amani, Nilo, Kilombero and Uzungwa Scarp Nature Reserves. Community Development and applied Research Projects were also funded in 6 Districts (Kilolo, Mufindi, Kilombero, Muheza, Korogwe and Mkinga)

• Funding of the second phase was initially planned to come mainly from incomes generated from the investment of the endowment capital secured from the GEF commitment of US$ 7.0 mil. as well as additional resources acquired from other sources through fundraising activities.

• Following the end of WB/TFCMP support in December 2009, EAMCEF operations and programme activities continued at a modest level using resources withdrawn from its capital investment. Some financial support was also provided by the MNRT

• In May 2011, EAMCEF secured a grant from the Royal Government of Norway through its Embassy in Dar Es Salaam for past five years, June 2011-May 2016, totalling US$ 5, 947,700.00

• The grant enhanced the EAMCEF to extend its support from the earlier 2 target sites to 9 target sites i.e. Amani, Nilo, Kilombero, Uzungwa Scarp, Uluguru, Mkingu, Magamba & Chome Nature Reserves, and the Udzungwa Mountains National Park

• Since 2011 therefore, a total of Tshs 224Mill. has been allocated to the 9 target sites per year for management of 8 Nature Reserves and the Udzungwa Mountains National Park as follows:

<table>
<thead>
<tr>
<th>S/No</th>
<th>Nature Reserve/National Park</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amani Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Nilo Nature Reserve</td>
<td>22,000,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Kilombero Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Uzungwa Scarp Nature Reserve</td>
<td>26,000,000.00</td>
</tr>
<tr>
<td>5</td>
<td>Chome Nature Reserve</td>
<td>28,000,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Uluguru Nature Reserve</td>
<td>25,000,000.00</td>
</tr>
<tr>
<td>7</td>
<td>Magamba Nature Reserve</td>
<td>26,000,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Mkingu Nature Reserve</td>
<td>24,000,000.00</td>
</tr>
<tr>
<td>9</td>
<td>Udzungwa Mountains National Park</td>
<td>25,000,000.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>224,000,000.00</strong></td>
</tr>
</tbody>
</table>

- The funds were mainly used for Routine Forest Management and Ecotourism activities in the Target Sites i.e. boundary clearing, planting & weeding; fire-line maintenance, slashing of agriculture and narcotic crops in the reserves; enrichment tree planting; rehabilitation of mining areas in the reserves; surveillance; development and management of nature trails for ecotourism, development and management of camp and picnic sites; rehabilitation of rest houses and information canters, training of local tour guides etc.

- In order to reduce pressure from the protected areas, EAMCEF also supports livelihood improvement projects for the communities living adjacent to the protected areas such as beekeeping, tree planting, animal husbandry (dairy cows, dairy goats, piggery, improved chicken), horticulture, soil conservation, fish farming, etc.

**Challenges**

- Limited funds
- Ongoing degradation although at an improved level

1. Introduction

Legal status and history

- Amani Nature Reserve (ANR) was officially gazetted on 8th May, 1997 under Government Notice No. 151 and 152, as a Central Government Forest Reserve under Forest and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism. Amani Nature Reserve was created from amalgamation of gazetted six Forest Reserves decades ago namely; Kwamkoro, Kwamsambia, Mnyuzi scarp, Amani Zigi, Amani East and Amani West, the oldest ones existed back to the 1920s. However, their legal status was considered insufficient for an area of such high biodiversity conservation values and hence has to be combined to form Amani Nature Reserve proposed which was later on gazetted.

Ownership and administration

- Amani NR is owned by the Central Government, Tanzania Forest Services Agency (TFS) under the Ministry of Natural resources and Tourism. The immediate in charge of the reserve is the Conservator of Amani Nature Reserve. The conservator has to report to the Northern Zonal Manager TFS (Same HQ). The administrative and managerial structure is divided into four (5) ranges namely Kwamkoro, Amani, Zigi Mashewa and Mnyuzi. These stations are managed by Range in charge

Size and Boundary

- Amani Nature Reserve has the total area of 8,380ha. The boundary has a length of 149 km. The boundary is demarcated by beacons and planted with Teak and Eucalyptus trees.

