RESEARCH ARTICLE

Fish diversity in relation to fish economics of Isapur dam, from Pusad, Yavatmal District (Maharashtra), India.

Pawar SK

Department of Zoology, Gramin Mahavidyalaya, Vasantnagar, (kotgyal), Tq. Mukhed Dist. Nanded, (M.S.)India

Manuscript details:

Received: 27.01.2017
Revised: 28.02.2017
Accepted: 13.03.2017
Published: 11.04.2017

Editor: Dr. Arvind Chavhan

Cite this article as:
Pawar SK (2017) Fish diversity in relation to fish economics of Isapur dam, from Pusad, Yavatmal District (Maharashtra), India, *Int. J. of Life Sciences*, Volume 5(1): 133-136.

Available online on
http://www.ijlsci.in
ISSN: 2320-964X (Online)
ISSN: 2320-7817 (Print)

ABSTRACT

The Study fish diversity and analysis of fish Economics of Isapur dam from Pusad Dist. Yeotmal in Maharashtra region. The water body resource for human consumption, significant role in the human economy and agriculture. special reference to fish diversity and fish rare. The importance of fish economics in fish Production and Analysis in fish of data were also Studied.

Keywords: Isapur dam, Fish Economics, Diversity, Pusad.

INTRODUCTION

In India, a number of ponds, lakes and reservoirs are naturally found but they are not being utilized properly due to take of insufficient study of the hydro biology. Indian reservoirs presence a rich variety of fish species, which support to the commercial fisheries and fish production. This diversity is on decline and few species have been lost from the fresh water ecosystem of India and some are under endemic, endangered and threatened category. The study of different water parameters is very important. The Fish are not only used as good source of food for mankind, having economic important from medicinal plant of view but also play a crucial role in the second tropic level of the aquatic ecosystem. The Indian National Biological Diversity Act.2002 defines biological diversity as the variability among living organisms from all source and the ecological complexes of which they are part and includes diversity with species or between species and an ecosystem. Fish diversity is a good index of healthy, growing dynamic and economically efficient water body. the fish form a rich source of food and nutrition. Serving as an important item of food. It is a natural as a source of proteins, fat and vitamin A and D providing certain other useful by products. Fish found diversity is a major aspect for its development and management for developing fishery. The Maharashtra state for the fish production and natural water resources. There is wide scope for the further development in the fisheries sector. Fishes of fresh or in land water bodies of the Indian sub-continents have been subject of study since last century. The fish diversity was studied by many workers to a great extent that includes Ahmad *et al.* (2008), Sarwade *et al.* (2010), Muruga (2012), Chouhan *et al.* (2013), Sirajudheen and khan (2014), and Londhe (2015).

The Isapur dam as a rich source of water supply for a agriculture, fish culture, and drinking purposes. In the present investigation fish diversity in relation to fish economics of Isapur dam were studied during the year June 2015 To May 2016. The Isapur dam is across the river Penganga near Isapur Village. The length of dam is 3730 meters with gated spillway on right side. The maximum height of the dam in river bed is 48 meters. It is situated within the latitude 19^0 16′30″N to 20^0 – 30′N. The main scope of this dam is irrigation and fishing purposes.

MATERIAL AND METHODS

The fishes were collected from different sites of Isapur dam with the help of local fisherman and preserved in 4% formalin for identification. this work was conducted during the month of June 2015to may 2016. Fishes were identified. Following work of Days (1878), Talwar and Jhingran (2001).

RESULT AND DISCUSSION

During the study period study 17 fish species belonging to 07 orders and 11 families were recorded from the site of Isapur dam. The member of order Cyprimiformes and Silariformes were dominated by each 04 species of fishes. *Labeo rohita catla, catla, wallago, attu, mystus seenghala cirrhinusmrigala, channa punctatus, notopterus motopterus. Cyprimus carpio. Barbus ticto, barilis bendelis, neamacheilus botia, ophiocephalis gachua, opiocephalus marulis mastocembelus armatus*. The collected and identified fish species including their scientific name, order, family and status, are shown in the given table. Such type of investigation was carried out by other workers also maintained in the same table. Ahmad *et al.* (2008), Devi Parsad et al. (2009), Mohite and Samant (2013).

