

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

Patil Prashant V

KSK College Beed 431122

Email: [drprashantpatil123@yahoo.com](mailto:drprashantpatil123@yahoo.com)

## Manuscript Details

Available online on <http://www.irjse.in>  
ISSN: 2322-0015

Editor: Dr. Arvind Chavhan

## Cite this article as:

Patil Prashant V. Fish diversity and Topography of Thodga reservoir Dist Latur (MS), India, *Int. Res. Journal of Science & Engineering*, 2018; Special Issue A6: 51-53.

© The Author(s). 2018 Open Access

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License

(<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

## 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-Osteoglossiformes  
 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-5.6387mm<sup>3</sup>  
 Capacity at sill-0.513 mm<sup>3</sup>  
 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.

**REFERENCES**

1. **Gautam M and Dongre KA.** Maharashtra Fisheries in 21 st century prospectus and Development, Proc. Nat. semi. Vision on Indian Fisheries of 21 st Century, **1998**, 85-89
2. **Kulkarni.** A Derla tank monitoring Limnological and fish cultural aspects Ph. D thesis 2002 S R T M U Nanded, **1998**.
3. **Jayram KC.** The water fishes of India , Pakistan, Bangladesh, Srilanka-A hand book Director ZSI Calcutta, **1981**.
4. **Jhingran VG.** Fish and Fisheries of India Hindustan pub. India (Delhi), **1988**.
5. **Laglar K.F. (1978):** Freshwater fishes Biology W.M.C. Brawn Company Publishers DEBEque, Lewa 1978.