

International Forest and Landscape Restoration Conference

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New World Makati Hotel, Makati City

The Case of Philippine Peñablanca Sustainable Reforestation Project 2007 - 2013



Project Title:

Philippine Peñablanca Sustainable Reforestation Project

Project Duration:

6 Years, 2007 – 2013

Project Partners:

Toyota Motors Corporation

Conservation International - Philippines

Department of Environment and Natural Resources

Municipal Local Government of Peñablanca

Project Overview

Philippines Biodiversity

The Philippines is one of world's megadiversity countries. At the same time, it is one of the world's most threatened biodiversity hotspots. This is made manifest by the less than 3% remaining primary forest cover.

Project Overview

Sierra Madre Biodiversity

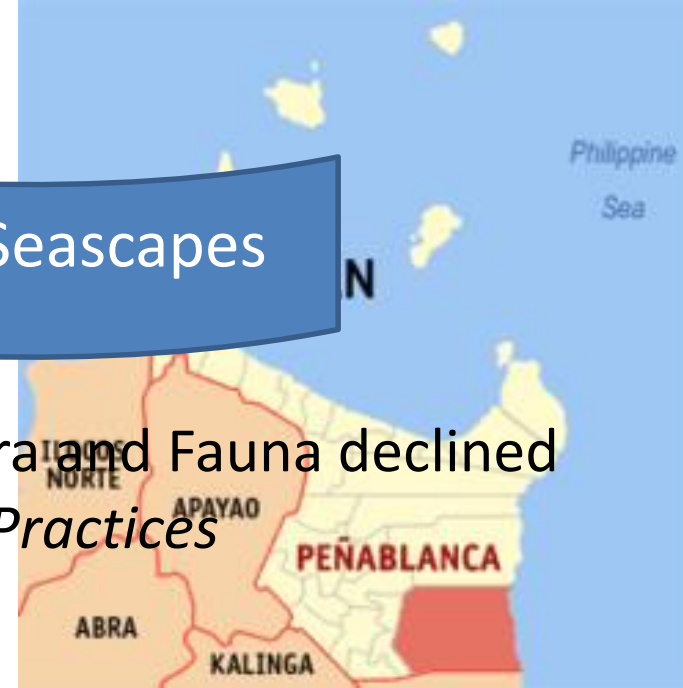
The **Sierra Madre Mountain** range in the northern island of Luzon constitutes the largest block of remaining natural rainforest in the Philippines—about 1.4 million hectares, accounting for 25% of the country's forests, including more than 400,000 hectares or 40% of the remaining old growth forests.

About 3500 species of plants have been recorded in the area, of which 58% are found nowhere else in the world. There are at least 293 species of birds, 84 of which are endemic to the country, and 19 of which are threatened. Because of its high biodiversity, the Sierra Madre mountain range has been identified as one of the conservation priority areas in the Philippines.

Peñablanca Protected Landscapes & Seascapes

Issues & Problems:

1. Forest Cover and Threatened Habitats, Flora and Fauna declined
2. *Unsustainable & Inappropriate Livelihood Practices*



Peñablanca Protected Landscapes & Seascapes

Issues & Problems:

3. *Grass fires*

4. *Insufficient Financial, Logistical and Manpower Resources*

5. *Flooding*

6. *Landslide*

7. *Land Tenure Insecurity of Individual Tenured Migrants*



Project Goal

To promote and achieve sustainability in forest conservation in the Peñablanca Protected Landscape and Seascape, and demonstrate the compatibility among multiple uses of forests – for biodiversity protection, watershed management, carbon sequestration and other ecosystem services for the benefit of the local communities.

