

# Fresh water Fishes and Special Reference to Silver Carp on Majalgaon Dam in Maharashtra State, India.

Sitaram B. Ingole

Shri Siddheshwar College , Majalgaon, Dist. Beed. M. S. India

Email- [sbingole@yahoo.com](mailto:sbingole@yahoo.com)

## ABSTRACT

River Sindphana which is tributary of River Godavari, in Beed District (Maharashtra, India) in 1987. Which falls 16° 16 N latitude and longitude 73° 26 E. The River Sindphana has been under constant threat of pollution by sewage and industrial wastes, disposal of dead bodies, deforestation, excessive use of fertilizers and pesticides, bathing and water development programmes. The dam reservoir has a catchment area is 3840 sq. km. It is of great Importance for the region because its water is used for human and cattle consumption, It is multipurpose type like irrigation and power production (Hydro Electric Project). As a representative of these 'Majalgaon Dam reservoir' was selected for the limnology studies.

The present study is aimed to investigate some of the important physical and chemical parameters along with the flora and fauna of the reservoir. A total of 31 species of *Phytoplanktons*, 25 species of *Zooplanktons* and . The reservoir is very productive. There are several types of fresh water fishes present in the dam. *Labeo rohita*, *Cirrhina mrigal*, *Catla catla*, *Cyprinus carpio*, *Silver carp*, *Wallago attu*, *Mystancenbelus armatus*, *Notopterus chital*, *Barbus ticto*, *Channa staitus*, *Mystus seenghala*, *Mystus cavassius*, *Eutroplus suratensis*, *Belon concila*, *Chela*, *Tilapia mosambica*, *Rohtee alfrediana*, *Gobius giuris* etc. 19 species of fishes were identified during June 2017- May 2018. Hence the present work is an attempt to accumulate information pertaining to various aspect of hydrobiology of standing water bodies from this part of peninsular India.

The most important factor that influence the utilization and development of the fishery resources in the Socio-economic condition of the fisherman.. This caused them to depend upon middle man for the marketing of their producer and naturally the major portion of the profit goes in the pocket of middle man. The fisherman do not have their own net, for it they depend upon the other fisherman and in return they give a good portion of their income as hire of the net. The net income of the fisherman is insufficient for his maintenance and of his family.

**Key World:** *Physical and Chemical parameters, Flora and Fish Fauna, Socio-economic condition.*

## Introduction:

India has a large network of river, canals, lakes and ponds, which contribute more than 30% of the total fish production. Fish form one of the most important group of animals for man and have received his attention from ancient time. Majority of our people suffer from hunger and malnutrition. Fish is an excellent food for man and provides protein, fat and vitamin A and D, which are essential for the health of man. Fish is also provide source of vitamin B, it food rich in protein is specially preferred for containing essentially amino acid such as Lysine and methionine abundantly required for formation of phospholecithine in gray matter of the brain unsaturated fat in fish also reduce the risk of formation of high blood cholesterol. Phosphorus and several minerals are also present in it. They have good test and easily digestible. Besides being a rich source of food, fishery provides job opportunities also. By product of fishes i.e. fish manure, isinglass and several other production of commerce.

Considerable studies on fish diversity from different fresh water bodies of India have been carried out during the last few decades Hamilton Buchanan (1822), Day (1878), Mishra (1962), Jayram (1981) Thomus et.al. (1989), Talwar & Jhingrah (1991), Menon (1992), Rao et.al (1999). Sarkar and Banergee (2000), Mishra et.al.(2003). There are over 19000 reservoirs in India. Covering 3, 15,366 ha. And many more are under construction. (Suguman 2000) Reservoir Fishery in India is also important from social economic point of view as it has the potential of providing employment to about 2 million people (Khan Et.al.1999). According to sreenivasan (1993) the Maharashtra is

endowed with an area of 1,79,430 ha. Under reservoir and the state produces 516 tones of fish of these area the state fisheries corporation was operating in 6,272 ha. Of reservoir and marketing the catches.

The present investigation was under taken to study the aquatic vertebrate animals with reference to fishes from Majalgaon dam reservoir water. It is a second stage of Jayakwadi Project of Nath Sagar. It is irrigation project of Maharashtra state. It is situated in the latitude  $16^{\circ}16^{\prime}N$  and longitude  $73^{\circ} 26^{\prime}E$ . It is multipurpose type like irrigation and power production and also fishing purposes (Table No. 1).

### Material and Method:

The fishes were collected from the Majalgaon dam reservoir with the help of fisherman during the year June2017-May2018. The specimen were preserved in 10% formalin and subsequently identified following work of Lagler (1956) Menon and Talwar (1972), Day (1878), Datta Munshi & Srivastav (1968), Jayram (1981) and Talwar & Jhingran (1991).

