FY 09 PROGRAMMATIC REPORT TO USAID-TRANSLINKS Program led by the Wildlife Conservation Society (WCS)

from Forest Trends, The Katoomba Group, & The Ecosystem Marketplace





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INTRODUCTION

In FY09, Forest Trends worked with USAID's Standing Forests Conservation Markets Initiative (SFCMI), through TransLinks, with the goal of increasing capacity in developing countries to protect biodiversity and carry out avoided deforestation activities through payments for ecosystem services (PES). The geographic focus has been on high-priority areas including: the Brazilian Amazon, the Andean region, Southeast Asia, as well as West and Central Africa.

This report reviews FY09 accomplishments. Specific outputs are in annexes and attached.

OVERVIEW

In FY09, the Forest Trends work products included:

- **Scoping of Payments for Ecosystem Services prospects**, as part of Katoomba Group event planning, in the Brazilian Amazon and Southeast Asia
- Designing and conducting regional legal and institutional PES water and carbon assessments, in order to document the context for establishing PES-water and carbon markets in:
- Launching a legal assessment of PES, which will include:
 - o Publication of 2-4 legal country analyses
 - o Legal guidance tools for project developers to be integrated to the Getting Started manual
 - O Tools, resources and expertise to address government needs and opportunities via onsite Rapid Response (with experts from the Katoomba network)
 - o Legal issue briefs for Katoomba events
 - Key guidelines for legal and institutional structures to support PES
- Researching and drafting the world's first "State of Water Markets" report, which will include a data collection methodology and spreadsheet, a comprehensive spreadsheet with all programmatic data collected, a final report summarizing the findings, and presentations of the findings at global and regional Katoomba meetings and other venues
- Preparing background documents relevant to Reducing Emissions from Deforestation and Degradation (REDD) as well as the "State of the Forest Carbon Market" which builds on the "State of Voluntary Carbon Markets"
- Preparation for, and in some cases holding, Katoomba Group events and/or workshops in:
 - o Brazil (March 2009)
 - o Latin American MAP region (August 2009)
 - o Ghana (October 2009)
 - o South East Asia (Spring 2010)
- Collaborating with USAID to offer ENRM/Climate, Forests, and PES Training modules in South Africa and Washington DC
- Conducting a workshop on biodiversity offset policy opportunities across multiple countries at the Business and Biodiversity Offset Program (BBOP) annual program meeting
 - (Note: Due to political unrest, the Madagascar policy workshop was scaled back significantly and Translinks funding supported initial policy dialogues with government officials from seven countries in Paris, France in June 2009.)

Each of these outputs is discussed in detail below.

SCOPING OF PAYMENTS FOR ECOSYSTEM SERVICES PROSPECTS

As part of Katoomba Group event planning, in the Brazilian Amazon and Southeast Asia (with a focus on Mekong countries), the Katoomba Group engaged in a scoping of PES prospects. The findings are described below.

Brazilian Amazon PES Prospects

The **Surui Carbon Project** was one of the key case studies presented and discussed during the Mato Grosso Katoomba Group conference. The event increased interest in and support for this first reforestation/REDD initiative in indigenous territories within the Brazilian Amazon.

The Surui project seeks to demonstrate the feasibility of reducing deforestation by strengthening indigenous rights and local capacities. Forest Trends, through the Katoomba Incubator, is fully engaged in the project design, the technical analyses, as well as in the development of the investment structure that will take this project to market. A draft Project Design Document is scheduled for December 2009. The technical design work—including vegetation mapping, baseline modeling, and carbon stock analysis—is underway.

A legal analyses by Baker & McKenzie for the reforestation component concluded that the Surui have carbon ownership rights. A new legal analysis for REDD credits is underway. Also, an extensive process of community-level discussion and participatory planning is well advanced. The baseline social and biodiversity assessments to comply with CCB standards are also under development.

The project is expected to generate VCS and CCB certified carbon credits at the rate of approximately 180,000 tons per year for 20 years.

Another promising PES prospect resulting from the Mato Grosso Katoomba conference was a partnership between Forest Trends and **Aliança da Terra** to enable payments for ecosystem services through the **Registry for Social-Environmental Responsibility as a pre-certification system for Amazon Basin beef.** This innovative initiative will support a rancher exchange program between the states of Mato Grosso and Texas whereby lessons learned from both states and countries will be shared, principally with regards to conservation incentives on private lands and through differentiated markets.

Work is underway for the development of services, technologies, and monitoring capabilities to prepare the land registry for a beef certification system, including systems and expertise in beef traceability, compliant with European Union and American importation criteria, market demands, and demand trends. One of the first steps will be for ten leaders from Mato Grosso to travel to Texas to participate in seminars by industry experts, academia, and state wildlife office personnel as well as field trips to ranches actively involved in conservation efforts.

Finally, during the private Katoomba Group conference a meeting took place between Anthony Brunello, Deputy Secretary for Climate Change and Energy for the State of California, and the heads for the environmental secretariats for the Brazilian Amazonian states of Amazonas, Acre, Mato Grosso and Pará to further conceptualize an emissions **offsetting cooperation agreement between California and Brazilian states**, wherein California would acquire carbon credits generated from REDD programs. One potential source of these credits is a major program being developed at the Xingu Indigenous Park. This meeting was a continuation of the work started with the November 2008 signing of a MOU for collaboration during a Climate Summit sponsored in Los Angeles.

Southeast Asian PES Prospects

Starting in mid 2009, Forest Trends has been working in Vietnam and Indonesia to scope out potential PES prospects for future pilots and policy work, which include:

- Payments for Wetlands / Mangrove Ecosystem Services: Mangrove ecosystems, in particular, are of particular interest to stakeholders in the region and represent an interesting vehicle to bridge forest and marine, adaptation and mitigation, as well as local and international financing schemes (e.g. REDD). Work in mangroves is important as the area of mangrove forest has rapidly declined throughout much of Southeast Asia due to urbanization and aquaculture production.
 Balancing between commercial and environmental benefits requires an integrated approach and use of economic incentives. Prospects for potential pilots are being explored in:
 - Vietnam: Based on meetings and discussions to date, the Government of Vietnam has requested Forest Trends support in building a PES "deal" on mangroves / wetlands, as well as assistance in developing lessons that can be used as input for the formulation on PES policy on wetland/mangrove in the country.
 - O Papua Province Indonesia: With some of the largest remaining mangrove forests left in the world, and a provincial government interested in innovative financing schemes for conservation based development, there is interest in a partnership between Conservation International Indonesia marine program and Forest Trends for a Katoomba-style event and/or pilot projects. Exploration of the best pathway forward is underway.
- Policy Advice on Benefits Sharing & Payment Structure Mechanisms: While the details of REDD are still under discussion, a basic principle is that REDD will involve performance-based payments for developing countries in response to measured and verified reductions in carbon emissions. One of the most hotly debated issues is how countries will improve or develop effective and transparent systems to channel benefits to the local level – the local communities, households and individuals whose lives are inextricably intertwined with the management of these forests.
 - Vietnam: The Government of Vietnam is eager to learn more about different structures of benefits sharing mechanisms from the region and the rest of the world, as well as sharing the results of their own internal analysis. Other stakeholders in Southeast Asia have also indicated an interest in an overview of lessons learned from benefits sharing in the region. In response, Forest Trends—in collaboration with UN REDD, IUCN and others—are developing a country case study tentatively titled "Design of a REDD-Compliant Benefit Distribution System for Viet Nam." In addition, Forest Trends is currently completing a study looking at the construct of PES contracts in Vietnam. These studies will be used to inform Vietnam's input at Copenhagen in December 2009 as well as informing the Katoomba Event planned for March 2010, but will be useful in the years to come as REDD begins to be implemented.
- Evaluation of Cross-Border Leakage: Vietnam has seen regrowth in forest cover over the past twenty years, largely as a result a forestry policies that restricted timber harvesting and encouraged the development of processing industries that turned raw log imports into finished products for export. Much of this wood for Vietnamese-based processing facilities came from Laos and Cambodia, which are countries with relatively low levels of forest governance and indicate a potential major issue related to regional design, collaboration and implementation of REDD scheme. With collaborators in both Vietnam and Laos, Forest Trends is beginning to scope out regional collaborative arrangements by which this issue is further examined and the "types of deforestation leakage" most likely to occur are identified.

DESIGNING & CONDUCTING REGIONAL LEGAL AND INSTITUTIONAL ASSESSMENTS RELATED TO WATER AND CARBON

In 2009, the Katoomba Group worked to develop a set of criteria to help governments, policymakers, and potential investors assess the viability of potential REDD projects, which by nature combine carbon and water. We have identified, refined, and tested criteria that could determine a project's capacity to realize emissions reductions as well as provide social and environmental co-benefits. Focused workshops brought together actors from community organizations, local and national governmental authorities (forestry, wildlife, etc.), social and environmental NGOs, academia, and international donor agencies. Key points of discussion focused on tenure and carbon rights as well as on the need to situate projects within future/emerging national REDD strategies and link forest carbon frameworks at national and local levels. Input from workshop participants allowed Katoomba to to highlight areas of opportunity as well as identify bottlenecks that inhibit the development of community-led PES projects in each country. A series of recommendations was developed with best practices for communities considering engagement in PES transactions and governments designing policy related to carbon rights at both the national and international level. The final documents will be issued soon and will offer an approach that can be applied in countries throughout the world.

