Proceedings of the
3rd National CBNRM Forum, 2016
Held on 26th May 2016 at the National College of Tourism, Bustani Campus, Dar es Salaam
Theme: There is more to be done to fully unlock wildlife potentials in Tanzania.

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The CBNRM Forum was funded by WWF Finland through WWF Tanzania, as an activity for the Long-term Partnership Programme with TNRF on Forests and Land Based Investments in Tanzania (2014-2017)

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PART 1: INTRODUCTION AND BACKGROUND

On 26th May 2016, the Tanzania Natural Resource Forum (TNRF) organized the 3rd National CBNRM Forum in Tanzania. The CBNRM forum was officially launched in 2012. TNRF began the process to establish a series of dialogues on CBNRMs with the aim of providing a platform for multi-stakeholder exchange of information and agreeing on a common course for CBNRMs success in Tanzania. In 2012, TNRF undertook a stocktaking exercise of CBNRMs in forestry, fisheries and Wildlife in Tanzania which also recommended the need for establishing a national level platform to help disseminate information on CBNRM success stories, share experiences and promote a greater understanding of the actions and enabling environment that can lead to improved social, economical and environmental benefits. While facilitating engagement at the national level, TNRF has also joined a regional civil society network platform, called the Southern Africa CBNRM Forum (SACF) whose secretariat is based in Lusaka-Zambia. Joining SACF helps to promote South-to-South exchange and experience. Similar efforts are also made to promote South-to-North linkages through exchange dialogues on forest investments. To further promote CBNRM among other tasks, TNRF and WWF Tanzania through its Coastal East Africa Initiative entered a 3-years partnership programme on Land and forest-based investments in Tanzania (2014-2017). The programme is geared towards building constructive dialogue with wide range of stakeholders including private sector, Government, civil society organizations to address and contribute to responsible investments on land and forests. The partnership programme provides support to hold National CBNRM forum each year.

History of CBNRM: CBNRM as a broad conservation and rural development approach emerged in the early 1990s in Tanzania and most of sub-Saharan African countries following a conservation paradigm shift from state-centric top-down conservation approaches to democratic decentralization and participatory bottom-up conservation and rural development approaches. Many factors contributed to the conservation paradigm shift and emergence of CBNRM approaches including: a clear failure by the poor newly independent African states including Tanzania to halt rampant wildlife poaching and massive deforestation in the 1970s (Brockington, 2005); increased pressure by the national and international NGOs, such as International Union for Nature Conservation (IUCN), World Wide Fund for Nature (WWF) and African Wildlife Foundation (AWF) to participate in natural resources management claiming to be better equipped with resources (manpower, finances and technical capacity) than the poor newly independent African states (Hutton and Leader-Williams, 2003; Brockington, 2005). CBNRM aimed to confer natural resources management rights and powers to local rural communities in managing resources found in their areas. The underlying premise was that, local communities are likely to be better managers of the resources since their livelihoods almost entirely depend on the resources hence they put a high value on them for their sustenance. CBNRM emerged in the wildlife sector and soon spread to other sectors including forestry, water, rangelands and fisheries. In Tanzania, CBNRM models include the Community Conservation and Outreach services (CCS) under Tanzania National Parks Authority (TANAPA); the Community Based Conservation (CBC) later Wildlife Management Areas (WMAs) approach under the Wildlife Division (WD); the Participatory Forest Management (PFM) approaches which is categorized into Joint Forest Management (JFM) and Community Based Forest Management (CBFM) models; fisheries co-management approaches such as Beach Management Units (BMUs), among others. However, the scale and degree to which these models delegate powers over resource management and decision making to communities differs considerably (Fabricius et al., 2004; Nelson, 2010). Several and important policy and legislation reforms have taken place for the aim of creating an enabling policy and legislation environment for effective CBNRM implementation. The success of CBNRM as an integrated sustainable rural development and natural resources management strategy is challenged by many factors including: weak implementation of policies, laws and regulations; inadequate resources among local, district and national actors/agents; insufficient understanding and analysis on the factors for CBNRM success and/or failure and their applicability to different contexts and; reluctance by certain actors particularly governments to develop a CBNRM enabling environment e.g. fully devolve natural resources management rights and powers to local communities.
PART 2: RATIONALE, OBJECTIVES, METHODOLOGY AND APPROACH

RATIONALLY FOR THE NATIONAL CBNRM FORUM

TNRF promotes community based natural resource management (CBNRM) as the focus for strengthening citizens’ voice in the forestry, rangelands, wildlife and fisheries thematic areas across the country and at community level. Focusing on the citizen and community brings natural resources management down to the level of practice, where the effects of policy can be seen and where real changes occur. Promoting CBNRM will put the citizens first; secure livelihoods at the community level and foster sustainable natural resource use.

Success stories have been recorded in various CBNRM models, yet major challenges related to sustainability of project-based, donor funded models have not been addressed. Further, most CBNRM models have neither been able to deliver significant economic benefits to participating communities nor provide adequate incentives for effective participation. TNRF and other partners believe that it is through this kind of for a CBNRM models can be improved to fully unlock economic potentials for participating local communities, investors, the government and the conservation community.

One way of addressing the multitude of challenges facing CBNRM in Tanzania is through improved stakeholder collaboration and coordination. However, the coordination and collaboration between CBNRM stakeholders has for the past years been characterized as temporary, reactive, non-strategic, and non-holistic (some stakeholder are left out) and ad hoc at large. The lack of a national platform for deliberations and joint decision-making between multiple actors affected progress and effectiveness of CBNRM programs in achieving sustainable natural resources management and rural development in Tanzania. Realizing this lack of a common platform and following consultations with various local, national, regional and international level stakeholders, the Tanzania Natural Resources Forum (TNRF) facilitated the process to establish the Tanzania National CBNRM forum.

OBJECTIVE AND SCOPE OF THE FORUM

The main objective of the National CBNRM forum is to provide a platform for multi-stakeholder exchange of information, sharing experiences and agreeing on a common course for the success of CBNRM in Tanzania. This 3rd forum focused its discussion on CBNRMs in the Wildlife sector in Tanzania, such as the Community Conservation and Outreach Services (CCS), the Wildlife Management Area (WMA) approach and Community-Based Wildlife Management (CBWM). Other sectors (such as forestry, fisheries and rangelands) were left for discussion through other TNRF initiatives and through its partner activities.

SPECIFICALLY, THE FORUM INTENDED TO:

- Share lessons, experience, current research findings and plans from current initiatives on Wildlife conservation – from the government, development partners, funding agents, national and international organization
- Engage multi-stakeholders and promote dialogue on various issues and efforts related to Development and Conservation of the Wildlife in Tanzania, including discussions of possible options and innovative models on wildlife conservation
- Promote re-establishment of the Wildlife Working Group under TNRF coordination to work on pertinent and emerging issues and synergies with on-going initiatives.
ORGANIZATION OF THE FORUM
In order for the forum to provide a common platform for information-experience sharing, discuss/dialogue and a space for multi-stakeholders engagement, the forum was organized into keynote speeches, presentations and sharing of field-level experience, research findings, plenaries and discussions.

PARTICIPANTS
The CBNRM forum being a national level platform involved participants representing the Government line ministries/departments/agencies, national and international NGOs working in Tanzania, development partners, academia, research and development institutions, private sectors and media representatives among others. A full list of participants is annexed to this report. TNRF plans to promote similar forum at local level where wildlife management activities are really happening, such that forum at the local level will be feeding the national level platform, with possibilities of merging the two. The national platform would then channel issues/policy recommendations to the national government, and adequately provide feedback at the local level platform.

A group Photo of participants of the 3rd National CBNRM forum
Front line, from Left: Joseph Olila (Director TNRF), Lena Thiede (Germany Embassy, DPG-E Chair), Nebbo Mwina (Guest of honor, from MNRT), and Charles Meshack (Director, TFCG and TNRF Board member).
## EVENT PROGRAM

<table>
<thead>
<tr>
<th>Time (hrs.)</th>
<th>Main activity</th>
<th>Responsible Person</th>
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</thead>
<tbody>
<tr>
<td>0800-0845</td>
<td>Registration of participants</td>
<td>Organizing Team</td>
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### Session 1: Setting the scene

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<tbody>
<tr>
<td>0845-0850</td>
<td>Welcome remark</td>
<td>Joseph Olila, Executive Director- TNRF</td>
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<tr>
<td>0850-0915</td>
<td>Objectives, background, structure of the meeting</td>
<td>Faustine D. Ninga, CBNRM Programmes Coordinator- TNRF</td>
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<tr>
<td></td>
<td>Introduction of participants</td>
<td>Facilitator</td>
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<tr>
<td>0915-0930</td>
<td>Opening Remark</td>
<td>Dr. Nebbo Mwina, (Assistant Director - Research, Training and Statistics, MNRT)</td>
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<tr>
<td>0930-1000</td>
<td>Remark from Development Partners/Embassies/Agencies and DPG-E</td>
<td>Lena Thiede, Germany Embassy, DPGE Chair</td>
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<tr>
<td>1000-1040</td>
<td>Group Photo and tea/coffee break</td>
<td>All</td>
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### Session 2: There is more to be done...