- Buffer zones around ANR promote sustainable land and natural resource use practices through implementation of the Village Resource Management Plans, farm forestry activities including tree planting and income generating activities. The objective of the buffer zones is to decrease the dependency of the local communities on the natural resources of ANR and contribute to the social and economic development of the communities. Buffer zone can be found outside or inside the enclaves of the ANR.

- The buffer zones area of the Nature reserve is 310 ha. It boarders 20 villages and the local residents have the right to utilize the resources of the buffer zones. One corridor namely Derema forest reserve has been established and gazetted. It connects conservation values of ANR and Kambai forest reserve; its finalization will add 956 ha to the Nature Reserve.

JFM IMPLEMENTATION

JFM implementation in Amani NR

- Amani NR is surrounded by 20 buffer zone villages as summarized in the table below.

JFM implementation cont…

Participatory Rural Appraisal (PRA)

- The whole process start with PRA-VGT-Village Resource Management plan(VRMP)-Village Environmental Committee(VEC)-Memorandum of Understanding (MOU) -Village Conservation Development Committee (VCDC)
PRA considered all sectors of village development, special emphasis was given to natural resources matters as well as the expectations concerning the ANR management. The aim was to identify the best alternatives and developing strategies concerning sustainable utilization of natural resources and environmental services.

Village Resource Management Plans (VRMP) has been prepared for each village to guide the villages’ development activities. In the VRMP’s, the villagers have been able to identify problems and opportunities of their villages. An action plan arising from VRMP will continue to be supported by ANR management.

In Amani NR we have 20 VNRC that’s to say from each village and one VNRC consist of 15 members including the Chairman and secretary

The chairman and secretary of each VNRC are members in the VCDC

And VCDC members elect their Chairman and secretary

The conservation of the ANR will not succeed without the support of local communities. Therefore, the involvement of local communities in the decision making and management of the ANR is essential. Benefit sharing mechanisms established by ANR contribute to the local communities’ economic development and promote ecologically sustainable production and utilization of natural resources.

The responsibilities of the Environmental Committees in relation to the implementation of the ANR management under MOU:

To supervise and control the utilization of forest products in the ANR;

To ensure that the regulations concerning the conservation and utilization are obeyed as stipulated in the by-laws and MoU

Keep record on the amount of forest products collected and records on implementation of VNRMP’s and present them to VCDC and ANR Conservator.

Report to the VCDC and ANR Conservator about offences against the ANR regulations.

Promote the implementation of Village Resource Management Plans

Advice the village council on conservation and utilization of natural resources

In case of conflicts between the village and ANR, resolution is sought in three levels of decision making that is at the village council, VCDC and then to the Advisory Board. If resolution is not met, the ANR Regulations usually holds. The offences made by individuals in the village or by staff of ANR are dealt with by using the existing laws as stipulated in the MoU.

Instruments to facilitate community participation

The ANR aims at frequent communication between the ANR management and the local communities in the implementation of the management plan and on decision making concerning the ANR management. The ANR management strategy is transparent in order to guarantee active participation, openness and confidence of the local communities. However, this needs to be strengthened by comprehensive extension activities which make the Rules, Regulations and Management Plan of ANR known to the stakeholders.

Community participation in decision making has been considered in all three levels namely
In implementing daily activities at village level (Environmental Committee)

- Co-ordination and overseer of implementation in all villages (VCDC)
- In decision making at higher level (Advisory Board).

In each level of participation, gender and social groups within the respective society will be taken into consideration. Village Environmental Committee (VEC) is considered to be key player in linking implementation of VNRMP and the ANR Management Plan. All these parties are bounded by Memorandum of Understanding (MoU) signed by both parties.

Local communities usually are prepared to deliver good services to tourist in order to improve the cultural tourism. Local guides have received training and motivation in order to deliver good services to the tourist. Services rendered by ANR rest houses and restaurant, fees paid for entrance, guiding and camping fees, films, guidebooks, and other products as souvenirs are normally adjusted annually based on the inflation and devaluation of Tanzanian Shilling.