Project Objectives

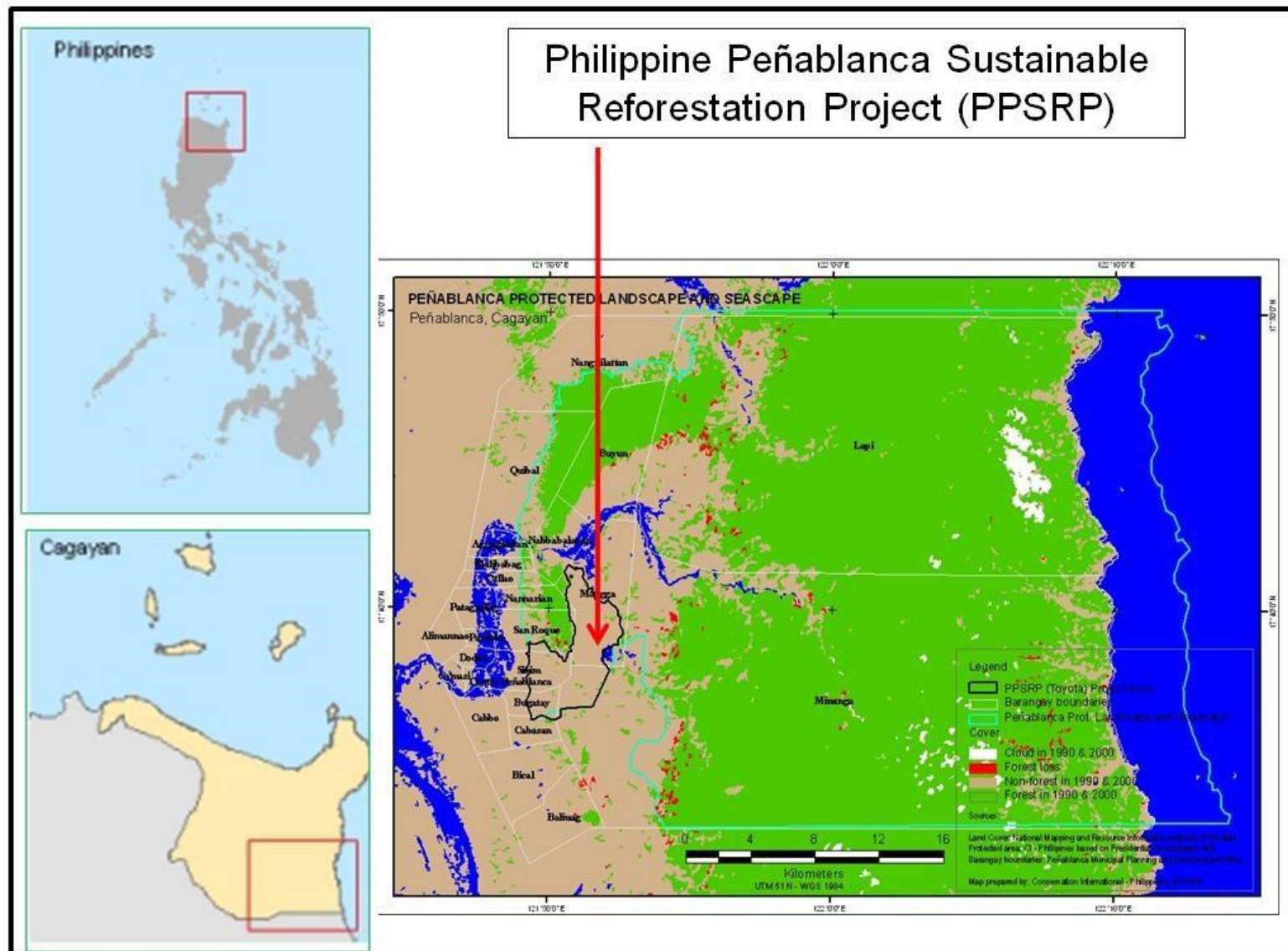
Objective 1: Revegetate or reforest around 1,800 hectares of degraded, open areas through a combination of reforestation and enhancement planting to promote habitat restoration and watershed rehabilitation through the use of appropriate mix of indigenous forest and fruit trees.

Objective 2: Provide alternative livelihoods for local communities within and adjacent to the project site through the promotion of agroforestry within 700 hectares grasslands and shrublands areas

Project Objectives

Objective 3: Promote active participation of nearby communities for long term forest maintenance and protection of the target site through conservation awareness building and skills-oriented trainings for livelihood development.

