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“Solidarity in a competing world —
fair use of resources”

The Role of Biodiversity and Natural Resource Management in Food Security in South Eastern Madagascar

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Abstract

Madagascar still ranks low on the HDI (rank 151) and about one third of the population is undernourished. South Eastern Madagascar with its rich biodiversity has the highest rate of food insecurity (64%) and the largest proportion of households with a poor diet with regard to quantity and quality.

This study aims at exploring consumption behaviour of rural populations and understanding the reasons for poor nutrition and micronutrient deficiencies in the area. The role of biodiversity for the diversity of diets is investigated and assessed along with natural resource management practices and usage of ecosystem services with regard to contribution to diet diversity, livelihoods as well as their sustainability.

The data for this study was collected through ethnography, 16 gender-disaggregated focus group discussions and about 300 in-depth interviews with smallholder farmers as well as key stakeholder interviews in two village sites in Atsimo Atsinanana Region in South Eastern Madagascar.

The research showed that food consumption is characterised by a high priority for staple foods, so that three quarters of the daily calorie intake is covered through rice, cassava or maize. Despite the high biodiversity in the region people do not consume a balanced diet. Whereas fruit consumption is relatively high, perception and consumption of vegetables is low (“vegetables” are considered as green leaves). Eating fish is not common and meat is not affordable for most, so consumption is also not meeting nutritional needs. Especially the poorest people in the region highly depend on hunting, fishing and gathering of wild foods from their surroundings to supplement their deficient diets. Hence, a healthy ecosystem plays a vital role in diversification of diets of the people and in providing additional livelihood sources (e.g. material for basketry). Through that they maintain a close relation with nature and the environment.

The paper will also look into how sustainable such practices are and what effects established collective rules (*dina*) for natural resource management by local authorities (*Ampanjaka*) have. Apparently they are respected well. In a last step, recommendations are given how interests of conservation and utilisation can be harmonised.

Keywords: Balanced diet, biodiversity, food insecurity, natural resource management