

Recognizing those who take care of water

# BEYOND the market

**From the start of the 1990s**, the issue of Environmental Services has attracted the attention of conservationists, development organizations and donors, who have been interested in seeking and supporting new strategies for financing conservation and, additionally, in some cases, for diversifying the income of rural communities.

By the logic of the market, the principal proposal is the Payment for Ecosystem Services: “a voluntary transaction for an environmental service, in which at least one buyer and one seller participate; the environmental service is well-defined; and the provider of the service ensures its provision”.

Given that water in the Andes is such an important resource, closely related with the management of ecosystems and important for the wellbeing of dozens of millions of people, we can assume that there exists a large market for the Payment of Hydrological Ecosystem Services (PHES).

However, the PHES schemes that until now have been implemented in the Andes, are not the result of market forces, defined as a group of voluntary transactions stimulated by the interaction of demand and supply, but of negotiation and cooperation among different actors.

## **But is the market really the answer?**

Research made by CONDESAN between 2008 and 2011 indicates that the existing cases in the Andes function in

the absence of a market. Based on this research, we can also state that the mechanisms rooted in the market are less likely to include the requirements of equity and the fight against poverty.

Water management, which is so important for society in general and is considered a human right in the majority of countries in the region, should include strong social and cultural provisions that go beyond the market.

## **Some concerns regarding PHES**

In recent years (2008-2011) CONDESAN has promoted spaces for research and discussion regarding benefit sharing mechanisms in the Andes.

As part of these discussions, as far as Payments for Hydrological Ecosystem Services are concerned, some points of discussion have stood out, which will continue to be important in the coming years in line with the progress this scheme makes.

### **1. WHY TO PAY?**

The resource itself (water) is not what is paid for, but rather the activity that helps to improve hydrological regulation (conservation, reforestation, vegetation recovery, better agricultural practices).

Therefore, if the payment is made only when a sufficient quantity of good quality water is delivered without interruption, it may be inefficient because much time may pass before this occurs.

## 2. WHO RECEIVES THE PAYMENT?

There are three principal considerations in selecting the possible beneficiaries of PHES: The value chain, land tenure, and the informal and illegal use of resources. To ensure the provision of EHS, there is a vertical distribution of opportunity costs; if an area of forest is converted, for example, to agricultural production, not just does the farmer have a potential income but also the intermediaries, transport providers, dairy companies, local government, etc.

Therefore, who has the most to lose from conservation? Should each be compensated? The second issue revolves around land users without formal title. Can or should they participate in PHES?

Finding ways to overcome this complex set of problems regarding land ownership is particularly important to ensure the efficiency of PHES.

A third issue regards illegal or informal users. In many countries, the legislation regarding the use of resources is weak and sometimes not applicable or poorly enforced (paper parks, forest reserves that produce charcoal or where hunting of certain species is common).

Therefore, many natural resources are used in a way that is informal but not necessarily illegal. Should these people be compensated too? There is no single answer but we need to have a pragmatic solution to these cases.

## 3. HOW TO PAY FOR A SERVICE THAT IS OFTEN INTANGIBLE?

One of the recurring problems with PHES schemes are the gaps in knowledge and research. No tangible product exists (such as a good that is delivered directly on payment) but rather a service that is conserved or improved through various actions without it really being known how much this is attributable to those actions.

Few studies of applied environmental valuation have managed to define the intrinsic value of a service or the opportunity cost to the land owner. The final values paid are the result of negotiations, and very few are based on valuations of the environmental service.

## 4. ADDITIONALITY, BASELINES AND MONITORING

Measuring the additionality of forest management and forestation projects and of good agricultural practices on hydrological regulation, establishing a clear baseline and

standardized tools for evaluation, ensuring that providers comply with the incentivized activity and produce the environmental service, are some of the challenges related to PHES.

In the Andean nations, the lack of legal instruments, control and enforcement, demands a system of periodic monitoring and compliance.

## 5. HOW TO PAY?

Payments in cash are what rural communities generally need to improve their wellbeing and the mechanism of direct payments to owners, in exchange for the conservation of their land, is the most common.

Nevertheless, flows of cash can also cause problematic social effects, greater inequality and the use of those funds for other activities that are not compatible with the provision of HES.

But direct payment is just one of various mechanisms that are used. Others include education, security, soft credits and the purchase of land.

Each of these has its advantages and difficulties, depending on the local reality and the desire of the community.

The fact that this variety of mechanisms exists to reward the providers of HES has led to various attempts to use the term “compensation” rather than “payment”.

## 6. EQUITY VS. EFFICIENCY?

Among conservation and rural development organizations, many people consider PHES as a source of fair compensation for rural populations of limited resources who care for the environment and thus provide HES, until now for free. However, from the viewpoint of efficiency, only those that constitute a real threat to the environmental service should be paid.

Thus, there exists the danger of creating a perverse incentive in which the “environmental criminal” receives compensation but the “saint” who poses no threat remains unpaid.

Likewise, this can occur with large scale providers (such as the owners of large areas of forest, with a significant quantity of potentially marketable hydrological services) as they tend to be more efficient in delivering the service than small scale providers. This is a question that PHES schemes should address, seeking a balance between the goals of efficiency and considerations of equity.

