



Report of the
Training Workshop on Payments for Ecosystem Services (PES) and
Reducing Emissions from Deforestation and Forest Degradation (REDD+)

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by

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1.0 INTRODUCTION

A Training Workshop on Payments for Ecosystem Services (PES) and Reducing Emissions from Deforestation and Forest Degradation (REDD+) was offered to 28 African participants including public policy makers, the private business community and non-governmental organisations (NGOs).

The objective of the workshop was to increase understanding of the opportunities associated with rewards or payments for ecosystem services (R/PES), highlighting its potential to create incentives for natural resource management. Can payments (or rewards) for ecosystem services (PES) create new incentives for sustainable land use management in Africa? Where are the opportunities? And what risks exist, for whom? How does the PES approach fit with on-going natural resource management approaches, including command and control, participatory mechanisms, and others? Specifically, the workshop sought to provide participants with:

- An introduction to PES and the related areas of Reducing Emissions from Deforestation and Degradation (REDD+);
- A discussion of policy, legal, and institutional supports that can enable, or prohibit, PES transactions at a national or sub-national level;
- An explanation of what PES and REDD+ both entail for all parties to an agreement;
- An overview of how PES can be most effectively designed and implemented, including:
 - Assessment of potential 'value' of ecosystem services;
 - Provision of cost estimates, as well as current 'pricing' and realistic revenues that on-the-ground land managers can expect;
 - Discussion of potential implementation risks,
 - Community involvement/participation in the formulation and implementation of PES, and
 - Consideration of key legal issues associated with agreements and contracts.
- A set of case studies from Africa, Asia and Latin America that illustrate key details of past transactions.

The two-day workshop was conducted as a series of presentations interspersed with long discussion sessions. The workshop sessions included: Introduction to PES, Implementation of PES, and Case Studies of PES. The report below is structured according to these sessions giving a summary of each presentation, the discussions that followed it and links to full presentations.

1.1 Opening session

The two-day training workshop began with a welcome message from Dr. Delia Catacutan of the World Agroforestry Centre and Dr. Michael Richards of Forest Trends. The workshop was officially opened by Mr. Kithinji Mutunga, Head of Soil and Water Management, at the Ministry of Agriculture, in Kenya. In his address, Mr. Mutunga narrated the history of environmental management in Kenya as progressing from harsh conservation measures during the colonial era, to a liberal approach after independence. Participatory management was adopted in the 1980s and a Presidential Commission was formed to engage in tree planting and environmental awareness. Rewarding communities for sustainably using the environment is being seen as a possibility of addressing challenges such as encroachment of rivers and wetlands for agriculture and settlement, which persist despite previous efforts.

Mr. Mutunga said that the concept of payments for environmental services (PES) "is aligned with Kenya's Vision 2030 objective of sustainable environmental management." He said Kenya's Vision 2030 strategy aims at turning the country into a middle income economy and "the creation of a just and cohesive society enjoying equitable social development in a clean and secure environment" is among its key social pillars.

2.0 INTRODUCTION TO PES AND REDD+: Implications for participating land managers. *Sara Namirembe*

PES is the provision of incentives or rewards to land managers for implementing practices that conserve or enhance a clearly defined natural or ecological benefit(s). The Millennium Assessment (2005) identified 32 kinds of environmental services but the key ones for PES are water, carbon and biodiversity environmental services. PES starts with the recognition of trade-offs entailed in sustainable management of the environment. This then enables communities to access funds that previously were not available to them, including private sector investment. PES involves a voluntary conditional agreement for beneficiaries to give incentives to providers for actions that supply an important, but threatened or scarce environmental service. REDD+ (Reduced Emissions from Deforestation and forest degradation) is a form of PES that seeks to reward governments, companies or forest owners in developing nations for keeping tropical forests instead of cutting them down. It focuses on saving forests to mitigate carbon dioxide (CO₂) emissions. A key PES concept is the demonstration of additionality compared to a business as usual baseline. Other concepts which apply mostly to carbon projects are leakage (Risk of ecosystem destruction resulting from project implementation) and permanence (or sustained positive effects).

Payments could be upfront or periodic, group or individual, for a single ES or bundled ES, in form of cash or in-kind. There are different types of PES schemes, including public schemes, private schemes, use-restriction schemes and asset building schemes.

