

# Clean Water and Forest Preservation in 13 Villages

## THOUSANDS CAN ACCESS A RELIABLE WATER SOURCE

### Location

Negros Island, Philippines

### Project Date

2008 - 2009

### Funding Status

3 village pumps installed

5 villages funded

5 villages need funding

### People Served by Ram Pumps

Approx. 9090

### Households Benefitting

Approx. 1515

in 13 villages

### Technology Used

Hydraulic Ram Pump

### Developments after Pump

Installation

Improved health

Time for education/chores

Growing food

### Cost of Water Delivery per

Household

\$81

### Money still needed from

Green Empowerment

\$17,983

Green Empowerment and its partner organization, the Alternative Indigenous Development Foundation, Inc (AIDFI), have proposed the installation of hydraulic ram pumps (HRP) in 13 villages in Negros island in the Philippines. Communities could receive water, pumped uphill, using hydraulic ram pumps directly into their villages, to community shared faucets. Women and children would no longer have to haul water up steep hillsides and poor communities can benefit economically from growing vegetables and other high-value crops. These locally manufactured pumps, which require no electricity, deliver water to upland communities that would otherwise have dirty and/or insufficient water. The project when completed could directly benefit over 9000 people.

### How ram pumps help people's lives

On the hilly and steep terrain of the Philippines island of Negros, the struggle for potable water creates a cycle of poverty. The terrain is hilly, and many villagers must scramble, sometimes hundreds

of meters, down a steep slope, twice a day, to collect fresh water, which is carried-back in containers on a shoulder yoke. This work is typically performed by women and limits the volume of water available to households for hygiene, sanitation, and irrigation. Collecting water takes a lot of time. Time that could be spent on productive activities, such as caring



for children, rearing livestock, and growing vegetable gardens. A hydraulic ram pump system is a viable renewable energy option to bring the water closer to the communities.

### Communities are invested in these projects

Already 3 villages have functioning ram pumps, 5 have secured full funding and 5 are seeking funds. Money raised by Green Empowerment triggers complementary funding by local authorities which helps invest local communities in the project and speeds up the process of securing sufficient funding.



*Installing a Ram Pump in Negros*

*Your generous donation will fund these important projects in the Philippines. Visit [www.greenempowerment.org](http://www.greenempowerment.org) and click "Donate Now"*

# Ram Pumps Save Precious Time



**Green Empowerment**  
social justice - local leadership - sustainability

## A VALUABLE ISLAND TO CONSERVE FOR GENERATIONS



*Water collected from a village faucet*

### How ram pump technology works

A single pump can benefit 20 to 100 households or more, and it can pump water uphill to a maximum height of 200 meters. It runs automatically on a 24-hour basis and is a clean renewable energy system – no fuel or external energy is needed. Ram pumps utilize the momentum of a large flow of water through a valve which creates pressure in a second chamber that raises a smaller quantity of water to a higher elevation.

### Unique eco-systems, plants, animals and watersheds can be protected

These projects are located in North Negros near Mount Kanlaon Natural Park buffer zone. It is critically important to maintain a clean and healthy watershed to protect native life. These projects ensure conservation takes place within the communities by teaching villagers how to take care of the watershed that provides them with the essential components of their livelihood, clean water and food. Long term viability of the project is ensured as AIDFI will select 2 or 3 local people to be trained as technicians who live in the community.

Local trainees will help AIDFI in the actual installation of the system. After completing the installation, the local technicians are trained further in maintenance and provided with a tool kit and spare parts for the pump. With proper maintenance and replacement of valves, the ram pump system can last for 30 years.

### Negros Island and forest preservation

Negros is the 4th largest island in the Philippines and only has 4 % of its original forest cover left, putting a huge amount of pressure on the remaining endemic species. A total logging ban was imposed in 1983, as commercial logging was no longer a viable business, but the island forests still suffer from illegal logging. Ram pumps will help alleviate this because community leaders will ensure protection and tree planting in their watershed to ensure that their Hydraulic Ram Pump water system can be productive for its full life of up to 30 years.



*Negros island, central Visayas*



*Native trees planted to restore local watersheds*