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<tbody>
<tr>
<td>1040-1100</td>
<td>The status of community participation in Wildlife Management and major challenges/lessons towards effective participation.</td>
<td>Leonard Mayeta, MNRT</td>
</tr>
<tr>
<td>1100-1120</td>
<td>An update of current efforts/programmes on conservation and how they link with local communities</td>
<td>Project Manager, Selous Game Reserve, MNRT</td>
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<tr>
<td>1120-1140</td>
<td>Ecotourism potential for local communities to reap from wildlife conservation</td>
<td>Wilfred K. Msemo, Senior Tourism Officer, MNRT</td>
</tr>
<tr>
<td>1140-1200</td>
<td>Policy options/review in relation to community-based conservation</td>
<td>Director of Policy and Planning, Policy and Planning Division, MNRT</td>
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<tr>
<td>1200-1220</td>
<td>Emerging lessons (and options for improvement) from the current implementation of KILORWEMP project</td>
<td>Giuseppe Daconto, International Technical Assistant &amp; Co-Manager, KILORWEMP</td>
</tr>
<tr>
<td>1220-1240</td>
<td>Tanzania PROTECT Project activities and their linkages with community-based wildlife Management</td>
<td>Demetrius Kweka, Dep. Chief of Party/Resources Rights, Governance and Policy Reform Specialist</td>
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<tr>
<td>1240-1300</td>
<td>Need for more sustainable options to Community Conservation Services for communities to benefit more from conservation</td>
<td>Representative, TANAPA.</td>
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<tr>
<td>1300-1320</td>
<td>Current conservation efforts/plans in addressing critical 'issues' in WMAs around Selous Game Reserve</td>
<td>Country Director/Representative, WWF Tanzania</td>
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<tr>
<td>1320-1415</td>
<td>Lunch Break</td>
<td>All</td>
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### Session 3: Selected Research Findings

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<tr>
<td>1415-1435</td>
<td>Evaluating the impact of Tanzania’s Wildlife Management Areas on household wealth trajectories</td>
<td>Aidan Keane, Edinburgh University, PIMA Project</td>
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<tr>
<td>1435-1455</td>
<td>Examining livelihoods impacts of Wildlife Management Areas in Tanzania</td>
<td>Jens Friis Lund, University of Copenhagen. PIMA Project</td>
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<tr>
<td>1455-1515</td>
<td>Predictors of elephant poaching in a wildlife crime hotspot: The Ruvuma landscape of southern Tanzania and northern Mozambique</td>
<td>Neil Burgess, UNEP-WCMC/Copenhagen. PIMA Project</td>
</tr>
<tr>
<td>1515-1535</td>
<td>Women, wellbeing and WMAs</td>
<td>Katherine Homewood (UCL). PIMA Project</td>
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### Session 4: Determining the way forward

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<tr>
<td>1535-1620</td>
<td>Revisiting recommendations: Re-establishing a Wildlife Working Group</td>
<td>Facilitator, presenters and all</td>
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<tr>
<td>1620-1630</td>
<td>Closing</td>
<td>Charles Meshack (Director, TFCG, Board Member TNRF)</td>
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PART 3: REMARKS, PRESENTATIONS AND ANALYSIS

In line with the forum’s objectives, remarks, presentations and discussion formed important component of the meeting. The session’s proceedings are detailed below:

**WELCOME REMARKS [J.OLILA, TNRF DIRECTOR]:** In his remarks, the Director welcomed all participants to the meeting and thanked them for opting to attend the meeting despite their busy schedules. He further stressed the importance of promoting multi-stakeholders dialogues in discussing issues that would help the country shape policies and governance processes for natural resources in Tanzania.

The Director requested participants to fully participate in discussions and share their experience regarding conservation of wildlife by communities. Since the meeting coincided with budgetary session at the Parliament of Tanzania, the Director noted that some key participants from the Ministry of Natural Resource and Tourism (MNRT) were not able to attend the forum meeting.

**OPENING REMARKS [DR. NEBBO MWINA, AG. PS, MNRT]:** Officiating the opening of the forum meeting, Dr. Mwina recalled the objective of the meeting and stressed the need for agreeing on a common course for the success of CBNRMs in Tanzania. On behalf of MNRT, Dr. Mwina commended TNRF and its partners for supporting the event and bringing together different stakeholders into a common platform to discuss, share experience and find innovative ideas and new ways that would further empower local communities in managing natural resources within their vicinity. She perceived the gathering as an important opportunity to also create partnership and synergies in implementing various conservation activities and promoting engagement with the government, especially on policy issues that stakeholders recommend. Making reference to the Wildlife Policy of Tanzania which provides guidance on stakeholders engagement in wildlife conservation, ranging from the government itself as the regulator, facilitator and service provider, local governments and local communities as implementers of government policies, NGOs as technical and financial supporters, and the private sectors as investors in the wildlife sub-sector; she urged every stakeholder to comply with various government instruments while implementing their intervention.

“...this kind of forum complements the government efforts in engaging its partners in wildlife conservation and the government commends for this kind of spirit...as you discuss today, I would like you to ask yourself if we are doing enough to fully unlock the wildlife potential in Tanzania”

In her concluding remark, she hoped the forum participants will not end up discussing issues but put into use the best practices/lessons learnt from various projects and researches. She finally declared the official opening of the 3rd CBNRM forum meeting.
Ms. Lena closed her remarks by expressing her grateful appreciation to TNRF and WWF for organizing the forum event, which brought together different stakeholders eager to see the promising future for CBNRMs in Tanzania.

The Co-chair of DPG-E Ms. Lena Thiede from the Germany Embassy provided remarks on behalf of the Development Partners Group on Environment (DPG-E). She explained that the DPG-E combines 17 bilateral and multilateral Development Partners who committed in supporting the natural resource management in Tanzania, among others. Other commitments from DPG-E are on climate change and environmental protection. She commended Tanzania’s long-term commitment to protecting natural heritage and biodiversity of global importance and thereby setting standards for nature conservation in Africa. She recalled the challenges facing wildlife in Tanzania, including increasing encroachment, habitat loss, land degradation and poaching and called for improved measures to address the challenges, including meaningful involvement of local communities in decision-making processes in natural resource management. Regarding WMAs, she commended big efforts made by the country in promoting CBNRM approaches through the Wildlife Act, which provide legal basis for local communities to establish WMAs.

“The CBNRMs like WMAs are important in ensuring communities benefit from conservation goals, in securing long-term land rights to communities, in allowing photo-tourism and hunting companies more security on their investments with communities, and in fundamentally ensuring the long-term conservation and sustainable management of natural resources”

Ms. Lena further indicated that, a number of development partners – among them the German Government in the Serengeti and Selous ecosystem -, NGOs and private sectors are supporting the government of Tanzania and local communities to spearhead participatory resource management. Prior to highlighting prerequisites for a successful community involvement, Ms. Lena pointed out some key challenges facing the current CBNRM approaches, such as: the sustainability of donor-driven models, inadequate incentives for effective local participation, lack of significant economic benefits flowing to individual communities, long and time-consuming process to set up successful models, and inadequate technical capacity at local level. She further proposed some solutions to key challenges facing the CBNRM models, including:

“a stronger devolution of powers that creates an enabling environment for CBNRM, diversifying income sources, expanding and improving the revenues WMAs earn and the benefits that reach communities, the need for training, increased women’s participation in WMAs and a strong information management system”.

Ms. Lena closed her remarks by expressing her grateful appreciation to TNRF and WWF for organizing the forum event, which brought together different stakeholders eager to see the promising future for CBNRMs in Tanzania.

The Status of Community Participation in Wildlife Management and Major Challenges/Lessons Towards Effective Participation [by Leonard Mayeta, MNRT]
major achievements to date with regard to community participation in wildlife management, including:

- Enabling policy, institutional and institutional frameworks in place,
- 22 out of 38 areas declared as WMA and their CBOs as Authorized Associations (AAs) with area coverage of 136,714 Square Kilometers.
- 19 out of 22 AAs have wildlife user rights,
- 223 villages with Village Land Use Plans (VLUPs)
- More stakeholders engagement,
- Increased capacity of Village Game Scouts (VGS) to conduct anti-poaching patrol
- Increased donor support to local communities
- Improved relationships between Government and local communities,
- PT Regulations (2008) have been reviewed to provide more benefits to local communities and they at final stages of gazettement,
- WMA Regulations (2012) have been reviewed and are at final stages of endorsement. The review of these regulations is intended to provide more benefits to the local communities
- CBC/WMA support unit established, facilitated, supported and functioning,
- Increased conservation education at community level
- Improved relationships between Government and local communities (Common goal-Conservation)

Despite these achievements, Mr. Mayeta pointed out some key challenges that hinder successful operations of WMAs: low/weak governance capacity within WMAs, poor leadership skills, and investment conflicts and livestock invasion (See Annexes).

LINKAGES OF CONSERVATION EFFORTS IN SELOUS GAME RESERVE TO LOCAL COMMUNITIES (By A. NZIKU, MNRT – SELOUS GAME RESERVE)

The presenter highlighted major conservation efforts going on in Selous Game Reserves (SGR), focusing on conservation and protection of wildlife resources and their habitats. Beyond SGR boundaries, areas outside the reserve are also used by wildlife as migratory routes, dispersal areas or corridors. Some of these areas are on village land, thus managing areas outside the reserve and integration of local communities to Selous conservation is inevitable. In strengthening security of wildlife around SGR, the management facilitate establishment of Community Wildlife Management Areas (currently 7 WMAs exist), but also Collaborate with district authorities and village game scouts to carry out patrols in areas outside the reserve including control of dangerous and problem animals. Other important conservation efforts include: strengthening law enforcement, establishment of benefit sharing and compensation scheme, capacity building for wildlife staff, participatory intelligence, and social service improvement to local communities as well as creation of employment opportunities (See Annexes).

ECOTOURISM POTENTIAL FOR LOCAL COMMUNITIES TO REAP FROM WILDLIFE CONSERVATION [By WILFRED K. MSEMO, SENIOR TOURISM OFFICER, MNRT]

This important presentation strengthened understanding of ecotourism potentials among participants. The presenter clearly covered important topics such: the meaning of ecotourism, key ecotourism activities, ecotourism development strategies, tourism policy strategies, current status of ecotourism development in Tanzania, benefits obtained by local communities from wildlife conservation, benefit sharing, and challenges in developing ecotourism. Despite knowledge
sharing, the presenter threw key challenges that need to be taken into account in developing ecotourism in Tanzania. These challenges have been very instrumental in promoting dialogue among participants.

