



## Why Power Matters in Payments for Environmental Services (PES)

### Summary

Payments for environmental services (PES) are payments to land owners whose land management practices help to provide environmental services (ES). In the context of watershed environmental services, the most important services are the supply, purification and regulation of water.

PES was conceived as an instrument for facilitating the transition to a green economy. From this perspective, PES is a win-win solution to environmental degradation and poverty.

Today, PES is a widely used policy tool for conservation. Having begun life as scattered, privately funded projects, PES has made its way into many national and international conservation policies around the world. The value of PES watershed transactions in 2011 was USD 8-10 billion; and the figure is still growing fast.

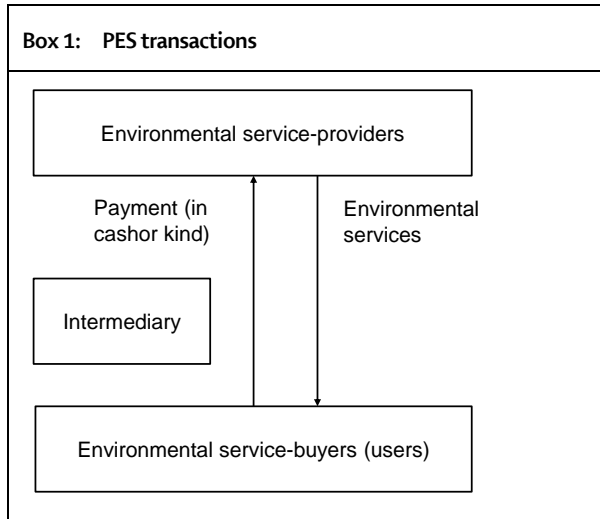
This briefing paper challenges the notion of PES as a panacea for environmental degradation and poverty. While PES is a rapidly proliferating mechanism for natural resource management and conservation, its use is sometimes coupled with a lack of understanding of its social and economic impacts. To this end, we identify a number of critical issues that have received marginal policy attention in the context of the developing world, but which have a great deal of social relevance and impact.

Understanding the critical issues surrounding PES can help to overcome and reduce the following drawbacks:

- Power asymmetries in PES negotiations. PES often involves governments and private enterprises negotiating with marginalised communities. These actors' differing resources and capabilities are likely to influence both the outcomes of negotiations and the operation of PES. Ensuring that the interests of marginalised communities are protected in PES negotiations is not just a social imperative, but also contributes to sustainability.
- PES participation is not always voluntary. Environmental laws, strict contract clauses, unclear participation mechanisms and intermediary agency pressure tend to force PES on service-providers. Voluntary participation should be guaranteed by implementing organisations. In addition, PES policies should integrate peasants' perspectives (i. e. what do providers think they need?), so that PES is a tool for rather than a hurdle to rural development.
- PES schemes are introduced in contexts where natural resource distribution is skewed. PES could exacerbate this skewed distribution or even reduce the degree of control that the less powerful have over natural resources. In many situations, PES may result in service-providers not actually having access to the services they are helping to conserve, or losing control over their resources. PES should be tied to the fair redistribution of natural resource rights.
- PES may compete with communal organisations, and erode cultural and conservation practices that are not based on monetary payments.

### Background

Payments for environmental services (PES) are voluntary transactions in which users or beneficiaries pay service-providers for conservation practices that are conducive to a continued or improved environmental service (ES) provision (see Box 1).



PES schemes are financed by private environmental service users (e. g. hydro-electric power suppliers, agri-businesses and water companies), public agencies acting on behalf of citizens (e. g. national governments and local authorities) or from public-private partnerships.

PES is based on the notion that natural resource degradation is the result of market failure and that the economic valuation of nature and the operation of conservation markets can halt environmental degradation. PES may therefore be seen as linked to the Green Economy Initiative, REDD+ (Reducing Emissions from Deforestation and Forest Degradation) and TEEB (The Economics of Ecosystems and Biodiversity). As part of these worldwide initiatives and programmes, PES has received strong political support and has developed rapidly.

However, the strong support for PES and its rapid development are counterbalanced by a modest understanding of its socio-economic and cultural impacts (Bennett / Carroll / Hamilton, 2012). The implication is that we can solve environmental problems simply by throwing money at them.

