



Local and Collaborative Ecosystem Management in Kalatungan

The MILALITTRA - Payment for Ecosystems Services Experience

Submitted by:

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List of Acronyms

ADSDPP	Ancestral Domain Sustainable Development Protection Plan
BLGU	Barangay Local Government Unit
CADT	Certificate of Ancestral Domain Title
CDA	Cooperative Development Authority
CDORBMC	Cagayan de Oro River Basin Management Council
CDP	Community Development Plan
CLOA	Certificate of Land Ownership Award
CSO	Civil Society Organization
DENR	Department of Environment and Natural Resources
ES	Ecosystem Services
ICCA	Indigenous Community Conservation Area
ILG	Institute of Land Governance
IP	Indigenous People
IPRA	indigenous Peoples Rights Act
LGU	Local Government Unit
MILALITTRA	Miarayon, Lapoc, Lirongan, Tinaytayan Talaandig Tribal Association
MINDA	Mindanao Development Authority
MKRNP	Mt. Kalatungan Range Natural Park
NCIP	National Commission on Indigenous People
NGP	National Greening Program
NIPAS	National Integrated Protected Area System
OIC	Oro Integrated Cooperative
PAFID	Philippine Association for Intercultural Development
PAMB	Protected Area Management Board
PES	Payment for Ecosystem Services
PTFCF	Philippine Tropical Forest Conservation Foundation
REDD	Reduction in Emission through Degradation and Deforestation
REECS	Resources Environment and Economic Center for Studies Incorporated
RUPES	Rewarding the Upland Poor for the Environmental Services
VEST	Valuing Ecosystem Services Together
WQMA	Water Quality Management Area
XSF	Xavier Science Foundation, Inc.
XU	Xavier University

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I. Executive Summary

The possibility of the indigenous peoples and/or rural communities to have control and management of ecosystems with the collaborative support of various stakeholders is not impossible. The case of MILALITTRA in the implementation of PES in Kalatungan has manifested this in some ways. The PES in MILALITTRA in Kalatungan may have many challenges still, but relationships among various stakeholders in this PES are still seen encouraging.

One of the major keys for this to happen is that the indigenous peoples and/or rural communities should have the access or ownership of the land and that these rights to land be fully understood and respected by other stakeholders.

While this is so, some of the recommendations are the following:

1. Promote PES to other IP communities as one of the mechanisms for local resource management strategies.
2. Review ES valuation and costing to consider the environmental, socio-economic and cultural benefits in a much wider and deeper perspective.
3. Further in-depth study of the sociological aspect of land and resource management.
4. Sustain and further improve collaboration among major stakeholders and push further the private sector and corporations to increase support to PES.

II. Introduction

Background of the Case Study

Payment for Ecosystem Services or PES is considered as one of the mechanisms that provide opportunity for a society to “pay” for ecosystem services and wherein human dependence on these services is better understood.¹ Under this mechanism, the ecosystem services are not only maintained but the service providers themselves can also benefit in terms of economic, social, and cultural development (to be discussed in the succeeding chapters).

Though PES is already being practiced in a number of countries (e.g Costa Rica, Ecuador, United States called Payment for Watershed Services)², it has no common definition. The widely acknowledged definition is Wunder’s (2005): PES is “(1) a voluntary transaction in which (2) a well-defined environmental service (or a land use likely to secure that service) (3) is being ‘bought’ by a (minimum of one) buyer (4) from a (minimum of one) provider (5) if and only if the provider continuously secures the provision of the service (conditionality).”³ However, in its implementation in the pilot area in Mindanao, it is simply defined as a multi-sector strategy to protect the forest in the uplands so the run-off water will not be devastating when it reaches urban areas.⁴

There is also confusion as to what the “E” stands for. The terms “environmental,” “ecosystem” and “ecological” are being used in which the first two terms are commonly being used interchangeably. Environmental services encompasses all the benefits from all forms of managed ecosystems; thus, ecosystem services” is part of the “environmental services.” In the entire implementation of the latest PES (as documented in this report), agencies involved used the term “ecosystem” services due to the specificity of the goal of the mechanism. It is defined as “dealing exclusively with the *human benefits* derived from natural ecosystems.”⁵

Aside from the human benefits, there are other indicators or “ideal conditions” for PES to thrive. One of these is when the natural resources are evidently diminishing due to the degrading ecosystem services resulting from ecosystem mismanagement or abuse.² This condition is very apparent in the Philippines especially in Mindanao triggering the need to adapt PES.

While PES has many variations and modalities as practiced in different parts of the globe and has encountered many issues and concerns, such as, sustainability, institutionalization, this documentation

¹Global Environment Facility. 2012. *Payment for Ecosystem Services*

²http://www.unep.org/pdf/PaymentsForEcosystemServices_en.pdf

³Wunder, S. http://www.cifor.org/publications/pdf_files/OccPapers/OP-42.pdf

⁴*Valuing Ecosystem Services Together brochure*. 2014. Xavier University-Ateneo de Cagayan

⁵*Greening livestock: Assessing the potential of payment for environmental services in livestock inclusive agricultural production systems in developing countries*

will focus on the experience of the indigenous people's community, the Miarayon Lapoc Lirongan Tinaytayan Talaandig Tribal Association (MILALITTRA) in managing their ancestral domain –particularly, the forest resources, under the PES scheme.

Objectives

This case study aims to:

1. Provide an understanding on the experience of MILALITTRA in PES as a manifestation of a locally-managed ecosystem;
2. Craft possible recommendations on how to further strengthen local management of resources of the indigenous peoples;
3. Use this case as one of the resource materials for discussion, instruction and outreach particularly on managing land and resources for other indigenous peoples' communities and/or rural communities in the Philippines and in other countries with similar situations;

Methodology

This study employed three methods in gathering information, (1) documentation of activities (2) interviews and field visits (3) review of available related literatures and documents, studies and data.

Scope and Limitation

This study focused only on the experience of the Miarayon Lapoc Lirongan Tinaytayan Tribal Association (MILALITTRA) in the Payment for Ecosystems Services mechanism highlighting their efforts on local management of resources and the collaboration with other stakeholders from the government, civil society and private sectors.

As mentioned earlier, this case study will not dwell on the processes on how to sustain funds or financing, PES institutionalization, and scientific valuation of ecosystems services, among others. It is more on the relationships of indigenous peoples' community, particularly, MILALITTRA, as ancestral domain holder and forest manager, with other stakeholders.

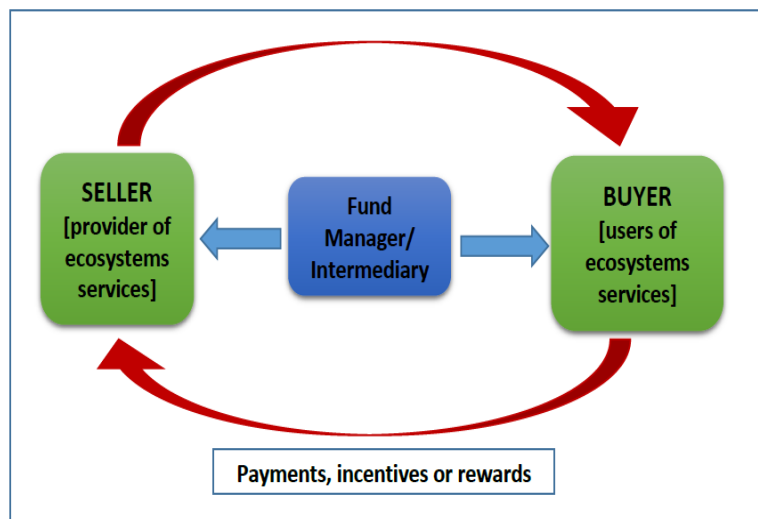
III. Understanding PES

The PES Scheme

The use of Payment for Ecosystem Services (PES) as an approach to address the issues of rural or upland poverty and natural resource degradation has increasingly become popular. Its practice in the Philippines, however, is relatively new or even still developing compared to other countries where some PES schemes have been going on already for a number of years.⁶

Simply, it is a market transaction where there is a seller and a buyer of products and services. Here, the products and services comes from nature, or specifically, comes from ecosystem.

PES are “payments, incentives, or rewards for environmental services” given to the providers of these services. PES is also referred to as a market-based approach to environmental management (Landell-Mills & Porras, 2002). In marketing terms, the providers of the environmental services are viewed as the “sellers” while the beneficiaries of environmental services are viewed as the “buyers”. Payments for Environmental Services have also been defined and considered as



voluntary arrangements where well-defined environmental services (ES) are bought by at least one ES buyer who compensates at least one ES provider if the provision of the ES is continuously secured by the latter (Thomas, 2009). PES, in many cases, does not only have two sides to it- the “buyers” and the “sellers”. In many examples of PES around the world and even in the Philippines, there are usually “brokers” who make up for the “third” side of the PES equation (van Noordwijk et.al., 2004)⁷.