PES can enhance efficiency and sustainability of existing natural resource management approaches, but it entails a number of challenges, the biggest of which is getting buyers. Other challenges include the high transaction costs in involving the participation of small holder stakeholders, uneven power relations, and the need for new skills and institutions to make it happen.

Discussion

1. *The PES challenges are many. Does PES provide enough opportunities to make it worthwhile?*

Costs may be high, but should also be viewed from the perspective of costs of doing nothing. PES is not a replacement, but an addition to existing approaches in natural resource management. Given its recognition of local costs incurred for public gain, PES is a tool that can achieve fair sharing of responsibilities among stakeholders in collective management of natural resources. The edge of attaching conditionality to the transfer of rewards and incentives also has the potential to cause change in actions and behaviours, ensuring continued supply of ES.

2. *How affordable or cost-effective is a PES approach compared to other approaches?*

PES is not 'less-costly' or cheap as such, but the costs of implementation can be a shared responsibility. PES also opens up opportunities for new partnerships with the business sector.

3. *How can PES fit in existing participatory water resource use structures in Tanzania? Might it not create perverse incentive?*

The structure of participatory water management in Tanzania is similar to that in Kenya and Uganda. PES does have the potential to enhance the objectives of participatory water resource management as will be demonstrated in a presentation on institutional implications of PES based on the Sasumua catchment in Kenya.

4. *Is a baseline demonstrating threat always necessary for PES to happen – how about the risk of perverse incentive? How can baselines be developed realistically?*

In some cases PES has occurred without a baseline, e.g., in Mexico. Ideally a baseline enables proof or demonstration that a PES mechanism is creating a positive change that would not have been otherwise achieved. It creates confidence that the agreements developed are achieving the purpose of delivering ES. However, the

difficulty of developing baselines sometimes tends to be a key barrier to the development of PES. Understanding drivers and agents is important to generate baselines, assess leakage risks and design projects. Forest Trends which focuses on capacity building to support community based PES programs, is looking at development of a regional baseline, which can be used by individual projects.

See presentation: <http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1582>

3.0 PES IMPLEMENTATION

3.1 Guide to structuring a PES project. *Michael Richards*

Before embarking on a PES project, it is important to assess the possible trend for environmental services with and without project interventions. Skills and experience required in PES include negotiation, contract development, working with communities, monitoring and evaluation. Skills can be acquired by project proponents or sourced by paying consultants, or by training local people. In a prototype study in Morogoro, Tanzania, working with local communities to monitor carbon was up to 60% cheaper than hiring contractors.

The steps below for structuring a carbon PES project were presented.

- Identify potential ecosystem buyers, marketable value and supply potential
- Assess technical and institutional capacity.
- Assess legal, policy and land ownership context
- Examine existing rules for PES markets and deals
- Design management and business plans
- Structure PES agreement showing terms and types of payments, Timing of payments, Requirements to be met for payment
- Implement project and monitor project impacts in representative sample sites

Pre-feasibility analysis is crucial. The potential impact should be assessed before the project is designed. Common pitfalls of PES projects are: overestimating gross revenue and underestimating costs, especially transaction costs. Financial feasibility should also consider return to labour. Small scale projects are likely to struggle, for example, at least 50,000 hectares are required for a REDD+ carbon project.

Social feasibility is also required by CCB and other multiple benefits standards. The United Nations Declaration on the Rights of Indigenous Peoples demands full participation in all project stages. Communities have the right to self determination, to free, prior and informed consent (FPIC) and to employ customary management practices in land matters. FPIC gives communities negotiating power. The challenges with FPIC include questions over who has the right to give consent, the costs and time spent in getting meaningful participation, legitimacy of community representatives, and difficulties obtaining consent where outcomes are uncertain.

If a project is too risky, there are unlikely to be buyers. The risks involved can be assessed using a guideline from the Voluntary Carbon Standard (VCS). Risks/uncertainties can be high if legal and institutional frameworks are still evolving. Risk of communities not meeting their end of the bargain exist due to environmental , market and social/political uncertainties. In REDD+, a buffer of 20-40% of carbon emissions reduced is always required. There is potential for involving insurance companies. Bundling could spread risks and transaction costs if buyers for the other services can be found. Risk could also be controlled through adaptive management and partnerships.

