

Overview of Ornamental Aquaculture

Ornamental fish keeping is a hobby, in which attractive colourful fishes also known as are kept as pets in confined spaces of an aquarium or a garden pool with the purpose of enjoying their beauty for fun and fancy. In addition to the aesthetic beauty to the home and mind relaxation, ornamental fishes serve self employment to the youth by taking to various job activities such as culture of native varieties of ornamental fishes and their export. Aquarium hobby in India started during the British rule and now it is blooming industry all over the country. Along with the aquarium keeping India exports a large quantity of ornamental fishes and earns foreign money. The world trade of ornamental fish is estimated to be US\$ 6.0 billion. Globally ornamental fish industry, a multibillion industry in global and in 2015 the sector earned USD 304 million, 2/3rd of the export from developing countries. Asian countries account for nearly 60% of the total export trade in ornamental fishes in 2015. The developing countries continue to be the major producer of ornamental fish. USA was the largest importer of ornamental fish accounting for US\$ 49.67 million followed by United Kingdom (US\$ 24.31 million), Germany (US\$ 18.62 million) and Japan (US\$ 15.71 million), Singapore (US\$ 14.33 million) 34 million, with a ranking of 51, in the world. In 2015, top exporters were Singapore (US\$ 45.44 million), Spain (US\$ 36.07 million), Japan (US\$ 31.08 million), Czech Republic (US\$ 20.43 million) and Indonesia (US\$ 19.67 million) was only US\$ 1.02 million, with a ranking of 29th in the world. More than 90 percentages of the ornamental fishes from India exported from a single state West Bengal and traded from Kolkata port followed by 8 percent from Mumbai and 2 percent from Chennai. About 150 commercially important ornamental fish species recorded from the country but the export trade mainly dominated by indigenous freshwater species collected wild and some captive bred exotics. The indigenous fish groups like Loaches, Eels, Barbs, Catfishes, Gobies, Shrimps, Gouramies, killi fishes, glass fishes and shrimps are the ruling species in the industry. In addition to the fresh water species the brackish water candidates like Scats, Tiger perches and Pearl sports export from India. The wild collection of marine ornamental fishes from, Laccadives and Minicoy on the western side and Andaman and Nicobar Islands on the eastern side and Mannar play a major role in the marine live fish export along with a few amount of captive bred clowns. Various methods are used by the fishers to exploit the fishes from wild but have often received negative publicity in relation to ecosystem damage, mortality and depletion of stocks. The skilled personals are the important fact of the industry for the species specific and sustainable harvest of the organism. Scuba diving,

species specific traps, Lines with small barbless hooks and tubular nets may be used to catch species are the major methods adopt by the industry for the sustainable exploitation. Along with this some fishers adopted the indiscriminate fishing methods like dynamite poison fishing, which devastating the whole ecosystem along with the species. Intensive and selective catching techniques and dynamite fishing pose major threats to the delicately balanced ecosystem and this is of particular concern in marine ornamental fish trade. Aquaculture, the ornamental fish culture comprises techniques, such as broodstock management and captive breeding and supply the fishes to traders for export, which reduces the excess pressure on the species in the ecosystem. Standardization captive breeding technology is the keystone factor and India accomplished with captive breeding technology of more than 35 indigenous fishes. Effective extension education and scientific management and quality improvement is required for such practices. MPEDA (Marine Product Export Development Authority of India, under the Ministry Commerce and Industry) has introduced developmental assistance for the promotion of exports of ornamental fishes from the country Under this pilot scheme, exporters would be reimbursed 10% on the FOB value of exports effected, subject to a maximum of RS.2.00 lakh per exporter. Aquaculture is becoming a source of income day by day for the rural people and semi-urban areas. As part of the poverty alleviation and women empowerment the Government of India launched the Swarnjayanti Gram Swarozgar Yojana (SGSY) in 1999 where the major emphasis is on self help group (SHG) formation, social mobilization and economic activation. They bcan also adopt the ornamental fish culture technique through the microcredit for their economic sustainability and income generation.