- In Tanzania today, the growing promise of community-based ecotourism at the local and national level may be undercut by a number of conflicts of interest among different groups.
- Safari hunting is undertaken both in game reserves and in many unprotected community lands- the same areas where ecotourism has developed at the village level.
- The critical difference between tourist hunting and ecotourism, from the local perspective, is that while the latter is determined through local agreement, the former is subject to exclusive central control and concessions.
- Revenues from safari hunting similarly flow directly back to the treasury, rather than accruing to the local communities on whose land these activities occur.
- Most of communities do not have a perspective on ecotourism and many other development initiatives that come to their areas. They develop a perspective over time, and this will depend on their experience with the project.
- In most of communities donor support is treated as a right with no obligation for accountability, and sometimes lack of accountability seems to be a cultural thing as it is true that collective responsibility can be nobody’s responsibility.
- Sometimes local people may want to be part of ecotourism but they do not appreciate the responsibilities that come with the business and this is the reason many of them are seen as unsustainable.
- Accessibility to most of the ecotourism sites still being a major problem. Generally investment in infrastructure that could make it easy for these areas accessed is lacking.

(See Annexes)
This presentation highlighted critical issues and challenges currently facing WMAs around Selous Game Reserve (SGR) where WWF Tanzania is working to sustainably manage the SGR buffer zone. Major issues and challenges presented included the following:

- Governance challenge: lack of accountability of Authorized Associations (AAs) to village councils/local government, governmental involvement in AA decision making, incomplete devolution of responsibilities to AAs especially on lucrative functions such as selection of investors.
- Economic challenges: high costs of establishing and running WMAs, inadequate benefits flowing to communities and households, inadequate financial management capacity.
- Conservation challenges: inadequate monitoring of wildlife in WMAs, compression-loss of habitat and blockage of wildlife migratory routes.
- Manpower: inadequate capacity for oversight of SGR and WMAs, sustainability issues for the built infrastructures in WMAs.
- Poaching: commercial and subsistence poaching.
- Fundraising constraints

The presenter suggested the way forward for improvement of CBNRM, especially for WMAs through: Supporting and building capacity in WMA management to local institutions, WMA support units and District Natural Resource Advisory bodies, expanding high-revenue generating enterprises by engaging with private sectors focusing on responsible tourism and trophy hunting, improving the policy-enabling environment by reviewing existing policies (benefit sharing and trophy hunting), harmonization of sectorial policies on CBNRM, and by strengthening natural resource management and monitoring systems to ensure informed management decisions at local and national levels to improve the natural resource base (See Annexes).

**KILOMERO AND LOWER RUFJI WETLANDS ECOSYSTEM MANAGEMENT PROJECT (KILORWEMP), PRESENTED BY: GIUSEPPE DACONTO (INT. TECH. ASSISTANT/CO-MANAGER)**

The general objective of the KILORWEMP project is to sustainably manage the wetlands Ecosystem of the Kilombero Valley and Lower Rufiji so that its ecological balance is conserved, the local communities’ livelihoods are improved and economic development is sustained. Specifically, the project aim to “Strengthened capacities to implement the sustainable management policy and regulations to the Wetlands Ecosystem of the Kilombero Valley and Lower Rufiji, fostering sustainable livelihoods development and more effective natural resources governance within the decentralization framework”. This objective has a direct link to forum objectives.

The presenter further presented project’s CBNRM targets and results of effectiveness survey in Village Forest Reserves, Beach Management Units and Wildlife Management Areas in terms of establishment, development of plans, capacity, governance and outcomes.
The project’s dimension of CBNRM capacity development, which contributes directly to unlocking wildlife potential were presented focusing on both approaches catering for supply side and demand side (See Annexes)

PRESENTATION OF SELECTED RESEARCH FINDINGS

Forum participants had an opportunity to receive recent research findings from an interdisciplinary research project, which “aims to discover how Tanzania’s Wildlife Management Areas have changed people's lives and their effects on wildlife and the environment”. Details about the project are available at http://www.ucl.ac.uk/pima/

Four key presentations were shared during the meeting;

TOPIC 1: "EVALUATING THE IMPACT OF TANZANIA’S WILDLIFE MANAGEMENT AREAS ON HOUSEHOLD WEALTH TRAJECTORIES" [DR AIDAN KEANE, UNIVERSITY OF EDINBURGH, PIMA PROJECT]

Abstract:

In many parts of the developing world, community-based conservation projects (CBC) shape the rules governing local people's ability to access, and benefit from, natural resources. Tanzania's Wildlife Management Areas (WMAs) are a prominent example. WMAs aim to promote wildlife conservation and benefit local communities through the creation of sustainable wildlife-based revenues. Since 2007 the WMA model has spread from the initial sixteen pilot sites and there are now up to 38 WMAs in various stages of planning or development, representing a major influence on local livelihoods and land use. To better understand their effects on household wealth, we carried out a large scale, quasi-experimental impact evaluation in six of the pilot WMAs and statistically matched control areas. Our analysis draws on data for ~13,500 households within 42 villages across Tanzania, extending from the northern rangelands to the southern miombo woodlands.

We find that WMAs have played an important role in shaping wealth trajectories, but that their effects can be both positive and negative, differing from area to area and between different types of households. In the North, the average household within a WMA has seen their wealth reduce relative to equivalent control households while those in leadership positions have benefited substantially. By contrast, all but the richest WMA households in the South have seen their wealth increase on average relative to equivalent controls. These effects are likely to have been strongly influenced by the balance of restrictions and opportunities present in each WMA, but in the South it appears that some of the apparent benefits of WMA membership may be attributable to philanthropy rather than the development of sustainable revenue-generating activities.

The long-term viability of WMAs depends on their ability to deliver sustainable net benefits to local communities. To this end, our findings suggest (1) that the current arrangements for benefit sharing within WMAs should be revised in favour of communities and (2) that the management of WMA land should prioritise security of tenure and access to natural resources for communities. To support this goal, communities should be empowered to revisit the terms of
Results also indicate that livestock ownership and natural resources-based livelihood strategies have been negatively affected by WMAs, in particular in northern Tanzania. Finally, results demonstrate that revenue incomes and local labor opportunities associated with WMAs are orders of magnitudes smaller than the costs imposed on people in terms of restrictions on resource use and by wildlife in the form of, crop damages and livestock predation.

Analysis focused on calculation of average treatment effect on the treated (ATETs) of WMAs on household wealth, assets (land and livestock ownership) and livelihood strategies (e.g., reliance on agriculture livestock, environmental goods and wage labor). Treatment effects were calculated for groups of households stratified with regard to WMA leadership role and wealth. Further, analysis focused on assessing trajectories in village level financial benefits and revenue related to conservation and wildlife tourism and how the implementation of WMAs have affected these.

Results indicate that household-level livelihoods impacts of WMAs are less than dramatic at the aggregate level and therefore difficult to assess through the chosen research strategy. This is also reflected in households’ own assessment of the impact of the WMAs on their livelihoods – few report large negative or positive impacts. Yet, results do indicate that WMAs have had differential impacts between households with WMA leadership roles and other households, indicating that the benefits of WMAs fall disproportionately on those involved in actual management. Results also indicate that livestock ownership and natural resources-based livelihood strategies have been negatively affected by WMAs, in particular in northern Tanzania. Finally, results demonstrate that revenue incomes and local labor opportunities associated with WMAs are orders of magnitudes smaller than the costs imposed on people in terms of restrictions on resource use and by wildlife in the form of, crop damages and livestock predation.

By way of conclusion, our study further documents – at an hitherto unprecedented scale of investigation - well-known and anticipated impacts of WMAs on rural households and how these distribute across social strata and individuals’ involvement in WMA governance. Our study also shows, however, that WMA impacts are limited and difficult to isolate from the many other developments affecting rural livelihoods. Related to this, our study illustrates that quasi-experimental studies of social impacts of conservation interventions are extremely challenging for a number of reasons that we outline in the paper.

A detailed presentation is available at: http://www.ucl.ac.uk/pima/docs/may2016_closing_02_lund.pdf

Also attached as an Annex to this report (See Annexes)
Abstract:
Gender is a major dimension of resource use, production and consumption, and hence of development interventions and the inequalities these may foster or mitigate. The present paper outlines the condition of women in rural Tanzania, and explores the impacts on them of Tanzania’s wildlife management areas (WMAs). Using statistically rigorous before/after, control/impact (BACI) study of women in villages associated with six WMAs, compared to matched controls unaffected by WMAs, alongside in depth qualitative work, we set out the current status of women within male-headed households, of female as compared to male heads of household, and investigate the differential social and ecological impacts of WMA implementation on their condition. This study hinges on the concept of wellbeing and its interplay with resource access and use:

- What resources could women access before WMA inception and what can women access now?
- What could/ can women do with those resources?
- What did/ does that resource use mean to women as individuals? Or as members of their respective communities?

The term ‘resources’ here includes natural resources, especially land, water, fuel, construction materials, livestock; but also social resources including health and education infrastructure, support networks, political representation; conflict/security and autonomy. The multidimensional picture of well- (or ill-) being, which emerges thus, encompasses livelihoods, entitlements and related conceptual frameworks.

The paper then explores gendered impacts of WMA using the following comparisons:

1. **Female headed versus male-headed households.** Within the total PIMA dataset, there are 187 female- and 1737 male-headed households. The low numbers of female-headed households in the South (50) and in Makame (19) make it necessary to focus analysis on the 118 female heads of household in Burunge and Enduimet and their control villages.

2. **Impacts on wives in WMA villages vs wives in control areas.** The wives’ questionnaire includes data from 937 married women in 42 villages distributed across three North and three South WMAs and their matched controls.

