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ASSESSMENT OF CONSERVATION- BASED LIVELIHOODS IN TANZANIA



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ACRONYMS

AWF	African Wildlife Foundation
BCN	Biodiversity Conservation Network
BIOME	Biodiversity Monitoring and Evaluation project
CAMPFIRE	Communal Areas Management Program for Indigenous Resources project
CBNRM	Community-based natural resource management
CBO	Community-based organization
CDCS	Country Development Cooperation Strategy
ICDP	Integrated conservation and development projects
ICM	Integrated coastal management
JFM	Joint forest management
JGI	Jane Goodall Institute
LIFE	Living in a Finite Ecosystem project
MSME	micro, small and medium enterprises
NGO	Non-governmental organization
NRM	Natural Resource Management
NTFP	Non-timber forest product
PES	Payment for ecosystem services
PIRS	Performance Indicator Reference Sheet
PFM	Participatory forest management
WMA	Wildlife management area
WWF	World Wide Fund for Nature

INTRODUCTION

BACKGROUND

The most important direct threat to Tanzania's biodiversity is the conversion, loss, degradation, and fragmentation of natural ecosystems. Overexploitation of high-value species, the introduction of non-native and invasive species, pollution, and climate change round out the list of direct threats to Tanzania's natural resources. Although diverse activities contribute to these threats, the specific proximate causes appear to be rooted in a smaller number of drivers (Byers et al. 2012):

- No integrated framework for natural resources management (NRM) and land use planning;
- Conflicting and contradictory laws and policies;
- Minimal national capacity for Environmental Impact Assessment;
- Corruption;
- Rapid population growth; and,
- Lack of sustainable livelihood opportunities for poor, rural populations.

An estimated 85% of rural Tanzanian households directly utilize the natural resources for their livelihoods. The cumulative effect of these livelihood activities can cause significant harm to ecosystems, the ecosystem services they provide and threaten important biodiversity habitats. One approach to balancing economic growth and the conservation of critical ecosystem is to promote livelihoods—existing, diversified, and new—that are compatible with natural resources management.

PURPOSE AND OBJECTIVES

The USAID Tanzania Mission is developing a Country Development Cooperation Strategy (CDCS) in 2013, to be followed by the design of new programs addressing Climate Change, Water and Sanitation and Biodiversity Conservation. In preparation for the CDCS, the Mission is undertaking a number of evaluations and assessments to identify and include the most promising approaches to achieve development goals in Tanzania. This assessment serves as one of those efforts: an analytical review of conservation-based livelihoods, to characterize livelihoods that enhance conservation outcomes, those that are neutral to conservation outcomes and those that are detrimental to conservation.

The purpose of this review is to identify livelihoods that encourage people to be sound stewards of their environmental assets and results in the development of an economic constituency for local conservation practices. This is an essential strategy to align household economic incentives with local resource use practices and ultimately, long-term conservation objectives. The review will collect information from a variety of sources within and outside Tanzania that exemplify this relationship between livelihoods and conservation at a local scale. This report will provide the background and recommendations to direct and design appropriate programs that will promote livelihoods in all programs of the NRM office. Once the programs are established, it is the goal of the Tanzania Mission that they all have a similar approach to supporting conservation-based livelihoods. This report will help the NRM office provide consistent guidance on livelihoods to all future programs to ensure they are promoting conservation, applying best-practice livelihood approaches and measuring outcomes in a consistent manner. Wherever possible, the report will identify conservation-based livelihood activities that have the greatest potential to better engage women in conservation-based livelihoods, create jobs, and promote private sector participation and scale-up.

APPROACH AND METHODS

This desk-based assessment is focused largely on a review of existing information and literature compiled by U.S. Forest Service analyst Beth Hahn, and complemented by communications with staff from the USAID/Tanzania Mission and partner organizations.

OVERVIEW OF CONSERVATION-BASED LIVELIHOODS

Conservation-based livelihoods are livelihoods that rely on the underlying natural resource base with varying impacts—positive, neutral, or negative—on environmental outcomes. Some of these activities have been practiced for generations (e.g., farming and pastoralism), while other activities have resulted from more recent development programs (e.g., trophy hunting concessions). Over the last three decades, many initiatives have increasingly aimed to simultaneously address local economic improvement and sound resource management, through efforts such as conservation enterprises, integrated conservation and development projects (ICDP), community-based natural resource management (CBNRM), participatory or joint forest management (PFM, JFM), and integrated coastal management (ICM).

One possible categorization of conservation-based livelihoods involves distinctions between livelihoods that rely on wild versus domesticated stocks, as well as services:

- Agricultural and livestock livelihoods – “domesticated” stocks
 - farming and horticulture: primary crops include coffee, sisal, tea, cotton, cashew nuts, tobacco, cloves, corn, wheat, cassava, bananas, fruits, vegetables, pyrethrum (insecticide made from chrysanthemums)
 - pastoralism and livestock husbandry (cattle, sheep, goats)
 - agroforestry
- Natural product livelihoods – “wild” stocks
 - timber, firewood, charcoal production
 - non-timber forest products (NTFPs): honey, beeswax, medicinal plants, wild foods (fruits, vegetables, leaves, fungi, roots, tubers and gums), livestock fodder, dyes, latex, essential oils, fibers, bamboo, palm products (mats, baskets, hats, brooms)
 - bushmeat hunting
 - fisheries/aquaculture/mariculture
 - pearl farming
 - crafts (e.g., wood-carving, shell jewelry)
 - protected area jobs
- Tourism livelihoods – “services”
 - Guide services
 - Wildlife viewing and photography
 - Trophy/safari hunting
 - Lodges, campsites, restaurants, transportation
- Payments for ecosystem services (PES) – “services”
 - PES is a relatively new mechanism that attempts to assign values to ecosystem goods and services that historically have been unacknowledged, discounted, and overexploited.
 - e.g., watershed services; carbon sequestration

These categories are not mutually exclusive, but may be useful in considering possible project components and emphases. The distinction between domesticated and wild stocks is particularly fuzzy, as many wild stocks can be farmed.

All of the above categories of conservation-based livelihoods have been incorporated into development programming in Tanzania (Section 3; Annex A-C). The Tanzanian economy depends on agriculture, which accounts for more than one-quarter of GDP, provides 85% of exports, and employs 80% of the work force; industry and services employ the remaining 20% of the work force (CIA World Fact Book 2013). Nature-based tourism is another important economic sector and a critical source of foreign exchange, and many livelihoods projects are associated with Wildlife Management Areas (WMA). WMAs are the official mechanism established for implementing community wildlife management in Tanzania. WMAs consist of portions of village land set aside for purposes of wildlife conservation and the development of wildlife-based enterprises such as safari hunting and wildlife viewing and photography. To establish WMAs, villages must develop land use plans and by-laws, as well as establish a community-based organization (CBO) that is granted user rights to wildlife by the Wildlife Division of the Ministry of Natural Resources and Tourism.

Diverse issues and relationships have surfaced with conservation-based livelihoods programming. By design, these livelihoods projects are intended to create both economic (jobs, income, opportunities) and non-economic (political, social, rights) benefits. Interestingly, the non-economic benefits may have a higher livelihood value to communities. For instance, communities often invest incomes from project enterprises into communal benefits such as education, security, water, health services, that can have huge multiplier effects (Arntzen et al. 2007; Elliott and Sumba 2010). In addition, non-cash benefits can facilitate and strengthen relationships: a meta-analysis of 39 programs from Asia and the Pacific (Salafsky et al 2001) found that non-economic benefits were effective in promoting trust and cooperation between local stakeholders and project staff. Finally, many livelihoods projects require a mix of skills and expertise that demand unprecedented partnerships between communities and the private and public sector, including relationships with local and central governments, formal joint venture partnerships with corporations such as hunting or tourism lodge concessions, and new financing mechanisms.

With respect to gender, conservation enterprises are often viewed as a mechanism to promote greater equity and income for women. However, there are gender differences in terms of resource use, access to land, natural resources, equipment, labor, capital, income, and education. These dynamics are influenced by social structures, legal and political regimes, and further shaped by class, ethnicity, and religion. Women are less likely to own land and therefore rely more heavily on common property resources or open access resources, and tend to be disproportionately impacted by environmental degradation, as well as by measures such as restrictions of access to forests, leasing or sale of common lands to private entrepreneurs and conversion of common lands to other uses (Bechtel 2010; Torell and Tobey 2012). Many of these challenges also apply to other marginalized groups, who can be the most difficult to reach, are often the most dependent on natural resources, and usually have the fewest assets and the least technical, financial, and literacy skills.

Significant investments in conservation-based livelihoods have generated a wealth of collective experience and opportunities for comparison. A variety of influences shape the success of conservation-based livelihood programming (ARD 2001; Salafsky et al. 2001; Garnett et al. 2007), including social, economic, political, and biophysical factors. However, development programming that supports conservation-based livelihoods often involves compromises in trying to meet the dual objectives of local economic growth and environmental conservation, and there is a robust literature on the efficacy of this approach (e.g., Salafsky et al. 2001; Agrawal and Redford 2006; Elliot and Sumba 2010; Torell and Tobey 2012). Resolving this challenge is complicated for a number of reasons:

- Both poverty and conservation are complex, multi-dimensional issues (Agrawal and Redford 2006; Roe 2010). For instance, poverty is more than income, and includes lack of power, security, and agency. Similarly, conservation can be defined and measured in many ways. One common metric is species diversity, though there is some indication that biomass may be more important for livelihood purposes, despite recognition that biodiversity is critical to the integrity of ecosystem services (Leisher et al. 2010; Roe 2010).
- Conservation-based livelihoods are highly variable in terms of sectors and activities; spatial and temporal scales; gender implications; benefits distribution; and, the socio-economic, environmental and governance contexts in which they operate. This variability defies standardized program development and delivery.
- Poor program design and monitoring have hampered evaluation efforts and cross-study analyses (Newmark and Hough 2000; Hughes and Flintan 2001; Salafsky et al. 2001; Kiss 2004; Agrawal and Redford 2006; Robinson 2006; Arntzen et al. 2007; Barrett et al. 2010; Leisher et al. 2010). Many efforts lack rigorous quantitative or qualitative data, and inconsistent indicators preclude opportunities for comparison.

The evidence for the efficacy of conservation-based livelihood programming is mixed. However, there is strong consensus on the challenges and vulnerabilities, best practices, and the importance of monitoring and evaluation.

CHALLENGES AND VULNERABILITIES

There is a lively literature that details the many potential obstacles to the success of conservation-based livelihood programming (Ashley et al. 2000; Newmark and Hough 2000; Salafsky et al. 2001; Alcorn et al. 2002; Van Engen 2002; Baldus 2005; Arntzen et al. 2007; Spenceley 2008; Barrett et al. 2010; Elliott and Sumba 2010; Leisher et al. 2010). Challenges and vulnerabilities include the following issues:

- Governance
 - Unsupportive legislative, policy, governance and market contexts can hinder or altogether prevent conservation-based livelihood success.
- Conservation-based livelihoods are challenged by up-scaling beyond the micro-scale, while also managing within the limits of ecological sustainability.
- Gender and cultural feasibility
 - Projects must include provisions for reducing discrimination against women, and strategically target their participation, while at the same time selecting social and cultural units that are appropriate to local and traditional forms of social organization.
- Comprehensive business planning is critical to the financial feasibility of projects.
 - Financial planning of the operations has to be done with as much precision as possible to account for market fluctuations, especially when the margins are slim. Operating in remote areas is logistically complex, and costs are higher for operations that are removed from functioning markets and significant infrastructure. In addition, external market forces are increasingly manipulating resource use patterns in Africa (e.g., urbanization has created growing demand for resources such as meat, timber, and firewood) – these urban markets will produce increasingly strong market incentives to exploit rural natural resources.
 - Explicit contracting terms is needed for both conservation goals and outcomes and benefit distribution, in addition to active enforcement of the terms.
 - Grant funding may lessen or eliminate community engagement by removing the entrepreneurial element and weaken the overall commercial proposition. Debt financing may be a better option.
- Strategic partnerships between communities and the private sector are essential to commercial and social viability.

- Combining the support of communities at local level as well as supporting the marketing and development of a conservation-based livelihood product requires a huge range of skills and working at multiple levels. Unscrupulous private sector partners may exploit weaknesses in community institutions and decision-making, and may not be willing to take environmental sustainability goals on board. Furthermore, weak community institutions and low technical and business skills often require long-term facilitation and support that NGO intermediaries can find hard to sustain.
- Benefits sharing with communities is a persistent challenge.
 - Weak benefits sharing mechanisms.
 - Households with higher assets and higher levels of social capital may be more likely to participate and benefit (i.e., elite capture); tourism-related livelihoods may be particularly susceptible to elite capture.
 - Exclusionary management of village resources may preclude equitable benefits-sharing (e.g., CFM in East Usambara Mountains; Rantala et al. 2012).
 - Employment benefits may not reach the poorest community members, due to generally lower levels of education and skills.
 - Benefits from conservation-based livelihoods may not compensate for lost or reduced rights to resources (e.g., game licenses, pastoral mobility) or may increase costs (e.g., human-wildlife conflict; Muruthi 2005; Homewood et al. 2012), and this may disproportionately impact the poorest community members.
- External factors—such as seasonality, weather events (e.g., floods, droughts, cyclones), international events, crises, foreign policy, technology, and the emergence of cheaper markets elsewhere—may have unexpected consequences for program success as conditions and trends change.
- Demographic changes such as population growth and density, or household-level shocks such as deaths in the family, can influence success at multiple levels of the program.
- Climate change may have a significant negative impact on the success of conservation-based livelihood programming.
 - Predicted impacts of climate change include prolonged drought, heavy rains, severe weather events, and shifts in seasonality. The Tanzania economy is highly reliant on climate-sensitive activities such as rain-fed agriculture, livestock rearing, fisheries and forestry. Climate change will increase food insecurity, which will put huge direct (e.g., bushmeat hunting) and indirect (e.g., competition for water) pressure on natural resources. Changes in coastal environments and freshwater resources due to climate change, combined with poor resource management, could have negative impacts for a number of sectors, including fisheries and human health. Projected sea level rise will have significant economic and social impacts for coastal populations, and might result in migration toward resource-rich, inland sites such as protected areas. Tanzania’s vulnerability is exacerbated by the low capacity of its social and ecological systems to cope with climatic extremes. Major droughts and floods are frequently followed by ecological decline, widespread food scarcity, migrations, and loss of human life. The high sensitivity of Tanzania to climate change is exacerbated by low adaptive capacity related to widespread poverty, an immediate daily dependence on natural resources and biodiversity, and a heavy disease burden.
- Poor monitoring and evaluation has prevented possibilities for adaptive management.
 - Using an adaptive management process at a programmatic level to formally test assumptions, adapt, and learn from the results requires more staff, more money, a willingness to experiment and value failure, and a necessarily narrow focus. However, this approach will also yield improved knowledge, cross-project learning, and improved partnerships.

BEST PRACTICES

Although conservation-based livelihood programs have included diverse sectors—including wildlife, forestry, coastal environments, pastoralism, and tourism—there is general agreement on enabling conditions and good practices (Heermans and Otto 1999; IRG 2000; Alcorn et al. 2002; Baldus 2005; Elliott and Sumba 2010; Leisher et al. 2010; Aboud et al. 2012; IUCN 2012; Torell and Tobey 2012).

Summary of conditions for success:

- Supportive governance, legislative and policy contexts are the greatest prerequisite for long term sustainability and up-scaling. A supportive government role is necessary to provide the appropriate enabling conditions for conservation enterprise to succeed (policies, laws, regulations, extension services), including access and tenure (or control) of relevant natural resources.
- Organization and community engagement: Long-term success and sustainability lies with the successful organization and engagement of local stakeholders and beneficiaries, including women and other marginalized groups. Heavily subsidized livelihoods run the risk of failing once the subsidy is removed.
- Capacity Building: Sufficient investment in community capacity prior to engaging (e.g., empowerment, capacity building of organizations to be able to manage the enterprise, technical support). Often working with a partner organization with skills in enterprise development is advisable.
- Leadership: The commitment and continuity of several individuals to lead and coordinate the conservation-based livelihood program is essential.
- Partnerships: The ability to negotiate and maintain a core set of relationships, including with the private sector, for the benefit of the enterprise is important for growing the enterprise and ensuring equitable benefits.
- Triple bottom line planning: The conscious and deliberate alignment of economic benefits with social and environmental benefits is an important element of achieving sustainable development.
- Business planning and marketing: Either the leaders of the enterprise have business and marketing skills, or they have access to those skills in their key partners; or they have ready access to training to attain these skills.
- Existing market: There must be an existing market for the products and/or services produced by the conservation enterprise, and considerable knowledge of that market should be obtained in advance. Effectively linking the producers to the market place - physical distance and/or appropriate contacts with buyers, information about market price.
- Appropriate research and development is completed: to understand potential environmental impacts of or limits to the conservation-based livelihood, that methods are completely sustainable, that there are sufficient quantities of the resource to meet industry needs, and to secure market access.
- Keep expectations realistic: Be clear about the roles and responsibilities of all involved—and set up realistic expectations of the time and effort it will take to develop and reap the benefits of the conservation enterprise. If the expectations are too high, the enterprises will fail.
- Short and long-term benefits management: The enterprise should demonstrate how it is planning to equitably deliver not only longer term benefits for its stakeholders (including how those benefits will be shared), but the short-term benefits that will keep stakeholders engaged and committed to the enterprise. Initiatives need to produce early benefits to entrepreneurs and communities to encourage them over the long haul, and this is especially true for the poorest members of communities. Communities also need to consider investing in natural resource management.

- Appropriate processes for evaluation and accountability are established and enforced (e.g., performance monitoring for economic and environmental indicators; financial records).

Summary of best practices in conservation-based livelihoods programming:

- Know the context and tailor to local conditions, using an inclusive, participatory process that matches the biodiversity issues and form of enterprise with the technical capabilities and the capacity of the institutions and community stakeholders; understand what works and does not work before scaling up; moderate expectations.
- Minimize negative environmental impacts.
- Ensure there are strong, explicit links between the enterprises and the conservation of natural resources to reinforce resource stewardship practices; education and awareness building encourage stakeholders to take action to counter biodiversity threats.
- Enhance and add value to existing livelihoods where possible; new forms of livelihoods are sometimes necessary, but can be more capital-intensive.
- Consider enterprises that require low levels of capital investment as these are more feasible for poor rural communities.
- Build on people's strengths and entrepreneurial capacity.
- Ground the enterprise on a feasibility study and a sound business plan.
- Family- or individual-owned enterprises often work better than group enterprises.
- Facilitate a supportive governance context: national and regional policies and strategies; locally governed enforcement mechanisms; avoid investments and policies that pit one conservation-based livelihood against another (pastoralism v. agriculture); secure a clear legal definition of resource ownership and access rights (i.e. tenure regimes).
- Partnerships: leverage resources and capacity of local community, NGOs, private sector, government partnerships; embrace different partners' skill sets, capacity, priorities, and styles of communication; establishment of agreements and monitoring for clear understanding of what the enterprise is responsible for and what the project should support. In the experience of AWF, local ownership and private sector management is most effective option in delivering substantial benefits for communities and conservation (Elliott and Sumba 2010).
- Benefits sharing decisions should be determined through transparent, participatory processes with local communities, and these benefit allocation decisions need to be documented and monitored; generate early benefits.
- Include capacity building: professional management, marketing, business skills; local institutional development.
- Monitoring and Evaluation: Institute robust biological and social monitoring to inform management; host study tours and promote knowledge exchange.
- Gender: use participatory techniques that target women; provide adequate training and awareness-raising on gender, involving all stakeholders, and providing periodic 'refresher' training; promote female role models and opportunities for female leadership and responsibility; gender-specific monitoring.

