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Food Security and Food Quality among Vanilla Farmers in Madagascar: The Role of Contract Farming and Livestock Keeping

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Abstract

Around 67 % of Madagascar’s population is malnourished. Yet little is known about the effects of recently booming vanilla prices on food security in Madagascar’s SAVA region, the largest vanilla producing area globally. This study analysed food security and diet composition of local vanilla farming households (HHs, n=140) by means of a 12-month longitudinal food survey. Household Dietary Diversity Score (HDDS), Food Consumption Score (FCS), Food Security Index (FSI) and the contribution of protein from Animal Source Food (ASF) were used to characterise diet composition, food security and nutrient intake. Data was complemented with baseline, agro-economic, longitudinal and field-plot information to determine factors influencing food security and ASF protein contribution using a stepwise generalised linear model.

Many HHs (74 %) were food insecure with insufficient calorie, vitamins A and E intakes, but had an acceptable protein intake. Consumption of rice, the principal source of carbohydrates, was stable across the year. Compared to other regions in Madagascar, local diets were moderately diversified (HDDS = 6.9) with a medium dietary share of ASF protein (about 50 %). HH size ($p < 0.001$) and cash income from rice sales ($p < 0.001$) were the most important factors influencing FSI, while cash crop income ($p < 0.01$) and number of income sources ($p < 0.01$) were more important for the dietary share of ASF protein. Contracts with vanilla exporters and livestock ownership did not improve food security. Although many vanilla actors run social and environmental programs in the SAVA region, more needs to be done to improve diet quality and strengthen farmers’ resilience to food insecurity.

Keywords: Animal source food, dietary diversity, food security index, seasonality, vanilla farmers