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BIODIVERSITY CONSERVATION AND SUSTAINABLE DEVELOPMENT AS THEY SEE IT: COMMUNITY-BASED CONSERVATION WITH THE MANOBO-TINANANON OF ARAKAN, NORTH COTABATO, PHILIPPINES

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BIODIVERSITY CONSERVATION AND SUSTAINABLE DEVELOPMENT AS THEY SEE IT

COMMUNITY-BASED CONSERVATION
WITH THE *MANOBO-TINANANON* OF ARAKAN, NORTH COTABATO



USAID
FROM THE AMERICAN PEOPLE



ABOUT THE COVER PHOTO

A Philippine Eagle nest was discovered in 1992 at Mt. Mahuson, home of the *Manobo-Tinananon* Indigenous community, which led to the formation of the community's own Indigenous People's Organization, the Pan-uangdig Lumadnong Panaghiusa.

The Philippine Eagle *Pithecophaga jefferyi* is an IUCN 'critically endangered' species, with no more than 500 eagle pairs left in the remaining forests of Luzon, Leyte, Samar, and Mindanao.

Cover photo by Klausse Nigge.

ACKNOWLEDGEMENT

The case study writers are grateful to the Indigenous *Manobo-Tinananon* of Sitio Macati, Arakan, North Cotabato for the privilege to become a part of their lives. They also thank Dennis Salvador, PEF Executive Director, and the Board of Trustees of the Philippine Eagle Foundation for providing inspiration and support. The case study writers also grateful to the following partners: Arakan LGU, Arakan Environment Coordinating Council, Philippine Long Distance Telecommunications, United Nations Development Programme, British Petroleum Conservation Program, Globe Telecommunications, Solar Energy Foundation, Department of Education, Action Against Hunger, Protected Areas and Wildlife Bureau-DENR, Manobo Lumadnong Panaghiusa, the Peregrine Fund and the World Agroforestry Center. They also thank Bing Veloso for assistance during data gathering.

BIODIVERSITY CONSERVATION AND SUSTAINABLE DEVELOPMENT AS THEY SEE IT

COMMUNITY-BASED CONSERVATION

WITH THE *MANOBO-TINANANON* OF ARAKAN, NORTH COTABATO

APRIL 2013

Prepared by the Philippine Eagle Foundation (PEFI) for the Foundation for the Philippine Environment (FPE) under the Up-Scaling Forest Restoration Efforts in Key Biodiversity Areas (KBAs) project.

DISCLAIMER

This publication is made possible through the generous support of the American People through the United States Agency for International Development (USAID). The contents of this publication are the sole responsibility of the case study writers and PEFI and do not necessarily reflect the views of USAID, the United States government, or FPE.

MESSAGE FROM **DENR**

In this emerging era of climate change, environment and natural resources (ENR) around the globe are threatened with destruction to an extent rarely seen in earth's history. The mitigation of the pernicious effects of climate change compels government, particularly us in the DENR, to adapt an integrated approach to ENR planning and decision making.

Constructive engagement, international partnerships, and collaboration with the different sectors of society are forged not only to brace up our limited resources, but more so to create an enabling policy environment that would enhance institutional and regulatory capacities.

It is in this complicated and complex task of building partnerships with key stakeholders that we appreciate the role played by the Foundation for the Philippine Environment (FPE). A catalyst for cooperation, the FPE blazes trails in efforts to promote and encourage international and local cooperation among NGOs, business groups, and communities toward developing good policies and effective programs on biodiversity and sustainable management.

The case studies presented in this publication bear testament to FPE's leading role in facilitating collaborations for sustainable development. Without the foundation's assistance and effort to involve key stakeholders' cooperation, appropriate assessments regarding the current conditions and trends of eight key biodiversity areas in Luzon, Visayas, and Mindanao would not have been made. Our success, hence, in establishing reliable bases for developing goals and strategies for future biodiversity and sustainable management interventions in these areas can only be ensured with support from the Foundation for the Philippine Environment.



RAMON J. P. PAJE
DENR Secretary

MESSAGE FROM USAID

The realization of our shared vision of broad-based and inclusive growth is greatly aided by enhancing environmental resilience and ensuring that the country's bountiful natural resources and life-giving ecosystems services are sustainably managed while reducing the risk of disasters. The U.S. Government holds firm to its commitment to help the Government of the Philippines to achieve this goal.

Expanding the network of environmental stakeholders and providing continued support to local governments and communities on proper natural resource management are crucial strategies to achieve this goal. With these in mind, our partnership with the Government of the Philippines has yielded a large network of partners that engages local communities and groups in biodiversity conservation and natural resource management. We have helped empower our partners to be more involved in decision-making leading to better management and protection of natural resources that they depend on.

This publication captures the key strategies applied through the years that "Up-scaling Forest Restoration Project" attempted to scale up in the last two years in eight key forest areas of the country. Eight case studies feature committed forest guard volunteers, lessons from science-based forest restoration efforts with indigenous peoples, and partnership building among government, communities, and the private sector to restore forest habitats and watersheds. This collection of stories is a testament to the hard work of our partners, led by the Foundation for the Philippine Environment, which collaboratively worked with local stakeholders to ensure that the approaches employed, milestones achieved, and lessons learned from our forest restoration efforts are carefully documented.