MONITORING AND EVALUATION

Understanding and measuring the multidimensional impacts of economic performance, social impacts, and environmental outcomes is complex. Monitoring and evaluation are critical components of conservation-based livelihood programming because they define project success, and this determination has impacts on the intended beneficiaries. Measuring project efficacy can help identify who gains and who loses, confirm or dispel a hypothesized impact pathway, and potentially increase the benefits to people from conservation (Leisher et al. 2013). Monitoring and evaluation is essential to (1) deciding whether a project is meeting goals and achieving objectives; (2) facilitating change during the project

cycle to ensure continued or improved success (i.e. adaptive management); and, (3) creating a learning culture for all stakeholders to avoid mistakes and replicate successes in current and future interventions.

A review of the literature evaluating conservation-based livelihood program effectiveness underscores the need to dramatically improve monitoring and evaluation of environmental, developmental and economic outcomes. There are many reports highlighting anecdotes and case studies, but relatively few robust empirical comparisons. There are a number of challenges to effective measurement of conservation-based livelihood programs (Newmark and Hough 2000; Hughes and Flintan 2001; Saterson et al. 2004; Barrett et al. 2010; Elliott and Sumba 2010; Leisher et al. 2010; Leisher et al. 2013):

- Underlying policies may lack defined targets and measures for outcomes, leading to indicators that are omitted, too narrowly defined, or inconsistent.
- Funding priorities of both donors and their implementing partners often emphasize project delivery activities over evaluation, or involve tradeoffs between expensive rigorous household-level surveys and quicker, less expensive qualitative analyses.
- Absence of sufficient baseline or historical data.
- Distinguishing between change caused by a project versus change that would have occurred without the project or strategy (i.e. counterfactual) is difficult, and few efforts include landscape-matched controls. Even when project evaluation is a priority, the dynamic impacts of a project may only be measurable beyond the period of evaluation.
- Most impact analyses focuses at the aggregate community level and do not attempt to analyze impacts at the household level, where most resource use decisions are made, and where variation in costs and benefits are expected.

Suggestions for improved monitoring and evaluation:

- Monitoring and evaluation must be included at all stages of the project cycle (Saterson et al. 1999; Walpole et al. 2007; Elliott and Sumba 2010; Torell and Tobey 2012):
 - Initial project conceptualization and the context in which it will be carried out, including feasibility assessment (e.g., evaluate the local livelihoods-conservation linkages; establish conceptual framework based on threats analysis to identify relevant indicators);
 - Selection and use of appropriate methods for data collection and analysis; and,
 - Use and application of the results to adapt and learn.
- Projects should document baseline conditions during the initial assessment of environmental and socio-economic context: What is the status of current societal, economic, and environmental conditions that impact conservation-based enterprises? What aspects of current societal, economic, and environmental conditions or behaviors are targets for modification?
- Ensure that monitoring and evaluation resources are included in the project budget, including required staff skills and expertise, and costs and time for data collection and analysis. For instance, extractive conservation-based livelihoods will need to include measures that evaluate the sustainability of harvest, and these measures should align with or contribute to current scientific understanding. Currently, there is ambiguity in the scientific literature about how best to measure a sustainable wildlife harvest (Weinbaum et al 2013), and trophy hunting in the WMAs of Tanzania could serve as important research sites for clarification, while also improving project efforts.
- Use multiple, complementary monitoring approaches: qualitative vs. quantitative; aggregate measures versus individual experiences; subjective vs. objective (i.e. recording perceptions is as important as measuring indicators); methods to measure unexpected as well as expected change; means to identify and understand the causes of change.
- Use indicators that are consistent between programs and organizations to leverage other programming and collective understanding (e.g., [Conservation Measures Partnership](#)), while also incorporating locally-relevant indicators.

- Employ a people-centered, participatory approach to the greatest extent possible. People themselves are best placed to describe the impact of project interventions on their lives. Participatory approaches tell us directly – through peoples’ own voices, the reality of what they have experienced, what has changed and how significant these changes are to them. People are also capable of nuanced analysis of why certain things have and have not happened.
- Measurements should incorporate relevant dynamics and capture trends over time and space, rather than single-snapshot assessments; well-being and access to resources fluctuate with seasons or longer intervals.
- Where possible, use a quasi-experimental approach, with matched control sites to evaluate project impact.
- Indicators need to include disaggregated data, to allow for comparison between different socio-economic groups such as gender or ethnicity. Disaggregation is essential to identify actual beneficiaries and potential inequities.
- Multi-dimensional measurements of well-being may be a more holistic way to understand the economic performance and social effects of conservation-based livelihood programming (e.g., Stiglitz et al. 2009; Leisher et al. 2013). For instance, a combination of indicators that measure living standards, health, education, social cohesion, security, environment, and governance may provide a more comprehensive depiction of program efficacy.

CONSERVATION-BASED LIVELIHOOD EXAMPLES

As alluded to previously, there is an enormous diversity and volume of development programming that has focused on conservation-based livelihoods to improve both economic and environmental outcomes. Highlighted here are several recent meta-analyses that explored available data on conservation enterprise projects, as well as several country-specific project examples that were relatively successful. In addition, one out-of-the-box example from the Youth Opportunities Program in Uganda is presented as stark alternative to the more common types of development programs.

META-ANALYSES

Several meta-analyses examining conservation-based livelihoods development programming found evidence for specific factors related to the success of conservation-based livelihood-related projects, and patterns in the types of livelihoods programming that resulted in poverty reduction. Overall, projects that balance economic incentives, community empowerment, and secure rights to natural resources can succeed.

Education, awareness and good project staff were particularly important influences in an analysis of 39 programs from Asia and the Pacific (Salafsky et al 2001). These projects represented a mix of livelihoods based on domesticated and wild stocks (e.g., essential oils, silk, honey, fruits, medicinal plants, resin, rattan, butterflies, fibers, fisheries, nut oils), tourism, and potential PES (e.g., biodiversity pharmaceutical prospecting). Evidence supporting the importance of education and awareness include the fact that community participation in the enterprise was significantly associated with conservation. Non-economic benefits, such as enhanced community confidence, were also significantly associated with conservation, and, as shown by anecdotal evidence, communities took action in support of conservation in sites where they had good working relationships with project staff members. A second study of 28 projects from Africa, Asia, and Latin America also included a mix of livelihoods based on wild and domesticated stocks and tourism (Brooks et al. 2006). In this analysis, permitted use of natural resources, market access, and greater community involvement in the conservation project were all important factors for a successful outcome. Another recent meta-analysis examined 136 projects in 40 countries involving livelihoods based on wild and domesticated stocks, tourism and PES (Brooks et al.

2012). Project success was evaluated in terms of attitudinal, behavioral, ecological, and economic outcomes. Results showed that project design, particularly capacity-building in local communities, tenure regimes, and supportive cultural beliefs and institutions, were associated with success.

Using a partner-based evaluation effort, the Biodiversity Monitoring and Evaluation Project (BIOME) involved the staff from 11 African projects to analyze each other's projects to identify lessons learned and principles for effective conservation. In the area of community participation, they observed that, in general, the more active the participation, the more the community is likely to support and benefit from conservation. Looking at mechanisms through which communities could reap economic benefits from conservation, they found that problems arise when the total economic returns are modest compared with what communities feel they are losing to conservation. The BIOME study also identified problems arising when members of the community disagreed about how economic benefits should be allocated among them (Ntiamoa-Baidu et al. 2000).

Finally, another review of more than 400 projects identified patterns of poverty reduction (i.e. economic benefits only) by livelihood sector, including domestic and wild stocks, tourism, and PES (Leisher et al. 2010):

- Ten conservation mechanisms had empirical evidence of poverty reduction benefits to the rural poor: NTFPs, community timber enterprises, PES, nature-based tourism, fish spillover (i.e. dispersal of replenished fish stocks from improved management into harvest zones), mangrove restoration, protected area jobs, agroforestry, grasslands management, and agro-biodiversity conservation (i.e. variety and variability of animals, plants and micro-organisms that are used directly or indirectly for food and agriculture).
- Greater biomass (amount harvested)—not species diversity—resulted in poverty reduction benefits to the poor for NTFPs, community timber enterprises, PES, fish spillover, mangrove restoration, and agro-forestry.
- Overall, there is empirical evidence that at least six conservation mechanisms have been a route out of poverty for some people in some places: community timber enterprises, nature-based tourism, fish spillover, protected area jobs, agroforestry and agro-biodiversity conservation.
- Four conservation mechanisms contributed to reducing poverty or provided a safety net in times of need, though they may not have been a route out of poverty: NTFPs, PES, mangrove restoration, and grasslands management.
- There are also initiatives that might benefit both the rural poor and biodiversity but lack hard evidence of conservation benefits: trophy hunting, bushmeat harvesting, medicinal plant collection, woodcarving, and bio-prospecting.

COUNTRY-SPECIFIC EXAMPLE PROGRAMS

Zimbabwe – Communal Areas Management Program for Indigenous Resources (CAMPFIRE)

Established in the 1980s to protect wildlife (particularly elephants) from unsustainable poaching, the CAMPFIRE project in Zimbabwe is a foundational example of community-based wildlife management of communal lands adjacent to state-protected areas that are home to a diverse and abundant assemblage of plains wildlife (Hecht et al. 2008). CAMPFIRE encouraged sustainable trophy hunting of big game and has been the model for many subsequent projects. Under CAMPFIRE, authority over wildlife was given to the Regional District Councils, which receive revenue from hunting fees that are then distributed at the community level and/or to individual households, according to the regional policies.

Main activities:

- Organization of trophy hunts, photo safaris, or tourism; reintroduction of animals into areas from which they have disappeared; collection, consolidation, and annual distribution of income generated by these activities; financing of socioeconomic infrastructure (schools, health centers, drilled wells, grain mills, electric fences, road construction); and job creation for hunting guides and forest wardens.
- Capacity building and training workshops: establishment and management of community institutions; basic accounting and bookkeeping; roles and responsibilities of each member of the institution; conflict resolution; internal laws and regulations; marketing; techniques for designing, monitoring, and evaluating projects; and environmental education and awareness.
- Natural resource monitoring and management: wildlife census and monitoring, annual determination of wildlife hunting quotas, and land-use management plans (e.g., creation of buffer zones with electric fences, cropping patterns, rotation of pastures, and field crops).

During the 1990s, CAMPFIRE was largely regarded as a successful project, with clear benefits to communities engaged in conservation and wildlife, and studies showing increases in wildlife populations and habitat retention. Nevertheless, some critics identified substantial shortcomings of CAMPFIRE, where many districts showed revenue from safari hunting as too small for the local population who bear the direct costs of wildlife protection, such as crop destruction by elephants. After the political changes in Zimbabwe that began in 2000 (including major land reforms and resettlements), donor support ended, and the local NGOs that had been providing institutional support ceased their involvement. This reduced the auditing of the Regional District Councils, which in turn led to decreases in funding received by the local communities. This highlights the importance of institutional support in creating effective CBNRM systems. The existence of valuable natural resources is not sufficient to ensure success and careful choices must be made between commercial and political structures when seeking to transfer authority over natural resources to rural communities. Since 2000, wildlife in Zimbabwe's Protected Areas, CAMPFIRE areas, and conservancies have declined and are at great risk. Habitat throughout Zimbabwe's conservation areas has been severely degraded over the past decade and sources of revenue to support conservation are limited due to the economic and political situation in Zimbabwe and the corresponding decline in photographic and hunting tourism (Fitzgerald 2012).

Namibia – Living in a Finite Ecosystem (LIFE)

The initial LIFE project (1993-1999) in the East Caprivi area of Namibia was designed to increase benefits received by historically disadvantaged rural populations from sustainable local management of natural resources in communal areas (Ntiemoa-Baidu et al. 2000; Hecht et al. 2008). Prior to the establishment of the project, there was much hostility from the people living in the area, resulting from the non-democratic creation of two national parks and the subsequent treatment of poachers. Main activities included: (1) Establishment of the Community Game Guard Program to mobilize grassroots support and involvement in natural resource management and to assist in wildlife research and monitoring; (2) Establishment of female Community Resource Monitors to increase women's participation in decision-making regarding resource use and in monitoring and management of non-wildlife natural resources; and, (3) Establishment of the Enterprises Development Program to promote income-generating activities, including relying on women's knowledge of palm leaf and thatch grass harvest.

Key accomplishments of LIFE included:

- Contributions towards major policy and legislative reform including the 1995 Policy on Wildlife Management, Utilization and Tourism in Communal Areas, and the 1996 Nature Conservation Amendment Act. This legislation granted ownership rights over wildlife and tourism revenues to communities and helped to build a network of organizations and associations to help support

the conservancy movement. This led to the recovery of wildlife populations as well as increased revenues and governance rights for communities.

- Community mobilization and awareness raising of CBNRM development opportunities, and demonstration of tangible financial benefits from wildlife and tourism based enterprises
- Capacity building of Namibian institutions
- The establishment of financially viable, well- managed conservancies that led to improved management of their natural resources

The LIFE Plus Project (2004-2008) was designed to support the broader national CBNRM program to strengthen conservancies as rural, democratic institutions, enhance the livelihood of conservancy members, and expand the range of natural resources that conservancies may manage in an integrated fashion. As of September 2007, 50 conservancies were registered, and another 40 communities were in the process of developing them, involving over 220,000 Namibians and encompassing more than 14 percent of the country and almost 40 percent of communal land. As a result, land under conservation-oriented management in Namibia effectively doubled (when compared to nature reserves and national parks).

In Namibia, conservancies have helped:

- Increase incomes derived from natural resources
- Make Namibia a global tourism destination
- Expand the economic potential of wildlife, land and tourism in communal areas
- Create incentives to manage wildlife and other natural resources sustainably
- Bring new sets of natural resources into production
- Expand and diversify areas managed for wildlife and other natural resources
- Boost the abundance and productivity of natural resources
- Build local empowerment, capacity, leadership and skills

The LIFE and LIFE Plus programming involved livelihoods that relied on natural products from wild stocks (e.g., thatch grass, palm) and wildlife-related tourism. The project approach emphasized local engagement and empowerment, by improving the legislative and policy frameworks to enhance conservancy success and local benefits, and by recruiting community members (including women)—rather than individuals hired by the Namibian government and sent to work in these areas. In addition, the economic benefits were sufficiently high compared to use restrictions imposed by the conservancies: now, wildlife is seen as a community resource to be protected and managed for the benefit of conservancy members. Any money made by the conservancy's activities, like guide services, tourist facilities or hunting, is distributed by the conservancy's members at an annual meeting or invested into community development projects. Many conservancies choose to spend their money on compensation to farmers who lose livestock to predators, to open soup kitchens for the community's elderly, on donations to local schools and to create income-generation projects to employ community members. Finally, although initially designed to increase benefits from sustainable local management of natural resources, the creation of a conservancy has come to be perceived in the region as a way to have a voice in local government (i.e. an important non-economic benefit), and is considered desirable for this reason even if it will not necessarily bring significant financial returns (App et al. 2008; Hecht et al. 2008).

Botswana – Natural Resource Management Program (NRMP)

Similar to the LIFE program, the Botswana NRMP of the 1990s also introduced a legal structure for establishing community trusts with the authority to own and manage wildlife resources in “controlled hunting areas” through the administration of hunting quotas (Hecht et al. 2008). These leases grant the community the sole authority to negotiate hunting contracts within established quotas, tourism, and

other uses for a 15-year period, though communities are not granted ownership of or the right to control access to their territory.

Approximately 20 trusts were created under this program in areas suitable for safari hunting and wildlife tourism. They then expanded across the entire country, and eventually more than 65,000 rural families were obtaining direct payments for their game harvesting quotas. Poaching dropped off dramatically, and new joint ventures sprang up. The Botswana NRMP involves diverse livelihoods relying on domestic and wild stocks and tourism, though the targeted involvement of women is unclear. Some of the trusts diversified into new enterprises, including value-added processing of veldt products such as marula fruit preserves and oil extraction, mopane worm, thatch grass, and some less successful enterprises in cochineal production, as well as enterprises such as spring water sales and liquor stores. While the variety of activities has given communities a number of options to pursue, the decoupling of enterprises from the underlying natural resources may not facilitate sustainable management.

The program requires that revenues and benefits go directly to the community-based organization which can then apply them to communal projects or distribute them to families, but in reality distributions to families have been very limited. Families can, however, earn income directly under this system, and individuals are therefore encouraged to develop independent natural resources enterprises in addition to communal activities. There remains much discussion about the transparency of the income distribution and decision making, with the Government of Botswana reclaiming 65 percent of the total revenue stream for more directed conservation.

When individual conservancies fail, corruption and inequitable distribution of community revenues are often cited. Others, however, believe that such failures lie in an inadequate support infrastructure for community-based organizations or normal failures of small business. Regardless of the reasons for failure of some conservancies, the trusts in Botswana have, as a whole, added an important new engine of growth that persists and provides a realistic alternative to less financially or economically attractive traditional agriculture practices for rural populations.

Guinea – Natural Resource Management Program (NRMP)

Beginning in 1993, the Guinea NRMP worked on agroforestry interventions and sustainable resource management, and helped to lay the groundwork for forest co-management and community forestry (Hecht et al. 2008; Serge et al. 2009). The second phase, Expanded Natural Resource Management Project, looked to expand the reach of the activity to include more forests and communities. The final phase (2008-09), Landscape Management for Improved Livelihoods (LAMIL), worked to consolidate the successes of its predecessors but incorporate landscape, governance, and livelihoods aspects. After conducting a rapid diagnostic analysis, programming focused on diversifying and intensifying farming systems of communities (with targeted recruitment of women) living in and around transboundary protected areas—Ottamba Killimi National Park in Sierra Leone and Oure-kaba and Madina Oula forests in Guinea—to improve food security and reduce poverty, thereby leading to improved biodiversity conservation and forest management. LAMIL used agricultural innovations targeting smallholder farmers and participatory tree domestication (i.e. domesticated stocks) as a mechanism in which community livelihoods options could co-exist with and even strengthen biodiversity conservation.

The LAMIL effort was short-term (18 months), but was able to introduce co-management into the targeted landscapes of Sierra Leone; success in Guinea was curtailed by the political instabilities associated with accession to power by a military government. Where LAMIL was implemented: improved agriculture and agroforestry technologies were disseminated, within more than 50% of communities in the landscape; community groups involved in natural resource management activities were strengthened in their organization, internal management capacity, gender consideration and legal

status; biodiversity monitoring techniques and modern technology were introduced and technical skills of resource managers upgraded. In addition, dialogue across border communities and resource managers was effective at grassroots and regional levels, and communities became open to collaboration with the state in preserving biodiversity.

Senegal – Wula Nafaa (“Benefits of Nature”)

The Wula Nafaa project was initiated by USAID/Senegal in 2003 to improve natural resource management, raise incomes in rural areas, and to facilitate the decentralization process (USAID 2006; Hecht et al. 2008). Wula Nafaa has shown success in all three sectors of the Nature/Wealth/Power framework: the project has expanded the markets and profitability of new and existing enterprises for non-traditional agriculture (e.g. NTFPs, tree crops, and charcoal) while helping communities take a greater interest in the sustainable management of their natural resources on which they depend. By linking sustainable resource management to local-level economic prosperity, the project has given people a reason to support conservation and motivation to assume a more substantial role in the management of their resources. The project has also facilitated local control and rights through the decentralization process and through the establishment of local conventions and forest management plans. With sales of most of the natural resource-based products increasing, and revenues increasing for participating producer groups, project beneficiaries understand the link between successful natural resource enterprises, the need to conserve the community forests, and the importance of codifying rules which control the use and the management structures for their “commons.”

The overall economic impact is highly positive with substantial direct and indirect benefits, due to factors such as improved quality, expanding markets, better price negotiations and a higher portion of the final price captured by producers. Processing groups have benefited from the broader availability of processing technologies which has contributed to improved product quality and helped with new product development. Beneficiaries, communities and buyers all report major injections of cash into the local economy and substantially increased incomes for producers and processors which has, among other things, improved security against the effects of drought. The welfare impact is positive but still small due to the newness of the program and much reinvestment of profits in other business activities. Lower income groups, especially women, youth and the elderly, appear to have benefited since they have less access to land and other sources of income and are more dependent on collection of forest products for their livelihoods. Employment opportunities in the forest may reduce youth emigration. Most of the ten products have found good markets, although their long-term potential for generating revenue is still uncertain. Production of charcoal and sale of wood products is just starting now but is believed to have good potential. Several new producer networks are functioning and are developing long-term relationships with buyers. Heavy taxation, fraud and policy barriers act as disincentives to production and marketing and need to be reformed or removed if full potential benefits are to be realized.

Uganda – Youth Opportunities Program

Starting in 2006, the World Bank provided funding for the [Youth Opportunities Program](#) in northern Uganda, which offered cash grants to young adults for income-generating projects in an attempt to help them find work outside of the informal farming and casual labor sectors (Blattman et al. 2013). Farming and animal husbandry are the most common occupation. Northern Uganda has relatively low levels of land and income inequality. Farming is rudimentary, a mix of subsistence and small cash crop production, on small rain-fed plots with little equipment or inputs.

This program sought to offset difficulties young adults faced finding credit in northern Uganda. Researchers partnered with the Ugandan government to evaluate the effectiveness of the Youth Opportunities Program, targeting young adults aged 16 to 35 in the country’s northern region. To

qualify for the cash grants, young adults had to organize in small groups and submit a proposal for a grant to cover training programs and what tools and materials they needed to run a business, either together or on their own. While facilitators were available to help youth organize into groups, build budgets and apply, these facilitators played no role after the application phase, and there was no formal mechanism of follow-up or accountability for the funds after the grants were distributed. Applicants were randomly assigned to treatment (i.e. grant recipient) or control groups, and five individuals in each group (2,675 individuals), were monitored through a baseline survey in early 2008, after two years and after four years.

The Youth Opportunities Program was remarkably successful. Fears that the money would be mismanaged or misappropriated were unfounded. Overall, young adults who received the unsupervised grants stuck to their stated plans, using the majority of the money for vocational training and to acquire materials to run a business. Four years later, most grant recipients were practicing skilled trades and earning more money than the control group. Young adults who had received the grants were earning 41 percent more than peers who didn't receive the grants. One reason may have been that those who received the money were 65 percent more likely to be working in a skilled trade such as carpentry, tailoring, metalworking and hairstyling. Those who received the grants were also 34 percent more likely to register a business and 40 percent more likely to pay business taxes and keep business-related records. In particular, the cash grants gave women a real boost, underscoring that access for finance is critical to helping women escape poverty: after four years, female grant recipient incomes are 84% greater than female controls (compared to a 31% relative gain for men). There was also evidence that credit constraints were more detrimental to young and unemployed women, and that without access to capital they are more likely than males to find themselves in a poverty trap—over the four years, males in the control group begin to catch up to their grant recipient peers in investments and earnings, while females in the control group have largely stagnant capital stocks and earnings. In spite of the large economic impacts, however, there were no evidence linking higher incomes to measures of social change (non-economic benefits e.g., self-reported measures of family and community integration, community and national collective action, aggression, disputes with authorities, and attitudes toward and participation in violent protests).

The Youth Opportunities Program did not require that grant-funded projects pursue natural resource-based livelihoods. In fact, most groups pursued skilled trades such as carpentry, tailoring, metalworking and hairstyling. Nonetheless, the striking success of this alternative model of enterprise development—with its rigorous study design and strong inference—may provide some new ideas for innovative pilots in conservation-based livelihoods between the World Bank and USAID/Tanzania.

CONSERVATION-BASED LIVELIHOOD PROGRAMMING IN TANZANIA

Over the last three decades, Tanzania has been host to diverse development programming that addresses both conservation and economic growth priorities. These programs have been funded by many different multilateral and bilateral donors, and facilitated and implemented by NGO and university partners (Annex A-C). The suite of recent and ongoing projects demonstrates that programming has included a variety of sectors, with locations throughout Tanzania and Zanzibar; there are no obvious gaps in terms of critical sectors or sites. Not surprisingly, agriculture is the leading emphasis. Other key sectors for livelihood investments include coastal and marine environments (i.e. fisheries, aquaculture and mariculture); pastoralism; forestry; and, wildlife and tourism. Additional focal areas are natural products and freshwater resources. Most projects incorporate capacity building efforts to

enhance business skills and literacy, and diversification of local financing mechanisms. More recently, climate change is increasingly integrated into projects. PES projects are relatively few in number, but are expected to expand in coming years, particularly in relation to carbon sequestration and even watershed services (e.g., CARE-WWF Payment for watershed services project in Uluguru Mountains).

USAID/TANZANIA

The current USAID/Tanzania portfolio focuses on health, especially HIV/AIDS and malaria (more than half of total funding); food security and agricultural development; and, infrastructure for roads, power, and water (CBJ FY2013). For more than a decade, USAID/Tanzania has been the leading donor supporting conservation of critical ecosystems through a livelihood-driven approach, which is the strategic objective of the NRM program (SO13, *Biodiversity conserved in targeted landscapes through locally driven livelihood approaches*). USAID's sustainable landscape approach targets critical ecosystems to sustain wildlife habitats, reverse land degradation, restore watersheds and improve community livelihoods through conservation enterprises.

Current USAID/Tanzania NRM programming targets five geographic priorities:

- Coastal Ecosystem (Tanga, Pwani Regions, north to central coastal Tanzania) / Conservation of Coastal Eco-Systems in Tanzania, PWANI project (University of Rhode Island, Coastal Resources Center) is working to sustain the flow of environmental goods and services; reverse the trend of environmental destruction of critical coastal habitats; and improve the wellbeing of coastal residents in the Bagamoyo-Pangani and Menai Bay Seascapes.
- Wildlife Management Areas (nationwide) / Enhancing Conservation and Community Gains through the Implementation of Wildlife Management Areas and Environmental Policies in Tanzania, CBNRM (WWF-Tanzania) is working to enhance community participation in wildlife conservation through establishment and management of WMAs on village land.
- Maasai Steppe Landscape (Arusha, Manyara Regions, north-central Tanzania) / Scaling up Conservation and Livelihoods Efforts in Northern Tanzania, SCALE-TZ (AWF) is working in the Tarangire-Manyara and the Kilimanjaro-Natron ecosystems to help local communities protect the land while developing tourism, livestock, and other conservation-friendly businesses.
- Gombe-Masitu-Ugalla Landscape (Kigoma, Katavi, Tabora Regions, western Tanzania) / Landscape Scale Community-Centered Ecosystem Conservation in Western Tanzania, Gombe-Masitu-Ugalla, GMU program (Jane Goodall Institute) is working at village and landscape levels to conserve biodiversity and protect and restore wildlife habitat in forest and miombo woodlands.
- Wami-Ruvu and Rufiji River Basins (Iringa, Morogoro Regions, south-central Tanzania) / iWASH (Florida International University/Global Waters) is a public-private partnership to implement a Community Watershed Alliance project in both Wami-Ruvu and Pangani River Basins

All of these programs are ongoing, and are scheduled to end in 2013 or 2014, so a full assessment is not yet possible or appropriate. However, some insights can be gleaned from annual and quarterly reports. Based on the monitoring data presented in these reports, most projects are making reasonable progress toward their objectives, though the CBNRM project to expand and improve WMAs appears to be struggling. Most projects are achieving their goals of reaching female beneficiaries, though the CBNRM and iWASH projects report challenges. Reports from the implementing partners list a number of other challenges to project success, which align with those described in the literature and summarized in this assessment. One constraint that was shared by all partners was continued illegal resource exploitation, particularly wildlife poaching, livestock intrusion, and charcoal. In addition, local capacity in the form of skills and equipment hinders progress, as does the long and cumbersome process to establish a WMA or a community water organization. Furthermore, revenue and benefit distribution remains tricky: private sector partners have their own interests in negotiating agreements, which may result in a less

lucrative arrangement for the communities; poor financial governance of WMA revenues and lack of transparency may limit village perceptions of the value in conservation; and, WMA revenue sharing with the Government of Tanzania is a persistent challenge. Finally, WMA projects lack a working monitoring and evaluation system to consistently collect, analyze and share information.

RECOMMENDATIONS FOR USAID/TANZANIA

PROGRAMMING RECOMMENDATIONS

Looking toward future programming, the USAID/Tanzania Mission will need to establish priorities among different livelihoods intervention options: support for conservation-based livelihoods is one among several possible ways to address conservation and economic growth objectives. Other potential options include policy reform, landscape-wide conservation planning, education and awareness, conflict resolution, and enhanced management capacity of protected-area institutions and relevant ministries. Because of their complex, multi-dimensional nature, the Mission will need to be very clear in articulating economic and conservation objectives, and in using rigorous monitoring and evaluation approaches; there is no definitive, standardized answer guaranteed to work across all sites (Salafsky et al. 2001). Climate change and gender considerations will need to be integrated into all future conservation-based livelihoods programming. A country-specific vulnerability and adaptation assessment is an important resource in identifying key sectors and adaptation options, as well as possible variation between geographic regions.

USAID/Tanzania has played a significant role in supporting conservation-based livelihoods programming, and in encouraging participatory processes that decentralize natural resource management. One important NRM investment is support for WMA development. WMAs have played a central role in Tanzania's wildlife management, policy and law for more than a decade. It remains unclear, however, whether WMAs are meeting objectives related to rural economic development, enterprise development and wildlife conservation. There may be opportunities for cross-sectoral learning and improvement in NRM decentralization related to participatory coastal, forest, fisheries, and water management. In addition, there may be a need to explore complementary approaches that will ultimately facilitate the success of livelihoods-based programming. For instance, many participatory management approaches are delayed due to policy or governance issues; influencing the policy environment around access to resources, tenure regimes, or benefits sharing mechanisms may be warranted.

As a general strategy, USAID/Tanzania is encouraged to develop and enhance NRM linkages within the mission portfolio (Byers et al. 2012):

- NRM and agriculture
 - Possibilities to enhance a conservation perspective in Feed the Future projects should be pursued. Agroecosystems provide a range of services to human communities, including provisioning services (e.g., pollination, pest control, genetic diversity for future agricultural use, soil retention, regulation of soil fertility and nutrient cycling) and regulating services (e.g., flood control, water quality control, carbon storage and climate regulation through greenhouse gas emissions, disease regulation, and waste treatment). The management practices implemented within agricultural sites determines whether these important ecosystem services are maintained, or whether there is the potential for 'disservices' from agriculture, including loss of habitat for conserving biodiversity, nutrient runoff, sedimentation of waterways, and pesticide poisoning of humans and non-target species (Power 2010; Balmford et al. 2012).

- More specifically, pilot projects could be used to explore sustainable production and harvest regimes for natural products such as NTFPs or non-traditional agricultural products.
- NRM and Democracy, Human Rights, and Governance Program
 - There are obvious linkages with the Democracy, Human Rights, and Governance Program, in terms of broadening participation and linking citizens with government institutions responsible for managing ecological resources such as wildlife, fish, forests, and water. WMAs and other CBNRM institutions, citizen engagement and advocacy, and government accountability need to be improved. Because Nature/Wealth/Power approaches deal with tenure and authority over resources, they can be tied to real changes in local governance as well as to conservation and economic development. This makes them an effective way to integrate several different development objectives: sustainable resource management, improved livelihoods, improved welfare through better social services, and strengthening governance and democratic processes. Where possible, the Mission should attempt to leverage project sites and resources to address multi-sector outcomes. Resource access and tenure is a common element of successful livelihood programming (Brooks et al. 2006; Brooks et al. 2012).
- NRM and Health and Education
 - There are also some potential benefits from linking the Mission's Health and Education Programs with communities being supported in NRM decentralization. Geographical co-location of Health activities in communities with NRM activities should be considered – such as HIV/AIDS, anti-malaria, maternal and child health, family planning and reproductive health, and nutrition programs. Opportunities for geographical co-location of Education activities in communities with NRM activities should also be a high priority for livelihoods projects (Salafsky et al. 2001). One advantage of co-locating activities from different programs within the USAID/Tanzania portfolio is the opportunity to use monitoring data in a multi-dimensional assessment of well-being (e.g., Stiglitz et al. 2009; Leisher et al. 2013).
- NRM and infrastructure development (roads, power, and water)
 - Many conservation-based livelihoods projects are located in logistically challenging sites, which often hinders the economic, and sometimes environmental, sustainability of an enterprise. Working in tandem with existing, expanding, and new infrastructure can dramatically improve the feasibility of a particular enterprise; these considerations are essential during early planning phases.

The Mission is encouraged to continue work that will facilitate future PES projects. CARE/WWF recently completed pilot Payments for Watershed Services project in the Uluguru Mountains, with the aim of improving water quality of the Ruvu River catchment while also improving livelihoods in the community. Under the public-private scheme negotiated between upstream land-users and downstream beneficiaries, downstream water users (DAWASCO water and sewage and Coca Cola) made payments to upstream land-users (Kibungo Juu community) to implement sound, sustainable land-practices, providing improved water quality supply in the Ruvu River catchment. Additional payments for watershed services projects may be possible, and carbon sequestration projects are anticipated. Successfully capitalizing on these new markets will involve learning and training for all stakeholders, and taking time to build community trust and buy-in as well as capacity to deliver.

USAID/Tanzania is also encouraged to broaden current partnerships and actively foster a learning culture. There is an ongoing need to share information and experiences by donors and implementing partners, and to facilitate more peer-to-peer learning within and between communities. The array of recent and ongoing projects demonstrates that there is substantial collective investment in livelihoods

programming within Tanzania (Annex A-C). However, many outstanding questions and challenges remain, as described in this assessment. There may be opportunities to address these issues through the development of research partnerships, in which scientists and students add value to project understandings by implementing detailed studies or surveys that supplement project monitoring and evaluation (e.g., household-level effects, sustainability of wildlife hunting quotas). Alternatively, future livelihoods programming could pursue a collaborative model. For instance, the Biodiversity Conservation Network (BCN) explored community-based, environmentally-linked enterprises to promote conservation, and was one of the first “learning portfolios” that systematically evaluated a specific conservation strategy by supporting projects using the strategy and also by working with them to collect the evaluation data. By combining action and research at a project level BCN helped partners to enhance their conservation impact and develop as learning organizations. At a program level, the enterprise strategy lessons that were collectively generated helped produce a more comprehensive understanding (Salafsky et al. 2001).

MONITORING AND EVALUATION RECOMMENDATIONS

The current combination of 11 standardized and three custom indicators used in USAID/Tanzania NRM projects represent a feasible combination of environmental, governance, economic, and well-being measurements, with disaggregation by gender (Table 1).

The following suggestions are offered to refine the USAID/Tanzania monitoring and evaluation approach, including the current PIRS (see also Annex A):

- Additional disaggregation may be warranted.
 - Disaggregation to the household level is suggested for economic indicators, as relevant. In the current PIRS, the indicator *Number of people with increased (economic) benefits derived from sustainable NRM and Conservation as a result of USG assistance* is defined in numerous ways: “Increased economic benefits include increased household income; average increase in income per household; number of new enterprises developed (including but not limited to fisheries, sustainable tourism, forestry/agro forestry, sustainable agricultures micro enterprises etc); economic benefits from ecosystem services etc. Economic benefits may be based on actual cash transactions or other economic value of natural resources.” Because of the flexibility in these definitions, it may be difficult to track household-level benefits with a sufficient sample size to derive meaningful inference regarding project effects.
 - Disaggregation to different socio-economic classes within communities would help to evaluate the re-distribution of project costs and benefits between different stakeholder groups, such as the poorest community members, minority ethnic groups, or those displaced by new resource restrictions.
 - Sampling a randomized subset of beneficiaries to acquire household-level and socio-economic class data may reduce the costs of additional disaggregation.

Table 1. Indicators in current Performance Indicator Reference Sheet (PIRS) for Strategic Objective 13: Biodiversity Conserved in Targeted Landscapes through Locally-Driven Livelihood Approaches

Type	Indicator	Disaggregation
Standard	# of hectares of biological significant and/or natural resources under improved natural resources management as a result of USG assistance	Marine or Terrestrial
Standard	# of hectares of biological significance and/or natural resources showing improved biophysical conditions as a result of USG assistance	

Standard	# of people with increased (economic) benefits derived from sustainable NRM and Conservation as a result of USG assistance	Geographical location; Gender; Type of economic activities
Standard	Proportion of females participants in USG-assisted programs designed to increase access to productive economic resources	Gender; Age (10-29, ≥ 30)
Custom	Annual revenue generated through private sector investment in targeted conservation landscapes	
Custom	Dollar value of community derived resources through benefit sharing mechanisms	
Standard	# of people receiving USG supported training in Natural Resources Management and/or biodiversity conservation	Gender; Training Type
Standard	# of person hours of training in natural resource management and/or biodiversity conservation supported by USG assistance	Gender
Standard	# of laws, policies, strategies, plans, agreements or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance	Clean energy; Adaptation; Sustainable landscapes; Cross cutting climate measure
Custom	# of integrated general management plans in target areas implemented	Type of plan
Standard	# of institutional structures with improved capacity to address climate change	REDD+; Clean energy; Adaptation; General climate change capacities
Standard	# of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance	Implementing risk reducing practices; Using climate information in decision making
Standard	# of people in target areas with access to improved drinking water supply as a result of USG assistance	Gender; Rural or Urban
Standard	# of people in target areas with access to improved sanitation facilities as a result of USG assistance	Gender

- Non-economic benefits are not currently captured. This can be measured in a number of ways, resulting in diverse options for indicators, depending on hypotheses to be tested and the particular benefit sharing mechanisms used in a specific project:
 - Some projects re-invest project revenues in community-level services such as education, water, or health. If this scenario was being used, community investments could be tracked over time, as well as community members' perceptions of these revenue investments.
 - Improved business and management skills are additional examples of non-economic benefits that USAID/Tanzania could add to the PIRS. Standard Indicators could be used to monitor enterprise-specific capacity building, with disaggregation by gender:
 - 4.5.2-37 Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (this indicator may be specific to agricultural projects)
 - 4.6.2-9 Number of private sector firms that have improved management practices as a result of USG assistance
 - 4.6.2-11 Person hours of training completed in private sector productive capacity supported by USG assistance
 - 4.6.2-12 Number of days of USG funded technical assistance in private sector productive capacity provided to counterparts or stakeholders
 - 4.6.2-13 Percentage of firms that have achieved improved technologies as a result of USD assistance

- 4.7.3-8 Person hours of training completed by employees of microenterprises supported by USG assistance
 - 4.7.3-9 Number of days of USG funded technical assistance provided to employees of microenterprises
 - The BCN hypothesis and sub-hypotheses presented below provide some examples for testing different factors associated with non-economic benefits.
- The use of multiple types of assessment is encouraged. Current indicators are quantitative. Beneficiary surveys that include open-ended responses on project efficacy, as well as stakeholder perceptions of effects, are important supplements. As suggested previously, sampling a randomized subset of beneficiaries can help to limit the time and effort of data collection. The University of Rhode Island, Coastal Resources Center, a current implementation partner for the PWANI project, uses a series of open-ended questions in their project evaluations, such as the following:
 - Is there a link between your livelihood and conservation?
 - What do you think are the major challenges to implementing this livelihood?
 - Do you think this livelihood activity it will continue after the project ends? Why or why not?