Table 1: Fish diversity of Isapur dam during the year June 2015 to May 2016

Sr. No.	Scientific name	Order	Family	Status
1	*Barbus ticto*	Cypriniformes	Cyprinidae	A
2	*Barilius bendelis*	Cypriniformes	Cyprinidae	A
3	*Catla catla*	Cypriniformes	Cyprinidae	A
4	*Cirrhinus mrigala*	Cypriniformes	Cyprinidae	A
5	*Cyprinus carpio*	Cypriniformes	Cyprinidae	A
6	*Nemacheilus botia*	Cypriniformes	Cyprinidae	R
7	*Wallago attu*	Siluriformes	Bagridae	A
8	*Mystus seenghala*	Siluriformes	Bagridae	A
9	*Clarias batrachus*	Siluriformes	Claridae	R
10	*Heteropneustes fossilis*	Siluriformes	Hetropneustidae	R
11	*Anabas testudineus*	Stromateoidei	Anabantidae	M
12	*Channa puncatus*	Perciformes	Channidae	A
13	*Notopterus notopterus*	Clupciformes	Notopteridae	A
14	*Notopterus Kapirat*	Clupciformes	Notopteridae	A
15	*Ophiocephalus gachua*	Ophiocephaliformes	Cyprinidae	A
16	*Ophiocephalus marulius*	Ophiocephaliformes	Cyprinidae	A
17	*Mastocembelus aramatus*	Mastocembeliformes	Mastocembelidae	A

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

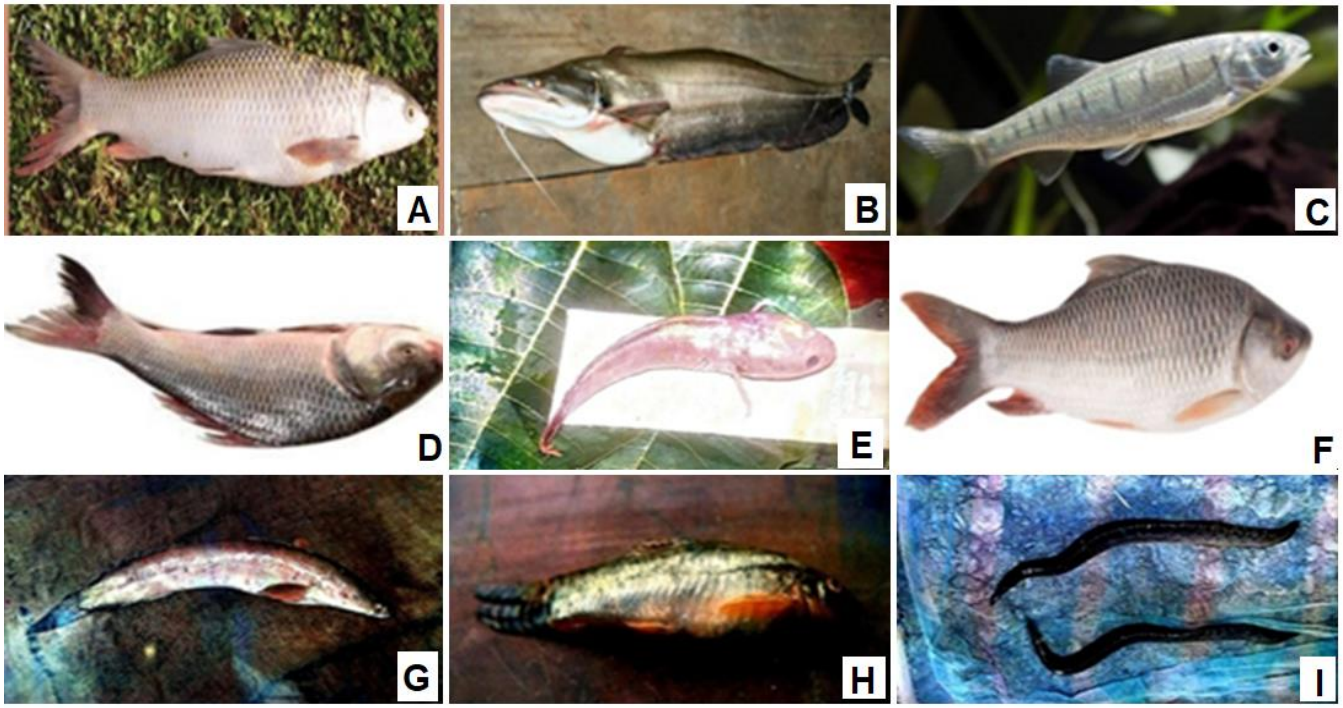

Fig: 1 : A: *Cirrhinus mrigala,* **B***: Wallago attu,* **C:** *Barilius bendelisis,* **D:***Rohu,* **E:** *Ophiocephalus gachua,* **F:***Catla-catla,* **G:** *Ophiocephalus marulius,* **H:** *Nemacheilus botia,* **I:** *Mastacembeleus armatus*

