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Payments for ecosystem services in Vietnam: Market-based incentives or state control of resources? ☆

Diana Suhardiman [a,*], Dennis Wichelns [b], Guillaume Lestrelin [c], Chu Thai Hoanh [d]

[a] International Water Management Institute, Southeast Asia Regional Office, P.O. Box 4199, Vientiane, Lao Democratic People's Republic
[b] Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore, 469C Bukit Timah Road, Singapore 259772, Singapore
[c] Institut de Recherche pour le Developpement (IRD), UMR 220 GRED, P.O. Box 5992, Vientiane, Lao Democratic People's Republic
[d] International Water Management Institute (IWMI), Southeast Asia Regional Office, P.O. Box 4199, Vientiane, Lao Democratic People's Republic

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ABSTRACT

Payments for ecosystem services often are viewed as an innovative approach toward improving natural resource management, while also providing opportunities for enhancing incomes and livelihoods. Yet not all PES programs are designed and implemented in ways that reflect voluntary transactions between buyers and providers of well-defined, measurable ecosystem services. When third-party interests, such as donors or governments, design PES programs to achieve goals that lie outside the conceptual scope of payments for ecosystem services, the improvements in resource management and enhancements in livelihoods can fall short of expectations. We examine this potential dissonance in PES program implementation, taking the case of PES in the forestry sector in Vietnam. We question whether PES in Vietnam has the potential to enhance forest protection and watershed management. We highlight the importance of institutions and governance (i.e., the policies, rules, and regulations) in determining program significance and we illustrate how PES programs are implemented as part of the government's subsidy scheme. We conclude that in the absence of a competitive market structure and appropriate regulations, governments can reshape PES programs to function primarily as tools for strengthening state control over natural resources.

1. Introduction

Paying for ecosystem services (PES) has been described as an innovative approach for improving natural resource management (Ferraro and Kiss, 2002; Pagiola, 2008). Presented originally in the forest conservation literature, PES programs now include efforts to enhance watershed protection, motivate carbon sequestration, and beautify landscapes (Landell-Mills and Poras, 2002). Early promoters envisioned that PES programs would transform conservation practices from costly requirements to potential sources of revenue (Kinzig et al., 2011). Thus, individuals and communities would be financially motivated to engage in mutually beneficial agreements regarding resource management. PES programs have also been linked to efforts to alleviate global poverty (Bulte et al., 2008; Grieg-Gran et al., 2005; Wunder, 2008).

PES programs have been seen by some as an approach for improving environmental amenities without relying on regulatory agencies to implement restrictive policies. Voluntary agreements between individuals generating externalities and those impacted by them might be more effective in reducing harmful impacts in a shorter time than is required to craft and adopt environmental legislation. In a sense, PES programs address the classic problem of negative externalities by creating a market setting in which the externalities are internalized. Ideally, the amount of compensation paid for modifying or ending a harmful activity is determined through negotiations in which the 'market participants' evaluate their incremental benefits and opportunity costs. As defined by Wunder (2005 p. 50) PES program design should incorporate the following principles: "(1) *a voluntary transaction in which* (2) *a well-defined environmental service* (*or a land use likely to secure that service*) (3) *is 'bought' by a* (*minimum of one*) *buyer* (4) *from a* (*minimum of one*) *provider* (5) *if and only if the provider continuously secures the provision of the service* (*conditionality*)".

While the approach is attractive, in reality it is hard to find PES programs that fulfill all the above-defined principles (To et al., 2012; Vatn, 2010). PES programs do not automatically bring together potential buyers and sellers of environmental services

* Corresponding author. Tel.: +856 20 77488425; fax: +856 21 770076.
E-mail addresses: d.suhardiman@cgiar.org, suhardiman@gmail.com (D. Suhardiman), dwichelns@nus.edu.sg (D. Wichelns), g.lestrelin@gmail.com (G. Lestrelin), c.t.hoanh@cgiar.org (C. Thai Hoanh).

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and enable them to interact in a self-regulating market. On the contrary, PES programs often are implemented using donor funds or as part of government-subsidized compensation programs focused primarily on how to pay people for generating external benefits (Munoz-Pina et al., 2008; Pagiola, 2008; Wunder and Alban, 2008). In practice, most buyers of ecosystem services in the PES programs implemented worldwide are intermediate parties, such as governments and non-governmental organizations, rather than direct beneficiaries (Pham et al., 2010; Shelley, 2011). To date, the public sector has been the largest purchaser of ecosystem services, and Milder et al. (2010) expect this trend to continue. Recently, Muradian and Rival (2012) have proposed shifting the emphasis from trying to create purely market-oriented mechanisms to designing incentives for environmental protection.

