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Limitations in Fish Production in Yen Chau/Son La Province, Northern Viet Nam

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Abstract

In Yen Chau district of Son La Province fish farming is one of the major activities of farmers belonging to the ethnic minority Black Thai. The typical pond system in this area is characterised by polyculture with grass carp, among other carp species and tilapia, a continuous water-flow and feeding of mainly grass and leaf material.

Data were gathered by conducting 70 open and 70 structured interviews in the district of Yen Chau and by monthly surveying of six selected fish farmers.

Average fish yields of less than 300 g m⁻² for a 2-year production cycle must be considered relatively low for a feed-based aquaculture system. Even though, around Yen Chau town most farmers own ponds, the demand on the local market can not be covered and fish must be imported from the lowlands.

The low productivity can be partly explained by a lack of training or extension services in the field of aquaculture. Grass carp are frequently affected by diseases which leads to high fish losses and is considered as the main problem in pond farming in that region. The quality of the stocking material is assessed as low, which is probably caused by inbreeding depression in the local hatchery. As paddy fields and ponds are linked by a common irrigation system, activities in the paddy fields, such as application of pesticides, may negatively affect ponds. Water shortages in ponds may occur when paddy fields start to be irrigated. Low water temperatures in winter frequently lead to mortalities of tropical fish species, such as tilapia. Feed resources become limited in the cold dry season and the general food base in this system seems to be adequate for grass carp, but not for other fish species.

Despite of those bottlenecks, fish farming contributes enormously to food security, generates income and plays a significant role in farmers lives. Small improvements in the system might lead to big increases in fish yields.

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