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AN ASSESSMENT OF OPPORTUNITIES TO INTEGRATE CLIMATE CHANGE ACTIVITIES INTO THE PROMARA PROJECT



OCTOBER 2010

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PREFACE

Through ProMara (a program title meaning “for the Mara River”), USAID assists the Kenya government in restoring forests and water catchment in the upper Mara basin of the Mau Forest Complex. The Complex is the largest of Kenya’s five major catchment areas or “Water Towers”, but has undergone large-scale, accelerating deforestation and population influx over the last 50 years.

ProMara has the goal to *help recover the integrity of the Mara-Mau ecosystem for and by stakeholders*, with three objectives:

1. Property rights and obligations of key stakeholders in the Upper Mara River Basin strengthened, clarified and communicated;
2. Markets for commodities and services that enhance conservation and sustainable natural resource management improved; and
3. Equitable management of land and forests for environmental goods and services (biodiversity, water, soil fertility, climate change mitigation and adaptation) of the Mara-Mau ecosystem fostered.

Major themes of ProMara include securing land and resource rights, forest resource and biodiversity governance and management, conflict mitigation, and equitable access to and benefits from land and forest resources for catchment residents.

The ProMara program is a two-year USAID/Kenya activity running from August 2010 to September 2012 under USAID’s global Property Rights and Resource Governance program.

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DISCLAIMER

The authors' views expressed in this publication do not reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS AND ABBREVIATIONS

AFOLU	Agriculture, Forestry, and Other Land Uses
A/R	Afforestation/Reforestation
AWF	Africa Wildlife Foundation
CCBA	Climate, Community, and Biodiversity Alliance
CCI	Clinton Foundation Climate Initiative
CFA	Community Forest Association
COMIFORM	Community Based Integrated Forest Resource Conservation in the Maasai Mau Forest
EGAT	Bureau of Economic Growth, Agriculture, and Trade
ERC	Emission Reduction Credit
FAO	Food and Agriculture Organization of the United Nations
FCC	Forest Conservation Committee
FCPF	Forest Carbon Partnership Facility
FIS	Forest Information System
GBM	Green Belt Movement
GCC	Global Climate Change
GHG	Greenhouse Gases
GIS	Geographic Information System
GoK	Government of Kenya
ICS	Mau Interim Coordinating Secretariat
KFS	Kenya Forest Service
LTPR	Land Tenure and Property Rights
MFW	Ministry of Forestry and Wildlife
MOC	Mau Outreach Center
MRV	Measurement, Reporting, and Verification
NCAS	National Carbon Accounting System
NGO	Nongovernmental Organization

PES	Payment for Economic Services
PIN	Project Identification Notes
PDD	Project Design Document
PRRG	Property Rights and Resource Governance
REDD+	Reducing Emissions from Deforestation and Forest Degradation including Carbon Stock Enhancement
REL	Reference Emissions Level
RIL	Reduced Impact Logging
R-PP	Readiness Preparation Proposal
SOW	Statement of Work
TIST	International Small Group & Tree Planting Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WRI	World Resources Institute
WRUA	Water Resource Users Association

EXECUTIVE SUMMARY

Kenya is at a relatively early stage of readiness for trading greenhouse gas (GHG) emission reduction credits (ERC) from forest carbon, having had its Reduced Emissions from Deforestation and Degradation (REDD) Readiness Preparation Proposal (R-PP) approved by the World Bank Forest Carbon Partnership Facility (FCPF) in August 2010. Kenya is beginning a period of intensive governance and institutional reform driven by the adoption of a new Constitution in August 2010. These reforms will affect forest governance and hence the prospects for creating and trading in forest carbon credits. Forest management law and policy will be revised, and is expected to provide a more favorable environment for creating and distributing benefits from forest carbon.

Informants interviewed during the course of this assessment (see Appendix C) recognize the challenges and costs associated with REDD readiness at the national and at field project levels. Of particular concern is creating awareness and selling the concept of forest carbon to skeptical communities without raising their expectations regarding the future financial benefits. Project proponents stress the value of the co-benefits of increased access to forest products, improved livelihoods, and water availability when talking with communities. Three site-based forest carbon projects are under development in the Mau Forest Complex led by different proponents and aiming to sell afforestation/reforestation (A/R) emission reduction credits on the voluntary market. The Mau Interim Coordinating Secretariat (ICS) is in the early stages of developing an umbrella forest carbon project that they intend will encompass the entire Mau Forest Complex.

The USAID/Kenya ProMara Program provides a solid programming platform to build readiness for forest carbon emissions reduction by adjusting existing activities to contribute to the enabling conditions required to participate in the forest carbon market (see Section 2 for details) or by adding activities (see Appendix D). All forest carbon activities would have to be implemented within the current project program budget. At the time of writing this report, it was not known how much of the project budget is from global climate change (GCC) funding sources, making it difficult to propose an appropriate scope and scale of activities or to formulate a ProMara climate change action plan. The delivery of financing based on GHG emission reductions will likely not be possible within the two-year time frame of the project, but important contributions to readiness for carbon financing can be made. In addition to forest-related mitigation activities, a climate change vulnerability and adaptation assessment could be conducted for the ProMara Program in rapid appraisal fashion, in the expectation that key adaptive strategies could be quickly identified and implemented. Even without this assessment, it would be possible to include climate change vulnerability as a selection criterion for livelihood interventions and include climate change in the communications strategy.

