

# **Payment for Ecosystems Services: A Pathway for Environmental Conservation in Uganda**

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# Ecosystems in Uganda

- Uganda is gifted by nature, its geographical location has endowed it with a range of geographical features which range from glacier topped mountains, tropical rain forests, and dry deciduous acacia bush lands, to vast lakes and rivers, wetlands as well as fertile agricultural landscapes.
- It was called the Pearl of Africa by the Britain's World War II Prime minister, Sir Winston Churchill on his visit in 1907 to Uganda and was attracted to the magnificent scenery (landscape), wildlife and friendly natives (culture). To him, the beauty of it all could only be described as a pearl.

# Structure of the Presentation

1. Introduction: Ecosystems in Uganda
2. What is payment of ecosystems Services (PES)
3. Some benefits of PES
4. Legal and Policy Framework for Implementing PES
5. Some Projects that Implementing PES
6. The Challenges of Implementing in PES to conserve the Environment
7. Conclusion and strategies for PES to achieve environmental conservation

# Map of Uganda



# What is payment of ecosystems Services (PES)?

PES is a product of an ecosystem service where there is a buyer such as companies, governments or an organization that is able and willing to pay for the conservation of the specific ecosystem service and there must be a seller or provider such as local communities, receiving a financial resource, who, in exchange, must promise to maintain that ecosystem service.

# Types of PES

**There are various types of PES.**

- Carbon sequestration and storage. For example a company from developed country paying farmers in the tropics for planting and maintaining additional trees and biodiversity protection.
- Watershed protection for example downstream water users paying upstream farmers for adopting land uses that limit deforestation, soil erosion, flooding risks,
- Landscape beauty for example a tourism operator paying a local community not to hunt in a forest being used for tourists wildlife viewing.
- Payment and Sharing Parks entry fees.

# Some benefits of PES

- PES schemes such as CDM could lead to the introduction of clean technology and other benefits such as planting of trees.
- Investments such as CDM may also bring additional financial inflows to the country.
- There are also social benefits such as creation of employment as well as income generating activities to rural communities. For example Eco-tourism services, Revenue sharing from parks fees.
- Provide opportunities to restore the ecosystem in partnership with local governments, environmental authorities and development partners which they would not have been interested;

## Legal and Policy Framework for Implementing PES in Uganda and their Implications for Environmental Conservation

Legal and policy frameworks are relevant to PES schemes in two ways:

- Specify the details of the process and by assigning oversight, certification and monitoring responsibilities to governmental institutions, NGOs, or private businesses.
- Provide rights and obligations that regulate the operation of PES that guide environmental conservation.



# Relevant Laws and Policies

## **CONSTITUTION OF UGANDA**

In the preamble it requires the Government of Uganda to:

- to protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda and take all practical measures to promote a good water management system.
- to promote sustainable development and public awareness of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations.
- To take possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes
- to promote and implement energy policies that will ensure that people's basic needs and those of environmental preservation are met.
- Together with the citizens to preserve and protect and generally promote, the culture of preservation of public property and Uganda's heritage.

# Laws and Policies Cont'd: Constitution

- The central government and local governments are required:
- to create and develop parks, reserves and recreation areas and ensure the conservation of natural resources;
- to promote the rational use of natural resources so as to safeguard and protect the bio-diversity of Uganda.
- to hold, in trust for the people, and protect natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any other land to be reserved for ecological and tourist purposes.

# Laws and Policies Cont'd: Environmental Policy 1994

- Seeks to conserve, preserve and restore ecosystems and maintain ecological processes and life support systems,
- Requires that full environmental and social costs or benefits foregone as a result of environmental damage or degradation should be incorporated in public and private sector planning and minimized where possible.
- Requires that social and economic incentives and disincentives should be complementary to regulatory measures so as to influence peoples' willingness to invest in sustainable environmental management.
- Priority should be given to establishing a social and economic environment which provides appropriate incentives for sustainable natural resource use and environmental management.
- •Emphasizes that biodiversity should be considered at the species, genetic and ecosystem levels and that tourism, eco-tourism and non-consumptive biodiversity should be promoted as both a means of conserving biodiversity and earning income.