REFERENCES

Ahmad SM, Venkateshwarlu M, Honneshappa K and Tantray AK (2008) Fish diversity of sogane and Santhekadur tanks, Shimoga, Karnataka, India. *Current Biotica*, 5 (1) : 46-55.

Alikunhi KH (1956) Fish culture technique in india progr. Fish Development India 63-73.

Baburao M and Reddy Siva Y (1984) Fish fauna of Hussinsagar. Jantu 2:1-6.

Battul PN, Rao KR, Bagal MB and Shah NV (2007) Fish diversity from ekrukh lake neaesolapur. *J Aquatic boil*.22(2);68-72.

Chouhan M, Siddiqui and Sharma SA (2013) Fish biodiversity of Narmada River in some selected stations of Madhya Pradesh, India. *International Journal of Advanced Research*, Volume 1, Issue 3, 20-25.

Dattamunshi JS and Srivastava MP (1988) Natural history of fishes and syastematic of freshwater fishes in india.Narendra pub.Co.Delhi India.

Dattamunshi JS and Zutsghi N (2003) Ichthyofauna of river Tawi and its tributaries of the river Ravi.first Indian Fisharies Congress 21-23sept, 2000 Chandigarh.

Day F (1878) The fishes of India, being A natural history of the fishes known to inbabit the seas and fresh waters of India, Burma and Ceylon. Vol. I and II. Ceylon text and atlas in 4 pts., London.

Day FS (1878) The fishes of India, a willam and Sons Ltd.London

Deviprasad AG, Venkataramana GV and Thomas M (2009) Studied Fish diversity and its conservation in Major Wetlands of Myscore. Journal of Environmental Biology September 2009, 30 (5) 713-718.

Hamilton Buchanan (1822) An account of the fishes found in the river Ganga and its branches, Edinburg and London, vii+405pp.39 pic.

Jayaram KC (1994) The fresh water fishes of India, Pakistan,Bangladesh,Brama Shrilankah and look, zoological survey of India, Kolcatta.

Khanna SS (1992) An introduction to fishes,Indian Universities press and published by central book Dept. of Allahabad. 1-59.

Londhe SD and Sathe TV (2015) Fish faunal diversity and occurrence from lakes of Kolhapur district : Biolife; Vol.3; Issue 2: 2320-4257.

Mohite SA and Samant JS (2013) Impact of Environmental change on Fish and Fisheries in Warna River Basin, Western Ghats, India, *International Research Journal of Environment Sciences,* 2319-1414 Vol.2 (6), 61-70.

Muruga S and Prabaharal C (2012) Fish diversity in relation to physic-chemical characters of Kamala Basin of Darbhanga District, Bihar, India. *International Journal of Pharmaceutical and Biological Archives*; Vol.3 (1) : 211-217.

Salunke Vasudev Shivaji (2016) Fisheries in Ahmednagar district: A Biogeogrophical perspective Flora and Fauna (special issue)31-34.

Sarwade JP and Khillare YK (2010) Studies fish diversity of ujani wetland, Maharashtra, India *J. fish diversity of ujani wetland,* special issue Vol.1 : 173-179.

Sirajudheen TK and Khan J (2014) Fresh water pond ecosystems and ichthyofaunal diversity of Lakshadweep islands, India *Journal of Aquatic Biology and Fisheries* Vol.2 : 691 to 696.

Talwar PK and Jhingran AG (2001) Inland fishes of India and adjacent countries. Oxford and 1 BH Publishing Co. Pvt. Ltd. New Delhi, P.18.

Talwar PK and Jhingran A (1991) Inland fishes of india and adjacent countries-Oxford-IBH publ. Shing Co.Pvt.N.Delhi vol. 1and2;115-116.