It is our hope that knowledge sharing through publications like this will become a staple element in how we sustain our efforts in forest management. There is wisdom from the grassroots, as we have valuably learned through our initiatives, which have significant impact at the national level. I invite you to read these stories and share them with your network and other organizations working towards biodiversity conservation and environmental resilience.




GLORIA D. STEELE

Mission Director, USAID/Philippines

MESSAGE FROM **FPE**

FPE's twenty-one years of working with partners to save forests and sustain life have borne fruit. Eight (8) case studies documenting the progress and challenges in expanding forest governance in key biodiversity areas (KBAs) are now available to the public.


The cases relate, among others, how our partner in Negros Occidental transformed a silent subsistence community to active forest protectors; how planting native tree species revived dying forests and earned income for farmers in Leyte; how synergistic partnerships among various agencies accelerated watershed rehabilitation in Davao City; and how the concept of social fencing in the provinces of Quezon and Laguna deepened the communities' collective resolve and shared responsibility in guarding their forests for life.

These are testaments of progress in FPE's conservation support. But the mission of the foundation is none more relevant than today, as scarcity of natural resources worsens hunger, climate change brings collateral damage to conservation investments, and unbridled population growth threatens the carrying capacity of our remaining forests. In almost all USAID-FPE Up-Scaling Project sites, our partners continue to face the challenges of poverty, unsustainable economic development, and fragmented or uncoordinated conservation initiatives.

Notably, this is the first time in many years that our long-time partners in conservation took the initiative of assessing and documenting what strategies worked and what could still work to sustainably protect our forests in KBAs. This is a conscious attempt to create tools and platforms for knowledge access and sharing.

All these interesting case studies constitute the second set of Kalikasan (Kaalamang Likas Yaman) Biodiversity Conservation and Sustainable Development series, one of FPE's regular publications. The first set describes the results of resource and socio-economic assessments in selected KBAs. This second set combines best practices and lessons learned in forest restoration efforts under the USAID-FPE Up-Scaling Project. All Kalikasan BCSD series are packed with knowledge from projects and field experiences. FPE does not stop at merely making beautiful publications, but endeavors to translate knowledge into action towards improving our work and contribution to BCSD.

Allow me to congratulate our project partners, the local government units in project sites, and USAID for making the case studies of the Up-Scaling Project possible. We hope our readers distill the lessons to guide future actions for more effective forest restoration and hunger alleviation.



NESTOR R. CARBONERA
Chair and CEO

MESSAGE FROM PEFI

We have been doing community-based conservation for two decades now but our search for an improved theory and practice continues. Our experiences inform what we do but our work with communities shapes us and our worldviews too. Each community is unique and there is always space for learning.

This case study is part of an organizational effort to continuously learn and serve better.

We wish to thank the FPE and the USAID for this opportunity to share what we have learned. We are also indebted to the Indigenous *Manobo-Tinananon* community in Arakan, North Cotabato who have generously given us the privilege to be a part of their lives.

There is still so much work to do, but we hope that conservation practitioners find these potential best practices useful in their own BCSD initiatives.




DENNIS I. SALVADOR
Executive Director

KALIKASAN

The BCSD Knowledge Series of FPE

Kaalamang Likas Yaman or simply, KALIKASAN, is the publication series of the Foundation for the Philippine Environment (FPE) on biodiversity conservation and sustainable development (BCSD).

Kaalaman is the Filipino term for knowledge while *Likas Yaman* is the term for nature or natural resources. *Kaalamang Likas Yaman* literally means knowledge of nature. As FPE's main thrust is BCSD in key biodiversity areas of the Philippines, this series is essential in presenting and promoting valuable theories, case studies, site assessments, best practices, and other learning materials.

As Atty. Danny N. Valenzuela, FPE Chair and CEO (2010-2012), explains, "That the work of the Foundation for the Philippine Environment on biodiversity conservation and sustainable development has gone a long way in the past twenty years cannot be overemphasized. In fact, it has become imperative for FPE to embark into an appropriate, meaningful and innovative knowledge management systems in order to preserve and properly utilize the significant learnings out of its various collaborations with partners in key biodiversity areas all over the country."

As a major repository of the knowledge base of FPE and its partners, KALIKASAN will serve as a series of dynamic and enriching resource materials that will educate the readers, in particular those involved in the environmental protection of key biodiversity areas, and equip them with both theoretical and practical knowledge.

Kaalamang Likas Yaman may also refer to the richness (*yaman*) of natural or intuitive knowledge (*kaalamang likas*). This is in recognition of the a priori knowledge of the local communities in FPE areas of operation and concern, especially among the grassroots communities and indigenous peoples, in environmental protection and conservation.

KALIKASAN seeks to serve as a comprehensive BCSD reference and research source while tapping and augmenting the existing knowledge base of its partners, beneficiaries and communities. This is the legacy of the current FPE leadership to the next generation of Filipino environmentalists who will continue and further develop the current advocacies and endeavors of FPE and its partners.

