Technical Report

(Kimbutan MHP Project Upgrading)

Objectives:

- Conduct a watershed management training and nursery building.
- Complete the civil works of MHP upgrading (Forebay, Powerhouse, Intake, Spillway and Line Post).
- Installation of the electro-mechanical components and hauling of electrical materials into the site.

Introduction:

The target outputs for the period are to complete the civil works of the system and initiate watershed rehabilitation through a training and building up of the nursery as part of laying down the integration of renewable energy development and sustainable agriculture work.

Actual Outputs

Watershed

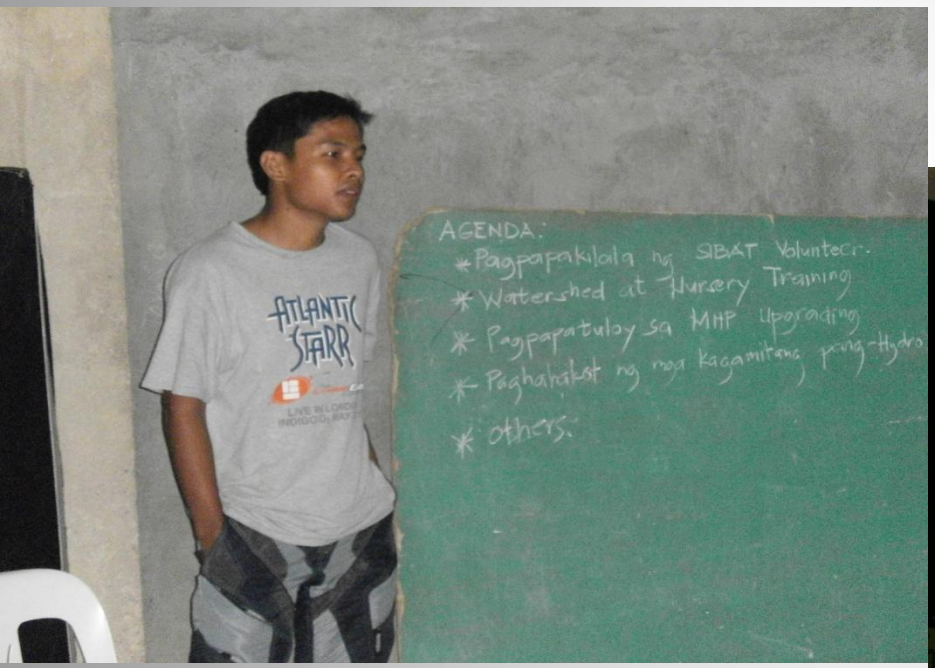
- Conducted 1 training and orientation activity to 15 PO members.
- Constructed the community central nursery.
- Collected 800 assorted wildlings of forest tree species some of which are (rattan,tuwel,red lawaan, alimit).
- Watershed assessment survey conducted

MHP

- Forebay completed which included trashrack installation, spillway expansion, drainage improvement and size expansion
- Powerhouse modified which included gate valve replacement, floor tiling, repainting of electro-mechanical components, re-wirings of electrical connections, interior wash area construction, and installation of door and windows and painting of walls
- Intake reconstruction which include installation of screen and breather.

- Installation of steel posts for transmission lines, currently completed 15 G.I. Pipe 3” x 6 replacements

Community workplanning session focused on developing a workplan for the watershed trainings, civil and electrical works .



Saying a prayer before starting the community planning meeting

Watershed Management Training

SIBAT's Sustainable Agriculture staff explaining the components of watershed and its significance in relations to a balanced ecosystem, food security, biodiversity, health and conserving water particulalry for MHP use

The MHP powers the LCD projector and computer during the nightly community meetings

Brownish flowing water showed excessive siltation indicating there are denuded spots inside the watershed perimeters

Nursery Building

Soil media are being processed to fill a thousand poly-ethylene bags for the collected wildlings of assorted forest tree species

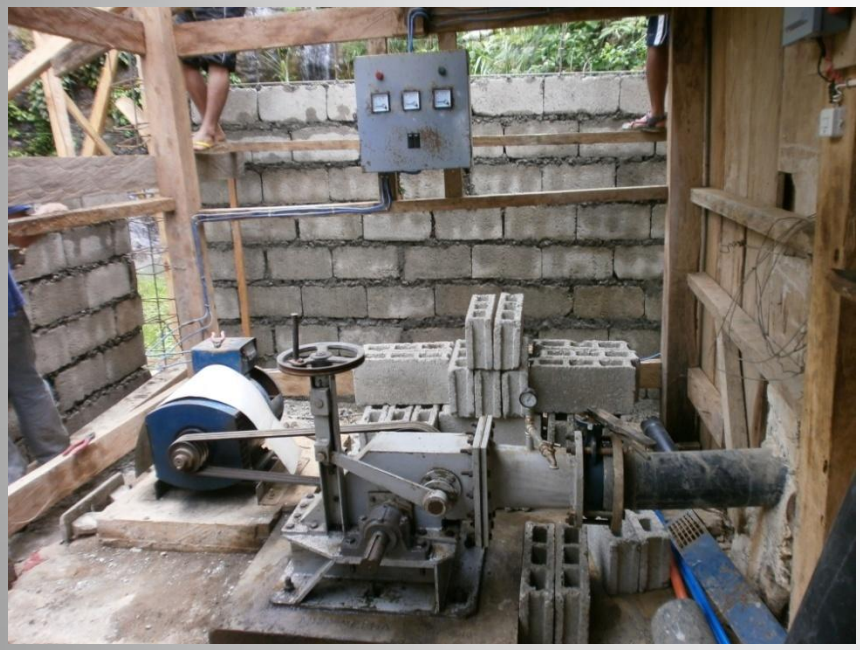
Women power at work in the construction of the central nursery station

Civil Works in MHP System

The people from the community working on the powerhouse foundation

Powerhouse Modification

Remodeling the power house from wooden to concrete make .



Our technician prepared all the pipes for the electrical works.

Installing electro-mechanical components

Valve Replacement

New butterfly valve(Geared type) was installed and existing turbine repainted .

Cleaning and checking the ball bearings in the turbine.

Sharing of knowledge on how to install tiles in the floor.

Continuation of tiling works

Installing the electrical connections inside the powerhouse.

Near-finished powerhouse remodeling work

SIBAT Technicians and Kimbutan PO partners after interior painting works

Electro-mechanical devices getting a face-lift after repainting

Forebay Expansion

Women power at work : helping out in bringing sand and gravel to the forebay being expanded

Installing the trashrack in the forebay tank for the protection of the turbine.

Before

After

Expanded Forebay

Intake

Installing a breather from the headrace pipe going to the forebay.

Installing a fabricated screen to the intake for the protection of the headrace pipe going to the forebay tank.

Line Posts: replacing previous wooden ones with GI steel

MHP electricity powering the drilling and grinding machines

Preparing the GI Pipes that would replace existing wooden posts

Preparing the foundation of the steel posts

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Carrying the GI pipes to the designated areas for installation

Installing the insulators from the steel posts

Thank You

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