All fees stipulated in the Forest act and its subsidiary legislation has been instituted accordingly. These include entrance, research, camping, and such alike should be paid for. Private investors will be encouraged to invest in various ways in tourism industry at Amani. Private hotels, lodge, camp sites and handcraft makers should be given the priority. The local communities are entitled to a share of the revenues generated from the tourism, research and other activities in the ANR as stipulated in the Cost benefit sharing mechanism. The size of the share (20 %) is as approved in the stakeholders workshop and is shared once annually.

**Private and Government sect Initiative**

At the upper plateau particularly in Amani Division, the degraded tea estates were restored under the private sector initiatives. The tea out grower scheme started to be introduced, and some more areas formally used for peasant agriculture was turned to protected forest reserves.

Tanzania Forest Research Institute (TAFORI) conducts forest research activities in Amani Botanical Garden, Kwamkoro arboretum and other parts of the ANR;

National Institute of Medical Research (NIMR) conducts research activities in Enclave I of the ANR. It has a title deed to an estate of 132 ha, which includes those parts of the Amani Botanical Garden which fall outside the ANR.

Mlingano Agricultural Institute conducts fruits and spices research in the Amani Botanical Garden (15ha).

**Participation of stakeholders in four levels of management**
The forests of the East Usambara are nationally and globally important for their water catchment properties and high biodiversity values. Amani Nature Reserve as a Government institution faces many challenges; in recent years, it was observed illegal alluvial gold mining, timber harvesting...
being the major problems in most of areas of Amani Nature Reserve others were forest fire, pouching, encroachment, invasive species and poor infrastructure like tourist’s accommodation and road, inadequate advertisement of eco – tourism attractions and inadequate working facilities.

These forests contain endemic flora and fauna. The East Usambaras, particularly Amani nature reserve is the source of the Zigi River which feeds the Tanga municipality. Both the biodiversity values and the catchment values have been threatened by the illegal timber harvesting, pouching and influx of miners.

Villages with their challenges

<table>
<thead>
<tr>
<th>Village</th>
<th>Problem</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mlana</td>
<td>Lack of forest products &amp; Wetland destruction</td>
<td>Agroforestry intensified; Law enforcement; Awareness rising; Rehabilitation of degraded areas.</td>
</tr>
<tr>
<td>Ubiri</td>
<td>Lack of forest products, Fire, Wetland destruction</td>
<td>Intensify agroforestry; Establishment of woodlots; Law enforcement; Awareness rising &amp; Rehabilitation of degraded areas</td>
</tr>
<tr>
<td>Mikwinini</td>
<td>Lack of forest products, Water pollution from the chemicals from tea estates and lack of land for Agriculture</td>
<td>Intensify agroforestry; Law enforcement; Awareness rising; Rehabilitation of degraded areas &amp; Application of Intensive farming.</td>
</tr>
<tr>
<td>Kwagundu</td>
<td>Fire, Vermin, Inadequate forest produce</td>
<td>Law enforcement; Awareness raising. Establishment of legal local vermin control unit; Intensify Agroforestry; Establishment of fuelwood stand.</td>
</tr>
<tr>
<td>Magungua Cheko</td>
<td>Fire, Vermin, Inadequate forest produce</td>
<td>Law enforcement; Awareness raising Establishment of legal local vermin control unit; Intensify Agroforestry; Establishment of fuelwood stand.</td>
</tr>
<tr>
<td>Pooce Mipani</td>
<td>Fire, Lack of cash crop &amp; Lack of land for agriculture</td>
<td>Law enforcement; Awareness rising. Introduce the new cash crop in the area. Develop alternative source of income.</td>
</tr>
<tr>
<td>Mbomole</td>
<td>Wetland destruction</td>
<td>Law enforcement; Awareness raising; Rehabilitation of degraded areas.</td>
</tr>
<tr>
<td>Shumbu kopori</td>
<td>Inadequate land for agriculture &amp; Inadequate supply of forest products</td>
<td>Application of Intensive farming; Agroforestry techniques; Establishment of woodlots.</td>
</tr>
<tr>
<td>Magoda</td>
<td>Wetland destruction for cultivation</td>
<td>Law enforcement; Awareness raising; Rehabilitation of degraded areas; Application of Intensive farming.</td>
</tr>
<tr>
<td>Sebomeza</td>
<td>Wetland destruction through illegal mining and cultivation</td>
<td>Law enforcement; Awareness raising; Rehabilitation of degraded areas.</td>
</tr>
<tr>
<td>Kimbo</td>
<td>Inadequate land for extensive agriculture</td>
<td>Application of Intensive farming. Alternative sources of income; Agroforestry techniques.</td>
</tr>
<tr>
<td>Tea estate land</td>
<td>Wetland destruction, Use of chemicals</td>
<td>Agreed in the MoU; Law enforcement and Awareness.</td>
</tr>
<tr>
<td>NIMR Estate</td>
<td>Animal grazing</td>
<td>Agreed in the MoU; Law enforcement.</td>
</tr>
</tbody>
</table>

