Analysis Of Freshwater Fish Fauna Caught from Erai River of Chandrapur (M.S.), India

Atul K. Pimpalshende[1], Shashikant R. Sitre[2]
[1]*Assistant Professor, Department of Zoology, Netaji Subhash Chandra Science College, Mulchera, Dist. Gadchroli-442707*
[2]*Associate Professor, Department of Zoology, N. S. Science and Arts College, Bhadrawati Dist. Chandrapur - 442902*

***Abstract*—Here an attempt is made to study the freshwater fish diversity of Erai riverine fishes caught by local fishermen of Chandrapur city near Ram Setu bridge at Datala village site in Chandrapur city of Maharashtra state. The observations on fishes caught were made during the year 2025 by visiting the fish catching sites observing various fishes caught and meeting local fishermen communities. There are 30different types of species of fish observed and recorded in field caught from river during study period which includes different order's i.e., Anabantiformes, Beloniformes, Cichliformes, Cypriniforme, Osteoglossiformes, Perciformes, Gobii formes, Siluriformes and Synbranchi formes. The Erai River flowing through the city of Chandrapur is quite polluted due to man-made activities and a lot of fishes are thriving in its basin, so present studies of one year focuses on it by utilizing the services of fishermen of the river. The fishes are observed, classified and recorded. This study provides an insight into the presence of fish fauna in a riverine condition of Chandrapur city.**

***Index Terms*—Erai River, Chandrapur city, Fish fauna diversity.**

I. INTRODUCTION

The Erai River is flowing through Chandrapur city of Maharashtra state in Vidarbha region. Due to discharge of industrial waste waters and city burden, increase in pollution of the precious water resource is increasing day by day. Therefore, it is necessary to assess the fishes present in it, so in this context fishes caught by local fishermen community were recorded from Datala village site on Erai River site. In this context fishes caught were observed and recorded during the year on site. The Erai River plays a key role in the life of Chandrapur city people. The city outlets discharge untreated wastes directly into the adjoining Erai River which causes water pollution. Also, the waste water from the factories affects the river which directly effect on flora and fauna.

The fishes play an important role in the life of mankind so it is a useful commodity to man since times immorial. So, its biodiversity is important for man's sustenance. Unfortunately, very scanty work is done in relation to fish fauna of this area in recent past, though appreciable limnological work is done yet the fish fauna remained fully explored till date now. The fauna study is of utmost importance in determining the population density of fishes. Freshwater fish comprise almost 13,000 species. Studies on Indian fishes were made by Shelke (2018), Sarwade and Khillare (2010), Siddaram *et al* (2018), Thirumala etl al (2011), Totawar (2018), Vishwanath (2017), Mathew Sojomon (2011), Kadam *et al*(2020), Dandawate *et al* (2021), Kharat et al (2012), Shelke (2018), Ahmad *et al* (2008), Chaudhari and Sitre (2020), Kamble and Raje (2023), Gadekar (2015), Jancy Rani and Jobiraj (2020), Gadekar and Tijare (2012), Arunkamar and Manimekalan (2018), Menon (1949), Bhat (2004), Johal (2002). So present studies are an attempt to observe the fish fauna of river Erai of Chandrapur district.

II. MATERIALS AND METHODS

The Erai River is flowing through the Chandrapur district of Maharashtra state (Fig.1). Erai river is one of the tributaries of Wardha River and its water is continuously in high demand as a major part of the

people in and around the city depends on it for their daily routine activities.

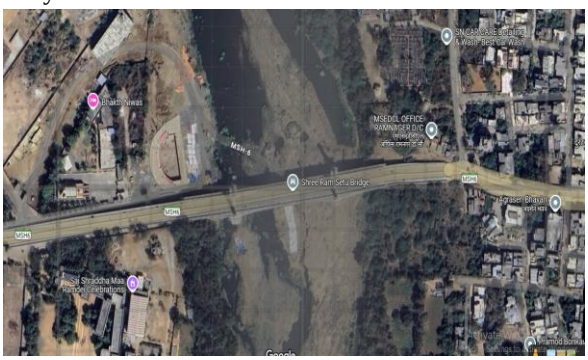

Fig.1: Erai River Ram Setu Bridge (Aerial View) with Erai River

Fishes caught by local fishermen community from river Erai basin were periodically visited during the year 2025 and recorded and classified. Local fishermen services are utilized from Ram Setu Bridge of Chandrapur city for caught fish's observations. Identification of fishes was done by using keys of Jayaram (1994), Day (1958), Day (1889).

III. RESULT AND DISCUSSION:

During present work in all about30 fish species were observed and recorded from Erai River of Chandrapur city during the year 2025.The studies on biodiversity of fish fauna and their identification is one of the interesting fields of biological research. It gives us an idea about the morphological variation and population diversity of fauna in a polluted and non-polluted site of any particular habit.

Thirupathaiah (2013) recorded 44 species belonging to 8 orders, 16 families and 26 genera from lower Manair reservoir of Karimnagar district. Sarwade and Khillare (2010) recorded fish diversity of Ujani resersvoir. Jancy Rani and Jobiraj (2017) studied fish fauna of Karamana river of Kerala in which the Cryprinide family dominated with 14 species whereas Cichlidae Gobidae and Baguide followed with three species each and Channidae, Ambassidee and Nandidae with 2 species each, Aunguillidae, Aplocheildae, Balitoridae, Cobitidae, Belonidae, Claridae, Heteropneustidae, Mastacembelidae, and Siliuridae had one species each. In Mula and Muha rivers of Pune. Ghate and Wagh (2003) recorded 62 fish species. Fish diversity of two perennial lakes in Indapur was studied by Sarwade *et al* 92009) who recorded 27 species belonging to 9 families and 4 orders. Mule and Patil (2006) recorded 32 species belonging to 22 genera in Pauna River.

