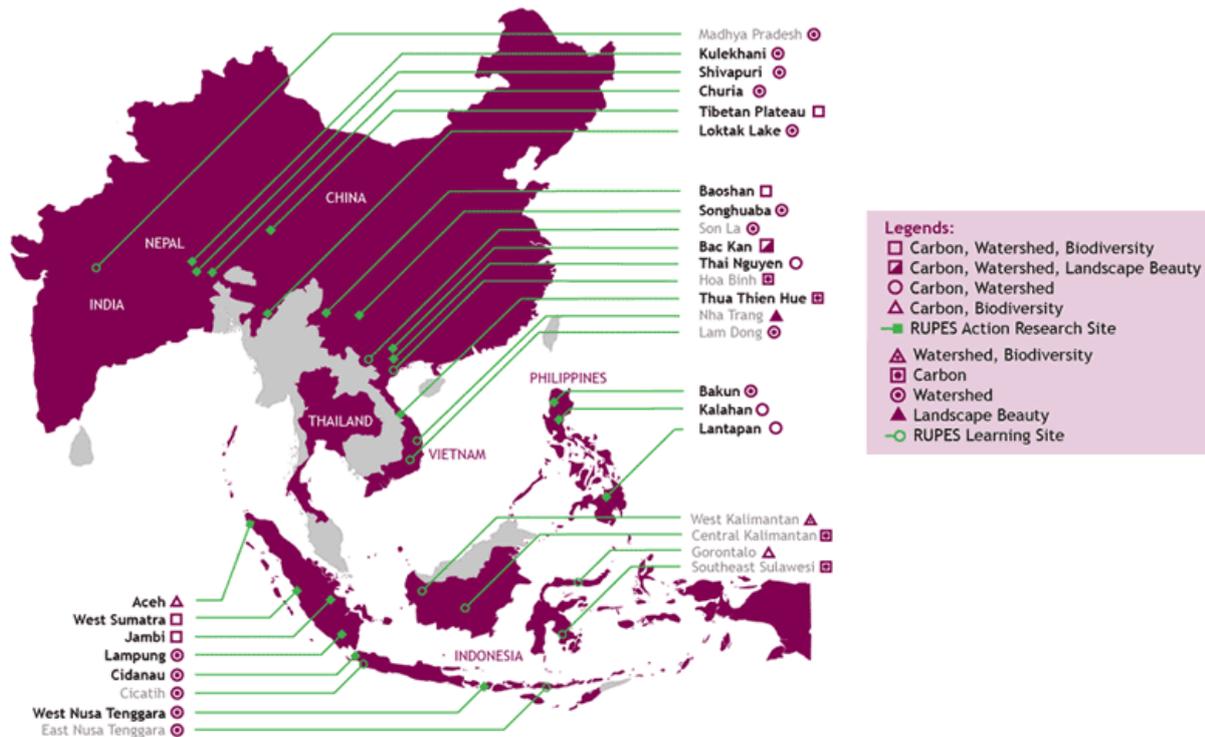


## Rewarding Upland Poor for Environmental Services (RUPES) – various schemes, proposals and pilots

Map of RUPES Action Research and Learning Sites



RUPES watershed services projects

Country	Name	Status	Comment
India	<a href="#">Loktak Lake</a>	Proposal, ongoing studies	Propose to link ecosystem service approaches to regional management plan in a wetland environment.
	<a href="#">Kulekhani</a>	Ongoing, but with bottlenecks	Hydroelectricity as demand. An Environmental Management Special Fund (EMSF) was established under the Makwanpur District Development Committee (DDC) that oversees the distribution and allocation of the royalty budget for the KHP-affected villages. This mechanism has functioned for three years although much of the budget from the royalty was used for building roads and electrification in the villages. The budget received in the fiscal years 2006/7, 2007/8 and 2008/9 were about US\$4300, US\$56,000 and US\$71,000 respectively. The conflict between political parties at local levels is seen as the major reason for the current stalemate in the selection and funding of projects (contact Dr. Laxman Joshi).
Nepal	Shivapuri and Churi Hills	Proposals	Working with Shivapuri National Park and International Union for Conservation of Nature (IUCN). Unclear link to watershed services but emphasis on livelihoods. There are possibilities from government to devolve authority for management to local unit, but the prospects of instituting a reward mechanism as a measure to meet both conservation and development objectives as well as keeping the indigenous community in the park has not gained much traction (see <a href="http://rupes.worldagroforestry.org/node/397">http://rupes.worldagroforestry.org/node/397</a> ).
China	<a href="#">Songhuaba</a>	Proposal	The research in the Songhuaba watershed will serve as a platform for multiple stakeholders to constructively engage in dialogue involving both upstream and downstream stakeholders. Activities to support this dialogue will include