We discuss the dissonance in PES program design (Wunder, 2005) and implementation. It looks at how PES is presented as an innovative, alternative policy measure to improve natural resource management and enhance livelihoods vis-à-vis persistent problems and challenges in PES program implementation. Current debates in natural resource management tend to view this dissonance mainly under the notion of 'implementation barriers', or as a failure to create the conditions required for effective policy implementation (Hebinck and Verschoor, 2001; Mollinga and Bolding, 2004). We argue that such dissonance can also occur when policy actors (international, national, sub national and local) perceive and interpret the problem differently. While we focus specifically on forest protection and watershed management, we echo broader policy discussions about dissonance in natural resource management in general. Mosse (2004, p. 640) for instance, analyzes this dissonance by examining development aid policy and questioning whether good policy is implementable in the first place: "*What if the things that make for good policy are quite different from those that make it implementable?*" We argue that understanding this dissonance is pertinent to increase the actual significance of PES program implementation and better understand the potential to enhance natural resource management, as opposed to treating it as a panacea.

We show that while PES program significance is determined in part by the institutions in which the program operates, the range of possibilities to select appropriate institutional arrangements might be limited by the existing governance structure (i.e. policies, rules, and regulations) in a specific country. Taking Vietnam as our case study, we highlight the important role played by the state in shaping PES program implementation. We discuss how the idea of market environmentalism may be deployed strategically as a means to increase state power in natural resource management. We illustrate how PES program implementation is predefined by the way the state views the program as a means to collect additional revenue for forest protection.

To these ends, we describe the Government of Vietnam's (GoV) various efforts in forest protection, and how the GoV currently incorporates PES as part of its forest protection and watershed management policies. We consider also the possibility that the GoV might be using PES programs to expand and strengthen state control over natural resources and the people who use them. Indeed, by prescribing specific activities within certain spatial boundaries, these programs may contribute to state territorialization (Peluso and Lund, 2011; Vandergeest and Peluso, 1995). When this occurs, a PES program functions primarily as a government's subsidy scheme (McAfee and Shapiro, 2010).

2. Nature, market environmentalism, and the state

The notion of paying for ecosystem services was presented originally in the environmental economics literature, where many authors consider the environment to be an integral component of economic decisions (Coase, 1960; Perrings et al., 1995). Early authors describe the systematic undervaluation of ecosystem services in economic decision making, which arises in part because the services provided by natural capital are not adequately quantified in terms that are comparable with the economic services from manufactured capital (Costanza et al., 1997). In line with this argument, the concept of ecosystem services is perceived by many conservationists merely as a tool for communicating the value of ecosystem functions, using a language that reflects the dominant political economic perspectives (Gomez-Baggethun et al., 2010).

Over time, and with experience, the notion of paying for ecosystem services has gained favor as an analytical framework that allows ecologists to develop stronger theories, and to document empirically how the stock of nature delivers flows of services (Carpenter et al., 2006). From Norgaard (2010, p. 1219): "*Economic services became a paradigm for thinking about development and the environment and for designing environmental management programs. Over a period of about* 15 *years, an eye opening metaphor intended to awaken society to think more deeply about the importance of nature and its destruction through excessive energy and material consumption transformed into a dominant model for environmental policy and management in developing countries and for the globe as a whole*".

The transformation from a communication tool to analytical framework has placed PES programs more clearly in the context of market environmentalism, which promotes the pricing of nature's services, the assignment of property rights, and the expansion of commodity markets into the realm of nature's services (Berthoud, 1992). This transformation, together with an increasing flow of funds from international donors, such as the Global Environmental Fund of the World Bank, promoting implementation of PES programs in developing countries, has given the concept a life of its own (Pagiola and Platais, 2007). In recent years, PES programs have been featured in national decrees and adopted as a preferred environmental strategy by international organizations. National-level PES programs have been implemented in several countries of Latin America (Munoz-Pina et al., 2008; Pagiola, 2008; Wunder et al., 2008). Several countries in Southeast Asia have incorporated PES as part of their national legislation, and others are considering to mainstream PES as part of their natural resource management policies (Emerton and Lopaying, 2011; Wunder et al., 2005). PES programs have been successful in highlighting the important roles of ecosystem services in economic decision making. They have also promoted privatization in natural resource management.

The spread of market environmentalism as alternative idea for nature conservation correlates with a changing role of the state in natural resource management. The declining role of the state in governance issues in general and in natural resource manage ± -ment in particular has been widely discussed in political science (Migdal, 1988; 2001; Schulte-Nordholt, 2003; Scott, 1987), geography (Harvey, 1989; Cox, 1997; Escobar, 2001) and legal anthropology literature (Benda-Beckmann, 1981; Benda-Beckmann, von Strijbosch, 1986). Authors have described how the state has been hollowed out (Jessop, 2004), and how particularizing and universalizing tendencies beyond the state now interact in a process of glocalization (Swyngedouw, 1997). Nonetheless, current research has shown how nation–states can reposition and reorient their role in natural resource management, amidst pressure from international, regional and local levels, through different regulatory measures and public–private partnerships (Bakker, 2010). Using neo-liberalism and market environmentalism perspectives as her entry points, Bakker shows that the state can actually sustain its power through reregulation, and that increased participation of non-state actors does not necessarily result in reduced