

Principles for Sustainable, Effective, and Equitable PES Programs

- Programs should be financially self-sustainable. Although external funds may be necessary for assessment, design, and initial implementation, the program should be cost-effective and market based with clearly identified sellers and buyers.
- Transaction costs should be minimized.
- Flow of funds and information should be transparent.
- Smallholders should be targeted as service providers where appropriate.
- Poverty reduction activities should make special efforts to include women and other disadvantaged groups.
- Best management practices should be locally defined and monitored for implementation and environmental benefits.

Critical Elements:

- Clearly defined royalty and fee assessments
- Earmarked funds with transparent processes and procedures for disbursement
- Multistakeholder committees or boards with strong representation and voice from environmental stewards
- Locally determined payment priorities and mechanisms
- Participatory planning and performance monitoring.



Lessons Learned:

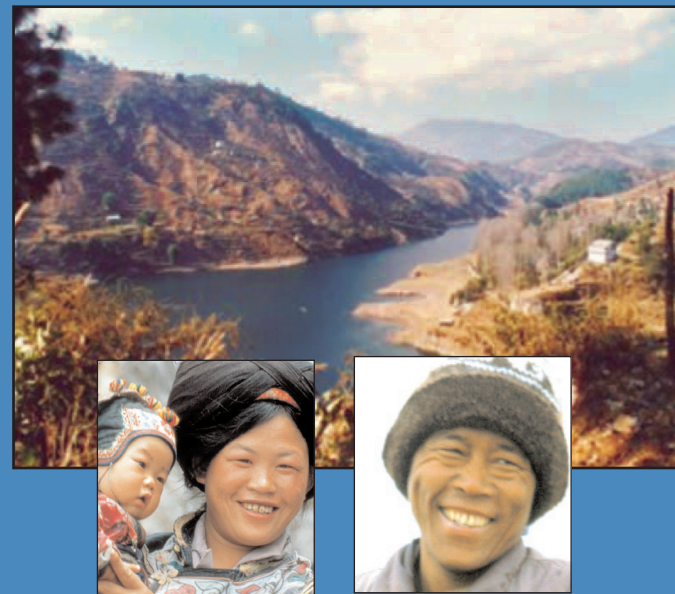
What we learn by developing and piloting PES programs based on watershed environmental services can be used by future programs focusing on other environmental services. As opportunities emerge for biodiversity and carbon services, there will be similar challenges in implementing programs in which the payments reach the service providers. **The best practices and lessons learned from pilot programs can provide a new framework for PES programs that strive to achieve sustainable resource management and improve the livelihoods of the poor.**

Winrock International is a nonprofit organization that works in the United States and around the world to increase economic opportunity, sustain natural resources, and protect the environment.

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Payments for Environmental Services: Innovative Incentives for Protecting Natural Resources and Increasing Rural Incomes



Overview

Sound natural resource management by upland communities often provides environmental services and benefits for downstream users. Yet communities are rarely compensated for the services they provide - even if they have to forego economic opportunities to do so. In response to the continuing degradation of watersheds, there is growing interest in market-based instruments to improve natural resource management by providing incentives to upland communities.

Payments for environmental services are a mechanism for compensating natural resource stewards for the services they provide.

Innovative approaches and mechanisms to compensate natural resource stewards can foster their commitment to conserving natural resources and safeguarding their livelihoods.

If well designed, PES can ensure that those who benefit economically from or demand



services actually pay for them, and that these payments reach the natural resource managers who provide or supply these benefits.

Terminology

Environmental services. The provision of natural resources and healthy functioning ecological systems that produce environmentally and economically valuable goods and services.



Payments for environmental services (PES). Compensation for providing environmental services. The actual payment that is transferred can take many forms: cash, in-kind assistance, exemption from taxes, tenure security, skills training, and other types of compensation. PES can apply to services provided by watersheds, biodiversity, carbon sequestration, landscape beauty, and bundled services.

Sellers. Natural resource stewards "producing" environmentally and economically valuable goods and services. In the case of watersheds, sellers are typically individual landowners or collective resource user groups of upland farms or forests.

Buyers. Beneficiaries are willing to pay for the benefit of receiving environmentally and economically valuable goods and services. In the case of watersheds, buyers are most likely public or private companies, irrigators, hydroelectric power generators, industries, local and national governments, and downstream users.

