

Dear Forum Moderators,

Please see below the submission on Payments for Environmental Services to the FAO Global Forum on FSN by the Institute for Agriculture and Trade Policy, (www.iatp.org), USA.

According to FAO, Payments for Environmental Services (PES) are one type of economic incentive for those that manage ecosystems to improve the flow of environmental services that they provide. Generally these incentives are provided by all those who benefit from environmental services, which includes local, regional and global beneficiaries.¹

We write this note to urge caution about the wider implications of adopting PES as a public policy option. We have come to our position by drawing not only on IATP's work with mid-western farmers since 1986 onwards, but also on our individual engagements in environmental stewardship activities since 1986 in India, China and the United States. IATP's experience includes involvement in the much discussed Catskills Project in Upper New York, the Upper Yangtze Watershed Protection Program in China, the rainwater harvesting and forest protection initiatives in Satpura Ranges, Narmada District, India.

Based on our historical and ongoing involvement in environmental stewardship related activities both in policy and practice, we consider that Payment for Environmental Services (PES), and its market, as we know it now, is something that emerged in the last decade or so.

We recognize it as an attempt to monetize specific 'ecosystem functions'² that are considered beneficial to human civilization by naming these as 'services' and instituting a regime of payments for them. We understand that PES is seen by its advocates as an option because of the decline of the community ethos that prevailed formerly, where, certain functions were valued as essential for community survival and were protected—regeneration of forests, water retention, refraining from killing young animals or plants etc. It is also seen by its advocates as a framework for protecting these commons in the absence of regulations and/or incentives.

However, our support for PES is qualified, as we see it as a reductionist approach to complex ecological and cultural systems, and that that approach can lead to perverse incentives.

In a paper, '[Commodification of the commons?](#)' which we published in the lead up to Rio+20, we urged for caution. In fact in the Rio+20 negotiations, the G77 formally requested the term 'environmental services' be removed from the outcome document. It is noteworthy that the main supporters of PES as a market based mechanism for addressing environmental problems, and green economy as such, are countries such as South Korea that are part of OECD. Group G77 and China on the other hand had already pointed out in their [submission](#) to the draft document that “there is no consensual agreement on the definition of a Green Economy in the context of Sustainable Development and Poverty Eradication.”

¹ <http://www.fao.org/es/esa/pesal/index.html>

² Natural processes are the result of complex interactions between biotic (living organisms) and abiotic (chemical and physical) components of ecosystems through the universal driving forces of matter and energy, and they affect each other in complex exchanges of energy, nutrients and wastes. These complex exchanges and interactions, within an ecosystem are called ecosystem functions and in addition to energy and nutrient exchanges, involve decomposition and production of biomass.

For them the central tenets for “achieving sustainable development and poverty eradication is through technology transfer/access and sustainable consumption and production patterns”. Given that most developing countries have reservations regarding the use of environmental services, it is prudent that FAO adopt a more cautious approach towards PES, especially in the context of developing post 2015 UN sustainable development agenda.

This prudence is all the more necessary since PES is increasingly promoted as an offset mechanism, especially when in private sphere (as compliance markets are still limited in carbon, water, and even in biodiversity). Here in lies the problem.

Thus whether PES can be a public policy instrument to help protect ecosystem function must be examined on a case by case basis.

We include a set of principles/ questions (see below) that we use in deciding whether to engage in proposed activities towards environmental stewardship. These are based on the recognition that it is nearly impossible to isolate one ecosystem function as an independent variable: these functions are interdependent, and in identifying the variables that influence the ecosystem functions socio-cultural and economic justice issues are important considerations. We urge you to include these questions as guidelines, in addition to emphasizing that PES must not lead to violation of Rio principles such as “polluter pays”, “precautionary approach”, and common but differentiated responsibilities, in your policy recommendations.

Questions developed by IATP to help guide our work around environmental stewardship

- Does it (the policy/program) reduce emissions/ pollution?
- Is it a slippery slope to policy?
 - What are the downstream policy implications of a particular initiative?
 - What are the implications of scaled-up versions of an initiative?
- Opportunity costs: is it distracting from real solutions?
- To whom does the benefit (dollars and others) go? Are farmers benefitting?
- Does it support better agroecological/social practices?
- What are the risks involved?
- How do these practices support human rights, justice, equity, democracy?
- How does the domestic affect the international, how does international affect domestic?
- Do these practices create a more democratic production system, or does it play into further concentration of power etc.?
- How does it affect food security?
- Does it promote adaptation and/or resilience?

We have responded to some of your questions further below, using some of our own experiences in various countries as well as our research on PES. Wishing you success and looking forward to the results of this forum,

Shiney Varghese,
Institute for Agriculture and Trade Policy,
Minneapolis, MN 55406, USA. iatp.org

See below our responses to your questions:

Please note that given our qualified support for PES, all our answers are in the context of public support for environmental stewardship rather than PES.

1. What are the lessons learned from PES in developed and developing countries?

- a. **What are the main challenges and opportunities with regard to PES projects in your particular country?**

As IATP works locally and globally/ given our qualified support for PES, we reframe this question thus: **“What are the main challenges and opportunities with regard to environmental stewardship in your particular country/other countries?”**

As a recent report ‘*Charting new waters*’ by Ecosystem Marketplace pointed out, the majority of all PES schemes are financed by governments. This is because many of the public funded conservation projects are now considered as PES projects.

For example, in the United States Conservation Reserve Program (CRP) that was enacted in 1985³ and Wetland Reserve Program (WRP) that was authorized by Congress in 1990⁴ as part of the Food Security Act (Farm Bill) 1985, are both federally funded and interestingly both are now considered as PES projects in many PES surveys.

While more public funds needs to be made available for environmental stewardship, for most developing country governments, their budgets are too limited to undertake such public funded activities. In many countries environmental conservation competes with other developmental priorities. Lack of public funds to implement environmental stewardship related activities remains one of the main challenges in many countries.

- b. **Do you know of highly successful PES cases in your particular field of expertise (watershed management, biodiversity/wildlife conservation, carbon sequestration,...)? If so, what were the main factors that contributed to the success of the PES scheme?**

In our [paper](#) on PES in the green economy, we examined a watershed initiatives in the late 1970s/early 1980s in Sukhomajri, India, where villagers undertook watershed protection (and other) activities that both helped enhance ecosystem functions and increased livelihood options for the villagers. The project is listed as successful example of PES according to the TEEB project, even though it did not involve the kind of monetization of ecosystem functions that seems to characterize the PES schemes being discussed these days. The case study looks at some of the problems that have emerged in the later years.

³ <http://www.cnio.org/NLE/CRSreports/Natural/nrgen-21.cfm>

⁴ http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_006911.pdf

The Catskills project of early 1990s (which involved water shed protection as a means for water purification for NY city), suggests the emergence of a different trend: It is one of the first examples where restoring the ecosystem function—in this case water filtration—was not only priced in terms of its cost to the mainstream economy, but was also compared to the alternative, of investing in a technological alternative—a filtration plant, and has been hailed as an example of how the ecosystem protection in one area can benefit another group downstream.

What is interesting is that the ‘service’ is priced only in terms of its present market price rather than its value, it has been suggested that the market price may not have reflected the actual value of the ecosystem functions in the area. “However, despite the paper success of the program, Delaware County residents claim that they are experiencing significant detrimental economic and sociological effects to their communities because the LAP is driving up land prices, reducing the quantity of developable land, and threatening the County’s property tax base.” *Excerpted from: Avoiding Further Conflict: A Case Study of the New York City Watershed Land Acquisition Program in Delaware County, NY, by Jennifer Church, Pace University School of Law.*⁵

- c. **Do you know of PES projects that have failed to deliver despite substantial donor support? If so, what were the reasons that caused the failure?**

I would consider World banks’ *The Kenya Agricultural Carbon Project* as a good example of PES project that failed to deliver despite substantial donor support. This is one of the case studies included in a paper looking at the [PES landscape in Eastern Africa](#). As [our ongoing research](#) shows this project has not delivered on its promises regarding fair remuneration to actual farmers undertaking activities to enhance ecosystem functioning. We also found the transaction costs to be very high. We continue to monitor the project.

2. PES can be conceived as a diverse set of policies, institutions and processes that mobilize funding from direct beneficiaries, taxpayers, consumers and other interested parties to reward/remunerate/pay providers of environmental services. Which type of PES-related policy instruments would you recommend for your own particular country and why?

- a. **Are PES-related policy tools applied in affluent countries with lots of off-farm employment opportunities and low population growth rates also adequate for least developed countries where farm sizes often tend to get smaller due to lack of opportunities outside agriculture?**

Programs such as conservation reserve programs can be tailored for developing countries (with small farm) by linking incentives with dedicated practice of multi-functional agriculture/ agro-ecological practices/ organic farming in small farms.

- b. **What should be the role of the public sector in creating a regulatory/enabling environment for PES to deliver? Where is public sector assistance most needed**

⁵ <http://digitalcommons.pace.edu/cgi/viewcontent.cgi?article=1581&context=enrlaw>

(knowledge transfer, communal/private land rights, infrastructure, measurement of environmental quality changes, etc.)?

The public sector must not subsidize the establishment of markets in environmental services. Instead, they should use the funds for developing compliance mechanisms for regulating pollution, as well as for incentivizing environmental stewardship, recognition of communal and private land rights,

- c. **To what extent is it justified to abandon the ‘polluter pays’ principle of PES to increase agricultural productivity and reduce poverty in developing countries? Or should we use other tools to tackle these objectives separately?**

As we understand, it is envisaged that PES can incentivize good practice among some actors—say farmers, such as reducing the in-farm use of agrichemicals. However this in turn allows other polluters (say, industry in the same watershed) to buy pollution credits from these farmers and in turn avoid paying for the true cost of their pollution, as the factories would opt to pay a lower cost to farmers rather than investing in reducing their own pollution.

So in effect, PES provides an easier option to those who do not want to comply with rules and regulations, without necessarily making actual reduction in their own pollution or emission.

3. What should be the role of innovation and entrepreneurship in making PES work for sustainable development?

- a. **In some cases, PES has become a vehicle for a market for environmental goods (e.g. farmers respond to a growing regional demand for trees by setting up their own tree nurseries). Do you know of other business opportunities for farmers that could arise from the implementation of a PES scheme?**

Rewarding farmers for their practice of climate resilient agro-ecological approaches (e.g. by subsidizing organic farming) will be important.

- b. **According to your practical experience with PES, where do we need innovation to make PES more effective and what type of reward system could create such innovation?**

Rewarding environmental stewardship as part of rural and urban development would be important.

- c. **Innovative landscape approaches focus on the improvement of environmental services on the landscape-level while the PES approach is focused on the remuneration of individual farmers on the field-level. How can the two approaches be reconciled?**

Using the concept of commons will be helpful.