

Country Status on Sustainable Aquaculture in Lao PDR

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Abstract

Capture fisheries and aquaculture in Lao PDR are based on water resource ecosystems which consist mainly of rivers and streams, hydropower and irrigation reservoirs, diversion weirs, small water bodies, flood plains and wet-season rice-fields. The total area of water resources for capture fisheries is believed to be more than 1.2 million ha. The estimated consumption of inland fish in Lao PDR is approximately 167,922 tonnes per year while consumption of other aquatic animals is estimated at 40,581 tonnes per year. Most of the consumption is from internal production (i.e. imports are of minor importance), so these figures represent approximate catches or yield from fisheries. These estimated yields are conservatively valued at almost US\$150 million per year.

The people of Lao PDR, especially in the rural communities that account for more than 75 per cent of the population, still depend upon the country's fish and other aquatic animals as their most reliable sources of animal protein. The estimate of actual fish consumption per capita (kg/capita/year) of inland fish is 24.5 kg, while other aquatic animals account for about 4.1 kg and marine products around 0.4 kg, to make a total of 29 kg of fish and aquatic products consumed per capita per year.

As aquaculture in Lao PDR expands, many forms of production systems are being developed, for example pond culture, communal ponds, rice-cum-fish culture and cage culture. Most fish culture systems in Lao PDR are small-scale. Such forms of production systems are divided into sub-categories depending on the nature and main activity of the producers. According to the Department of Livestock and Fisheries, aquaculture production in 2007 accounted for 54,750 tonnes in an area of more than 42,000 ha, including cage culture in the Mekong and some tributaries.

There has been a significant increase in intensive tilapia production in recent years in Lao PDR (MRC Technical Paper No. 5 April 2002) based on tilapia cage culture in the Mekong river and irrigation reservoirs. In last two years, an enterprising farmer has established about 360 cages .

Constraints in the large-scale development of tilapia cage culture are the lack of technical support (e.g. extension services) to the farmers and insufficient supply of advanced fingerlings. Moreover, tilapia cage culture in the Mekong river system is perceived to be difficult to sustain because of environmental factors such as river flooding and strong currents during the rainy season and the lack of water during the dry season.

It can be concluded that sustainable intensification of aquaculture in Lao PDR, still requires building the capacity of both extension workers and farmers with assistance from other SEAFDEC member countries. The training should cover the following:

- Selection of suitable aquaculture systems, and the promotion of appropriate technologies that can be adopted by farmers in Laos.
- Fish seed production, especially local production of sufficient and good quality seeds.
- Promotion and development of technologies on the propagation and culture of local fish species with aquaculture potential.
- Adoption of environment friendly feeding practices and production of aquaculture feeds.

Keywords: production systems, local fish species, capacity-building