USAID-FPE PROJECT

Up-Scaling Forest Restoration Efforts in Key Biodiversity Areas

For more than two decades, FPE has been at the forefront of biodiversity conservation and sustainable development in the Philippines. FPE operates as a catalyst for cooperation, fund facilitator, and grant maker in order to save species, conserve sites, and sustain communities.

Capitalizing on previous and existing forest restoration initiatives of its local site partners, FPE, in partnership with USAID, implemented the Up-Scaling Forest Restoration Efforts in Key Biodiversity Areas (KBAs) project from 2011 to 2013. This project seeks to address the decline of the Philippine forests by strengthening the protection of approximately 170,000 hectares of forest habitats and reforesting a total of 480 hectares within 8 sites in the bioregions of Cebu, Negros, Leyte (Eastern Visayas), Luzon and Mindanao. The project has also instituted mechanisms to sustain conservation efforts and continuously affect a macro-level of consciousness among stakeholders.

FPE supports its partners on sites in drawing lessons from projects and sharing results of research and experiences. FPE considers the knowledge gathered and lessons learned by the forest resource managers — people's organizations (POs), indigenous people's organization (IPOs), forest guards and wardens, and the communities themselves — as one of its strategic assets in improving methodologies, practices and systems toward BCSD.

In Arakan Valley in Mindanao, the Indigenous Manobo tribes, through the assistance of the Philippine Eagle Foundation (PEFI) have adopted the rainforestation technology to build forest patches by means of corridors. By doing so, they would be expanding forest habitats to allow viable populations of the critically endangered Philippine Eagle (*Pithecophaga jeffreyi*) to thrive. The USAID-FPE project enabled PEFI to apply lessons learned in conservation work with the IPs, using its community-driven conservation and development framework.

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ACRONYMS

ACF	Action Against Hunger
AFCDP	Arakan Forest Corridor Development Project
BCSD	Biodiversity Conservation and Sustainable Development
BOD	Board of Director
CADC	Certificate of Ancestral Domain Claims
CBC	Community-based conservation
CDP	Community Development Plan
CSR	Corporate Social Responsibility
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DOLE	Department of Labor and Employment
ESSC	Environmental Science for Social Change
FFS	Farmer Field School
FPE	Foundation for the Philippine Environment
GPS	Global Positioning System
ICDP	Integrated Conservation and Development Programs
ICRAF	World Agroforestry Center
IEK	Indigenous Ecological Knowledge
IK	Indigenous Knowledge
IKSP	Indigenous Knowledge, Systems and Practices
IPO	Indigenous Peoples Organization
IUCN	International Union for the Conservation of Nature and Natural Resources
LCO	Local community organizers
MALUPA	Manobo Lumadnong Panaghiusa
MAO	Municipal Agriculture Office
MLGU	Municipal Local Government Unit
NGP	National Greening Program
NRM	Natural Resource Management
NTFP	Non-timber Forest Product
PALUPA	Pan-uangdig Lumadnong Panaghiusa
PAWB	Protected Areas and Wildlife Bureau
PEF	Philippine Eagle Foundation
PLDT	Philippine Long Distance Telecommunications
SLF	Sustainable livelihoods framework
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Community-based conservation has become the hallmark of a country-wide effort to save Philippine biodiversity. Despite a number of criticisms against it, programs where rural people are an integral component of conservation have yet to be implemented in earnest. Using a community-based conservation program with the Indigenous *Manobo-Tinananon* of Arakan, North Cotabato, evidence is provided that partnerships could indeed supply tangible benefits toward achieving sustainable rural development and clear conservation outcomes. In this paper, potential best practices for conservation work, using a flagship species at the grassroots level are highlighted.

INTRODUCTION

Community-based Conservation (CBC) whereby rural people are an integral part of biodiversity conservation has become the hallmark of environmental actions in the Philippines. The key elements of CBC include local communities driving resource planning and management, and more importantly, gaining economically from conservation. As a bottom-up rather than a top-down approach, CBC advocates see it as an exercise in democracy, where local people become active players in wildlife protection, letting them decide how to use and protect their lands, instead of having policies imposed from above (Berkes 2004, Horwich and Lyon 2007).

Despite a seemingly global adoption of CBC approaches to nature conservation, there remains criticism against it. For example, Li (2004) argued that community-based NRM practice in the country remains an imposed environmental agenda that is "...at best a partial response to the need of upland people to secure the benefits of a fuller citizenship" (pg. 266). Talking generally about Integrated Conservation and Development Programs (ICDPs) and how it lacks genuine indigenous peoples' participation, Chapin (2004) commented that these programs were "...generally paternalistic, lacking in expertise, and one-sided—driven largely by the agendas of the conservationists, with little indigenous input." (pg. 20).



However, we agree with Berkes (2004), in that "...the failure of community conservation is not due to the weakness or impracticality of the concept, but rather to its improper implementation." Therefore, practitioners with their insightful experiences and the lessons learned during implementation can contribute greatly to identifying what techniques would work and would not in which particular contexts.

