



Major Role of Coastal Aquaculture and Characteristics of Various Fields

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DESCRIPTION

Coastal aquaculture means the farming of shrimp, prawns, fish or other aquatic organisms in salt or brackish water under controlled conditions in ponds, pens, enclosures or other locations in coastal areas increase. However, freshwater aquaculture of the Coastal Aquaculture Service Act 2005 is not included. As the demand for seafood has grown, technology has enabled the cultivation of food in coastal waters and open oceans. Aquaculture is a method of producing food and other commodities, restoring habitats to replenish wild populations, and restoring populations and endangered species. In general, the socioeconomic benefits arising from the expansion of aquaculture include improved nutrition and health, income and employment generation, food provision that contributes to the diversification of primary production, and are becoming increasingly important for developing countries. It is from the export of quality products. Aquaculture is encouraged as it may compensate for low growth rates in capture fisheries. The release of hatchery-grown organisms and release into inland waters supports aquaculture. Aquaculture can contribute to the regeneration of rural areas by reclaiming degraded land. Fishing is an important occupation for people living in coastal areas and islands, because the area has abundant water, most of them, they eat is fish and fishes are easily obtained by fishing. It is an important occupation because people earn money by selling fish. Areas with 'sustainable' aquaculture can provide tourists with quality seafood and increase the attractiveness of the area. But where aquaculture is not a traditional sector or has intensified over the years, the conflict with tourism could become more acute.

In many countries, coastal populations are growing faster than non-coastal areas. This is a concern as population growth and associated activities can affect coastal and marine ecosystems. In

some areas, overuse of fisheries has reduced native coastal fish stocks to 10%-30% of what they were 30 years ago. In the 20th century, half of the world's wetlands disappeared, and 50% of mangroves disappeared. Nearly 60% of the world's coral reefs are severely degraded or at risk of recovery due to development and other human activities. Pollution from industry, agriculture and urban areas is degrading the quality of much of the world's fresh water. These challenges are particularly acute for island nations, whose coastlines often encircle entire national territories. Such countries could also be threatened by sea level rise, which could be a result of climate change.

India's traditional coastal aquaculture system is represented by the 'Pakkali' fields in Kerala, West Bengal, Ghazani farm in Karnataka, Kazan in Goa. These are natural systems powered by Tidis' water resources and organisms. About 5,120 hectares of low-lying coastal areas in Kerala are used for the cultivation of salt-tolerant rice called 'Pakkali' during the southwest monsoon season and shrimp during other seasons. In addition to seasonal fields, there is also a permanent field for shrimp farming. Estimated production of paddy-cum-shrimp farming varies between 500 and 1200 kg per hectare over a 6-month period. Total production from these fields is about 4800 tons.

Nutrients and organic wastes generated in shrimp farming ponds consist of solid matter (mainly leftover food, faeces, dead plankton) and dissolved metabolites (mainly ammonia, phosphate, carbon dioxide, nitrite and nitrate). Various management methods are used keep them within tolerance. Water is the most economical exchange. As a general rule, water changes of 5%-30% per day are carried out, depending on the requirements. Water availability and pond water quality. Various chemicals and probiotics available used to improve water and soil quality.

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