### Result and Discussion:

Fish as constitute economically a very important group of animals. A large number of dams and reservoir has been constructing during the recent year to provide water for irrigation and power production. These bodies of water offer immense scope for fish culture for successful fish farming in dam and reservoir. Majalgaon dam reservoir is very productive more work has been carried out of fish fauna. The distribution of fish species is quite variable because of geographical and geological condition.

The Eleven species of the fish fauna in this study belonging to four order and six families are given in the table No. 1 among them order Cypriniformes was dominant with eight species to be followed by the Mastalimbeliformes, Osteoglossiformes, and Ophiocephaliformes each with one species. Valsangkar (1993) recorded 17 indigenous and 5 introduced fish species from Shivaji Sagar reservoir. Sakhare (2001) recorded 23 fish species belonging to 7 orders in Jawalgaon reservoir in Solapur district. Pawar and Madlapure (2002) recorded 11 fish species belonging to 5 order in sivur dam. Ingole (2005) recorded 11 fish species occurrence in the during research work at Majalgaon dam reservoir.

**Table No. 1: Fish diversity from Majalgaon Dam reservoir**

<i>Class – Pisces</i>	<i>Family -3 – Siluridae</i>
<i>Sub-class – Teleostomi</i>	<i>Spcies – 8 – Wallago altu</i>
<i>Order 1 – Cypriniformes</i>	<i>Order – 2 – Mastaembeliformes</i>
<i>Family 1 – Cyprinidae</i>	<i>Family 4 – Mastamecembelidae</i>
<i>Speices – 1 – Catla Catla</i>	<i>Species 9 – M. armatus</i>
<i>Species 2 – Labeo rohita</i>	<i>Order 3 – Osteoglossiformes</i>
<i>Species 3 – Cirrhina mrigal</i>	<i>Family 5 – Notopteridae</i>
<i>Species 4 – Cyprinus carpio</i>	<i>Species – 10 – N. chital</i>
<i>Speices 5 – Silver carp</i>	<i>Order 4 – Ophiocephaliformes</i>
<i>Species 6 – Barbus ticto</i>	<i>Family 6 – Channidae</i>
<i>Family 2 – Bagridae</i>	<i>Speices – 11 – Channa Staitus</i>
<i>Species 7 – Mystus seenghala</i>	

Fig. Silver Carp culture in Maharashtra Fish Seed Center ,Majalgaon



## References:

1. Datta Munshi and Srivastava M.P. (1968)-Natural history of fishes and systematic of fresh water fishes of India. Narendra Publication House Delhi.
2. Day F. (1944) - The fishes of India being a natural history of the Burma and Cylon. Fourth Indian Reprint vol. I & II Jagmander Book Agency, New Delhi.
3. Hamilton B.F. (1822) - An account of fishes found in the river Ganga and it branches Edinburg and London VIII + 400 p.p. plate 39.
4. Ingole S.B. (2005) - Some aspect of Hydro biological studies of Majalgaon dam Dist .Beed (M.S.) Ph.D. Thesis, S.R.T.M.U. Nanded (M.S.)
5. Jayaram K.C. (1981) -The freshwater fishes of India Pakistan, Burma and Shrilanka, Hand Book Zoological Survey of India No. 2, XII + 475 pp.
6. Khan A.A., Kartha K. N., Percy Dawson and George (1991) - Fish harvesting system in Indian reservoir proc. Of Nat. workshop on 1000 energy fishing 8-9 August 1991.
7. Lagler K.F. (1956) -Freshwater fishery biology W.M. C. Brown and Co Jowa.
8. Misra K.S. (1962) - An aid to the Identification of the common commercial fishes of India and Pakistan. Rec. Indian Mus. 57 (1-4) 1-320.
9. Rao P.S. (2000) - Problems of management of fish marketing and co. oprative FIE PC/73/10 Bombay.
10. Sarkar L. and Banerjee S. (2000) Ichthyofauna of Damodar river system pro. zool soci. Calcutta 53(1) : 41-54
11. Sugunan (2000) - Reservior fishery of India FAO fisheries Tech. paper No. 345. FAO Rome 1-424.

12. Srinivasan (1993) - Reservoir fishery of India, fishing chimes 13(1) : 18-21
13. Sakhare V.B. (2001) - Ichthyofauna of Jawalgaon Reservoir in Solapur district of (M.S) Aqua Biol. 16(1) 31-33.
14. Talwar P.K. and Jhingrah A.G. (1991) - Inland Fishes of India and Adjacent countries Vol. 1 & 2. Oxford & BH Publishing co. Pvt. Ltd.