Honest brokers in PES can assist in proposal development, assessing ecosystem service products and values to buyers, establishing relationships and rapport with potential buyers, enabling sellers get to know potential buyer(s) well, negotiating to ensure the final agreement is in sellers' best interest and risk management.

Conditions for successful PES projects include:

- A threat to the supply of environmental services
- Willingness and capacity to pay
- Resource management actions that can address supply problem
- Policy, legal & governance framework, especially compliance
- Clear land tenure and environmental service property rights
- Low land use opportunity costs
- Strong participation and social benefits

Discussion

1. *Is it realistic to expect communities to engage in long term contracts of 20, 30 years? What happens after natural disasters destroy the project site? How about decisions made by other people, for example, to light bush fires?*

There is a danger that communities may be attracted to rewards without considering the long-term nature of the contracts. It is important to assess these risks in a participatory way before communities commit to long-term contracts.

2. *What about capacity? Is there enough capacity to implement PES?*

Currently, there is very little capacity in developing countries, so it is important to build the capacity of decision-makers, investors, buyers and sellers on PES, as a first step.

3. *Carbon and REDD+ seem to be overemphasized.*

This is because there are mechanisms and buyers for carbon, which do not exist for other environmental services, for example, pollination. Despite this, running a carbon scheme is not easy.

4. *How is price for ES determined?*

Markets often fail to capture the value of ecosystem services. In case of voluntary transactions, price is determined by demand-supply laws as well as willingness to pay versus willingness to accept. Because PES buyers are few, there is little room to negotiation. In identifying buyers, brand names such as Crane, Nile, Rwenzori could provide a starting point. Payment mechanisms can be driven via regulation in form of user fees, donation, sharing royalties etc. Payment types include cash, in-kind, recognition of rights/tenure and pay per tree. The payment should be competitive enough and should consider equity issues.

5. *How can PES be sustained?*

It can be sustained as long as the market exists or demand for ES remains, supported by enabling policies.

See full presentation and other references:

<http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1584>

<http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1583>

<http://www.katoombagroup.org/events/ROSE.pdf>

3.2 Potential 'value' of ecosystem services vis-a-vis cost of project implementation, buyers, current 'pricing' and realistic potential revenues. *Florence Bernard and Delia Catacutan*

Valuation methods provide an indication of how much to pay. The costs of PES projects can be high and include transaction costs, payment costs and management costs. In order to avoid huge start-up costs, it is better to begin a PES scheme with simple actions.

A case study was presented on valuation of water, biodiversity and recreational ecosystem services in [Tapanti-Macizo de la Muerte National Park](#) Costa Rica. Using the Avoided Cost Method for drinking water and hydro power supply, the value of water ecosystem services was at US\$ 1,845,713/year. Using the market-based and the factor income methods, recreation value was estimated at US\$ 657,500/year. Based on the market-based method, biodiversity conservation was valued at at least US\$ 10,000/year. Potential payment mechanisms for these services include a Water Tax, donations from tourism businesses with voluntary contractual arrangements, tourism and research user fees. The value of the services however does not often tally with the willingness to pay of key beneficiaries. In this example, the main beneficiary of the three services with a collective value of US\$ 2.5 million/year, was the hydroelectric company, which was willing to pay only up to \$339,000/year. Another consideration to make is that sustainability of ES provision requires involvement of local communities and this increases the transaction costs. The need for legal enforcement should also be built into PES mechanisms to ensure both livelihood and longer term goals.

Discussion

Ecosystem values include use and non-use values. Why are valuation estimates needed?

Policy makers need to be able to compare between different approaches and alternative programs. Valuation is also needed to justify conservation of ecosystem services.

See presentation: <http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1585>

3.3 Key legal elements of PES and REDD+ agreements/contracts. *Slayde Hawkins and Michael Richards*

Written, legally binding agreements are required in PES, clearly stating the rights and obligations of each party, the amount of payment and the schedule of payments. An Memorandum of Understanding (MoU) might work at the beginning, when the project is small but it is not recommended as it may not be enforceable in case one party fails to live up to their end of the deal. A legally binding contract is required as the project grows.

