

The Impact of Joint Forest Management on Household Income and Forest Condition: The Case of Madhya Pradesh, India

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Joint Forest Management (JFM) is a benefit-sharing scheme between rural households and the state government. Rural households are the user of forest resources for their livelihood, such as grazing, fuel woods, wild foods, etc., while the state government is the owner of the forest land and trees in the forest and makes revenue from the sales of forest resource such as timber, medicinal plants, etc. In the past, the state government used to protect the state forest from rural households, but the protection had been becoming more costly due to the increasing population and as a result forest resources had been depleted. JFM scheme was formally introduced by the central government in 1988 to provide rural households with incentive for forest management by benefit sharing, and each state government adopted JFM since then. Under JFM scheme, rural households have to regulate their use of forest resources for their livelihood and they are promised to will a significant share (e.g. 50%) of timber sales revenue.

Although JFM has been implemented for almost 20 years in most states in India, its impact on the welfare of rural households and forest condition has rarely investigated quantitatively. Thus, the objective of this paper is to tackle this remaining question. This paper utilizes a two-year panel data of 360 households and the satellite images of forest around their residential places. The panel data were collected in 1998 and 2008 in 60 villages spread over 6 districts in Madhya Pradesh.

Our analyses show that JFM neither increased nor decreased household income per capita although household income per capita increased significantly during the 10 year period investigated. It implies that the restriction of forest use did not have any negative effect on the welfare of rural households, but that the benefit sharing was not realized or did not increase household income. The latter is consistent with the fact that most timber trees are still immature to harvest. On the other hand, forest condition was improved during the 10 year period in villages where JFM was implemented. The improvement of forest resources is considered to be caused by forest protection from grazing and tree plantation as part of JFM activities. In conclusion, the state government has benefited from JFM, while rural households have not benefited from JFM although they have not decreased their welfare at least in the short-run.

Keywords: joint forest management, impact assessment, panel data, household income, forest condition, India