Sustainable forest management for poverty reduction through agroforestry options in the uplands of eastern Bangladesh

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Background

Bangladesh is a poor and densely populated country, with massive population growth that increases pressure on the country's forest resources. Forest covers only 6.7% of the country's surface area. The net deforestation rate is estimated at -0.3%, the equivalent of 2000 ha per year (FAO 2009).



In Eastern Bangladesh traditional shifting cultivation is the primary agricultural system and the main contributor to deforestation. Agroforestry is seen as one of the few options that can protect degrading forest resources and help lift communities out of poverty (Rahman *et.al.* 2007; 2008). The Poverty Environment Network project assesses the dependency of local people on forest resources and the role agroforestry can play in maintaining forest resources and reducing poverty at the same time.

Methods

Two villages in the uplands of Eastern Bangladesh were selected for study.



Participatory Rural Appraisal (PRA) and structured interviews were conducted with 50 households in each of the two selected villages using the PEN questionnaire.

We conducted judgement sampling with forty agroforestry growers to identify actual and anticipated costs and benefits of alternative agroforestry systems.

We convened four focus groups to analyse local knowledge of forest resources, management practices, barriers to forest resource use, visions of agroforestry systems and possible roles of government and nongovernment organisations.

Results

- Agroforestry can potentially protect existing forest by integrating trees with agriculture.
- Agroforestry systems provide better cash flow than shifting cultivation.

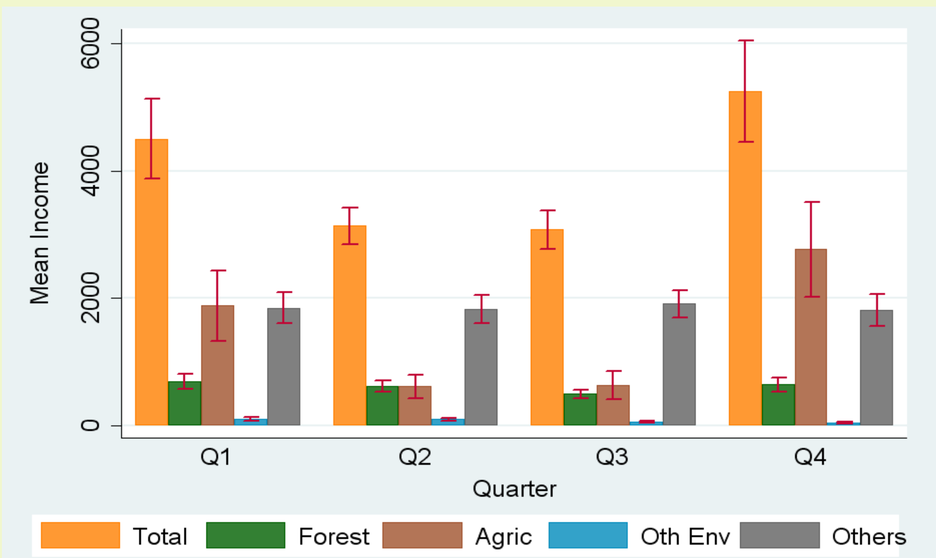


Figure 1. Yearly household income in different seasons (Quarter 1–4)

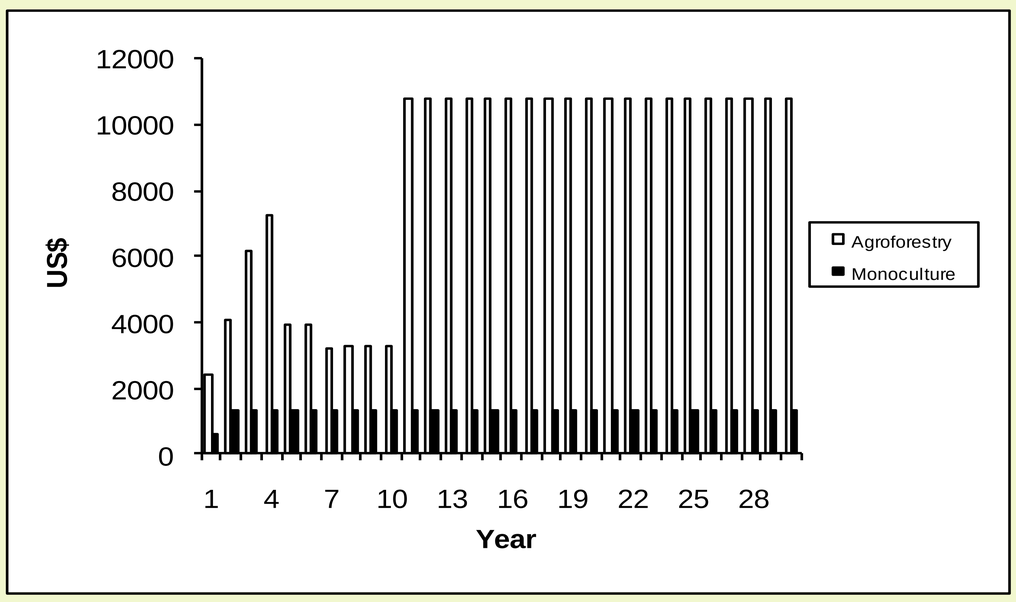


Figure 2. Net income of agroforestry and monoculture (per acre)

Constraints to agroforestry expansion

- Farmers say capital for initial agroforestry investment hard to access
- Delay in profit earning
- Dearth of appropriate agroforestry models and supporting extension
- Lack of suitable land coupled with tenure ambiguities
- Lack of knowledge due to low level of formal education

Finding solutions to forest conservation through agroforestry

- Community education
- Flexible credit
- Strategies to motivate farmers
- Improved tenure rules









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