

Impact of small indigenous species of fish (SIS) on livelihood of local fishing community in two upazilas of Mymensingh

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Abstract

The fisher folk used to catch small indigenous species of fish (SIS) from rivers, canals, wetlands and floodplains at little or no cost for their livelihood. Surplus fish was sold at the local market to generate some little capital for the households. The livelihood and consumption of SIS in fishing community of two upazilas viz. Trisal and Ishwarganj under Mymensingh district were studied for 3 months in 2004. Most of the fisher folk of the study areas belong to resource-poor section of the society living below the poverty level. Majority of them had no cultivable land. As professional fishers they face many problems during lean fishing period from January to April due to little or non-availability of fish. Majority of the fisher households consumed SIS three to four days a week. The fisher households of Trisal upazila consumed more small fish than those of Ishwarganj upazila. More than 50% respondents consumed <20 g SIS/day and 20% consumed >40 g SIS/day in Trisal upazila. On the other hand, in Ishwarganj upzila, most of the fisher households (66%) were found to consume <20 g SIS/day. SIS was mostly available from July-December in rivers, wetlands (*beels*), and canals, and income from fishing was reported to be good. The dominant SIS was *Puntius* spp., *Mystus* spp., *Anabas testudineus*, catfishes, mola, and small prawns. Non-indigenous species like tilapia was also dominant in Trisal upzila where aquaculture practices were well established.

Key words: Fisher folk, SIS, Fish consumption, Livelihood

Research findings

- Forty-eight of the surveyed fishers were between 41-50 age groups. Family size of 76% was larger (6-8 nos.) than the national average. No woman was found to be participating in fishing operations.
- The fishers were permanent settlers, every one had at least own house. Among respondents, 46% had no cultivable land. More than 50% had 0.08 – 0.16 h homestead and 26% had less than 0.20 h agricultural land. Only 28% had pond in their homestead.

- Fishers were found to be fully employed at least 2 days/week in non-fishing activities. Non-fishing employment was limited to agriculture (56%) and net making (32%). The daily earning from fishing ranged from Tk. 100 to 150 for 60%, < Tk. 100 for 22% and >Tk. 150 for 18% of the respondents. Earning was high in Trisal than Ishwarganj due to aquaculture activities in Trisal upazila.
- The small fish, jatpunti (*Puntius shophore*) ranked number one in both the studied upazilas. Tilapia as a cultured species was dominant in the Trisal study area.
- About 80% of the surveyed households were found to consume SIS 3-4 days a week while about 20% consumed >5 days a week.
- The fisher's households of Trisal upazila consumed more small fish than those of Ishwarganj upazila. More than 50% respondents consumed <20 g SIS/day and 20% respondents consumed >40 g SIS/day in Trisal upazila while 66% in Ishwarganj upzila consumed <20 g SIS/day.
- SIS was mostly available from July-December in rivers, wetlands (*beels*), and canals and income from fishing was reportedly good.

Policy implications

- Policy decision should be taken to develop modalities to protect the open water fisheries resources.
- Department of Fisheries may take a policy to establish and maintain fish sanctuaries, update fish protection acts and ensure their judicious implementation.
- Steps should be taken to re-excavate and restore silted up water bodies to provide suitable habitats to the open water fishes.
- Community based fisheries management system should be developed to improve the SIS production.

Livelihood implications

Fishing communities are poor and socially disadvantaged. They maintain their livelihood by catching fish from natural sources. But, due to declining production from capture fisheries their catch and income have been gradually dwindling putting them in economic crisis. Fisher families have a diverse range of strategies for their livelihoods. Full-time fishing families are engaged in making and repairing fishing gears, fish cleaning, fish trading and fish drying in addition to actually fishing. Many of the other livelihood strategies pursued alongside fishing rely on the natural assets of the open water environment and these vary according to the region and its characteristics. A higher proportion of the landless people than those owning land are full-time fishing families, as a result, SIS have considerable implications on their livelihoods.