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"Solidarity in a competing world — fair use of resources"

Population Increase and Market Development as a Peril for Traditional Home Gardens and a Promise for Khat in Southern Ethiopia

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Abstract

Home gardens in southern Ethiopia are regarded efficient farming systems, allowing maximum interactions between the system's crop, tree and livestock components. However, these age-old traditional home gardens are subject to conversion processes linked to socio-economic change and biophysical conditions. Altered cropping patterns, farm size and component interactions may affect the systems' sustainability. Furthermore, home gardens exhibit a huge diversity in farms and farming systems, which needs to be understood in order to design adapted interventions for improvement. Two decade (1991–2013) dynamics of home gardens were studied based on a survey of 240 farm households and focus group discussions. Major trends in cropping patterns included an expansion of the cash crop khat and a consolidation of combined food and cash crop production. In the two market proximate districts the area share of khat per farm increased from 6 % to 35 % while the combined area share of enset and coffee decreased from 45 % to 25 % during the period of analysis. Cattle fell from 5.8 TLU to 3.9 TLU per household. In the other two less accessible districts, enset and coffee together maintained a share over 45 %. Farms were grouped into five home garden types: Khat-based, Enset-cereal-vegetable, Enset-based, Enset-coffee and Enset-livestock. Overall farm trajectories revealed a shift from food-oriented Enset-based, Enset-coffee and Enset-livestock systems to (1) cash crop oriented khat-based systems, and (2) combined food and cash crop oriented systems (Enset-cereal-vegetable). The strongest replacement of traditional home gardens based on combinations of enset, coffee and livestock by khat-based systems was observed within a radius of 36 km from major market areas. In these areas population density doubled, and the annual rate of decline in land holding per household increased from 0.5 % to 5.1 %. Easy transport and marketing of the perishable khat in combination with its cash-generating advantage over traditional crops boosts cultivation of khat among smallholders. However, increased vulnerability to shocks related to the decrease in diversity leads to concerns about the sustainability of these newly evolving systems. This study provided insights in trends, drivers and diversity that may help designing adapted interventions in the face of population increase and commercialisation.

Keywords: *Catha edulis*, commercialisation, cropping patterns, diversification

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