Culture practices of freshwater giant prawn in some selected areas of Mymensingh

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Abstract

A study was conducted to examine the culture practices of freshwater giant prawn, *Macrobrachium rosenbergii* in some selected areas of Mymensingh. Based on a sample of 100 farmers from three different upazila, namely Phulpur, Gouripur and Ishwargonj in Mymensingh district, 94% of farmers cultured prawn with fish in their pond. Only 6% of farmers cultured prawn, fish and dike crops for higher economic return. The culture period is typically nine months; hatchery produced post-larvae were stocked from May to June and harvested from November to January. Per hectare production of prawn, 375 kg/yr was very low because the farmers followed simple culture method. Most of the farmers made a profit of Tk. 68,403/ha/yr and the major costs incurred were for purchasing prawn seed and feed. The culture of prawn in pond system is technically possible under different conditions though expansion of small-scale prawn farming mainly depends on reduction of production costs. Future targets could be integration of pond prawn culture with other agricultural activities especially dike cropping and rice production in the monsoon.

Key words: Freshwater prawn, Culture, Socio-economic aspects

Research findings

- The culture period of integrated prawn farming was typically nine months. Hatchery produced post-larvae were stocked in between May and June and harvested from November to January.
- The average stocking density of post-larvae was found to be 20,415/ha/yr.
- A variety of feeds such as cooked rice, rice bran, oil cake, wheat flour and fishmeal were used for prawn culture.
- Prawn yield varied considerably because of simple culture method and the average yield was around 385 kg/ha/yr. Average cost of production and net returns were respectively Tk. 53,763 ha/yr and Tk. 68,403 ha/yr.

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• Constraints of prawn farming as reported by the farmers were: higher production costs as well as poor financial support, low supply of hatchery produced post-larvae, lack of technical knowledge for prawn farming and inadequate extension services.

Policy implementations

- Considering the lack of technical knowledge for prawn farming, basic technical knowledge of integrated prawn farming should be provided to the farmers with the help of DOF, BFRI and NGO's.
- More prawn hatcheries should be established in prawn farming areas throughout the country.
- Training, extension services, institutional and policy supports should be provided to the prawn farmers for sustainable prawn production.

Livelihood implications

In spite of various socio-economic constraints, 71% of the households (farmers) have improved their economic status through prawn farming and have clearly brought out positive changes of economic activities. Farmers have improved their food consumption, standards of living, purchasing power, choice, and ability. However, concerns arise about the long-term sustainability of their livelihoods due to poor institutional and organisational support, lack of training facilities and extension works. It is, therefore, essential to provide them necessary institutional and organisational supports and extension services for sustainable livelihoods.