Given the fact that the six-month Phase 1 is already underway, it will be very important to reach agreement soon among USAID, Government of Kenya (GoK) partner organizations, and the project about the scope of climate change activities under ProMara because planning must be completed by the end of Phase 1 in order to achieve smooth implementation in Phase 2.

1.0 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

This report presents options for integrating climate change into ProMara program activities, either through changes to existing activities or possibly additional activities within the project's four components and crosscutting themes (see Scope of Work [SOW] in Appendix A). Many of the recommended activities are related to contributing to creating enabling conditions for participation in financing mechanisms based on maintaining or increasing forest carbon stocks in the project's target sub-catchments. The delivery of financing based on greenhouse gas (GHG) emission reductions will likely not be possible within the two-year time frame of the project, but important contributions to readiness for carbon financing can be made. Opportunities for climate change vulnerability and adaptation activities are also addressed in the report. It was not possible to develop a ProMara climate change action plan as indicated in the SOW because the amount of funds earmarked for climate change within the program had not been finalized as of this writing. The primary audiences of the report are the staffs of Mau Interim Coordinating Secretariat (ICS), Kenya Forest Service (KFS), USAID/Kenya Mission, and the Land Resources Management Team in the EGAT Bureau of USAID. Readers who are not familiar with the design of the ProMara project should refer to the project activity description (USAID/Kenya, 2010). The consultant presented his findings and recommendations to USAID, ICS, KFS, and other stakeholders on 22 October 2010. During the same meeting, he also presented his experience in developing REDD+ projects in Indonesia, a country more advanced in its forest carbon preparations and development of pilot projects.

1.2 AN OVERVIEW OF FOREST CARBON FINANCE

Forest carbon finance is a potential means to reduce global GHG emissions while providing an incentive for sustainable tropical forest management and delivering 'co-benefits' in the forms of biodiversity conservation, stable hydrological services, and enhanced human development in forest areas. Donor countries and organizations, including the United States, are providing funding to developing countries to 'ready' themselves to participate in a mechanism for avoided deforestation—the desired result of ongoing discussions under the United Nations Framework Convention on Climate Change (UNFCCC) to draft a post-2012 climate change treaty. These discussions are framed within the context of Reduced Emissions from Deforestation and Forest Degradation plus carbon stock enhancement (REDD+). REDD can be achieved through actions that reduce the current trajectory of deforestation/degradation, for example improved forest governance or Reduced Impact Logging (RIL). Carbon stock can be enhanced through reforestation of recently deforested areas or enrichment planting of degraded forest. Funding to finance afforestation/reforestation (A/R) of deforested and degraded land is already feasible under the UNFCCC and voluntary market. A small but growing market in voluntary forest carbon credits, primarily related to A/R of degraded land, is already operating under various standards, such as the American Carbon Registry Forest Carbon Project Standard, the Gold Standard, and the Voluntary Carbon Standards. Establishing enabling conditions for REDD+ will also make these projects more viable.

The creation of forest carbon credits through a REDD+ mechanism will require that sellers prove that the amount of forest carbon is accurately measured at the beginning of the contract, is 'additional' to carbon that would have been sequestered without the contract, can be maintained over the duration of the contract (permanence), and that maintaining carbon stocks within the contract area will not result in loss of stocks elsewhere (leakage). Sellers will have to demonstrate that actions required to maintain forest carbon stocks will not harm human communities or the natural environment, and that benefits from

carbon payments are distributed equitably, including to forest communities. Standards for these aspects of REDD have been articulated by the Climate, Community, and Biodiversity Alliance (CCBA, 2008) and the Standards Committee of the UNFCCC (2010). Achieving governance, technical, social, and environmental ‘enabling conditions’ are costly and often politically challenging. Key challenges include:

- Forest spatial databases typically must be vastly improved to establish a reference emission level (REL) and monitor changes in forest carbon to satisfy requirements for measurement, reporting, and verification (MRV). Many countries are planning to create national carbon accounting systems (NCAS) to encompass all forms of GHG emissions.
- On-the-ground baseline conditions and monitoring protocols must be established for woody biomass, socioeconomic conditions, and biodiversity status.
- Land tenure and property rights (LTPR) laws for forest areas must often be revised to recognize a range of ownership and use rights, including those of forest dwellers. Forest carbon ownership must be established in law, and mechanisms/formula for distributing financial benefits from credit sale developed.
- A wide range of forest stakeholders must be engaged in awareness raising, planning, and implementation.
- Forest governance and law enforcement must be strengthened.
- New institutions must be created to oversee the sale of carbon credits and distribution of benefits.
- Site-level forest carbon project preparation activities such as stakeholder awareness, institutional capacity development, baseline assessments (carbon, socioeconomic, and environmental) and development of a project design document (PDD) is costly and typically must be funded by donor or philanthropic sources. Carbon credit payments may not begin to flow for several years and these initial costs cannot be recouped in most cases.