			stakeholder workshops at which the scientific evidence is deliberated, and the initiation of a pilot RES scheme to test and demonstrate appropriate mechanisms for initiating and sustaining improved land management practices (contact Ms. Yang Mei, International Centre for Research in Agroforestry (ICRAF) China)
Vietnam	<a href="#">Son La</a> And <a href="#">BacTang</a> sites	Very early pilot	Bundle carbon and watershed, although most emphasis on carbon. In 2011, with the backing of a new government policy, the World Agroforestry Centre in Vietnam will pilot some of the first payments to poor village communities in north-east Vietnam for the environmental services their forests provide. The team will work with farmers in four villages and other key stakeholders to assess and document the communities' ability to manage the forest to maintain, sustain and increase its capacity to store carbon. They will assist the village to produce documentation as 'proof' of this capacity to attract potential carbon buyers. The work is at different levels. First, at the national level RUPES is working to influence government policies aimed at creating rewards for environmental services schemes. Second, RUPES is working in Bac Kan province in the northwest of Vietnam, supporting intermediate links between sellers and buyers of environmental services and training groups in the use of rapid assessment tools used to analyse hydrological services, carbon stocks and landscapes in a participatory manner (Nguyen Ngoc Huyen and Nguyen Thi Hoa, 2011).
Philippines	<a href="#">Bakun</a>	Proposal, advanced studies	Under the RUPES project in Bakun, the existing rewards/payment mechanisms from the HEC are being tested /assessed for their efficacy vis-a-vis the twin objectives of poverty alleviation and resource sustainability. Since the HEC are providing other voluntary benefits which can be given directly to the Bakun people, RUPES will help them to come up with the proposal on the watershed conservation programs that can reduce or slow down sedimentation. RUPES laid down the groundwork of the formulation of the Bakun Integrated Watershed Development and Management Plan (BIWDMP) which will be jointly implemented by Bakun Indigenous Tribes Organization (BITO) and the Bakun Local Government Unit (LGU). The project implementation activities would benefit the operations of HEC, thus they need to reward the Indigenous People (IP) in return for their effort. The rewards/benefits would include the provision of incentives to villages for reducing, if not eliminating, the incidence of forest fires in Bakun, provision of rewards to upland farmers who are willing to protect and preserve their private woodlots called muyong instead of converting the same into commercial vegetable gardens, and support to agroforestry and livelihood projects/community based Natural Resource Management (NRM) projects (Emma Abasolo, 2010).
	West Kalimantan	Proposal	Several studies underway or finished, but no implementation yet. Work in Kapuas Hulu Basin, Kapuas Hulu Regency, West Kalimantan in National park. Local community and policy makers are concerned about the impact of loss of forest cover on watershed hydrological functions, particularly on water level and water quality (erosion, sedimentation and pollution). See <a href="http://rupes.worldagroforestry.org/node/265">http://rupes.worldagroforestry.org/node/265</a>
Indonesia	Aceh	Ongoing	<p>Inserted within development plan following the Tsunami in 2006, it focuses on:</p> <p>a) develop a working strategy on environmental services and Payment for Environmental Services (PES) in support of the Aceh Green Visio; develop a draft policy and regulations to support PES mechanisms; design and implement a pilot PES scheme as a basis for testing the policy and regulations; evaluate, review and revise the ES strategy and PES Policy and regulations, based on the pilot project experience; and share project experiences with other regional countries.</p> <p>Action sites are located in two main sites. 1) Greater Aceh district and 2) Peusangan Watershed, where the project has signed a Memorandum of Understanding (MoU) between five district governments for watershed</p>