3. **Impacts as reported by wives vs husbands:** gendered perceptions, gendered participation, gendered impacts; gendered trajectories of change 2007-2014.
Overall, women reported few significant positive or negative changes associated with the implementation of WMAs. Our findings suggest women, and women heads of household, perceive benefits in terms of community infrastructure, but experience costs through crop damage, fear of wildlife attacks, and WMA restrictions on resource use. The pro-poor and gender benefits anticipated from WMAs remain to be seen.
A detailed presentation is available at: http://www.ucl.ac.uk/pima/docs/may2016_closing_04_homewood.pdf
Also attached as an Annex to this report (See Annexes)

TOPIC 4: "WILDLIFE OVERFLIGHT ANALYSIS IN TANZANIAN WMAS" [PROF. NEIL BURGESS, UNEP-WCMC/COPENHAGEN. PIMA PROJECT]

Abstract:

Highlights:

- Quantify relative contribution of multiple predictors of elephant carcasses
- Facilitate effective and optimally targeted management strategies
- Protected area management effectiveness is critical to tackle elephant poaching

Poaching has been identified as the main driver of the loss of more than a quarter of the global elephant population between 2008 and 2012. Understanding the spatial distribution of poaching events in relation to ecological characteristics and human predictors is critical to developing targeted management strategies for reducing poaching. We identify major ecological and human predictors and test their association with the distribution of observed elephant carcasses in a recognized poaching hotspot: the Ruvuma landscape of northern Mozambique and southern Tanzania, including the Niassa Reserve in the south and the Selous Game Reserve in the north.

In Mozambique, we found the number of elephant carcasses to be associated with State-managed protected areas and environmental variables such as the scarcity of water, i.e. low rainfall, high temperature and presence of rivers and open woodland habitat allowing for higher detectability of poaching.

In Tanzania, elephant carcasses were mostly associated with human variables. State-managed protected areas were negatively associated with the number of elephant carcasses, whereas the numbers of elephant carcasses were high in community-managed sites.

Our results suggest that management effectiveness of protected areas is crucial in diminishing illegal killing of elephants in the Ruvuma landscape.

A detailed presentation is available at: http://www.ucl.ac.uk/pima/docs/may2016_closing_03_burgess.pdf
Also attached as an Annex to this report (See Annexes)
The forum being a multi-stakeholder platform aimed also at promoting discussions among participants. In line with the subject of each presentation made, participants discussed issues along the following lines:

1. The question of benefit sharing between Protected Areas and surrounding communities dominated the larger part of discussion. The key issue is on how to operationalize/design an equitable incentive mechanism to ensure full and effective participation of local communities in conservation activities. The current benefit sharing arrangement has for many years not been appreciated by local communities since ‘costs’ are comparatively higher than tangible benefits.

2. The question of how much revenue is generated from WMAs especially in the Southern part of Tanzania is putting most WMAs into danger of encroachment by other competing land use demands. In some WMAs for example, livestock grazing is becoming a growing challenge, farmers have expanded their activities close to and into WMAs, and uncontrolled harvesting of timber. Lack of and inadequate revenues is a result of many factors, including lack of investors in WMAs attributed by poor infrastructure in Southern WMAs. The revenue quest has threatened financial and economic viability of most WMAs.

3. Poor participation of key stakeholders in policy review processes within the government emerged in line with reported on-going review of policies related to wildlife conservation in Tanzania. The level to which various stakeholders are involved in the review process has remained questionable for many years. This approach has created a wider gap between policy processes at the national level and actual implementation on the ground, and buy-in from local communities. The question remains as to what extent local needs and priorities are addressed at the policy level. Some critics have even questioned the extent to which the WMA idea originates from local communities – if WMAs are intended for local communities why are they (the locals) closely involved in the review and formulation of policies?

4. The ecotourism potential in many areas surrounding communities has not been fully utilized to deliver significant economic benefits at the local level. Many challenges are accountable here, but the biggest is lack of investment and capacity to plan and managed ecotourism at the local level. It was reported during the forum meeting that the government has come up with a strategy of collecting important information, comments and concerns from different eco-tourism stakeholders in order to develop proper solutions to various challenges. It was also reported that the government of Tanzania is now preparing a National Strategy for tourism that would include the management of WMAs.
5. **The role of tourism hunting in contributing positively to reduced poaching** was pointed out for the case of Selous Game Reserve. This is done through hunting companies supporting the surrounding communities with necessary facilities and equipment for undertaking anti-poaching patrols.

6. **Comparatively, the WMAs in Northern Tanzania are better off than those in the Southern** – in terms of financial, economic and social viability. Several options for unviable WMAs have been recommended by various researches, including the need to improve WMAs infrastructure, capacity building and marketing strategies, integrating sustainable management of other resources within WMAs - such as forest management, agriculture as an effort to diversify livelihood. The question and the challenge remain as to what economically viable options are available to change the land use category from WMAs to other land uses. Any decision regarding change in land use category should consider in totality the purpose and objectives of establishing WMAs, including the ecological role played by such WMAs.

7. **It was questioned by one participant about the government’s position on operating the proposed drones technology for elephants’ protection** project in Selous Game Reserve. Clarifications indicated that the launch of drones would depend on finishing all the formalities needed such as requirement of Aviation’s certificate.

8. **Measures to control bushfire, especially on Mount Kilimanjaro**: uncontrolled fire incidences on in protected areas are detrimental to the survival of both plant and animals, destructing habitats for important/key species. Deliberate measures are required to control fire in order to ensure that investments put for conservation efforts does not end in vain. The Tanzania National Parks (TANAPA) has a big role to play in ensuring effective participation of local communities in reporting and responding to fire incidences.

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**Photos:** Participants of CBNRM forum discussing various ‘issues’ during the meeting.
PART 5: NEXT STEPS

The Tanzania Natural Resource Forum (TNRF) has been holding discussion of these natures for many years and has helped the government and other stakeholders’ work to address important policy issues, including providing recommendations and options for improved CBNRMs in Tanzania. TNRF intends to revisit and put into practice priority actions and recommendations from various wildlife-related meetings by re-establishing and strengthening a working group on wildlife [Wildlife Working Group]. While working modalities, framework and strategies for the group are being established; during the CBNRM forum TNRF proactively registered interested experts and individuals from across various institutions to join the Wildlife Working Group (WWG).

The idea behind establishment of WWG is to ensure that important recommendations are not just discussed during meetings, instead working sessions are carried to further brainstorm and unpack the issue at hand. For example, if a policy recommendation is to improve WMA viability by incorporating multiple benefits, then the WWG will need to work out all available options, determining advantages and disadvantages and indicating the best ways the incorporation of multiple benefits can be done. Apart from working sessions, the WWG will design interventions to address various issues at the national level, including designing of wildlife campaigns.

A 3-step process is thought to ensure successful operationalization of the working group:

**Step 1: Identification of major policy/technical issues**

This is the key step initial step where TNRF through review and consultative processes identify and prioritize key policy/technical issues that needs attention. Since TNRF has conducted several meetings, roundtable discussions and researches, key issues and recommendations from its various reports will be revisited and prioritized for actions. Such issues included the challenges of benefit sharing arrangements between the government, investors and local communities, the question of integrating multiple benefits in WMAs, investment conflicts in WMAs, identification of innovative models and monitoring of on going processes within the government and noting emerging issues for further actions.
Step 2: Working Group Actions

This is an important step where key issues identified in step 1 are worked on.

Working on issues involves one or a combination of options such as (depending on the issues at hand): designing and undertaking of research work, technical working sessions, undertaking capacity building, designing and implementing campaign activities, and by promoting national level dialogue.

TNRF has proved enough competencies in facilitating working group activities, and therefore effective coordination is expected in facilitating the work of wildlife working group. Outputs from this step will be important in influencing decisions within the government/community.

Step 3: Input to and Feedback:

This step is intended to make us of existing platforms to communicated working group outputs. The step involves identification of related platforms and national events, as well as preparation of policy briefs and other communication material in order to reach wider stakeholders.

CLOSING REMARKS [Charles Meshack, Director TFCG and TNRF Board Member]:

Mr. Meshack of the Tanzania Forest Conservation Group (TFCG) represented the TNRF Board during the forum meeting. He was given the honor to officiate closing of the meeting. In his remark, Meshack thanked all participants for their active participation from opening of the meeting to the last session. He pointed out that the CBNRM approach in the wildlife sector is good and can learn a lot from the forestry sector. Meshack hoped that participants will not only end up discussing issues facing the sector but will also take actions.

Mr. Meshack also commended the idea to form a working group on wildlife as an important step to ensure that key issues are technically attended.

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**Action Researches?**
**Working Session**
**Capacity building**
**Action Research**
**Campaign activities**
**Dialogue**
**Etc.**

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**CLOSING REMARKS [Charles Meshack, Director TFCG and TNRF Board Member]:**

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ANNEXES: VARIOUS PRESENTATIONS
LINKAGE OF CONSERVATION EFFORTS IN SELOUS TO LOCAL COMMUNITIES

SELOUS GAME RESERVE
INTRODUCTION

- Area: SQ Kilometres 50,000, equally to 5% of the Tanzania LAND.

- Potential for Wildlife conservation, social and economical values.

- The area was listed as a World Heritage Sites-WHS on 1982.

- In 2014 the area was named as Endangered World Heritage sites.
Selous GR area lies within four regions (Coastal, Morogoro, Ruvuma and Lindi).

Ten (10) districts (Liwale, Kilwa, Rufiji, Kilombero, Morogoro Vijijini, Ulanga, Namtumbo, Tunduru, Kilosa and Kisarawe)

These districts maintain a prominent interest in Selous GR, its management and resources.
## INTRODUCTION CONT...

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<th>Area</th>
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<tr>
<td></td>
<td>Kisarawe</td>
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<tr>
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</table>
Due to its large size, Selous management is divided into 8 sectors:

- Matambwe
- Kingupira
- Miguruwe
- Liwale
- Kalulu
- Likuyu Sekamaganga
- Msolwa
- Ilonga
INTRODUCTION CONT...