Environmental Services Include

- ♦ Biodiversity conservation
- ♦ Carbon sequestration
- ♦ Watershed protection
- ♦ Landscape beauty [including ecotourism]

Reflecting the increasing demand for energy and water, watershed based PES programs are of special interest. In Asian countries, many of the critical elements needed for PES program are either under consideration or already in place - and there is strong evidence of the willingness to pay by downstream users, especially hydropower facilities and municipal water supplies, for water, both in terms of quantity and quality.

From Potential to Reality:

Linking the sellers and the buyers. In Asia real potential exists for designing and implementing PES programs that enable stewards of watersheds to receive payments from hydropower plants for providing water. Hydropower plants are already paying royalties - and will continue to pay during the lifespan of the facility. However, these royalties and fees are not paid to the upland environmental stewards - instead they are used by government agencies for payments to displacement communities or to fund local or regional development.

PES programs would create incentives and have a positive impact on both livelihoods and watershed management. In a PES program a portion of these fees and royalties currently being collected would be channeled to the environmental stewards in the uplands

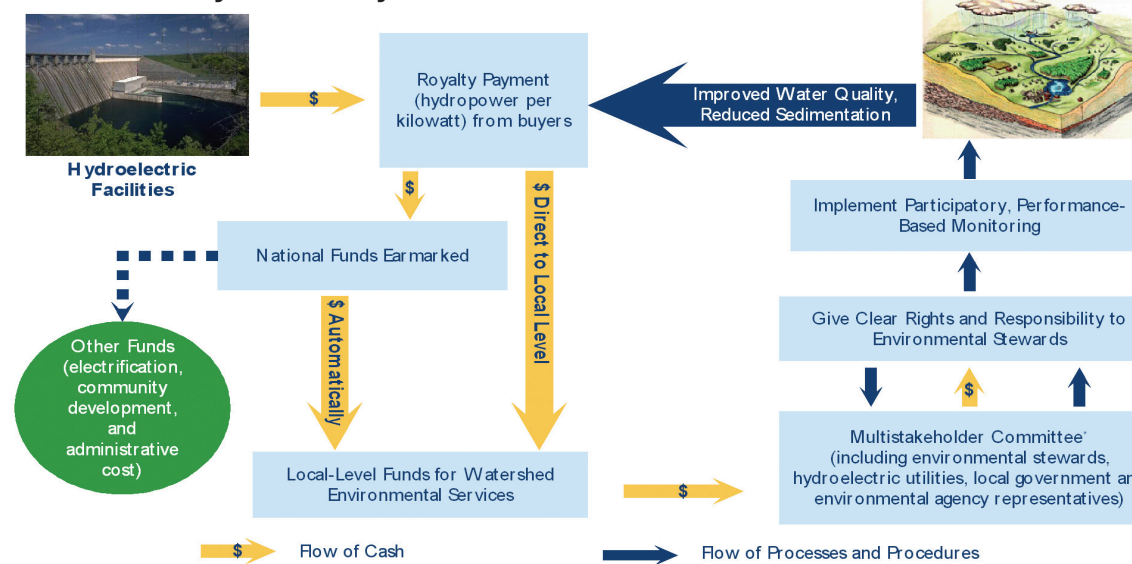
If they continue or adopt appropriate land-use practices for effective watershed management.

Experience in developing PES for hydropower-linked programs will be readily transferable to programs focusing on water for urban areas and industry.

WATER CRISIS?

Demand for water is projected to double or triple within the next 50 years primarily in developing countries with increasing needs not only for electricity, but drinking water; 30-40 percent of the world's largest cities rely on forest areas for water.

Potential to Reality Model: Payment Flow of Environmental Services



* The committee should - with input from the hydroelectric utilities - prepare the best management practices criteria. For instance, they could determine exchange ratios for improving water supply and quality (e.g., two hectares of woodlot established for every metric ton of soil erosion reduction credit). The committee could also set up baseline assessments of participating environmental stewards.

The first step in the design of a PES program is to identify the services for which the payments will be made, the buyers of the services, the providers of the services, and the transfer mechanisms that clearly link payments to effective watershed management.

The goal is a flow of benefits that provide incentives to upland communities and results in cost-effective, improved, and maintained watershed management and, in turn, improved water quality.

