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Payment for Environmental Services: an emerging issue to be addressed

Globally, economic approach to environmental management has been receiving recognition in all sectors of the economy. Forests provide ecosystem services such as pleasant landscapes, carbon sequestration, biodiversity conservation, watershed protection and so on. Forest ecosystems provide a wide variety of environmental services such as water regulation, biodiversity conservation, carbon storage for climate change mitigation & so on. Therefore, paramount importance is being given to forest management issues these days. Environmental goods and services not only benefit the local communities, it will also provide benefits to the global communities. However, not all environmental uses generate financial, returns commensurate with their real economic value. Environmental services are not traded in the market and have no observable price, which may be the reason. Implementing Payment for Environmental Service (PES) mechanisms can be a way for natural resource conservation, and achieve development goals and, especially in low-income regions.

The use of Gross Domestic Product (GDP) or Gross National Product (GNP) as indicators Of economic performance, however, has been critically debated, not only because they do not account for many environmental values but more importantly because they do not provide correct measures of change in well-being. As a result, the Natural resource and Environmental Accounting (NRA) approach emerged to provide the operational framework for measuring and evaluating progress towards sustainable development by including all environmental values missing from the current Systems of National Accounts (SNA). It is relatively easy to assess the value of tangible commercially exploited natural assets such as, timber and fuel wood compared to the non-traded and indirect services of ecosystems such as regulating climate, water purification, supporting for nutrient cycling, soil formation and biological diversity.

PES, therefore, develops mechanisms to capture environmental externalities and bring them into marketplace. The basic principles of PES are: beneficiaries of environmental services pay for their provision; and providers of environmental services get paid to provide them. It is important to identify the demand and supply side of the environmental services. The demand aspects include the questions such as What are the specific services? Who benefits from these services? How much benefit do they receive? Similarly, some questions related to supply side are how are these services generated? How much more or less of these services would we receive if land use changed? Who generates these services?

Before understanding and implementing PES, some crucial and pertinent questions need to be answered such as:

- What is the willingness-to-pay of the beneficiaries of environmental services to help finance conservation (Contingent Valuation)?
- How can their willingness-to-pay be translated into real resource flows?
- How should the collected funds be used to structure payments to those who are doing conservation activities?
- How do these questions differ when global and local PES are taken into consideration?

People in Nepal are not much aware of the intangible benefits of the forestry sector. There are enormous environmental benefits that forests can provide in a sustainable way. Realizing such environmental values of forests locally and globally, concerned institutions need to start working on "Payment for Environmental Services" with a concerted effort.