New, open-ended questions could be developed—with specific wording chosen in consultation with a survey design specialist—to evaluate whether the project is effective at reaching the intended audience, and to explore non-economic benefits:

 - Do all community members benefit from this livelihood, including women and the poorest people? If not, why?
 - Did you receive any non-economic benefits from the project? If yes, please describe.
- Livelihoods programming involving the harvest of natural resources may need to include measurements of sustainable exploitation. For instance, given the many pressures on wildlife species and their habitats, empirical and modeling studies from Tanzania sites demonstrate that hunting quotas must be carefully established and monitored over time to ensure long-term viability of wildlife species (e.g., Selous Game Reserve, Caro et al 2009; Udzungwa Mountains, Roverto et al 2012). This represents an important opportunity for a research partnership that could take many forms, including capacity building between expatriate scientists and Tanzanian students, ministry staff, and young researchers.
- A quasi-experimental approach using matched control sites would provide additional, important context on project efficacy (i.e. counterfactual). This may be challenging to include within project budgets, but may be possible through partnerships with researchers, who could leverage the project data in their comparative studies. The Uganda Youth Opportunities Program described previously is an excellent example of a development initiative with a strong research design and component to evaluate project success.

One example of a set of research questions that USAID/Tanzania could incorporate into future conservation based-livelihoods programming comes from BCN (Salafsky et al. 2001). The core hypothesis of BCN stated that

if local communities receive sufficient benefits from a viable enterprise that depends on biodiversity, then they will act to counter internal threats, caused by stakeholders living at the project site, and external threats, caused by outsiders, to that biodiversity.

The three main conditions of the hypothesis are that if an enterprise approach to community-based conservation is going to be effective, then there must be (a) linkage between a viable enterprise and

biodiversity (enterprise must be financially viable and depend on the in situ biological resources of the region; enterprise will fail if this biodiversity is significantly degraded); (b) generation of short- and long-term benefits (i.e. enterprise must generate benefits, financial, social, and/or environmental, for a community of stakeholders); and (c) stakeholder involvement (enterprise must involve members of the local community who are stakeholders in the enterprises and the biodiversity of the area and have the capacity to take action to counter threats to biodiversity). Many factors can potentially affect the success of a conservation-based livelihood project, and these can be captured by four different types of categories (enterprise, benefit, stakeholder, other; Table 2). In addition, specific enterprise factors can be hypothetically linked to livelihood success (Table 3).

Table 2. Key variables potentially affecting conservation success at project sites (Salafsky et al. 2001)

Variable type and variable	Potential subhypothesis
<i>Independent variable (Outcome or Result)</i>	
Conservation success	
<i>Dependent variables</i>	
Enterprise factors	
Enterprise success	if enterprise success increases, then conservation increases
Local enterprise management	if local ownership increases, then conservation increases
Enterprise linkage with biodiversity	if local management increases, then conservation increases
Benefit factors	
Distribution of cash benefits	if enterprise linkage increases, then conservation increases
Amount of cash benefits	if amount of benefit increases, then conservation increases
Variability in cash benefits	if benefit variability increases, then conservation increases
Timing of cash benefits	if timing of benefits decreases, then conservation increases
Frequency of cash benefits	if benefit frequency increases, then conservation increases
Non-cash benefits	if noncash benefits increase, then conservation increases
Stakeholder factors	
Strength of formal stakeholder group	if group strength increases, then conservation increases
Leadership of stakeholder group	if leadership increases, then conservation increases
Resource governance	if local control increases, then conservation increases
Community policing	if local policing increases, then conservation increases
Stakeholder homogeneity	if homogeneity increases, then conservation increases
Other factors	
Chaos (e.g., natural disasters, turmoil)	if chaos increases, then conservation decreases
Project effectiveness	if effectiveness increases, then conservation increases

Table 3. Enterprise factors and their association with success at project sites (Salafsky et al. 2001).

Variable	Subhypothesis
Enterprise linkage with biodiversity	if enterprise linkage increases, then enterprise success increases
Local enterprise management	if local management increases, then enterprise success decreases
Market establishment	enterprise success highest in moderately established markets
Product perishability	if perishability increases, then enterprise success decreases
Green market potential	if green market increases, then enterprise success increases

MANUAL RECOMMENDATIONS

Based on the volume of conservation-based livelihoods programming in Tanzania and the diversity of challenges inherent to these initiatives, there is a strong need for additional support and guidance on the processes, strategies and good practices of environmentally sustainable enterprise development.

There are some important tools to help with planning and project scoping. For example, the BCN enterprise strategy guide provides a useful planning framework for evaluating a suite of factors that help to determine if project investment is warranted (Salafsky et al. 2001).

Table 3. BCN enterprise strategy guide (Salafsky et al. 2001).

Factor	Conditions at site				Comment on maybe if . . . column ^b
Enterprise					
potential profitability	< variable costs	< fixed costs	> fixed costs	Costs+profit	if have management subsidy
market demand	none	low	high	medium	if overharvesting can be controlled
infrastructure	poor	marginal	okay	good	if low-weight, high-value product
local enterprise skills	none	few	some	lots	if people can be hired and trained
complexity	extreme	high	medium	low	if sufficient support is available
linkage	none	low	medium	high	if community perceives linkage
Benefits					
cash benefits	none	few	high	moderate	if they do not cause conflict
noncash benefits	none	few	some	high	if they are meaningful to community
timing	long wait	unknown	short	immediate	if at least some initial quick benefits
distribution	very wide	elites only	limited	targeted	if to resource-use decisionmakers
Stakeholder					
stakeholder group	not present	very new	present	established	if groups shows interest
leadership	none	weak	strong	balanced	if leader is respected by people
resource access	none	ill-defined	some	full	if not clear how important
enforceability	none	limited	some	strong	if community can defend its rights
stakeholder homog.	low	minimal	moderate	complete	if can compartmentalize businesses
conflict	constant	frequent	occasional	rare	if enterprise/project not involved
threat source	all internal	most internal	most external	all external	if external threat pays cash
Other					
chaos	constant	frequent	some	unlikely	if you can adapt to it
project alliance	unwieldy	none	strategic	experienced	if alliance has complementary skills
Implication	forget it	think hard	maybe if . . .	go for it	

^aSee Fig. 4 legend for description of Biodiversity Conservation Network.

^bThese comments apply if the condition winds up in the "maybe if . . ." column as shown on the bottom of the table.

The USAID/Tanzania Mission is encouraged to support enterprise planning and implementation needs through in-person workshops and a detailed manual, ideally in partnership with other donors. One current USAID/Tanzania partner, the University of Rhode Island Coastal Resources Center, has drafted a two-day workshop module that is a companion to the *Enterprise Strategies for Coastal and Marine Conservation—A Guide for Practitioners, Donors, and Local Government* (Torell and Tobey 2012). Although this workshop and training are designed for coastal and marine environments, many of the approaches and fundamental principles will apply to other livelihood sectors. The workshop explains what conservation-based enterprises are; provides a framework for designing and implementing conservation-based livelihoods; provides examples of conservation enterprise and lessons learned; and provides links to resources and tools. A variation of this workshop and guide could be developed for wider application. A training and workshop manual would be helpful in helping practitioners (1) to define conservation targets and objectively measure their success in moving toward it; (2) to discover and refine guiding principles for using enterprise-based and other strategies for conservation; and, (3) to capture and share the acquired knowledge and experience within a wider “learning culture” context (Salafsky et al. 2001).

LITERATURE REVIEWED

- Aboud, A.A., P.K. Kisoyan, M.Y. Said, A. Notenbaert, J. de Leeuw, J.W. Gitau, P. Manzano, J.M. Davies, G.M. Roba, S.O. Omondi and M.O. Odhiambo. 2012. [Natural resource management and biodiversity conservation in the drylands of eastern and central Africa](#). ASARECA, Entebbe, Uganda.
- Agrawal, A. and K. Redford 2006. [Poverty, development, and biodiversity conservation: shooting in the dark?](#) WCS Working Paper No. 26. Wildlife Conservation Society, New York, USA.
- Alcorn, J., A. Kajuni and B. Winterbottom. 2002. [Assessment of CBNRM best practices In Tanzania](#). USAID/Tanzania.
- App, B., A.W. Mosimane, T. Resch, and D. Robinson. 2008. [USAID Support to the Community-Based Natural Resource Management Program in Namibia: LIFE Program Review](#). USAID, Washington, D.C.
- ARD. 2001. [Community-based natural resource management \(CBNRM\) in Africa – a review](#). USAID.
- Arntzen, J., T. Setlhogile and J. Barnes. 2007. [Rural livelihoods, poverty reduction, and food security in southern Africa: is CBNRM the answer?](#) USAID.
- Baldus, R.D. 2005. [A practical summary of experiences after three decades of community-based wildlife conservation in Africa: what are the lessons learnt?](#) CIC Technical Series Publication No. 5. Joint publication of FAO and CIC. Budapest, Hungary.
- Balmford, A., R. Green and B. Phalan. 2012. What conservationists need to know about farming. *Proceedings of the Royal Society B: Biological Sciences* 279:2714–2724.
- Bechtel, J.D. 2010. [Gender, poverty, and the conservation of biodiversity: a review of issues and opportunities](#). MacArthur Foundation Conservation White Paper Series. MacArthur Foundation, Chicago, USA.
- Blattman, C., N. Fiala, and S. Martinez. 2013. [Credit constraints, occupational choice, and the process of development: long run evidence from cash transfers in Uganda](#). Social Science Research Network.
- Bowler, D.E., L.M. Buyung-Ali, J.R. Healey, J.P.G. Jones, T.M. Knight and A.S. Pullin. 2012. Does community forest management provide global environmental benefits and improve local welfare? *Frontiers in Ecology and Environment* 10:29-36.
- Brashares, J.S., C.D. Golden, K.Z. Weinbaum, C.B. Barrett and G.V. Okello. 2011. Economic and geographic drivers of wildlife consumption in rural Africa. *Proceedings of the National Academy of Sciences* 108:13931-13936.
- Brooks, J.S., M.A. Franzen, C.M. Holmes, M.N. Grote and M. Borgerhoff Mulder. 2006. Testing hypotheses for success of different conservation strategies. *Conservation Biology* 20:1528-1538.
- Brooks, J.S., K.A. Waylen and M. Borgerhoff Mulder. 2012. How national context, project design, and local community characteristics influence success in community-based conservation projects. *Proceedings of the National Academy of Sciences* 109:21265-21270.

Byers, B., Z. Aloyce, P. Munishi and C. Rhoades. 2012. [Tanzania environmental threats and opportunities assessment](#). USAID.

Caro, T. 2008. Decline of large mammals in the Katavi-Rukwa ecosystem of western Tanzania. *African Zoology* 43:99-116.

Caro, T.M., C.R. Young, A.E. Cauldwell and D.D.E. Brown. 2009. Animal breeding systems and big game hunting: models and application. *Biological Conservation* 142:909-929.

CBJ, FY 2013, Foreign Operations, [Annex: Regional Perspectives](#).

Christophersen, K., R. Hagen and G. Jambya. 2000. [Economic opportunities in Wildlife Management Areas](#). USAID/Tanzania.

Daw, T.M., J.E. Cinner, T.R. McClanahan, K. Brown, S.M. Stead, N.A.J. Graham and J. Maina. 2012. To fish or not to fish: factors at multiple scales affecting artisanal fishers' readiness to exit a declining fishery. *PLoS ONE* 7:e31460.

Dickman, A.J., E.A. Macdonald and D.W. Macdonald. 2011. A review of financial instruments to pay for predator conservation and encourage human–carnivore coexistence. *Proceedings of the National Academy of Sciences* 108:13937-13944.

Elliott, J. and D. Sumba. 2011. [Conservation enterprise: what works, where and for whom?](#) IIED Gatekeeper Series No. 151. International Institute for Environment and Development, London, UK.

Ferraro, P.J. and S.K. Pattanayak. 2006. Money for nothing? A call for empirical evaluation of biodiversity conservation investments. *PLoS Biology* 4:e105.

Fitzgerald, K. 2012. [Understanding the ecological, economic and social context of conservancies in Zimbabwe](#). USAID.

Garnett, S.T., J. Sayer and J. du Toit. 2007. Improving the effectiveness of interventions to balance conservation and development: a conceptual framework. *Ecology and Society* 12:2 [online].

Haws, M., E. Ochoa, D. Robadue, P. Rubinoff, J. Tobey and A. Villalba. 2001 Good management practices for sustainable shrimp production in coastal habitats. Coastal Resources Center, University of Rhode Island, Narragansett, USA.

Hecht, J.E., D. Gibson and B. App. 2008. [Protecting hard-won ground: USAID experience and prospects for biodiversity conservation in Africa](#). USAID, Washington, DC, USA.

Heermans, J. and J. Otto. 1999. [Whose woods these are: community-based forest management in Africa](#). USAID, Washington, DC, USA.

Hesse, C. and J. McGregor. 2006. [Pastoralism: drylands' invisible asset?](#) Drylands Issue Paper Series No. 142. International Institute for Environment and Development, London, UK.

Holmern, T., J. Nyahongo and E. Røskaft. 2007. Livestock loss caused by predators outside the Serengeti National Park, Tanzania. *Biological Conservation* 135:518-526.

Homewood, K.M., P. Chenevix Trench and D. Brockington. 2012. Pastoralist livelihoods and wildlife revenues in East Africa: a case for coexistence? *Pastoralism: Research, Policy and Practice* 2:19.

Hughes, R. and F. Flintan. 2001. [Integrating conservation and development experience: a review and bibliography of the ICDP literature](#). Biodiversity and Livelihoods Issues No. 3. International Institute for Environment and Development, London, UK.

Institute of Resource Assessment. 2007. [Assessment and evaluation of the Wildlife Management Areas in Tanzania](#). Institute of Resource Assessment, Dar es Salaam, Tanzania.

IRG. 2000. [Community based conservation experience in Tanzania: an assessment of lessons learned](#). USAID/Tanzania.

IUCN. 2012. [Supporting sustainable pastoral livelihoods: a global perspective on minimum standards and good practices](#). Second Edition. IUCN Eastern Africa Regional Office, Nairobi, Kenya.

Kipuri, N. and C. Sørensen. 2008. [Poverty, pastoralism and policy in Ngorongoro](#). ERETO/ International Institute for Environment and Development, London, UK.

Kiss, A. 2004. Is community-based ecotourism a good use of biodiversity conservation funds? *Trends in Ecology and Evolution* 19:232-237.

Knueppel, D., P. Coppolillo, A. Omari Msago, P. Msoffe, D. Mutekanga and C. Cardona. 2009. [Improving poultry production for sustainability in Ruaha landscape, Tanzania](#). USAID.

Koontz, A. 2008. [The conservation marketing equation: a manual for conservation and development professionals](#). USAID.

Leisher, C., M. Sanjayan, J. Blockhus, A. Kontoleon, and S.N. Larsen. 2010. [Does conserving biodiversity work to reduce poverty? A state of knowledge review](#). The Nature Conservancy, Arlington, USA.

Leisher, C., L.H. Samber, P. van Buekering and M. Sanjayan. 2013. Focal areas for measuring the human well-being impacts of a conservation initiative. *Sustainability* 5:997-1010.

Lewis, D., S.D. Bell, J. Fay, K.L. Bothi, L. Gatere, M. Kabila, M. Mukamba, E. Matokwani, M. Mushimbalume, C.I. Moraru, J. Lehmann, J. Lassoie, D. Wolfe, D.R. Lee, L. Buck and A.J. Travis. 2011. Community Markets for Conservation (COMACO) links biodiversity conservation with sustainable improvements in livelihoods and food production. *Proceedings of the National Academy of Sciences* 108:13957-13962.

Lindsey, P.A., L.G. Frank, R. Alexander, A. Mathieson and S.S. Románach. 2006. Trophy hunting and conservation in Africa: problems and one potential solution. *Conservation Biology* 21:880-883.

Lindsey, P.A., P.A. Roulet and S.S. Románach. 2007. Economic and conservation significance of the trophy hunting industry in sub-Saharan Africa. *Biological Conservation* 134:455-469.

Lindsey, P.A., G. Balme, M. Becker, C. Begg, C. Bentos, C. Bocchino, A. Dickman, R.W. Diggle, H. Eves, P. Henshel, D. Lewis, K. Marnewick, J. Mattheus, J.W. McNutt, R. McRobb, N. Midlane, J. Milanzi, R. Morley, M. Murphree, V. Opyene, J. Phadima, G. Purchase, D. Rentsch, C. Roche, J. Shaw, H. van der

- Westhuizen, N. Van Vliet, P. Zisadza-Gandiwa. 2013. The bushmeat trade in African savannas: impacts, drivers, and possible solutions. *Biological Conservation* 160:80-96.
- Mabugu, R. and P. Mugoya. 2001. [Financing, revenue-sharing, and taxation in Wildlife Management Areas. USAID/Tanzania.](#)
- Mayaka, T.B., T. Hendricks, J. Wesseler and H.H.T. Prins. 2005. Improving the benefits of wildlife harvesting in Northern Cameroon: a co-management perspective. *Ecological Economics* 54:67-80.
- McNally, C.G., E. Uchida and A.J. Gold. 2011. The effect of a protected area on the tradeoffs between short-run and long-run benefits from mangrove ecosystems. *Proceedings of the National Academy of Sciences* 108:13945-13950.
- Mfunda, I.M. and E. Røskaft. 2010. Bushmeat hunting in Serengeti, Tanzania: an important economic activity to local people. *International Journal of Biodiversity and Conservation* 2:263-272.
- Moro, M., A. Fischer, M. Czajkowski, D. Brennan, A. Lowassa, L.C. Naiman and N. Hanley. 2013. An investigation using the choice experiment method into options for reducing illegal bushmeat hunting in western Serengeti. *Conservation Letters* 6:37-45.
- Murphree, M.W. 2000. [Community-based conservation: old ways, new myths and enduring challenges.](#) Conference on African Wildlife Management in the New Millennium. College of African Wildlife Management, Mweka, Tanzania.
- Muruthi, P. 2005. [Human wildlife conflict: lessons learned from AWF's African heartlands.](#) AWF Working Papers. AWF, Arusha, Tanzania.
- Naidoo, R., L.C. Weaver, G. Stuart-Hill and J. Tagg. 2011. Effect of biodiversity on economic benefits from communal lands in Namibia. *Journal of Applied Ecology* 48:310-316.
- Neely, C., S. Bunning and A. Wilkes. 2009. [Review of evidence on drylands pastoral systems and climate change: implications and opportunities for mitigation and adaptation.](#) Land and water discussion paper 8. FAO, Rome. Italy.
- Nelson, F. 2008. [Developing alternative frameworks for community-based conservation: piloting payments for environmental services \(PES\) in Tanzania's Simanjiro Plains.](#) USAID.
- Nelson, F. 2012. Natural conservationists? Evaluating the impact of pastoralist land use practices on Tanzania's wildlife economy. *Pastoralism: Research, Policy and Practice* 2:15.
- Newmark, W.D. and J.L. Hough. 2000. Conserving wildlife in Africa: integrated conservation and development projects and beyond. *BioScience* 50:585-592.
- Nielsen, M.R. 2006. Importance, cause and effect of bushmeat hunting in the Udzungwa Mountains, Tanzania: implications for community based wildlife management. *Biological Conservation* 128:509-516.
- Nielsen, M.R. 2011. Improving the conservation status of the Udzungwa Mountains, Tanzania? The effect of joint forest management on bushmeat hunting in the Kilombero Nature Reserve. *Conservation and Society* 9:106-118.