# Laws & Policies Cont'd: Environment

## Policy

- Requires that prices paid by resource users should reflect the cost of resource replacement or rehabilitation.
- Recognizes that private forestry should be encouraged by appropriate incentives, extension services, marketing assistance and increased security of land and tree tenure and the prices paid for forest products should reflect their true value.
- Requires that tourism development plans and protected areas should contribute to sustainable economic development at both the national and local levels.
- Propose strategies which include: establishment of concessions, management contracts, joint ventures and production sharing and charging fees commensurate with the value of the resource.
- Recognizes that ecosystems are fundamental in regulating water quality and quantity and this concept should be integrated into water resources conservation and management.
- Requires government to integrate environmental costs and benefits into economic planning and development at all levels of government in order to reflect the true costs and benefits of development.

# Laws and Policies Cont'd: The National Environment Act Cap 153

- Establishes the National Environment Management Authority (NEMA) as a coordinating, monitoring and supervisory body of all environmental matters in Uganda.
- The Act has the following Principles;
  - ✓ the use and conservation of the environment and natural resources of Uganda is for the benefit of both present and future generations and has to take into account the rate of population growth and the productivity of the available resources.
  - ✓ the conservation and the cultural heritage and use of the environment and natural resources of Uganda should be for the benefit of both present and future generations.
  - ✓ the need to the maintain the stable functioning relations between the living and nonliving parts of the environment through preserving biological diversity and respecting the principle of optimum sustainable yield in the use of natural resources,
  - ✓ to reclaim lost ecosystems where possible and reverse the degradation of natural resources to ensure that the true
  - ✓ the total costs of environmental pollution are borne by the polluter.

# Laws & Policies Cont'd: NEA

- The National Environment (Waste Management) Regulations of 1999 made under the Act require that a person intending to transport or store waste should apply to NEMA for a licence and pay the appropriate fee.
- requires that the commercial exploitation of any forest be carried out in accordance with the principle of the optimum sustainable yield and traditional uses of forests which are indispensable to the local communities and are compatible with the principle of sustainable development shall be protected.
- NEMA in consultation with the lead agency is required to promote measures for the conservation of nonrenewable sources of energy and take measures to encourage the planting of trees and woodlots by individual land users, institutions and by community groups.
- NEMA with the assistance of local environment committees, district environment committees and the lead agency is required to identify those elements, objects and sites in the natural environment which are of cultural importance to the various peoples of Uganda

# Laws and Policies Cont'd: The Forestry Policy 2001

- Recognizes that forests provide important environmental services in the protection of watershed and soil.
- Requires the need to ensure that there is economic, social and environmental opportunities in forestry without undermining the resource base
- Requires the need to ensure the survival of forest biodiversity and rehabilitation and conservation of key watershed forests.
- recognizes the role the private sector plays in developing and managing commercial forest plantations.
- Encourages collaborative forest management whereby local communities are genuinely involved in the management of the forest resource through a negotiated process in which rights, roles, responsibilities and returns for the sustainable management of such forest resources are shared.

# Laws and Policies Cont'd: National Forestry Plan 2009 & Forestry Act

## **National Forestry Plan 2009:**

- Promotes the use of incentives to encourage private sector involvement in tree planting activities.
- Encourages involvement in tree planting and accessing global financing mechanisms for forestry activities such as the World Bank Carbon Funds, and the Carbon trading financing mechanism provided for under the Clean Development Mechanism (CDM) of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC).

## **The National Forestry and Tree Planting Act, 8/2003**

- Provides that NFA may enter into a collaborative forest management agreement with a forest user group for the purpose of managing a central or local forest reserve.



# Laws and Policies Cont'd: Wildlife Policy

- Promotes collaborative management and benefit sharing in the wildlife resources management.
- Encourages tourism development so as to generate revenue from tourism, to support wildlife conservation efforts and the national economy.
- Establishes the Uganda Wildlife Authority a body responsible for all wildlife conservation in the country whose functions include ensuring the sustainable management of wildlife conservation areas and developing, implementing and monitoring collaborative arrangements for the management of wildlife.
- Empowers the Executive Director to enter into MoUs that provide mutual benefits to both the communities and conservation authorities; provision of access to valued plant resources.
- Provides for revenue sharing of the money collected from the entry fees of the National Parks with neighbouring local communities. UWA to pay 20% of park entry fees collected from a wildlife protected area to the local government of the area surrounding the wildlife protected area from which the fees were collected

