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Farmers’ and academia’s views”

Growing vegetables on fallow rice fields between growing seasons : challenges and opportunities in south-eastern Madagascar

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Abstract

Achieving food security is still difficult for smallholder farmers in Madagascar. Farmers in Atsimo Atsinanana region are among the most vulnerable suffering from a lean period of six months every year. This situation is getting increasingly worse due to climate change effects, which cause delays in the rainy season. Rice fields lay fallow for several weeks between the two annual growing seasons. During this inter-season period, some farmers use their rice field to grow vegetables. These crops contribute to diets and incomes, and thus support farmers’ food security. However, despite its potential, this practice is still rare among smallholder farmers in Atsimo Atsinanana. To explore the future potential of scaling inter-season horticulture in rice fields through food security interventions, this study intended to understand current adoption barriers. Our main objective was to identify both motivating and hindering factors affecting the decision to cultivate vegetables in the rice field. For this analysis, we tested four hypotheses, linking barriers to technical farm aspects, gender roles, market dynamics, and farmers’ attitudes. Semi-structured individual interviews were conducted with 26 vegetable farmers using rice fields as well as 50 vegetable farmers using other plots to grow vegetables. To dissolve apparent contradictions in the interviews, gender-separated focus group discussions were carried out with 60 farmers. We found that technical barriers are the main constraint to this practice. Many rice fields are not suitable for horticulture, being at risk of flooding or located too far away from the farmers’ homestead, which causes drudgery and increased theft risk. The practice is also hindered by beliefs and attitudes for example that the rice field is only for rice, fertilisers damage the rice field, or growing vegetables on the rice field is for non-local people. In addition of these barriers, low market demand and the far location of big markets further disincentivize farmers. Gender roles, however, do not seem to represent a barrier to this practice. Growing vegetables on rice fields during off season is an alternative to increase food security in Atsimo Atsinanana region, but many barriers need to be overcome to make the production on rice fields profitable.

Keywords: Atsimo Atsinanana, food security, Madagascar, rice fields, vegetable growing

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