

Economics and implications of fishery of live *Scylla serrata* (Forsk.) at Navanthurai coastal area in Jaffna

N. Tharmine¹, K. Sivashanthini² and U. Edirisinghe³

¹Department of fisheries, Faculty of Science, University of Jaffna, Sri Lanka.

²Department of Zoology, Faculty of Science, University of Jaffna, Sri Lanka.

³Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka.

Mud crab (*Scylla serrata*) is a commercially important species worldwide because of its size, meat quality, high price, fast growth, hardiness and adaptability to various aquatic conditions. After the war, the export of live *S. serrata* in the northern part of Sri Lanka has increased significantly. However, the open access nature of the resource has led to overexploitation, especially due to economic pressure, expansion of fishing activities and the use of some destructive fishing methods. Objectives of the study were to identify the fishing method, the marketing channel of crab and analysis of the profitability of crab export. Data were collected over a six month period by on-site observations, interviews and by using a pre-tested semi-structured questionnaire with randomly selected fish marketers and fishermen. Mud crabs caught by different gear and sold through different marketing channels involved a series of intermediaries between the collectors and the consumer or exporter. This network plays an important role in the final price. Crabs with a hard shell fetch a higher price than soft-shelled ones. As the investment is low, profit is high and the daily earning per fishermen is around Rs. 4,000. However, average size and catch per unit effort of mud crabs have declined in the Jaffna estuary due to the uncontrolled use of various fishing gear and overfishing even using illegal fishing nets. In addition, significant percentages of catch are often rejected by exporters due to high mortality of damaged crabs. Recommended management measures include, prohibition of capturing immature crab, educating fisher folk, developing crab fattening and aquaculture. Alternative types of gear for catching crabs could be considered for fisheries management in the future. The introduction of a crab trap with an escaping path for undersized juveniles may help to conserve the resource.

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