

Payment for Watershed Services: It's Possible, but for which Conservation Policy on Fresh Water and Ecosystem Services?

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Payment for Watershed Services (PWS) is a mechanism that encourages economic payments to landowners to adopt conservation management practices with a view to influencing the biophysical attributes of an ecosystem that is expected to affect the supply of freshwater. Although the promotion of payments for protection of watersheds has been gaining momentum in recent years, little concern had been given towards evaluation of the effectiveness of these programs. The objective of this presentation is to describe the importance, the national and international experiences, as well as the challenges of deploying and maintaining PWS.

There are several reasons for focusing on this particular program. In the first place, watersheds are involved in the vast majority of programs of Payment for Environmental Services (PES). Secondly, the water cycle provides a good adjustment to be considered as an approach for ecosystem services, as it arose from the Millennium Ecosystem Assessment (2005), and it forms a good context for expressing the effects of the changes to the status of natural capital flows on environmental services and their impact on human well-being. Finally, the water supply provides ecosystem services upstream and downstream, and is therefore often used to illustrate the principles of the PES concept.

In 2011, 205 programs of PWS assets around the world were analyzed. More than half of the programs are in two countries: China (61) and the United States (67). The transactions totaled 8.17 million dollars in 2011. In global terms, the investments in watershed services have steadily increased since beginning in 2008 (Bennett et al., 2013).

Indeed, despite all the apparent success and progress with the launch of new PWS programs, there remains the suspicion that lessons still need to be learned from the formation experiences. Until now that is all the more true, especially in relation to monitoring and evaluation. While a handful of efforts have been made to review the overall progress with PWS, there is currently no systematic assessment of achievements of rigorous PWS programs.

There is also a lack of information in the literature about the threats that environmental programs of PWS are destined to reduce. In developing countries, the lack of appropriate forms of property rights and/or the safety of land possession can create conflicts in defining the responsibilities of soil use necessary to ensure the provision of the service. Without clear property titles, land users may not enter into contractual agreements thus allowing to them the benefit of payments (Martin-Ortega et al., 2013).

The importance of PWS in the management of water resources is undeniable, but it is important to work further on the subject to assess the effectiveness of these programs. The key issues here are understanding actions on these programs, and how to affect water quality and quantity through evaluating uncertainties and benefits over time. The inability to take this essential step can lead to incorrect conclusions on causes and effects, with PWS programs considered successful when, in fact, they had little or no benefit on the watershed services.

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