In addition, the Katoomba Group developed a set of legal tools that can help project developers and local attorneys participate in the contractual aspects of PES transactions. Model contracts created in partnership with CARE-Africa and Duke University Law Schol are now on a dedicated Katoomba Group 'legal tools' webpage, along with a contract design guide, template agreements, and related tools. Expanding the range of tools available will make low-cost transaction management solutions more easily available to PES project developers, a necessity for efficient PES transactions. While these tools will be housed at a dedicated webpage, they will also be incorporated and linked to the Getting Started manual. The contracts are accessible on the Katoomba Group website:

http://www.katoombagroup.org/regions/international/contracts.php

All of these materials and tools address needs of government and are a key element of the Katoomba Group's 'rapid response' approach to PES inquiries. In addition to these tools, the Katoomba Group has provided expertise to governments on legal and institutional aspects related to PES programs and policies. For example, in September 2009, the Katomba Group was invited to present to the Amazon Sustainable Development Commission of the Brazilian Congress. The Brazilian Congress is in the process of reviewing laws related to the establishment of a national PES program, and the hearing was designed to inform Congress members of PES experiences from other countries. On a panel with the Minister of Strategic Affairs, the Katoomba Group presented an overview of the trends and experiences of PES programs in Costa Rica, Mexico, and Ecuador. Approximately 50 people attended this event, which was recorded and will be provided to other Congressmembers in preparation for an upcoming symposium on PES. Information and presentations from the event can be found on the Katoomba Group website.

Legal and policy briefs have been developed and are available on the Katoomba Group website. In addition, at the Brazil Katoomba events, Forest Trends' advised on new laws and the Cuiaba Declaration, while also leading a one-day seminar with the Secretariat of Environment for the State of Acre to present issues related to climate change, PES, and REDD.

Key guidelines for legal and institutional structures to support PES is currently in the final design / lay out phase in the form of the upcoming IUCN Katoomba guide *Legal Frameworks of Water Payments for Ecosystem Services*. While the document bases its conclusions on a review of water PES case studies, the resulting guidelines are equally relevant to transactions involving other environmental services (i.e. carbon, biodiversity). The guidelines focus on:

- property rights,
- enabling institutions,
- contracts,
- payment structures,
- risk allocation, and
- governance.

The case studies and final manual will also be available on the Katoomba Group website.

RESEARCHING & WRITING THE WORLD'S FIRST "STATE OF WATER MARKETS" REPORT

Excess nitrogen and other pollutants into waterways is a pressing global environmental problem affecting water quality, freshwater and marine wildlife, and human health. According to recent research by the World Resources Institute the number of "dead zones"—or areas of the ocean with too little oxygen to survive or support aquatic life—has increased by 35% between 1995 and 2007, numbered now at over 400 globally. In response, regulated markets now exist for nitrogen and other nutrients in the US, Australia, New Zealand and Canada. In addition, payment for watershed services have been established in Colombia, Ecuador, Peru, and China as well as watershed protection projects in Tanzania and South Africa.

Despite this proliferation of market-based mechanisms being applied to water quantity and quality issues, there is no single source of information on water markets, payments for watershed services, and government subsidy programs for watershed protection. This report addresses the gap by tracking payments for watershed services as well as water quality trading transactions. It offers the most current and comprehensive analysis of water markets worldwide, with an emphasis on transaction volumes and values, market structure, and growth projections. Specifically, the report answers questions such as:

- How do water markets currently function? How are they structured? What transaction types exist (regulated, voluntary and payments for watershed services)?
- What is the number and type of transactions overall and by category, price ranges, overall size of the market? What is the growth potential and trends?
- What information standards are needed to inform the markets, such as monitoring and evaluation tools? What are the critical gaps? And what new tools are in the pipeline?
- What are the motivations for creating or participating in a water market or offset scheme? Given these motivations, what are predictions for future trends and growth?

Data collection for the report divides market activity into three categories: regulated, voluntary and government mediated. We utilize our existing Katoomba networks to identify key programs in China and the Mekong, East and Southern Africa, Latin America, Brazil, Colombia, Ecuador and Peru, and in

Central America, Costa Rica and Mexico. We utilize key source information on the regulated water quality markets in the US, Canada, Australia and New Zealand and work through contacts to highlight the efforts in Europe centered around the Black Sea and the Danube Basin. In all cases, we begin with data available in the public domain and conduct follow up research to fill gaps. Forest Trends is the principle author supported by the work of key consultants in many of the geographic regions, many of whom may serve as contributing authors to highlight those specific programs or case studies.

PREPARING REDD DOCUMENTS

In response to the clear need for introductory guides for project development, Forest Trends proposed creating a Getting Ready for REDD guide. In September 2008, World Conservation Society released a high quality REDD Development Guide. Because of the quality of the WCS Guide and specific niche it filled, we chose not to create a similar guide. The gap, it was clear, was tracking fast moving developments and applications. Therefore, Ecosystem Marketplace focused development of a complementary set of materials to the WCS REDD guide by researching and writing over a dozen articles related to forest carbon project development, including a set of basic primers on key issues. (All materials can be found at www.ecosystemmarketplace.com by typing "REDD" into the search function.) In addition, as part of our EM Insights Series, the Ecosystem Marketplace also released the primer book "Forests: Taking Root in the Voluntary Carbon Markets." The booklet includes an introduction to the voluntary carbon markets, key challenges for forest carbon offsets, and a set of case studies.

To further deepen accessible materials on REDD—and complement these Ecosystem Marketplace publications, as well the WCS Primer—the Ecosystem Marketplace and Katoomba Group have begun working on a Step by Step Guide for Project Developers. While a series of specific tools and templates exist for project developers (e.g. Tool for A/R Approved Methodologies, contract templates, guidance on measuring and monitoring, etc.), these are often fragmented and not easy to access. This compendium step-by-step guide will address the need for a one-stop-guide for project developers to break down the components of project assessment, design and implementation. The step-by-step guide will build on previous (but now in need of updating) guides by Winrock, ITTO and others, covering issues of project feasibility assessment, technical design, legal and contracting, financial assessment, design and structuring, and social and biodiversity impact assessment. Such a guide will meet a significant capacity-building need enabling potential project developers around the world to access key resources.

In 2009 the Ecosystem Marketplace researched and wrote the first-of-its-kind, annual *State of the Forest Carbon* report which features quantitative data and qualitative analysis of the regulated and voluntary markets for forest carbon around the world. The analysis considers transaction size, project types, buyer motivations and certification standard preferences, players in the market, and other key components of the market. Price data is provided for all segments of the retail chain, from projects developers, to retailers. The report elucidates trends in the market that have, until now, gone undocumented at such a comprehensive scale. The State of the Forest Carbon Market report utilizes data collected for the voluntary market report as well as for the Forest Carbon Portal Project Inventory (http://www.forestcarbonportal.com/inventory.php).

PREPARATION FOR, AND IN SOME CASES HOLDING, KATOOMBA GROUP EVENTS AND/OR WORKSHOPS

In FY09, the Katoomba Group organized and in some cases held a series of events in:

- o Brazil (March 2009)
- o Latin American MAP region (August 2009)
- o Ghana (October 2009)
- o South East Asia (March 2010)

A brief summary of each event is provided below. Proceedings and/or agendas—depending on whether the events have been held or not—can be found in the annexes and/or attachments.

Brazil Katoomba Group Meeting (March 2009)

The XIV Global Katoomba Meeting was held in Mato Grosso, Brazil in partnership with the State Government. We received very positive feedback from participants, partner organizations, funders and government representatives. Both the public conference in Cuiaba and the private meeting in the Pantanal (the world's largest wetland) were considered to have a significant political influence as well as contributing technical information to the rapidly evolving environmental markets in the country.

The leadership of Blairo Maggi, Governor of Mato Grosso, was a strong pull for other governors to participants, including governors from Amazonas, Para, Rondônia and Acre in the Brazilian Amazon, and Santa Cruz in Bolivia as well as Loreto in Peru. Following on discussions at this meeting, the governors of the Amazon states are developing a consensus statement on Reducing Emissions from Deforestation and Degradation (REDD) to present at the United Nations Climate Change Conference in Copenhagen in December.

The presence of the Brazilian Minister of Environment, Carlos Minc, was another highlight of the event, leading to the signing of a new law between the State of Mato Grosso and the Federal Government, called MT Legal which grants a temporary amnesty for ranchers and farmers in Mato Grosso, allowing them up to four years to reforest their holdings to bring them up to legal code. Under Brazilian law landowners in the "legal Amazon" are required to maintain 80% forest cover on their holdings.

