Payments for Environmental Services (PES) is an innovative market-based mechanism based on the twin principles that those who benefit from environmental services should pay for their provision, and that those who provide environmental services should be compensated for doing so. The PES approach is attractive in that

- It generates new financing, which would not otherwise be available for conservation;
- It is likely to be sustainable, as it depends on the mutual self-interest of service users and providers and not on the whims of government or donor funding;
- It is likely to be efficient, in that it conserves services whose benefits exceed the cost of providing them, and does not conserve services when the opposite is true.

A perception that areas of high poverty are highly correlated spatially with areas that provide environmental services has led to an expectation that PES programs could contribute to poverty reduction. Two aspects of PES programs are particularly noteworthy from the perspective of its potential impact on poverty.

- Payments made under PES programs are usually payments to land users. This makes the distribution and ownership patterns of land critical for the poverty impact of PES programs.
- Land user participation in PES programs is voluntary, and participants receive payments for doing so. This creates a prima facie presumption that participants are at least no worse off than they would be without the PES program. Were this not the case, they could simply decline to participate.

**PES is not designed to be a poverty reduction mechanism.** The objective of PES programs is to address environmental and natural resource management problems, by providing a mechanism to internalize externalities. Attempting to focus PES on poverty reduction objectives has a high risk of being counterproductive, undermining the basis for the quid-pro-quo deal between service users and service providers. If service users do not receive the services they are paying for, they will cease paying into the system, and then neither environmental nor poverty reduction objectives will be reached.

- **Poverty cannot be used as a criterion for participation.** The fundamental criterion for participation must be the capacity to provide the desired services.

**Pro-poor PES.** PES programs can affect the poor in a variety of ways—in particular, by providing an additional income source. Although PES programs should not be used primarily as poverty reduction mechanisms, there is considerable scope to design them so as to maximize their potential positive impact on the poor, and minimize potential negative impacts.

- A pro-poor PES program is one that maximizes its potential positive impact and minimizes its potential negative impact on the poor.

**Transaction costs.** High transaction costs are a major potential obstacle to participation by the poor in PES programs. The higher the transaction costs of each contract, the less attractive contracts with smallholders will be for the program, as these costs will be spread over a small area. Similarly, the higher the transaction costs imposed on participants, the less attractive participation will be to smallholders.

- **Keep transaction costs low.** This is important in all PES programs, as it affects their efficiency. Keeping transaction costs low is particularly important when many potential participants are poor, as they will be relatively more heavily affected.
- **Devise specific mechanisms to counter high transaction costs.** When many potential participants are smallholders, transaction costs will inherently be high. Specific mechanisms should be developed to reduce these costs, such as collective contracting.
Obstacles to participation. A variety of problems specific to poorer households may impede their participation in PES programs. They may lack the technical capacity to implement the required land use practices, be unable to bear the upfront costs of implementing land use practices that require substantial initial investments, or not have access to the necessary inputs. Evidence suggests that such problems are not always as binding as is assumed ex ante. Nevertheless, they may well be significant in some cases.

- Provide targeted assistance to overcome problems that impede the participation of poorer households. This may take the form of technical assistance or credit programs, for example.

Land tenure. Land tenure issues are often particularly salient for the poor. PES programs do not generally require land titles, but they do require reasonably secure land tenure. Where tenure is particularly insecure, it may be impossible to implement a PES program. Indeed, attempting to do so may be counterproductive, as it may attract additional settlers and/or result in more powerful groups displacing poorer, less powerful households. Solving tenure problems, however, is usually beyond the purview of PES programs. Where other efforts are underway to address tenure problems, the PES program can attempt to coordinate these efforts in its target areas.

- Avoid implementing PES programs in areas with conflicts over land tenure.

Indirect impacts. PES programs can also affect non-participants indirectly. Two such potential impacts may particularly affect the poor:

- Agricultural laborers. The land use practices supported by a PES program might be either more or less labor-intensive than the practices they replace. If they are less labor intensive, as for example when intensive agricultural uses are replaced with forest, demand for labor will fall and people who derive their livelihood primarily from agricultural employment may be harmed.

- Renters. When a significant part of the area that provides environmental services is operated under rental contracts, the introduction of a PES program might affect the arrangements. Landlords may decide to stop renting their land, for example, and operate it themselves under eligible land uses. There may also be conflicts over how to share the costs and benefits of participating in a PES program between landlords and renters.

Neither of these situations has general solutions, as much will depend on the specific details of the case.

- Ensure that the social context is well understood, so that possible adverse impacts are anticipated and appropriate remedial measures can be designed.

Who pays for poverty reduction? Adapting PES programs to make them pro-poor may well increase the cost of the program. The question then arises as to who should pay for these additional costs. In general, PES programs should be financed by the service users, and they lose their efficiency and sustainability benefits if they are not. This only applies to the cost of generating the desired environmental services, however. Service users have a vested interest in paying for service provision, which is what makes PES efficient and sustainable. They do not usually have an equivalent interest in reducing poverty. Asking them to pay the additional costs of making the PES program more pro-poor may make the program less attractive to them; it would be equivalent to taxing them for their conservation efforts. Whenever the additional costs of making a PES program more pro-poor are significant, therefore, other funding sources should be identified to cover them. Donor funding could be used to finance these additional costs.

These guidelines are based in part on studies financed by a grant from the Norwegian Trust Fund for Environmentally and Socially Sustainable Development. The opinions expressed are the authors’ own and do not necessarily represent those of the World Bank Group or the Government of Norway.

For more details on the design and implementation of PES programs, see: