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

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Abstract

Ethiopian rural households make significant part of their livelihood from natural resources in general and from forest produces in particular. Bamboo is one of the most important forest resources in the country, which is estimated to be around one million hectares, of which 850,000 ha are lowland and 350,000 ha are highland bamboo varieties. This is the largest bamboo area in Africa. Apart from serving as source of energy, fodder and construction, bamboo can serve as an input for small and micro-enterprises (SMEs) via forward and backward linkages. Its production is a major part of farming system and source of livelihood for rural people. Notwithstanding such higher potential for both livelihoods enhancement 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. This research was conducted with the major objective of providing an insight into the current status and future potentials of the bamboo sector in Ethiopia in order to enhance sustainable livelihoods. The research mainly used primary data for its analysis. The sample for this research was drawn from the two-major bamboo growing national regional states in Ethiopia, Amhara and Benishangul Gumuz. A total of 486 sample households were randomly selected. Both quantitative and qualitative data were collected. Survey questionnaire was the main tool to collect the quantitative data while the qualitative data were collected using focus group discussions, key informant interviews and case story narrations. Ordered response models and principal component analysis were applied to analyse the food security status of smallholder farmers captured by their food consumption score, dietary diversity scale, and coping strategy index. Results suggest that bamboo has untapped potential to ensure food security – especially to poor rural smallholder farm households. To tap into the full potential of bamboo, a collective action of the government, NGOs and other stakeholders is required to create awareness among smallholder farm households and artisans about the diverse benefits of bamboo, improved methods of growing and extracting its culms and adoption of modern and up to date technologies.

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