The communities collect forest products, such as fuelwood, medicinal plants and vegetables in the ANR. The pressure towards utilizing forest products from the ANR is considerable, even though the people are aware of the forest conservation needs.

The geographical location of the Amani Nature Reserve in relation to local communities provides a great challenge in the management of natural resources both inside and outside the reserve. The ANR is surrounded by villages with a dense population. The need for more farmland and forest resources has risen along with the growth of population and has resulted in accelerated deforestation of ungazetted forests in many areas.

Fire is often used in the farmlands for land preparation, and it sometimes causes forest fires in the ANR. More effective farming methods are required to ensure efficient use of land.

Furthermore, cardamom, one of the superior cash crops in the area, has for a long time threatened the forests. Cultivation involves clearing the forest undergrowth and smaller trees, with the establishment of cardamom under a canopy formed by the remaining large trees.
Villagers depend on subsistence farming of food or cash crops for their living. The farming methods practiced is still poor, soil conservation activities such as terracing as well as manuring and other soil improvement practices are not commonly used. This leads within a few years to soil infertility and hence to low crop production. Once the soil is exhausted the area is abandoned, which creates further pressure on forest land in search for more fertile land.

Mining has also brought many negative social and economic problems to the surrounding communities like crime. Rapid immigration and the breakdown of normal social structures may accelerate the spread of HIV. Some farmers have neglected their fields.

The EUTCO tea estates have also suffered from an exodus of workers and individuals were found dead in the mining pits for example at Monga tea field no.4. Water quality for many communities downstream of the mines has declined. The Tanga municipal town has been affected by deterioration water in quality and quantity from Zigi river. These challenges need to be addressed time to time.

**Lesson learnt**

Proper management practices are essential for ecologically sustainable utilization of forest products inside the ANR. However, searching and developing alternative sources of forest products is of major importance when aiming at the conservation of the forest ecosystem.

The possible method of using agroforestry system for managing the cardamom may be considered as alternative for clearing the new forest for the same.

The recent increase of dairy farming activities in areas next to the ANR may reduce the people’s dependence on resources of the ANR by offering additional income.

The conservation of the ANR will not succeed without the support of local communities. Therefore, the involvement of local communities in the decision making and management of the ANR is essential. Benefit sharing mechanisms are required which contribute to the local communities’ economic development and promote ecologically sustainable production and utilization of natural resources.

Some affected farmers are complaining of land shortage in general but the most farmers specifically need shady forest which suits cardamom cultivation. The possible method of using agroforestry system for managing the cardamom may be considered as alternative for clearing the new forest for the same.

**Initiatives for revenue generation and sharing**

- This will be done through improving of sources of revenue and developing some supporting projects. Based on the experience during the implementation of the first ANR General Management plan it was learnt that the Government budgetary allocation cannot sustain the conservation activities of ANR. Therefore, for the sustainability in conservation of Amani Nature Reserve local sources of revenue will be well developed and where possible project proposals for specific activities should be prepared and submitted to various sources of funding for financial support.

- The already established Ecotourism activities will be improved further as it is one of the best alternative sources of income for ANR. Improving the services and facilities of the ANR rest houses will add value to the tourism attractions of ANR and hence attract more visitors to the area. Other tourism supporting facilities including camp sites, picnic sites, hiking routes, drive routes, marketing materials like Trails guidebook and trees of Amani Book, calendars Brochures, Posters,
symposiums and communication facilities should be improved to attract more visitors and hence more revenues.