However, PES is not designed to reduce poverty, but, a mechanism that offers economic incentives that contribute to a more efficient and effective use of ecosystems services.

The Ecosystems Services

⁶ Maria Aurora Laotoco: *Understanding the Potentials*

⁷ Lozada, Charlotte L, *The Institutionalization of PES for MILALITTRA-Mt Kalatungan, Bukidnon*

It is reiterated that there is no standard definition of environmental or ecosystem services. Broadly, they are the benefits from nature to households, communities and economies. Broad categories of ecosystem services include food production (crops, livestock fisheries capture, aquaculture, wild foods), fiber (timber, cotton, hemp, silk), genetic resources (biochemical, natural medicines and pharmaceuticals), fresh water, air quality regulation, climate regulation, water regulation, erosion regulation, water purification and waste treatment, disease regulation, pest regulation, pollination, natural hazard regulation, and cultural services (spiritual, religious, aesthetic values, recreation and ecotourism).

The major three ecosystem services the most money and interest worldwide are climate change mitigation, watershed services and biodiversity conservation. Demand for these services is predicted to continue to grow. These ecological services can be classified into local or regional commons or public goods, such as erosion and flood control, seasonal stream flow regulation, and clean drinking water. Carbon sequestration and biodiversity conservation are classified as global commons or global public goods. A traditional image of PES in the Philippines is one of forest in the hills providing clean water downstream for drinking, sanitation and agriculture⁸.

The concept of PES in this sense, dictates that critical environmental or ecosystem services to the lowlands will have to be negotiated with those living in the uplands. The premise is that payments for environmental services:

- are mechanisms for generating finance and incentives for environmental service providers;
- can help to provide rewards or payments and cover costs for ecosystem conservation;
- can be a tool for livelihood enhancement and income generation; and
- improve markets and prices by valuing ecosystem services according to real worth.

⁸ Lozada, Charlotte L, *The Institutionalization of PES for MILALITTRA-Mt Kalatungan, Bukidnon*

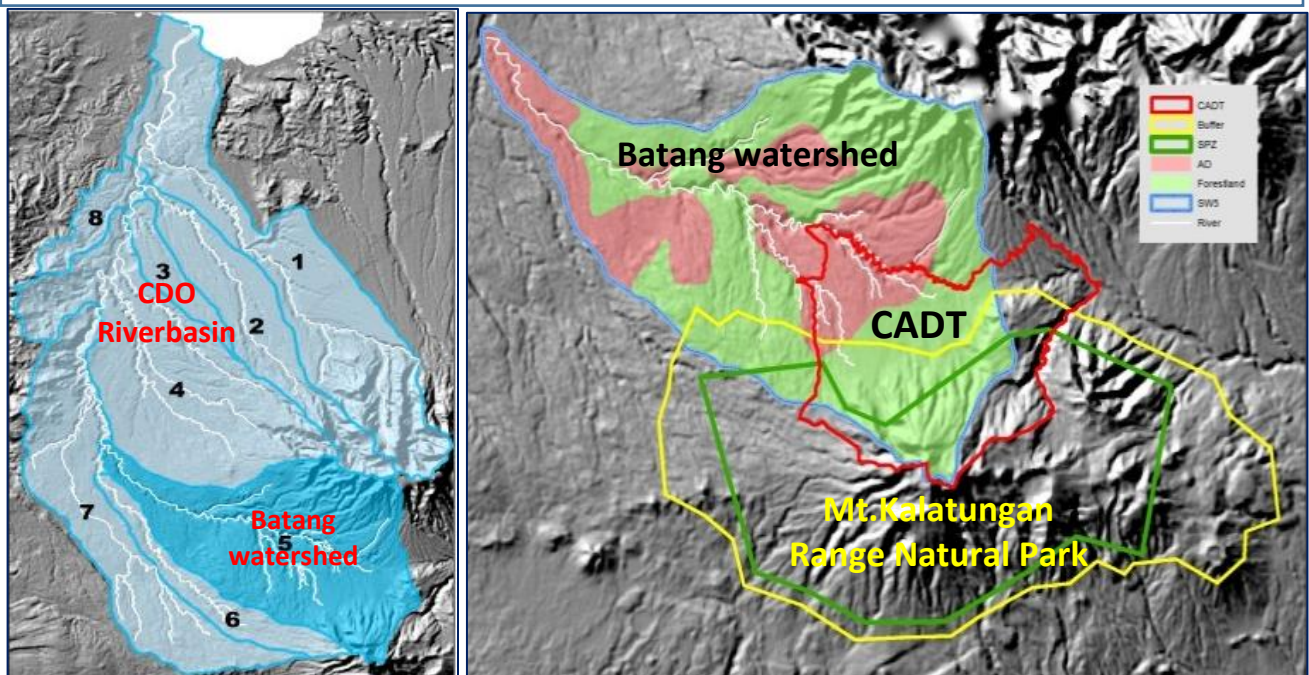
IV. The MILALITTRA-Kalatungan PES

The PES mechanism was introduced in 2014 in Northern Mindanao with MILALITTRA CADT area in Mt Kalatungan as the pilot site. This was in some way a response to rehabilitate the forest after Typhoon *Sendong* (TS Washi) causing flashflood that hit the region in December 2011 leaving thousands people dead and millions worth of properties damaged. The Kalatungan mountains, where the ancestral domain is located, is the upstream of the Cagayan de Oro river where the said flashflood begun.

Location

The site of the pilot PES in Kalatungan is within the ancestral domain of the Miarayon Lapoc Lirongan Tinaytayan Taalandig Tribal Association (MILALITTRA) that overlaps with the Mt Kalatungan Range Natural Park (MKRNP), part of the Batang watershed and within the Cagayan de Oro river basin. Mt Kalatungan Park was also recognized as an Indigenous Community Conservation Area (ICCA) as it was considered as sacred ground to the Talaandig indigenous peoples⁹.

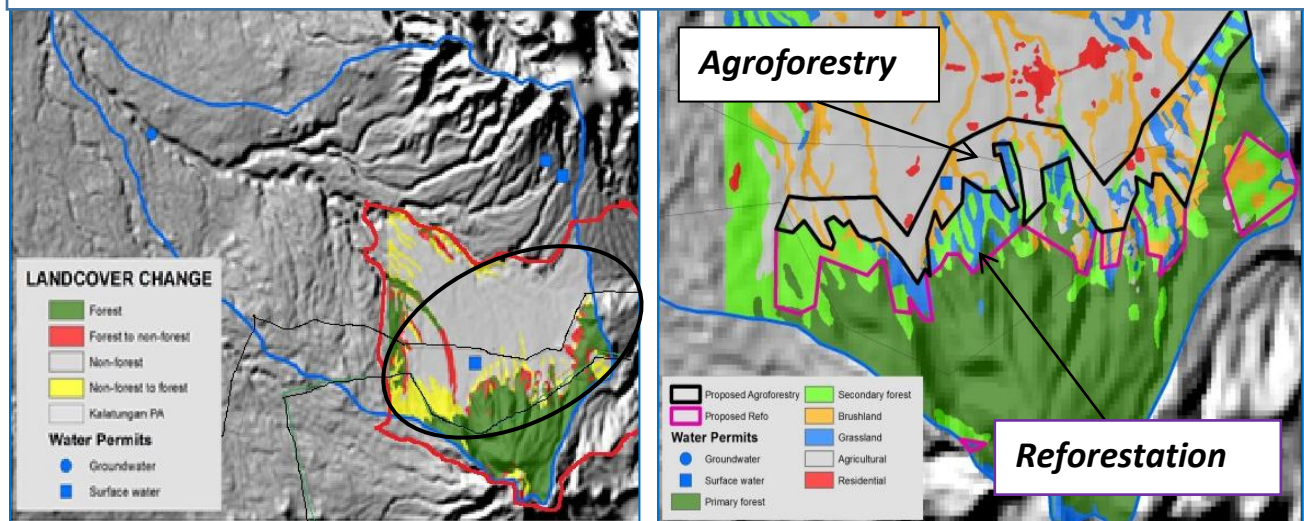
Maps of the (left) CDO Riverbasin showing Batang watershed and (right) that of Batang watershed CADT, MKRNP.



⁹ ICCAs are natural and/or modified ecosystems containing significant biodiversity values, ecological services and cultural values, voluntarily conserved by indigenous peoples and local communities. They are an important complement to official protected area system as they help conserve critical ecosystems and threatened species, and are part of the resistance to destructive development (IUCN, 2011).

Specifically, adjacent and along these forest and buffer zones, 832 hectares is identified for reforestation and 812 hectares is allocated for agro-forestry¹⁰. The reforestation site is to be planted purely with endemic / native forest tree species while agroforestry is for the planting of fruit trees that can provide sources of income, such as coffee, among others. These allocations are stated in MILALITTRA's Community Development (CDP) which becomes the bases for PES funding support.

Maps showing the specific sites for reforestation and agroforestry.