- SGR is managed under the:
  - Wildlife Policy 2007
  - Wildlife Conservation Act No. 5 of 2009 and its regulations
  - Convention on World Heritage Site 1982
CONSERVATION EFFORTS

- Major program going on in Selous GR is conservation and protection of wildlife resources and their habitats.
- Areas outside the reserve are also used by wildlife as migratory routes, dispersal areas or corridors.
- Some of these areas are on village land, thus managing areas outside the reserve and integration of local communities to Selous conservation is inevitable.
CONSERVATION EFFORTS cont…

- Strengthening wildlife security around SGR
- Law enforcements
- Benefit sharing and Compensation scheme
- Capacity building for Wildlife Staff
- Exchange of Intelligence Information with VGS
- Contribution to social services improvement
- Opportunity for employment
CONSERVATION EFFORTS cont…

Strengthening security of wildlife around SGR

- Facilitate establishment of Community Wildlife Management Areas.
- Currently 7 WMAs exist:-
  - MUNGATA (Utete), JUKUMU (Morogoro), MAGINGO (Liwale), ILUMA (Ulanga), NALIKA (Tunduru), JUHIWANGUMWA (Rufiji) and MBARANG’ ANDU (Namtumbo)
- Collaborate with district authorities and village game scouts to carry out patrols in areas outside the reserve including control of dangerous and problem animals.
CONSERVATION EFFORTS cont…

Improving Intelligence and Investigation

- The Reserve Management continue to use the informers from surrounding villages in gathering information that improves success in the war against poaching.

Minimizing human wildlife conflicts

- Extension services conducted to ensure communities aware that wildlife conservation is also a profitable form of land use.
Compensation and Consolation scheme

- A total of **TZS 23,943,000.00** was paid to victims of dangerous and problem animals in districts surrounding the reserve from 2011 to December 2015

Benefit sharing

- In the year 2014/2015 to date, a total of **TZS 532,221,376.00** has been disbursed to Districts and WMAs adjacent to the reserve as revenue accrued from trophy hunting in the Reserve.
CONSERVATION EFFORTS cont...

**Capacity building for Wildlife Staff**

Capacity building for VGS (At Likuyu Seka Training Centre) on:-

- bush craft,
- map reading, Global Positioning System (GPS)
- Range/shooting practice
- Para military discipline and code of conduct
- Rescue techniques and first aid
- Basic ecological data collection and organization
- Intelligence, investigation, arresting, crime scene management and exhibit handling techniques
CONSERVATION EFFORTS cont…

- **Contribution to social services improvement**
  - SGR has taken initiatives to contribute in social services development in adjacent communities.
  - SGR in collaboration with Tourism investors has contributed to various development projects in communities around. These include construction of school classroom, dispensary and clean water supply at Liwale, Msolwa, Illonga and Kalulu for a period between 2010-2015: Total **TZS 259,589,800**.
Opportunity for employment

- Through trophy hunting and photographic tourism activities conducted in SGR, people from local communities are provided with employment opportunities.

- These play a much greater role in poverty reduction and local economic growth in these communities and thus provides them with incentives to conserve wildlife.
CONCLUSION

- Sustainable wildlife management needs participation of various stakeholders including local communities.
- This is important not only to keep Selous safe from poaching but also links Selous conservation efforts with sustainable community development.
- When the two partners are properly linked contribution of Selous conservation efforts to community development will be clearly realized.
Asanteni
ECOTOURISM POTENTIAL FOR LOCAL COMMUNITIES TO REAP FROM WILDLIFE CONSERVATION

Presented at the 3rd National CBNRM Forum held on 26th May 2016

Wilfred K. Msemo
Senior Tourism Officer
Research, Training and Statistics
Setting the scene

1.0 Introduction

1.1 Definition of Ecotourism

2.0 Seven Key Activities of Ecotourists

3.0 Ecotourism Development Strategies

4.0 Tourism Policy Strategies for Ecotourism development

5.0 Current Status of Ecotourism Development in Tanzania

6.0 Benefits obtained by Local Communities from Wildlife Conservation

7.0 Sharing of income generated from tourist hunting activities in WMA

8.0 Challenges to be taken into account in the efforts to develop Ecotourism

9.0 Concluding remarks
1.0 INTRODUCTION

1.1 Definition of Ecotourism

• Ceballos-Lascurain, who is generally accepted as the first person to define ecotourism, defined the term as: Tourism that involves travelling to relatively undisturbed or uncontaminated areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas (Ceballos-Lascurain, 1991, p.25).
1.1 Definition of Ecotourism...

- The International Ecotourism Society (TIES) defines ecotourism as: Responsible travel to natural areas that conserves the environment and improves the well-being of local people.

- Ecotourism is therefore a travel to fragile, pristine, and usually protected areas that strive to be low impact and (usually) small scale. It helps educate the traveller; provides funds for conservation; directly benefits the economic development and political empowerment of local communities; and fosters respect for different cultures and for human rights.
2. SEVEN KEY ACTIVITIES OF ECOTOURISTS

Generally ecotourists are interested in 7 key activities or experiences, namely;

- Village development projects
- A wide range of adventurers
- Communing with nature
- Immersing themselves in the culture
- A travel learn experience
- Spending their money wisely and
- Helping to protect the environment
3. ECOTOURISM DEVELOPMENT STRATEGIES

• If any country should be in the front line of global ecotourism, it is Tanzania. The country’s natural resources and tourist attractions are second to none, with hundreds of miles of pristine Indian Ocean coastline;

• The planet’s greatest remaining concentrations of wildlife like elephants, zebra, lions, and wildebeest in places like the Serengeti and the Selous; and a wondrously diverse topography that includes Mount Kilimanjaro, the world’s highest free-standing peak.
3. ECOTOURISM DEVELOPMENT STRATEGIES...

• Its cultural attractions are no less impressive; the Maasai grace virtually every national tourism publication, the Hadzabe are among the last true hunter-gatherers in East Africa, and the Swahili coast is rich in history.

• Blessed with these natural and cultural assets, Tanzania has also been fortunate that during the past fifty years it has been one of sub-Saharan Africa’s most peaceful and politically stable nations.
4. Tourism Policy Strategies for Ecotourism Development

• Major National Policy Reforms which aimed at promoting local community participation and economic empowerment in Ecotourism activities in the country have been done. This had helped to forge links with local communities in developing more informed choices like cultural tourism and community – private sector partnerships.

• The policy also places emphasis on quality tourism against the traditional mass tourism, to carry extensive tourism promotion and foresees tangible benefits to the people’s livelihood and the national economy in general, explicitly poverty reduction through encouraging development of sustainable and quality tourism (high yield low volume).
4. Tourism Policy Strategies for Ecotourism development...

Among others some of the Tourism Policy Strategies for Ecotourism development are as follows;

- Designing environmentally friendly tourism programs
- Putting in place mechanisms that will ensure tourist activities respect use of biodiversity, wildlife conservation, beaches and other naturally occurring phenomena of aesthetic value
- Enhancing and developing designated trails by putting into place guidelines for their use in order to protect their respective tourist product
4. Tourism Policy Strategies for Ecotourism development...

- Enhancing the conservation of nature, creating sustainable environmental awareness among tourists and the local population alike, and sensitising them on the need to respect nature and conserve the environment etc.
- Ensure that tourism development activities are subject to EIA.
- Developing tourism plan for specific areas e.g. beach areas etc.
5. CURRENT STATUS OF ECOTOURISM DEVELOPMENT IN TANZANIA

• Tanzania is well-documented example of nature-based tourism in Africa. With abundant wildlife, great and unique natural features, friendly and hospitable people and a superb climate.

• Ecotourism has been one of the tourism products that are growing steadily in Tanzania. This growth has been supported greatly by other sectoral policies such as that of wildlife, Forestry and Beekeeping which all advocate for Ecotourism development in the game and forest reserves.
5. CURRENT STATUS OF ECOTOURISM DEVELOPMENT IN TANZANIA...

- The country is already witnessing a positive move by the private sector initiatives in investing in the development of visitor facilities in the village lands under mutually agreed terms between villagers and investors.

- Ecotourism activities have been broadened and more avenues for income generation opportunities for the economically disadvantaged rural communities have been opened.
5. CURRENT STATUS OF ECOTOURISM DEVELOPMENT IN TANZANIA ...

- Small benefits are starting to trickle in some local communities, initiating a dual structure that shall enable people to continue their rural practices and traditions in the production of goods and services, whilst expanding the environment stewardship.

- Ecotourism is now widely practiced in areas such as Ngorongoro, Mto wa Mbu, Amani Natural Reserve, Uluguru mountains, Udzungwa mountains etc. These activities provide a new source of communal income through tourism, as well as a source of employment and a limited market for local goods.
5. CURRENT STATUS OF ECOTOURISM DEVELOPMENT...

- There has been a rapid development of Ecotourism in recent years as the tourism industry seeks to broaden and diversify its product beyond that available in National Parks and other protected areas. Partnerships or joint ventures whereby local villages receive payment in exchange for access to their lands are multiplying in the northern part of the country.

- Ecotourism programmes managed by TANAPA in the National Parks contribute significantly to a wide range of livelihood strategies within local communities through revenues generated in parks and nature based tourism.
Several mechanisms are used to enable local communities benefit directly from tourism within and outside national parks.

- The government believes and supports the fact that community based Ecotourism programs shall in the long run sustain a consistent reduction of poverty endemics and disparity in income distribution, whilst conserving and protecting the fragile environment.
6. Benefits obtained by Local Communities from Wildlife Conservation

• The Village land Act of 1999 specifies that there will be a set aside village land for various economic activities, including tourism.

• The wildlife policy of 1998, points out directives on how wildlife tourism in Tanzania can be undertaken, by coming up with the Wildlife Management Areas (WMAs), to operationalize community Based tourism on village lands. At the moment there are 22 WMAs in Tanzania with Authorized Association (AA) status.
6. Benefits obtained by Local Communities from Wildlife Conservation...

• Economic development and diversification, particularly in rural areas.

• The generation of income for conservation and management of nature reserves, national parks, other public land and cultural development.

• Quality employment opportunities utilizing local knowledge.

• Foreign exchange earnings

• Education and appreciation of country’s natural heritage to visitors
7. Sharing of income generated from tourist hunting activities in WMA

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</tbody>
</table>
8. CHALLENGES TO BE TAKEN INTO ACCOUNT IN THE EFFORTS TO DEVELOP ECOTOURISM

• In Tanzania today, the growing promise of community-based ecotourism at the local and national level may be undercut by a number of conflicts of interest among different groups.

• Safari hunting is undertaken both in game reserves and in many unprotected community lands— the same areas where ecotourism has developed at the village level.
8. Challenges...

• The critical difference between tourist hunting and ecotourism, from the local perspective, is that while the latter is determined through local agreement, the former is subject to exclusive central control and concessions.