Some other artificial attractions including canopy walk, hotels and standard conference facilities will be established to add value to the natural attractions of Amani Nature Reserve and collect more revenue. This is one of the best ways to improve the tourism in Amani. The Nature of the landscape and type of forest trees available shows a great potential to support these types of infrastructures. Local communities will be sensitized to deliver good services to tourist in order to improve the cultural tourism. Local guides should receive adequate training and motivation in order to deliver good services to the tourist industry.

Private investors should be encouraged to invest in various ways in tourism industry at Amani. Private hotels, lodge, camp sites and handcraft makers will be given the priority. ANR in collaboration with the government machinery will facilitate the private sector to invest at Amani.

These sectors will continue to be involved in management of Nature Reserve through consultation meetings as need arise.

The payable fees for goods and services rendered by ANR should be adjusted based on the quality of goods and services rendered. Services rendered by ANR rest houses and restaurant, fees paid for entrance, guiding and camping fees, films, tapes, hiring of camping facilities and values for sold posters, guidebooks, and other products as souvenirs should be adjusted annually best on the inflation and devaluation of Tanzanian Shilling.

Technical services provided by staff to either private sector, community and such alike should be considered in monitory terms and should be paid for.

Means of communication will be further being improved. The internet service available seems not to be sustainable as it is not self-propelling. The service is to be commercialized and expanded further as there is great potential of needs in the area.

Moreover, ANR will seek funding from Conservation organizations for both conservation and improvement of local people livelihood. This will be dealt with by writing of project proposals which geared into implementation of ANR General Management Plan. Possible funding bodies might include EAMCEF, UNDP, GEF, UNESCO–MaB Programme, ICRAF, Conservation International, CEPF and others as it might seem necessary. Projects will be both short and long term, and emphasize will be kept also in inventing on those which will be sustainable and geared into revenue improvement and well-being of communities surrounding the reserve

Carbon stock in tree biomass revealed ≥400tons/ha existing in Amani Nature Reserve. Negotiation initiatives should be geared towards compensating the conservation efforts. This can be achieved through the giant carbon emissions compensating the stock of carbon Amani NR preserve.

These sectors will continue to be involved in management of Nature Reserve through consultation meetings as need arise.

THANK YOU FOR LISTERNING
Annex 8. Tanzania National Parks Authority by Deogratius Ndelolia

- HISTORY OF CONSERVATION IN TANZANIA
  - Go far back before Colonial period
  - Our ancestors conserved resources they value and perceived to be important
  - Human population was by then low with little demand of natural resources
  - Arrival of colonists changed conservation system: Strict conservation with fine and fence approach
  - Even after independence in 1961, the country mostly adopted colonial system of conservation
  - Local community were not involved in establishing and managing Protected Areas (PAs)
  - Local communities had a feeling of being deprived of using/utilizing resources they own
  - This created resistance, retaliation and consequently lack of support from communities in conservation

- PROTECTED AREAS IN TANZANIA
  - Tanzania land covers an area of about 940,000 sq km
  - 28% of the total land of the country equivalent to 260,000 sq km is protected
  - Main Protected Areas (PAs) within the country include:
    - National parks, Ngorogoro Conservation Area Authority (NCAA), Game Reserve, Game Controlled Areas, Forest Reserves, Nature Reserves and Wildlife Management Areas (WMAs)
    - Management of these PAs is based on various Laws and Regulations of the country
  - TANZANIA NATIONAL PARKS (TANAPA)
    - Established in accordance with the National Parks Ordinance (Cap 412) of 1959, and its revision (Cap 482) of 2002
    - The role being managing all national parks within the country and establish new ones whenever deemed necessary
    - Main objectives being protecting and managing national parks for sustainable tourism
    - To meet the objectives the local community participation must be involved through Outreach Program

- OUTREACH PROGRAM
  - Meaning:
    - A program aim to involve local community adjacent to National parks in managing natural resources
  - Foundation
    - Scientific meeting seated at Serengeti National Park in 1985 to discuss the drivers for mass killing of big animals
    - Decision to involve local community in conservation
    - In 1988 started with 3 pilot villages (Ololosokwani, Soitsambu and Oloipiri) adjacent to Serengeti NP in Ngorongoro District
Later on covered 3 parks; Tarangire, Arusha and Manyara NPs

Main objective of Outreach Program

To enhance awareness, understanding and good relations to park adjacent communities in protecting and managing natural resources

Specific objectives

To deliver conservation Education to park adjacent communities
To enhance relations between parks and adjacent communities
To update local communities with information which assist them to attain sustainable development
To coordinate and ensure benefit sharing

OUTREACH PROGRAM - BENEFIT SHARING

Mainly done through:

1. Support for Community Initiated Projects (SCIP)

Meaning:

Community development projects initiated by local communities, the costs being contributed by the community itself and TANAPA
Initiated from village level (Village assembly, village Council), then Ward level and Later District level
Bill of quantity (Cost of the Project) and technical drawings are prepared by respective District Experts

Project Contribution

TANAPA: 70% of the project cost
Local Community: 30% of the project cost
(Labour Force, material, cash)

Community contribution creates sense of ownership and ensure sustainability

SCIP Target:

Education Sector (classrooms, dormitories, laboratories, teachers houses, furniture, lab equipments, school desks/chairs and tables)
Health Sector (dispensary building, Health Centre wards, laboratory equipments, furniture)
Clean and Safe water (running water/piping networking, drilling of deep borehole, construction of water reservoir tanks)
Infrastructure (Road construction and rehabilitation in park adjacent villages)
Community Safety and Security (construction of police post buildings and furnishing)
Livestock Sector (Infrastructure: water troughs)
Land use sector (preparation of land use plans in adjacent villages)

2. TANAPA Income Generating Projects (TIGPs)
Meaning of TIGP

Environmental friendly projects supported to local communities with the aim to provide immediate alternative source of income. E.g. Beekeeping/apiary, tree nurseries and tree seedlings, diary cattle and goats, poultry (local breed) and piggery

- Initially started with 3 NPs (Tarangire, Rubondo and Udzungwa)
- Currently implemented in all 16 NPs

BENEFIT SHARING - TIGP (Cont...)

MODE OF OPERATION

- Local community derive income generating project
- Support is targeted to community groups, which are registered and legally recognized
- More emphasis on Community Conservation Banks (COCOBA)
- Members contribute their capital and start to operate, then TANAPA support them with equipments and training (capacity building)
- In Udzungwa and Serengeti some of these groups have proven success

RESOURCE MOBILIZATION

Source of Fund

- TANAPA - Outreach Budget

Mode of securing the fund

- Annual budget
- Project Write Ups

BENEFIT SHARING - RESOURCE ALLOCATION

Allocation of fund for both SCIP and TIGP is based on SCIP committee Meetings decisions

- Based on various set up criteria (proximity of the community to park, contribution of the community towards conservation, effects of wildlife to respective community -human/wildlife conflict, cost of the project, technical drawings)

Expected Impact: SCIP and TIGP

- Increased local community income
- Improved local community livelihood and standard of living
- Win local support in conservation of natural resources
- Sustainable utilization of natural resources
- Reduced illegal activities (poaching) in national parks

CHALLENGES
- Over ambition and expectation of local communities
- Limited park resources: Manpower, finance and equipments
- Low commitment by local communities to contributes their part (30%) in SCIP project
- Low entrepreneurship skills (TIGPs)
CONCLUSION

Before establishment of PAs human being coexisted with the wildlife

The community sustainably utilized these resources while protecting them

However, in the course of time human population grew with concomitant increase in natural resources demand

Hence, management on resources use was inevitable, this led to establishment of PAs (Restriction)

Restriction means deprive someone's needs, consequently, anger and vengeance from local community

However, we can restrict the use of the resources but benefit the community in other aspect (SCIP and TIGP)

This will ensure local community support in protection and conservation of natural resources

For that reason, Outreach Program will always act as a principal tool of bringing local community close to the resources they own (Protect and benefit)