A PES agreement can be in form of a purchase agreement: buying credits that are quantified and verified by 3rd party. An example of purchase agreement is Ecotrust where Plan Vivo and Rainforest Alliance are validators/verifiers. Another form of PES agreement is a Services agreement.

The risk that the buyer may not deliver payments can be minimised by having the buyer making a contract with a collective block of farmers, rather than with individuals. In Indonesia, there have been two types of contracts: buyer with individual villagers, and buyer with entire village.

A diligent, honest broker is required, for example, one lawyer cannot represent both buyer and seller. In some cases in the international carbon market, government is a broker between buyers and communities. In a REDD+

pilot project in Tanzania, MJUMITA, a national network of community groups involved in participatory forest management, aggregates members' carbon and negotiates with buyers on behalf of individual farmers.

Conflict resolution methods should be agreed and these vary depending on the size of the contract. For example, disputes over local contracts can be resolved at district courts. Higher courts deal with national or international contracts.

Local participation and the use of intermediaries are vital even though it increases transaction costs. Communities could suffer penalties for getting into contracts without fully understanding the provisions. Negotiations should involve civil society or a cultural leader who commands respect. Cultural leaders also provide local ecological knowledge. In the L. Naivasha PES case where each party understood its obligations, the contract between 565 farmers and water users proceeded smoothly.

Contracts may be needed between sellers and buyers, but other nested contracts may also be needed e.g., government to regional government, regional to district, district to communities etc. The Equitable Payment for Watershed Services project in the Ulugurus Tanzania is an example of layered contracts including DAWASCO with CARE, Coca-cola with CARE and then CARE with communities.

See presentation: <http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1586>

Discussion:

1. *On the Default section of contracts, the consequence for sellers is commonly withdrawal of payments; what about for buyers?*

Conflict resolution provisions are possible if buyers and sellers were in the same landscape. If agreements are legally binding, then buyers should be sue-able, though a contract approach may be intimidating to local communities. Buyers tend to pay in advance – e.g., Mexico carbon. An honest broker is needed.

2. *When should actors move from Mou to a legally binding contract?*

Participatory approaches are necessary to find out the kind of contracts participants want. Individual contracts (transaction costs, better educated, better performance) should be compared with group (cheaper, but often lower performance) contracts. The common trend that parties start with flexible contracts and then move to tighter ones with time is rationalized by starting with the building of capacity and trust. However, the reverse, starting with tight measures and loosening these as trust is built should be considered, though this is more likely where power relations are more balanced.

3. *Comments on community participation*

In Indonesia, a participatory PES process strengthened institutional capacity for managing PES. Contracts could be improved if international buyers invested in understanding local conditions.

4.0 PES CASE STUDIES

4.1 Can land use interventions deliver quantifiable environmental services? Case studies from Kenya and Asia. *John Mwangi and Mwangi Gathenya*

If landuse degradation leads to degradation of watershed functions, then landuse interventions should be able to restore these functions. Hydrological models were used to demonstrate that watershed functions are impacted by scenarios of landuse change from forest to crop farming, grassland or urbanization in Kapingazi and the Mara River basins. In Kapingazi, landuse changes from tea farms to either annual crops or even built up areas, did not seem to have an impact on water yield, surface runoff or base flow. For the Mara river basin, increasing forest cover increased base flow and reduced surface runoff and water yield. In the Kejie watershed in Asia, conversion to forest reduced surface runoff and increased evapotranspiration; conversion to grassland increased surface runoff; conversion to annual crops increased surface runoff even more.

Not all changes in watershed functions are driven by landuse. Low dry-season flows in River Kapingazi for example, were caused by increased abstraction upstream. Models also showed that positive changes in watershed functions could be achieved through structural (terraces, waterways, grade stabilization structures, cut-off drains) and non structural (vegetative) interventions. Good land use practices at the upper catchment can reduce sedimentation substantially, but can cause only marginal increases in water quantity.

