



Deutscher Tropentag, October 11-13, 2005, Hohenheim

“The Global Food & Product Chain—  
Dynamics, Innovations, Conflicts, Strategies”

## An Enduring Match? Livelihoods, Conservation, and Payments for Watershed Services in China’s Upland Areas

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### Abstract

Upland agriculture and watershed conservation are often juxtaposed in China’s sustainable development discourse. Intensive upland agriculture sustains the livelihoods of a majority of China’s poorest farming communities, but is perceived as environmentally destructive. Deteriorating watershed quality has prompted efforts to convert agricultural land to forest and grassland, which reduces farmers’ productive land. Resolving the impasse between upland food security and rural development, on the one hand, and the need to control watershed degradation, on the other, has become one of China’s most pressing development challenges.

More recently, efforts to intertwine upland development interests with downstream conservation priorities have taken a new form. Recognizing farmers’ lack of conservation incentives, government agencies and industry groups in China have begun to experiment with innovative payment schemes that attempt to offset farmers’ opportunity costs for taking land out of agricultural production. These schemes range from national (e.g., the Sloping Land Conversion Program) to catchment (e.g., hydropower station-community agreements) in scale.

This paper provides an overview of the promise and pitfalls of payment mechanisms for watershed services in China’s upland areas, drawing on case studies from several provinces. Although preliminary surveys and experience with actual arrangements have demonstrated their potential in China, payment schemes are regularly hindered by a lack of the awareness, market infrastructure, and institutional support necessary for their success.

The stakes are high, and continued experimentation and research is needed. Mechanisms that appropriately reward upland farmers for conservation provide an enduring match between upland development interests and watershed conservation. Failure to provide adequate rewards threatens farmers’ food security and livelihoods, and consequently the viability of conservation programs.

**Keywords:** China, payment for environmental services, upland agriculture, watershed conservation