Nielsen, M.R. and T. Treue. 2012. Hunting for the benefits of joint forest management in the eastern Afromontane biodiversity hotspot: effects on bushmeat hunters and wildlife in the Udzungwa Mountains. *World Development* 40:1224-1239.

Ntiamoa-Baidu, Y., S. Zéba, D.-G. Mboje Gamassa, and L. Bonnénin. 2000. [Principles in practice: Staff observations of conservation projects in Africa](#). Biodiversity Support Program, Washington, D.C.

Packer, C., H. Brink, B.M. Kissui, H. Maliti, H. Kushnir and T. Caro. 2010. Effects of trophy hunting on lion and leopard populations in Tanzania. *Conservation Biology* 25:142-153.

Pfliegner 2010 The Impacts of Joint Forest Management on Forest Condition, Livelihoods and Governance: Case studies from Morogoro Region in Tanzania.

Power, A.G. 2010. Ecosystem services and agriculture: tradeoffs and synergies. *Philosophical Transactions of the Royal Society B: Biological Sciences* 365:2959-2971.

Rantala, S., R. Bullock, M.A. Mbegu and L.A. German. 2012. Community-based forest management: what scope for conservation and livelihood co-benefits? Experience from the East Usambara Mountains, Tanzania. *Journal of Sustainable Forestry* 31:777-797.

Roe, D. (Compiler). 2010. [Linking biodiversity conservation and poverty alleviation: a state of knowledge review](#). CBD Technical Series No. 55. Secretariat of the Convention on Biological Diversity, Montreal, Canada.

Roe, D., M. Walpole and J. Elliott. 2010. [Linking biodiversity conservation and poverty reduction: what, why and how?](#) Summary report of a symposium held at the Zoological Society of London, April 2010.

Rovero, F., A.S. Mtui, A.S. Kitegile and M.R. Nielsen. 2012. Hunting or habitat degradation? Decline of primate populations in Udzungwa Mtns, TZ: an analysis of threats. *Biological Conservation* 146:89-96.

Salafsky, N., H. Cauley, G. Balachander, B. Cordes, J. Parks, C. Margoluis, S. Bhatt, C. Encarnacion, D. Russell and R. Margoluis. 2001. A systematic test of an enterprise strategy for community-based biodiversity conservation. *Conservation Biology* 15:1585-1595.

Salafsky, N., R. Margoluis, K.H. Redford and J.G. Robinson. 2002. Improving the practice of conservation: a conceptual framework and research agenda for conservation science. *Conservation Biology* 16:1469-1479.

Saterson, K., Margoluis, R., and Salafsky, N. 1999. Measuring conservation impact: An interdisciplinary approach to project monitoring and evaluation. Biodiversity Support Program, Washington, D.C.

Saterson, K.A., N.L. Christensen, R.B. Jackson, R.A. Kramer, S.L. Pimm, M.D. Smith and J.B. Wiener. 2004. Disconnects in evaluating the relative effectiveness of conservation strategies. *Conservation Biology* 18:597-599.

Serge, N., M. Balinga, A. Kalinganire, A. Tchoundjeu, and T. Sunderland. 2009. [Transboundary landscape management to improve livelihoods and biodiversity conservation: case of Guinea and Sierra Leone](#). USAID.

- Stiglitz, J.E., A. Sen and J.-P. Fitoussi. 2009 [Report by the Commission on the Measurement of Economic Performance and Social Progress](#). Government of France, Paris, France.
- Sulle, E., E. Lekaita and F. Nelson. 2011. [From promise to performance? Wildlife management areas in northern Tanzania](#). Tanzania Natural Resources Forum, Arusha, Tanzania.
- Svadlenak-Gomez, K., T. Clements, C. Foley, N. Kazakov, D. Miquelle and R. Stenhouse. 2007. Paying for Results: The WCS Experience with Direct Incentives for Conservation. In Protected Areas and Human Livelihoods, K. Redford and E. Fearn (ed.). WCS Working Paper No 32: 117-129
- Torell, E., B. Crawford, D. Kotowicz, M.D. Herrera and J. Tobey. 2010. Moderating our expectations on livelihoods in ICM: experiences from Thailand, Nicaragua, and Tanzania. *Coastal Management* 38:216-237.
- Torell, E. and J. Tobey. 2012. [Enterprise strategies for coastal and marine conservation: a review of best practices and lessons learned](#). Coastal Resources Center, University of Rhode Island, USA.
- UNEP. 2005. [Making tourism more sustainable](#). UNEP, Paris, France.
- Vedeld et al. 2004 Counting on the Environment: Forest Incomes and the Rural Poor
- USAID. 2001. [Building institutional capacity for environmentally sustainable and appropriate mariculture](#). USAID.
- USAID. 2006. [Evaluation of USAID/Agriculture and Natural Resource Management Program Wula Nafaa](#). USAID, Washington, D.C.
- USAID. 2009. [Value chain cases in context of conservation marketing and certification](#). Workshop proceedings. USAID.
- Van Ingen, T., C. Kawau and S. Wells. 2002. [Gender equity in coastal zone management: experiences from Tanga, Tanzania](#). IUCN Eastern Africa Regional Office, Nairobi, Kenya.
- Van Vliet, N. (Compiler). 2011. [Livelihood alternatives for unsustainable use of bushmeat](#). CBD Technical Series No. 60. Secretariat of the Convention on Biological Diversity, Montreal, Canada.
- Vermeulen, C., C. Julve, J.-L. Doucet and D. Monticelli. 2009. Community hunting in logging concessions: towards a management model for Cameroon's dense forests. *Biodiversity Conservation* 18:2705-2718.
- Vyamana, V.G. 2009. Participatory forest management in the Eastern Arc Mountains of Tanzania: who benefits? *International Forestry Review* 11:239-253.
- Walpole, M., L. Wilder, A. Granziera, D. Thomas, and J. Elliot. 2007. [Measuring the impact of livelihoods initiatives in the conservation context](#). FFI/Birdlife International/AWF, Cambridge, UK.
- Weinbaum, K.Z., J.S. Brashares, C.D. Golden and W.M. Getz. 2013. Searching for sustainability: are assessments of wildlife harvests behind the times? *Ecology Letters* 16:99-111.
- Wilfred, P. 2010. Towards sustainable Wildlife Management Areas in Tanzania. *Tropical Conservation Science* 3:103-116.

Paulo Wilfred Ngunjiri. 2012. [Patterns of wildlife exploitation in the Ugalla ecosystem of western Tanzania](#). Ph.D. Dissertation. University of Nottingham.

ANNEX A. MULTILATERAL DONOR PROGRAMMING

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Capacity Building	African Development Bank (ADB)	Alternative Learning & Skills Development Project	Improved access of youth and women to quality functional literacy and skills required by the labor market. Component I: Support to Skills Training, Vocational Education and Alternative Learning; Component II: Capacity Building and Institutional Development	Zanzibar	2012-
Marketing, Finance	African Development Bank (ADB)	Marketing Infrastructure, Value Addition	The specific objective of the ADF component is to enhance rural incomes and food security through improved market access (feeder roads, market centers and storage, community management of infrastructure), increased share of value added of small- and medium-scale producers and processors including training and matching grants for equipment. (i) Marketing Infrastructure and Systems Development; (ii) Rural Finance; and (iii) Program Coordination	16 regions of Tanzania	2012-
Capacity Building, Finance	African Development Bank (ADB)	Small Entrepreneurs Loan Facility II	The overall goal of the Project is to contribute towards reducing income poverty in Tanzania. The objective of the proposed project is to improve access of 820,000 of the active poor, especially in rural areas, to financial services. (i) Financial Services; and (ii) Capacity Building and Business Development Services	Tanzania	2010-
Agriculture	African Development Bank (ADB)	District Agricultural Sector Investment	To increase agricultural productivity and incomes of rural households in the project area: farmer capacity building, community planning and agricultural investment, rural micro-finance and marketing.	northwestern Tanzania	2005-
Forestry	EU - EuropeAID Development and Cooperation	Livelihoods, Incomes and Village Institutions in the Ngurus ("LIVING")		Tanzania	2007-2010
Forestry	EU - EuropeAID Development and Cooperation	Rafiki Mitiki: a Scattered Cooperative Teakwood Plantation, Tanzania		Tanzania	2007-2011
Fisheries	EU - EuropeAID Development and Cooperation	Reducing poverty in Rufiji-Mafia-Kilwa, Tanzania, through improved livelihoods and sustainable coastal and marine resource management	Rufiji-Mafia-Kilwa	2008-2011	Fisheries
Forestry	EU - EuropeAID Development and Cooperation	Tanzania Participatory Forest Management	To promote sustainable forest management through improved participatory forest management systems and tangible forest-based livelihoods, to meet local and national needs.	Dar Es Salaam, Arusha; Districts of Babati & Mbulu in Manyara region	2009-2012
Natural Products	EU - EuropeAID Development and Cooperation	Beekeeper Economic Empowerment (BEE) Project,	The project aims at enabling small-scale farmers in the Urambo and Sikonge districts of the Tabora region to earn increased income from trade in honey and beeswax products.	Tabora - Urambo and Sikonge districts	2009-2013
Agriculture	EU - EuropeAID Development and Cooperation	Improvement of food security and nutritional status in Maasai steppes of northern Tanzania, by applying sustainable farming technologies		northern Tanzania	2010-2011
Agriculture	EU - EuropeAID Development and Cooperation	Improvement of the competitiveness of the Tanzanian Tea Sector		Tanzania	2010-2013
Agriculture	EU - EuropeAID Development and Cooperation	Improving incomes, market access, and disaster preparedness: A rapid response to food insecurity in Shinyanga, Tanzania		Tanzania	2010-2011
Agriculture	EU - EuropeAID Development and Cooperation	Increasing the Competitiveness of the Tanzania's Coffee sub-sector for sustainable poverty reduction - Coffee Research and Technology Support Program (CRTSP) II		Tanzania	2010-2013

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Agriculture	EU - EuropeAID Development and Cooperation	SAAFI: Sustainable Agriculture Against Food Insecurity in Kilolo and Namtumbo Districts		Kilolo and Namtumbo Districts	2009-2011
Coastal/Marine	EU - EuropeAID Development and Cooperation	EU-Indian Ocean Commission cooperative project	In support of enhanced regional cooperation for sustainable biodiversity management in the eastern and southern Africa-Indian Ocean region, and in promoting contribution of biodiversity to improved livelihoods (e.g., fisheries, aquaculture, farming)	Tanzania, Comoros, Madagascar, Mauritius, Seychelles, Kenya	2013-2018
Climate Change	EU - EuropeAID Development and Cooperation	Empowering and accompanying rural communities in their transformation to resilient eco-villages in Tanzania	Increase rural adaptation capacities and improve livelihoods in three types of ecosystems: coastal/islands, drylands and highlands	Chololo, Pemba, Uluguru	2011-2013
Climate Change	EU - EuropeAID Development and Cooperation	Wood fuels services for poverty reduction and environmental conservation in Tanzania	Contribute to poverty reduction and environmental conservation in use of fuel-efficient stoves		2006-2011
Fisheries	EU - EuropeAID Development and Cooperation	Pilot action: Climate change threatening communities in the Lake Victoria region	Identify environmentally-friendly alternatives for the fishing industry and access to potable water that can easily be adopted by the communities		2007-2008
Wildlife, PES	EU - EuropeAID Development and Cooperation	Building community roles and incentives in ecosystem conservation and management	Land-use plans for WMAs developed, conservation cooperatives and community tourism ventures functioning.	Serengeti	2006-2011
Climate Change	FAO	UN-REDD+ Quick Start Initiative			2010-2013
Agriculture	FAO	Transboundary agro-ecosystem management program for the Kagera River Basin			2010-2014
Agriculture	FAO	Supporting Food Security and Reducing Poverty in Kenya and Tanzania through Conservation of Globally Important Agricultural Heritage System (GIAHS)			2008-2012
Natural Products	FAO	Small-Scale Cassava Processing and Vertical Integration of the Cassave Sub-Sector in Southern and Eastern Africa			2010-2014
Agriculture	FAO	Unlocking Commercial Fibre Potential in Developing Countries (Haiti and LDC East Africa) Strengthening Global Value Chains for Rural Development, Poverty Alleviation and the Environment			2010-2012
Agriculture	FAO	Pilot Project on processing fruits and vegetables using oil-bath dehydration technology			2010-2013
Agriculture	FAO	Food systems development in Tanzania			2009-2013
Pastoralism	FAO	Support for Development of Livestock Identification and Traceability System			2001-2013
Fisheries	FAO	South West Indian Ocean Fisheries Project			2009-2014
Natural Products	FAO	Beekeeping Project			2011-2012
Livestock Husbandry	FAO	Poultry Raising Project			2011-2012
Livestock Husbandry	FAO	Pig Keeping Project			2011-2012
Agriculture	FAO	Vegetable and Fruit Production			2011-2012
Coastal/Marine	FAO	Oyster Culture Project			2011-2012
Agriculture, Pastoralism	GEF	Conservation and Management of the Eastern Arc Mountain Forests	Development of a conservation strategy and facilitation of community-based conservation initiatives, including sustainable agriculture and livestock husbandry.	Eastern Arc Mountains	2003-2010

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Coastal/Marine	GEF	Development of Mnazi Bay Marine Park	Additional funding for the development of a multi-purpose Marine Protected Area around the globally significant marine biodiversity values of the Mnazi Bay and Rovuma River estuary areas in southern Tanzania. There is a focus on protected area zoning with sustainable harvesting.	southern Tanzania	2005-2008
Protected Areas, Livelihoods	GEF	Jozani Chwaka Bay National Park Development	The project will promote integrated conservation and development activities in the Jozani-Chwaka Conservation Area. The project will establish Jozani-Chwaka Bay national park, developing Biodiversity Conservation, Community Based Natural Resources Management programs and improving the institutional capacity in natural resources management.	Zanzibar	2000-2004
Pastoralism	GEF	Novel Forms of Livestock & Wildlife Integration Adjacent to Protected Areas in Africa	To achieve sustainable biodiversity conservation by alleviating and controlling conflicts over land use between pastoralism, cropping, and conservation. It will explore and understand the dynamics of land use in Tanzania using this improved knowledge to generate greater returns to key stakeholders from both wildlife and livestock simultaneously. This is thought to be achieved by developing and implementing land use plans, establishing benefit sharing mechanisms from wildlife such as community-managed business ventures and by improving livestock production by pastoralists such as access to health, marketing and water.		2004-2009
Coastal/Marine	GEF	Developing Core Capacity to Address Adaptation to Climate Change in Productive Coastal Zones	To develop institutional capacities to manage climate change impacts through improved climate information, technical capacity, the establishment of demonstration projects to reduce vulnerability in key vulnerable areas, and learning.	coastal Tanzania	2011-2015
Fisheries, Water	GEF	Kihansi Catchment Conservation and Management Project	Incorporate environmental dimensions into the water resources management and development framework at the river basin level.		2012-2017
Agriculture	GEF	Reducing Land Degradation on the Highlands of Kilimanjaro	To create a sustainable enabling environment for shade coffee as an incentive for integrated sustainable land management that reduces land degradation and improves livelihoods in the Kilimanjaro Highlands	Kilimanjaro	2009-2013
Agriculture, Climate Change	GEF	Promotion of waste-to-energy applications in agro-industries of Tanzania	To promote investments in waste-to-energy (WTE) technologies for energy (electricity + thermal energy) generation in processing of economically important agro-industries.		2012-2016
Forestry	GEF	Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania	To expand, financially secure and strengthen the management of Tanzania's Forest Nature Reserve (FNR) network, including benefits sharing agreements with local communities.		(to be implemented)
Water	GEF	Mainstreaming Climate Change in Integrated Water Resources Management in Pangani River Basin	To strengthen IWRM in the Pangani Basin, including mainstreaming Climate Change to support the equitable provision and wise governance of freshwater for livelihoods and environment for current and future generations		2003-2010
Coastal/Marine	GEF	Sustainable Coastal Livelihoods Project	To improve lives and livelihoods of coastal communities of mainland Tanzania and Zanzibar, through implementing participatory and integrated coastal development/economic activities while sustaining coastal resources	coast	2005-2011
Coastal/Marine	GEF	Extending the Coastal Forest Protected Area Subsystem	To strengthen biodiversity management fundamentals within the Coastal Forests Protected Area network in Tanzania and Zanzibar: improved governance framework; better institutional capacity; and new management options and partnerships piloted with local communities (e.g., JFM, sustainable use thresholds, improved market access, adaptive management).		2009-2014
Agriculture, Pastoralism	IFAD	Agricultural Sector Development Programme	To improve access to the technologies and services that small-scale farmers need to enhance productivity, and to increase the participation of farmer and pastoralist organizations in district planning processes, negotiating and advocacy		2007-2015
Capacity Building	IFAD	Rural Micro, Small and Medium Enterprise Support Programme	To improve rural employment opportunities in 6 of the 21 regions in mainland Tanzania, by selecting selected medium and small-scale rural entrepreneurs with improved skills training, knowledge and access to markets to help increase productivity, profitability and off-farm incomes.	Iringa, Manyara, Mwanza, Pwani, Ruvuma and Tanga	2007-2014
Pastoralism	UNDP	Integrating Environment into Poverty Reduction policies	Institutional capacity building to integrate environment and livelihood issues into planning; improved access to environment and livelihoods data for planning; sustainable financing of environmental targets; and promoting efficient use of rangelands and improved market access.	Tanzania	2007-2010

