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FISH-DIVERSITY OF ATARITAL DAM AT MAUGANJ, REWA MADHYA PRADESH, INDIA

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ABSTRACT: - Fish are finned, aquatic, cold blooded vertebrates with gills. They share a body plan similar to that of humans and other vertebrate (with a backbone) animals. Fishes are not useful as source of food, medicine, and economic value but it also plays a crucial role in the second tropic level of the aquatic ecosystem. Therefore, in the present investigation preliminary observations of fishes were carried out in the Atarital Dam of Mauganj Rewa (M.P.). In the present investigation results reveal the occurrence of 26 species of fish belonging to seven orders, eleven families. It is conclude that the Dam have high ichthyic diversity with good economic potential. To conserve and maintain the ichthyic diversity, anthropogenic activities should be controlled and further need to assess the water quality of this dam.

KEYWORDS: Fish Diversity, Atarital Dam.

INTRODUCTION

Atrital Dam (stop dam) is an anthropogenic construction on the confluence of two small nallahas Garha and Atari on the right hand side of N.H.7 in Mauganj tahsil of Rewa district at 24 ^{0}43' 13" N and 80^{0}2'53"S. Rewa has 7495 sq. Km of territory and occupies about 2.5% of total geographical area of the state. It stretches about 150 Km from north to south and 83 Km. from east to west. The Dam harbors a wide variety of fish resources.

Rewa district comprises of seven tahsil namely Sirmaur, Teonthar, Mauganj, Hanumana Raipur karchuliyan, Gurh and Huzur. Hanumana tahsil is surrounded by the boundaries of Allahabad district of U.P. on the north, Mirzapur district on the east, Sidhi and Shahdol on the south and district Satna on the west side.

Mauganj, Rewa (M.P.) is very unique tahsil of Rewa district is very rich in its natural resources, beautiful fauna and flora including many rivers, lakes pond dams' pools tanks and water falls. The Mauganj tahsil which has chosen for the present study is situated on Rewa Mirzapur N.H.7 road.

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The various scientists have been reported 23,000 fish species in the world out of these 2546 species are dwell in India (Chakraborty, 2004). The studies carried out by various researchers in concern of fish community Hora and Nair (1941), Karamchandani et al (1967) , Rao et al (1991) , Vyas et al (2007), Desai (1992), Singh (1995), Dubey (1994), Anon (1971), Bakawale and Kanhere (2006), Shravastava (1968) and Shrivastava et al (1970) given an account about fish fauna of Ken River. No data appeared in literature concern fish diversity of Mauganj Rewa district Madhya Pradesh.

Therefore, in the present investigation preliminary observations of the fishes were carried out in the Atarital Dam.

MATERIALS AND METHODS

Fishes were caught for the present study from Atarital Dam of Mauganj, by local fisherman by operating cast net and during Government operation using drag nets and gill net for its harvesting. A period of one year from June 2010 to May 2011.Fishes were identified using the standard keys of Day, F. (1989), Mishra, K.S. (1959), Jhingran (1991) Jayaram (1999) and Shrivastava (1998).

Satellite View of Atarital Dam

Fish Diversity of Atarital Dam

RESULT AND DISCUSSION

In the present investigation results reveal the occurrence of 26 species of fish belonging to seven orders, eleven families. The species of family cyprinidae were most dominant by nineteen species followed by bagridae and ophicephalidae with four species. Notopteridae, siluridae, mastacembelidae and nandidae each family containing two species and claridae, saccobianchidae,schlibidae and anabantidae family with one species each.

Out of twenty six species six species having high economic value these are Labeo rohita, Catla catla, Cirrhinus mrigala, Walago attu, Ompok bimaculatus and Channa marulius, and others have moderate economic value. During this study we also found exotic species namely Cyprinus carpio (common carp), Ctenopharyngodon idella (grass carp), Hypopthalmichthys molitrix (silver carp). Results are summarized in Table 1.

Kong Kab Wai and Ali (2006) have reported fish composition through gill and cast netting with row and column in tropical reservoir in Malaysia. Similar pattern has been followed by Balogun (2005) in a case study of Kangimi Reservoir in Nigeria. In the present study netting used 10 mm to 50 mm mesh size of gill net. Hora and Nair (1941) reported 40 species of fish at Satpura rang, Hosangabad. Karamchandani et al (1967) have reported 77 species in River of Narmada, Rao et al (1991) reported 84 species of Narmada basin in the context of Indian Sagar Maheshwar, Omkareshwar and Sardar Sarover Reservoirs. Vyas et al (2007), Desai (1992), Singh (1995) Dubey (1994), Anon (1971), and Bakawale and Kanhere (2006) have also studied the fish fauna. Shrivastava et al (1970) had given an account about fish fauna of Ken River. National Bureau of Fish Genetic Resources, Lucknow prepares a list of 637 Fish species from different River Basin of the country.

Adverse effect of environment, climatic changes, increasing water temperature Parihar, M.S. and Dubey, A.K. (1995),declining water level Dubey et al (2011) ,tremendous use of pesticide and xenobiotic compound Dubey (1995) affected the fisheries productivity, hence decreasing the number of aquatic organism.

Table No. 1. Fish Diversity of Atarital Dam in Mauganj Rewa (M.P.)

S. No.	Order	Family	Genus	Species	Local Name
1	Clupeiformes	Notopteridae	Notopterus	*notopterus*	Moh
2			Notopterus	*chitala*	Chital
3			Catla	*catla*	Katla
4	Cyperiniformes	Cyprinidae	Cirrhinus	*mrigala*	Mrigal
5			Labeo	*rohita*	Rohu
6			Labeo	*bata*	Rohu
7			Oxygaster	*bacaila*	Chela
8			Puntius	*sarana*	Punti
9			Puntius	*ticto*	Pothia
10			Cyprinus	*carpio*	Common carp
11			Hypthalmichthys	*molitrix*	Silver carp
12			Ctenopharyngodon	*idellus*	Grass carp
13		Siluridae	Wallago	*attu*	Padhin
14			Ompok	*bimaculatus*	Pabda

S. No.	Order	Family	Genus	Species	Local Name
15		Claridae	Clarias	*batrachus*	Magur
16		Saccobrachidae	Heteropneustes	*fossilis*	Singee
17		Schilbeidae	Clupisoma	*garua*	Bachua
18			Mystus	*aor*	Daryai
19		Bagridae	Mystus	*seennghala*	Tengara
20			Mystus	*vitatus*	Katuwa
21			Mystus	*cavasius*	Singti
22			Channa	*marulius*	Padam Saur
23	Ophiocephaliformes	Ophicephalidae	Channa	*punctatus*	Sauri
24	Mastcabeliformes	Mastacembelidae	Mastacembelus	*armatus*	Bam
25	Perciformes	Nandidae	Nandus	*nandus*	
26	Percimocuchia	Anabantidae	Anabas	*testudineus*	Kabai

CONCLUSION

It is conclude that the Dam have high ichthyic diversity with good economic potential. To conserve and maintain the ichthyic diversity, further need to assess water quality, and anthropogenic activities to this dam should be controlled.

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