

Paying for watershed services to cities

Cusco, Peru

The case study is a pilot implementation of a mechanism that rewards the provision of hydrological services to drinking water facilities in cities. Similar mechanisms are currently under development all over Peru.

Upstream local communities and downstream water users can join forces to restore and conserve hydrological services.



Setting the scene

A recent law in Peru has enabled municipal water supply utilities to reward hydrological ecosystem services from upstream watersheds. This mechanism is seen as an opportunity to improve water security for both upstream local communities and urban water users in downstream cities. However, the implementation of payment for ecosystem services can create challenges related to the balanced participation of upstream and downstream stakeholders in decision-making about interventions for restoring or conserving hydrological ecosystem services. The development of this mechanism in Peru needs support by drawing lessons learned from current implementation and via experiences from elsewhere.

Objectives

- Implement ecosystem-based interventions in watersheds for improving water security.
- Involve multiple stakeholders in decision-making and share intervention costs and benefits in a fair manner.

Challenges

- Lack of knowledge on the expected benefits of different interventions.
- Possible inequity and conflicts linked to benefit distribution and power imbalances among stakeholders

Innovation mechanism

In the Piuray watershed, which provides water to the city of Cusco, the city water utility initiated a dialogue with upstream communities and municipal authorities in 2012. The resulting agreement aims to restore the ecosystems of the micro-watershed and to implement a mechanism for payment for ecosystem services.

In 2013, the city water utility was authorised by the national supervising authority to increase water fees and to start financing projects in the watershed.

The implemented interventions, such as reforestation with native or exotic tree species and the building of infiltration trenches, have resulted in hydrological and non-hydrological changes, as well as social and economic outcomes.

An analysis of the interventions and their outcomes can provide important lessons for adjustments and replication.

Expected impacts

- ✓ Improved hydrological ecosystem services, enhanced synergies and reduced trade-offs with other ecosystem services
- ✓ Improved water security and livelihoods in upstream local communities and downstream cities
- ✓ Improved relationships between stakeholders

The bigger picture

We hope that the lessons learned from the case study in Cusco will contribute to a sound implementation of reward mechanisms for hydrological services in similar settings in Peru and elsewhere.

Action

- Analyse the hydro-socio-economic impacts of current interventions for improving hydrological services under the reward mechanism.
- Work with stakeholders on analysing lessons learned and disseminate results.

Contact b.locatelli@cgiar.org