The 5 year Community Development Plan (CDP) of MILALITTRA was crafted for their ancestral domain which was already provided with Certificate of Ancestral Domain Title (CADT). The CDP has 10 management components: Environment, Ancestral Domain, Livelihood, Culture and Tradition, Peace and Order, Health, Education, Infrastructure, Youth and Organizational Development. Of these 10, Environment which includes forest rehabilitation and protection covers almost 50 percent of investment proposal.

ES Costing

There are many methods of pricing or valuing ecosystems services; some are scientific and even complicated. However, for the MILALITTRA-Kalatungan pilot PES, the ES price is based on the Community Development Plan of MILALITTRA. The investment requirements of the CDP total PhP 109.3 M for 5 years. This amount was then simply divided by the target number of hectares allocated for reforestation and agroforestry which is 1,648 hectares. Thus, the amount is then pegged at around PhP 70,000 per hectare for 5 years or PhP 13,257 per hectare per year.

However, after more than a year of implementation, MILALITTRA found out that the yearly investment of PhP 13,257 per hectare especially during the first year is not enough. The first year of reforestation is when seedlings, fertilizer, land preparation and planting labor cost is needed. While the rest of the years

¹⁰ Building PES Case for Mt Kalatungan, REECS, September 4, 2013

are for maintenance works. MILALITTRA suggested to increase the first year investment to not less than PhP 31,000 and reduces the price for the remaining years which still totals around PhP 70,000 per hectare in 5 years¹¹. This was presented to and was accepted by the DENR- Protected Area Supervising unit (PASu) of Mt Kalatungan.

The preceding investments in PES for Kalatungan are then based on the renewed ES value per hectare per year.

MILALITTRA CDP INVESTMENT REQUIREMENTS						
Management Focus	2014	2015	2016	2017	2018	TOTAL
Environment	11,128,025	8,643,088	9,090,775	8,779,025	9,047,275	46,688,188
Ancestral Domain Security	275,500	188,500	87,000	87,000	87,000	725,000
Culture and Tradition	363,950	174,363	174,000	130,500	478,500	1,321,313
Livelihood	6,003,000	6,169,750	6,401,750	5,821,750	5,952,250	30,348,500
Peace and Order	108,750	108,750	87,000	87,000	87,000	478,500
Organizational Development	174,000	145,000	145,000	145,000	145,000	754,000
Infrastructure Support	2,117,000	5,626,000	5,582,500	6,307,500	2,900,000	22,533,000
Education	116,000	1,566,000	116,000	116,000	116,000	2,030,000
Youth Development	29,000	29,000	29,000	29,000	29,000	145,000
Health Services	290,000	1,015,000	1,015,000	1,015,000	1,015,000	4,350,000
TOTAL	20,605,225	23,665,450	22,728,025	22,517,775	19,857,025	109,373,500
Average per year	21,874,700	21,874,700	21,874,700	21,874,700	21,874,700	109,373,500
AVE. COST PER HAS PER YEAR	13,257	13,257	13,257	13,257	13,257	66,287

¹¹ PES Sellers Review and Planning Workshop conducted on April 25-26, 2016.

V. The MILALITTRA-Kalatungan PES Stakeholders

For the PES to work, there are at least 2 major players needed, the “seller” and the “buyer” of ecosystems services. However, for the MILALITTRA-Kalatungan PES, there are other players involved, the fund manager and support groups.

The ES Seller

MILALITTRA, a tribal association of the Talaandig tribe and CADT-holder of the more than 11,000 hectares ancestral domain covering 4 barangays in the town of Talakag in Mt Kalatungan, is the “seller” of the ecosystems services.

The “seller” is basically the owners of the land/s and they are the ones that protect and provide ecosystem services to the “buyers”. They are in charge of planting the seedlings and guarding the forest.

Based on the accounts of the elders of MILALITTRA, their ancestors already settled in the mountains of Kalatungan even before the coming of the Spanish colonizers in the 1500’s. Decades passed, they had made communities who valued peace and harmony. Due to their closer proximity to the Kalatungan Mountains, they call themselves Kalatunganon, hence, they are called *Talaandig-Kalatunganon*.¹² MILALITTRA, the representative organization of the tribe, was then organized in 1997 and was awarded with their CADT in 2003.

The Indigenous Peoples Rights Act (IPRA) of the Philippines respects the rights of the indigenous peoples’ communities to have control and management over their ancestral domain and natural resources including respect to their culture and practices.