• Revenues from safari hunting similarly flow directly back to the treasury, rather than accruing to the local communities on whose land these activities occur.
8. Challenges...

• Most of communities do not have a perspective on ecotourism and many other development initiatives that come to their areas. They develop a perspective over time, and this will depend on their experience with the project.

• In most of communities donor support is treated as a right with no obligation for accountability, and sometimes lack of accountability seems to be a cultural thing as it is true that collective responsibility can be nobody’s responsibility
8. Challenges...

• Sometimes local people may want to be part of ecotourism but they do not appreciate the responsibilities that come with the business and this is the reason many of them are seen as unsustainable.

• Accessibility to most of the ecotourism sites still being a major problem. Generally investment in infrastructure that could make it easy for these areas accessed is lacking.
9. Concluding Remarks

In order to realize the potential of Ecotourism in Wildlife Conservation we need the involvement of numerous actors, including:

• Visitors;
• Communities;
• Businesses, including various combinations of local businesses, in-bound operators, outbound operators, hotel and other accommodation providers, restaurants and other food providers, and so on;
9. Concluding Remarks...

• Natural areas and their managers, including both public and private areas;

• Government, in addition to its role as a natural area manager; and

• Non-governmental organizations, such as environmental and rural development NGOs
THANK YOU FOR YOUR ATTENTION
Promoting Tanzania’s Environment, Conservation and Tourism (PROTECT)

A USAID-funded project implemented by International Resources Group (IRG)

TNRF CBNRM Forum
Dar es Salaam, May 26, 2016
PROTECT – AT A GLANCE

• **Project Objective:** To address dynamics that threaten biodiversity conservation and inhibit private sector-led tourism growth

• **Policy and institutional strengthening to support USAID landscapes**

• **Project Dates:** 5 years (2015-2020)
PROTECT approach is based on:

• **Participatory process** – ensure stakeholder participation in policy dialogue

• **Substance** – generate and use *expert evidence-based* analysis to inform policy reforms

• **Representation** – *provide technical assistance* to credible counterparts, with special focus on anti-poaching, wildlife trafficking, WMAs and tourism

• **Demand** – ensure that there is demand from affected stakeholders for PROTECT initiatives (participatory workplan and activities)

• **Comprehensiveness** – address multiple elements in the conservation-wildlife-tourism system
PROTECT strategic plan and main priorities

- **Strengthen institutions**, WD-CBC able to monitor WMAs performance and provide policy and legal directives, governance, and technical back stopping to AAC and WMAs.
- **CWT**—work with range of actors and stakeholders to implement a suite of tools and CWT best practices.
- Work with **CSOs and the private sector** - CBNRM advocacy agendas
- Work with **TCT, HAT, TATO** and other relevant associations to create a conducive business environment for tourism.
- Improve investment and income in WMAs through **joint ventures** and private sector involvement in conservation based enterprises.
PROTECT implements its activities in 4 ways:

- Technical staff
- Consultants
- Subcontractors (GMU)
- Grants (CWMAC, LEAT, HGF and TNRF)
Activities:

1. Policy, Research and Advocacy

2. Institutional strengthening

3. Nature-based economic strengthening and diversification

4. Combat Wildlife Poaching and Trafficking
Activity 1: Policy, Research and Advocacy

Stronger policy, research and advocacy in favor of biodiversity conservation and local economic growth

Select Expected Results:

• Policy reforms implemented

• Capacity of WMAs to identify and capture revenue for carrying out their mandate strengthened

• Capacity of CSOs and private sector to develop advocacy agendas around conservation and tourism strengthened
Activity 1: Policy, research and advocacy

Select Activities:

• Partnering with George Mason University and UDSM IRA to develop an online course and training workshop on Environmental Policy targeted at students, conservation managers, and practitioners

• Empowering organizations through grants (CWMAC, TNRF, LEAT, HGF and JGI) to strengthen and deliver advocacy and policy

• Reviewing current revenue collection system of WMAs

• Supporting review regulations associated with WCA
Activity 2: Institutional strengthening

Increased institutional capacity to address current and future natural resource challenges

Select Expected Results:

• Ability of CWMAC, AAs, and WMAs to do planning and forecasting strengthened

• Capacity of Tanzanian institutions to develop and market sustainable tourism improved

• Capacity of protected area managers and research institutes to develop business plans, management, and financial models improved
Activity 2: Institutional strengthening

Select activities:

• **Build organizational capacity** (e.g. AAC), and data-sharing platform for adaptive management (WMAs etc.)

• Developing curriculum, conduct training, and research on application of business planning with **CWMAC** and **Community-based Training Institute (Likuyu)**
Activity 3: Strengthen and Diversify Nature-Based Enterprises

Increased and diversified economic opportunities for wildlife conservation

Expected results:

• Increased economic benefits from sustainable wildlife management and conservation enterprises

• Increased investment for nature-based enterprises

• Increased community engagement and private sector participation in conservation-based enterprises
Activity 3: Strengthen and Diversify Nature-Based Enterprises

Select Activities:

• Economic viability and options for WMAs.
• Economic valuation and value chain analyses for wildlife tourism
• Partnering with private investors to increase investment in WMAs and to increase community benefit from tourism industry.
• Improve business environment for tourism (TCT, HAT and TATO)
Activity 3: Strengthen and Diversify Nature-Based Enterprises

Future modes of engagement

– Issue grants to local development partners to support household income generation activities in USAID landscapes,
– Provide training and guidance to USAID landscape partners on enterprise development,
– Provide capital to private sector investors to leverage investment
Activity 4: Combat Wildlife Poaching and Trafficking

Reduce wildlife poaching and trafficking

Selected Expected Results:

- Increased capacity of GoT agencies to combat wildlife trafficking and poaching
- Punishments for wildlife-related crimes clearly articulated, understood, and meted out
- Decrease in wildlife trafficking and poaching crimes
Activity 4: Combat Wildlife Poaching and Trafficking

Select Activities:

• Support localized anti-poaching efforts on the ground in the landscapes that USAID operates in (HGF and PAMs)

• Support national level efforts:
  – To strengthen investigation and prosecutorial capacity through improved information collection, analysis, and sharing (WCUs, NTSCIU, PAMS)
  – Assist **MNRT** to develop M&E plan and database for conservation, anti-poaching and wildlife trafficking data to inform decision-making and reporting.

• Use of detection dogs: building a community of practice
STRATEGIC GRANTS PROGRAM

• Promote scalable and/or innovative solutions and/or engage local stakeholders in improved wildlife management, anti-poaching, and private sector partnerships

• NOT for operational costs of ongoing activities

• Responsive and targeted support to US and Tanzanian non-governmental organization.

• Total grants budget of approximately $2.75 million over the 5 years
Current grant:

**CWMAC** to strengthen the institutional capacity and operational functions of CWMAC and WMAs

- Translated the CWMAC Constitution and Cooperate Strategic Plan into Swahili and English.
- Facilitated conflict arbitration for select WMAs
- Negotiated with two companies interested in investing in WMAs.
STRATEGIC GRANTS PROGRAM: Anticipated

• **Lawyers Environmental Action Team (LEAT)** to:
  – Develop a toolkit on wildlife policies, laws and regulations
  – Prepare a manual of legal and regulatory instruments/options for land use and conservation
  – Identify legal, regulatory and operational constraints hindering WMAs from responding to poaching

• **Tanzania Natural Resources Forum (TNRF)** to:
  – Research and prepare policy briefs/recommendations on penalties for poaching and trafficking, hunting regulations, permits, quota setting
  – Build capacity of civil society and private sector to develop advocacy agendas around conservation and tourism
Southern Tanzania Elephant Program (STEP) to:
- Support a civil society social media and advocacy platform OKOA TEMBO (Save the Elephants), to lobby the GOT to take increased action to combat wildlife poaching and trafficking

Honeyguide Foundation to:
- Develop best practices for managing anti-poaching teams in WMAs;
- Establish a common data-sharing platform for WMAs, in collaboration with CWMAC;
- Create and implement tourism and business plans for WMAs,
- Produce a WMA educational training film for communities.
– Piloting CWT technologies

– Local development partners to support household income generation activities in USAID landscapes

– Capital to private sector investors to leverage investment that promotes responsible tourism around WMAs
We look forward to your suggestions and partnership

Thank you
STATUS OF COMMUNITY PARTICIPATION IN WILDLIFE MANAGEMENT IN TANZANIA: MAJOR CHALLENGES/LESSONS TOWARDS EFFECTIVE PARTICIPATION

A paper presented
By
Leonard Mayeta
MNRT HQ

At the 3rd National CBNRM Forum, held at the NCT, DSM
on 26th May, 2016
1. Introduction
2. Status of community participation
3. Challenges
4. Proposed actions/intervention
Wildlife Conservation in Tanzania dates back in 1891 and the management approaches have evolved from time to time. This is manifested by the establishment of SGR in 1905 by the Germany Government and its subsequent gazettement by the British Government in 1922.

This was followed by establishment of the Game Department in 1921. Establishment of the Game Department was basically meant to:
- Administer established GRs,
- Enforce hunting regulations and,
- Protect people and crops against dangerous animals.

The department has retained these functions to date, with more responsibilities of engaging other wildlife management institutions and stakeholders.

To extend the wildlife protected PA Network, more National Parks and Game Controlled Areas were established.

The most dominant management approach at this time was the state control and more centrally management without engagement of local communities and other stakeholders.
As time went on, there was a call for more collective efforts on wildlife conservation whereby the Father of the Nation and First President of the then Tanganyika, the late Mwalimu Julius K. Nyerere, when he made the a proclamations at the IUCN meeting in 1961, commonly known as the Arusha Declaration.

The late Mwalimu J.K.Nyerere said:-
1. Introduction...