# Laws and Policies Cont'd: Water Policy

- Allocation of water resources and investments for water for production done considering the economic, social and environmental value of the water.
- investment subsidies be given to vulnerable groups: women, youth, poor farmers, and the disabled, especially in the drought prone areas.
- Encourages the promotion of private sector involvement and user participation in financing, planning, development, operation and maintenance of infrastructure for irrigation, livestock water supplies and aqua-culture.
- Makes provisions for financing, investment subsidies and user charges. Those who benefit from irrigation, aquaculture and livestock water supply facilities financed by the Government are required in return to pay part or all of the investment costs and the full cost of the operation and maintenance of such works (including overhead administrative costs).
- The costs are be collected and administered by the User Associations organised right from the planning stage of the project.

# Laws and Policies Cont'd: Water Act

- Controls pollution and to promote the safe storage, treatment, discharge and disposal of waste which may pollute water or otherwise harm the environment and human health.
- The Water and Waste Discharge Regulations, establishes recovery costs for the use and major environmental damage from polluters. Thus any person who wishes to construct any works or to take and use water has to apply for a permit and the pay fees or charges that may be prescribed under this Act.

# Other Laws & Policies

- **The Land Act Cap 227** requires a person who owns or occupies land to manage and utilise the land with the relevant environmental Laws
- Encourages the conservation of environmentally sensitive areas through the public trust doctrine.

## **The Local Government Act 1997**

- The Act vests the power of managing environmental and natural resources at Local Government District level.
- Under the Act local government are required to assist the central Government to preserve the environment through protection of forests, wetlands, lake shores, streams and prevention of environmental degradation.

# Some Projects that implement PES

## **THE FORESTS ABSORBING CARBON DIOXIDE EMISSIONS (FACE) AND UGANDA WILDLIFE AUTHORITY (UWA) PROJECT**

The FACE and UWA project is partnership between the two organisations. Under the above project, Face Foundation is funding a substantial part of the financing of the forest, and in return it gets carbon dioxide sequestration and offset in the contract areas of Mt. Elgon for 25,000ha and Kibaale National Parks 10,000ha during the term of 99 years (1994 to 2093).

There are some challenges regarding the implementation of the rights of the local communities:

- sharing of carbon proceeds between FACE and UWA was not included in the original agreement;
- there are no proper mechanisms to ensure that communities benefit from the carbon payments and re-designing/ renegotiating the project to ensure that it responds to emerging principals of carbon trade – equity, biodiversity conservation, social impacts.

# PES Projects Cont'd

## **THE NILE BASIN AND FORESTRY AUTHORITY PROJECT**

- This project started in 2006 and is implemented by the Uganda National Forestry Authority (NFA) and Rwoho Conservation and Development Association in the Rwoho Central Forest Reserve in South Western Uganda and covers about 2000 ha.
- It involves the World Bank BioCarbon Fund as the investor and the NFA as the implementing agency. The project is designed to plant pine and mixed native species. The growing trees absorb carbon dioxide from the atmosphere, and carbon credit is purchased by the World Bank Biocarbon paid to NFA and the communities.
- Trees for Global Benefits involve communities to plant indigenous trees adjacent to protected areas.
- The timber benefits are shared with the local community and the carbon credits are given to the World Bank.

# Rwoho Environmental Conservation Nile Basin Reforestation Project





# PES Projects Cont'd

## **THE INTERNATIONAL SMALL GROUP (TIST)**

- TIST is about empowering small groups of subsistence farmers to engage in activities which accomplish local sustainable goals. This project, begun in 1999, involves the World Bank Biocarbon Fund as the implementing agency, and United States Agency for International Development (USAID) and Dow Chemical Company as the investors.
- It covers the districts of Bushenyi, Kabale and Kanungu. Activities include tree planting and sustainable agriculture, and working under TIST creates a structure of small groups who work together to implement the activities.
- Under the project about 150,000 trees had been planted as of early 2009. Under this system farmers get paid Uganda shillings 35 per tree every year in two installments of Uganda Shillings 17.5 per year.