Another significant development during the conference was a meeting between Anthony Brunello, Deputy Secretary for Climate Change and Energy for the State of California, and the State Environmental Secretaries for Amazonas, Acre, Mato Grosso and Pará to continue the work started in the Climate Summit held in California last November which aims at reaching agreements between these states for offsetting emissions in California with conservation efforts in the Amazon, most likely through REDD. A follow up meeting was held in Brazil in July.

The Katoomba Group meeting also produced the Cuiaba Declaration which asks for the Brazilian Federal Government to reverse its opposition to REDD and involve more stakeholders in the process of forming climate-change policy. The declaration was signed by more than 190 individuals and organizations representing farmers, indigenous communities, NGOs, and businesses. It will be presented to the governors of the Amazonian states and to President Luiz Ignacio Lula da Silva. The public conference was attended by an unprecedented 1,500 people and the private meeting by 150. For further information, and presentations, please see: http://www.katoombagroup.org/~katoomba/event_details.php?id=27.

Latin American MAP Region Community Training (August 2009)

The first course of the MAP (Madre de Dios, Acre, and Pando) capacity building series for communities took place in Rio Branco, Acre, from August 16th to the 20th. The course was designed and delivered by Forest Trends' Communities and Markets Program in partnership with a group of local and international institutions including the Environmental Leadership and Training Initiative of the Smithsonian Tropical Research Institute and the Yale School of Forestry and Environmental Studies (ELTI), the Amazon Working Group (GTA), the Secretariat of Environment in the State of Acre, Comissão Pró-Indio, and IDESAM. The 4-day long course was designed to increase the ability of leaders from community-based organizations to understand and participate in payments for ecosystem services (PES) schemes, with a special focus on REDD programs.

Sixty-seven people attended the course from the Brazilian Amazon, Madre de Dios in Peru, and the Pando region of Bolivia, including a significant representation of indigenous groups within Acre. Of the participants, 25 represent community-based organizations and 18 represent NGOs that work directly with communities in the MAP region.

The course was divided into 11 modules over 4 days. Prior to the course, focus groups carefully selected the content and designed the methodology paying special attention to adapt the content to this community audience. The modules included:

- climate change globally;
- climate change and its influence in the Amazon region;
- introduction to environmental/ecosystem services;
- the role of environmental services in the Amazon region and in the state of Acre;
- how payments for ecosystem services works;
- what the carbon market is and how it works;
- what REDD is;
- how to design PES (specifically REDD) projects;
- public policy around REDD, focusing on the Acre government's plan;
- the MAP region and its strategic place in REDD schemes;
- PES case studies from Latin America;
- field component on how to measure tree carbon, and
- a PES community project clinic.

The course was followed by a 1 day public seminar co-sponsored by Forest Trends and the Secretariat of Environment in the State of Acre discussing the primary themes of the course with a wider audience comprised of scholars, government officials, NGOs, among others.

During the course, Forest Trends launched a community handbook in Portuguese about payments for environmental services entitled *Aprendendo sobre Serviços Ambientais* (*Learning about Ecosystem Services*) which served as the main course material. The 35-page handbook reviews climate change, the UNFCCC process, basic concepts on forests and ecosystem cycles, environmental services and respective payments schemes, carbon markets and REDD, and key steps in PES project development, all in a simple and direct language full of illustrations. It was designed as a reference guide for building upon the presentations and discussions at the course and was very well received by the participants.

Most responses in our evaluation survey were enthusiastically positive, such as:

"This course brought great clarification about the theme, before I had no knowledge related to PES," and "(the course) was a unique opportunity, the privilege to be here, with all of these people who have so much wealth and diversity of knowledge."

We also received direct feedback from Mark Mitchell from USAID and Erick Fernandes from the World Bank, reinforcing that the course fulfilled its primary objective of increasing the knowledge of community leaders about PES and REDD schemes in particular. These leaders are now better positioned to represent their communities' interests and concerns in discussion forums about PES and REDD, explain the basic concepts to their constituencies, and contemplate the viability of developing a PES/REDD project with their communities. For more information, as well as presentations, please see: http://www.katoombagroup.org/~katoomba/event_details.php?id=33.

Ghana Katoomba Group Meeting (October 2009)

The West Africa (and looking forward to Central Africa) Katoomba Meeting is at an advanced planning stage. The Introduction and current draft agenda for both the Public Meeting (6-7 October 2009), to be held in Accra, and the Private Meeting (8-10 October), to be held in Elmina, can be found in Annexes. Confirmed keynote speakers include Lucio Pedroni (Carbon Decisions), Dr Ken Norris (Reading University) and Sachin Kapila (Shell).

The program will cover a wide range of emerging PES options for the region, including:

- the various aspects of REDD+, including MRV, social and legal issues;
- the potential of soil carbon, including biochar;
- assessment of wider terrestrial carbon options for the region;
- the importance of carbon for tree crops like cocoa;
- biodiversity offsets;
- the linkage between biodiversity and REDD;
- hydrological benefits of West Africa's forests and how to pay for them;
- coastal and marine PES potential, especially around the planned oil exploration off the Southwest coast of Ghana:
- charcoal and energy; and
- the potential to move towards a more integrated or landscape approach to carbon.

There will be field trips to potential coastal PES sites as well as to one of the main deforestation frontiers where there is high potential for 'cocoa carbon' finance.

We believe that the REDD+ discussions will be very important for the regional representatives who will attend the UNFCCC Meeting at Copenhagen to gain a sound understanding of key issues, such as REDD architectural options.

There will also be several Central African or Congo Region participants, including government representatives, and presentations on the Congo Region. This meeting will provide the basis for developing a network and early consultations on the 2010 roundtables in the Congo Region.

A strong but informal regional network has already been formed in the process of planning the Katoomba Meeting. Key members of the informal network include:

- *in Ghana*: the Nature Conservation Research Centre (NCRC); Conservation International, Kuapa Kokoo Farmers Union; Cocoa Abrapoba; the Cocoa Board; the IITA Sustainable Tree Crops Program (STCP); Forestry Commission Climate Change Unit and Wildlife Division; Civic Response; Tropenbos; the IDL Group; and Arborcarb, a carbon project developer
- *in Liberia*: Conservation International; the National Forestry Authority; Fauna & Flora International and the REDD Secretariat

Other strong institutional relationships are developing through regular interaction with Sierra Leone and Nigeria.

Also informing the meeting will be the findings from a "REDD Opportunities Scoping Exercise" (ROSE) that has been undertaken in Ghana to identify high priority REDD project types, and assess policy, legal and institutional constraints to developing REDD projects. In addition, work has been undertaken by a two person in-country team (Yaw Osafo, a lawyer who attends the UNFCCC meetings as a representative of Ghana, and Rebecca Asare of Forest Trends/NCRC) to assess key legal and institutional issues for

REDD. This work will provide the basis for two legal/policy briefing notes to be distributed at the Katoomba Meeting.

Finally, in preparation for the next Katoomba Group meeting, representatives from the host organizations of the Southeast Asian Katoomba Group planning committee will be participating in the Ghana Meeting.

South East Asia Katoomba Group Meeting (March 2010)

Planning for a March 2010 Southeast Asian Katoomba Group Meeting has started, and will be co-hosted by the Government of Vietnam's Ministry of Agriculture and Rural Development (MARD), Ministry of Natural Resources and Environment (MONRE) and the Asia Regional Biodiversity Conservation Project (ARBCP). The meeting will have a cross-cutting theme of "payment structure and benefits sharing" and focus on issues such as:

- *REDD readiness strategies* including post-COP15 discussions on national-level REDD systems, international, regional and national experience, investor and other stakeholder engagement, pilot demonstration sites, capacity building / training needs, and research agendas
- Payment for Watershed Services schemes throughout the region, by exploring current projects and experience from around the world where PWS agreements are operational
- Payment for Marine Ecosystem Services throughout the region, by exploring how climate change adaptation strategies can be complemented by mitigation measures and revenues from carbon credits as well as identifying buyers for a range of marine ecosystem services

Meeting participants will include the full range of actors interested in markets and payments for ecosystem services, including the private sector, financial institutions, forest dependent communities, government agencies, NGOs (potential buyers, sellers, and intermediaries), donors, and other stakeholders from the Southeast Asian region and the rest of the world. The geographic scope will likely be the Mekong countries, Indonesia, Malaysia, Papua New Guinea, and the Philippines.

COLLABORATING WITH USAID TO OFFER ENRM/CLIMATE, FORESTS, AND PES TRAINING

From May 4-8, 2009, USAID offered an Environment and Natural Resources Management overview course for USAID staff in the Africa region, in Pretoria, South Africa. Following this training session, a 3-day PES, Forests, and Climate Change in-depth training module was offered from May 11-13. The materials and presentations for this module were developed by CIFOR (www.cifor.cgiar.org), ICRAF (http://www.worldagroforestry.org), Forest Trends and the Katoomba Group (www.forest-trends.org and www.katoombagroup.org).

