

Status, Prospects for Aquaculture in Nigeria

Background

Production from aquaculture is less than 10 percent of the country's total annual domestic fish production of 700,000 tons. However, there is a great potential for large-scale production; some 1 million ha of swampland are available in Nigeria's delta area for brackishwater culture.

The country's Third Development Plan 1975-1980 earmarked N\$10 million for aquaculture development and research. This sum is about 10 percent of the total capital outlay for fisheries development and research during the Plan period. The program involves the stocking of irrigation dams and reservoirs as well as the construction of modern fish farms.

Construction of ponds is labor-intensive. Invariably, fishpond farming is a part-time operation. However, some half a million people are estimated to be engaged in some phase of aquaculture or the other.

Manpower

The main problem in Nigeria's aquaculture development is not land, labor or capital but technical skill. In some states, the extension staff of government experimental and demonstration farms are well-trained and could carry out surveys and supervision of pond construction and management.

Facilities

Nigeria has the following types of aquaculture installations: (1) hatcheries and breeding centers for raising fish seed for government production farms and private ponds (2) pond farms whose sizes range from 0.5 ha to 400 ha (3) man-made lakes and reservoirs (4) cages, which are purely for research purposes (5) indoor tanks, also for research purposes particularly in the study of *Clarias*, *Tilapia* and *Chrysichthys* and (6) oyster and mussel farms.

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Prospects for Aquaculture Development in Brazil

Background

By 1985, the population of Brazil is projected to reach 142 million (108 m in 1974). Per capita fish consumption is 7.1 kg. In 1974, Brazil's fish production was 861,700 tons 13 percent of which comes from freshwater aquaculture. Brazil is a traditional exporter of crustaceans, principally prawn and lobster, and the "Piramutaba" fish species of the Amazon region. It also imports a substantial amount of dried and salted fish (24,600 tons in 1974).

By 1985, assuming that per capita fish consumption is maintained, Brazil would be needing some 1 million tons of fish. For 1985, it is estimated that the marine fishery production will go up to 400,000 tons. The deficit is expected to be filled up through aquaculture production.

National Fishery Plan

Brazil's Bureau of Fisheries Development, which is attached to the Ministry of Agriculture, has formulated a 1975-1979 national plan for fishery development which seeks to implement programs and projects designed to improve production at different levels through an integrated scheme of (a) research on fishery resources (b) manpower training (c) development of improved fishponds (d) strengthening of commercial fishing (e) development of fish ports (f) improvement of fishery laws, and (g) development of an effective fishery administration.

The Plan's long-term strategy is to establish aquaculture as a substantial source of animal protein at all levels in rural and urban areas.

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Filipino Aquaculturist Goes into Egg Production of Brine Shrimp

Brine shrimp, an essential feed for prawn larvae and milkfish fry is now being grown successfully by a private commercial fishpond operator, Atty. Ceferino de los Santos, Jr. of Iloilo Province.

Atty. de los Santos who is the author of *Modern Aquaculture for the Philippines*, an authoritative book written for the ordinary fish farmer, claimed

he was able to evolve the technique for producing viable eggs of the San Francisco strain of *Artemia salina* with technical expertise provided by two SEAFDEC Aquaculture Department visiting scientists from the University of Ghent in Belgium, Dr. Patrick Sorgeloos and Mr. Etienne Bossuyt, and a Filipino researcher, Einstein Laviña.

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Atty. Ceferino de los Santos inspects one of his *Artemia salina* grow-out ponds.