The Buyers of ES

Any individual, group, company, or institution that is willing to invest or provide support, whether in cash or in kind, for the rehabilitation and protection of the ecosystem for it to sustain services. For the PES of MILALITTRA-Kalatungan, this is done through a per-hectare basis based on the MILALITTRA’s CDP.

As of December 2016, around 10 institutions from the government, cooperative and private sector already provided support, in cash and in kind, for the reforestation under PES. There were also individuals who provided support to the PES through the Valuing Ecosystems Services Together (VEST), a one-year social marketing project of Xavier University implemented in 2014.

The interest of PES among local and multinational corporations is observed to be gradually growing that they are asking for PES orientations to understand its scheme. Aside from water and flood mitigation as the main ES marketed, there are other corporations who are interested in carbon sink establishment for carbon sequestration as another ecosystems service.

¹²Cartwheel Foundation Inc. compilation on Talaandig Ancestral Domain Claim Miayon Region, Talakag, Bukidnon, 2003

The Fund Manager/Intermediary

The fund manager of PES is the Xavier Science Foundation (XSF). The fund manager basically manages the PES fund and acts as the mediator between the buyers and the seller. As an institution, XSF's main roles as reflected in its mission are (a) as convener, (b) conduit of funds and (3) an innovator of programs. In its 48 years of existence, XSF has established and managed programs and assisted various institutions as fund manager. In 2014, it established the Institute of Land Governance (ILG) that manages and operates all lands and resource-related projects and activities.

Support groups

There are various support groups of the PES in Kalatungan.

The Cagayan de Oro River Basin Management Council (CDORBMC). The CDORBMC was established in November 17, 2010 as the governing body for the operation, supervision and management of the Cagayan de Oro River Basin. It is composed of various sectors, from the government, CSO, business, academe and church. The council, co-chaired by both the Director of the Department of Environment and Natural Resources-10 (DENR-10) and the Archbishop of Cagayan de Oro City, acts as the oversight committee of the PES.

The Department of Environment and Natural Resources (DENR). The DENR, through its Protected Areas Supervising unit (PASu) for Mt Kalatungan Range Natural Park, provides the technical assistance for the project. The PES project was received well because the National Greening Program (NGP) of the government only reforested publicly owned land and did not include ancestral domains. Therefore, uplands that had a CADT were not part of the reforestation plan of the government. PES served as a complement to the NGP because it could rehabilitate other areas. DENR – PASu provides technical assistance, such as, conduct of mapping, geo-tagging and monitoring activities¹³.

Mindanao Development Authority (MinDA). MinDA is an agency mandated to integrate various programs of the government for the development of Mindanao. One of the programs is on watershed management. MinDA was instrumental in pushing for the start of PES in Kalatungan by piloting 3 hectares.

Local Government Units (LGU). The LGUs surrounding Mt Kalatungan and/or within the CDO river basin are also seen important stakeholders in PES. These units provide the enabling policies. As of the moment, the LGU of the town of Libona already enacted an ordinance for the collection of water fees using PES scheme. The LGU of Cagayan de Oro, on the other hand, is now in the process of discussing with technical experts for the crafting of PES ordinance.

The XSF - Institute of Land Governance (ILG). Aside from XSF who manages the fund, the Institute of Land Governance (ILG) of XSF provides operational support to the project. At the community level, the institute facilitates IP community organizing and organizational development and assists MILALITTRA in their reforestation activity, among others. The institute also documents and facilitates conduct of

¹³ Lozada, Charlotte L, *The Institutionalization of PES for MILALITTRA-Mt Kalatungan, Bukidnon*

studies. In some matter, it links with the academe, such as, Xavier University, especially, on its social outreach component.

Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance (ACDI/VOCA). ACDI/VOCA is an international development non-profit organization that supports the tribal communities in farm production and market linking. For MILALITTRA, ACDI/VOCA provides technical assistance and community trainings in the establishment and development of coffee seedling nurseries, particularly (red bourbon variety) quality testing and linkage to possible international market under the Mindanao Productivity in Agricultural Commerce and Trade (MinPACT) project.

VI. The ES Management Strategy

Reforestation Management

MILALITTRA, as the CADT holder, has the right to control and manage over the lands and natural resources covered by their CADT as provided for by the Indigenous Peoples Rights Act (IPRA) or Republic Act 8371. The group is also the “seller” of ecosystems services of PES. Cultural norms and local traditional practices play a strong part in MILALITTRA’s reforestation. For instance, as the project started at the ground, a ritual was celebrated by the group’s *baylan* (tribe’s religious leader) to pray and ask grace from the *Magbabaya*, the God. The group is also careful in selecting seedlings in order not to plant tree species that they believe will attract bad luck.

