

Cost-Effectiveness of Forest Restoration in Nepal: A Case from Leasehold Forestry Initiatives

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Abstract : Forests are depleted throughout the world in the 1990s, and since then, various efforts have been undertaken for the restoration of the forest. A government of Nepal promoted various community based forest management in which leasehold forestry was the one introduced in 1990s, aiming to restore degraded forests land. However, few attempts have been made to systematically evaluate its cost effectiveness. Hence the study assesses the cost effectiveness of leasehold forestry intervention in the mid-hill district of Nepal following the cost and benefit analysis approach. The study followed quasi-experimental design and collected costs and benefits information from 320 leasehold forestry groups (with intervention) and 154 comparison groups (without intervention) through household survey, forest inventory and then validated with the stakeholders' consultative workshop. The study found that both the benefits and costs from intervention outweighed without situation. The members of leasehold forestry groups were generating multiple benefits from the forests, such as firewood, grasses, fodder, and fruits, whereas those from comparison groups were mostly getting a single benefit. Likewise, extent of soil carbon is high in leasehold forests. Average expense per unit area is high in intervention sites due to high government investment for capacity building. Nevertheless, positive net present value and internal rate of return was observed for both situations. However, net present value from intervention, i.e., leasehold forestry, is almost double compared to comparison sites, revealing that community are getting higher benefits from restoration. The study concludes that leasehold forestry is a highly cost-effective intervention that contributes towards forest restoration that brings multiple benefits to rural poor.

Keywords : cost effectiveness, economic efficiency, intervention, restoration, leasehold forestry, nepal

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