Thinking beyond REDD+, some organizations and scientists advocate taking into account all biocarbon in the rural landscape, adding agricultural crops and soil carbon to the above- and below-ground biomass of trees inside and outside forests (World Agroforestry Center, 2009). Reducing GHG emissions at the landscape level from agriculture, forestry, and other land uses (AFOLU) is appealing in a place like the upper Mara catchment, given the mosaic of forest and other land uses, although taking this broad view of ‘landscape carbon’ introduces more complexity to measurement and monitoring. In the ProMara context, it should be understood that USAID’s sustainable landscapes climate change programming does not encompass agriculture-related mitigation activities. Agricultural adaptation activities may be funded under USAID climate change adaptation programming, however.

1.3 FOREST CARBON IN KENYA

Kenya has a low level of forest cover (approximately 2%) due to the arid climate in much of the country and past deforestation. The Mau Forest Complex is one of the few areas with extensive closed canopy, moist forest that contains concentrated stocks of forest carbon. It is also a critical water catchment area for the nation and region. Kenya is at a relatively early stage of REDD readiness, having had its REDD Readiness Preparation Proposal (R-PP) approved by the World Bank Forest Carbon Partnership Facility (FCPF) in August 2010, but not yet funded. Kenya is not a UN-REDD country. The R-PP acknowledges that communities have not been adequately engaged in forest management in the past and that government capacity for forest management is low, especially at the local level. In a recent critique of several national R-PP documents, the World Resources Institute (WRI) noted that the Kenya R-PP does not sufficiently address the issue of forest land tenure (Davis et al., 2010). The focal point for REDD activities in the Government of the Republic of Kenya (GoK) is the Kenya Forest Service. No official REDD demonstration projects have started although some A/R voluntary carbon market projects have begun, including the Community-Based Integrated Forest Resource Conservation and Management in the Maasai Mau Forest (COMIFORM) project in the Maasai Mau Forest.

Kenya is beginning a period of intensive governance and institutional reform driven by the promulgation of a new Constitution in August 2010. These reforms will affect forest governance and hence the prospects for creating and trading in forest carbon credits. County governments will be empowered with significant authority, creating a new forest management stakeholder. Forest management law and policy will be revised, with the new governance framework expected to provide a more favorable environment for creating and distributing benefits from REDD+. The Forest Act (2005) will be redrafted and the Ministry of Forestry and Wildlife (MFW) will revise forest policy and conduct a baseline assessment of forest governance. These efforts are expected to provide greater clarity about forest land tenure and forest carbon rights as well as the rights and operating procedures of community forest associations (CFAs). Other major activities related to forest carbon include a Ministry of Finance initiative to develop policy regarding the distribution of benefits from the sale of carbon credits and an MFW and KFS effort to build a national Forest Information System (FIS) that will form an important part of an eventual NCAS. The Clinton Foundation is assisting the GoK to develop a comprehensive proposal to attract multi-donor funding to support the development of the Kenya NCAS. The Finnish government is supporting the MFW in a multi-objective forest sector-strengthening project that includes development of a university-level forestry curriculum that will include modules on climate change and forest carbon.

1.4 FOREST CARBON ACTIVITIES IN THE MAU FOREST COMPLEX

The three site-based forest carbon projects described below are under development in the Mau Forest Complex led by different proponents and use different funding sources. All aim to sell A/R emission reduction credits (ERC) on the voluntary market. In each case, the proponents have partner organizations to lead community engagement and carbon accounting. These projects are at a range of spatial scales, from hundreds to thousands of hectares. The Mau ICS is in the early stages of developing an umbrella forest carbon project that will encompass the entire Mau Forest Complex, as described at the end of this section. The International Small Group & Tree Planting Program (TIST), a nongovernment organization (NGO), is beginning to work in Mau on tree planting with the aim of securing carbon financing. Other potentially relevant donor activities in the Mau are a United Nations Food and Agriculture Organization (FAO) livelihood project in partnership with KFS, and a French government-funded project that will work in the eastern Mau.

Community-Based Integrated Forest Resource Conservation and Management in the Maasai Mau Forest (COMIFORM) Project (www.comiform.org). This integrated forest conservation project is located in the upper Ewaso Ngiro South River catchment, which is adjacent to the Mara catchment. It is being implemented by the United Nations Environment Program (UNEP) with funding from the Spanish government and in partnership with KFS, Narok County Council, Green Belt Movement (GBM), and Unique Forestry Consultants. The project addresses biodiversity conservation, forest planning, alternative livelihoods, community tree nurseries, tree planting networks, water harvesting, and development of a forest management plan and trust fund for the Maasai Mau Forest. The project goal is to reforest 1,500 ha and sell the ERC. The project team is developing a Project Identification Note (PIN) and will subsequently develop a PDD. Approximately \$75,000 has been invested in the baseline assessment, stakeholder consultations, and site selection. The PIN is expected to cost an additional \$25,000.