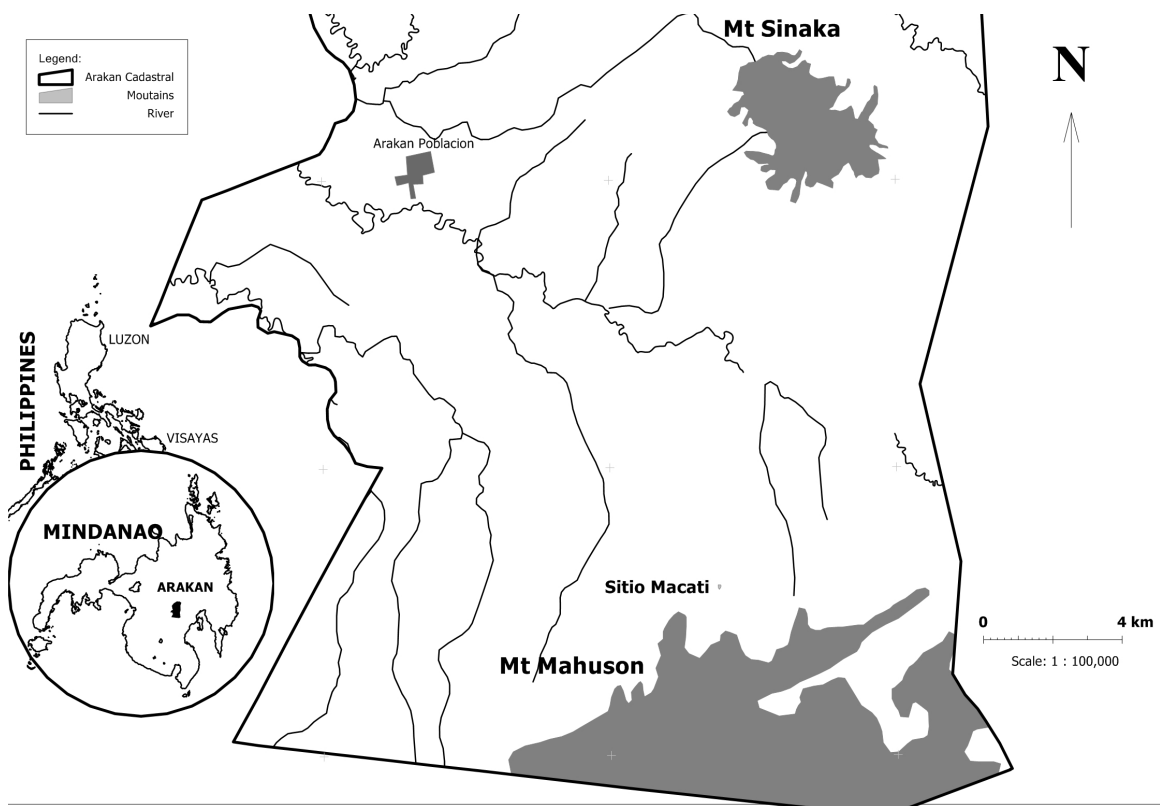
Our goal therefore for this paper is to contribute to a healthy and continuous interrogation of the practice of CBC by describing what we see as potential "best practices" in community engagement, particularly with marginalized indigenous peoples in the Philippines. Using a case study conducted with the Indigenous *Manobo Tinananon* of Arakan, North Cotabato, we particularly aim to provide an example of how local aspirations and community commitment to achieve "imagined futures" can be harnessed to bring about the desired conservation outcomes.

In the succeeding sections, we will provide a background of the case study site, as well as describe the socio-ecological set-up of the study area, the conceptual framework used to design the CBC program, the strategies or steps that could be considered as best practices, and the preliminary evidence that such strategies do achieve both conservation and development goals.

METHODOLOGY

Case Study Site: Description and Timeline of Events

The case described in this paper is centered at Sitio Macati, Barangay Ganatan, Arakan, North Cotabato (Figure 1), a small village comprised of at least 40 households who belong to the Indigenous *Manobo-Tinananon* ethno-linguistic group. The community holds a Certificate of Ancestral Domain Claim (CADC No. 11) covering 1047 hectares of forests, grasslands, and farms. The ancestral domain covers most of the northern slopes of Mt Mahuson, one of the three forest islands in Arakan comprising a meager 4 % of the town's total land area of nearly 69,500 ha.



Projections by the ESSC (1999) showed that prior to American colonization the whole Arakan town was nearly covered with forests. However, towards the end of the 20th century, about 95% of the original forest had been lost primarily through commercial logging, cattle ranching, and cash-based agriculture (Kaliwat Theater Collective, 1995). At Macati, commercial logging spanned three decades, beginning in the mid 1950s.

The traditional governance system gave way to the state's unified and centralized political structure in the 1950s. The village-specific, multiple-authority system of chieftains, elders, wise men, priests/priestesses, and warriors who collectively maintained political and socio-economic order, often through kin-based customs and sanctions, was substantially undermined (Manuel, 1973). Immediately after logging ceased in 1985, the Manobos faced another political exigency with the occupation by insurgents of their territory. The whole community evacuated, and re-settled a few years later only after the rebels left.