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Water	UNDP	Mainstreaming Climate Change into Integrated Water Resources Management in Pangani River Basin	To mainstream climate change into Integrated Water Resources Management in the Pangani Basin, so that it may support the equitable provision of freshwater for the environment and for livelihoods for current and future generations.		2007-2011
Forestry	UNEP	Woodlot Management	Using smallholder woodlot management practices as a strategy for climate change adaptation has created a new stream of income for local communities and revenues for the city, while enhancing resilience to climate vulnerability.	Makete District	
Agriculture	World Bank	Agricultural Sector Development Project (ASDP)	To enable farmers to have better access to and use of agricultural knowledge, technologies, marketing systems, and infrastructure and to promote agricultural private investment based on an improved regulatory and policy environment	SAGCOT	2012-
Coastal/Marine	World Bank	Tanzania Marine and Coastal Environment Management Project	To strengthen the sustainable management and use of the Exclusive Economic Zone, territorial seas, and coastal resources resulting in enhanced revenue collection, reduced threats to the environment, better livelihoods for participating coastal communities living in the Coastal Districts, and improved institutional arrangements.	Coast	2005-2013
Capacity Building	African Development Bank (ADB)	Alternative Learning & Skills Development Project	Improved access of youth and women to quality functional literacy and skills required by the labor market. Component I: Support to Skills Training, Vocational Education and Alternative Learning; Component II: Capacity Building and Institutional Development Services	Zanzibar	2012-
Marketing, Finance	African Development Bank (ADB)	Marketing Infrastructure, Value Addition	The specific objective of the ADF component is to enhance rural incomes and food security through improved market access (feeder roads, market centers and storage, community management of infrastructure), increased share of value added of small- and medium-scale producers and processors including training and matching grants for equipment. (i) Marketing Infrastructure and Systems Development; (ii) Rural Finance; and (iii) Programme Coordination	16 regions of Tanzania	2012-
Capacity Building, Finance	African Development Bank (ADB)	Small Entrepreneurs Loan Facility II	The overall goal of the Project is to contribute towards reducing income poverty in Tanzania. The objective of the proposed project is to improve access of 820,000 of the active poor, especially in rural areas, to financial services. (i) Financial Services; and (ii) Capacity Building and Business Development Services	Tanzania	2010-
Agriculture	African Development Bank (ADB)	District Agricultural Sector Investment	To increase agricultural productivity and incomes of rural households in the project area: farmer capacity building, community planning and agricultural investment, rural micro-finance and marketing.	northwestern Tanzania	2005-
Forestry	EU - EuropeAID Development and Cooperation	Livelihoods, Incomes and Village Institutions in the Ngurus ("LIVING")		Tanzania	2007-2010
Forestry	EU - EuropeAID Development and Cooperation	Rafiki Mitiki: a Scattered Cooperative Teakwood Plantation, Tanzania		Tanzania	2007-2011
Fisheries	EU - EuropeAID Development and Cooperation	Reducing poverty in Rufiji-Mafia-Kilwa, Tanzania, through improved livelihoods and sustainable coastal and marine resource management	Rufiji-Mafia-Kilwa	2008-2011	Fisheries
Forestry	EU - EuropeAID Development and Cooperation	Tanzania Participatory Forest Management	To promote sustainable forest management through improved participatory forest management systems and tangible forest-based livelihoods, to meet local and national needs.	Dar Es Salaam, Arusha, and Districts of Babati & Mbulu in Manyara region	2009-2012
Natural Products	EU - EuropeAID Development and Cooperation	Beekeeper Economic Empowerment (BEE) Project,	The project aims at enabling small-scale farmers in the Urambo and Sikonge districts of the Tabora region to earn increased income from trade in honey and beeswax products.	Tabora - Urambo and Sikonge districts	2009-2013
Agriculture	EU - EuropeAID Development and Cooperation	Improvement of food security and nutritional status in Maasai steppes of northern Tanzania, by applying sustainable farming technologies		northern Tanzania	2010-2011
Agriculture	EU - EuropeAID Development and Cooperation	Improvement of the competitiveness of the Tanzanian Tea Sector		Tanzania	2010-2013

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Agriculture	EU - EuropeAID Development and Cooperation	Improving incomes, market access, and disaster preparedness: A rapid response to food insecurity in Shinyanga, Tanzania		Tanzania	2010-2011
Agriculture	EU - EuropeAID Development and Cooperation	Increasing the Competitiveness of the Tanzania's Coffee sub-sector for sustainable poverty reduction - Coffee Research and Technology Support Programme (CRTSP) II		Tanzania	2010-2013
Agriculture	EU - EuropeAID Development and Cooperation	SAAFI: Sustainable Agriculture Against Food Insecurity in Kilolo and Namtumbo Districts		Kilolo and Namtumbo Districts	2009-2011
Coastal/Marine	EU - EuropeAID Development and Cooperation	EU-Indian Ocean Commission cooperative project	In support of enhanced regional cooperation for sustainable biodiversity management in the eastern and southern Africa-Indian Ocean region, and in promoting contribution of biodiversity to improved livelihoods (e.g., fisheries, aquaculture, farming)	Tanzania, Comoros, Madagascar, Mauritius, Seychelles, Kenya	2013-2018
Climate Change	EU - EuropeAID Development and Cooperation	Empowering and accompanying rural communities in their transformation to resilient eco-villages in Tanzania	Increase rural adaptation capacities and improve livelihoods in three types of ecosystems: coastal/islands, drylands and highlands	Chololo, Pemba, Uluguru	2011-2013
Climate Change	EU - EuropeAID Development and Cooperation	Wood fuels services for poverty reduction and environmental conservation in Tanzania	Contribute to poverty reduction and environmental conservation in use of fuel-efficient stoves		2006-2011
Fisheries	EU - EuropeAID Development and Cooperation	Pilot action: Climate change threatening communities in the Lake Victoria region	Identify environmentally-friendly alternatives for the fishing industry and access to potable water that can easily be adopted by the communities		2007-2008
Wildlife, PES	EU - EuropeAID Development and Cooperation	Building community roles and incentives in ecosystem conservation and management	Land-use plans for WMAs developed, conservation cooperatives and community tourism ventures functioning.	Serengeti	2006-2011
Climate Change	FAO	UN-REDD+ Quick Start Initiative			2010-2013
Agriculture	FAO	Transboundary agro-ecosystem management program for the Kagera River Basin			2010-2014
Agriculture	FAO	Supporting Food Security and Reducing Poverty in Kenya and Tanzania through Conservation of Globally Important Agricultural Heritage System (GIAHS)			2008-2012
Natural Products	FAO	Small-Scale Cassava Processing and Vertical Integration of the Cassava Sub-Sector in Southern and Eastern Africa			2010-2014
Agriculture	FAO	Unlocking Commercial Fibre Potential in Developing Countries (Haiti and LDC East Africa) Strengthening Global Value Chains for Rural Development, Poverty Alleviation and the Environment			2010-2012
Agriculture	FAO	Pilot Project on processing fruits and vegetables using oil-bath dehydration technology			2010-2013
Agriculture	FAO	Food systems development in Tanzania			2009-2013
Pastoralism	FAO	Support for Development of Livestock Identification and Traceability System			2001-2013
Fisheries	FAO	South West Indian Ocean Fisheries Project			2009-2014
Natural Products	FAO	Beekeeping Project			2011-2012

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Livestock Husbandry	FAO	Poultry Raising Project			2011-2012
Livestock Husbandry	FAO	Pig Keeping Project			2011-2012
Agriculture	FAO	Vegetable and Fruit Production			2011-2012
Coastal/Marine	FAO	Oyster Culture Project			2011-2012
Agriculture, Pastoralism	GEF	Conservation and Management of the Eastern Arc Mountain Forests	Development of a conservation strategy and facilitation of community-based conservation initiatives, including sustainable agriculture and livestock husbandry.	Eastern Arc Mountains	2003-2010
Coastal/Marine	GEF	Development of Mnazi Bay Marine Park	Additional funding for the development of a multi-purpose Marine Protected Area around the globally significant marine biodiversity values of the Mnazi Bay and Rovuma River estuary areas in southern Tanzania. There is a focus on protected area zoning with sustainable harvesting.	southern Tanzania	2005-2008
Protected Areas, Livelihoods	GEF	Jozani Chwaka Bay National Park Development	The project will promote integrated conservation and development activities in the Jozani-Chwaka Conservation Area. The project will establish Jozani-Chwaka Bay national park, developing Biodiversity Conservation, Community Based Natural Resources Management programs and improving the institutional capacity in natural resources management.	Zanzibar	2000-2004
Pastoralism	GEF	Novel Forms of Livestock & Wildlife Integration Adjacent to Protected Areas in Africa	To achieve sustainable biodiversity conservation by alleviating and controlling conflicts over land use between pastoralism, cropping, and conservation. It will explore and understand the dynamics of land use in Tanzania using this improved knowledge to generate greater returns to key stakeholders from both wildlife and livestock simultaneously. This is thought to be achieved by developing and implementing land use plans, establishing benefit sharing mechanisms from wildlife such as community-managed business ventures and by improving livestock production by pastoralists such as access to health, marketing and water.		2004-2009
Coastal/Marine	GEF	Developing Core Capacity to Address Adaptation to Climate Change in Productive Coastal Zones	To develop institutional capacities to manage climate change impacts through improved climate information, technical capacity, the establishment of demonstration projects to reduce vulnerability in key vulnerable areas, and learning.	coastal Tanzania	2011-2015
Fisheries, Water	GEF	Kihansi Catchment Conservation and Management Project	Incorporate environmental dimensions into the water resources management and development framework at the river basin level.		2012-2017
Agriculture	GEF	Reducing Land Degradation on the Highlands of Kilimanjaro	To create a sustainable enabling environment for shade coffee as an incentive for integrated sustainable land management that reduces land degradation and improves livelihoods in the Kilimanjaro Highlands	Kilimanjaro	2009-2013
Agriculture, Climate Change	GEF	Promotion of waste-to-energy applications in agro-industries of Tanzania	To promote investments in waste-to-energy (WTE) technologies for energy (electricity + thermal energy) generation in processing of economically important agro-industries.		2012-2016
Forestry	GEF	Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania	To expand, financially secure and strengthen the management of Tanzania's Forest Nature Reserve (FNR) network, including benefits sharing agreements with local communities.		(to be implemented)
Water	GEF	Mainstreaming Climate Change in Integrated Water Resources Management in Pangani River Basin	To strengthen IWRM in the Pangani Basin, including mainstreaming Climate Change to support the equitable provision and wise governance of freshwater for livelihoods and environment for current and future generations		2003-2010
Coastal/Marine	GEF	Sustainable Coastal Livelihoods Project	To improve lives and livelihoods of coastal communities of mainland Tanzania and Zanzibar, through implementing participatory and integrated coastal development/economic activities while sustaining coastal resources	coast	2005-2011
Coastal/Marine	GEF	Extending the Coastal Forest Protected Area Subsystem	To strengthen biodiversity management fundamentals within the Coastal Forests Protected Area network in Tanzania and Zanzibar: improved governance framework; better institutional capacity; and new management options and partnerships piloted with local communities (e.g., JFM, sustainable use thresholds, improved market access, adaptive management).		2009-2014
Agriculture, Pastoralism	IFAD	Agricultural Sector Development Programme	To improve access to the technologies and services that small-scale farmers need to enhance productivity, and to increase the participation of farmer and pastoralist organizations in district planning processes, negotiating and advocacy		2007-2015

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Capacity Building	IFAD	Rural Micro, Small and Medium Enterprise Support Programme	To improve rural employment opportunities in 6 of the 21 regions in mainland Tanzania, by selecting selected medium and small-scale rural entrepreneurs with improved skills training, knowledge and access to markets to help increase productivity, profitability and off-farm incomes.	Iringa, Manyara, Mwanza, Pwani, Ruvuma and Tanga	2007-2014
Pastoralism	UNDP	Integrating Environment into Poverty Reduction policies	Institutional capacity building to integrate environment and livelihood issues into planning; improved access to environment and livelihoods data for planning; sustainable financing of environmental targets; and promoting efficient use of rangelands and improved market access.	Tanzania	2007-2010
Water	UNDP	Mainstreaming Climate Change into Integrated Water Resources Management in Pangani River Basin	To mainstream climate change into Integrated Water Resources Management in the Pangani Basin, so that it may support the equitable provision of freshwater for the environment and for livelihoods for current and future generations.		2007-2011
Forestry	UNEP	Woodlot Management	Using smallholder woodlot management practices as a strategy for climate change adaptation has created a new stream of income for local communities and revenues for the city, while enhancing resilience to climate vulnerability.	Makete District	
Agriculture	World Bank	Agricultural Sector Development Project (ASDP)	To enable farmers to have better access to and use of agricultural knowledge, technologies, marketing systems, and infrastructure and to promote agricultural private investment based on an improved regulatory and policy environment	SAGCOT	2012-
Coastal/Marine	World Bank	Tanzania Marine and Coastal Environment Management Project	To strengthen the sustainable management and use of the Exclusive Economic Zone, territorial seas, and coastal resources resulting in enhanced revenue collection, reduced threats to the environment, better livelihoods for participating coastal communities living in the Coastal Districts, and improved institutional arrangements.	Coast	2005-2013

ANNEX B. BILATERAL DONOR PROGRAMMING

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Natural Products	Belgium (BTC)	Beekeeping Support Project	To pilot a model of sustainable beekeeping in the Kigoma region, where there is significant potential for beekeepers to become more productive and more market-oriented, and thus to increase their earnings.	Kigoma	2012-2016
Agriculture	Canada (CIDA)	Enhancing Food and Economic Security	Increased agricultural production and application of small-scale farmers, especially women, using sustainable methods; Increased engagement of household members, especially women, in profitable small scale enterprises; Improved governance among local community groups and strengthened performance in the planning and management of food security and economic development initiatives.		
Capacity Building	Canada (CIDA)	Promoting African Grassroots Economic Security Through Education and Skills (PAGES)	To improve access to basic education and sustainable livelihoods for more than 200,000 children and youth, men and women, by reducing the intergenerational effects of household poverty		
Agriculture, Pastoralism, Fisheries	Denmark (DANIDA)	Sustainable Wetlands Management	To consolidate and improve the conservation of the Malagarasi-Muyovozi wetland ecosystem and to improve the welfare and livelihoods of rural and urban communities living within and around the wetland area		2000-2009
Forestry	Denmark (DANIDA)	Participatory Forest Management	To achieve sustainable forest management and improved rural livelihoods by encouraging the management or co-management of forest and woodland resources by local communities	Morogoro, Iringa, Mbeya and Lindi	2003-2007
Climate Change	Denmark (DANIDA)	Impacts of Climate Change on Water Resources and Agriculture and Adaptation Strategies in Tanzania (CLIVET)	To contribute to the knowledge and capabilities of Tanzania to encounter the impacts of climate change and to develop best strategies to adapt to these changes, particularly as they relate to water resources and the use of water within the agricultural sector		2008-2010
Forestry	Finland (FINNIDA)	Conserving forests and improving livelihoods, Tanzania			WWF
Forestry	Finland (FINNIDA)	Forest conservation by livelihood development in Zanzibar Live-project, Tanzania			
Water	Finland (FINNIDA)	Improving livelihood and environment by rainwater harvesting		Mwanga District	
Agriculture	Finland (FINNIDA)	Lindi and Mtwara Agribusiness Support (LIMAS)		Mtwara, Lindi	
Forestry	Finland (FINNIDA)	Livelihood and Forest Protection Project		Western Tanzania, Mahale	
Forestry	Finland (FINNIDA)	Mama Misisu – campaign for sustainable forestry			
Forestry, Natural Products	Finland (FINNIDA)	National Forest and Beekeeping Programme			
Forestry	Finland (FINNIDA)	Village Forestry Promotion Project, Phase II			
Pastoralism	Germany (BMZ)	Northern Serengeti Livelihoods Improvement	A new project in the northern Serengeti eco-system aims to improve the living conditions of local people in selected districts whilst conserving the biodiversity of the Serengeti eco-system.	northern Serengeti	
Agriculture	Ireland (Irish Aid)	Pilot country of Africa Agri-food Development Fund	To work closely with the Department of Agriculture to attract major agri-food companies from Ireland into the country to support sustainable growth of the local food industry, build markets for local produce and support mutual trade between Ireland and Tanzania.		
Agriculture	South Korean (KOICA)	Increasing Agricultural Productivity: Project for the Rehabilitation of Irrigation Facilities and the Modernization of Farms			2007-2009
Agriculture	South Korean (KOICA)	Establishment of the Agro-Processing Production Centers			

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Agriculture	Switzerland (SDC)	Private Sector Development and Agriculture	To support development of agricultural market that functions effectively, sustainably and to the benefit of the poor people while ensuring food and nutritional security at household, district, regional and national level in an environmentally sustainable manner.		
Agriculture	Switzerland (SDC)	Rural Livelihood Development Program	To get more people in rural Tanzania to participate in the market economy, by helping them to get the goods they produce to the market	central corridor	
Forestry	Switzerland (SDC)	Transforming TZ's Charcoal Sector	To promote commercially viable and pro-poor charcoal value chain for legal and sustainably sourced charcoal		
Agriculture	United Kingdom (DFID)	Cotton Sector Development Programme	To raise incomes of small holder farms and increase cotton yields		2011-2015
Agriculture	United Kingdom (DFID)	Coastal Rural Support Programme	To increase incomes and food security for smallholder farmers engaged in rice and sesame production	Lindi, Mtwara	2010-2015
Pastoralism, Land Tenure	United Kingdom (DFID)	Land and Livelihood Rights for Pastoralists	Address the land and livelihood rights of the Banabaig		2006-2010
Forestry	United Kingdom (DFID)	Improving Governance of Forest Resources	Tanzanian civil society and rural community groups (CSCGs) provided with training and support to empower them to fully participate in policy-making decisions affecting forests and their livelihoods at the district and national levels		2008-2011
Climate Change	United Kingdom (DFID)	Tanzania Climate Change Institutional Strengthening Programme	Tanzania accesses climate finance and uses it effectively to support climate change resilience and low carbon sustainable growth		2011-2015
Agriculture	United Kingdom (DFID)	Agriculture Growth Corridor Programme	To raise rural incomes and increase food security in Tanzania		2011-2017
Agriculture	United Kingdom (DFID), Norway (NORAD)	Agriculture Green Growth Program in SAGCOT	To develop environmentally sound and sustainable alternatives to other industrial agriculture initiatives	SAGCOT	

ANNEX C. NGO, FOUNDATION AND UNIVERSITY PROGRAMMING AND EXPERTISE

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Agriculture, Pastoralism	African Wildlife Foundation	Priority Landscapes: Kilimanjaro and Maasai Steppe Heartlands		Sustainable agriculture including coffee production, sustainable pastoralism	
Pastoralism, Wildlife, Tourism	African Wildlife Foundation	Tanzania Land Conservation Trust / Livestock for Livelihoods	Support to establish TCLT, which has acquired ecologically important properties such as Manyara Ranch. manages these lands to protect the needs of pastoral communities as well as to preserve the integrity of these areas for wildlife conservation, and to develop ecotourism sites as appropriate		
Climate Change, NFM, Biodiversity, Health	African Wildlife Foundation	SCALE-TZ program	Transformational Biodiversity Conservation and Economic impacts delivered in Tarangire-Manyara-Kilimanjaro-Natron ecosystem through innovation, replication, and capacity building of local actors	Tarangire Manyara Kilimanjaro Lake Natron Ecosystem	2010-2013
Wildlife	Africare		Supports government initiatives in addressing social and development issue, as well as natural resources management. For the past ten years Africare has been involved in facilitating establishment of Wildlife Management Area (WMA) in Ugalla Landscape in Tabora and Rukwa regions.		
Wildlife	BirdLife International	Important Bird Areas	77 sites identified in Tanzania		
Forestry, Financing, PES	CARE International	Payment for watershed services in Uluguru Mountains	has programs in different parts of the country and has supported various conservation projects in Zanzibar and Eastern Arc Mountains. CARE has also been a pioneer in Village Community Conservation Banks (VICOBA) and initiation of dialogue on Payment for Ecosystem Services (PES).		
Biodiversity	Conservation International	Biodiversity Hotspots		Coastal Forests of Eastern Africa, Eastern Afromontane Forests, Miombo-Mopane Wilderness	
Agriculture, Monitoring	Conservation International	Vital Signs Africa	A monitoring system will provide near-real time data and diagnostic tools to guide agricultural development decisions and monitor their outcomes. It will ensure that improving food production supports resilient livelihoods and enhanced quality of life for smallholder farmers while also supporting healthy natural systems. It will also fill a critical unmet need for integrative, holistic measurements of agriculture, ecosystem services and human well-being		
Forestry	Conservation International	Restoration of Mufindi forests			
Water, WASH	GLOWS	Tanzania Integrated Water Sanitation and Hygiene (iWASH) program	support sustainable, market-driven water supply, sanitation, and hygiene services to improve health and increase economic resiliency of the poor in targeted rural areas and small towns within an integrated water resource management framework	Wami/Ruvu Basin, with WASH provision activities in selected areas of Rufiji Basin	2010-2013
NRM, Forestry, Law/Policy, Wildlife	International Union for Conservation of Nature (IUCN)	Livelihoods and Landscapes	Works on various themes in Tanzania, including CBNRM, PFM, NFTP processing, participatory dialogues, Forest Law Enforcement and Governance, and endangered species		
Wildlife; Forestry; Agriculture	Jane Goodall Institute	Landscape Scale Community Centered Ecosystem Conservation in Western Tanzania	conserve biodiversity and protect and restore wildlife habitat; reduce deforestation from shifting agriculture; improved NRM; increase in sustainable livelihoods	Gombe-Masito-Ugalla: Kigoma and Mpanda Districts covering 52 villages	2010-2014