The training provided participants with a solid understanding of forests, climate change, and environmental markets / payments for ecosystem services. It offered USAID and its partners an opportunity to learn from experts within a small setting on topics that included:

- forests, climate change, and adaptation as well as economic services of ecosystems
- emergence and growth of environmental markets and payments for ecosystem services
- carbon markets and payments for ecosystem services (including reduce emissions from deforestation and forest degradation (REDD), afforestation/reforestation (A/R) clean development mechanism (CDM), carbon accounting, etc.)
- water and biodiversity payments for ecosystem services
- guidelines for assessing opportunities and risks associated with engagement with these marketmechanisms—particularly given broader biodiversity and poverty alleviation objectives

For more information, please see conference agenda and reading lists in the annexes.

CONDUCTING A WORKSHOP ON BIODIVERSITY OFFSET POLICY OPPORTUNITIES ACROSS MULTIPLE COUNTRIES AT THE BUSINESS AND BIODIVERSTIY OFFSET PROGRAM (BBOP) ANNUAL PROGRAM MEETING

BBOP, in cooperation with its partner the Wildlife Conservation Society, intended to hold a two day policy workshop in February of 2009 in Antanavarivo, Madagascar to explore the potential role of biodiversity offsets in Madagascar. The workshop coincided with civil unrest and had to be scaled down to a half day session. Ray Victurine, Conservation Finance Director at WCS and BBOP Secretariat partner, was joined as a speaker by Kerry ten Kate, BBOP Director; Lisa Gaylord, head of WCS in Madagascar; and Pierre Berner, Head of Environment for the Ambatovy Project in Madagascar - a BBOP pilot project. Twenty-five representatives took part in a conversation on incorporating biodiversity offsets into the 'Madagascar Action Plan': a blueprint for national direction, commitments and priorities for sustainable development in 2007-2012. A subsequent meeting with the General Secretary of the Ministry of Environment encouraged BBOP to explore biodiversity offsets with the Government of Madagascar.

While there was strong mutual desire by the Ministry of Environment and the BBOP Secretariat to hold a follow-up meeting on biodiversity offsets policy, persisting political turbulence has made continued progress on policy work impossible for the foreseeable future. However, this setback resulted in a unique opportunity for BBOP to hold significant policy dialogues between the BBOP Advisory Committee and a group of policy makers from a number of countries that appear to offer promising policy development opportunities for BBOP. These discussions took place at the BBOP7 Program Meeting in Paris, in June 2009. The previously un-represented developing country stakeholders participated in a three-day strategy conference around biodiversity offsets. Participants included representatives from the governments of Ghana, South Africa, Peru, Mexico, Brazil, Malaysia and Mongolia.

BBOP's three day meeting in Paris opened with a policy panel discussion. Presenters from Ghana, South Africa, Peru, Brazil, and Germany shared their reflections on the current status and potential for aggregated offsets and conservation banking policy in their respective countries.

- Nana Kofi Adunsiah with the Ghana Forestry Service noted Ghana's great potential for biodiversity offsets in the oil & gas, mining, and rubber sectors. He articulated a national goal for offset frameworks to be embedded into existing EIA permitting processes. Nana also identified strategic land use planning and the development of conservation priorities as important policy actions for biodiversity offsets success in Ghana.
- Jeff Manuel from the South African National Biodiversity Institute (SANBI) explained the *ad hoc* nature of biodiversity offsets in the region. Efforts to draft offset guidelines, implement wetland mitigation banking, and investigate trust fund models for property management indicate that South Africa is beginning to build a national-level approach for biodiversity offsets. The biggest roadblocks to a national offsets framework in South Africa are: lack of political buy-in, resource constraints, limited pilot experience, and questions of legal interpretation.
- Former head of the Peruvian Environmental Management Authority, Carlos Loret de Mola, asserted that biodiversity offsets will be crucial to simultaneously managing conservation and development in Peru. He identified political challenges in balancing voluntary and regulatory markets and cited inconsistent property rights, complicated licensing practices, and local concerns as key factors in future offset discussion.
- Representatives Daniela Lerda and Denis Daleva Costa from the Brazilian Biodiversity Fund (FUNBIO) and the Brazilian state of Goiás explained that the relative autonomy of Brazilian states and the consequent patchwork of laws have left industry looking for simpler, clearer guidance on offset design and regulations.

Marianne Darbi from the Leibniz Institute in Dresden concluded the panel by offering a
perspective on German biodiversity offsets. In Germany impact regulation laws are strong within
the Federal Nature Conservation Act, however, compensation measures and quality standards are
not integrated into planning or monitoring on the national level.

Following the morning panel, the focus remained on country-level policy. One issue explored was whether policy makers can use offset aggregation as a conservation development and planning tool. The first presentation covered a scoping study on aggregated offsets. Aggregated offsets were reported to be particularly suitable as a conservation tool when multiple developers in one region are subject to the same performance standards or when national legislative frameworks incorporate reliable biodiversity plans. Feedback from participants suggests that the most deciding factors in effectiveness of national aggregated offsets policy are:

- Government interest/ awareness
- Flexibility in legal frameworks
- Strength of national conservation planning

During discussion the Advisory Group agreed that it was difficult to approach aggregated offsets with a low level of understanding among policy makers. There was consensus that BBOP can potentially fill two separate roles with regard to aggregated offsets 1) advising government, and 2) developing credible standards and criteria. Participants expressed that BBOP's work on aggregated offsets or conservation banking in the next phase should promote enabling policy frameworks with the input of our business partners. This may best be approached by an exploratory analysis of opportunities in key countries or regions.

A final session on biodiversity offset policy identified potential national level interventions and partnerships for BBOP Phase II. Opportunities in Brazil to advance environmental markets and conservation incentives were reviewed. The strategic benefits of country-level interventions in Uganda, Australia, and Mongolia were also presented and considered. A description of Peru's promise and suitability for a national BBOP partnership followed, including mention of upcoming mining conventions and workshops to showcase current pilots. In addition, participants were informed of Indonesia's current push to draft a compensatory mitigation regulation, South Africa's initiative to create a biodiversity offset framework, and Japan's desire for offset education. Participants reminded the BBOP Secretariat not to overlook the interest and capacity of European partners.

With record attendance BBOP received very positive feedback from the June 2009 meeting. A major outcome from the meeting was the design and approval of a BBOP Phase II work plan for 2009-2011. This plan includes an ambitious policy work stream and the establishment of a policy working group to help in implementation. BBOP is now defining its policy goals for its next three year phase of work. Follow up meetings and workshops to discuss specific ways BBOP can contribute to national and regional level policies to support biodiversity offsets are being planned in Ghana, South Africa, Malaysia, Peru and Mongolia in the next 6 months. Country policy partnerships are already underway with Brazil and the Netherlands.

ANNEX 1: ORGANIZATIONAL BACKGROUND

Forest Trends has 10 years of experience working to promote sustainable forest management and conservation. Forest Trends focuses its activities in three areas: accelerating the development of markets for forest ecosystem services; expanding markets and investments that encourage forest conservation; and promoting markets that improve livelihoods of forest communities. In addition to its core initiatives, Forest Trends has created and launched a set of pioneering initiatives—including Katoomba Group, Ecosystem Marketplace, Ecoagriculture Partners, and Rights & Resources Initiative – focused on these objectives. The Forest Trends network is extensive and includes leaders from the forest industry, environmental groups, finance, donors, and community conservation.

Katoomba Group, a member of the Forest Trends family of initiatives, is a global network of practitioners working to promote the use and improve capacity for developing ecosystem services payments. It seeks to achieve this goal through strategic partnerships for analysis, information-sharing, investment, market services and policy advocacy. The Katoomba Group includes over 180 experts and practitioners from around the world, representing a unique range of experience in business finance, policy, research and advocacy. It has held 10 major global conferences since 1999, published and contributed to a number of publications, and supported the development of a range of new PES schemes including the BioCarbon Fund at the World Bank and the Mexican Payment for Hydrological Services Program. The Katoomba Group has also advised national policy discussions on financial incentives for conservation in numerous countries including China, Brazil, India, and Colombia.

Ecosystem Marketplace, a member of the Forest Trends family of initiatives, has since 2005 served as a leading source of information on environmental markets and payment schemes for ecosystem services. Ecosystem Marketplace's publicly available information currently serves over 35,000 unique viewers. Information sources include annual reports, quantitative market tracking, weekly articles, daily news, and newsletters designed for different payments for environmental services stakeholders. EM strives to provide solid and trustworthy information on prices, regulation, science, and other market- relevant issues in order to help markets for ecosystem services become a fundamental part of our economic and environmental systems.

