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## Livelihood and Resource Use Situation of Mangrove Forest Dependent Rice Farmers in Yanbye Township, Myanmar

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### Abstract

Wunbaike Reserve mangrove forest and the nearby mangrove ecosystem have been degraded within a few decades mainly due to agricultural encroachment, conversion of mangrove forest for shrimp farming, and uncontrolled fuel wood collection related to the increasing population pressure in the region. At the same time, mangrove related farming contributes decisively to local food security and to the stability of local livelihoods. Under these conditions there is a need for socially, economically and ecologically sustainable mangrove management in the region. The present study analyses, in the framework of a case study, the livelihood and resource use situation of farm households which are engaged in rice production in the mangrove forests. For that purpose 173 rice farmers in Yanbye Township were interviewed in 2011/12.

The results show that the main forest products extracted by the rice farmer households are fuel wood (by 100%), wood for fences (by 89%), fish (by 93%), shrimp (by 81%), crab (by 86%) and vegetables (by 52%). Besides less than half of the households collected nipa palm as roofing material (28%), and forest honey (15%). 98% of farmers used these products essentially for subsistence purposes. Fish and fish related products as well as crab are the commercial products. On average 80–98% of the total household income is contributed by rice production in cash and in kind. This demonstrates that for the farm households, rice production might have a strong priority against the preservation of the mangrove forests which applies even more as alternative sources of income are missing and the local population's educational level is low. The public value of the mangrove forests until now has not been assessed, and therefore public interest in preserving it has not been highlighted, with the consequence that it is not high on the political agenda. Our research intends to provide policy input by contributing clarifications with regard to the social value of the mangrove forests, i.e. their opportunity costs in case of degradation and loss.

**Keywords:** Local livelihood, mangrove ecosystem, resource use situation