- "The survival of our wildlife is a matter of grave concern to all of us in Africa. These wild creatures amid the wild places they inhabit are not only important as a source of wonder and inspiration, but are an integral part of our natural resources and of our future livelihood and well being”

- This among other factors formed the basis of engagement of more stakeholders in wildlife conservation and making sure that the wildlife continues to survive, provides enjoyment and benefits to the current and future generations.
Given the importance of stakeholders engagement in wildlife conservation, the government in collaboration with conservation/development partners created enabling environment to community participation (Policies/legislations).

This was through formulation of the Wildlife Policy, review of wildlife legislations and testing the CBC Concepts on 16 pilot areas.

Positive results from the pilot projects necessitated up-scaling of the 38 WMA areas.
3. Achievements

- Enabling policy, institutional and institutional frameworks in place,
- 22 out of 38 areas declared as WMA and their CBOs as AAs with an area coverage of 136,714 Square Kilometers.
- 19 out of 22 AAs have wildlife user rights,
- 223 villages with VLUPs
- More stakeholders engagement,
- Increased capacity of VGS to conduct anti-poaching patrol
- Increased donor support to local communities
Map of Registered and gazetted WMAs in Tanzania
3. Achievements...

- Improved relationships between Government and local communities,
- PT Regulations (2008) have been reviewed to provide more benefits to local communities and they are at final stages of gazettement,
- WMA Regulations (2012) have been reviewed and are at final stages of endorsement. The review of these regulations is intended to provide more benefits to the local communities.
3. Achievements....

• CBC/WMA support unit established, facilitated, supported and functioning,
• Increased conservation education at community level
• Improved relationships between Government and local communities (Common goal-Conservation)
4. Challenges

- Low/weak governance capacity within the WMAs,
- Low leadership skills to AA leaders,
- Conflicts (Investors Vs AA leaders)-
- Livestock grazing and settlement in WMAs
5. Proposed interventions

- More support is needed to
  - the AA leaderships particularly on governance and leadership skills
  - Strengthening partnerships with government agencies, conservation partners and the local communities in ensuring that WMA is the best among the CBNRM Models in the Country
  - to WMAs which has no investors at the moment so that they can carry out key anti-poaching operations
THANK YOU FOR LISTENING
Current conservation efforts in addressing critical issues in WMA around SGR

Presented by Isaac Malugu
WMA Critical Issues & Challenges

- **Governance challenges:**
  - Basic governance functions:
  - AA not accountable to village councils/government.
  - Governmental Involvement in AA Decision Making
  - Incomplete Devolution of Responsibilities to AAs, especially lucrative functions such as selection of investors.

- **Economic challenges:**
  - Costs of establishing and running WMAs are too high
  - policy reforms to ensure benefits flow to communities and households (Benefit-sharing mechanism improved)
  - Inadequate capacity in financial management

- **Conservation challenges:**
  - Inadequate monitoring of wildlife resources in WMAs
  - Compression – loss of habitat and blockage of wildlife migratory routes

- **Manpower**
  - Inadequate Capacity for oversight of SGR and WMAs
  - Sustainability issues for the built infrastructure under WMAs

- **Poaching** - commercial and subsistence poaching

- **Funding constraints**
**WWF long term vision**

- **WWF Vision By 2030**, Tanzania’s outstanding and globally significant natural wealth and biodiversity are sustained, and support local livelihoods and national economic development for present and future generations.

- By 2020 the ecological integrity of Selous-Ruvuma landscape is maintained and contributing to improved livelihoods; with populations of selected wildlife species, and coverage and condition of designated forests, at least above 2015 levels.
Rationale

• Realizing the multitude of challenges facing Selous Game Reserve, the Selous-Niassa Wildlife Corridor and the WMAs around

• Implementation of the project requires a multi-stakeholders and multidisciplinary interventions

• Major focus is in the SGR buffer zone - local communities in WMAs and VLFRs
Coverage

- Country wide for policy related activities
- for WMA support in collaboration with partners
Support effective governance of WMA’s

- Capacity building initiatives for DGOS from District Councils as part of improved linkages with WMAs;

- Support AAC and WMA Support Unit to have strong oversight capacity to ensure that AAs operate effectively

- Enhance WMA capacities in transparency and accountability in financial as well as NRM management;
Support coordination and economic development in SNWC according to social/environmental standards

- Establish the stakeholder forum and determination of the modality of operations

- Articulating the vision of the forum in supporting all conservation efforts in and around Selous Game Reserve

- Profile the essence and significance of the SNWC in the protection of Selous Game Reserve in Tanzania and to ensure to uphold its integrity

- develop natural resources’ indicators of resource condition to monitored for adaptive management
Establish Community Conservation Business enterprises

• sensitize communities to embrace conservation management in order for the WMAs to attract potential conservation business investors;
• conduct market study to identify viable business opportunities;
• identified business opportunities aggressively promoted;
• capacity building for investment negotiations, contract management and financial management;
• strive to have at least one investor each for every WMA
Capacity building program in SNWC on CBNRM, community business enterprises and resource monitoring

- address & control human wildlife conflict (HWC)

- conduct needs assessment to identify gaps

- prepare and implement capacity development program to address gaps in law enforcement, monitoring, conservation business enterprises, organizational and financial management.
Implement regular joint law enforcement to reduce illegal off take

- Build a network of informers and intelligence system in support of law enforcement agencies. Eg. joint anti-poaching patrols
- Institute regular retraining programs for VGS and SGR scouts in the area in modern techniques in law enforcement;
- Prevent encroachment on the WMA’s boundaries to reduce human presence inside the WMA and minimize illegal utilization and poaching incidences
- New ideas and experience in anti-poaching, i.e sniffer dogs and use of drones (UAV)
Monitor biological and socio-economic resources

- Develop M&E indicators for WMA livelihood and socio-economic monitoring;
- Support policy reform for WMA regulations with respect to M&E tools as well as indicators for monitoring performance;
- Support AAC in the hosting and management of WMA database and contribute to the established WMA monitoring system.
WAY FORWARD FOR CBNRM

• **Support and build capacity in WMA management** – to local institutions such as AAs, the AAC, the Wildlife Division’s WMA Support Unit (WSU), and District Natural Resources Advisory Boards (DNRABs);

• **Expand high-revenue-generating enterprises** - engagement with the private sector with a particular focus on responsible tourism and trophy hunting;

• **Improve the policy-enabling environment** - review of existing policies with focus on benefit-sharing and trophy hunting and initiate dialogue to harmonize sectoral policies on CBNRM, including fisheries, forestry, and wildlife;

• **Strengthen natural resource management and monitoring systems** to ensure informed management decisions at local and national levels to improve the natural resource base.
Thank You
Evaluating the impact of Tanzania’s Wildlife Management Areas on household wealth trajectories

Aidan Keane, Univ. Edinburgh

TNRF CBNRM Forum, National College of Tourism, 26th May 2016

Background to the study

Tanzania’s natural resources
- High biodiversity, iconic wildlife populations
- Tourism >$700 million; 5-10% of GDP
- ~30% of GDP, esp. agriculture and tourism
- ...but GDP misses most pastoral production
- 75% of population dependent
- Widespread poverty, esp. rural areas

Conservation in Tanzania
- CBNRM key poverty reduction strategy
- 1998 Wildlife Policy of Tanzania
- 2002 WMA regulations developed
- 2003 Implementation started
- 2006-7 First pilot WMAs registered

Project team

- Prof Katherine Homewood (University College London)
- Dr Jens Friis Lund (University of Copenhagen)
- Dr Aidan Keane (University of Edinburgh)
- Dr Mauro Msuha (Tanzania Wildlife Research Institute)
- Prof Neil Burgess (UNEP WCMC)
- Joseph Oilla (Tanzania Natural Resource Forum)
- Dr Martin Nielsen (University of Copenhagen)
- Jevgeniy Bluwstein (University of Copenhagen)
- Anthony Dancer (Imperial College London)

Wildlife Management Areas

Status:
- 19 WMAs in operation
- 148 villages
- >450,000 people
- Restrictions on land use in return for wildlife-based revenue
- 38 planned in total
- Will cover 7% of land area

Study areas

6 WMAs selected:
- North vs. South

8 villages per WMA:
- Sampling frame: EAs from 2002 census
- 4 inside
- 4 outside
**BACI comparison**

WMA areas

Pre-WMA Recall

Change in WMA areas

WMA areas Now

Non-WMA areas Pre-WMA Recall

Change in control areas

Non-WMA areas Now

**Control village selection**

Non-parametric matching

WMA units

“Control” units?

**Control village selection**

Non-parametric matching

WMA units

Pool of potential control units

**Control village selection**

Non-parametric matching

WMA units

Pool of potential control units

**Control village selection**

Non-parametric matching

Matching on:

- Demographics (population density)
- Market access (distance to roads, distance to towns)
- Wildlife & conservation (wildlife corridors, presence of key species, distance to PA)
- Biophysical characteristics (slope, elevation, precipitation, land cover)

Excluding:

- Protected areas

**Data collection approaches**

Mixed methods

PIMA

Governance

Wealth ranking

Recall validation

Narratives of change

Household surveys

Remote sensing

Aerial surveys
Wealth data and analysis

Wealth ranking dataset
- 13,573 households, 42 villages
- Participatory wealth ranking
- Recall relative to anchor events (e.g. Ol Doinyo Lengai)

Analysis:
- Bayesian hierarchical cumulative logit
- Response = wealth category
  (ordered: Very poor < Poor < Normal < Rich)
- Village-varying coefficients

Background // Our Approach // Results // Conclusions

Wealth change
Raw wealth ranking data

Comparison between WMAs and controls

Household-level WMA effects
Wealth change
Household-level WMA effects

Discussion

Have WMAs helped people?
- Mixed: 3 Worse, 1 No change, 2 Better
- Also village-by-village variation
- Differences btw. revenue/not and age

Northern WMAs
- Generally worse-off: loss of opportunities not fully compensated
- WMA leadership have benefitted
- Elite capture?

Southern WMAs
- Generally better-off
- Philanthropy?
- Sustainability?