Executive Summary

I. Introduction

- A. Definition of Water Markets: What we mean when we use the term.
- B. What this report will cover: Focus of this report is on the use of market-mechanisms in the context of water quality and quantity (as it relates to quality).
- C. What this report will not cover: This report will not focus on the
 - i. issues and laws related to water rights or the reallocation of specific water rights
 - ii. storm water fees?
- D. Why Focus on Water Markets?
 - i. To better understand the role of market (market theory) mechanisms as innovative and effective tools for conservation of water resources.
 - ii. To quantify the tools that are being used to address real-life water quantity and quality issues and if possible help separate the fact from fiction regarding the potential for markets and market-mechanisms to become a more robust tool for conservation of water resources especially as it relates to the looming global water crisis.
 - iii. To disseminate information and further promote innovation in this emerging field.

II. The Taxonomy of Water Markets: Deconstructing and Categorizing Market-Mechanisms and Activities in the Context of PES/PWS

- A. The Continuum of Activities
 - i. Compliant Activity: cite WRIs recent research and EPA's tools around water quality trading. Do a status check on the progress of the tools, cite challenges, highlight opportunities
 - ii. Voluntary Activity: Describe what constitutes a voluntary activity, give examples; discuss the supply/demand challenges in the voluntary space; highlight opportunities such as:
 - 1. The Chesapeake Fund, the Willamette Partnership and other similar voluntary initiatives.
 - 2. Corporate Sustainability Measures, Water Footprinting and Related Actions: Neutrality, Conservation, Purchase of Offsets. Highlight leaders: Coca Cola, MillerCoors, Others (in text boxes).
 - iii. Government-mediated or third-party Activity: Describe activities in this category and their relevance/scope/size on the continuum.
- B. Lessons Learned from other environmental markets:
 - iv. Carbon Markets (including offsets)
 - v. Biodiversity Markets (mitigation and offsets)
 - vi. Green Building (LEED certification)
 - vii. Other green products such as organics.

III. Methodology for Identifying and Collecting Data:

- A. Methodology for Collecting Data
- B. Information Template
 - 1. General Information
 - i. Project name/location/brief description
 - ii. Contact information/website
 - iii. Project cycle (begin/end date)
 - 2. Quantitative Information (MarketWatch Data)
 - i. Total dollars transacted/exchanged
 - ii. Number of credits transacted/price per credit/lifecycle of credit
 - iii. Total area affected
 - iv. Environmental impact (i.e., # of pounds reduced)
 - v. Notable changes over time (if program is mature enough)
 - vi. Other

IV. Water Markets by the Numbers: Totals/Summary

Part One: Regulated Activity: Water Quality Trading

- A. General Information
 - i. Project name/location/brief description
 - ii. Contact information/website
 - iii. Project cycle (begin/end date)
- B. Quantitative Information (MarketWatch Data)
 - i. Total dollars transacted/exchanged
 - ii. Number of credits transacted/price per credit/lifecycle of credit
 - iii. Total area affected
 - iv. Environmental impact (i.e., # of pounds reduced)
 - v. Notable changes over time (if program is mature enough)
- C. Key Issues

Part Two: Voluntary Activity: Payment for Watershed Services

- A. General Information
 - i. Definition of PES and the use of wide-reaching term (along the lines of Silver Bullet IIED)
 - ii. Project name/location/brief description
 - iii. Contact information/website
 - iv. Project cycle (begin/end date)
 - v. Total dollars transacted/exchanges
 - vi. Architecture of funding (how are funds generated, which schemes generate funds).
 - vii. Total area affected
 - viii. Environmental Impact
- B. Key Issues
- C. Spotlight on corporate involvement (who's involved, who's leading, what's next?)
- D. Spotlight third sector initiatives (NGOs socially responsible investors and social entrepreneurs)

Part Three: Government Mediated Payment Programs

- A. Overview of Programs by Agency
- B. Key Issues and Trends

VII. Analysis of Overall Market Data

- A. Potential growth in the market based on current data (2,5,10 years out)
- B. Qualitative assessment of current market situation

VIII. What's Next in Water Markets

- A. Marine Markets
- B. Increased Role for the Private Sector?
- C. Hot Spots Around the Globe:
 - 1. North America (Ohio River Basin, Gulf of Mexico, Puget Sound, Everglades, Great Lakes)
 - 2. Central and South America
 - 3. China
 - 4. Europe
 - 5. Australia
 - 6. Africa/South AfriÊ

ANNEX 3: KATOOMBA GROUP BRAZIL MEETING RESULTS -- CUIABÁ DECLARATION

During April 1-4 2009, 1,400 people – including Governors of five states in the Brazilian Amazon, the Governor of the Department of Loreto in Peru, the Governor of the Department of Santa Cruz in Bolivia, State and municipal legislators, mayors, representatives of Brazilian government agencies, business leaders, rural producers, indigenous peoples, local communities, traditional populations, family farmers, scholars, social movements, and non-governmental organizations, among others – gathered in Cuiabá and participated in the XIV Katoomba Meeting to discuss proposals and experiences related to the reduction of deforestation through payments for environmental services. The institutions signing this declaration arrived at a consensus on the positions and recommendations listed below.

Considering that:

- climate change has been proven to represent a grave threat to the environment, society and the economy, and that forests play a key role in climate stabilization and provision of environmental services;
- Brazil has been a key protagonist in the international negotiations over climate change;
- the Fifteenth Conference of the Parties (CoP15) in Copenhagen is approaching and this
- CoP should define the conditions for the negotiations on Reduced Emissions from
- Deforestation and Forest Degradation in the Climate Convention;
- this theme is of special national interest to Brazil;
- the targets for reduced deforestation set forth by Brazil and the creation of the Amazon Fund represent a historic milestone in the contexts of national and international environmental policy;
- the responsibility of the Federal Government to prevent and confront deforestation is shared with the States, as stated in the Law for the Management of Public Forests (*Lei de Gestão de Florestas Públicas*);
- the amount of funds necessary to support the targets for reduced deforestation exceeds the current expectations for fundraising within the Amazon Fund;

The institutional and individual signatories of this letter present the following recommendations on the theme of climate change and forests:

- 1. The elaboration of Brazil's national position should be the result of an agile process, yet one that is open, participatory and transparent, through dialog with the interested stakeholders;
- 2. The targets for reduced deforestation should be shared between the federal government and each state in the Brazilian Amazon, in the context of the State Plans for Prevention and Control of Deforestation;
- 3. The legal and financial instruments established for implementing the targets should recognize and guarantee the rights, and compensate in a just and equitable manner the efforts by the agents indigenous peoples, local communities, traditional peoples, family farmers, rural producers and entrepreneurs in forestry, agriculture and ranching, among others who are the stewards of environmental services that benefit national and global societies, through their practices of conservation, restoration, and sustainable use of forests.
- 4. Including recognition of innovative initiatives in local and sub-national projects that contribute in a measurable and transparent way to the fulfillment of the national and state targets;
- 5. The national strategy for raising funds for compensation of emission reduction from deforestation and forest degradation, in the context of the Amazon Fund, should be complemented by other financing mechanisms based on market instruments (voluntary or compliance based) that promote economic incentives for changing the behavior of private actors;
- 5. These funds should be in addition to regular public budgets.

At this time, we reaffirm our support of the government for the implementation of the initiatives proposed herein.

Cuiabá, April 5th, 2009.

ANNEX 4: WEST AFRICA KATOOMBA MEETING (OCTOBER 2009)

The Katoomba Group is an international network working to promote and improve capacity related to markets and payments for ecosystem services (PES). The mission of the Katoomba Group is threefold: to identify and respond to gaps in PES theory and practice; share intelligence about new developments related to PES markets; and address key PES challenges, such as mobilization of private sector buyers and enabling progress on legal, policy and institutional frameworks.

Although there have been three Katoomba Group meetings in Africa - Uganda (2005), South Africa (2006) and Tanzania (2008) - this will be the first in West Africa. It is timely in that PES interest in the region is fast increasing while the region's forests are under immense threat. In the past 15 years West Africa has lost 1.4 million hectares or 26 percent of primary 'old growth' forest, leaving about 1.5% of the area under primary forest cover, and the rate of deforestation has significantly increased since the 1990s. Alternative solutions to traditional approaches are therefore urgently needed.

Thus Ghana, Liberia and Cameroon have initial funding from the World Bank's Forest Carbon Partnership Facility (FCPF) to submit national 'Readiness Preparation Plans' (R-PPs) for Reduced Emissions from Deforestation and forest Degradation (REDD); there are some emerging private sector initiatives to develop 'forest carbon' credits; and a 'biodiversity offset' project in Ghana, in which a mining company is aiming to offset its environmental and social footprint, is at the planning stage. These early developments are encouraging, but there is an enormous need for information and capacity building in order to develop these new opportunities. The main themes of this Katoomba Meeting are set out below.

