

Key Developments in agroecology: The role of ecoagriculture¹

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Abstract

The dominant late twentieth century model of land use segregated agricultural production from areas managed for biodiversity conservation. This model is no longer adequate in much of the world. The Millennium Ecosystem Assessment confirmed that agriculture has dramatically increased its ecological footprint. Rural communities depend on key components of biodiversity and ecosystem services that are found in non-domestic habitats. Research over the past decade has demonstrated that agricultural landscapes can indeed be designed and managed to host wild biodiversity of many types, with neutral or even positive effects on agricultural production and livelihoods. This wild biodiversity, including relatives of domestic species, pollinators, and predators on crop pests, can also help farmers adapt to climate change. Innovative practitioners, scientists and indigenous land managers are adapting, designing and managing diverse types of 'ecoagriculture' landscapes to generate positive co-benefits for production, biodiversity and local people. This presentation will assess the potentials and limitations for successful conservation of ecosystem services in productive agricultural landscapes. It will also identify priority research gaps in relation to ecosystem-friendly agricultural production systems, conservation management in agricultural landscapes, institutional developments to enable multi-functional landscapes, and the implications for the CGIAR.

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