## Challenges for PHES

Different studies have evaluated the lessons learned from specific cases of payments for environmental services in Latin America. Platforms to compare and exchange experiences at a global level are Ecosystem Marketplace and the Katoomba Group. For its part, CONDESAN is an organization that promotes the systemization and analysis of experiences at the Andean regional level, through the Andean Panorama project for Hydrological Environmental Services (2008-2010).

In the different spaces of analysis of experiences that Ecosystem Marketplace, the Katoomba Group and more regionally, CONDESAN have promoted, the conclusion has been that all cases currently functioning were initiated on an experimental basis, having a diversity of sources of financing and management models, and on many occasions accompanied by long processes of communication and raising of awareness, and that the majority of these should not be considered PHES schemes.

It happens that the cases analyzed are not simply a transaction between a provider and a beneficiary, but rather a process of interaction on the long term and a continuous, adaptive management in which the market does not intervene. These cases together span a total area of hydrological interest of more than 800,000 hectares, of which nearly 25% is directly managed through conservation agreements, land purchases, better productive practices or security for protected areas that benefits more than three million people.

The few cases in the Andes that can be considered PHES schemes are focused on stimulating activities that protect natural ecosystems and that recover vegetation cover (natural regeneration or reforestation). Just a few contemplate the stimulation of better productive practices or the recovery of degraded lands.

These schemes are financed by multiple sources; the major source of financing comes from the beneficiaries, whether they are individual users of water or government representatives. Important additional funds have been provided by NGOs and international aid agencies. There are various institutional structures for these schemes, both public and private, and they are characterized by being flexible and holistic.

## 7. CAN PHES HELP TO REDUCE POVERTY?

Of the cases currently operative, we can conclude that in general the net effects for the providers of environmental services are positive.

However, some rules regarding access and structural limitations in PHES schemes limit the participation of the poorest (people without formal land titles, little land, people who due to economic limitations do not pose a threat to the ecosystem service, etc.).

Reducing poverty is an important objective associated with PHES, strongly related to the principle of equity. However, if it is converted into the main objective, it threatens the basic functionality of PHES, related to the principle of effectiveness.

## 8. ETHICAL DOUBTS ABOUT PHES

There exists a growing perception among various groups in Andean countries that PES is not a very ethical mechanism, because it places a fundamental human right, such as access to and use of water, within

a market mechanism, which changes the relationships of control and power regarding this resource.

## Recommendations for the design of benefit sharing mechanisms beyond the market

The few cases of PHES currently implemented in the Andes confirm that the market for ecosystem services is not yet consolidated, because the determination of a price for the service is what complicates the development of the market as such.

There exists a set of transactions that take place among users and providers of the environmental service in a voluntary manner, with different procedures for negotiation and agreement among the parties. In this, the valuation of the price through financial instruments is just one part, as other variables, such as the cultural, social and ecological context, also play a role.

It is thought that a public policy regarding the market should not center on the “market” per se, nor on the

“payment for hydrological ecosystem services” but on broadening the definition towards “economic tools” and “benefit sharing mechanisms”, which take into account the relationship between the population and water, whose valuation depends on multiple factors.

The instruments that should be promoted should aim to redistribute the benefits and the way in which they operate is similar to that of a market.

The range of economic instruments is broader than the market and recognizes the different processes of negotiation and agreement. The instrument should permit payment in kind and not just in cash.

The policies for recognizing those who take care of water, regardless of the existence of a market or not, should be about rewards and awareness more than regulation, placing the issue on the national agenda.

There is a certain level of controversy regarding the issue of HES and in this context it is useful to have documents and tools to help orient us.

Compensation for environmental services (regardless of the market or form of compensation) is an instrument that recognizes someone who is doing good regarding the management of an ecosystem, but always starting from the premise that natural resources are the property of the state.

This automatically requires a minimum legal framework to define what is being managed and who are the beneficiaries in order to promote efficiency and equity at the same time. On the other hand, many cases have occurred without any regulation and it appears necessary in the cases of private actors.

However, the case of water is always of public interest and this, along with the roles and responsibilities of different actors and institutions, must be protected in such an uncertain context.

It is important to seek coherence in environmental, economic and social policies, especially regarding how to ensure social equity while working on the issue of ecosystem conservation given that if a policy does not promote equity it will not be sustainable. In this discussion, the issue of property also plays a role.

Experiences with PHES include the risk of creating greater inequity because in theory they are more successful

when they compensate those who have most property (and who produce most environmental services).

On the other hand, groups with less property and without clear land title have greater barriers to participate in PHES systems. This is the dilemma between equity and efficiency. The regulatory framework, therefore, should be oriented towards the definition of property rights and land title; strengthening the capacity to negotiate and obtain agreements under equal conditions, based on symmetrical information and transparent processes.

## Additional information

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### Links

- Initiative for Hydrological Monitoring of Andean Ecosystems (MHEA) <https://sites.google.com/site/iniciativaregionalmhea>
- Challenge Program on Water & Food (CPWF) [www.waterandfood.org](http://www.waterandfood.org)
- Katoomba group [www.ecosystemmarketplace.org](http://www.ecosystemmarketplace.org)
- CONDESAN • [www.condesan.org](http://www.condesan.org)
- InfoAndina • [www.infoandina.org](http://www.infoandina.org)

## ANDEAN PROPOSALS. Number 2.

© Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN) 2011  
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First edition - Year 1 - 2011 • Editor: CONDESAN • City and country: Lima, Peru  
ISSN 2223-389X • Print run: 200 • November 2011