Shortly after a Philippine Eagle nest was discovered at Mt Mahuson in 1992, the community organized its own Indigenous Peoples' Organization called the Pan-uangdig Lumadnong Panaghiusa (PALUPA). Its officers are elected through a popular vote and a Board of Directors, made up of the Chieftain and a group of traditional elders and leaders supervise them. Thereafter, PALUPA became the focal management entity for conservation and development projects within the ancestral domain in partnership with PEF and FPE.

In 2010, as part of a revitalized three-year landscape-level conservation plan for the whole Arakan Valley using a 'forest corridor' approach, the sustainable rural livelihoods framework (SLF) became the conceptual model for planning community-based interventions with PALUPA (Box 1). SLF has gained popularity in rural development work, including environmental projects where the causes of degradation are tied to poverty issues and the need for stable and resilient livelihoods (see Solesbury, 2003). PEF also launched a 'conservation agreement' scheme whereby the community is provided with financial or 'in-kind' incentives in return for either collective or individual environmental service.



Prior to American colonization, the whole Arakan town was nearly covered with forests but commercial logging, cattle ranching and cash-based agriculture caused the loss of 95% of its original forest (PEFI File Photo).

Definitions of Sustainable Livelihood “Capitals” (all adapted from Scoones 1998:7-8, except ‘cultural’ which is from Lertzman 1999)

Natural capital – the natural resource stocks and environmental services from which resource flows and services for livelihoods are derived

Economic or financial capital – the capital base (cash, credit, savings, and other assets, including infrastructure, production equipment, and technologies) essential for livelihood pursuits

Human capital – the skills, knowledge, ability to labor and good health and physical capability important for livelihoods

Social capital – the social resources (networks, social claims, social relations, affiliations, associations) upon which people draw when pursuing different livelihood strategies

Cultural capital – resources of shared knowledge, beliefs, and values upon which communities are based



In 2011, a community development planning session was facilitated using an Indigenous planning approach anchored on the SLF. The framework looked into community strengths and assets rather than deficiencies, among other things (Figure 2). This planning framework is a product of a literature review of best practices in community-based planning coupled with analyses of interviews and focus-groups with 10 Indigenous tribes in Mindanao (Ibanez, et al forthcoming). The planning process fundamentally drew from a collective Indigenous worldview in identifying development aspirations and priority outcomes. The community planning also gave an opportunity for training and engaging Indigenous community organizers. Since then, the resulting CDP has become PALUPA's basis for conservation and other development investments.

Data collection and analysis

The case study used qualitative data gathered during project implementation by PEF and PALUPA from 2010 to 2013. Analysis was focused on this period because it was during these years that lessons learned from previous implementation had been proactively incorporated into the annual project design. We also believe that community participation and project ownership were also at their highest during the last three years. Data came from project reports, outputs of planning workshops, semi-structured interviews (focused group and individuals), and participant observations. To complement previous data and validate initial case study results, focus groups were also held in late 2012.

We analyzed transcripts of meetings, workshop outputs, project reports, and field notes. Two of the authors spent considerable time living with the community to facilitate project activities (Ibanez in 2011 and Carig in 2011 and 2012). Veloso and Carig spent a few days in the village between September and October 2012, doing key informant interviews and focus groups to validate data collected from project documents, interview transcripts and supplemental interviews of PEF staff who had worked with PALUPA since 2010 (Box 2).

TIMELINE OF KEY INFORMANT INTERVIEWS AND FOCUS GROUPS WITH PALUPA IN 2012

09.25

Planning and preparation for interviews and focus groups at the Philippine Eagle Center, Davao City

09.26-28

Key Informant Interviews and focus groups with PALUPA

09.29-10.04

Consultation of results with PEF team and FPE

10.05

Validation of results with PALUPA

Figure 2. Indigenous framework for planning sustainable livelihoods and natural resource management goals within *Manobo-Tinananon* ancestral domains in Arakan, North Cotabato. This process is an amalgamation of community-based planning processes described in the literature and the results of focus groups with 10 indigenous communities.



RESULTS AND DISCUSSIONS

1. Rural livelihood outcomes

Social capital – The number of project partners have increased, broadening community access to more resources and development actors. Apart from PEF (who continuously brokers development assistance for PALUPA) and FPE (who has been providing crucial support to NRM activities and community capacity strengthening since 2000), development aid from public and private institutions that were packaged as ‘conservation incentives’ has increased.

In 2010, PLDT supported a food security project and the construction of a day care facility, while ICRAF undertook a case study with Indigenous researchers on smallholder agro-forestry at Macati. SEF gave solar lamps as a ‘rainforestation’ incentive, while the DepEd began adult literacy sessions in 2011. In 2012, USAID and FPE provided substantial conservation funds and the MAO instituted the Field Farmer School (FFS). ACF also gave tools and seeds. Project allies for 2013 include the MLGU, DepEd, and PLDT (primary school), PAWB-DENR (new home gardens and water system repairs), and Globe (25,000 cacao seeds and nursery supplies).

