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Review: Payments for watershed services in real life – emerging lessons from IIED and partners

Action-learning, amongst the protagonists in a range of watershed sites around the world, has been at the heart of IIED's project on "Developing Markets for Watershed Protection and Improved Livelihoods". Since its inception in 2003, the project has worked with, and learned from, the real-time efforts of those trying to set up and develop payments for watershed services (PWS) in ways that address both land use and livelihood challenges. Ten locations - in Bolivia, China, India, Indonesia, Jamaica, St Lucia and South Africa – have been the particular focus of attention. To date, actual payments are occurring in four of these ten locations:

- In Kuhan, Himachal Pradesh, India, saplings and grass have been provided by downstream communities, in exchange for upstream communities limiting livestock access to degraded areas to reduce siltation.
- In Brantas, Indonesia, PJTI (the management body for the catchment) is making payments to three farmer groups for tree planting and terrace construction to reduce sedimentation.
- In Cidanau, Indonesia, KTI (an industrial conglomerate), is making payments via a watershed forum to two farmer groups for tree planting to reduce sedimentation.
- In Los Negros, Bolivia, beehives are provided by the local municipality to farmers who agree not to extend cultivation into the cloud forest.

What sets these four cases apart from the other six is the existence of processes of negotiation, providing a basis of trust and lowered transaction costs on which to build. Among the reasons why mechanisms have not yet been developed in the remaining six sites are the lack of a clear hydrological rationale (e.g. in Jamaica and St Lucia), and limited demand from potential buyers (e.g. in South Africa).

From the emerging lessons it is evident that although the direct, income benefits of PWS for poverty alleviation may be small or questionable, indirect benefits may be considered of greater significance by the poor – this is true in the cases outlined above. For example, all the Indonesian farmers' groups involved in the schemes have invested in goat breeding, one side effect of which is planting hedges along terrace lines of dryland fields – providing both fodder and control of soil erosion. One farmers' group invested revenue from the scheme in a successful fodder store while the Brantas farmers have also found the tree nurseries necessary for the scheme to be viable small businesses. The Cidanau farmers' groups have developed small enterprises in manufacture of vegetable crackers and vegetable oils.

Above and beyond the cash payments, it is the indirect benefits of collective action and engagement that have helped strengthen the community and with it, their sense of rights and responsibilities. In Los Negros, payment in the form of beehives allowed for a diversification of livelihoods through honey production, and helped create employment opportunities for landless people.

Given that payment arrangements are often associated with land use or ownership rights, another important indirect benefit in some cases has been the clarification or definition of rights and the responsibilities that underlie any form of agreement between buyers and sellers.

A further emerging lesson is that actual situations tend to defy some of the theory about PWS. As seen above, transactions between water consumers and land managers are rarely direct. Instead they reflect complex relationships between different stakeholders and intermediary organizations, as well as the unique conditions in which they occur. Watershed management requires collective action in a context where buyers' and sellers' choices are limited by their geographic ties to particular places – these factors are often overlooked. Therefore, it may be necessary to question preconceived notions in the design of payment initiatives, and to regard the rules of the game as work in progress. This is particularly true if the goal is to support livelihoods and alleviate poverty.

Whilst the project in general concludes that payments have limited applicability - and work more for conservation than poverty alleviation - it is clear that they can be useful in some circumstances. As part of an adaptive learning approach, the emphasis has been on getting the foundations right, by building trust and gathering the necessary information to anticipate outcomes. Two key 'rules of thumb' stand out: start at small scale; and keep management adaptive. An approach based explicitly on adaptive management – on trying, sometimes failing, sometimes succeeding but always learning - develops trust and capability to make uncertainty explicit, to support locally-valued services, to consider trade-offs and conflicts among multiple uses and to negotiate actions.

In looking ahead, IIED calls for more 'buyers' to step forward, and for the shapers of PWS schemes to put hard-learned lessons from experience into practice at larger scales and ensure buyers get what they pay for, sellers get a decent price - and watersheds get a fair deal.

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