



Tropentag, September 9-11, 2020, virtual conference

“Food and nutrition security and its resilience  
to global crises”

## Can Subsistence Farming Help to Achieve Household Food Security? Evidence from Gurue, Central Mozambique

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### Abstract

In Mozambique, about 70 percent of population live in rural areas and depend directly on ecosystem services for their livelihoods. Subsistence agriculture has been given particular importance by the government of Mozambique as a strategy to fight food insecurity and poverty. Nonetheless, low soil quality, poor and irregular rainfall, low level of synthetic inputs, food losses, inadequate infrastructure and support services are the principal barriers to agricultural productivity. Therefore, the question is can subsistence farmers achieve some level of food security? To answer this question, we collected data from 300 households in Gurue district, central Mozambique, using a semi-structured questionnaire. The results revealed very limited income earning opportunities outside agriculture, therefore, undermining households' ability to buy food. Only 16% of households had a non-farm income. The number of households with three or more meals a day grows during the harvesting period (March and July), reaching over 60 percent of the households, but this number decreases to 5 percent in January and February when the food reserves are already scarce. Two strategies stand out in alleviating food insecurity, particularly crop diversity and the use of processing and preservation techniques for agricultural products. The more crops a farmer produces, the more likely he/she is to harvest for a longer period throughout the year. The preservation of agricultural products helps to reduce post-harvest losses, while allowing food to be available for a longer period. However, farmers in the study area use traditional preservation techniques, mainly open sun drying, which may have negative impact on food quality, therefore creating a need for the implementation of innovative drying techniques that preserve the quality of food and use sustainable sources of energy.

**Keywords:** Crop diversity, food processing, food security, rural Mozambique