## **TREES FOR GLOBAL BENEFITS-PLAN VIVO PROJECT**

- This project is set to last for nine years (2003-2012). It involves the UK Department for International Development (DFID), USAID, START, and Tetra Pak UK as investors, and ECOTRUST Uganda, the Edinburgh Centre for Carbon Management (ECCM) and the International Centre for Research in Agroforestry (ICRAF) as implementing agencies.
- It is a voluntary private and requires conservation management practices are mainly planting of indigenous tree species.



# PES Projects Cont'd

## **WEST NILE POWER PROJECT**

- The Project is part of the Uganda's Energy for Rural Transformation Project funded largely by the World Bank. It is the PCF which is a private-public partnership operated by the World Bank. PCF buys the Carbon Emission Reductions that accrue from this project.
- Two streams of revenue are generated and sale of power to the communities in 5 districts of the West Nile region of Uganda and the ERCs.
- It is beneficial to the local communities because the Government of Uganda sells Emission reduction credits to the PCF and cleaner energy to the people of West Nile in Uganda

## **MGAHINGA BWINDI IMPENETRABLE FOREST CONSERVATION TRUST (MBIFCT)**

- This project involves GEF, World Bank and Government of Uganda and the communities living in and around Mgahinga National park and Bwindi National park and UWA authority. The project is located in south western Uganda.
- It includes Mgahinga and Bwindi National Park. The service is conservation of the biodiversity in the two national parks and this is paid for through an endowment fund set aside by the GEF.
- The revenues generated are used to pay for the conservation activities. 40% of the revenue goes to the local community associations and 60% to UWA.

# Bwindi advert for Gorilla Tracking



Special Offer!

**Gorilla Safari 3 days**  
Budget \$ **1090**  
Luxury \$ **1522**  
BOOK NOW

# PES Projects Cont'd

## REVENUE SHARING IN THE NATIONAL PARKS

- UWA which is mandated to oversee National Parks in Uganda, is obliged to share 20% of its parks entry fees with the local governments adjacent to national parks. This fund is credited to the Revenue Sharing account of a specific national park. Adjacent parishes apply for this fund through proposal submitted to UWA through district local governments. The district award contracts for implementing the proposed activities through the tendering process. The district transfers the balance (less tendering costs) to the sub-county account to pay the contractors on successful implementation.
- The philosophy of Revenue sharing is based on the acknowledgement that the communities of the relevant national parks endure a disproportionate burden of the costs associated with the conservation of the national park. In that way, revenue sharing provides an enabling environment for establishing good relations between national parks and adjacent communities by demonstrating the economic value of the national parks and conservation from the adjacent communities.
- However, there is still a challenge to realize timely, effective, efficient and equitable distribution of the benefits, as well as transparency and effective participation.

# PES Projects Cont'd

## **COLLABORATIVE MANAGEMENT PROJECTS**

- As noted earlier, the Uganda Wildlife Act and the National Tree Planting and Forestry Act permit collaborative arrangements to management the natural resources
- There are some challenges that still affect the realization of local communities' rights. At the institutional level, there is not yet good linkage between local Councils and District Councils, NGOs and CBOs and the implementing authorities. This affects the implementation of MOUs. Institutionally, the MoUs are still designed and implemented by UWA and NFA.
- No definite steps have been taken to empower communities at a local level to develop and tailor such MoUs to their specific and peculiar circumstances. The MoUs are financed by donors and specific steps for ensuring their sustainability have not been put in place and moreover there is also lack of trust between officials of UWA and the local communities.

# PES Projects Cont'd

## **ECOTOURISM**

Ecotourism is that form of travel that involves travelling to natural areas with the objectives of learning, studying or participating in activities that seek to minimize negative impacts to the environment; at the same time protecting and empowering the host communities socially and economically. It is also regarded as sustainable tourism that contributes actively to the conservation of natural and cultural heritage; includes local and indigenous communities in its planning, development and operation, contributing to their well-being.

There are some eco-tourist projects which illustrate how the rights of local communities have been recognised.

- the Busingiro Eco-Tourism Site which is part of the Budongo Forest Ecotourism Project.
- the Buhoma Community Rest Camp which is located in the Bwindi Impenetrable National Park in Buhoma.
- Bigodi Wetland Sanctuary project which is managed by the Kibale Association for Rural and Environmental Development (KAFRED)

# Example of eco-tourism Lodge at Budongo



# THE CHALLENGES OF IMPLEMENTING PES TO ACHIEVE ENVIRONMENTAL CONSERVATION

## INSTITUTIONAL FRAMEWORK BARRIERS

There is lack of the necessary institutions to manage payment of economic services. Currently, most PES support is provided by international public sector or by conservation NGOs still in the early stages of the PES learning curve, rather than by business leaders or seasoned leaders in PES development.

