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## Opportunities for integrating more fruit in smallholder farms and diets in south-eastern Madagascar

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## Abstract

Consumption of fruit is an important element of a healthy diet, as fruits are sources of vitamins, minerals and bioactive plant compounds. In the south-eastern region of Madagascar, fruits are not adequately integrated into smallholder farmers' diets. Favored by the climate, there is significant potential for increasing the cultivation and consumption of fruit by smallholder communities. This study intends to understand the reasons for low fruit consumption and to identify viable entry points for increasing production and consumption of fruit. We purposively selected four villages with relatively high and five villages with relatively low fruit diversity across three districts in south-eastern Madagascar. In 70 in-depth interviews and five focus group discussions, we gained an understanding about local fruit production, consumption, storage and transformation, considering the gender and social norms. The study revealed that fruit cultivation is given low priority by local farmers. The main constraints relate to the lack of technical skills, declining productivity of fruit trees, and the limited opportunities for commercialization. In addition, womenheaded households are also handicapped in cultivation of perennial fruit since it requires secure land tenure. Potential opportunities consist in growing short cycle fruit near the homestead, especially fruit with good market potential. Fruit consumption varies in terms of quantity and distribution, with a peak during and shortly after harvest. It is mainly due to the limited storability of fresh fruits, the absence of fruits in the market, or the lack of cash for buying them. Outside the abundance period, most of the community relies on the consumption of unripe or wild fruits. Improved storage and preservation of harvested fruit could therefore help to better cover dietary needs. Farmers have experience with traditional solar drying of lychee fruits in particular. Further increasing capacities for safe solar drying of fruit can be an opportunity, but may be challenged by time constraints. Increasing the awareness of the community on the importance of fruit consumption, promoting simple and locally suitable fruit preservation and storage methods, and generating cash returns from fruit sales could help smallholder farmers to prioritize fruits in their farming systems and in their diets.

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