			<p>integrated management.</p> <p>Local community (two villages) receive rewards provided by a drinking water company. The community has established a forum to ensure that no logging took place in upstream areas in order to maintain the quality of the water supply (<a href="http://rupes.worldagroforestry.org/node/460">http://rupes.worldagroforestry.org/node/460</a>).</p>
	Lombok, West Nussa	Ongoing	<p>Ongoing scheme after long studies, in which 75 per cent of Environmental Services (ES) funding is allocated for conservation and economy development of poor community, and 25 per cent for management operation (government). ES programme is managed by Multi-stakeholder Institution (IMP). There seem to be willingness to pay from users, but it is uncertain how much and what would be the proportion within the overall watershed site and the number of people involved (Nando, 2010). <a href="http://rupes.worldagroforestry.org/node/417">http://rupes.worldagroforestry.org/node/417</a></p>
	<a href="#">Cidanau</a>	Ongoing	<p>The payment for watershed services mechanism was started by identification of some potential stakeholders involved. Four farming communities in the upstream areas of Cidanau Watershed were chosen to be the service providers. They are Citaman, Cibojong, Ckikumbuen, and Kadu Agung Villages. They were selected based on their critical lands aspects, including steep slopes and erosion prone areas. KTI was then appointed as the only buyer for the service in this mechanism. KTI, which previously used the water to supply their steel company, is currently the manager for water supply to hundreds of companies in Banten Province, including State Water Company and Indonesia Power Company. Their involvement was believed to increase the watershed conservation rather than securing the access of clean water to the companies. FKDC plays role as the intermediaries, not only to assist the farmers but also to be actively involved in administrative affairs and to monitor the rehabilitation processes.</p> <p>The price was decided upon negotiations between the buyer (KTI), the intermediary (FKDC) and the sellers (farmer groups from four villages). The agreed price was then formalized in a form of Memorandum of Agreement between KTI and FKDC (and was represented by the Governor of Banten Province). The 100 hecatres agreement was later developed between FKDC and the farmers groups.</p> <p>Between KTI and FKDC is agreed on US\$350 per hectare annually. This was based on the government standard for rehabilitation program, including the cost for land preparation, ground cover, seedlings, transportation, fertilizers and labor. KTI made three stages of payment within five years, and is subjected to six percent of tax. The payment from KTI to FKDC was US\$ 35,000 for Phase 1 in 2005-2007 and US\$40,000 for following Phase 2 in 2007-2009.</p> <p>From total money received, 80 per cent goes to the communities, with 95 per cent of the money being used for rehabilitation activities and the remaining 5 per cent used for local business investment. Meanwhile, 14 per cent of the total money was allocated for transaction cost and managed by FKDC. The transaction cost included capacity building activities, finding potential buyers, monitoring and verification processes, and other operational cost. The remaining 6 per cent of total money was used for government tax (Rahadian, 2010, in <a href="http://rupes.worldagroforestry.org/node/332">http://rupes.worldagroforestry.org/node/332</a>).</p>
	Brantas (East Java)		<p>Working with LP3ES, World Wildlife Fund (WWF), and Rekonvasi Bhumi – a local NGO in Banten.</p>
	West Lombok	Pilot	<p>WWF initiated an agreement between the local water users and upstream farmers at Mount Rinjani over water retribution to help protecting Rinjani watershed.</p>
	<a href="#">Sumberjaya (Lampung)</a>	Ongoing	<p>Since 2004, RUPES Project provides support to local communities to gain access to the Indonesian government's Community Forestry Program (HKm). HKm programme provides farmers conditional land tenure to cultivate protection forest. In exchange, farmers adopt environmentally friendly farming practices and protect the remaining natural forest, thus ensuring that the land will continue producing watershed protection benefits. HKm programme has</p>

			<p>currently covered 70 percent of Sumberjaya's protection forest, involved nearly 6,400 farmers and accounted for 13,000 hectares. RUPES Project interprets HKm programme as a form of rewards for farmers who provide environmental services. HKm represents a major success for farmers, who are no longer at risk of eviction.</p> <p>RUPES Project set up a pilot project with one community and one sub-catchment area to develop a mechanism of payment for reducing sediment through the "RiverCare" program. During the programme, RiverCare members worked with RUPES to learn principles related to water conservation, including sediment reduction. Check dams were constructed and maintained, and drainage along pathways and terraces were built. RUPES helped with the technical sediment monitoring and calculation. Conditionality is the main principle in this initiative. During the commitment period, RiverCare group will receive US\$1,000 for a reduction of 30 percent or more, US\$700 for a 20 to 30 percent reduction, US\$500 for a 10 to 20 percent reduction, and US\$250 for a less than 10 percent reduction. By the end of the commitment, RiverCare should have a proven product to offer the hydroelectricity company: improving the environment, helping reducing electricity crisis, and enhancing community welfare (Edi Purvano, 2010 on <a href="http://rupes.worldagroforestry.org/node/335">http://rupes.worldagroforestry.org/node/335</a>).</p>
	Singkarak, West Sumatra	Pilot	<p>Linking royalties from hydroelectricity and funds from carbon sales. Initial payment from hydroelectric utility. In 2005, the Nagaris surrounding the lake received about US\$40,000 under their first allocation of hydropower royalties. The system uses criteria that include compensation for damage to livelihoods in Nagaris bordering the lake, which favours relatively poor Nagaris. The project now hosts voluntary carbon sales as well. See <a href="http://www.watershedmarkets.org/casestudies/Indonesia_Singkarak_eng.html">http://www.watershedmarkets.org/casestudies/Indonesia_Singkarak_eng.html</a>; and <a href="http://rupes.worldagroforestry.org/node/303">http://rupes.worldagroforestry.org/node/303</a>.</p>

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**Watershed  
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