### Critique of PES

In this light, this paper critically analyses the impact of PES by not presupposing that ecosystems and their custodians are necessarily better off if they receive payments for conservation. To this end, we performed qualitative research between 2009 and 2013, in order to identify the significance of PES for the poorest families involved in the schemes under review (see Table 1 for a list of schemes studied).

**Table 1: PES schemes studied**

Country	PES scheme	ES	Type of PES	Service users
Ecuador	Nueva America	Fresh water, water regulation and purification	Private funding	Urban water utility users
Ecuador	Chamachán	Fresh water and water regulation	International and national public funding	Irrigation users
Colombia	Cauca Valley Sugarcane Growers Nima	Fresh water, water regulation and purification	Private and public funding	Irrigation users / Urban water utility users / Hydro-electric company
Colombia	Chaina	Fresh water, water regulation and purification	Private funding	Rural water utility users

We go on to describe some of the problems surrounding PES, before concluding with some possible solutions.

**Power asymmetries between buyers and sellers** need to be acknowledged. The PES narrative presents buyers and providers as equal players. At a field level, marginalised peasant and indigenous communities have to bargain not only with large hydroelectric and water companies and agri-businesses, but also with representatives of national, regional and municipal governments. In short, economic and political power asymmetries create an uneven playing field. The PES bargaining arena requires Western knowledge of technical, economic and legislative matters. Those who have this knowledge have an advantage in that they can secure a better deal for themselves than those who rely on traditional or local perspectives.

The economic power of beneficiaries (i. e. buyers) means they are better placed to define what type of nature they want to see conserved (or bought). This is problematic for providers (i. e. sellers), as buyers tend to define nature, i.e. the type of nature they want to buy, as something separate from agriculture. For this reason, conservation

can become exclusionary and problematic for rural communities.

In a similar vein, service-sellers are sometimes unable to voice their concerns about PES (Rodríguez-de-Francisco / Budds, forthcoming). For instance, many PES scheme boards consist exclusively of buyers, with no seats allotted to sellers.

**PES participation is not always voluntary.** PES operates on top of environmental laws, which impose fines and other penalties on non-compliers. PES tends to reinforce environmental laws, in some cases due to the more frequent presence of environmental authorities or the hiring of local forest rangers to monitor PES compliance. As a result, communities have to choose between joining a PES scheme and facing environmental penalties. Under a well-known PES scheme in Ecuador, service-sellers wishing to leave the scheme are required to reimburse all previous payments.

**PES could reinforce a skewed distribution of rights to nature.** Inequalities in access to natural resources follow mainly from power inequalities. In developing countries, PES schemes are often introduced in the context of rights of access to natural resources that are skewed in favour of the powerful (i.e. buyers). Service-sellers may therefore be unable to access the very services they are helping to conserve and consequently end up with limited land use possibilities due to conservation. Rather than redressing inequalities in the distribution of natural resources, PES may actually make it harder for sellers to use natural resources, while reproducing and sometimes even protecting skewed rights to natural resources in favour of service-buyers (Rodríguez-de-Francisco / Boelens, forthcoming).

Some communities in the Colombian and Ecuadorian Andes have therefore argued that, instead of paying for conservation efforts, PES projects should give water rights to service-sellers. Granting water rights for irrigation would allow communities providing environmental services to have two harvests per year, thereby reducing pressure on key environmental areas.

**PES can harm service-sellers' organisations, institutions and practices.** PES schemes often make use of existing communal organisations in order to reduce transaction costs and because PES is expected to have a positive effect on collective action and the institutional capacities of communities. Given that certain members of a community might be more interested in PES than others, this is not always the case. For example, most indigenous and peasant organisations in Ecuador have a community assembly. When PES was introduced into the community, peasants who were not interested in PES stopped attending the assemblies and the communal institutional capacity was reduced (Rodríguez-de-Francisco / Budds / Boelens, 2013).

PES is also problematic when it replaces existing non-commodity relationships and collective action between families or communities. In many local societies, traditional reciprocal exchange relationships (based on labour, resources and services rather than money) form the backbone of culture and sustainable natural resource management, and often provide livelihood security for the poorest families (Boelens / Hoogesteger-van-Dijk / Rodríguez-de-Francisco, 2014). Exchanging these relationships for a payment culture in which relationships are based exclusively on money can have pernicious social and environmental drawbacks.