## MANAGING THE PES TRANSACTIONS

Three specific challenges:

- In Uganda the challenge which entity is rightly placed to manage and distribute payments? Is it the National Environment Management Authority or the Ministry of Finance? Once the money is managed by the latter it is put in the consolidated fund and may not go back to manage and restore the ecosystems they are meant to restore.
- Rural communities lack the education and experience to use the newly acquired funds wisely.
- There are some tenure issues where land is communally owned.
- Designing contracts. In Uganda, one of the major issues whether it is really worthwhile to ask farmers to dedicate their land to tree planting for 15 years at a rate of \$3 - \$8 dollars per tonne of CO<sub>2</sub> sequestered. It is important to note that unless it is proved that the investment for the conversion are reason, it may not be easy to induce the land user to change their behavior.

# Challenges Cont'd

## **PROPERTY RIGHTS AND LAND TENURE**

- Property rights are still ambiguous, not enforced, or even non-existent. A further complication arises from the fact that the land users are often not the owners. In Uganda, most women do not own land, despite the fact that they frequently carry out the activities that lead to ecosystem stewardship.

## **LEGAL AND POLICY FRAMEWORK**

- Uganda does not have a comprehensive legal and policy framework to address effective implementation of PES systems.

## **MONITORING AND EVALUATION**

- One challenge is monitoring and evaluation of the implementation of PES. Some of the PES services require may require outside monitoring or some other monitoring mechanism to ensure delivery.

## **EQUITY ISSUES**

- While economies of scale and lower transaction costs can certainly be achieved by favoring large PES contracts, most farmers in Uganda are small scale and could become marginalized in the process.



# Challenges Cont'd

## **POLITICAL SUPPORT**

- PES systems have not yet gained political support both national and local and top policy makers such as the members of parliament. The policy makers are not yet familiar with the concept of ecosystem services and how it can be used as an environmental policy tool.

## **LOCAL COMMUNITIES PERCEPTION**

- Local communities do not seem to see the benefits from PES. For instance, their perception is that other people (such as tourists, Government officials, investors) are the ones that benefit from the resources. In some areas, there are strong feelings of mistrust, fear, and antagonism between communities on one side and NEMA, NFA, and UWA officials on the other.

## **LIMITED INFORMATION**

- There is limited information available to the stakeholders of PES. The consumers of ecosystems services are sometimes unaware of the necessary information to enable them effectively participate in the PES system. The same also applies to the local communities. The situation is compounded by that fact that a few policymakers and regulators are knowledgeable about the policy requirements and implications of payments for ecosystem services.

# Challenges Cont'd & Conclusion

## **TECHNICAL BARRIERS**

- PES is a fairly a new concept in Uganda. As such there are no experts and organisations with the requisite knowledge to organize, design and implement payments for ecosystem services (PES) effectively.

## **Conclusion**

- PES system is an important approach for conservation of environmental in Uganda which is endowed with vast environmental and natural resources. Implementing PES has new potential to reduce poverty; enhance economic growth, develop partnership between government, the private sector, civil society, investors and local communities to conserve the environment. There is already work being done by NFA, UWA NEMA, ECOTRUST and NBI. Scaling up PES in Uganda require meeting many challenges, prominent among them is the need to ensure secure tenure and property rights, lack of comprehensive legal and policy framework, high transaction costs, creating the need for intermediaries that can bring together local sellers collectively to deal with international investors and a need to instill transparent regulatory systems and good governance systems and also building institutional capability at national and local levels.

# Strategies for Implementing PES

- enhance local communities' capacities to deal with international investors;
- develop a comprehensive policy and legal framework and instill transparent regulatory systems and good governance systems and also build institutional and human capability at the national and local levels;
- raise awareness and this is followed by implementing small scale projects so as to develop the interest and capacity of the local communities.
- even though some local organizations/consultancy firms and NGOs that provide some of the PES services are starting to emerge in Uganda, it would be cheaper if such activities are taken over by a fully facilitated Government body which can offer them at a subsidised rate.