Rationale to design a payment for ecosystem services mechanism to sustain ecosystem services: A case study in Meemure village area

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Abstract

Payment for Ecosystem Services (PES) is one of the innovative mechanisms for natural resource conservation and management. It accommodates opportunities for enhancing incomes and livelihoods of peoples who are providing ecosystem services. Meemure village area is rich in bio-diversity species and natural beauty. It provides a number of ecosystem services such as provisioning, cultural and supporting services to that area, in order to enhance the long-term sustainability. There are many beneficiaries of these services such as villagers, farmers and many services producers like villagers, ecosystems. Like in any other village, Meemure too will change meeting the needs of people. If the services they provide to the rest to remain unchanged a PES would be justified as a way of the rewarding Meemure people for providing those. The objective of this study was to identify different ecosystem services provided by Meemure village area and design a PES to that area. In this study both primary and secondary data were used. Questionnaire survey and focus group discussion were used as primary data collection methods. There were 30 questionnaires filled from this villagers and 10 tourist guides were interviewed under the focus group discussion. According to results a PES help to conserve the biodiversity and different ecosystem services and tourists are willing to pay for service enhancement. We found that 73% tourists were satisfied with ecosystem services and were also willing to pay to ensure ecosystem services for future generations. Villagers are much keen on conserving the ecosystem than tourist guides. According to collected data, 60 % of villagers were willing to pay the equilibrium price of Rs.50. Women are more in favor for the environmental conservation than men. Therefore as recommendation, PES is a good mechanism for conservation in this area. However villagers' preferences, norms and traditions should be considered when designing PES aimed at natural resource conservation. The design of PES based on community can be developed by cost of conservation, payment modalities, and targeting buyers with threats to conservation. This PES design may help to ensure the ecosystem services and to achieve the sustainable goal.

Keywords: Ecosystem, Meemure, PES, Resource conservation.

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