How could WMAs be improved?
- Sustainable net benefits to communities are key to WMA success
- Review benefit sharing arrangements?
- Prioritise security of tenure and access to natural resources for communities
- Enable communities to revisit agreements
Examining livelihoods impacts of WMAs

Jens F. Lund, Jevgeniy Bluwstein, Martin R. Nielsen, Aidan Keane and Katherine Homewood

Purposes

• Explain major results from the PIMA livelihoods research focusing on land, livestock, access to natural resources, revenues and own-reported wellbeing
• Compare findings from PIMA with other research on WMAs
• Provide policy recommendations

What do WMAs do?

A word on method

• App. 2,000 HHs
• Stratified random sampling
  – Elites (10)
  – Very poor (10)
  – Others (20)
• Questionnaire
• ODK

ATET estimate land ownership

A control example
A treatment example

Own reported development in access to grazing over the period 2007-2014

Own reported development in access to natural resources over the period 2007-2014

Portfolio score on income sources

ATET on income sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>All</th>
<th>North</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock income</td>
<td>-0.018**</td>
<td>-0.051***</td>
<td>0.017**</td>
</tr>
<tr>
<td>Environment income</td>
<td>-0.011*</td>
<td>-0.022**</td>
<td></td>
</tr>
<tr>
<td>Wage income</td>
<td>0.026*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business income</td>
<td>0.015**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remittances income</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Perceived change in wildlife crop damage 2007 - 2014

WMA revenues

- Only Burunge and Enduimet earn substantial revenues
- All WMAs remain heavily subsidized by outsiders
- Revenue income reaching the WMAs cut short by:
  - 35% tax on photographic tourism revenues
  - Investors refusing to pay or delaying payment
- Development potential of WMA revenues diminished by:
  - App. half of revenue covers admin and patrolling (focus on anti-poaching)
  - Most WMAs span villages that have little wildlife but get an equal share of the revenue

WMA related direct incomes

WMA public financing

- "Has the WMA reduced your homestead’s contribution to the following public development projects?"
- Average for school, village office, health centre, road and water

WMA related direct incomes

- “Overall, how would you say that the WMA has affected your personal wellbeing since WMA establishment until now?”
Policy recommendations

- GoT could forfeit its share of the revenues to favor villages by, for instance, doing away with the 35% tax on non-consumptive tourism revenues.
- At WMA level the sharing of revenues could be changed to favor villages that bear the brunt of the costs and/or villages that do not contribute important corridor functions could be excluded.
- WMA management plans and land use regulations should respect local livelihoods needs, including allowing non-extractive uses such as grazing in northern Tanzanian pastoralist areas and beekeeping in southern Tanzanian forested areas.
- GoT could support AAs in rule enforcement against political and economic elites, such as tourism operators.
What do WMAs hope to do for women?

"The main objectives of the WMA process are to:

- increase the participation of local communities in the management of wildlife resources;
- enable local communities to derive benefits from wildlife resources; and
- enhance the conservation of wildlife resources."

WWF-USAID WMA status report 2014 p. 13

WMAs’ theory of change for women:

"Increased women’s participation in WMAs needs to be pursued through … women-led income-generating projects and encouragement to participate in AA governance bodies … training opportunities to enhance their skills as active members in AA governance and to be employed in … tourism enterprises in the WMAs."

WWF-USAID WMA Status report 2014:41

Women and WMAs

• Rural women
  - Main and frequent collectors of wild products (Sunderland et al 2014)
  - natural conservators? (pro: Agarwal 2008; con: Mwangi et al 2011)
  - benefit from environmental interventions? (Salerno et al 2015; Pailler et al 2015)

BUT

• Rural African women
  - often disadvantaged by environmental initiatives
    - Land tenure (Kevane 2012)
    - Participation (Cleaver 2000)
    - NRM/CBWM (Khumalo and Yung 2015)

Women and WMAs

• Competing predictions:
  - WMA theory of change
  - Development experience

• PIMA RQ: What is the impact of WMAs on women?
  - On female-headed households?
  - On married women?

Total women’s sample:
  - 187 Female heads of household:
    - Focused on Burunge + Enduimet + controls (n=137)
    - Multi-level regression models
  - 937 Married women:
    - 3N + 3S WMAs + controls
    - Bayesian analysis

Results

Female heads of household

• Assets /wealth: Female HH < Male HH

<table>
<thead>
<tr>
<th>Effect of being female-headed</th>
<th>Multilevel model coefficient</th>
<th>1 SE</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock TLU/AE</td>
<td>-3.34</td>
<td>0.966</td>
<td>**</td>
</tr>
<tr>
<td>Land owned/AE</td>
<td>-1.30</td>
<td>0.316</td>
<td>**</td>
</tr>
<tr>
<td>Land farmed/AE</td>
<td>-0.67</td>
<td>0.192</td>
<td>**</td>
</tr>
<tr>
<td>Wealth rank trajectory 2007-2014</td>
<td>-0.54</td>
<td>0.117</td>
<td>**</td>
</tr>
</tbody>
</table>

• No WMA (BACI) effect
In slides that follow:

- **Black text:**
  - Significant findings, but no WMA effect

- **Red text:**
  - Weak evidence for WMA effect

- **Bold Red:**
  - Good evidence for WMA effect

---

Married women: access to assets

- ~100% wives: household has shamba/ bustani
- 90%N + 60%S: household has livestock

Independent access for consumption/ sale:
- shamba crops: <50% wives
- bustani crops: 50% S + 80% N
- livestock products: ~90% N + 60% S

Married women: access to land to settle and/or farm

- Increasing problem for most women
- No WMA effect

Married women: access to NRs

- non-village water-point water
  - most women: no change
  - ~25%: access is worse, especially
    - South women
    - Poor wives
- firewood + construction materials
  - ~50%: increasingly hard to access,
    - **Negative effect of North WMAs on access to**
      - water
      - construction materials

Married women: Income generation

- Sale of home produce
  - North:
    - ~50% sell livestock products
    - ~33% sell crops.
  - South
    - ~50% sell crops
    - ~33% sell livestock products
- **Kibarua**
  - ~33% women
  - Inversely related to wealth rank
  - WMA effect: more Very poor wives in WMAs undertake kibarua

Married women: trade

- Petty vending
  - 19% women
  - 33% North
  - Average/ Rich wives: positive WMA (BACI) effect.
- Sale of cooked foods
  - 15% women
  - negative WMA (BACI) effects on South and on Poor wives.
- NTFP sales
  - 11% women
  - Negative WMA (BACI) effect
  - Negative WMA effect in the North.
Married women: external income

- remittances
  - 24% wives in 2014.
  - negative WMA (BACI) effect among Poor wives.
- external aid
  - 7% overall
  - Very poor women < others
  - positive WMA effect in Very poor households.
  - positive WMA (BACI) effect Overall + in South.
    — philanthropic support in S. WMA (e.g. Mbarang’Yiku: Nos 2011, 2013).

Married women: food security

- No increase/decrease overall
- No WMA effect
- Few attributed any change in food security to WMA, but
- More did so for perceived decreases.

Married women: Worry over wildlife hazard

- WMA wives worry > non-WMA.
- Wives perceiving safety as worse attribute to WMA.

Married women: crop damage

- More WMA than non-WMA women report damage 🆙
- ~50% attribute changes in crop damage to WMA

Main perceived costs and benefits

<table>
<thead>
<tr>
<th>WMA Costs</th>
<th>WMA benefits</th>
</tr>
</thead>
</table>

Institutional/ governance impacts:

Women’s participation:

“Do you...”
Female HHs, wellbeing and WMAs:

- Compared to Male HH, Female HHs have lower
  - Livestock holdings
  - Land owned / farmed
  - Wealth trajectory
  - Knowledge of governance
  - Wives < FHH < MHH

Married women, wellbeing and WMAs:

- positive WMA (BACI) effect on
  - % external aid
  - overall and in S (not N)↑
  - Very poor ↑ (though still < others)
  - % Average/ Rich wives engaging in petty vending ↑

- Adverse WMA (BACI) effects:
  - % South and Poor wives selling cooked foods ↓
  - % Selling NTFPs in the North ↓
  - % Very poor kibara ↑
  - % Poor wives receiving remittances ↓

- Adverse effects of WMAs on
  - N WMAs: access to water and NTFPs ↓
  - crop damage ↑ reports WMA > non WMA
  - Perceived food security attributed to WMAs, wildlife hazard worries ↑ WMA > non WMA

Women, wellbeing and WMAs:

- WMAs:
  - Few positive effects on Female HHs/ married women
  - Some negative effects on women's wellbeing:
    - Assets
    - Wealth rank
    - Access
    - Income generation
    - Security
    - Participation

- Opportunity to reconsider WMA
  - Theories of change
  - Delivery of benefits
Wildlife overflight analysis in Tanzanian WMAs

Neil Burgess, Maurus Musa, Mwita Machoke, Simon Blythe, Martin Nielsen, Noelia Zafra Calvo

Overflight results: Northern WMA
Summary

• Northern WMA have high numbers of domestic animals
• Numbers of wild animals are also considerable, and variable
• Both live and dead elephants are recorded in 2014
• Large numbers of dead elephants were recorded in Mukame WMA in the 2014 census
Summary

• Southern WMA have few domestic animals
• Numbers of wild animals also seem lower than northern WMA
• Both live and dead elephants were recorded in 2014
• Large numbers of dead elephants were recorded in Liwale WMA in 2014
• Ngaramba-Taipika WMA had considerable evidence of human settlement within its boundaries in 2014

Domestic animals consumption in WMA and non-WMA villages

Wild animals consumption in WMA and non-WMA villages

Explanatory factors for the distribution of elephant carcasses in southern Tanzania

Conclusions

• In 2014 - WMA support more domestic and more wild animals in the north
• In 2014 - there were many elephant carcasses in a number of WMAs
• We don’t have the cause of death or the age of the carcass, but this was at the height of the poaching crisis in the country, with DNA evidence locating many seized tusks as from southern Tanzania
• Village surveys from 2014 show more domestic meat eaten in the north and more bushmeat in the south
• There are some differences between WMA and non-WMA village consumption patterns but these need further exploration
• Many WMA resources available on: https://www.ucl.ac.uk/pima/resources_tmp.htm