

# PRESENT STATUS OF FISH CULTURE IN DHEKU DAM (BHATANA) KANNAD, DIST AURANGABAD, MAHARASHTRA

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**Abstract—** Present study is given to fish culture status, production and development of dam. An attempt has been made to involve present status for fishery culture improvement in the management and commercial production of the fishes. It controlled by private agency. Management of water quality in ponds may help in enhancing the fish production through aquaculture. Fishes constitute economically very important group of animals. The nutritional and medicinal values of fishes have already been recognized. Pond water is considered as the major sources for fish production. It also generates rural employment in the town. To analysis the present status, categories of freshwater fish and fishery from Dheku (Bhatana) dam. To generate gainful rural employment with special reference to fishing communities

**Index Terms—** Dheku (Bhatana) dam, fish culture.

## I. INTRODUCTION

Aquaculture is labor intensive and at all stages, generates employment. An example of this is Multi harvesting, this improves the yield and income and increases the labor requirement. Fish feed Production should be encouraged instead of the use of prepared fish feeds, which require less labor and more cost. The production of duckweed, for instance, which requires more labor at lower costs, should also be encouraged. Increasing employment and the use of labor for aquaculture intensifications of particular significance in those countries where the opportunity cost for labor is low. Aquaculture has the potential to be an important generator of income and employment in the rural areas of many Asian countries. Shang (1981) estimated that the production of 4 metric tons provides one full-time job and an income adequate for a family. In Bangladesh, the net income derived from the production of 1,000 kilograms of fish a year can support a family of up to eight people. Stated in another way, the net income derived from aquaculture in 0.2 hectares of water surface area, is adequate to support a family in some developing countries

India has resources of inland waters as well as rich fish species resources which are highly suitable for fish culture and production. According to a report freshwater aquaculture sector contributes a third to the total fish production of 4.95 million tons in the country with an annual rate of growth rate of over 6 percent and a production potential of 4.5 million tons (Ayyappan, 2000). Inevitably, we have to rely heavily on

the capture fisheries resources to bridge the present level of production and the national targets of 4.5 million tons of inland fish production. (FAO, Jhingaran, 1990, 1991).

Out of the total 19,370 reservoirs in India, 19,134 are small (10-1000ha) with a total surface area of 1.48 x106ha. Maharashtra occupies an important place in the inland fisheries of India having a water spread area of 3 lack hectares in form of tanks/reservoirs and 4,552 seasonal tanks. (M.G.R.). In the recent years, with the increasing importance of fish culture, maintenance of cultural species in good health is problem confronting the pisciculture (Pandey and Chanchal 1977).

The present study deals with the present status of Fishery culture in the Bhatana Dam, a medium size fresh water dam situated between the KANNAD AND VAIJAPUR TALUKA near the SAKEGAON BHATANA Village, Tq.VAIJAPUR. Dam water used for drinking to people and agricultural purpose. (Fig-4). The aspects regarding culture practices of fish production and marketing. (Fig-1). Bhatana Dheku dam is perennial water resource for human consumption and also helpful for the agriculture and fisheries

## II. METHODOLOGY

Data was collected by visiting the site and discussion with the private fishery society man. The dam was constructed by Govt. Of Maharashtra in the Year 1972. The local fisherman (shri. Hari Naik and Shankar Naik) said that the dam had been taken on lease for on government auction rules on agreement for 5-7 year. The data on the fish seed stocking and culture were collected from private fishery society man. The ecology of dam is studied to know the prevailing environmental conditions under which the results have been achieved. The area is depend on this dam is Shivur, Sakegaon and related small villages for drinking water. The dam is surrounded by black soil fields area and that is the source of water. (Fig-2). The data of fish seed stocking were collected from the private fisherman society, and know the prevailing environmental conditions under which the results have been obtained. (Fig-3).

## III. TOPOGRAPHY AND PHYSICAL FEATURE

Bhatana dhku dam is situated 35 km South-West of Tq.Kannad. The dam is irregular shape with muddy bottom. The average level water in monsoon is about 7 to 11 feet and in summer 5 to 7 feet. (Fig-1).

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## IV. HYDROGRAPHIC AND CLIMATIC DATA

Water stores from adjoining catchment area. an average rainfall in periphery of DHEKU river and Bhatana village. Small channels. Sahangaon Medim project out let directly entered in the dam. The rainy seasons starts from the months of June. and continues upto October some time post monsoon in November s first week also. The climate the region is tropical with four distinct seasons a hot and dry summer (March–may) a warm and wet monsoon (June–September). Post monsoon (October–November) and a cool and dry winter (December–February). The average temperature are in summer 38C to 42C. While in winter the temperature is 13C to 18C.

## V. PHYSICO-CHEMICAL PROPERTIES

The soil is deep black and rich with calcium and magnesium. (Fig-2).

It is alkaline Ph. 7.1 to 7.9 and has a good water holding capacity. Dissolved oxygen (DO) is found 4.78mg/L. The total hardness as CaCO<sub>3</sub> of water 61.5mg/L

## VI. COMMERCIALY IMPORTANT FISHES AND FISHING METHODS

Fishing practices are carried out throughout the year. The average catch is more in winter and summer as compared to rainy season, hence it was observed that the physico-chemical parameters are within permissible limits and helpful for the growth of fishes. The reservoir fishery has both capture and culture. (Jayaram K.C 1999) The fishes belong to the major carps *Labeo rohita*, *Catla catla*, *C. mrigala*, *Wallago attu*, *Ophiocephalus* (DOK MASA), *Rasbora daniconius* (PATTHAR CHATU) (Fig-3), which fish have good prices in local market and city. Natural stocking of other fishes like *Babus ticto*, *Barbus stigma*, *Tilapia* (Tepali). fishing is done whenever need on demand from local people, and market day. Generally fishing is done in July to November /December. Sometime fishing done all twelve months. For regularly fishing methods gill net, cast net, tubes of truck are used.

## VII. STOCKING METHODS

For stocking fish seed procured from PAITHAN JAYAKWADI DAM FISH CENTER. The most economically stocking rate is that which results in the highest yield per unit area. David, A. (1963). 10,00,000 fish fry of *Labeo rohita* (rohu), *mrigal* and 1,25,000 fingerlings of *catla*, *wallago* are stocked. (Fig-5)

## VIII. MARKETING

Aurangabad, Kannad and local markets are available. Now days the fish caught and sold on the spot to the retailer. The retailer distributes to various small retail outlets or wholesaler. *Labeo*, *catla* and *C. mrigala* have great price in market RS.120/kg -180/kg respectively. (Fig-6)

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Fig-1: View of Dam (BHATANA)



Fig-2: Soil of Dam (BHATANA)



Fig-3: Fisherman catching the fish



Fig-4: Water supply channels



Fig-5: Captured fishes



Fig-6: Marketing of fishes (Kannad)