In the case of [the Sasumua catchment](#), the main problems are siltation (sedimentation), clogging of intakes in the rainy season and low inflows during the dry season resulting in water rationing in Nairobi city. Models demonstrated that siltation, which originates mainly from agricultural lands, could be greatly reduced through contour farming, terraces and grass strips for steep slopes and grassed waterways for flat areas. A PES approach could be used to reward upland farmers to practice these landuses to deliver sediment reduction services to Nairobi City Water and Sewerage Company (NCWSC).

Msafiri Wambua, a participant from the NCWSC informed participants how the company manages sedimentation. Firstly, cleaner water flowing from the forest dilutes the heavily sedimented water from agricultural areas. The company saves costs by waiting at least 50 days for sediment to settle before drawing water from the reservoir. Nevertheless, the sediments eventually have to be dredged or flushed. Dredging is expensive, and flushing is not cheaper in the long run as it tends to release the sediments to downstream reservoirs also owned by the company. Considering the large amount of water flowing into the reservoir from agricultural areas, sedimentation will remain a problem that needs to be addressed.

See presentation: <http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1587>

Discussion

1. *Who pays for the costs of research prior to establishing a PES scheme?*

In the case of Sasumua, research has been done over the previous 3 years by the Jomo Kenyatta University of Agriculture and Technology (JKUAT) and the World Agroforestry Centre. Buyers or sellers can cooperate with universities or government agricultural institutions to do the research. PES has the potential for sharing costs, thus reducing the burden borne by each party. Alternatively, projects can start with basic environmental, 'no regret' approach or precautionary principle in deciding to invest on PES.

2. *Should research costs be built into the business case of a PES scheme?*

PES builds into ongoing processes, so it's not necessary to build all the costs of that process into a scheme.

4.2 Institutional challenges to PES Implementation, case of Sasumua. *Sara Namirembe and John Mwangi*

There is potential for PES in Sasumua where communities (sellers) who are already organized in a Water Resource Users' Association (WRUA) can provide watershed environmental service to the Nairobi City Water and Sewerage Company (buyer), which owns the Sasumua Water Reservoir. Alternatively a PES mechanism can be used for the WRUA to access funding from the Water Services Trust Fund (WSTF).

Farmers in Sasumua are interested in PES if supported to cover the start-up costs. They stand to benefit directly from better land management through increased production of crops and fodder. The challenge is on the buyer side. PRESA studies showed that a business case for NCWSC to engage in PES exists. Compared to NCWSC's annual expenditure of about US\$21,000 on water treatment, a PES scheme would cost the company only about \$18,000 in the first year and subsequently \$3,000/year. The company however, is already paying multiple levies to Athi Water Services Board, the Nairobi City Council, WRMA, the Water Services Regulatory Board (WASREB) and KFS for areas where pipes are sited within the forest. Nevertheless, the company is willing to implement PES and was about to do so in Sasumua in 2005, but first needs PES to first be explicitly stipulated in government policy.

Funding PES from WSTF also has the danger of positioning WSTF as a 'buyer', yet its mandate as stipulated in the Water Act (2002) is that of capacity building. In any case, if the fund were to engage in PES, it would have had to do it across all watersheds for purposes of fairness. This may prove to be expensive. For water PES to practically happen, policies need to be more explicit about PES and expand mandates of potential institutions to engage in it. These transactions also need to involve relevant government ministries, such as that of agriculture, who can provide technical advice on land conservation measures.

Discussion:

1. The issue of attribution?

Fifty percent of water comes from forest, which produces little sedimentation. The company prefers to measure the impact from landuse change if it can reduce drenching/flushing frequency. It is not only sediment that is reduced, but also pollution via landuse change.

2. Recommendation by Assan Ngombe, UNDP: PES should start at ministry level rather than at buyer-seller level

See presentation: <http://www.forest-trends.org/%7Eforesttr/documents/index.php?documentID=1588>