In present study there are in all 31 different varieties of fish species recorded from fish catching sites of Erai River near Ram setu Bridge of Datala village. Fish catching is more in summer and winter season than monsoon season. Now a days it is found that this water of Erai River is polluted due to the man-made activities impacting the overall fish status.

The overall assessment regarding family wise representation of fish of erai river revealed the dominance of family Cyprinidae. Similar trends were reported by Hora and Mukherjii (1936).

Table:1- Fish in Erai River Recorded in A Year Span from Local Catches of Fishermen

Sr.No	Order	Family	Genus & Species	Common Name
1	Anabantiformes	Channidae	*Channa punctatus*	Spotted snake head
2	Anabantiformes	Channidae	*Channa striatus*	Snake head murrel
3	Anabantiformes	Anabantidae	*Anabus sp.*	Climbing perch
4	Beloniformes	Belonidae	*Xenentodon cancilla*	Needle fish
5	Cichliformes	Cichlidae	*Oreochromis sp.*	Tilapia
6	Cypriniformes	Cyprinidae	*Catla catla*	Katla
7	Cypriniformes	Cyprinidae	*Cirrhinus mrigala*	Mrigal
8	Cypriniformes	Cyprinidae	*Ctenopharyngodon idella*	Grass carp
9	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp
10	Cypriniformes	Cyprinidae	*Garra gotyla*	Sucker head
11	Cypriniformes	Cyprinidae	*Hypophthalamichthys molitrix*	Big head carp
12	Cypriniformes	Cyprinidae	*Labeo calbasu*	Calbasu
13	Cypriniformes	Cyprinidae	*Labeo rohita*	Rohu

14	Cypriniformes	Cyprinidae	*Garra mullya*	Sucker fish
15	Cypriniformes	Cyprinidae	*Puntius sarana*	Olive barb
16	Cypriniformes	Cyprinidae	*Puntius stigma*	Comman barb
17	Cypriniformes	Cyprinidae	*Puntius ticto*	Two spot barb
18	Cypriniformes	Cyprinidae	*Rasbora daniconius*	rasbora
19	Osteoglossiformes	Notopteridae	*Notopterus chitala*	Moy
20	Perciformes	Ambassidae	*Ambassis ranga*	Ranga
21	Perciformes	Nandidae	*Nandus nandus*	Nandus
22	Gobiiformes	Gobiidae	*Glossogobius giuris*	Tank goby
23	Siluriformes	Bagridae	*Mystus seenghala*	Catfish
24	Siluriformes	Siluridae	*Wallago attu*	Wallago
25	Siluriformes	Clariidae	*Clarias gariepinus*	African sharptooth Catfish
26	Siluriformes	Clariidae	*Clarias batrachus*	Walking catfish
27	Siluriformes	Heteropneustidae	*Heteropneustes fossilis*	Stinging catfish
28	Siluriformes	Siluridae	*Ompak bimaculatus*	Pabda catfish
29	Siluriformes	Bagridae	*Rita sp.*	rita
30	Synbranchiformes	Mastacembelidae	*Mastacembelus armatus*	Spiny eel

Table:2- Seasonwise Fish Species Occurrence in Erai River at Datala Village Site

Sr. No	Name of Species	Summer	Winter	Monsoon
1	*Channa punctatus*	+	+	-
1	*Channa striatus*	+	+	-
3	*Xenentodon cancilla*	+	+	-
4	*Oreochromis sp.*	-	+	+
5	*Catla catla*	+	+	-
5	*Cirrhinus mrigala*	+	+	+
7	*Ctenopharyngodon idella*	+	+	-
8	*Cyprinus carpio*	+	+	-
9	*Danio rerio*	+	+	+
10	*Hypophthalamichthys molitrix*	+	+	-
11	*Labeo calbasu*	+	+	+
12	*Labeo rohita*	+	+	+
13	*Puntius chonchonius*	+	+	+
14	*Puntius sarana*	+	+	+
15	*Puntius sophore*	+	+	-
16	*Puntius stigma*	+	+	+
17	*Rasbora doniconius*	+	+	-
18	*Notopterus notpotesus*	+	+	+
19	*Ambassis ranga*	+	+	+
20	*Glossogobius giuris*	+	+	+
21	*Nandus nandus*	+	+	+
22	*Mystus seenghala*	+	+	-
23	*Mystus vittatus*	+	+	-
24	*Wallago attu*	+	+	+
25	*Clarias gariepinus*	+	+	+
26	*Clarias batrachus*	+	-	-

27	*Heteropneustes fossilis*	+	-	-
28	*Ompak bimaculatus*	+	+	+
29	*Mastacembalus armatus*	+	+	-
30	*Anabas sp.*	+	+	-

Table:3: Fish Diversity Recorded in Erai River (Data from Fish Observations)

Sr.No	Order	No. of Species
1	Anabantiformes	03
2	Beloniformes	01
3	Cichliformes	01
4	Cypriniformes	13
5	Osteoglossiformes	01
6	Perciformes	02
7	Gobiiformes	01
8	Siluriformes	07
9	Synbranchiformes	01
	Total	30

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