

## **INDIGENOUS ORNAMENTAL FISHES ITS PROSPECT IN ASSAM**

Ornamental fishes usually mean attractive colourful fishes of various characteristics, which are kept as pets in confined space of an aquarium or a garden pool for fun and fancy. Ornamental fishes are usually kept in glass aquarium and hence popularly known as "Aquarium Fishes". These living jewels need not always have bright colours; as sometimes their peculiar characteristics such as body colour, morphology, mode of taking food etc. may also add to their attractiveness.

Keeping of aquarium has emerged as the second most popular hobby in recent years, next to photography. Perhaps, China is the pioneer in adopting aquarium fish as a hobby. The World's first public aquarium was established in England in 1853, and now about 500 public aquariums exist throughout the World.

The ever-increasing demand for aquarium fishes gradually paved the avenue towards global trade of ornamental fishes. The World trade of ornamental fish is valued at about US\$ 427.29 million (FAO,2001). India's overall trade presently is over Rs. 150 million. About 80% of ornamental fishes from India to International market are exported via Kolkata Airport, of which the lion's share (more than 80%) is contributed from North Eastern Region.

Already 217 fish species belonging to 136 genera has been identified in Assam, of which about 150 species have been reported to be of ornamental value and in case of more than 50 species, overseas demand has been established. Some of the commercially important species are-

*Chitala chitala*, *Notopterus notopterus*, *Gonialosa manmina*, *Gudusia chapra*, *chela cachius*, *C. laubuca*, *Salmostoma bacaila*, *Brachydanio rerio*, *Danio aequipinnatus*, *D. devario*, *D. dangila*, *D. regina*, *Esomus danricus*, *Aspidoparia morar*, *Amblypharyngodon mola*, *Puntius chola*, *P. conchonius*, *P. gelius*, *P. phutunio*, *P. sophore*, *P. terio*, *P. ticto*, *Osteobrama cotio cotio*, *Rasbora rasbora*, *Barilius barila*, *B. bendelisis*, *Acanthocobitis botia*, *Botia histrionica*, *B. berdmorei*, *B. derio*, *Lepidocephalus guntea*, *Mystus vittatus*, *Mystus cavasius*, *Rita rita*, *Gagata cenia*, *Hara hara*, *Ailia coila*, *A. punatata*, *Pseudotropius atherinoides*, *Clarias batrachus*, *Heteropneustes fossilis*, *Chaca chaca*, *Xenontodon cancila*, *Aplocheilus panchax*, *Monopterus cuchia*, *Chanda nama*, *Pseudambassis ranga*, *P. lalia*, *P. baculis*, *Badis badis*, *Nandus nandus*, *Glossogobius giuris*, *Anabas testudineus*, *Colisa fasciatus*, *C. lalia*, *C. sota*, *Ctenops nobilis*, *C. stewarti*, *Channa orientalis*, *C. punctatus*, *C. barca*, *Macrognathus aral*, *M. pancalus*, *Mastacembelus armatus*, *Tetraodon cutcutia* etc.

Assam is blessed by the presence of mild climate and abundance of ornamental fishes in nature and contributes the lion's share of total ichthyospecies in North Eastern region of India. Presence of diverse natural water bodies is also an added advantage. However, there is vast unexplored potential for indigenous ornamental fishes in Assam. Scientific and systematic exploration of this potential will definitely ensure a significant place for our State in this sphere, besides employment generation and earning of foreign exchange.

Some fish farmers, with limited infrastructures and capacity have made some effort on culture and breeding of indigenous ornamental fishes and various degree of success has been claimed. Many young and enthusiastic entrepreneurs are very much interested to take up such ventures on commercial basis.

Researchers of various organizations like Central Inland Fisheries Research Institute (CIFRI), Guwahati University, Dibrugarh University, Assam University, College of Fisheries (Assam Agricultural University) etc has done some pioneering works. The North Eastern Regional Centre of CIFRI has been conducting research on various aspects on indigenous ornamental fishes of this region including cataloguing of potential species, methods of collection from the wild, conditioning of wild fishes and laboratory rearing etc.

Agencies like Marine Products Export Development Authority (MPEDA), National Bank for Agriculture and Rural Development (NABARD), North Eastern Development Financial Institutions (NEDFi) are taking keen interest for promoting the development of culture of ornamental fishes. With a view to develop the ornamental fish sector in North-eastern region

of India, MPEDA under Ministry of Commerce, Government of India has recently opened a Sub-regional office at Guwahati which have jurisdiction overall the states of the region.

The scheme evolved by MPEDA to support the ornamental fish sector as follows:

- Provide subsidy of 50%, subject to a maximum of Rs. 40,000/- for setting up ornamental fish breeding unit.
- Assistance at the rate of 10% of FOB value of Ornamental fishes exported to overseas market with maximum limit of Rs. 3.0 lakh per annum.
- For participation in International trade fairs, as co-exhibitor in the MPEDA pavilion, an exporter need pay only 50% of stall rental, that too in India currency. The exporter also eligible for refund of 33.33% of the to and fro air fair, by economy class.

The Regional office of NABARD at Guwahati has organized business promotion meet on development of ornamental fishes in Assam recently. NEDFi, as financial Institution has prepared a report on this aspect after detailed study throughout the State.

Directorate of Fisheries, Assam is continuously trying to create awareness among the mass about the tremendous potential and utility of these living jewels. Under the Department, one officer in each district has and to coordinate the activities in field level.

In spite of all these divers efforts in this field, progress in this regard needs considerable improvement. Presently, the trade of indigenous ornamental fishes in the State is unorganized and mainly based on natural collection. The fishes are collected from the wild habitat by local fishermen and the marketed by traders who actually control the activities. It has been observed that, enthusiastic collectors collect ornamental fishes in large number during the peak season, but as market is neither ensured nor channelized properly, they loose their their enthusiasm to some extent. This has an adverse effect at the budding stage of the entrepreneurship itself.

Indiscriminate exploitation from natural sources may lead to extinction of some of the rare varieties of indigenous ornamental fishes, as decline in numbers is already reported from the natural habitats. Further there is an inherent danger of certain species disappearing from the region if the present mode of exploitation continues unabated. It is high time to take immediate measures to conserve this natural wealth of Assam.

If all the aforesaid agencies take up coordinated efforts, indigenous ornamental fishes may bring up new avenues as mentioned earlier. In such a situation, Educational Institutes & Researchers may primarily standardize breeding & rearing techniques; Financial Institutes may offer liberal financial assistance; MPEDA can assist in establishing market linkages and Government agencies like CIFRI, Directorate of Fisheries, Assam primarily coordinate the activities.

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