

FISH FAUNAL DIVERSITY OF TURORI RESERVOIR AT TURORI, TQ. OMERGA DIST. OSMANABAD (M.S.)

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ABSTRACT

Fish is a most valuable source of proteins and occupied a significant position in the Socio-economical fabric in most of the countries. Biodiversity is essential for stabilization of ecosystem and protection of overall environmental quality. In the present study attempts were made to study the fish faunal diversity of Turori Reservoir at Turori, Tq. Omerga, District Dharashiv, in Marathwada region. Systematic surveys were conducted during a period of one year (June 2011 to May 2012) It is perennial water bodies, resource for human consumption and agriculture. There is no report on the biodiversity of Turori Dam with special reference to the fish diversity. About 22 species of fish were identified 5 orders and 10 families were recorded.

KEY WORDS: Turori Reservoir, Diversity, Fish, Families.

INTRODUCTION

Fishes are aquatic creatures, perfectly adapted for life in water. Freshwater bodies comprise variety of fishes, fishes alone contribute about 2,546, species and the fishes of inland water bodies of Indian subcontinent have been subject of study since last century. Human being from time immemorial use fishes for various purposes. Millions of human are suffering from hunger and malnutrition while fishes are rich sources of food and nutrition and become an important and delicious food of man. Fishes have formed an important item of human diet from time immemorial and are primarily caught for this purpose (Sarwade & Khilliar 2010). In order to maintain sustainable development and stability of ecosystem, surveillance of fish faunal diversity of water bodies is needed.

Biodiversity is essential for stabilization of ecosystem protection of overall environmental quality for understanding intrinsic worth of all species on the earth. The lack of information on the present Ichthyo-fauna is a big handicap for popularizing little known fish variety in a particular ecosystem. Thus there is need to survey fish fauna associated with habitat, which will help in planning methods for their production and effective exploitation. This diversity is on decline and few species have been lost from the fresh water ecosystem of India and some are belonging under endemic enlarged and threatened category. The freshwater of Indian have viewed from a single perspective that of economic production. The objective of the study was to collect recent data regarding fish diversity and observe its abundance, aiming to contribute a better knowledge of the fish diversity of Turori Dam in Dharashiv district.

MATERIALS & METHODS

Work carried out during the year June 2011 to May 2012 for fish diversity study fishes were collected mainly by using gill net of different mesh size with the assistant of local fisherman immediately photograph were taken prior to preservation for the identification of fishes. The collected specimen were preserved in 4% formalin according to size plastic jar were used preserve fishes. The fishes were identified in laboratory work using taxonomic keys of Day (1829-1889), Jaiaram (1981) & Jhingram (1991).

RESULTS & DISCUSSION:

During the present investigation 22 species of fishes belonging to 5 order 10 families were identified (Table No-1). The order Cypriniformes was found to be dominant among fishes. Total 9 species of fishes were observed belonging to order cypriniformes and family cyprinidae. The members of this family are distributed in fresh water habitat all over the world. Freshwater carps are included in this order. The second largest order observed at Turori Reservoir was siluriformes. Total 6 species of fishes were observed from order siluiformes. The 4 fish species belonging to order perciformes, 2 species belonging to ophiocephaliformes and one species belonging to osteoglossiformes were also observed from the Turori Reservoir. The economically important species of fishes like Labeo-rohita, Cutla-Cutla, Channa striatus, Channa Punctatus, and Tilapia mossambica were found numerically more in this reservoir during the study period. This was due to the release of seedlings and fingerlings of these economically important fishes in the dam for commercial fishery practices. The diversity and abundance in fishes of Turoris dam is attributed to the availability of plenty of

food material and healthy ecosystem developed over long period of time. Sakhare (2001) reported the occurrence of 23 species of fishes belonging to 7 orders at Jawalgaon reservoir, Dist. Solapur. The order cypriniformes was reported to be the dominant in terms of number of species. Sarwade and Khillare (2010) reported the 60 species of fishes belonging to 15 families and 36 genera during their study on Ujani wetland (M.S.)

