

Fish diversity and Topography of Thodga reservoir Dist Latur (MS), India

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ABSTRACT

The Thodga reservoir is located at village Thodga and 5 km from Ahmedpur. The reservoir is constructed on the tributary of the river Manjra and river finally joins to the river Godawari. The reservoir is constructed in the year 1994 for irrigation purpose. Fisherman of *Ahmedpur Matsya Vyavsayik Sahakari Sanstha Ltd.* Ahmedpur use this reservoir for fishery activity.

The Latitude and Longitude of the area 18°-42`-30`` and 76°-58`-32``. Minimum water spread area is 108.31 ha. And average water spread area is 65.5 ha. Catchment area is 40.7589 sq. km. The average rainfall is 754mm. The fish diversity and topography is described in the text.

Key words-*Fish diversity, topography*

INTRODUCTION

India has vast and varied fishery resources (Marine and Inland) The inland resources includes east and west flowing rivers, reservoirs, canals, lakes, ponds etc. The total length of the rivers and canals is 0.17 million km and catchment area is 3.12 million sq. km which supports highly diverse fish fauna. The estuaries of our country having 2.7 million ha water spread area which are considered as an important source for fish and prawn seeds. The reservoirs which are basically constructed for irrigation and power generation are well suited for the capture and culture fisheries. The estimated area of reservoir in the country is 2.1 million ha. (GOI 1996).

Maharashtra state has both the marine and inland water resources to meet the need of the fishery. The inland water area is available in the form of reservoirs, lakes, ponds and rivers near about 3.3 lacs ha. Fresh water spread area and 1200 ha. Brackish water area is available for fish and shrimp culture [1]

Number of minor, medium and major reservoirs are constructed on river Godawari and its tributary in marathwada. The total water spread is 76912 ha. The district wise water spread area is as Aurangabad 39777ha., Beed 18844 ha., Parbhani 11832 ha, Nanded 6469 ha. [2]. Inland fishery resources of Latur district includes reservoirs, tanks, ponds, rivers etc. Riverine system of latur district includes Manjara, Terna, Tawarja, Dharni, Manyar which are tributaries of Godawari river.

METHODOLOGY

For the study of fish biodiversity fishes were collected from local fisherman and fisherman of *Ahmedpur Matsya Vyavsayik Sahakari Sanstha Ltd.* Ahmedpur. Every month and identified as per the guide lines given by Jayaram K.C. [3] and Jhingran V.G. [4]

RESULT AND DISCUSSION

The following species are available in the reservoir and described in the text.

Fish diversity-

Class-Pisces
 Sub class-Teleostomi
 Order-Siluriformes
 Family-Bagridae
 Species-Mystus Seenghala
 Species-Wallago Attu
 Order-Osteoglosiformes
 Family-Notopteridae
 Species-Notopterus Notopterus
 Order-Channiformes-
 Family-Channidae
 Species-Channa Punctatus
 Species-Channa Marulius
 Order-Mastacembalus
 Family-Mastacembeli
 Species-Mastacembalus Armatus
 Order-Cypriniformes
 Family-Cyprinidae
 Species-Catla Catla
 Species-Cirrhinus Mrigala
 Species-Labeo Rohita

Topography of Thodga Reservoir

Latitude -18°-42`-30``
 Longitude - 76°-58`-32``
 Average Rain fall-754mm
 Dependable rainfall at 50% C.L. 754 mm of monsoon rainfall
 Catchment area at site-11. 90 sq.km. Intercepted -2884 sq. km free
 Nature of catchment area-Average
 Depth of dam-15mm Yield per sq. mile-19.5516 mcft
 Total yield at site-5.6387mm³
 Capacity at sill-0.513 mm³
 Length of the earthen dam-1006m
 Maximum height of earthen dam-18.83mm
 Maximum flood discharge as per Ingils formula-680.01 Cum/Sq
 Flood lift over weir-1.50m

Length of weir-187m

Standard Level of Project

Sill level-501.25

F.T.L.-50880m

M.W.L.-510.30mm

T.R.L.-512.30mm

B.R.L.-500.78m

T.H.C.-510.80mm

Top width-4.50m

CONCLUSION-

The observation on fish and fisheries of Thodga reservoir reveals that the reservoir is suitable for fish culture, productivity can be increased by changing species combination and introduction of exotic carps in the reservoir.

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