4.3 Rewarding the Upland Poor for Environmental Services (RUPES) in Asia.

Sumberjaya Case: Community Contract for Sediment Reduction. *Leimona Beria*

In the Sumberjaya Watershed in Lampung Province, Indonesia, it was assumed that conversion of forest to coffee farming upstream was responsible for heavy sedimentation (20 cm in 4 years) in a hydropower dam downstream. Research showed that sedimentation was mainly caused by geological structure and river bank collapse. Soil erosion was high in newly planted coffee and was higher in monoculture than in multistrata coffee farms. Through focus group discussions, expectations of different stakeholders were harmonised: hydro power needs increased water flow and reduced siltation; farmers want secure livelihood and tenure; the forest sector wants to increase tree cover. It was understood that soil erosion had many sources and should not be addressed only by planting more trees. A contract was established where upland and riparian farmers, organised in a River Care Group, committed to carry out landuses and agronomic practices that enhance dam management and reduce erosion. If they achieved 30% sediment reduction within the first year, the hydropower plant committed to reward them with a minihydro-plant. The village government was contracted by the company to monitor the scheme and ensure accountability. Although farmers had carried out 85% of agreed actions, heavy rains occurred, causing landslides and only 20% reduction in sedimentation was achieved. However, because trust had been built, the hydropower plant still went ahead and rewarded the farmers with the minihydro plant.

Lessons learnt:

- Clear conditionality: Confidence of buyers and sellers was built by making the contract to be based on actual delivery of the ES and not using proxy.
- Social mobilization enabled local stakeholders to participate at all stages including problem analysis, identification of interventions, determination of contract mechanism and monitoring strategy. Integrating local knowledge increased chances of contract accomplishment
- Participatory ES monitoring increased accountability of the result and reduces potential conflicts
- Sticking with pure PES, puts communities at high risk. Outcome-based conditionality may not be pro-poor.

Discussion

Monetary incentives may be counterproductive for public social activities as they could undermine social norms, and may not be sufficient or durable enough to offset the loss of intrinsic motivation.

1. *Is trust built before or during PES?*

It is important to clarify the expectations of farmers. When there is mistrust at the beginning, it is better to begin with more stringent contracts. However, as the poor are more at risk, contracts should have 'a heart', that is, be more considerate of local conditions.

2. *Were there free riders in the community?*

Villagers do not understand concept of free riders! They wanted to contribute to local development. Due to peer-enforcement, almost all community members participated. Distribution of payments is stipulated within the contract – first the general development, then according to contributions.

3. *Was a compensation for opportunities skipped (COS) approach considered – for farmers to change from monoculture to multistrata coffee?*

A co-investment for ecosystem services (CIS) approach was more acceptable focusing not on the financial capital alone, but also the social gains and improved capacity. An evolutionary process of contracts can be developed – moving from CIS to CES. Or the other way round.

See presentation: http://www.slideshare.net/ICRAF_PRESA/rewarding-upland-farmers-for-reducing-sedimentation

4.4 Global Overview of PES transactions. *Michael Richards*

All water transactions are voluntary, totalling to \$20.05 billion transacted in 2010. Most of the transactions occurred in Latin America. Compared to other ES, demand for water services is low.

Biodiversity offset transactions total \$2,4 – 4.0 b/year and cover about 187,000 hectares occurring mainly in North America and Australia followed by western Europe. There are currently no active offset programs in Africa, but six are in development.

Voluntary carbon transactions totaled \$424 million in 2010 mostly from energy-efficiency /switch projects. Most carbon projects are in the Americas. . Africa mainly generates land-based carbon from afforestation/reforestation projects, integrated forest management and a mixture of both, earning \$20.9 million in revenue. Average price of carbon in general was \$6/t CO₂. Average price of forest carbon was at \$8.99/ tCO₂. In 2009 forest carbon generated \$149.2 million credits from 2.1 million hectares.

The number of PES projects is highest in North and Latin America and lowest in Europe. PES projects in Africa are lowest. The availability of skills, systems and infrastructure puts certain countries at an advantage.

Discussion

1. How is carbon sequestration measured?

Periodic measurement of tree diameter and use of allometric equations enable estimation of carbon sequestered. The rate of carbon sequestration depends on tree species, for example, eucalyptus grows fast and therefore will sequester a large amount of carbon quickly, compared to slow-growing tropical indigenous trees.

2. Who buys carbon from a typical landowner that has planted trees?

Demand exists from government and the private sector, and there are standards and rules to qualify a landholder for carbon payments. However, the process is long and expensive and only makes economic sense if done on a large scale.