REDD

The Meeting will focus on key challenges for the planning and development of national REDD strategies. These include, for example:

- understanding what REDD might mean in different national contexts;
- how to create economic incentives for local stakeholders;
- how to combine 'sub-national' REDD projects with national level accounting;
- the challenge of 'pro-poor REDD' including benefit sharing mechanisms;
- development of Monitoring, Reporting and Verification (MRV) systems.

This meeting is also timely in terms of helping country representatives fine tune their positions on REDD issues prior to the watershed meeting of the UN Framework Convention on Climate Change (UNFCCC) in Copenhagen in December 2009, at which it is hoped there will be a political agreement on the basic architecture of REDD in a post-Kyoto regime.

SOIL CARBON AND OTHER TERRESTRIAL CARBON OPTIONS

Most attention, as regards climate change mitigation, has so far has been on forests. But there is increasing impetus to discuss soil carbon as part of a 'Beyond REDD' package at Copenhagen. The storage or sequestration of carbon through soil conserving agricultural practices could also have major poverty reduction benefits for Africa. Among ideas being floated is an 'African Food Security Carbon Fund' based on soil carbon. At this meeting world experts will discuss the potential and challenges of soil carbon for Africa. Another very important agricultural issue is carbon finance for tree crops. For example, cocoa farming is a key driver of deforestation in Ghana, but presents an opportunity to use carbon finance to promote a sustainable agroforestry system – the potential and challenges for realizing this opportunity will also be a key discussion point at the meeting.

PAYMENTS FOR BIODIVERSITY

The continuing erosion of West Africa's forests is putting pressure on the region's rich biodiversity. Home to more than a quarter of Africa's mammals, including lowland gorillas and chimpanzees, and more than 1,800 endemic species of plants, West Africa has been named one of the world's 34 biodiversity hotspots by Conservation International (CI). While 17 percent of the region's forests are technically under some form of protection, CI notes that only 3 percent of the area is conserved for biodiversity purposes. This means there is a great urgency to develop PES experiences and capacity in the region. In this meeting we will particularly explore the potential for biodiversity

offsets, drawing on regional and international experience, and examine the linkages between biodiversity and REDD in the context of the Makira Project, Madagascar.

MARINE, COASTAL AND HYDROLOGICAL SERVICES

Another key area is marine and coastal ecosystem services. Most countries in the region share the Guinea coast, and there is an urgent need to incentivize the protection of wetlands and mangrove systems (such as the Amanzuri wetlands in Ghana and the Marshall wetlands in Liberia). These ecosystems buffer storm surges, provide critical habitats, harbor significant carbon stocks, and play a major role in the formation and export of 'dissolved organic matter' to the ocean. Also, in southwest Ghana, the planned exploitation of off-shore oil reserves threatens the richest biodiversity pool in the country, not to mention the significant carbon and tourism values. This meeting will discuss the potential and challenges to developing PES options for marine and coastal ecosystem services, as well as consider the broader hydrological functions of West Africa's forests, and how they could lead to payments to forest managers.

OUTCOMES

Based on discussions of these themes, key outcomes of this Katoomba Meeting will include:

- Guidance for negotiating teams and civil society going to Copenhagen;
- Discussion of REDD options for Central Africa and agreement on key issues for a proposed Katoomba Group meeting in the Congo Region in 2010;
- Increased collaboration among Katoomba Group members on critical ecosystem challenges in West Africa;
- Refining the agenda of the Katoomba Group and the 'Katoomba Ecosystem Services Incubator' in the region over the next five years.

DRAFT AGENDA

TUESDAY, October 6th: REDD and Other Terrrestrial Carbon Options

8:00–9:00am **Registration**

9:00–10:30am Inauguration and Welcome Addresses

Master of Ceremonies: Jonathan Allotey, Environment Protection Agency

- President John Atta Mills, Ghana, (tbc)
- Hon. Alhaji Collins Dauda, Minister of Lands and Natural Resources, Ghana
- Hon. Sherry Ayittey, Minister of Environment, Technology and Science, Ghana
- Michael Jenkins, Forest Trends

10:30-11:00am **Coffee break**

11:00–12:30pm **Keynote Presentations**

Moderator: Kyeretwie Opoku, Civic Response

- Kofi Annan, Africa Progress Panel, (tbc): "Agriculture, Climate and Carbon"
- Lucio Pedroni, Carbon Decisions: "Forests, Climate and Carbon"
- Ken Norris, University of Reading: "Exploring the Potential for 'Cocoa Carbon' in Ghana" Discussion

12:30–1:30pm **Lunch**

1:30–3:15pm REDD: Evolving Architecture and First Steps in West and Central Africa

Moderator: Atta Alhassan, CEO, Forestry Commission, Ghana

- Charlotte Streck, Climate Focus: "National REDD Architecture Options"
- Andre Aquino, World Bank and Josep Gari, UN REDD Programme, UNDP: "The Status of REDD Readiness in Africa"
- Alain Karsenty, CIRAD-FORET: Key REDD Issues in the Congo Basin Discussion

3:15 – 3:45pm **Tea break**

3:45 – 5:30pm Beyond REDD: Capturing the Full Range of Terrestrial Carbon Options

Moderator: David Tepper, Forest Trends

- Akim Adesina, Alliance for a Green Revolution in Africa, (tbc): "The Potential for Soil Carbon in West Africa"
- Bernard Mercer, Forests Philanthropy Action Network (FPAN): "Terrestrial Carbon: Lessons from FPAN's African Project"
- Peter Minang, World Agroforestry Centre: "The Africa BioCarbon Initiative"
- Phil Covell, Forest Trends and Edward Yeboah, Soil Research Institute: "Biochar Prospects for Africa."

Discussion

6:30 – 7:30pm Reception by the Katoomba Ecosystem Services Incubator and NCRC

WEDNESDAY, October 7th: Beyond Carbon (Morning Session)

8:30–9:00am Welcome and Recap on Day 1: George Wamukoya, COMESA

9:00–10:45am **Paying for Biodiversity – Emerging Opportunities**

Moderator: Nana Kofi Adu-Nsiah, Wildlife Division, Forestry Commission,

- Kerry ten Kate, Business and Biodiversity Offset Program: "Biodiversity Offsets and Extractive Industries Early Experiences in Africa"
- Abdulai Barrie, Bumbuna Hydro Electric Project, Sierra Leone. "Hydroelectricity and Biodiversity Off-setting – case from Sierra Leone."
- Christopher Holmes, Wildlife Conservation Society, Madagascar, "Linkages between Biodiversity and REDD: the Makira Project"

Discussion

10:45-11:15am Coffee break

11:15–1:00pm Payments for Marine, Coastal and Hydrological Services

Moderator: Prof. Chris Gordon, Africa Wetlands Centre, University of Ghana

- Tundi Agardy, Forest Trends: "International Experience Marine PES"
- Gordon Ajonina, Cameroon Mangrove Network: "PES for Mangroves and Wetlands"
- Yadvinder Malhi, Oxford University: "Water, Weather and West Africa's Forests"

Discussion

1:00-2:00pm **Lunch**

2:00–4:00pm Breakout Groups on REDD and Tree Crops

1. Pro-Poor REDD – How can we do it?

Facilitator: Phil Franks, CARE Denmark

- Kyeretwie Opoku, Civic Response: "Regional Challenges and Opportunities for Pro-poor REDD"
- Chris Neyor, Office to the President, Liberia and Kendrick Johnson, Forestry Development Authority, Liberia: "Legal and Institutional Aspects of Pro-Poor REDD"
- Mark Ellis-Jones, CARE Denmark: "Towards Equitable REDD Contracts and Benefit Sharing Mechanisms"

Discussion

2. REDD Measurement, Verification and Methodologies

Facilitator: Fredua Agyeman, Technical Director (Forestry), Ministry of Lands and Natural Resources, Ghana

- Yadvinder Malhi, University of Oxford: "Developing a Carbon Map for Ghana"
- Johannes Eberling: "The Challenge of Accounting for Forest Degradation"
- Mariano Cenamo, IDESAM: "Lessons from the Juma Project, Brazil"

Discussion

3. Tree Crops: Linking REDD with Farmers and Tree Planting

Facilitator: Frank Hicks, Biological Capital

- Jim Gockowski, Sustainable Tree Crops Program (STCP/IITA): "Cocoa Carbon Potential and Challenges in West Africa"
- Paul C.K. Buah and Nicholas Adjei-Gyan, Kuapa Kokoo Farmers Union: "Cocoa Farmer Perspectives"
- Mike Packer, Arborcarb: "Carbon Project Developer Perspectives"

Discussion

3:00 pm Tea break: tea will be served at 3 pm at the Breakout Group sessions in order to allow continuity of discussions

4:00-5:00pm Panel and Plenary Discussion – What is the Future of PES in West Africa?