Clinton Climate Initiative (CCI) Forest Carbon Project in the Maasai Mau Forest. This project, in a different part of the Maasai Mau than the COMIFORM project, is currently being funded by a grant from the Rockefeller Foundation and works in partnership with the GBM and LTS Consultants. The CCI is based on the premise that forest carbon mitigation activities should be viable as economic activities. The project will eventually cover 2,500 to 4,000 ha and involve 3,000 people. Three entry points were identified in the feasibility study: replant forest trust lands with indigenous tree species, develop community wood lots with fast-growing exotic species, and facilitate agroforestry on private land. A CFA has just been registered and a PDD is being developed by LTS, to be completed later this year. GBM is leading community awareness and development of tree seedling nurseries. CCI intends that proceeds from

the sale of ERCs will be split between the community (represented by the CFA) and the County Council. CCI estimates that \$500,000 will have been invested in the project at the point of PDD completion. Additional funds will be raised for tree planting.

Africa Wildlife Foundation (AWF) Mau-TransMara Project. The AWF has contracted CAMCO consultants to determine the viability of developing a carbon project in three Mau forest blocks, and to qualify the carbon project, if the feasibility study proves positive. The project involves a scoping study to determine the extent of the forest and existing carbon stocks, and establish the project boundary. The second stage is a feasibility study that involves establishment of sample plots in order to measure the amount of existing carbon stocks, and to determine the drivers of deforestation and degradation; and a socioeconomic study to establish community needs and how to enhance carbon stocks on farms. CAMCO will also investigate establishing a benefit sharing mechanism for proceeds from the sale of carbon credits and other ecosystem services. Two Nairobi-based NGOs, CLOUT and CERES, are partners in the project. CAMCO estimates that a forest carbon scoping study for a project of this scale can be done in two weeks, a feasibility study/PIN in three to four months, and that a PDD can be completed within six months to a year after the start of the feasibility study. Carbon quantification requires a minimum of one year to complete.

Mau Forest Umbrella Forest Carbon Project. The ICS is leading GoK efforts to create a forest carbon project that will cover the whole Mau Forest Complex except the ‘white areas’ on the standard ICS maps, which are under private ownership and outside the Mau forest restoration program. The ICS is in the process of hiring a consultant to develop a PIN for the project, which is expected to form an umbrella under which smaller forest carbon projects could operate, such as those described above. The ICS hopes to set up a revolving trust fund so that new proponents can access funds to begin new forest carbon projects. The GoK intends to develop one PDD for each of the nation’s five critical catchment areas, referred to as ‘Water Towers’. A French commercial bank has already expressed interest in investing in the Mau Forest Carbon Project and the ICS anticipates that other financing institutions will express interest upon completion of the PDD. In addition to forest carbon, the ICS wants to work with communities and individual farmers to introduce alternative energy, such as biogas and micro-hydro; plant economically beneficial trees and plants that will sequester carbon and protect watershed function; and adopt natural resource-based enterprises, including beekeeping. Bamboo is being evaluated for use in riparian areas because it is native to the Mau and appears to meet all selection criteria.

TIST Mau Tree Planting Project. TIST is a US-Based NGO that supports farmers to plant trees in Kenya and other developing countries as part of a broader rural development program. A total of 50,000 farmers are currently involved in their tree planting program in the Mt. Kenya area and they have recently begun to work in the Mau with funds from a 5-year USAID grant. Their approach is to support farmers to plant primarily exotic tree species on open land, providing them with annual stipends for tree maintenance until carbon credits can be sold on the voluntary market. They have already found buyers for some of the credits from the Mt. Kenya plantations. TIST has a sophisticated system for monitoring tree growth and displaying the data on their web site in real time to satisfy international market monitoring requirements.

1.5 KEY FINDINGS OF INFORMANT INTERVIEWS

The informants interviewed for this assessment are from government, donor organizations, NGOs, and the private sector (see Appendix C). There is a general feeling among them that approval of the R-PP is an important milestone in REDD+ readiness but recognize that the associated \$3.4 million FCPF grant is only a small fraction of what will be required to achieve REDD+ readiness. They also recognize that a lot of work lies ahead to create the new institutional structures called for in the R-PP and that assignment of responsibility and authority may be contentious, especially as governance reforms related to the new Constitution are rolled out.