PALUPA got registered with DOLE and became part of local coordinating bodies. They joined the Civil Society Organization of Arakan in 2010 and regularly went to its meetings. They also became part of the Arakan Environment Coordinating Council, a local NRM think-tank that recommends policies and supervises environmental programs. PALUPA’s membership in the MALUPA federation of Arakan Manobos was also renewed. Its DOLE registration, on the other hand, bolstered eligibility to the NGP in 2012.

Economic/financial capital – The community is receiving ‘payments for environmental services’ through reforestation and engagements in research and other project activities. The community as a whole is paid with cash incentives




Under the USAID-FPE project, communities set up their nursery chambers to raise seedlings needed for reforestation of denuded areas in Arakan alley (FPE File Photo).

in exchange for the care of communal tree nurseries, whereas household-based incentives were awarded for land preparation, planting, and maintenance of reforestation plots and fire breaks. Since 2009, PALUPA received at least a total of Php 218,400.00. In 2012, nursery earnings were used to electrify each home using a generator. On the other hand, individual cash incentives were used either to set-up backyard farms, buy farm seeds or fertilizer, pay for children's school fees, or meet other basic needs. Local experts are also compensated for the knowledge they share during research and biological inventories.

Human capital – The knowledge and capabilities of PALUPA officers and members in various aspects of organizational and project management are continuously enhanced. From 2009-2010, they were trained in (i) process documentation, (ii) Indigenous governance systems, (iii) project implementation, monitoring and evaluation; and (iv) paralegal procedures. In 2011, the officers participated in organization leadership sessions and training on financial management. Practice followed theory through active involvement in project decision-making and management.

Three Manobo youth - a college graduate and two undergraduates - were also chosen by the community in 2011 to undergo a crash course as local community organizers (LCOs) with PEF. For one week, Jimmy Ubay, Danny Catihan and Airene Umbaoy joined trainees from two more Indigenous villages in Arakan for special sessions on basic community organizing, development planning, agroforestry, GPS mapping, and farm planning. They also joined exposure trips to other ancestral domains in Mindanao to interact with and learn from other IPOs. Two more community members were hired as LCOs this year, Rey Namansila and Inday Namansila.

Learning sessions and coaching on agroforestry are sustained by project field technicians. Just recently, thirty households enrolled in the FFS program to learn about permaculture. FFS students also receive seeds and seedlings of agro-forestry crops, such as fruit trees, bamboo, coffee, and cacao for propagation. In 2011, households also participated in a grassfire prevention and management training facilitated by municipal fire fighters.



Natural capital – As a farming community, land is their most important natural asset, yet a large part of the ancestral domain is made up of unproductive grasslands. But through ‘rainforestation’, they aim to reclaim these grasslands while restoring wildlife habitats. At present, a total of 38 hectares of idle lands are being converted into agro-forestry sites of native trees. This year, an additional 70 hectares will be rehabilitated through the NGP and the AFCDP 3.

The forest is also an important community asset as it is a source of immediate ecological services (water, local climate regulation), supplemental food (bush meat, honey, rattan shoots, etc.), and NTFPs (rattan, ferns, romblon). Community foot patrols protect the Mahuson forest from slash-and-burn practices, illegal logging, and other forms of encroachment. Additionally, periodic wildlife inventories, biodiversity monitoring and other NRM activities also generate information necessary for making conservation plans, which, if socially marketed properly, results in more external support for forest conservation.

Cultural capital – Indigenous knowledge systems and practices (IKSP) were provided space by employing best efforts to integrate Indigenous knowhow into project implementation. In doing reforestation for example, we relied on Indigenous expertise in species selection, identification of mother trees, and collection of wildlings. For forest monitoring, we used local values and knowledge in the selection of species and habitat indicators and what metrics to use. Tapping into such Indigenous ecological knowledge (IEK) and compensating its knowledge holders contribute to empowerment (Wilson 2004, Garnett et al 2007).

There is also investment to support traditional gatherings. Apart from its spiritual benefits, we also believe they are analogues of modern day team-building inspiring and bringing about cohesion and unity. The ‘suksok sa kal-lo’ every January, for example, sanctifies the farming season by praying for spiritual guidance and blessing farm implements. The annual ‘Foundation Day’ for Sitio Macati every October also provides a venue for reviving Indigenous games and talents. These annual gatherings are witnessed by the whole community and thus are a good opportunity for cross-generational learning as well.

A few more project policies that help revive IK systems include the mandatory practice of religious rituals before any major project activity and the engagement of elders in resolving conflicts arising from project-related issues. We also support community calls for “dagyaw”, the practice of communal labor to accomplish project activities such as the repair of roads, setting-up backyard demo farms, and the construction of school buildings.

2. Conservation Outcomes

The ancestral forest has remained intact over the years. We believe this resulted from the synergy of conscientious forest use and a market-oriented farming economy. Timber and non-timber forest products remained largely subsistence. Trees were felled occasionally, but the harvested woods meet domestic needs, not commercial. Timber poaching has been controlled as well, unlike in the neighboring Indigenous territories where chainsaws are regularly heard.