CONCLUSION

The Turori Reservoir exhibit a good fish faunal diversity represented by 22 species of fishes belonging to 5 order and 10 families. The diversity and abundance of fishes in Turori dam represents the suitability of water and aquaculture practices. To maintain the richness of aquatic ecosystem continuous monitoring of reservoir is needed.

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Table No. 1: Showing Fishes reported from Turori Reservoir in the year 2011-2012

SR. NO.	ORDER	FAMILY	ZOOLOGICAL NAME	STATUS
1	Cypriniformes	Cyprinidae	1. Labeo-rohita	A
		“	2. Catla-catla	A
		“	3. Labeo-calbasu	A
		“	4. Cyprinus-carpio	A
		“	5. Puntius—ticto	A
		“	6. Cirrhinus mrigalla	A
		“	7. Cirrhinus macrops	A
		“	8. Puntius scophore	A
		“	9. Esomus danricus	M
2	Siluriformes	Siluridae	1. Wallago-attu	A
		Claridae	2. Clarias batrachus	R
		Heteropneustidae	3. Hetrogneustus fossilis	A
		Bagridae	4. Mystes seenghala	A
		Bagridae	5. Mystes cavasius	A
		Siluridae	6. Bagarius bagarius	R
3	Perciformes	Cichlidae	1. Tilapia mossambica	A
		Cichlidae	2. Etroplus suratensis	M
		Cichlidae	3. Rasbora daniconius	A
		Gobiidae	4. Glossogobius giuris	A
4	Ophiocephaliformes	Ophiocephalidae	1. Channa punctatus	A
		Channidae	2. Channa striatus	A
5	Osteoglossiformes	Notopteridae	1. Notopterus notopterus	A

A- Abundance, M- Moderate, R-Rare.





Fishes of Turori Reservoir

REFERENCES:

1. **AGRAWAL S.C. (1990)** Fishery management Ashish publication House Nre Delhi.
2. **BABU RAO M & Y. SIVA REDDY (1984)** Fish fauna of Hussinasager Jantu.2:1-6.
3. **CHANDANSHIVE N. E., KAMBLE S. M. & YADAV B. E. (2006).** Fish fauna of Pavana river of Pune. Maharashtra, J. Aquatic Biol.21(3):7-9
4. **DAY F. S. (1878)** The fishes of India, a willam & Sons Ltd. London, vol-I, p-777 & vol-II 198.
5. **DATTAMUNSHI J. S. 7 SRIVASTHAVA M. P. (1988)** Natural history of fishes and systematic of Freshwater fishes in India, Narendra Publ. Co. Delhi India.
6. **HIMILTON-BUCHANAN (1822)** An account of the fishes found in the river Ganga and its Branches, Edinburg & London vii+ 405 pp39 pic.
7. **HIWARE C. G. & PAWER R. T. (2006).** Ichthyofauna of paithan Reservoir Nathsager Dam in Aurangabad district. (M. S.)
8. **JAIRAM K. (1991)** The freshwater fishes of Indian region ,Narendra Publ.house ,New Delhi
9. **JHINGRAN V.G. (1991)** Fish and fisheries of India, Hindustan Publishing Corporation. Delhi,
10. **JAIRAM C. K. (1981)** Fresh water fishes of India, Pakistan, Bangladesh, Burma & Shrilaka.
11. **KHANNA S. S. (1992)** An Introduction of fishes, Indian Universities press and published by central book dept of Allahabad, 1-59
12. **Menon A.G.K. (1999)** Checklist of freshwater fishes of India, Z. S. I. Kolkata.
13. **KAMBLE S. M., MOHEKER A. D. 7 BHAGWAN H. K. (2006)** Biodiversity of fishes of river Manjara near Kallam, Dist. Osmanabad (M. S.) India. J. Aqua. Biol. 21 (3):3-4.
14. **SAKHARE V. B. (2001)** Ichthyofauna of Jawalgoan Reswevoir, Maharashtra Fishing Chimes; 19(8):45-47
15. **SARWADE J. P. &, KHILLARE Y. K. (2010)** Fish diversity of Ujani Wetland, Maharashtra, India. The Bioscan an Int Quart J. of Life Science 1; 173-179.