Project Location and Area

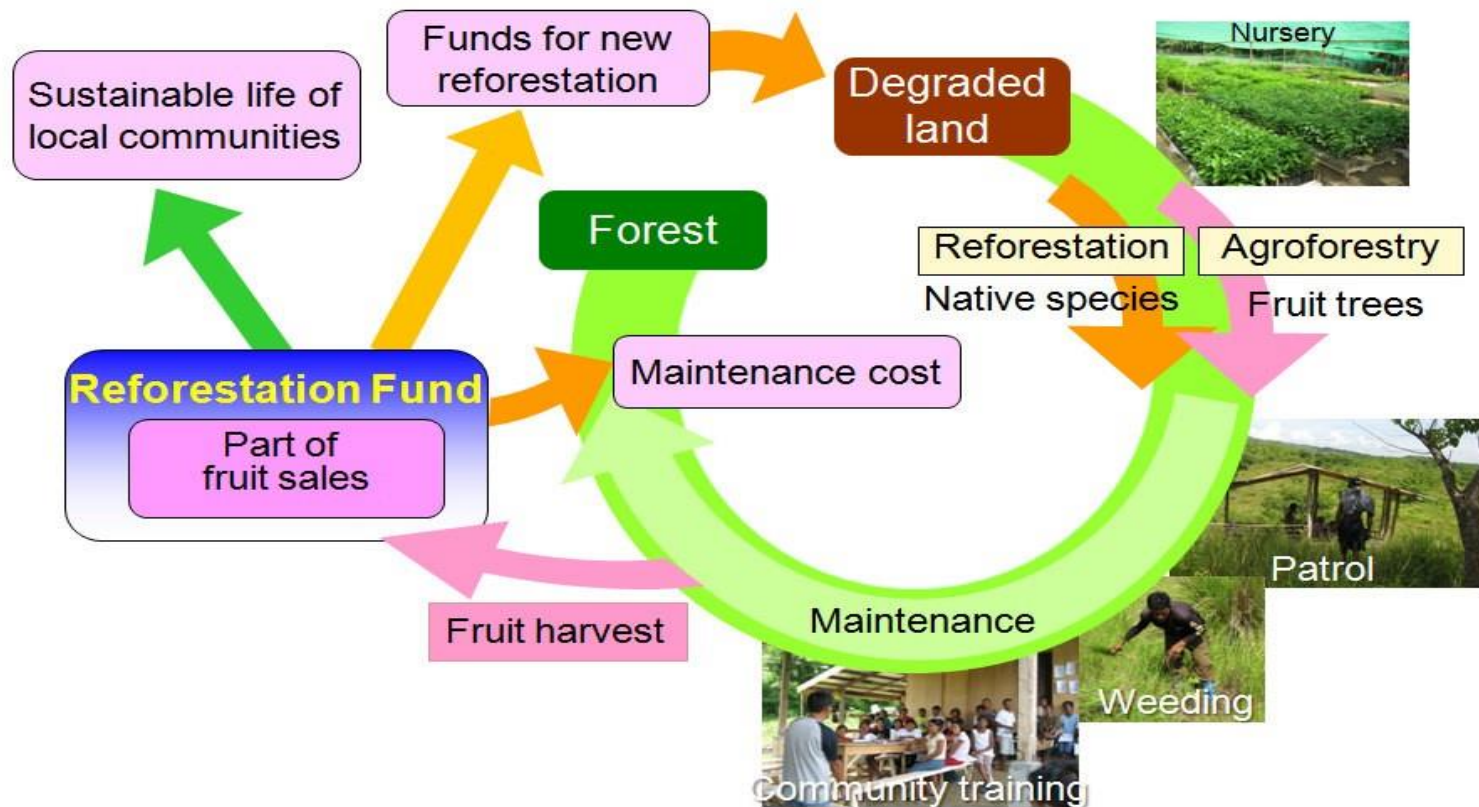


Area = 2,943 hectares within the Peñablanca Protected Landscapes & Seascapes in Northern Part of Sierra Madre