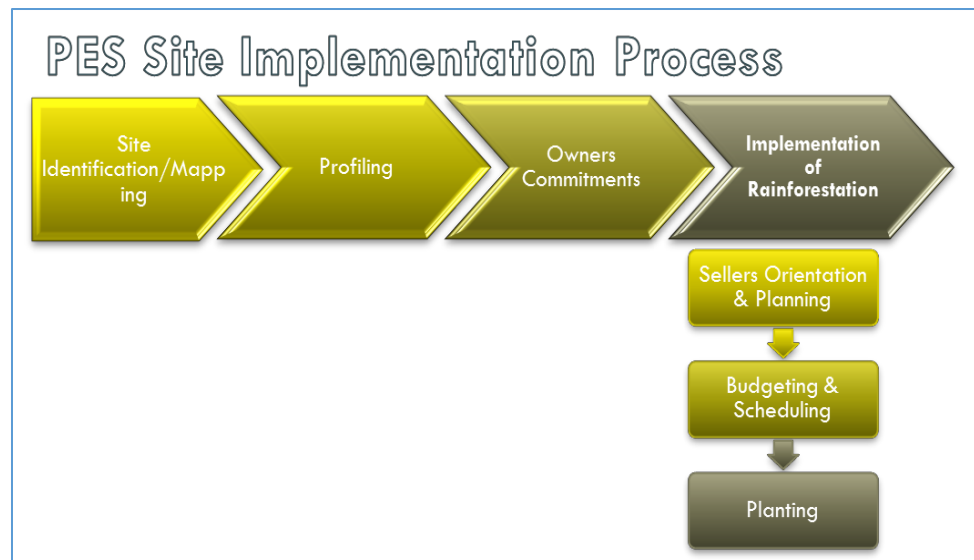
Since the PES site is also located within the declared protected area, the Department of Environment and Natural Resources - Protected Area Management Board (DENR-PAMB) for Mt Kalatungan also has jurisdiction over the sites as mandated by the National Integrated Protected Area Systems (NIPAS) Act. In this, the DENR-PAMB provides support to the PES reforestation, such as, mapping and geo-tagging of specific planting sites, assistance to reforestation technologies, monitoring the growth of planted trees, among others. The DENR has also trained some community members on how to use the Global Positioning System (GPS) tool for geo-tagging and monitoring using geo-camera. DENR-PAMB recognizes the role of MILALITTRA as forest manager as reflected in the Mt Kalatungan Business Plan.

Reforestation Implementation Process

The implementation of reforestation at the community level follow a careful process found important by the indigenous community themselves. The land tenure, individual land rights as well as the consent of individual community members plays an important role of the PES implementation.

While the whole site belongs to a communal title of MILALITTRA, clans and families have their own parcels of lots, locally called *gaup*, where they farm or use for any purposes, and is respected by the whole tribe. Thus, the whole process of reforestation considers this by identifying whose *gaup*, asking the consent of the *gaup* owners, recording their profile and mapping their areas to determine size. It is also ensured that they are oriented on the project.

Tribal leaders of MILALITTRA are the ones who negotiate with the individual tribe members on this matter.



Agro-Forestry and Reforestation Technology

Aside from planting local forest tree species, MILALITTRA strongly promotes planting of red bourbon, a variety of Arabica coffee native to the area, as the only type to be planted in agroforestry for its high commercial value. The tribal association has started propagating and planting red bourbon coffee seedlings with the assistance of ACDI-VOCA.

MILALITTRA also promotes the intercropping of endemic forest trees with coffee trees, a *reforestation* farming technology. *Reforestation* farming aims to provide both environmental and economic benefits to the communities¹⁴.

¹⁴ PES Annual Report, XSF, March 2016

VII. Findings

Based on the objectives of this study, the following conclusions are drawn.

Locally-managed forest ecosystems

The rehabilitation and protection of the forests under the PES scheme in Kalatungan is a reflection of the *locally-managed ecosystems approach*. A principle strongly promoted by many civil society organizations local communities and member organizations of International Land Coalition (ILC).

First, it is the tribal community, MILALITTRA, who is at the center of forest management within their ancestral domain. Their community development plan is the basis for allocation of areas for reforestation, the pricing of ecosystems services and support by other stakeholders as ES buyers.

