

"Biophysical and Socio-economic Frame Conditions for the Sustainable Management of Natural Resources"

Management of Enset (*Ensete ventricosum* (Welw.) Cheesman) Diversity in Wolaita, Southern Ethiopia: Farmers' Knowledge and Implications for On-farm Conservation

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Abstract

Enset (Ensete ventricosum (Welw.) Cheesman), an endemic staple and co-staple food crop for about 13 million people of Ethiopia, is often called 'the tree against hunger'. The Wolaita are among the people of enset culture' in the Southern Nations Nationalities and Peoples Region (SNNPR) of Ethiopia. With the objective of assessing the extent and indigenous management of enset diversity, and there by identify factors affecting it, stratified random sampling technique was employed to select 225 households from nine Peasant Association (PAs) of Wolaita zone. A total of 59 named farmers' varieties/landraces were recorded. The number of landraces maintained on individual farms ranged from 2 to 33 with mean and standard deviation of 7.4 and 3.63 respectively. Most (78%) of the landraces had limited distribution and abundance, and only few dominant landraces were widely grown. There was considerable variation amongst locations and farms with respect to landrace diversity. The number of landraces per farm was highly correlated with household characteristics and with farm and livestock size. The Wolaita farmers maintain diversity as a way to ensure harvest security or stability of production, minimising crop failure risks, and for multiple use of the crop as food, fiber, medicine, animal feed and as income source. Perceived as morphological and cultural traits, individual landraces with their different group of classifications were identified. Combination of local practices: acquisition and selection, propagation, planting patterns, spatial arrangement, selective and mixed harvesting and processing of landraces were described for their implication of the role of farmers in managing the dynamics of enset diversity in Wolaita. Furthermore, the enhancement and conservation significance of the crop is discussed.

Keywords: Enset, Ethiopia, farmers' varieties, on-farm conservation

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