3. Biodiversity PES drivers

- Biodiversity offsets e.g., mining companies putting back in a ratio of 3:1 for any destruction done and targeting sites that are threatened in order to achieve additionality.
- Pharmaceutical companies paying for any discoveries made
- Certification: Bridgestone is being approached to pay premium price for rubber from Asia agroforests which are maintaining connectivity for wildlife. Scheme is also combined with the improved rubber quality.
- REDD is also another way of paying for biodiversity. The CCB standard enables REDD programs to access higher prices for their carbon.
- Sharing of gorilla tourism funds has resulted in communities offering private land for expansion of the park.

See presentation: <http://www.forest-trends.org/~foresttr/documents/index.php?documentID=1589>

4.5 National policy and legal issues for PES and REDD+. *Slayde Hawkins and Florence Bernard*

Policy and legal issues include whether PES are permitted under existing law, resource ownership and use rights; eligibility for payment for ecosystem services; whether existing laws and regulations are applicable to PES and availability of mechanisms for contract enforcement and appeal. In addition mechanisms for handling conflicts and the stability and rule of law are key in PES implementation.

Existence of secure long-term use rights is an essential precondition for PES. Laws often imply rather than explicitly support PES. Commonly, land titles are not validly vested in local users or land use arrangements are poorly defined or recorded. This makes it unclear who qualifies for ecosystem services revenue. Customary tenure rights, based on social/cultural traditions do not necessarily qualify one for carbon rights, but formal recognition or streamlining of customary rights into legal systems is complex.

Some laws restricting private ownership of trees are also problematic for PES. In Mexico, 80% forests are owned by communities.

In addition, PES buyers will prefer policies that provide for “Ease of Doing Business” e.g., low taxes and regulatory burdens for PES and minimal direct government involvement in projects. Clarity and transparency in the regulatory framework means lower risks and costs.

Recommendation: The potential for PES should be explored in regional and transboundary frameworks such as COMESA, SADC, the East African Community and ECOAS.

See presentations: [Conditions for Project Success: Economic and Social Feasibility of PES](#)

<http://www.forest-trends.org/~foresttr/documents/index.php?documentID=1590>

5.0 CONCLUSION AND CLOSING REMARKS

There are many PES mechanisms and the choice is determined by the particular context of the site. Lessons learnt so far are that the strict definition of PES (buyer, seller and environmental service) still applies, but that this model is continuously undergoing modifications and adaptation. RUPES has summarized PES schemes as Commoditised Environment Service (CES), Compensation for Opportunities Skipped (COS) and co-investment in Ecosystem Services (CIS).

Given that PES and REDD+ projects involved a lot of preparation and costs to get started, partnerships should be developed between public and private sector institutions because markets may not be prepared to pay for social costs and benefits. This can be achieved via a ‘nesting approach’ which involves combining localized projects with national REDD programmes. The potential for marine environmental services and PES that achieves multiple environmental services should also be strengthened.

In this training workshop, the concepts of PES were introduced to policy makers and the private business community, outlining key technical steps and legal considerations in structuring PES. This was supplemented by an overview of where PES is globally and sharing of individual cases of PES implementation in Africa, Asia and Latin America. The long discussion sessions enabled mutual learning and sharing among workshop participants

and sometimes led to identification of solutions to hurdles addressed in the case presentations. Key emerging issues from the discussion included the need to:

- mainstream PES into existing policy frameworks at national and regional levels and the need
- support pilot projects in Francophone western Africa to demonstrate that the PES can lead to development of new frameworks for natural resource conservation involving investment from multiple players including mining and water companies.
- Link government extension workers into PES actions as they work directly with farmers

- mainstreaming of PES into national frameworks in order to get the cooperation of government departments during implementation.
- Take PES into regional environmental policy frameworks such as those of the East African Community.

ANNEXES

Organizing Institutions

ICRAF

The World Agroforestry Centre is part of the alliance of the Consultative Group on International Agricultural Research (CGIAR) centres, dedicated to generating and applying the best available knowledge to stimulate agricultural growth, raise farmers' incomes and protect the environment. The Centre's vision is a rural transformation in the developing world as smallholder households strategically increase their use of trees in agricultural landscapes to improve food security, nutrition, income, health, shelter, energy resources and environmental sustainability. The World Agroforestry Centre is guided by the broad development challenges pursued by the CGIAR. These include poverty alleviation that entails enhanced food security and health, improved productivity with lower environmental and social costs, and resilience in the face of climate change and other external shocks.