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
NRM, Climate change	Jozani Environmental Conservation Association (JECA)		JECA is a registered community based organization, working with local communities in nine villages/Shehia surrounding Jozani-Chwaka Bay National Park. The mission is to involve communities in natural resources management, especially to adapt with climate change. Key activities of the organization include involvement of the community in conservation of natural resources in the Jozani Chwaka bay area; education and awareness on the wise use of natural resources; rehabilitation of degraded mangrove forest and other ecosystem; facilitation and provision of alternative sources of livelihoods; and representation of community members in discussions and negotiations with other institutions and stakeholders.		
Law, Policy	Lawyers' Environmental Action Team (LEAT)		LEAT is the local NGO that aims at ensuring sound natural resource management and environmental protection in Tanzania. It is also involved in issues related to the establishment of an enabling policy environment for civil society, including civil liberties and human rights. LEAT carries out policy research, advocacy, and selected public interest litigation.		
Forestry, Fisheries, Agriculture	The Nature Conservancy	Tuungane Project - Lake Tanganyika and the greater Mahale ecosystem	To bring together reproductive-health and conservation interventions for integrated solutions to address the pressures on people and nature; to strengthen local governance, improve access to social services and create sustainable livelihoods		
Pastoralism, Land Tenure, Wildlife	The Nature Conservancy	Hadza Homeland	To help secure legal tenure for the Hadza communities, protect grazing resources, and protect wildlife habitat	northern Tanzania	
Agriculture, Health	Novartis Foundation	Millenium Villages Project	Investments in the village of Ilolangu's transition from subsistence farming to self-sustaining commercial activity. In addition, the foundation collaborates with the Millennium Villages Project in health-related research.		2007-2012
Forestry, Wildlife	Tanzania Forest Conservation Group (TFCG)		TFCG mission of conserving and restoring the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations. Coastal and Eastern Arc Mountain forests are their areas of focus where they work closely with many partners including local communities, government, development partners, private sector, research institutions and other civil society organizations and networks.		
Wildlife, Forestry, Pastoralism	Tanzania Natural Resource Forum		NGO that seeks to improve governance and accountability in Tanzania's natural resource sector to achieve more sustainable rural livelihoods and better conservation outcomes. As a member-driven NGO, TNRF works to improve policy and practice for the better, by helping to bridge the gap between: People's local natural resource management needs and practices; and, National natural resource management priorities, policies, laws and programs		
Coastal/Marine	URI/Coastal Resources Center	Pwani Project	sustain the flow of environmental goods and services; reverse the trend of environmental destruction of critical coastal habitats; and improve the well-being of coastal residents in the Bagamoyo- Pangani and Menai Bay Seascapes	Bagamoyo, Pangani, Zanzibar	2010-2013
Forestry, Tourism, Wildlife	Wildlife Conservation Society	Southern Highlands Priority Landscape	Helps conserve key upland habitats through a variety of research, protected area management, education, and community conservation initiatives		
Agriculture, Wildlife	Wildlife Conservation Society	Tarangire Ecosystem Priority Landscape	Uses research and capacity building to ensure that local communities, TANAPA and other partners have the information and resources needed to sustainably manage and benefit from the Tarangire-Simanjiro Ecosystem. The project also aims to assure the conservation of its ecosystem services and key wildlife migration routes through a novel system of 'conservation easement'		
Water, Wildlife, Agriculture	Wildlife Conservation Society	Ruaha Priority Landscape	Works at the landscape level with communities, TANAPA, the Wildlife Division, local authorities, and national and international institutions. The program is especially involved in the development of three Wildlife Management Areas (WMAs) in sites around Ruaha National Park. The program is also involved with community development, water sustainability, wildlife health, education and research initiatives		
Capacity Building, Wildlife	Wildlife Conservation Society	Zanzibar Priority Landscape	Works alongside the Zanzibar government and conservation partners developing management strategies for Zanzibar's unique forests and the corridors that link them. The project is also involved in the training of local communities to monitor their wildlife and habitats, capacity development and remote sensing analyses		
Coastal/Marine	Wildlife Conservation Society	Western Indian Ocean Priority Landscape			

Sector	Donor	Livelihood-Related Programming	Description	Location	Duration
Coastal/Marine	Western Indian Ocean Marine Science Association (WIOMSA)		Regional professional, non-governmental, non-profit, membership organization, registered in Zanzibar, Tanzania. The organization is dedicated to promote the educational, scientific and technological development of all aspects of marine sciences throughout the region of Western Indian Ocean, with a view toward sustaining the use and conservation of its marine resources.		
Wildlife	WWF Tanzania	CBNRM policy implementation program	Enhancing conservation and community gains through implementation of Wildlife Management Areas and environmental policy	Selous, Ruaha-Rungwa, Tarangire- Manyara Ecosystem and Rukwa-Katavi Ecosystems	2010-2013

ANNEX D. DRAFT PERFORMANCE INDICATOR REFERENCE SHEET

Performance Indicator Reference Sheet	
Name of Strategic Objective:	Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.
Name of Intermediate Result:	Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.
Name of Indicator:	Number of hectares of biological significant and/or natural resources under improved natural resources management as a result of USG assistance
Is this an Annual Report Indicator? ?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> , for Reporting Year(s) 2010 - 2014
DESCRIPTION	
Precise Definition(s):	<p>“Improved natural resource management” includes activities that promote enhanced management of natural resources for one or more objectives, such as conserving biodiversity, sustaining soil or water resources, mitigating climate change, and/or promoting sustainable agriculture.</p> <p>Management should be guided by a stakeholder-endorsed process following principles of sustainable NRM and conservation, improved human and institutional capacity for sustainable NRM and conservation, access to better information for decision-making, and/or adoption of sustainable NRM and conservation practices.</p> <p>An area is considered under “improved management” when any one of the following occurs: a change in legal status favors conservation or sustainable NRM; a local site assessment is completed which informs management planning; management actions are designed with appropriate participation; human and institutional capacity is developed; management actions are implemented; ongoing monitoring and evaluation is established; adaptive management is demonstrated; or on-the-ground management impacts are demonstrated (e.g. illegal roads closed, snares removed, no-fishing zones demarcated).</p> <p>Reported as total number of hectares improved during the fiscal year in question, which can include maintained improvement in previously reported hectares and/or new, additional hectares.</p> <p>A subset of this indicator may also be reported as “Number of hectares of natural resources showing improved biophysical conditions as a result of USG assistance” if the latter indicator is used; double counting IS allowed.</p> <p>Higher = better</p> <p>Reported as total number of hectares improved during the fiscal year in question, which can include maintained improvement in previously reported hectares and/or new, additional hectares. Improved management should be reported for activities where the USAID supported program was plausibly linked to the improvements observed. Partners should articulate clearly the benchmarks that are being used within the program to gauge success, and provide a short narrative to describe the benchmarks that have been reached in the past year.</p>
Unit of Measure:	Hectares (incremental hectares).
Method of calculation:	Incremental through GIS area measurements of demarcated land units
Disaggregated by:	Type. Marine/Terrestrial
Justification & Management Utility:	Reflects planned and actual conservation measures on demarcated land units. It is an appropriate measure of scale of impact of conservation interventions. The standard “improved” management as defined by implementation of best practices and approaches demonstrates progress and results across wide range of development programs.
PLAN FOR DATA ACQUISITION	
Data Collection Method (by partner):	Quarterly/annual/mid-term/final reports from implementing partner organizations. Partners collect data from sites and collate them on monthly bases.

Data Source(s) (for partner): Wildlife Division, District Councils, AAs, and Joint Forest Management Areas.			
Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned assessments.			
Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual concurrent with SOT meetings and Annual Partnership Retreats.			
Individual Responsible at USAID: Mikala Lauridsen			
Individual Responsible for providing data to USAID: Implementing Partners.			
Location of data storage: IPRS/ IP database/USAID/ NRM Public Folder under Monitoring and Evaluation Folder			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: New 'merged' indicator			
Known Data Limitations and Significance (if any): accurate measurements of areas/hectares			
Actions Taken or Planned to Address Data Limitations: GIS mapping			
Date of Future Data Quality Assessments: 2012			
Procedures for Future Data Quality Assessments: Site visits/Meeting with IPs			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Implementing Partners; USAID/NRM M&E focal point			
Presentation of Data: Strategic Objective Team Meeting; quarterly and annual reports			
Review of Data: Periodic physical verification of land demarcations, review of management planning documentation, interviews with managers, and observation of land management activities.			
Reporting of Data: Quarterly/semi-annual/annual concurrent with SOT meetings and Program reporting. Consolidated data will be reported annually at the time of preparing and submitting the PPR.			
OTHER NOTES			
Notes on Baselines/Targets: The baseline for the indicator reflects the actual achievement of the previous SO			
Other Notes: Target setting is done in consultation with IPs based on their work plans for the year. This indicator was previously reported as a cumulative indicator.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2007	4,300,000	4,390,000	
2008	5,200,000	5,300,000	
2009	6,050,000	6,293,953	cumulative
2010	500,000	83,126	No longer reporting cumulative
2011	620,000	458,980	
2012	550,000		

THIS SHEET LAST UPDATED ON: [January 2012](#)

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Indicator: Number of people with increased (economic) benefits derived from sustainable NRM and Conservation as a result of USG assistance.

Is this an Annual Report Indicator? ? Yes: No. , for Reporting Year(s) 2010 - 2014

DESCRIPTION

Precise Definition(s): Increased economic benefits include: increased household income, average increase in income per household, number of new enterprises developed (including but not limited to fisheries, sustainable tourism, forestry/agro forestry, sustainable agricultures micro enterprises etc), economic benefits from ecosystem services etc.. Economic benefits may be based on actual cash transactions or other economic value of natural resources.

Unit of Measure: Number of people

Method of calculation: The number of people from our target landscapes/seascapes will be derived from economic surveys and regular monitoring of the value of sales from conservation based enterprises being done as sources of income for the respective families. On-going.

Disaggregated by: Geographical location, gender, type of economic activities and groups.

Justification & Management Utility: This indicator links sustainable natural resource management to economic growth and social development objectives The better the combination of access to safe water, improved food availability, sanitation, and shelter, and reduced vulnerability to environmental risks available to local communities in target landscapes and seascapes the more economically able communities with incentives to participate in community based conservation.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Economic survey and Regular monitoring reports.(as mentioned above in methods of calculations). Data collected from sites.

Data Source(s) (for partner): TANAPA, District Councils, CBOs, WMA- AAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual concurrent with reporting requirements and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners. AWF, JGI, WWF and URI/TCMP, FIU/GLOWS

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: June 2011

Known Data Limitations and Significance (if any): This data is difficult to collect accurately as it is not always reported.

Actions Taken or Planned to Address Data Limitations: Quality assessment; M&E workshop; Data quality discussion with partners; support to capacity development in M&E for those collecting data for partners			
Date of Future Data Quality Assessments: June			
Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories. Format includes graphs, maps, matrixes			
Review of Data: Periodic physical verification and assessment of activities			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: The baseline for the indicator reflects the actual achievement of the previous SO.			
Other Notes: Target setting is done in consultation with partners and based on their planned activities for the year.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2007	185,000	187,500	
2008	468,750	535,740	
2009	2,000,000	816,027	NO longer reporting cumulatively.
2010	400,000	147,089	
2011	375,000	71,168	Initial target was set too high because the indicator was being interpreted incorrectly. 2012 target is more accurately reflecting expected achievements for the year.
2012	69,300		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain this indicator, but consider definitions used and data collection methods. Because of the flexibility in the definitions of “increased economic benefits”, it may be difficult to track household-level benefits with a sufficient sample size to derive meaningful inference regarding project effects. Disaggregation to different socio-economic classes within communities would help to evaluate the re-distribution of project costs and benefits between different stakeholder groups, such as the poorest community members, minority ethnic groups, or those displaced by new resource restrictions. Sampling a randomized subset of beneficiaries to acquire household-level and socio-economic class data may reduce the costs of additional disaggregation.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Indicator: 4.8.1-1 Number of hectares of biological significance and/or natural resources showing improved biophysical conditions as a result of USG assistance.

Is this an Annual Report Indicator? ? Yes: No: , for Reporting Year(s) 2012 - 2014

DESCRIPTION

Precise Definition(s):

“Improved biophysical conditions” are demonstrated where there is biophysical monitoring data showing improvement, stability if previously declining, or a slower rate of decline in one or more natural resources over time.

Reported as total number of hectares improved during the fiscal year in question, which can include maintained improvement in previously reported hectares and/or new, additional hectares.

This indicator should be a subset of “Number of hectares under improved natural resource management as a result of USG assistance” if the latter is reported; double counting is allowed.

Higher = better

Reported as total number of hectares improved during the fiscal year in question, which can include maintained improvement in previously reported hectares and/or new, additional hectares. Improved biophysical condition should be reported for activities where the USAID supported program was plausibly linked to the improvements observed.

Partners should articulate clearly the benchmarks that are being used within the program to gauge success, and provide a short narrative to describe the benchmarks that have been reached in the past year.

Unit of Measure: Hectares

Method of calculation:

Implementing partner(s) measure biophysical change using techniques and frequency appropriate to the resource(s) being measured. Direct observation is the usual but not the only method of data collection. Data collection methods include: remote sensing; soil and water sampling; wildlife and botanical surveys; etc.

Disaggregated by: none

Justification & Management Utility: Measure of this indicator demonstrates the highest level of conservation effectiveness and can inform adaptive management of programs.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/final reports from implementing partners. Economic survey and Regular monitoring reports.(as mentioned above in methods of calculations). Data collected from sites.

Data Source(s) (for partner):

Method of Acquisition (by USAID): Implementing partners’ quarterly/annual/final reports, as well as occasionally through commissioned consultants’ reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual concurrent with reporting requirements and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners. URI/TCMP

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: none			
Known Data Limitations and Significance (if any):			
Actions Taken or Planned to Address Data Limitations: Quality assessment; M&E workshop; Data quality discussion with partners; support to capacity development in M&E for those collecting data for partners			
Date of Future Data Quality Assessments: 2012			
Procedures for Future Data Quality Assessments:			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories. Format includes graphs, maps, matrixes			
Review of Data: Periodic physical verification and assessment of activities			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Have a baseline so far from URI: 2,475 hectares			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2011			Need to discuss target with IPs
2012	5,300		Need to discuss further with other IPs. It is likely other partners will also be reporting on this indicator and therefore the target will increase.
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Policies and laws that integrate conservation, natural resource management and climate change applied

Name of Indicator: Number of people receiving USG supported training in Natural Resources Management and/or biodiversity conservation.

Is this an Annual Report Indicator? Yes: No. for Reporting Year(s) 2010-2014

DESCRIPTION

Precise Definition(s): The number of individuals participating in learning activities intended for teaching or imparting knowledge and information on natural resources management and biodiversity conservation to the participants with designated instructors or lead persons, learning objectives, and outcomes, conducted fulltime or intermittently.

Unit of Measure: Number of people

Method of calculation: The number of people from our target landscapes/seascapes attending NRM trainings will be derived from sign up registers which will be verified and regular monitoring done.

Disaggregated by: Sex and type

Justification & Management Utility: Tracking the number of people trained in NRM/Biodiversity conservation provides information about the reach and scale of training and capacity building.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Regular monitoring reports. (as mentioned above in methods of calculations). Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): Those conducting the training, NGOs/CBOs, TANAPA, WD, District Councils, WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual concurrent with reporting requirements and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners: AWF, JGI, WWF, URI, FIU/GLOWS

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: June 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: NA

Date of Future Data Quality Assessments: June 2014

Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories. Format includes graphs, maps, matrixes			
Review of Data: Periodic physical verification and assessment of activities			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Based on on-going tracking of training programs in NRM/Biodiversity Conservation.			
Other Notes: Targets: Target setting is done in consultation with partners and based on their planned activities for the year.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2007	17500	18,500	
2008	34250	27,739	
2009	35000	42,310	
2010	10,000	2,371	
2011	3,177	11,367	Significantly exceeded target due to a training demand.
2012			This indicator was dropped by Washington but we will continue to report on it. Waiting for IPs info for target.
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Policies and laws that integrate conservation, natural resource management and climate change applied

Name of Indicator: Number of person hours of training in natural resource management and/or biodiversity conservation supported by USG assistance

Is this an Annual Report Indicator? Yes: No. for Reporting Year(s) 2012-2014

DESCRIPTION

Precise Definition(s):

This indicator uses the following equation to express the number of USG-supported training hours that were completed by training participants:

Hours of USG supported training course x Number of people completing that training course

Support from the USG: This indicator counts training hours that were delivered in full or in part as a result of USG assistance. This could include provision of funds to pay teachers, providing hosting facilities, or other key contributions necessary to ensure training was delivered. This indicator does not automatically count any course for which the USG helped develop the curriculum, but rather focuses on delivery of courses that was made possible through full or partial funding from the USG.

People: Only people who complete the entire training course are counted for this indicator.

Training: Training is defined as sessions in which participants are educated according to a defined curriculum and set learning objectives. Sessions that could be informative or educational, such as meetings, but do not have a defined curriculum or learning objectives are not counted as training.

Natural resources and biodiversity is defined as conserving biodiversity and managing natural resources in ways that maintain their long-term viability and preserve their potential to meet the needs of present and future generations.

Activities include combating illegal and corrupt exploitation of natural resources and the control of invasive species.

Programs in this element should be integrated with the Agriculture Area under Economic Growth and Conflict Mitigation and Reconciliation Area under the Peace and Security Objective, when applicable and appropriate.

Unit of Measure: Number of (person) hours

Method of calculation: Hours of USG supported training course x Number of people completing that training course

Disaggregated by: Sex

Justification & Management Utility: Training indicators account for the expenditure of USG funds to build country capacity.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Regular monitoring reports. (as mentioned above in methods of calculations). Data collected from attendance records from IP held trainings and calculated on monthly bases.

Data Source(s) (for partner): Those conducting the training, IPs, NGOs/CBOs, District Councils, AAs, etc.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual concurrent with reporting requirements and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners: AWF, JGI, WWF, URI, FIU/GLOWS, DOI, US FS

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: NEW			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: NA			
Date of Future Data Quality Assessments: 2012			
Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Training attendance records, Periodic physical verification and assessment of activities			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: No Baseline			
Other Notes: Targets: New indicator, therefore PPR target was planned prior to proper consultation with IPs. The target was set based on training undertaken during 2011.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2012	92,152		NEW indicator
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Policies and laws that integrate conservation, NRM and climate change applied.

Name of Indicator: Number of laws, policies, strategies, plans, agreements or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance.

Is this an Annual Report Indicator? ? Yes: No. , for Reporting Year(s) 2010-2014

DESCRIPTION

Precise Definition(s): Policies, laws, strategies, plans, agreements and regulations include those developed and formally endorsed by governmental, non-governmental, civil society, and/or private sector stakeholders to address climate change and/or biodiversity conservation issues. However, if a measure is not yet adopted, it must at least be formally proposed within an official government process to be reported.

Legal, regulatory and policy reform has a role to play by incentivizing investment in clean energy or energy efficiency, or encouraging lower risk behavior. Depending on the context, regulatory and policy reform might include: zoning regulations to prevent development in flood-prone areas, standards for improved infrastructure, policies to conserve or allocate energy or water more effectively, regulations to encourage the development of renewable energy sources, or trans-boundary agreements related to the use of shared resources, among many others. For example, an officially proposed or adopted low-emission development strategy (LEDS) is one type of strategy that should be counted.

Policies, laws, strategies, plans, agreements and regulations that address climate change and/or biodiversity conservation may be integrated in scope (e.g., at a certain spatial scale or political boundary such as municipal, state, or national), or may address certain climate-relevant sectors like water, marine resources, forests, land use and agriculture, energy, and urban development. For policies that may affect climate or biodiversity indirectly, it is essential that the indicator narrative explains the connection. For interpretation of this indicator, a qualitative description should be provided to explain what the number represents, particularly:

- What is the title of the measure?
- At what stage is it? (e.g., officially proposed, adopted, or implemented?)
- How does the measure contribute to climate change mitigation or adaptation or biodiversity conservation?
- What is/are the institution(s) that will be implementing and/or enforcing the measure, and at what scale (e.g., national, state, municipal, community)?

Unit of Measure: Number of policies, laws, agreements, and regulations

Method of calculation: Counting and verifying applicable policies, laws and agreements on-going and cumulative.

Disaggregated by: by clean energy; adaptation related measure; sustainable landscapes related measure; cross cutting measure related to multiple climate change areas or other sectors.

Justification & Management Utility: An improved enabling environment through legal and policy reform, strategy development and planning is essential for legal and strategic backing and institutional ownership.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Data collected from sites by IPs on monthly bases.

Data Source(s) (for partner): MNRT, VPO-Division of Environment, District Councils, NGOs/CBOs, WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual, concurrent with SOT meetings.			
Individual Responsible at USAID: Mikala Lauridsen			
Individual Responsible for providing data to USAID: Partners: AWF, JGI, WWF and URI/TCMP, iWASH.			
Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: New Indicator			
Known Data Limitations and Significance (if any): Specification between implemented and developed policies/regulations			
Actions Taken or Planned to Address Data Limitations: specification during reporting			
Date of Future Data Quality Assessments: June 2012			
Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of policies, laws, regulations and agreements being implemented at various levels of government.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: O-going tracking of policy, laws, regulations, agreements being implemented.			
Other Notes: Target setting in consultation with partners			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2006	25	8	
2007	65	146	
2008	101	187	
2009	200	203	
2010	40	28	
2011	55	81	The indicator slightly changed for 2012 and is more focused on CC policies- with specific disaggregations.
2012	99		Will include 2 feasibility assessments (REDD)

THIS SHEET LAST UPDATED ON: February 2012

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Policies and laws that integrate conservation, NRM, and climate change applied

Name of Indicator: Number of institutional structures with improved capacity to address climate change.

Is this an Annual Report Indicator? Yes: No. , for Reporting Year(s) 2011-2014

DESCRIPTION

Precise Definition(s): Institutions with improved capacity will be better able to govern, coordinate, analyze, advise, or make technical decisions or to provide inputs to decision making related to climate resilience, clean energy, or REDD+. This includes capacity to engage local communities to ensure that policies, plans, budgets and investments reflect local realities and ensure that local communities benefit from climate change investments in adaptation, clean energy and REDD+.

Unit of Measure: Number of institutions

Method of calculation: Counting registered institutions

Disaggregated by: REDD+. Clean energy, Adaptation, general climate change capacities

Justification & Management Utility: Improved ability and decision making on climate change issues including adaptation and mitigation.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): working with partners, District Councils, NGOs/CBOs, WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and concurrent with SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners: AWF, JGI, URI, WWF

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: September 2011 - but only one partner assessed. Need all partners to have a DQA

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: NA

Date of Future Data Quality Assessments: 2012

Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessments			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: New indicator for some IPs. Target set according to planned activities			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2011	3	21	
2012	87		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Participatory landscape scale natural resource management practiced

Name of Indicator: Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance.

Is this an Annual Report Indicator? Yes: No. , for Reporting Year(s) 2012-2014

DESCRIPTION

Precise Definition(s):

Adaptive capacity is the ability to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with the consequences. USG support to increase adaptive capacity should aim beyond only the near term, to also have benefits in the middle and longer term.

An increase in adaptive capacity can be shown with the use of surveys or assessments of capacities.

Having the “ability to adjust” to climate change impacts will measure an objective of the project to deal with climate stresses (in the context of other stresses).

Stakeholders with improved adaptive capacity may be:

- Implementing risk-reducing practices/actions to improve resilience to climate change, for example:
- Implementing water-saving strategies to deal with increasing water stress
- Making index-based micro-insurance available to assist farmers in dealing with increasing weather variability
- Adjusting farming practices like soil management, crop choice, or seeds, to better cope with climate stress
- Implementing education campaigns to promote the use of risk reducing practices, like use of storm shelters and bed nets that help people cope with climate stress

Using climate information in decision making, for example:

- Utilizing short term weather forecasts to inform decision-making, for example, by farmer cooperatives, disaster or water managers
- Utilizing climate projections or scenarios to inform planning over medium to longer term timescales, for example, for infrastructure or land use planning
- Conducting climate vulnerability assessment to inform infrastructure design or planning as “due diligence”

This indicator relates most closely to two of the three main categories under the adaptation pillar: support for improved information and analysis, and implementation of climate change strategies. The narrative accompanying this indicator should describe adaptive capacity in the project context and indicate the stakeholders involved.

Unit of Measure: Number of stakeholders

Method of calculation: Counting

Disaggregated by: Implementing risk reducing practices; using climate information in decision making

Justification & Management Utility: This indicator is a measure of stakeholders’ abilities to understand, plan, and act as climate stresses evolve. The ability to deal with climate change will depend on awareness, information, tools, technical knowledge, organization, and financial resources, which are partly captured by this indicator.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): District Councils, CBOs, WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners’ quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants’ reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and concurrent with SOT meetings.			
Individual Responsible at USAID: Mikala Lauridsen			
Individual Responsible for providing data to USAID: Implementing Partners: AWF, JGI; URI, WWF			
Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: New Indicator			
Known Data Limitations and Significance (if any): None			
Actions Taken or Planned to Address Data Limitations: NA			
Date of Future Data Quality Assessments: 2012			
Procedures for Future Data Quality Assessments: Planned DQA every 3 years, Site visits, working with partners and M&E focal points			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of policies, laws, regulations and agreements being implemented at various levels of government.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: New indicator			
Other Notes: The target was based on a previous indicator from 2011 (4.8.2-16). This target might be overestimated because there is potential double counting with a custom indicator we will be reporting on in 2012 (H/H's using energy efficient measures. This will be clarified with IPs through the March M&E meeting in 2012.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2012	14,002		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Participatory landscape scale conservation practiced

Name of Indicator: Number of integrated general management plans in target areas implemented

Is this an Annual Report Indicator? Yes: ___ No. , for Reporting Year(s) 2011 - 2014

DESCRIPTION

Precise Definition(s): The purpose of integrated general management plans is to provide a coordinated approach in managing the different land units taking into account the ecological and social effects of interconnections between the land units. The activities that address landscape level joint planning are recorded, shared and used to inform decisions regarding individual land units, in addition to integrated landscape level management.

Integrated plans include integrating Natural resource management and climate change adaptation and mitigation practices and approaches. General Management plans are developed after the resource zone management plans are developed.

Unit of Measure: Number

Method of calculation: Counting and verifying integrated general management plans developed and authorized. On-going.

Disaggregated by: Type.

Justification & Management Utility: The implementation of integrated general management plans that balance the requirements for conservation of biodiversity with socio-economic development needs of local communities provide the backbone of sustainable development.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners. Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): WD, District Councils, CBOs, WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and concurrent with SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners: AWF, Jane Goodall Institute; URI, WWF

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation Folder

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: TBD- this is a custom indicator, and will not be reported in FACTS

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: NA

Date of Future Data Quality Assessments: TBD

Procedures for Future Data Quality Assessments:			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of policies, laws, regulations and agreements being implemented at various levels of government.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Target setting is done on the bases of what has been planned for the year with IPs			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2011			
2012	6		Need to confirm with IPs
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result : Transparent and equitable benefits from the management of natural resources generated

Name of Indicator: Annual revenue generated through private sector investment in targeted conservation landscapes

Is this an Annual Report Indicator? No Yes , for Reporting Year (s) _2011-2014_____

DESCRIPTION

Precise Definition(s): The revenue generated includes the revenue derived from tourism and/or all natural resource-based products, services, and goods that are produced from natural resources from landscapes/seascapes that are marketed and promoted to yield income or monetary benefits to communities, the private sector, the government, and to other stakeholders. All private sector investments must have legal and binding contracts.

Unit of Measure: U.S. dollars.

Method of calculation: dollar value, cumulative per year

Disaggregated by: none

Justification & Management Utility: In order to improve livelihoods, the goods and services provided from natural resources must generate sufficient benefits for local communities to improve their livelihoods, including increasing access to basic services.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/final reports from implementing partners. Economic survey and Regular monitoring reports. Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): WD, CBOs, AAs/WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/annual reports and at SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners.

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: Custom Indicator. A DQA is not required since it will not be reported in FACTS, instead will work with partners on data quality.

Known Data Limitations and Significance (if any): This data has been difficult to collect in the past, but should be more accessible now since it is focusing on actual contracts developed with private sector.

Actions Taken or Planned to Address Data Limitations: Improving transparency is part of programing

Date of Future Data Quality Assessments: TBD

Procedures for Future Data Quality Assessments: Site visits, reports

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of agreements entered into and being entered.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Based on actual value of contracts entered into each year. Baseline is approximately 3 million since 2006- this is for WMAs alone.			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2011		\$500,000	We had difficulty getting actual (cumulative since 2006- 4.5 million)
2012	\$700,000		Need to discuss with IPs
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result : Transparent and equitable benefits from the management of natural resources generated

Name of Indicator: Dollar value of community derived resources through benefit sharing mechanisms

Is this an Annual Report Indicator? No Yes , for Reporting Year (s) _2011-2014_____

DESCRIPTION

Precise Definition(s): The revenue generated includes the revenue derived from tourism and/or all natural resource-based products, services, and goods that are produced from natural resources from landscapes/seascapes that are marketed and promoted to yield income or monetary benefits to communities, the private sector, the government, and to other stakeholders. This is the total amount which is actually given to communities to be used toward community development projects/programs based on community needs.

Unit of Measure: U.S. dollars.

Method of calculation: dollar value, cumulative for year

Disaggregated by: none

Justification & Management Utility: In order to improve livelihoods, the goods and services provided from natural resources must generate sufficient benefits for local communities to improve their livelihoods, including increasing access to basic services. Understanding the total amount being received by communities can inform whether revenue is increasing and thereby bringing greater benefits to communities. Secondly, having access to the data also demonstrates whether the benefit sharing mechanism is becoming a more transparent process.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/final reports from implementing partners. Economic survey and Regular monitoring reports. Data collected from sites and collated on monthly bases.

Data Source(s) (for partner): WD, CBOs, AAs/WMAs, Joint Forest Management Areas, and Collaborative Fisheries Management Areas.

Method of Acquisition (by USAID): Implementing partners' quarterly/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/annual reports and at SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: Implementing Partners.

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: Custom Indicator. A DQA is not required since it is not a standard indicator, instead will work with partners on data quality. This indicator will not be reported in FACTS.

Known Data Limitations and Significance (if any): This data has been difficult to collect in the past, but should be more accessible now since it is focusing on actual contracts developed with private sector.

Actions Taken or Planned to Address Data Limitations: Improving transparency is part of programing

Date of Future Data Quality Assessments: TBD

Procedures for Future Data Quality Assessments: Site visits, reports

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Strategic Objective Team; Working Groups; Implementing Partners. Analyses done separately at different levels and reviews presented at the SOT meetings and through standard reporting.			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of book keeping and records being kept.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Based on previous revenue generated- although the past amount has been difficult to get, therefore a baseline will be given after a full assessment of the revenue from the WMA program has been undertaken.			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2011			
2012			Waiting for baseline from audit/assessment
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Improved health and well-being of general and vulnerable populations

Name of Indicator: Number of people in target areas with access to improved drinking water supply as a result of USG assistance

Is this an Annual Report Indicator? Yes: No: , for Reporting Year(s) 2010-2014

DESCRIPTION

Precise Definition(s): Improved drinking water technologies are those more likely to provide safe drinking water than those characterized as unimproved. Extensive research in rural areas has found that people satisfy their basic needs for water if the source can be reached in a round trip of 30 minutes or less. When it takes more than 30 minutes to get to the water source and back, people typically haul less water than they need to meet basic requirements. Improved drinking water sources = water supply technologies including household connections, public standpipe, borehole, protected dug well, protected springs, rainwater and bottled water.

Unit of Measure: Number of people

Method of calculation: Surveys, Counting and verifying number of communities with access to improved drinking water as defined above.

Disaggregated by: Gender, Type (urban or rural).

Justification & Management Utility: This indicator measures provision of adequate access to improved water sources to improve health of communities. Access to clean water helps in improving health and thereby local communities are better able to engage in environmental and biodiversity conservation activities, including conservation enterprises and thereby facilitate the achievement of the SO overall objectives of balancing conservation and development.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners through Domestic Household Surveys, and Regular monitoring reports (as mentioned above in methods of calculations). National DHS data obtained after every three years and monitoring data collected from sites and collated on monthly bases.

Data Source(s) (for partner): District Councils, CBOs, households

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and concurrent with SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: FIU/GLOWS

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation folder

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: September 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: Regular training in data collection integrated in project design and implemented on a regular basis.

Date of Future Data Quality Assessments: September 2014			
Procedures for Future Data Quality Assessments: Site visits, reports			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: partner to do analysis and shared through reports and at SOT meetings			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of policies, laws, regulations and agreements being implemented at various levels of government.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Based on on-going tracking of number of people with access to improved water sources and monitored regularly			
Other Notes: Target setting is done on the bases of last year's performance and the number of improved water sources constructed and used by local communities. Target setting done in consultation with implementing partner			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2009	50,000	10,747	
2010	50,000	61,942	
2011	30,500	15,985	Slow procurement -2 water schemes in the process of completion and would then exceed target.
2012	54,061		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Improved health and well-being of general and vulnerable populations

Name of Indicator: Number of people in target areas with access to improved sanitation facilities as a result of USG assistance

Is this an Annual Report Indicator? Yes: No: , for Reporting Year(s) 2010-2014

DESCRIPTION

Precise Definition(s): Improved sanitation refers to provision of facilities and services for the safe disposal of human feces and urine including the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal.

Unit of Measure: Number of people with access to improved sanitation

Method of calculation: Surveys, Counting and verifying number of communities with access to improved sanitation as defined above. Ongoing.

Disaggregated by: Sex

Justification & Management Utility: This indicator accurately measures the availability and provision of facilities and safe disposal of feces and urine including the maintenance of hygienic conditions of same. With improved sanitation facilities communities are able to improve their health and minimize changes of diarrhea diseases. Healthy communities are better able to engage in environmental and biodiversity conservation activities and facilitate the achievement of the SO overall objectives of balancing conservation and development.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners through Domestic Household Surveys, and Regular monitoring reports (as mentioned above in methods of calculations). National DHS data obtained after every three years and monitoring data collected from sites and collated on monthly bases.

Data Source(s) (for partner): District Councils, CBOs, households

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: FIU/GLOWS

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation folder

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: September 2011

Known Data Limitations and Significance (if any): None

Actions Taken or Planned to Address Data Limitations: NA

Date of Future Data Quality Assessments: September 2014

Procedures for Future Data Quality Assessments: site visits and reports

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: partner to do analysis and shared through reports and at SOT meetings			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and assessment of policies, laws, regulations and agreements being implemented at various levels of government.			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets: Based on on-going tracking of number of people with access to safe sanitation facilities and improved water sources that are monitored regularly.			
Other Notes: Target setting is done on the bases of last year's performance and the number of safe sanitation facilities are constructed and used by local communities. Done in consultation with implementing partner.			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2009	50,000	5,717	
2010	60,000	4,364	
2011	3,060	1,640	WADA II sub award to CARE was delayed and therefore target was not met. iWASH target was met for FY11.
2012	10,310		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

Performance Indicator Reference Sheet

Name of Strategic Objective: Strategic Objective 13: Biodiversity conserved in targeted landscapes/seascapes through livelihood driven approaches.

Name of Intermediate Result: Transparent and equitable benefits from the sustainable management of NRs generated.

Name of Indicator: Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources.

Is this an Annual Report Indicator? Yes: No: , for Reporting Year(s) 2012-2014

DESCRIPTION

Precise Definition(s):

Productive economic resources include: assets - land, housing, businesses, livestock or financial assets such as savings; credit; wage or self-employment; and income.

Programs include micro, small, and medium enterprise programs; workforce development programs that have job placement activities; programs that build assets (such as land redistribution or titling; housing titling; agricultural programs that provide assets such as livestock; programs designed to help adolescent females and young women set up savings accounts).

This indicator does NOT track access to services – such as business development services or stand-alone employment training (e.g., that does not also include job placement following the training). Indicator narratives should specify type of assets.

Unit of Measure: The unit of measure will be a proportion, expressed in the format of X/Y, where X is the number of females from program participants and Y is the total number of male and female participants in the programs illustrated above (e.g., micro, small, and medium enterprise programs; workforce development programs that have job placement activities; programs that build assets (land redistribution or titling; housing titling; agricultural programs that provide assets such as livestock).

Method of calculation: see above

Disaggregated by: Sex and age (10-29 and 30 and older)

Justification & Management Utility: The lack of access to resources is frequently cited as a major impediment to gender equality and women's empowerment. Tracking the proportion of females among participants in USG funded interventions designed to increase access to economic resources can provide information on the scope of USG efforts to lift women out of poverty.

PLAN FOR DATA ACQUISITION

Data Collection Method (by partner): Quarterly/annual/mid-term/final reports from implementing partners through Domestic Household Surveys, and Regular monitoring reports (as mentioned above in methods of calculations). National DHS data obtained after every three years and monitoring data collected from sites and collated on monthly bases.

Data Source(s) (for partner): village governments, village committees, AA's, CBOs, DC's, sub grantees, etc.

Method of Acquisition (by USAID): Implementing partners' quarterly/semi-annual/annual/final reports, as well as occasionally through commissioned consultants' reports.

Frequency & Timing of Data Acquisition (by USAID): Quarterly/semi-annual/annual and SOT meetings.

Individual Responsible at USAID: Mikala Lauridsen

Individual Responsible for providing data to USAID: AWF, WWF, URI, JGI, iWASH

Location of data storage: USAID/Tanzania in NRM cabinet files; NRM Public Folder under Monitoring and Evaluation folder

DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: New			
Known Data Limitations and Significance (if any): NA			
Actions Taken or Planned to Address Data Limitations: NA			
Date of Future Data Quality Assessments: 2012			
Procedures for Future Data Quality Assessments: site visits and reports, M&E tools/systems in place			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: partner to do analysis and shared through reports and at SOT meetings			
Presentation of Data: Through presentations at Strategic Objective Team Meetings and through quarterly and annual reporting, and IPRS report, success stories.			
Review of Data: Periodic physical verification, tracking and conducting assessment/evaluations			
Reporting of Data: Quarterly/semi-annual/annual reporting and through SOT meetings and Annual Program Retreats. Consolidated data will be reported annually at the time of preparing and submitting the PPR			
OTHER NOTES			
Notes on Baselines/Targets:			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2012	12,000/35,000 (37%)		
THIS SHEET LAST UPDATED ON: February 2012			

Comment(s): Maintain indicator as described in current PIRS.

See also comments in 'Monitoring and evaluation recommendations section' on the potential for adding indicator(s) on non-economic benefits, such as training in business and enterprise management trainings and general capacity building.