Those informants that are directly involved in developing forest carbon projects recognize the challenges and costs associated with them. Of particular concern is creating awareness and selling the concept of forest carbon to skeptical communities without raising their expectations regarding the future financial benefits. Project proponents stress the value of the co-benefits of increased access to forest products, improved livelihoods, and water availability when selling the projects to communities. Most communities believe they already perceive the effects of climate change on weather variability, so do not need to be convinced on this score. Proponents typically use community tree nurseries and CFAs as points of entry for planning and implementation. These institutions often do not exist and must be created. Some informants noted the difficulty of getting community buy-in when forest land is in government, rather than private, ownership. Many informants noted the long time requirement and high cost of the forest carbon project preparation process and the need for upfront funding that must either be a grant, or a loan re-paid over long periods. The revolving trust fund being considered by the ICS would provide an alternate way to provide initial project funding. Even when funding is secured, getting a project to the PDD stage takes about a year and costs on the order of half a million dollars.

1.6 PROMARA'S POTENTIAL TO CONTRIBUTE TO REDD+ READINESS

ProMara provides an opportunity to integrate forest carbon enabling conditions into its existing activities and could add activities to magnify this positive impact. It is understood that all forest carbon activities would have to be implemented within the current project budget. At the time of writing this report, it was not known how much of the project budget is from GCC funding sources, making it difficult to propose an appropriate scope and scale of activities or to formulate a climate change action plan.¹ The specific activities described in Section 2 should therefore be viewed as a menu from which to choose activities, depending on the amount and type of funding available (mitigation vs. adaptation). ProMara forest carbon activities will have to be carefully planned and integrated into the work of GoK agencies and other stakeholders to reach a threshold of impact that would ensure sustainability after the end of the project.

The forest carbon projects that have already begun in the Mau are creating a basic pool of experience to which ProMara can contribute. The new initiative by the ICS to develop a forest carbon project for the entire Mau Forest Complex provides an excellent opportunity to work with this key partner to develop approaches to climate change awareness, creating socioeconomic and biodiversity baselines, and resolving LTPR issues related to forest carbon. ProMara has a strong comparative advantage in LTPR and forest biodiversity conservation aspects of forest carbon, which could contribute to national policy development and practice in these areas.

The R-PP timeline for REDD readiness preparation in Kenya specifies that the period 2010-2013 will be devoted to R-PP implementation through a three-step process. Step 1 is devoted to achieving 'readiness' in governance and data; Step 2 to Early Action and Testing through demonstration projects; and Step 3 to enacting and implementing a national-level system to monitor and sell forest carbon credits. Step 2 is most relevant to ProMara in terms of timing and the fact that it is focused on capacity building, multi-stakeholder consultation, and demonstration activity design. ProMara could contribute to these areas of REDD+ readiness in the Upper Mara catchment, while potentially laying the foundation for a formal demonstration project to be funded from other sources. ProMara could also potentially contribute to the policy dialogue under Step 1 with respect to the LTPR aspects of forest carbon. The details of proposed ProMara REDD+ related activities are described in Section 2.

¹ Although outside the scope of this report, ProMara also has significant funding from USAID's biodiversity earmark. Site selection for use of the biodiversity funding may not always be compatible with that for climate change mitigation activities, requiring careful assessment and balancing of site selection criteria depending on relative proportions of funding.

1.7 CLIMATE CHANGE VULNERABILITY AND ADAPTATION OPPORTUNITIES

The ProMara design is vulnerable to climate change in terms of potential effects on livelihood options and the forest ecosystems that are targeted for conservation. Expected hydrological and conservation benefits from land use change could be reduced or reversed by changes in rainfall and temperature patterns.

The USAID Guidance Manual **Adapting to Climate Variability and Change** (2007) lays out the following six-step process for incorporating climate change into project planning:

- **Step 1:** Screen for vulnerability to assess whether climate change could compromise the integrity or effectiveness of the project.
- **Step 2:** Identify adaptations to project interventions that increase resilience to climate change.
- **Step 3:** Conduct an analysis to compare costs of possible adaptations to likely costs related to climate change.
- **Step 4:** Select a course of action based on the findings of Step 3.
- **Step 5:** Develop and implement an adaptation plan.
- **Step 6:** Evaluate adaptations.

If it is decided that a vulnerability and adaptation assessment should be done for the ProMara Program, it would be most efficient to conduct the first four steps of this process in rapid appraisal fashion, in the expectation that key adaptive strategies could be quickly identified and implemented. Timing will be crucial since the project has already begun and only has a two-year life span. Even without this assessment, it would be possible to include climate change vulnerability as a selection criterion for livelihood interventions. For instance, tree-based agricultural systems tend to be more resilient than annual crops alone, and have the added benefits of storing carbon in biomass and soil and providing an alternative source of wood and other forest products. These systems may also provide an economic buffer in times of water stress or variable temperatures.

2.0 APPROACH TO CLIMATE CHANGE ACTIVITIES WITHIN PROMARA

Major themes for climate change activities within ProMara are raising awareness; building capacity; creating enabling conditions; and maintaining flexibility to adapt to emerging international agreements, evolving GoK policy, and trends in markets for carbon from REDD+ activities. The consultant proposes three categories of climate change-related activities for consideration under ProMara. The first two categories will require few additional activities and resources beyond those outlined in the ProMara Activity Description and Phase 1 Work Plan while new activities proposed under the third would require that project funds be allocated specifically to achieve a climate-related output. It is envisioned that all three categories would be funded from the existing project budget, in proportion to the amount of climate change funds available.

