

A STUDY ON SHRIMP PRODUCTION AND MARKETING IN THE BATTICALOA DISTRICT

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SRILANKA

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ABSTRACT

Shrimp farming is developed from scratch to a formidable position in terms of the volume and value of output and its contribution to the country's foreign exchange earnings, within a short time span of one and a half decades. The shrimp farming industry has gradually developed into a position of pre-eminence within the fisheries and aquatic resources sector.

The industry has contributed significantly to the development of the physical and social infrastructure facilities in the coastal villages in the Batticaloa district. This industry has earned recognition in the socio economy of the farmers because it provides readily harvestable animal protein.

A study was conducted to determine the production and marketing constraints and potential of shrimp production in the Batticaloa district during the period from December 2009 to January 2010. The survey covered 90 farmers from 8 villages, located in 6 D.S. divisions in the Batticaloa district. Stratified Random sampling method was used in this survey and data were collected through pre tested structured questioners. Data were analyzed using statistical soft ware Microsoft-Excel, SPSS, and descriptive statistics, frequencies and multiple regressions were done.

Aspects of socio – economic features of shrimp farmers, productivity parameters, marketing, cost of production, financial feasibility of shrimp farming and constraints of shrimp production and marketing in Batticaloa district were studied.

Most of the farmers (86.7 %) in this district used their own money, as a source of investment for the shrimp production. 67.8 % of shrimp farmers had adopted intensive farming method while other 32.2 % of farmers practiced semi intensive farming for shrimp production. All the shrimp farmers (100%) depend on private hatcheries to get fingerlings.

Around 84.4 percent of farmers used formulated feeds and 15.6 percent of farmers used premixed feeds. All farmers purchased shrimp feeds from private mash dealers. Average feed conversion ratio was 1.43. The mortality rate of shrimp was 27.28% in the study area.

About 64.4 % of farmers harvested at 4 months finishing period, other rest of 35.6 % of farmers marketed at 3 months period. About 46.7 % of the farmers sold their products through middle men, 38.9 % of farmers sold at urban market, 12.2 % of farmers conducted directly sold in export market and finally 2.2 % of farmers sold in Colombo market.

Factors affecting determined by the use of Cobb-Douglas production function. Cost of feed per crop, cost of pond preparation and feed conversion ratio highly impact on shrimp production. Other factors such as cost of fingerlings per crop, cost of labour per crop, and cost of equipments per crop were not significant in shrimp production.

Average price of shrimps/kg, total production of shrimps per crop, and cost of leasing of land / year were highly impact on the profitability. While cost of fingerlings, total cost of lab our, total cost of equipments and feed conversion ratio were not found to be significant. The Net present value method showed $NPV < 0$ and Benefit -Cost Ratio showed $B/C \text{ Ratio} < 1$, therefore this investment was not be profitable.

Financial feasibility of shrimp farming was also analyzed in this survey. But the results indicated that shrimp farming was not being profitable.

Key Words: Feed conversion Ratio, Mortality Rate, Multiple regressions, Net present value, Benefit - Cost Ratio.

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