

MECHANISMS FOR ON-FARM BIODIVERSITY MANAGEMENT: A PERSPECTIVE FROM ON-FARM WOODY-PLANTS MANAGEMENT PRACTICE IN A NEPALI VILLAGE

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Farm landscapes in Nepal demonstrate the integration of crop, livestock and trees. Woody plants are managed for products such as fodder, compost, timber, fuelwood, implements, medicine, and many other consumable and marketable products. Farmers also understand the protective role of woody plants in their farm. As such practice has been an established culture, the farmers hold rich knowledge of plant crop interaction, and maintain biodiversity in the level that promotes the production of agricultural ecosystems. Farmers are innovative, and the agricultural ecosystems are changing to sustain and enhance their livelihood.

The study investigates the components of agricultural ecosystems in a village in Nepal. Changes in the woody plants in farms between 1992 and 2001 are analysed. It is demonstrated how farmers promoted woody-plant biodiversity in agricultural ecosystems. Based upon farmers' knowledge and understanding, factors associated with the different levels of biodiversity in the farms are explored. Challenges on the sustainability of farmer's management of on-farm biodiversity are discussed, and potential approaches of promoting biodiversity in agricultural ecosystems are sketched.