Adjustments to existing activities such as including climate change awareness in the communications strategy, adding forest carbon as a selection criterion for sub-catchments, and assessing the carbon footprint of proposed livelihood options.

Add-ons to existing activities such as building the forest carbon-specific capacity of key stakeholder groups and coordinating with groups working on forest carbon in Kenya and other climate change-related topics.

New activities that would require additional financial resources and therefore likely significant reworking of the budget (and potentially less resources to other activities), and in some cases specialist expertise. Indicative activities in this category include:

- Create a baseline for forest carbon accounting within the project GIS, in coordination with the national-level FIS and NCAS as they develop.
- Develop a concept and supporting data for a REDD + demonstration project in the upper Mara watershed.
- Develop a forest carbon training curriculum for Kenya Forestry College certificate and diploma courses, as well as in-service KFS staff training at Londiani.
- Develop best practice guidelines and methods for addressing LTPR issues related to forest and landscape carbon in Kenya. Similar work being done at the global level under the USAID Property Rights and Resource Governance (PRRG) program can inform this process.
- Contribute to developing best practices for creating socioeconomic and biodiversity baselines and monitoring procedures to document co-benefits from forest carbon projects.
- Actively communicate and exchange experiences with other groups working on forest carbon in the Mau and Kenya.
- Sponsor a workshop/training session to explore options for forest carbon financing among ProMara stakeholders while keeping expectations in check.
- Facilitate communications between ProMara stakeholders and potential carbon credit buyers on the voluntary market as part of a broader effort to assess and facilitate payment for environmental services (PES) financing options. This must be done with the understanding that eventually the GoK

will establish an institution to broker all carbon credits, eliminating the need for direct interaction with buyers.

2.1 PROPOSED CLIMATE CHANGE ACTIVITIES BY COMPONENT

Proposed add-ons to existing activities and new proposed activities are described below by component, based on the ProMara draft Phase 1 Work Plan. These additions would be implemented during Phase 2 of ProMara. The process of deciding where to implement field-based climate change activities will be an integral part of the overall site selection process and based on a detailed assessment of biophysical and socioeconomic conditions as well as institutional capacity and ability to work productively with other partners.

2.1.1 COMPONENT 1 – LAND TENURE AND PROPERTY RIGHTS

POTENTIAL ADD-ONS TO EXISTING ACTIVITIES

Activity 1.1: Determine if it makes sense to integrate forest carbon into the ICS communications strategy, and if so, provide support to do this.

Activity 1.4: Include forest carbon considerations into selection criteria for critical catchment areas and biodiversity hotspots. If forest cover is used as an indicator of biodiversity value, areas valued for forest carbon will be similar to those valued for biodiversity.

PROPOSED NEW ACTIVITIES

- Identify LTPR issues related to forest carbon in the project area based on the land and forest resource ownership and use rights already documented by the project team. This includes incentives/disincentives for long-term sustainable forest management under current conditions. Make recommendations regarding land and carbon property rights, contributing to the national policy dialogue, if appropriate.
- Make recommendations to GoK regarding forest carbon benefits distribution in line with assignment of property rights and stakeholder roles in maintaining or increasing forest carbon.
- Develop and test a REDD-compatible methodology for a socioeconomic baseline assessment in one sub-catchment in line with global standards as articulated by the Climate, Community and Biodiversity Alliance (CCBA) and UNFCCC.

2.1.2 COMPONENT 2 – SUB-CATCHMENT AND BIODIVERSITY RESTORATION

POTENTIAL ADD-ONS TO EXISTING ACTIVITIES

Activity 2.1: Define the potential role of Mau Forest Conservation Committee with respect to forest carbon and climate change adaptation and include training in skills related to this role in the capacity development plan.

Activity 2.2: Identify forest carbon and adaptation activities and roles during institutional analysis and stakeholder mapping.

Activity 2.3: Add forest carbon as a selection criterion for some or all target sub-catchments. The spatial database should be designed to facilitate creating a forest carbon baseline/REL and forest carbon monitoring program.

Activity 2.4: Assess the capacity of CFAs to participate in forest carbon finance schemes during Phase 1 and identify improvements needed to reach the level necessary to participate in this market. In Phase 2, provide training and guidance on CFA rights and obligations with respect to forest carbon financing. Provide training to CFAs and Water Resource Users Associations (WRUAs) related to their vulnerability to climate change and steps they can take to adapt (this would require conducting a climate change vulnerability and adaptation assessment).

Activity 2.5: Explore potential rights and responsibilities of all stakeholders related to forest carbon under forest co-management and urge KFS to clearly assign rights and responsibilities within co-management guidelines. This approach should also be applied to CFA guidelines.

