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Food system transformation for sustainable food and nutrition security for all: What place for smallholder tree-crop farming?

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Abstract

Food system transformation has become ever more critical in the wake of the impacts of climate change and the COVID-19 pandemic to ensure food and nutrition security for all in a sustainable manner. Much attention goes to smallholder agriculture and food production, which provide 50–70% of global food production. However, much less is known about how a growing focus on high-value tree crops that link farmers to global value chains affects farming households' food and nutrition security. This paper aims to analyse these implications for Ghanaian tree-crop farming households who engage in cocoa and oil palm value chains. We use a mixed-method approach, including surveys, and interviews to analyse food availability, access, utilisation, and stability, and critical dimensions of food sovereignty, such as autonomy and the sustainability of production. We found that most households depend on their food production. However, total household food and nutrition security depends on the household's income capacity and own food production. While engagement in tree-crop production assures some income capacity, the required income capacity is only met by households that engage in multiple tree crops, while most single tree-crop and landless households face seasonal food insecurity due to their low incomes. Dietary diversity was similar amongst all household types proving that high-income capacity does not automatically lead to better nutrition as households spend money on other things or non-nutritious foods. Food and nutrition security was better among cocoa-farming households than oil palm households proving the importance of having the autonomy to intercrop food and tree crops in the wake of declining food-crop lands due to tree-crop expansion. While cocoa farmers have the autonomy to intercrop, oil palm farmers lose that autonomy, particularly when engaged in outgrower schemes. The sustainability of smallholder food-crop production depends on intercropping, but the overuse of agrochemicals like weedicides remains a major threat to sustainable food production. The findings reveal critical entry points to a just food system transformation that ensures sustainable food and nutrition security for all and highlights the importance of considering heterogeneity among smallholders and their production context as a starting point for equitable food system transformation.

Keywords: Cocoa, Ghana, household food and nutrition security