

# Clean Rivers, Lighted Lights : Monetary Rewards for Reducing Sediment

Case Study : Sumberjaya, Lampung Province, Indonesia

## Background

Blessed with ample water, Indonesia fills a crucial portion of its energy needs with hydropower. However, the supply of hydropower has declined in recent years because of increasing sediment loads in the water used to generate electricity. RUPES researchers in the upper Way Besay watershed in Sumberjaya. Have isolated land degradation, land slides and erosion as primary factors in creating extremely high sediment loads that reduce production capacity and dramatically increase costs.



## Reward Mechanism

### Monetary Reward Mechanism for Reducing Sediment

As a solution, RUPES is investigating mechanisms for the community to “sell” environmental services to hydroelectric company “buyers.” These mechanisms go beyond usual environmental payment schemes that ask buyers to make payments while trusting they will receive value.



As an alternative, the project is testing a mechanism that directly measures levels of sediment reduction. Buyers will then only pay for reduction actually achieved.

## RUPES Project

### Organizing the Community to Provide RiverCare

With RUPES help, members from the community around the hydropower reservoir have organized themselves into the RiverCare group, taking on responsibility for producing clean water for electrical generation.



### RiverCare Group Activities :

- Reduce Runoff Speed and Trap sediment on Path Road
- Control sedimentation and water flow from upper watershed
- Increase ground water table for surrounding areas.

## Agreement of Reward for Reducing Sediment

RUPES as the stand-in buyer and RiverCare as the seller have crafted an agreement that clearly spells out the level of measurable sediment reduction required for specified payment amounts:

- \$1,000 for a reduction of 30% or more
- \$700 for a 20 to 30% reduction
- \$500 for a 10 to 20% reduction
- \$250 for a less than 10% reduction

