

Preliminary Study of Fish Fauna in Varandh Dam From Mahad Tehsil, Western Ghats, Maharashtra, India

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Abstract: *The fresh water fish fauna of Varandh dam of Mahad Tehsil, Raigad district Western Ghats, Maharashtra was studied for period of one year during July 2020 to June 2021. Varandh dam is perennial aquatic body, which is used for agricultural practices and domestic activities including potability. This was the first systematic study conducted on the fish diversity in Varandh dam. The fishes were identified by referring standard literature (Day, 1981; Jhingram, 1992; Datta Munshi and Srivastava, 2002 and Jayram, 2010). In the present study, 15 species were recorded in the study area. They belong to 4 families and 12 genera. The family Cyprinidae (08 species) was reported to be dominant group followed by family Channidae (03), Siluridae (03) and Clariidae (01 species)*

Keywords: Preliminary study, Fish fauna, Varandh dam

I. INTRODUCTION

Fish is the poikilothermic animal, which inhabit the aquatic mode of life. These are the first true vertebrates. Fish is one of the significant sources of food. Fish is responsive to alterations in water quality due to various anthropogenic processes from their catchment. Fish constitutes half of the total number of vertebrates in the world. They live in almost all conceivable aquatic habitats; 21,723 living species of fish have been recorded out of 39,900 species of vertebrates out of these 8,411 are freshwater species and 11,650 are marine. India is one of the mega biodiversity countries in the world and occupies the ninth position in terms of freshwater mega biodiversity (Mittermeier and Mittermeier, 1997). India therefore has 2,500 species of fishes of which 930 live in freshwater and 1,570 are marine species (Kar et al (2003)). Present investigation was undertaken to study the fish diversity from Varandh dam. This is the first effort in this direction. Various indigenous and commercial fishes of importance were found in this area. Varandh dam is a man-made dam located 8 kms, away from Mahad and average rainfall was 665mm.

II. MATERIALS AND METHODS

The study area Varandh dam lies in Varandh region of Mahad taluka, Raigad district Western Ghats. It was constructed for irrigation and domestic purpose but it is being used for inland fish culture. Fishes were collected from different selected localities during the study period from July 2020 to June 2021 in Varandh dam with the help of local fishermen using different type of nets namely gill nets, cast nets, dragnets and Bhar jal. Immediately photographs were taken with the help of digital camera. Fishes brought to laboratory were preserved in 10% formalin solution in separate specimen jar according to the size of species. Small fishes were directly placed in the 10% formalin solution. While large fishes were given an incision in their abdomen and preserved. The Meristic and morphometric characters were measured and fishes were identified up to the species level, with the help of standard keys and books (Day, 1981; Jhingram, 1992; Datta Munshi and Srivastava, 2002 and Jayram, 2010).



Fig. Map of Varandh Dam of Mahad tehsil Raigad District Western Ghats (M.S.) India.

III. RESULTS AND DISCUSSIONS

In the present study, 15 species were recorded in the study area. They belong to 4 families and 12 genera. The family Cyprinidae (08 species) was reported to be dominant group followed by family Channidae (03), Siluridae (03) and Clariidae (01 species).

Table 1: Fish fauna of Varandh dam Raigad district ,Western Ghats MS during 2020-21

Order	Family	Common Name	Scientific Name
Cypriniformes	Cyprinidae	1.Catla	<i>Catla catla</i>
		2.Rohu	<i>Labeo rohita</i>
		3.Rohu	<i>Labeo calbasu</i>
		4.Common carp	<i>Cyprines carpio</i>
		5.Mrigala	<i>Cirrhinus mrigala</i>
		6.Chela	<i>Chela bacaila</i>
		7.Garra	<i>Garra lamta</i>
		8.Silver Carp	<i>Hypothalmichthys molitrix</i>
	Channidae	9. Bullseye snakehead	<i>Channa marulius</i>
		10.Spotted snakehead	<i>Channa punctatus</i>
		11. Snakeheads	<i>Channa Sp.</i>
	Siluridae	12.Butter catfish	<i>Callichrous bimaculatus</i>
		13.Helicopter Catfish	<i>Walla attu</i>
		14.Butter Catfish	<i>Ompok bimacularis</i>
	Clarridae	15. Magur	<i>Claris batrachus</i>