Activity 2.6: Design the biodiversity threats analysis to capture trends in forest biomass in addition to threats to ecosystems and species. The intent is to flag situations where current use practices are significantly depleting forest carbon stocks even if these activities may not be a near-term threat to ecosystem function.

2.1.3 COMPONENT 3 – LIVELIHOOD IMPROVEMENT

POTENTIAL ADD-ONS TO EXISTING ACTIVITIES

Activity 3.1: Criteria for assessing potential livelihood options should include an analysis of the carbon footprint of the activity in terms of both landscape carbon and fossil energy use. Options that do not require forest clearance but rather promote tree planting and soil carbon retention should be favored. Vulnerability and adaptation to climate change risk may also be used as a livelihood selection criterion and design guide.

Activity 3.2: Design landscape management approaches to retain forest carbon at levels above the business as usual scenario and to make the landscape more resilient to impacts of climate change. Carbon stock retention is closely tied to biodiversity conservation but should be addressed as an objective in its own right.

Activity 3.4: Facilitate communication between stakeholders and potential providers of carbon-related financing. This may require collaboration with groups working at the national or Mau Forest Complex level to seek opportunities to bundle carbon credits and to understand the requirements better for entering the voluntary market.

2.1.4 COMPONENT 4 – MARA-MAU OUTREACH AND RESOURCE CENTER

POTENTIAL ADD-ONS TO EXISTING ACTIVITIES

Activity 4.2: Design an element of the MOC communications strategy to raise awareness about climate change scenarios and vulnerability in the area, as well as adaptation and forest carbon financing with the goal of empowering stakeholders to actively participate in both. This could include workshops and training sessions in addition to mass media communications.

2.1.5 COMPONENT 5 – CROSSCUTTING ACTIVITIES

POTENTIAL ADD-ONS TO EXISTING ACTIVITIES

Activity 5.1: Analyze the implications of the provisions of the new constitution for ownership of forest carbon and distribution of benefits from it.

Activity 5.2: Once the institutional framework for ProMara is established, urge this body to create a working group on forest carbon financing.

Activity 5.3: Identify gender issues related to forest carbon financing (such as differential rights to land and resources or different ways of using forest resources between the sexes). Recommend how to address each issue in terms of policy, practice, and structuring of carbon finance deals.

3.0 CONCLUSIONS AND RECOMMENDATIONS

ProMara provides a solid programming platform to build readiness for forest carbon emissions reduction because many of its existing activities could be easily adjusted to contribute to the enabling conditions required to participate in the forest carbon market. There is currently considerable momentum behind the REDD+ concept in Kenya but not much knowledge or experience. ProMara can contribute to both with a modest investment in adjusting ongoing activities, and perhaps adding some additional work elements. The consultant recommends that as a minimum, the first two categories of adjustments to project activities discussed in Section 2 be adopted. The category 3 ‘new’ activities should be considered on a case-by-case basis if funding is available (see Appendix D for indicative resource requirements for these activities). Selection criteria should include cost, management resources required, demand from GoK counterparts for the activity, and likelihood that a concrete output could be delivered by the end of the project. LTPR is an obvious area where ProMara has a strong comparative advantage to contribute.

The consultant recommends that it would not be time or cost-effective to conduct a full climate change vulnerability and adaptation assessment at this stage and may not even be feasible to conduct a rapid appraisal given the need to devote management attention to getting core project activities up and running. At a minimum, climate change vulnerability should be one of the livelihood option selection criteria and adaptation should be built into the detailed design of each selected livelihood option.

Given the fact that the six-month Phase 1 is already underway, it will be very important to reach agreement soon among USAID, GoK partner organizations, and the project about the scope of climate change activities under ProMara because planning must be completed by the end of Phase 1 in order to achieve smooth implementation in Phase 2.

APPENDIX A. STATEMENT OF WORK

Forest Carbon Specialist

PROMARA Project

Overview

The PROMARA program objectives and related component activities can contribute to creating enabling conditions and capacity to support future forest carbon financing under REDD or other mechanisms, thereby contributing to the sustainability of PROMARA interventions and the long term health of the Mau Forest Complex. The timing of PROMARA is very advantageous as it will parallel implementation of the Government of Kenya's REDD Readiness Preparation Proposal funded under the Forest Carbon Partnership Facility administered by the World Bank. PROMARA will have an opportunity to contribute to the national REDD policy dialogue and provide concrete examples of how improved forest governance, equitable property rights, and stakeholder participation within selected sub-watersheds can provide enabling conditions for forest carbon financing. This will not require alteration of the program design but rather a conscious effort to implement interventions in ways that will provide a strong basis for forest carbon and landscape carbon financing.

