

Agroforestry – Food Security Nexus: Future Potentials of Bamboo to Food Security Enhancement in Ethiopia

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Background

- ❖ Ethiopian rural households earn a significant part of their livelihood with natural resources in general and with forest products in particular
- ❖ Bamboo is one of the most important forest resources
 - 850,000 hectares lowland bamboo varieties
 - 350,000 hectares highland bamboo varieties
- ❖ Source of energy, fodder, construction, and input for SMEs via forward and backward linkages
- ❖ Major part of farming system and source of livelihood for rural people
- ❖ Despite a high potential for enhancing livelihoods and environmental sustainability, the sector has been overlooked for a long time
- ❖ Being cognizant of the benefits of bamboo, attention has been given to the sector since recently



Objective

- ❖ Assess the current status and future potentials of bamboo to enhance sustainable livelihoods and food security of smallholder farmers in Ethiopia

Data and methods

- ❖ Research area: Amhara and Benishangul Gumuz
- ❖ Qualitative and quantitative data collected covering 486 randomly selected households
- ❖ Focus group discussions, key informant interviews, case story narrations, and household questionnaire
- ❖ Ordered response models
 - Food consumption score
 - Dietary diversity score
- ❖ Principle component analysis
 - Coping strategies index

Results

- ❖ Bamboo has untapped potential to ensure food security, especially to poor rural smallholder farmers
- ❖ Households' food consumption profile improves with higher levels of income from bamboo
- ❖ Wealth index has a strong positive relationship with food consumption score, dietary diversity score and a negative relationship with coping strategies index
- ❖ Food crises are tackled by
 - i. Consumption switching strategies (eat inferior foods, reducing food variety)
 - ii. Bamboo related strategies (selling bamboo culms, eating bamboo shoots, harvest immature crops)
 - iii. Other strategies (borrowing cash, help from neighbors, sell assets)

Way forward

- ❖ To tap into the full potential of bamboo, a collective action of the government, NGOs and other stakeholders is required mainly to create awareness among smallholder farm households and artisans about
 - diverse benefits of bamboo
 - improved methods of growing and extracting culms
 - adoption of improved technologies

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