Ubharhande and Sonawane 2012 was ciated 40 species of fishesbelong to 07 order 10 families, 19 genus in Paintakli dam from Buldhana district (MS) India. Telkhade and Jambhule 2017 was ciated 30 species of fishesbelonging to 5

orders and 10 families in Lohaha Lake, Lohara dist- Chandrapur Maharashtra, India. Chaudhari and Sitre 2020 were reported 17 different species of fishes belonging to 4 different orders and 5 different families in Pothara dam of Samudrapur Tehsil in Wardha District. Waware and Kamdi 2018 was recorded 18 fish species belonging to 7 orders, 9 families and 15 genera in from Saikheda Dam of Taluka Kelapur, Dist. Yavatmal (M.S.) India. Nirbhavane et.al (2021) was recorded 17 species of fishes belongs to 4 different families in Chankapur Dam Kalwan (Nasik District) Maharashtra, India. Nagmote et.al (2023) cited 22 species of fishes belonging to 06 orders, 11 families and 19 genera from the Khadkpurna Reservoir of Maharashtra, India.

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REFERENCES

- [1]. Chaudhari, A.N and Sitre, S.R. 2020. Fish Diversity of Pothara dam of Samudrapur Tehsil in Wardha District, *Int. Res. Journal of Science & Engineering*, Special Issue A7 : 483-487
- [2]. Datta Munshi, J.S. and Srivastava, M..P. 2002. Natural history of fish and systematics of fresh water fishes in India. Narendra publication Co. Delhi.
- [3]. Day, F 1981. The fishes of India Vol.-I & II William Dawson and Sons Ltd. London
- [4]. Jayram, K.C 2010. The freshwater fishes of the Indian region .2nd edition Narendra Publication house Delhi pp.616.
- [5]. Jhingram, 1992. Fish and fisheries of India 2nd edition Hindustan Publication Corporation New Delhi .
- [6]. Kar, D. A. , Kumar, C. Bohra and L.K. Sigh, (Eds) 2003. fishes of Barak drainage, Mizoram and Tripura; In: Environment, pollution and management, APH publishing corporation, New Delhi, 604: 203-211.
- [7]. Mittermeier, R.A. and C.G. Mittermeier, 1997. Megadiversity Earth's biologically wealthiest Nation. In McAllister, D.E. A. Lttamilton and B. Harvery (Eds). Global fresh water Biodiversity sea windcemex, Mexico city," pp:1-140.
- [8]. Nagmote, S.R., Nikam, M.T. and M.R. Tandale 2023. Diversity of Fresh Water Fishes from the Khadkpurna Reservoir of Maharashtra, India. *Acta Scientific Microbiology* 6.4: 92-97 p.
- [9]. Nirbhavane, A ; S. Bhoje and N. Bahiram. 2021. Fish faunal diversity of Chankapur Dam Kalwan (Nasik District) Maharashtra, India NCMR21 Peer Review Book chapter 116-118p.
- [10]. Telkhade, P.M. and S.H. Jabhule 2017. Fish diversity of Lohaha Lake, Lohara dist- Chandrapur Maharashtra, India. *I J R B A T*, Vol. V, Issue (1):63-65.
- [11]. Ubharhande, S.B and Sonawane, S.R. 2012. Study of freshwater fish fauna and water quality at Paintakli dam from Buldhanadistrict, (M.S) India. *Journal of Experimental Sciences* 2012, 3(7): 04-08 p.
- [12]. Waware, S.K. and R.R. Kamdi, 2018. Fish biodiversity of Saikheda dam wetland area of Lingti village in Kelapur taluka, dist.-Yavatmal (M.S.), India. *I J R B A T*, Issue (VII), Vol. I, 2018: 17-22