Wildlife and NTFPs close to depletion have been given time to recover. Deer and wild pig hunting and rattan gathering were controlled because the elders believe these resources are already close to depletion. Interviews indicate that prior to receiving the CADC, the forest was an ‘open-access’ resource, with outsiders freely moving in and out of the ancestral domain harvesting game, rattan, and timber without control. The latest forest patrol showed that the state of these resources seem to have improved. Today, outsiders are still banned from harvesting NTFPs and game, and regular foot patrols guard the ancestral domains from trespassers.

Permanent agriculture close to market infrastructures seem to have also eased off the pressure to deforest. Cash-crop farming is the main income source, and because the forests are far from the roads, traditional kaingin and home gardens inside the forests have been abandoned in favor of farming in accessible sections of the ancestral domain. Based on the latest forest patrol, no one resides inside the forests anymore and no new slash-and-burn farms were detected.

The CBC flagship, a Philippine eagle couple, appears safe and is breeding well inside the ancestral forests. Six nesting attempts have been verified since 1992 and all resulted in the young flying off from the nest. The eaglet produced during the 2011-12 breeding season was captured and instrumented, and satellite telemetry readings indicate that the bird stayed unharmed despite flying close to villages. Since 1992, no eagles were trapped, shot, or killed within the area.

The community is actively involved in forest restoration. Last year, PALUPA signed a 3-year contract with DENR for the community's participation in the NGP. Fifty hectares of invasive *Imperata* grassland and 'Buyo-buyo' *Piper aduncum* growths close to the eagle nest site was targeted for afforestation this year. Small patches of "rainforestation" plots are slowly being created as well. Although procedural challenges remain, the team's continuous trouble-shooting and consultation with the community resulted in promising innovations in land preparation and plant maintenance.

3. Potential best practices and lessons

Six key approaches contributed to promising BCSD outcomes with PALUPA:

- working with a socio-economically and culturally homogenous group;
- harnessing existing governance systems and other social institutions;
- identifying and achieving community development goals on their terms and in accordance with their values;
- engaging Indigenous researchers;
- compensating the community for ecological services they perform; and
- engaging private and public sectors to meet community goals.

Working with a relatively small, socio-economically homogenous group, whose members share bonds of kinship and common customs and traditions, helped facilitate equitable community access to benefits, resulting in a generally positive attitude towards the program. In the community, there is no elite minority capturing the benefits of development projects. All households belonged to a single income bracket. When asked why there seems to be no rich household amongst them, LCO Rey Namansila commented in Cebuano that it is because there is still a strong sense of equality and reciprocity in the community, so that accumulating wealth is uncommon; and cultural norms still demand that those with more share their resources with those who have less.

Harnessing traditional governance systems, where elders and traditional leaders remain accountable to the community and not to any external source of authority, seemed to have also ensured community ownership over

the program. The elders and leaders owe their position to the community members; thus, they are beholden to no one else except the community members. As a result, they tend to behave in culturally acceptable ways as expected by their constituents, lest they face shame and ostracism. Such forms of social reprimand are known to be effective in small villages where every member practically knows everyone (Berkes et al 2000). Village-level engagements also seem to protect against what Colchester (1994) called 'lairdism' - the cooptation, corruption and undemocratic tendency of some Indigenous leaders (Li 2002).

Apart from community respect of elders' and wise-men's wisdom over the management of community affairs, they also highly regard codes of behavior and conduct that exhibit an ethic of equity, reciprocity, and sharing. All of these informal social institutions facilitate BCSD goals.

A community-driven conservation and development agenda also promotes a strong sense of community ownership. The Indigenous planning framework was predicated upon this principle, and the results of interviews with participants showed over-all satisfaction with the process (Ibanez et al forthcoming). As a result, a CDP that is drawn from their own worldview (Box 3), values and imagined futures is now in place.

Addressing issues they don't consider important generates frustration. Expressing disappointment over outsider-driven development agenda in the past, PALUPA BOD Lito Namansila commented, "Tsinelas lang ang among kinahanglan pero abi nila sapatos ang among gipangayo- We only wanted slippers yet they thought shoes are what we needed." In contrast, there is a general sentiment now that the CBC at Macati is consistent with the needs that they perceive. Apart from a general feeling of satisfaction, it seems to motivate them more.

There is also an effort to engage and strengthen local expertise as much as possible for project sustainability. Evidence from research and conservation projects indicates that harnessing

Because there is still a strong sense of equality and reciprocity in the community, accumulating wealth is uncommon. Cultural norms still demand that those with more share their resources with those who have less.

REY NAMANSILA

PALUPA
Community
Organizer

'We only wanted slippers, yet they thought shoes are what we needed.'

LITO NAMANSILA

former chairman
and now BOD
member of
PALUPA



***Manobo-Tinananon* conception (worldview) of their relationship with their lands and natural resources.**

"For us *Manobo-Tinananons* whose culture and identity is closely tied to our ancestral land, nature is our life and livelihood. We know our forests more than other people. We draw our water, food, medicine, farm materials and other needs from the forests. It is important for us to maintain good ties with the land because it nurtures our crops. We respect nature because it nourishes us for free. We seek permission from the spirits before we use these resources so we can be properly guided and become safe from sickness and danger. We believe that if we abuse our natural resources, the spirit owners will harm us."

community human capital increase the chances for success of these projects (Garnett et al., 2009). Because they share the culture and values of the community, it is easier for the local organizers to convey information and muster support from the community. We also witnessed livelier and more productive meetings and workshops whenever LCOs facilitate meetings using their Indigenous dialects, perhaps because of the familiarity and a wider range of vocabulary they can draw from their mother tongue to express their thoughts and insights.