5:00–5:30pm Concluding Thoughts and Next Steps

7:30pm Final Dinner with Special Presentation by Amazonas Sustainable Foundation

(Fundação Amazonas Sustentável - FAS), Brazil:

Memorandum of Understanding: South-South Cooperation for a REDD Strategy: a Brazil-Mozambique Initiative for Zero Deforestation with Pan-African Relevance

THURSDAY, October 8th

Morning Travel to Elmina and check-in (about 2 hour drive)

12:00 - 1:00pm **Lunch**

1:00 – 2:45pm Charcoal and Energy Options

Moderator: Raphael Yeboah, Executive Director, Forestry Services Division, Forestry Commission, Government of Ghana

- Will Garrett, Camco: "East African Experience with Sustainable Charcoal and Carbon Finance"
- Victor Mombu and James Ohemeng, Nature Conservation Research Centre: "Community-based Regulation of Charcoal in Ghana's Transition Zone"
- Joel Strickland, Buchanan Renewable Energy Ltd: "Renewable Energy Options in Liberia" **Discussion**

2:45 – 3:15pm **Tea break**

3:15 – 5:00pm Towards an Integrated Landscape Approach to Land Use Based Emissions Reduction and Sequestration

Moderator: Odigha Odigha, Chairman, Cross Rivers State Forestry Commission, Nigeria

• Presenter, Global Mechanism of CCD, OR IFAD (tbc-SS): "Policy and Financial Mechanisms for Scaling up Climate Action in Agricultural Landscapes"

- Prof. David Wolfe or Prof. James Lassoie, Cornell University, OR Keith Shepherd, World Agroforestry Centre (tbc-SS): "Monitoring and Measuring Carbon at Landscape Scale"
- Sara Scherr, Ecoagriculture Partners: "Institutional Challenges for Engaging Smallholder Farmers and Pastoralists in Landscape-scale Carbon Initiatives"

Discussion

6:30 – 7:30pm **Dinner**

7:30 - 9:00pm

Oil and PES - On the Beach

Moderator: Chief Director, Ministry of Energy, Government of Ghana, (tbd-JM)

- Nana Kofi Adu-Nsiah, Director, Wildlife Division, Ghana and Tundi Agardy, Forest Trends "Potential Marine and Coastal PES Options in the Context of Ghana's West Coast Conservation Initiative"
- Tunde Morakinyo, Principal Consultant, Environmental Resource Management: "Lessons from Nigeria's Oil and Gas Experience"
- Hon. Samia Nkrumah, Member of Parliament, Jomoro Constituency: "Regional and Local Stakeholder Perspectives"

Discussion

FRIDAY, October 9th

Field trips

- 1. Coastal PES: West Coast Conservation Initiative: Amanzuri, Ankasa and Cape 3 Points
- 2. Cocoa Carbon/REDD: Cocoa Abrapopa Farmers Association and Kakum Forest Reserve

Evening

Discussion of field trips with a range of stakeholders, including traditional councils, regional and local government on the potential and challenges facing carbon and coastal PES projects

Wrap-up discussion of the meeting.

SATURDAY, October 10th

Local tourism: World Heritage Designated Castles in Cape Coast & Elmina; Kakum Forest Reserve, etc.

Side-event (by invitation only): venue and time to be determined

Consultative Roundtable on Agriculture Carbon Facility Feasibility Assessment (Rockefeller Foundation, Katoomba Group, Forest Trends, Climate Focus and Ecoagriculture Partners)

4:00-5:00 pm **Depart for Accra** (European flights leave between 9-12 pm)

ANNEX 5: STATE OF THE FOREST CARBON MARKETS - TABLE OF CONTENTS

- I. Executive Summary
- II. Introduction
 - A. Why this report
 - B. Brief context
 - a. Current state of deforestation
 - b. Policy overview
 - c. Economics
 - C. Markets for forest carbon on the edge of change
 - D. Scope of report
- III. Methodology
 - A. Data collection process
 - B. Key resources
- IV. Multi- market numbers & trends
 - A. Total transaction volumes & values
 - B. Total number of projects & hectares influenced
 - C. Geographical breakdown
 - D. Global breakdown of project types
 - E. Global breakdown of forest types
 - F. Overall deforestation pressures
- V. Kyoto Markets
 - A. General Introduction
 - i. Basic description
 - ii. Total volume numbers (WB State & Trends)
 - B. Forestry Overview
 - i. Forestry in context of flexibility mechanisms
 - ii. Total 2008 & 2009 forestry numbers
 - 1. Description of first validated project in 2008
 - a. Project type
 - b. Credits registered (sold?)
 - c. Price?
 - 2. Mid- year review for 2009
 - C. Policy context
 - i. Hurdles for forestry projects
 - ii. Review of approved CDM methodologies
 - D. Future outlook
- VI. New South Wales
 - A. General Introduction
 - i. Basic description
 - ii. Total volume numbers
 - B. Volumes & values
 - C. Project level specific data
 - i. Total hectares influenced
 - ii. Total carbon sequestered
 - iii. Growth of projects selling credits
 - iv. Active versus sold out projects
 - v. Project type breakdown
 - 1. A/R, REDD etc.
 - 2. Forest type

- 3. Native versus exotic species
- 4. Breakdown of crediting periods
- vi. Project location breakdown
 - 1. Geographical
 - 2. Land ownership
- vii. Analysis of deforestation drivers
- D. Forestry Specific Policy context
- E. Future outlook

VII. CCX

- A. Introduction
 - i. Overall description
 - ii. CCX overall numbers and prices
 - iii. Clarification of registered versus sold
- B. Quant analysis 2008
 - i. Volume of forestry projects registered 2004- 2008
 - ii. Project types registered
 - iii. Project location of registered projects
- C. Methodology review
- D. Future Outlook

VIII. OTC Voluntary Carbon Market

- A. Introduction
 - i. Overall description
 - ii. Overall transaction numbers
- B. Volume & Values
 - i. Total transaction numbers
 - 1. Credits transacted
 - 2. Credits retired
 - ii. Average prices
- C. Type of suppliers in the market
- D. Project level specific data
 - i. Total hectares influenced
 - ii. Total carbon sequestered
 - iii. Growth of projects selling credits
 - iv. Active versus sold out projects
 - v. Project type breakdown
 - 1. A/R, REDD etc.
 - 2. Forest type
 - 3. Native versus exotic species
 - 4. Breakdown of crediting periods
 - vi. Project location breakdown
 - 1. Geographical
 - 2. Land ownership
 - vii. Analysis of deforestation drivers
- E. Overview of Standards & Methodologies
- F. Future Outlook

BACKGROUND

The relevance of markets and payments for ecosystem services is expanding as these approaches become a global experiment in resource management and pollution reduction. These markets include the booming carbon markets, the emerging water markets, and scores of markets for biodiversity and other ecosystem services. For more information on markets and payments for ecosystem services, please also see:

- CIFOR's publications on climate change, adaptation, mitigation, REDD and payments for environmental services (http://www.cifor.cgiar.org/Publications)
- The Katoomba Group's Ecosystem Marketplace (www.ecosystemmarketplace.com)
- USAID's SANREM *Best Practices for Pro-Poor Payment for Ecosystem Services* page (http://www.oired.vt.edu/sanremcrsp/PES.php)

PRE-EVENT READING

Prior to the event, please read through:

- "Facing an uncertain future: How forests and people can adapt to climate change" By Bruno Locatelli, Markku Kanninen, Maria Brockhaus, Carol J. Pierce Colfer, Daniel Murdiyarso, Heru Santoso (http://www.cifor.cgiar.org/publications/pdf_files/Books/BLocatelli0801.pdf)
- "Moving ahead with REDD: Issues, options and implications" By Arild Angelsen (http://www.cifor.cgiar.org/publications/pdf_files/Books/BAngelsen0801.pdf)
- "Payments for Ecosystem Services: Market Profiles" By Forest Trends and Partners (http://ecosystemmarketplace.com/documents/acrobat/PES_Matrix_Profiles_PROFOR.pdf)
- "The State of Play: Payments for Ecosystem Services in East & Southern Africa" By Alice Ruhweza (http://ecosystemmarketplace.com/pages/article.opinion.php?component_id=5108&component_version_id=7498&language_id=12)
- "Mainstreaming Payments for Ecosystem Services in the Developing World" By Sissel Waage (http://ecosystemmarketplace.com/pages/article.opinion.php?component_id=4258&component_version_id=6446&language_id=12)

Please also look over the following two power point presentations from a past USAID event:

- "Introduction to Payments for Environmental Services" By Stefano Pagiola
 (http://www.oired.vt.edu/sanremcrsp/documents/PES.Sourcebook.Oct.2007/PolicySeminarPPTs/PagiolaInt roToPES.pps)
- "Payments for Environmental Services: Design Issues" By John Kerr and Rohit Jindal (http://www.oired.vt.edu/sanremcrsp/documents/PES.Sourcebook.Oct.2007/PolicySeminarPPTs/Kerr-JindalDesignIssuesI.pps#257,1,Payments for Environmental Services: Design Issues John Kerr and Rohit Jindal Michigan State University)

Finally, time-permitting, it would be ideal if you could glance through – online if feasible – the following materials:

- "Do Trees Grow on Money? The implications of deforestation research for policies to promote REDD" By Markku Kanninen, Daniel Murdiyarso, Frances Seymour, Arild Angelsen, Sven Wunder and Laura German (http://www.cifor.cgiar.org/publications/pdf files/Books/BKanninen0701.pdf)
- "Infobrief 14: Do Trees Grow on Money? The implications of deforestation research for policies to promote REDD" By Markku Kanninen, Daniel Murdiyarso, Frances Seymour, Arild Angelsen, Sven Wunder and Laura German (http://www.cifor.cgiar.org/publications/pdf files/Infobrief/014-infobrief.pdf)
- "Infobrief 15: What is the right scale for REDD? The implications of national, subnational and nested approaches" By Arild Angelsen, Charlotte Streck, Leo Peskett, Jessica Brown and Cecilia Luttrell (http://www.cifor.cgiar.org/publications/pdf_files/Infobrief/015-infobrief.pdf)
- "Infobrief 16: Measuring and monitoring forest degradation for REDD: Implications of country circumstances" By Daniel Murdiyarso, Margaret Skutsch, Manuel Guariguata, Markku Kanninen Cecilia Luttrell, Pita Verweij and Osvaldo Stella (http://www.cifor.cgiar.org/publications/pdf files/Infobrief/016-infobrief.pdf)

- "Infobrief 17: Financing REDD: Linking country needs and financing sources" By Michael Dutschke and Sheila Wertz-Kanounnikoff with Leo Peskett, Cecilia Luttrell, Charlotte Streck and Jessica Brown (http://www.cifor.cgiar.org/publications/pdf files/Infobrief/017-infobrief.pdf)
- "Infobrief 18: The role of REDD in stabilising greenhouse gas concentrations: Lessons from economic models" By Ruben N. Lubowski (http://www.cifor.cgiar.org/publications/pdf files/Infobrief/018-infobrief.pdf)
- "Infobrief 19: Adaptation at the interface of forest ecosystem goods and services and livestock production systems in Northern Mali" By Maria Brockhaus and Houria Djoudi (http://www.cifor.cgiar.org/publications/pdf files/Infobrief/019-infobrief.pdf)
- "Working Paper No. 39: Monitoring forest emissions: A review of methods" By Sheila Wertz-Kanounnikoff (http://www.cifor.cgiar.org/publications/pdf files/WPapers/WP40Wertz-Kanounnikoff.pdf)
- "Working Paper No. 40: Reducing forest emissions in the Amazon Basin: A review of drivers of land-use change and how payments for environmental services (PES) schemes can affect them" By Sheila Wertz-Kanounnikoff, Metta Kongphan-Apirak and Sven Wunder (http://www.cifor.cgiar.org/publications/pdf_files/WPapers/WP40Wertz-Kanounnikoff.pdf)
- "Working Paper No. 41: Reducing forest emissions in Southeast Asia: A review of drivers of land-use change and how payments for environmental services (PES) schemes can affect them" By Sheila Wertz-Kanounnikoff and Metta Kongphan-Apirak (http://www.cifor.cgiar.org/publications/pdf files/WPapers/WP41Wertz-Kanounnikoff.pdf)
 - "Working Paper No. 42: Estimating the costs of reducing forest emissions: A review of methods" By Sheila Wertz-Kanounnikoff (http://www.cifor.cgiar.org/publications/pdf files/WPapers/WP42Wertz-

Kanounnikoff.pdf)

Adaptation case studies & discussion

- "Payments for Ecosystem Services: Getting Started-A Primer" (2008) http://www.katoombagroup.org/documents/publications/GettingStarted.pdf
- "Negotiating for Nature's Services: A Primer for Seller's of Ecosystem Services on Identifying and Approaching Prospective Private Sector Buyers" (2007)

 (http://www.katoombagroup.org/documents/publications/NegotiatingforNature.pdf)
- "USAID PES Sourcebook" (2007) http://www.oired.vt.edu/sanremcrsp/menu research/PES.Sourcebook.Contents.php

AGENDA

Day 1 (May 11, 2009)

8:30-9:00	Registration & coffee/tea	
9:00-10:00	Welcome, introductions, workshop objectives and contents Erik Streed, USAID and Brent Swallow, ICRAF	
10:00-11:00	Forests and climate change overview, ICRAF This session will introduce how climate change relates to forest sector activities within a general framework of sustainable development.	
11:00-11:15	Break	
11:15-12:30	Forests and climate change adaptation – part 1, ICRAF Presentation and discussion on how forests provide adaptation benefits to the society and on how to better manage forests so they themselves are less vulnerable to climate change impacts.	
12:30-1:30	Lunch	
1:30-2:30	Forests and climate change adaptation – part 2, ICRAF	

2:30-3:30 Forest carbon accounting – part 1

What is carbon accounting and why it's needed? What are the levels of accuracy needed for different purposes, and what are associated costs, data needs, and methodologies?

3:30-3:45 Break

3:45-5:00 USAID forest carbon calculator

Erik Streed, USAID

A demonstration of USAID's new web-based forest carbon calculator and a chance for participants in small groups to enter real project data. Discussion of data needs and how to incorporate into USAID's programs.

5:00-5:30 Wrap-up of the Day 1

Brent Swallow, ICRAF

Day 2 (May 12, 2009)

8:30-9:00 Registration & coffee/tea

9:00-9:15 Re-cap of Day 1 & overview of Day 2

Brent Swallow, ICRAF

9:15-09:40 USAID's Perspective on Climate Change and Development

Duane Muller, USAID (25 minutes)

- Overview US Policy Approach to Climate Change
- Overview of USAID Global Climate Change Program

9:40-10:00 USAID's efforts in PES from a development perspective

Erik Streed, USAID (20 minutes)

10:00-10:15 Questions & Discussion (15 minutes)

10:15-10:30 Break

10:30-12:15 What are environmental markets and Payments for Ecosystem Services (PES)?

Why are they being established? What markets exist? Forest Trends

Erik Streed, USAID

- Rationale for a market-based approach
- Types of markets & payments
- Ecological areas of focus
- Geographic spread

12:15-12:30 Questions & Discussion (15 minutes)

12:30-1:30 Lunch

1:30-2:30 PES in East and Southern Africa: overview

Alice Ruhweza, East & Southern Africa Katoomba Group Coordinator (45 minutes)

Ouestions & Discussion (15 minutes)

2:30-3:30 PES in South Africa: case studies

Hugo Van Zyl, C.A.P.E. (45 minutes) **Questions & Discussion** (15 minutes)

3:30-4:00 Break

4:00-4:30 USAID/TIST: A PES/GCC case study

Erik Streed, USAID

4:30-5:15 What are the key questions to ask – and steps to undertake – in assessing whether or not to encourage project engagement with markets and PES?

Alice Ruhweza, East & Southern Africa Katoomba Group Coordinator (45 minutes)

Step 1: Identifying ecosystem service prospects & researching potential buyers

- Defining, measuring, and assessing the ecosystem services in a particular area
- Determining marketable value
- Identifying prospective buyers
- Considering whether to sell as individuals or as a group

Step 2: Assessing institutional & technical capacity

- Assessing legal, policy, and land ownership context
- Examining existing rules for PES markets and deals
- Surveying available PES-support services and organizations

Step 3: Structuring agreements

- Designing management and business plans
- Reducing transactions costs
- Reviewing options for payment types
- Selecting a contract type

Step 4: Implementing PES agreements

- Finalizing the PES management plan
- Implementing activities
- Verifying PES service delivery and benefits
- Monitoring and evaluating the deal

5:15-6:00 **Ouestions & Discussion**

6:00 Closing remarks & adjourn

Erik Streed, USAID

Day 3 (May 13, 2009)

8:30-9:00 Re-Cap of Day 2 & Overview of Day 3

9:00-10:30 Forest Carbon Accounting – part 2

This session will introduce IPCC guidelines for greenhouse gas inventories, and explain requirements for national and regional land use GHG inventories under the UNFCCC. There will be a related exercise/discussion.

10:30-10:45 Break

10:40-12:30 Carbon markets and finance

This session will introduce carbon markets relevant for forestry. It will introduce concepts like baseline, additionality, leakage, permanence, certification, verification, and co-benefits. A real life example will be used to show how these concepts are applied in the design of a specific project.

12:30-1:30 Lunch

1:30-3:00 Reducing Emissions from Deforestation and Degradation (REDD)

The presentation will provide an overview of the concept and its current status in negotiations. It will discuss remaining key issues and challenges (scope, baselines, finance, scale, accounting, cobenefits etc.) and options. It will also summarize the current major initiatives and regional trends. There will be a related exercise/discussion.

3:00-3:15 Break

3:15-4:30 Exercise on a framework of a REDD scheme

Design exercise on a national/sub-national REDD scheme. How do we apply what we have learned in this training in real or hypothetical situations and projects?

4:30-5:30 Final discussion, adjourn

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