Proposed Tasks

1. Review PROMARA background documents, other USAID documents, and Government of Kenya documents related to forest management and forest-related climate change mitigation.
2. Review work by USAID implementing partners and others in Kenya and neighboring countries related to mitigation of climate change through sustainable forest management.
3. Meet with USAID mission staff, PROMARA staff, the Kenya Forest Service, the Mau Interim Coordinating Secretariat, the Mau Forest Complex Conservancy and its stakeholder Forest Conservation Committee to explore opportunities for creating climate change mitigation enabling conditions and capacity through activities undertaken within each of PROMARA's components.
4. Meet with the GoK REDD+ Technical Working Group and relevant technical specialists in the World Bank and technical experts that assisted with preparation of the REDD Readiness Preparation Proposal to explore how PROMARA might support GOK REDD readiness activities.
5. Assess the status of Kenya's readiness for internationally recognized climate mitigation activities in the context of PROMARA.
6. Formulate an action plan with specific approaches and activities to be built into PROMARA's work plans and implementation approach to create forest mitigation enabling conditions and capacity within government agencies and other stakeholder groups.

Proposed Deliverables

1. Out-briefing of findings and recommendations for Mission and PROMARA staff.
2. Draft report of findings and recommendations with appended action plan
3. Final report.

Schedule of Activities

20 Sept-4 Oct: 3 days LOE (intermittent) to review documents contact relevant experts, and plan field work.

5-23 Oct: Work in Kenya including international travel (17 days LOE based on 6-day week)

25-29 Oct: 2 days LOE to complete draft report.

1 day LOE after that to revise report based on comments if needed.

Total LOE: 23 days.

APPENDIX B. REFERENCES

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APPENDIX C. LIST OF INFORMANTS

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APPENDIX D. COST-BENEFIT ANALYSIS OF PROPOSED NEW PROMARA CLIMATE CHANGE ACTIVITIES

Proposed Activity	Indicative Resources Required	Likely Benefits
Climate Change Vulnerability & Adaptation Assessment	If a rapid assessment is done as described in the report, 2 or 3 weeks of LOE for a two-person team (1 Kenyan and 1 expat) should suffice; this should be done early enough to guide the process of selecting livelihood activities.	Benefits will depend on the amount of information the team can find about the likely effects of climate change in the area. The results of the assessment could inform the communications strategy as well as livelihoods selection
Policy Brief and Guidelines on LTPR and gender considerations for forest carbon projects in Kenya	Approximately 3 months of LOE and travel costs split between expat and Kenyan experts	Potentially high impact on both national policy and field practice in the Mau and nationwide
Design of ProMara GIS to monitor forest biomass and be compliant with FIS and NCAS as they evolve; coordinate with groups developing these systems	Costs will have to be determined by the GIS Specialist after his design work in December 2010	Potentially an opportunity to contribute technically to the design of the FIS/NCAS and to lay a strong foundation for carbon accounting in the ProMara target sites
Lay foundation for a forest carbon project in one of the target ProMara sub-watersheds	Resource requirements will depend on level of preparation (e.g., feasibility study, PIN, PDD) and amount of data already collected as part of the project baseline; PIN could cost approximately \$75k and a PDD could cost up to \$500k, if done by a subcontractor.	This could potentially be very valuable as a means to support the Mau-wide PDD that the ICS plans but seems to make sense only if there is a good sense that either ProMara will be extended or another proponent can be found to move project to financing stage
Develop a climate change and forest carbon curriculum for Londiani Forestry College	Cost could be significant if curriculum must be developed but could be much cheaper if simply supporting implementation of an existing curriculum developed by others (e.g., FINNIDA-funded project)	This college trains most of the forest technicians/extension agents for the Mau and for KFS in general so this support could have long-term benefits far beyond the life of ProMara
Develop methods for socioeconomic and biodiversity baseline assessment and monitoring	These assessments must be done in any case, so it is a matter of determining additional costs related to compliance with	Piloting these assessment methods could result in standard approaches that are adopted throughout the Mau or more broadly in Kenya. The ICS

Proposed Activity	Indicative Resources Required	Likely Benefits
that are compliant with international forest carbon market standards	CCBA standards; specific costs will have to be calculated during Phase 1 after basic assessment procedures are developed	has indicated they believe this is an important contribution to their PDD efforts
Actively communicate and exchange experiences with other groups working on forest carbon in the Mau and Kenya	This would be done as additional duty for one or more of the long-term project staff – the amount of involvement could be adjusted but could require a significant investment in time and travel to remain abreast of developments	This interaction could provide an important means for ProMara to communicate its technical innovations to a wide audience of policymakers and practitioners and to learn from what others are doing
Sponsor a workshop/training session to explore options for forest carbon financing among ProMara stakeholders	Standard workshop costs plus the time of one or more specialist trainers	This is relatively low cost and supports the project's and ICS' PES implementation efforts
Facilitate communications between ProMara stakeholders and potential carbon credit buyers on the voluntary market as part of a broader effort to assess and facilitate PES financing options	This would be relatively low cost as the buyers would pay for their own expenses	Would depend on how far the ProMara progresses in terms of PDD preparation if this step is warranted. Care must be taken not to raise expectations.

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