

Improving watershed rehabilitation outcomes in the Philippines using a systems approach

●●● about ASEM/2010/050

Substantial deforestation has occurred in many critical watersheds in the Philippines which has led to severe environmental, social and economic problems within and outside these watersheds. The scale of the problem is enormous, with Department of Environment and Natural Resources (DENR) having identified 3,882,808 ha in critical watersheds needing urgent rehabilitation (DENR MC 2009-03, Annex A).

Past efforts in watershed rehabilitation in the Philippines have had limited success, largely due to the failure of programs to adequately address key socio-economic and institutional issues. New efforts will face similar challenges unless a better understanding of the factors that contribute to the success and failure of watershed rehabilitation is gained.

This project, a cooperation of the Visayas State University (VSU), the University of Queensland (UQ), Department of Environment and Natural Resources (DENR), with funding from the Australian Centre for International Agricultural Research (ACIAR) aims to improve the rehabilitation of critical watersheds in the Philippines by identifying the key technical, socio-economic and policy drivers for successful rehabilitation and then applying this knowledge to design and pilot test initiatives to improve the outcomes from watershed rehabilitation including improved watershed health, sustainable land use, and increased livelihood opportunities for rural upland poor leading to decreased poverty.

●●● what we want to achieve

1. Identify the key factors that have led to the success or failure of watershed rehabilitation/reforestation programs in the Philippines
2. By working with communities, LGUs and DENR, identify key intervention points and design initiatives to improve watershed rehabilitation outcomes
3. Pilot test initiatives to improve watershed rehabilitation outcomes and implement local-level policy changes in conjunction with communities, DENR and LGUs
4. Develop policy recommendations and advocate national-level policy changes leading to improved design and implementation of watershed rehabilitation projects

●●● how we will make it happen

- Assess past watershed rehabilitation programs through field measurements and interviews of key informants
- Conduct a national workshop on watershed rehabilitation to collate existing information and experiences
- Develop a policy assessment model (PAM) in conjunction with key stakeholders
- Use the PAM to identify drivers having the greatest effect on success of watershed rehabilitation and work with stakeholders to develop specific initiatives to pilot test
- Pilot test ways to improve key socio-economic drivers including initiatives such as livelihood planning, payments for environmental services, and facilitation of local participation which affect watershed rehabilitation outcomes
- At the local level, pilot-test changes to key institutional, policy and management factors that are impediments to improved watershed outcomes
- Implement and monitor initiatives to improve key technical and biophysical drivers affecting watershed rehabilitation outcomes (e.g. improved technical expertise through initiatives such as best practice manual and training; improved reforestation systems developed from field trials)
- Develop policy options and implement a protocol for engaging key national-level policy-makers including briefings and field tours, and actively seek input of Filipino team members in development of DENR policy instruments including Departmental Administrative Orders (DAOs)
- Hold mid-term and end-of-project national workshops

●●● the change we want

For the people

- Greater cost-effectiveness in implantation of watershed rehabilitation and increased areas rehabilitated due to better regulatory environment
- Increased income of local communities by implementation of initiatives to improve livelihoods
- Increased income from larger areas being rehabilitated through innovative funding arrangements (e.g. REDD, CDM, carbon sales into voluntary markets)
- Cost savings from decreased incidence of soil erosion and sedimentation, and deterioration in water quality
- Cost savings from more efficient and effective rehabilitation techniques (e.g. increased survival rates of seedlings, more effective planting systems to achieve reforestation objectives at lower cost)

For the community

Improve rehabilitation outcomes in terms of Improving productivity of the uplands, creating incomes for upland poor, mitigating hunger among highly vulnerable populations, engaging organised upland communities, civil society and local government in sustainable upland and forest management and providing the climate for gainful economic production for poor upland dwellers. One of the key outputs from this project will be the design, development and testing of tree-based livelihood systems that provide a positive return to smallholders and communities.

For the environment

As in other watershed rehabilitation initiatives, this project will help to reduce soil loss and improve water quality. In addition, use of native species in watershed rehabilitation will restore flora and fauna biodiversity lost through deforestation. Supply of forest products from reforestation, combined with associated livelihood opportunities, will also reduce pressure on the remaining native forest from both illegal logging and conversion to kaingin agriculture. Reforestation will also provide carbon sequestration benefits.

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REHABILITATION PROJECT
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