Forest Trends

Forest Trends is an international non-profit organization that works to expand the value of forests to society; to promote sustainable forest management and conservation by creating and capturing market values for ecosystem services; to support innovative projects and companies that are developing these markets; and to enhance the livelihoods of local communities living in and around those forests.

The Katoomba Group

The Katoomba Group seeks to address key challenges for developing markets for ecosystem services, from enabling legislation to the establishment of new market institutions, to strategies of pricing and marketing, and performance monitoring. 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.

United Nations Development Programme (UNDP)

UNDP is the UN's global development network, an organization advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP is on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and its wide range of partners. In environment, UNDP works with communities, countries and regions throughout the developing world to help them secure the environmental conditions crucial to reducing poverty and achieving all the Millennium Development Goals. The organisation's primary focus is on climate change, biodiversity, energy, water, drylands, chemicals and ozone. Through its offices in 135 developing countries, UNDP helps build its partners' capacity to integrate environment into development strategies, build partnerships, secure resources, and implement programmes in the transformation of their societies to sustainable, low-carbon, climate-resilient paths of development.

Workshop Programme

August 8, 2011		
Time	Activity	Resource Person
8.45 – 9.00	Welcome and Introductions	ICRAF Michael Richards, Forest Trends & Katoomba Group
9.00 – 9.20	Official opening	Kenya Government
9.20 – 9.30	Program overview	Godfrey Mwaloma ICRAF
	Session 1: Introduction to PES	
9.30 – 10.00	Introduction to PES and REDD+ Implications for participating land managers	Sara Namirembe & Peter Minang, ICRAF
10.10 – 10.30	Discussion	All
10.30-11.00	Tea break	
	Session 2: PES implementation	
11.00 – 11.30	Guide to structuring a PES project	Michael Richards, Forest Trends & The Katoomba Group
11.30 – 12.00	Discussion	All
12.00 – 12.30	Ideal conditions for PES: Selecting the most promising PES and REDD+ sites	Michael Richards, Forest Trends & The Katoomba Group
12.30 – 1.00	Discussion	All
1.00 - 2.00	Lunch	
2.00 – 2.30	Potential 'value' of ecosystem services vis-à-vis cost of project implementation, buyers, current 'pricing' and realistic potential revenues	Delia Catacutan and Florence Bernard, ICRAF with Forest Trends & The Katoomba Group
2.30 – 3.00	Discussion	
3.00 – 3.20	Tea	
3.20– 4.10	Key legal elements of PES and REDD+ agreements / contracts	Michael Richards and Slayde Hawkins Forest Trends & The Katoomba Group
4.10 – 4.30	Discussion	

August 9, 2011		
Time	Activity	Resource Person
	Session 3: Case studies	
8.45 – 9.15	Evidence that land use interventions including agroforestry can deliver quantifiable environmental services – case studies from Kenya and Asia	John Mwangi and Gathenya Mwangi (ICRAF/JKUAT)
9.15 – 9.40	Discussion	
9.40 – 10.10	Evidence that PES can be cost effective – business case – Case studies from Sasumua and Asia	Sara Namirembe, John Mwangi & Delia Catacutan, ICRAF
10.10 – 10.30	Discussion	All
10.30-11.00	Tea break	
11.00 – 11.30	Evidence of voluntary transactions: how much has been paid for what kinds of transactions, who has paid and who has received funds, what forms of payment, with what conditionality.	Leimona Beria, ICRAF With Forest Trends & The Katoomba Group
11.30 – 12.00	Discussion	All
12.00 – 12.30	Evidence of voluntary transactions (continued).	
12.30 – 1.00	Discussion	All
1.00 - 2.00	Lunch	
2.00 – 2.30	National and sub-national policy issues for PES REDD RPPs	Florence Bernard, ICRAF with Michael Richards, Forest Trends & The Katoomba Group
2.30 – 3.00	Discussion	
3.00 – 3.30	Next steps for PES work	Delia Catacutan, ICRAF Michael Richards, Forest Trends & The Katoomba Group
3.30 – 4.30	Tea and departure	

List of participants

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