

FISHERIES AND AQUACULTURE BOOMING IN INDIA

India is an emerging economic power with a very large pool of human and natural resources. India's global economic engagement in 2006 covering both merchandise and services trade was of the order of \$437 billion, up by a record 72% from a level of \$253 billion in 2004. By 2008, India had established itself as the world's second-fastest growing major economy. Economists predict that by 2020, India will be among the top five leading economies of the world.

India is the second largest food producer in the world. Fish and marine merchandise form an important constituent of India's food production. The Indian sub-continent has a promising future in producing marine merchandise as it has 8041 km of coastal line, 3 million hectares of reservoirs and 1.2 million hectares of brackish water. India is presently the third largest producer of fish and is playing an important role in global fisheries. The Indian fisheries sector has grown tremendously since 1950s to the present annual production levels of over 7 million tonnes of fish and shellfish from capture fisheries and aquaculture. India currently produces nearly 5% of the world's total fish production, and about 7% of the total aquaculture production. The potential for growth is immense and the Country is on the threshold of massive development in fisheries and aquaculture.

Seafood exports contribute about 3.32% of India's export and are the fourth largest contributor of net foreign exchange to the country. Marine products especially seafood business in India is booming. In 2009-10, Indian seafood exports business crossed the \$2-billion mark (US\$ 2.1 billion) by exporting about 663,603 tonnes of seafood. About 800 seafood exporters operate in India, but the majority of the marine products business is controlled by 100 companies. Japan is the largest importer of India's seafood with about 22.6% of the exports but quantities to EU, USA and Australia are on the rise. Frozen shrimp and squid, frozen cuttlefish, frozen lobsters, live crabs and lobsters, live shrimp, finfish, and ornamental fish are the main exports.

Unlike the marine fish production which has been stagnating, as elsewhere, the inland aquaculture production in India is surging ahead. Major interests in India in promoting inland aquaculture surround carps, catfishes including *Pangasius*, freshwater prawns, freshwater pearl culture, coldwater fisheries, ornamental fish culture etc. The estimated potential for ornamental fish export from India is about US\$ 30 million. There is also great future for Tilapia, which is being carefully introduced. The marine shrimp sector is well developed with the presence of world's industry leaders, and the recent introduction of *P. vannamei*. A huge untapped potential lies in developing mariculture including the farming of mussels, edible oysters, marine pearls, seaweeds etc. The potential for open water cage and pen culture in the inland and coastal areas is also immense.

Given the abundance of resources with potential and the national importance attributed, aquaculture in India is poised for great expansion in the near future. At the national level, the govt. of India is planning to develop a road map for enhancing fish production from the present level to 10 million tonnes by 2012; explore avenues to meet domestic demand; and to increase export earning potential in terms of value-added products and ornamental fish trade. The export industry is poised to achieve 5 billion US\$ level by 2012 with 75% contribution from value-added products.

India is presently a growing market for the feed industry. Several major feed plants have established recently with overseas assistance and the demand for feed, particularly the extruded feed is on the rise. Alongside there also a huge potential market for aquaculture medicine and husbandry industry.

The state (province) of Kerala situated in the southwest part of peninsular India, has a lean stretch of land with a long surf beaten coast on the western side and a lush green mountain range on the eastern side. The State has more continental shelf area (39139 sq. km) than the land area (38863 sq. km.) which points to the tremendous potential of these water resources teeming with fish. While Kerala is the top producer of marine fish, inland fish production from the extensive network of backwaters, rivers, and reservoirs is low. The potential of Kerala in increasing aquaculture production lies greatly in developing cage culture in the State's inland open water bodies, and also along the coast. The govt. of Kerala is looking for the world's industry in promoting cage culture in the lakes and reservoirs.