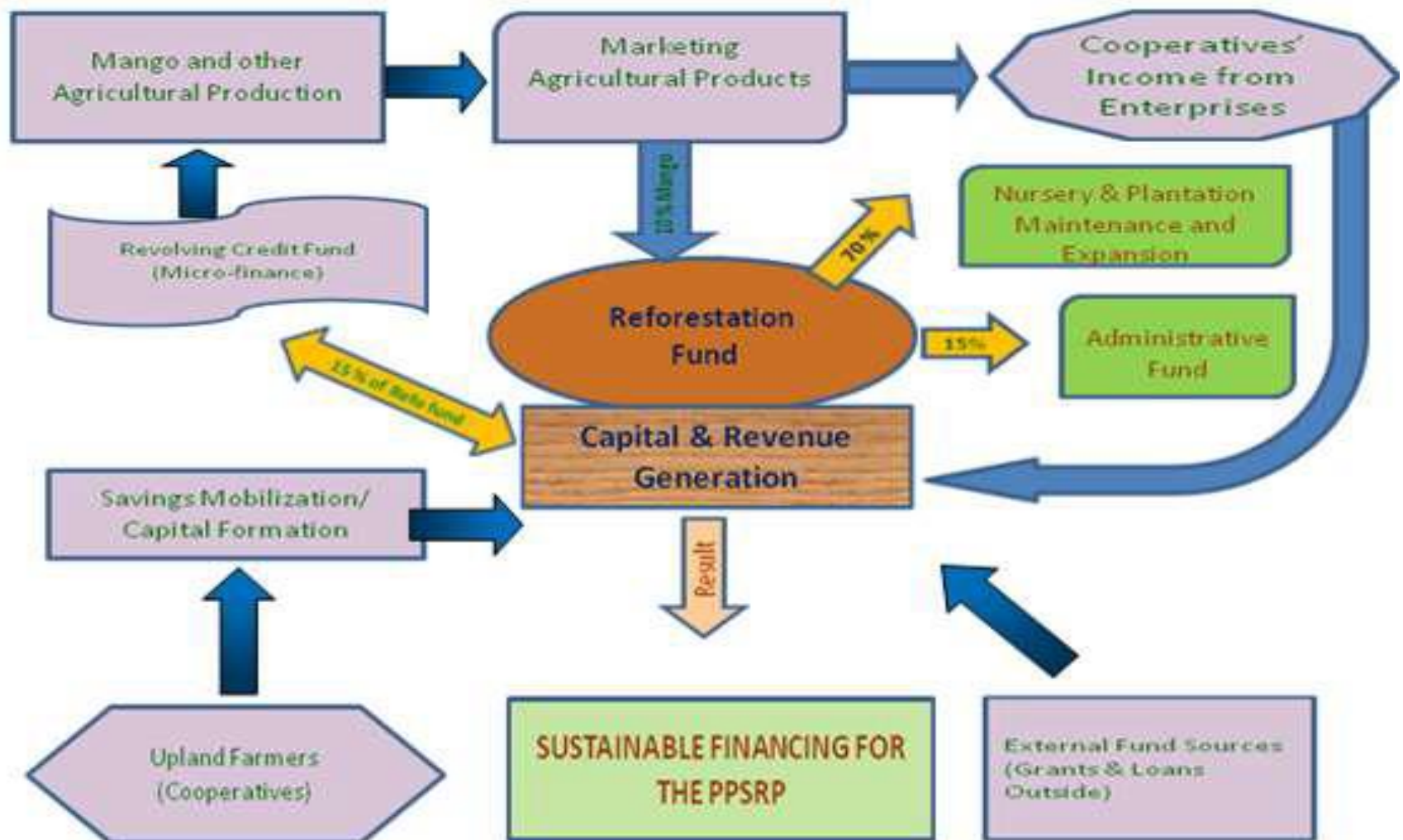
IMPLEMENTATION

Conceptual Diagram

“Sustainable Reforestation”



Reforestation Fund Mechanism



IMPLEMENTATION:

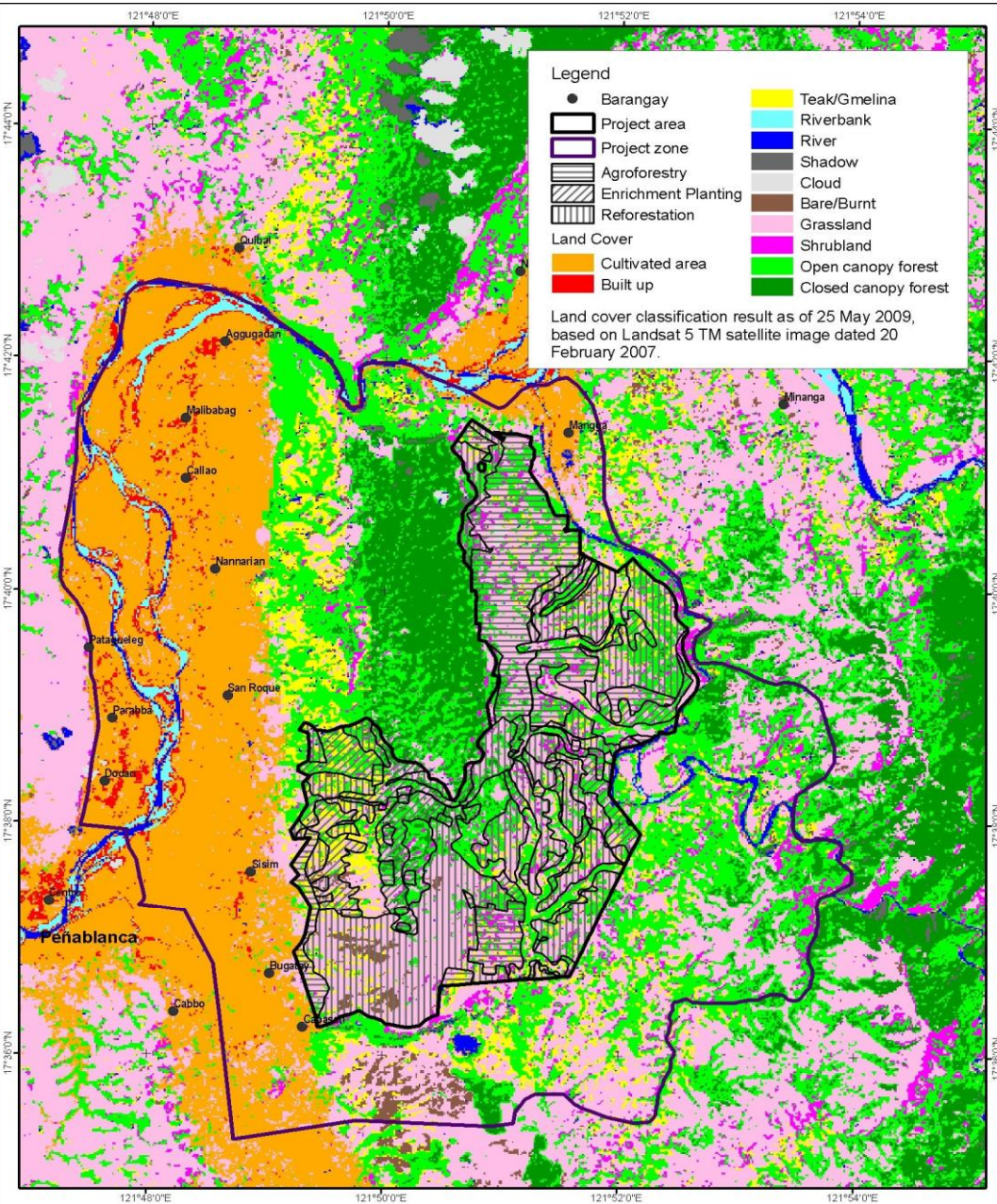
A) Combating Deforestation

- **Series of Consultations were done before and during the project implementation ensuring the engagement of communities from planning, designing & implementation**
- **Preparing the community**
 - **Intensive Information Campaign (TV program, local radio, lectures, posters, flyers, pamphlets, billboards, local ordinances, resolutions)**
 - **Communities were organized into associations & cooperatives**
 - **Trained their officers & members on leadership, financial management, nursery operation, plantation, agroforestry (season long training), etc.**
 - **Capacitation to local partners (Training on Carbon 101)**