Second, their indigenous culture and tradition is being respected. This is manifested by the conduct of rituals before implementation of PES at the site and other major activities. In the selection of seedlings for planting, their belief on tree species is employed that those considered tree species attracting “bad luck” is not planted. Also, even that the DENR has jurisdiction over those who are doing illegal cutting of trees using the national environmental laws, the tribal community’s traditional practice in conflict resolution and settlement is considered and to be applied first.

Third, their decisions are strongly considered in major matters related to forest management within their ancestral domain. This can be seen through the application of reforestation and agroforestry technologies, such as, *rainforestation* farming and the use of local red bourbon arabica coffee variety in agroforestry.

Generally, the tribal community’s ownership of their ancestral domain gave them the handle in pursuing this management.

Collaborative ecosystem management

The local management of the forest ecosystems is strongly manifested by MILALITTRA. This is further strengthened by the collaboration among various stakeholders, which in PES, also plays a significant role.

First, despite the overlaps in land tenure on the location of the PES reforestation site, particularly, that of Mt Kalatungan Range Natural Park (MKRNP) and MILALITTRA’s ancestral domain, collaboration is somehow manifested. On one hand, the DENR-PASu, with mandates coming from the NIPAS Act, recognizes and respects the IP communities, as the local forest managers and their ally in forest protection. On the other hand, the IP community, given the rights to have control and management of

their ancestral domain by the IPRA Law, recognizes the role of the DENR-PASu as having the legal authority in forest protection where the deputation of the IP forest guards as Wildlife Enforcement Officers (WEO) came from.

Aside from that, the support of other stakeholders to MILALITTRA as the PES seller is evident. For instance, the XSF, as fund manager, does not only collect funds from the buyers and disburse this to MILALITTRA, but also mobilizes the Institute of Land Governance (ILG) in providing capacity-building support, community organizing and reforestation facilitation, among others. Other CSOs, like the ACDI/VOCA also helps the community in the establishment of their coffee plantation from nursery to plantation and market linkage. On the buyer side, such as cooperatives and corporations, there are already those who are interested to join in actual planting with the said indigenous community, aside from just giving funds.

Another manifestation of collaboration and support to PES is from government agencies and local government units within the Cagayan de Oro river basin. As an example, the municipality of Libona in Bukidnon enacted an ordinance for the collection of water fees using the PES scheme. In Cagayan de Oro City, a technical working group composed of different sectors and experts to craft a PES ordinance.

In whole, the possibility of the indigenous peoples and/or rural communities to have control and management of ecosystems with the collaborative support of various stakeholders is not impossible. The case of MILALITTRA in the implementation of PES in Kalatungan has manifested this in some degree. The PES in MILALITTRA in Kalatungan may have many challenges still, but relationships among various stakeholders in this PES are still seen encouraging. Nevertheless, as also reflected in this study, one of the major keys for this to happen is that the indigenous peoples and/or rural communities should have the access or ownership of the land and that these rights to land be fully understood and respected by other stakeholders.

VIII. Recommendations

As of this moment, the following recommendations are:

- a. **Promote to other IP communities to consider PES as one of the mechanisms for local resource management strategies.** The lessons of MILALITTRA PES which manifests local-management of resources have encouraged other IP communities in Kalatungan and other places to establish PES. Promoting and establishing PES mechanism to other IP communities could contribute to strengthening of the IP's management of their ancestral domain.
- **Review ES valuation and costing to consider the environmental, socio-economic and cultural benefits in a much wider and deeper perspective.** The ES valuation used by MILALITTRA in pricing ES per hectare is based on the total cost of their 5-year community development plan divided by the number of hectares allocated for reforestation. While, this is not wrong, it would

be good to know the contribution and impact of the ES services (i.e. water, flood control) to the lowland communities and economies in terms of money value.

- **Further in-depth study of the sociological aspect of land and resource management of the indigenous peoples.** The IP communities have their traditional practices in resource management that is closely link to their culture and belief. This may be seen by others as “un-scientific.” This was practiced by MILALITTRA in PES such as rituals and not planting seedlings with “bad luck”. There was also the previous farming practice of so-called “slash and burn” which environmentalists considered as destructive. The understanding of the IP’s history, culture and belief using a sociological view may help everyone connect conflicting views to further collaborative local resource governance.
- **Sustain and further improve collaboration among major stakeholders and push further the private sector and corporations to increase support PES.** What PES in MILALITTRA reflects is some sort of collaboration among various stakeholders. This gain can be pushed further to sustain and improve. MILALITTRA, with the support of support CSOs and PASu, may need to actively engage the private sectors and corporations who expressed interest to support PES. Information and advocacy materials on PES and reforestation will also help a lot in expanding the support from the buyers.

IX. References

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