Agricultural and cultural practices include leaving land fallow in order to restore its productivity while providing environmental services. PES schemes that do not recognise this practice could end up by categorising fallow land use as deforestation and hence blocking any further use (Rodríguez-de-Francisco / Budds / Boelens, 2013).

### Policy recommendations

The framing of PES provides a simplified logic for action against environmental degradation. It is very appealing to policy-makers because it reduces complexity and simplifies decision-making. Nevertheless, we need to think outside the PES box. Its logic should not become a blinder to complexities such as power asymmetries, local struggles for natural resource control and green-grabbing practices. Before PES policies and programmes are introduced, policy planners need to address and investigate potential adverse impacts and the context-specific question of external agents' legitimacy to change property regimes, social relationships and natural resource values in the targeted watersheds. We need to take account of existing historical contexts, local institutions, the distribution of rights to natural resources, and internal and external pressures on sustainable practices of rural communities, i.e. pressures emanating from the political economy imposed on developing countries, agricultural prices, land pressures, development practices, etc.

A debate is currently going on between PES advocates and opponents. Conservation policy-makers can draw valuable lessons from this debate, in order not to turn PES into an instrument that reinforces the *status quo* in terms of unequal natural resource access and burdens of conservation. In this sense, PES should be a tool for improving the position of marginalised communities and fostering peasant-based environmental conservation and environmental justice.

The remaining question is how to move towards a more just form of environmental conservation. This is of paramount importance in the light of the current boom in market-based conservation policies such as PES and REDD+.

There is no straightforward way of addressing the power asymmetries in PES. However, there are certain conditions that need to be met in order to reduce the unequal degree of influence some actors may have over others.

First, the negotiating process must be transparent, and service-sellers must have a say in setting the agenda. Community members of service-sellers should be given clear information on the pros and cons of PES, as well as impartial legal advice, so that they can understand and assess contractual provisions.

Second, developmental and environmental organisations funding PES schemes should insist that their counterparts take account of the context-specific perspectives of natural resource managers living in poverty. How do PES schemes interact with struggles for natural resource control and who is likely to benefit most from such interventions? How do poor resource managers interact and shape conservation collaboration? This is crucial not just for understanding the viability of PES, but also for shaping

conservation strategies that support the poor as well as rural development. What are their positions and power differentials? The voluntary participation of service-sellers cannot be taken for granted.

Third, acknowledging that the skewed distribution of natural resources is one reason for environmental degradation, policy-makers, development banks and environmental NGOs need to consider how PES can work as a tool for the redistribution of natural resources. They must analyse how the redistribution of resources can be a potential means of combating the current expansion of agricultural frontiers.

Finally, researchers need to work together with communities in exploring whether PES schemes that redistribute natural resource rights can overcome the shortcomings generated by a culture of monetary payments. Research should focus on understanding and protecting the position of the least powerful in power plays and identifying how local institutions may be affected by this redistribution among environmental service-providers and users.

## Literature

- Bennett, G. / N. Carroll / K. Hamilton (2012): *Charting new waters : state of watershed payments*, Washington: Forest Trends
- Boelens, R. / J. D. Hoogesteger-van-Dijk / J.C. Rodríguez-de-Francisco (2014): *Commoditizing water territories : the clash between Andean water rights cultures and payment for environmental services policies*, London, Routledge: Capitalism Nature Socialism
- Rodríguez-de-Francisco, J.C. / R. Boelens (forthcoming): *Payment for environmental services and power in the Chamachán watershed, Ecuador*, in: *Human Organization* 73
- Rodríguez-de-Francisco, J.C. / J. Budds (forthcoming): *Payments for environmental services and control over conservation of natural resources : the role of public and private sectors in the conservation of the Nima watershed, Colombia*: Ecological Economics
- Rodríguez-de-Francisco, J.C. / J. Budds / R. Boelens (2013): *Payment for environmental services and unequal resource control in Pimampiro, Ecuador*, in: *Society and Natural Resources* 26 (10), 1217–1233

### **Dr Jean-Carlo Rodríguez-de-Francisco**

#### **Researcher**

Department IV "Environmental Policy and Natural Resources Management"  
German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)

### **Professor Rutgerd Boelens**

#### **Professor of the Political Ecology of Water in Latin America**

Centre for Latin American Research and Documentation  
University of Amsterdam, and  
Water Resources Management Group  
Wageningen University