A) Combating Deforestation

- **Forest Protection** – there were Community Reforestation Guards (CRGs) trained and deputized by DENR patrol within the project and adjacent forest areas to control unregulated cutting & grassland fires.
- **Ordinance on Fire Prevention was approved & implemented at barangay level**
- **44 km fireline established**
- **Ordinance on astray animals**
- **Look out Towers**
- **Efficient Alternative stove & distributed – 998 HH**
- **Communication & Education Campaign support**

B) Vegetation Recovery (Reforestation)



Areas for Intensive Restoration Activities:

Reforestation – 1,330 has
Enhancement Planting – 470 has
Agroforestry - 700 has



B) Vegetation Recovery (Reforestation)

- **Seedlings Production** – 450,621 indigenous tree seedlings produced by communities
- **Plantation of mixed indigenous tree species** – 1,449 hectares



Due to persistent burning, the management concentrated its planting effort in 40 hectares and developed a Community Based Reforestation Manual for extremely adverse site condition



FOREST REHABILITATION

Revised Plan:

- Focus on EAST CONCENTRATION AREA
- Planting strategy to ensure high survival and growth
- Apply refo OJT for 4 coops and alliance



FOREST REHABILITATION

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As a result of concentrating to the eastern side of project area:



A panoramic view of Reforestation Area which used to be heavily grazed before the PPSRP

IMPLEMENTATION:

- **The communities were engaged in nursery and plantation establishment.**
- **Chosen officers and members of peoples' organizations participated in the protection, monitoring and research (foot patrol, survival monitoring, stream flow monitoring, flora & fauna monitoring, Site-species suitability, etc.)**

IMPLEMENTATION:

C. Agroforestry

- 400 hectares of mango plantations – Reforestation Fund will come from the 10 % of the gross income for project sustainability after phase out.
- 60 hectares for other fruit trees like cacao, citrus, tamarind, rambutan, coffee, mandarin, & jackfruit.
- Business Plan for marketing mango fruits



Other Project Outputs:

- **PACBRMA awarded**
- **Business Plan for Mango**
- **Community Based Reforestation Manual**
- **Mango trees started to bear fruits in 2012**
- **Other fruit trees also started to bear fruits in 2012**



Cacao trees have been fruiting for over the 5 years

LESSONS AND CHALLENGES IN THE ATTEMPT TO SUSTAIN RESTORATION EFFORT

- The goals are too ambitious. So many interventions esp. monitoring and research. Towards the end of the project, monitoring activities were tapered down (survival monitoring, soil erosion, infiltration, water table, precipitation, extreme water flow, stream emergence, etc).
- Donors Expectations
- Carbon Ownership – rights to carbon was given to LGU
- Reforestation Fund for the sustainability of restoration initiatives didn't work as envisioned since the mango trees as source for the fund is vulnerable. Mango trees were devastated during cyclone Lawin in 2016.



Mango trees devastated by strong wind brought by typhoon Lawin in October 2016.

Accumulated Refo Rund collected for the project sustainability is Php 4,500.00

Challenge : Replacement of dead mango trees

LESSONS AND CHALLENGES IN THE ATTEMPT TO SUSTAIN RESTORATION EFFORT

- **Unmet expectations from partners especially local government**
- **Unquantifiable project benefits (natural regeneration)**
- **Use appropriate validation standards to serve as guidepost right after commencing the project.**
- **While the project used indigenous tree species but there was no site-species compatibility done before the project started in 2007. Research was conducted simultaneous with the implementation (Species-site suitability, combating drought, etc.)**

LESSONS AND CHALLENGES IN THE ATTEMPT TO SUSTAIN RESTORATION EFFORT

- **Cooperatives and associations (POs) lack the capacity to manage reforestation fund (sustainability mechanism) despite a number of trainings conducted for them in 3 years. Project management would have considered viable community organizations to manage the fund. Within 3 years after project phase out in 2013, POs only collected about 4,500 reforestation fund since they were not able to collect the contributions of other farmers as agreed in sustainability plan.**

Other Fruits trees in Agroforestry areas



Cacao fruits were processed into a delicious chocolate

Irineo M. Talosig, Jr.
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**THANK YOU
SALAMAT
MABBALO
AGYAMANAK**