Engaging local counterparts in research and projects is also a form of transformative participation, empowering these community members to apply the skills and modes of thinking they have gained to new endeavors (White, 1996; Garnett et al 2009). Thus, the community can benefit from these new skill sets and knowledge.

The very act of engaging poor but knowledgeable people can be transformative as well in that it diversifies means of income. Given that diversifying income sources is the primary route out of poverty (Krishna, 2007), engaging community members can be seen as one potentially useful means of alleviating poverty. Justly compensating communities for the ecosystem services they employ is also consistent with evidence that community-based conservation is effective only if it enhances the social capital of households and local institutions and increases incomes (Mazur & Stakhanov, 2008). Paying Indigenous peoples for the services (knowledge, skill or labor) they provide is also compatible with the growing advocacy that Indigenous ways of knowing are as legitimate as the 'mainstream' (scientific) ways (Berkes 2009).

Engaging the private or corporate sector (through their CSR projects) and the government in the delivery of basic services as an incentive for doing environmental projects also worked in sustaining community enthusiasm. This is all the more important as education, agricultural support and off-farm livelihood - not biodiversity conservation or forest restoration - topped the list of development priorities in five community planning we have supported from 2011 to 2012. We facilitate assistance based on what is on the CDPs. Because it has become a practical basis for monitoring and evaluation, the community also perceives success based on how well the community has achieved its targets in the the annual CDP action plan.

CONCLUSION

The *Manobo-Tinananon* case has shown how holistic, 'human-in-nature' approaches to biodiversity conservation can bring about outcomes consistent with an Indigenous community's aspiration for themselves. The Indigenous peoples represent the most politically and socio-economically marginalized sector of our society. On moral and ethical grounds, the conservation work that they do should be fairly recognized. The example at Macati showed how CBC can tap into pre-existing informal institutions to enforce rules and incentives that favor conscientious and sustainable uses of resources. Indigenous communities, as exemplified by Macati, have innate ways of knowing that can be harnessed to conserve species and habitats. To bring about empowerment, there should be just compensation for the knowledge, skills and labor that Indigenous peoples provide. The government and the private sector has an important role to play in motivating community participation to conservation, mainly by providing forms of incentives: cash or 'in-kind'. However, one should always bear in mind that what works in one place may not necessarily work in others because community contexts and milieus are not always the same. Every community will always be unique. So practitioners do not lose sight of this, we should endeavor to constantly seek learning with (not separate from) the communities we assist.

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The American people, through the United States Agency for International Development, have provided economic and humanitarian assistance worldwide for over 50 years. In the Philippines, USAID works in partnership with the national government in creating a more stable, prosperous and well-governed country through programs that promote broad-based and inclusive economic growth, increase peace and stability in Mindanao, and reduce risks from natural disasters.

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FPE is the first and largest grant-making organization for civil society environmental initiatives in the Philippines. Its support went primarily to protecting local conservation sites and strengthening community and grassroots-led environmental efforts in more than 65 critical sites through more than 1,300 projects grants. The establishment of FPE on January 15, 1992 was meant to abate the destruction of the country's own natural resources. As many as 334 NGOs and grassroots organizations, along with 24 academic institutions, helped set its course through a process of nationwide consultations. Subsequently, Philippine and United States government agencies and NGOs raised the foundation's initial \$21.8-million endowment through an innovative "debt-for-nature swap". Today, FPE remains committed in fulfilling its roles as a catalyst for cooperation, grant maker, and fund facilitator for biodiversity conservation and sustainable development.

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PEFI is a non-profit organization dedicated to saving the endangered Philippine Eagle (*Pithecophaga jefferyi*) and its rainforest habitat. Organized in 1987, it had before that time been operating as a project undertaking research, rehabilitation and captive breeding. Staffed by highly trained and dedicated personnel, it has today evolved into the country's premiere organization for the conservation of raptors. PEFI believes that the fate of the vanishing Philippine Eagle, the health of the environment, and the quality of Philippine life are inextricably linked. Thus, it is committed to promote the survival of the Philippine Eagle, the biodiversity it represents, and the sustainable use of forest resources for future generations to enjoy.

Know more about PEFI at <http://philippineeagle.org/>

The background features abstract geometric shapes. On the left, there are two overlapping triangles in shades of orange and light orange. On the right, a large, solid dark red shape with a rounded top-left corner dominates the space. The text is positioned within this red area.

BIODIVERSITY CONSERVATION AND SUSTAINABLE DEVELOPMENT AS THEY SEE IT

COMMUNITY-BASED CONSERVATION
WITH THE *MANOBO-TINANANON*
OF ARAKAN, NORTH COTABATO

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