

FISH FAUNA OF RESERVOIR SIRATWADI FROM PATHARDI TAHSIL, DISTRICT AHMEDNAGAR (M.S.), INDIA.

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ABSTRACT

The result of present study confirms the occurrence of 20 fish species belonging to 19 genera, 12 families and 8 orders in Sirsatwadi reservoir located in Pathardi Tahasil, District: Ahmednagar, Maharashtra, India. The order Cypriniformes was dominant with 10 species to be followed by order Perciformes with 3 species and Siluriforms with 2 species and rest of the orders, Clupeiformes, Channiformes Mastacembeliformes, Mugiliformes and Belontiiformes by single species. This work at a later stage would provide the required database for further development of reservoirs fishery in this region.

Figure:00

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Table:01

KEY WORDS: Fish, Ichthyofauna, Reservoirs, Water.

Introduction

The fishes play an important role in keeping the ecosystem in balance and also enhance the beauty of the nature by various ways. India is having very rich source of inland water bodies in the form of rivers, lakes and reservoirs. The fishes are the major component of an aquatic ecosystem. Fishes are having high economic value, as they provide the highly nutritious and delicious food for mankind. The fishes are not only providing protein rich cheap food but they also provide several highly precious by-products, which are used by the man for various purpose. Fishes of the inland water bodies of the Indian sub-continent have been a subject of study since long back^{2,5,7,8}. The reservoir fishery in India is also important from socio-economic point of view as it has the potential of providing employment in rural India. Unfortunately, as far as Ahmednagar District in Maharashtra is concerned, though there are many major and minor reservoirs, which are contributing significantly to the total inland production, scarcely an attention seems to have been paid towards systematic investigation on either of the diversity of ichthyofauna or total catch fishes from these reservoirs. So it is felt that there is need to generate information on diversity of fishes from reservoirs. Such work

at a later stage would provide the required database for further development of reservoir fishery in this region. Present investigation was undertaken to prepare a checklist of fishes from reservoir Sirsatwadi from Pathardi Tahasil, Dist: Ahmednagar (M.S.), India.

Materials and Methods

The present study was carried out to investigate the ichthyofauna, relative species and aspects of in-land fisheries by collecting seasonal sample of fish fauna during the period June 2007 to May 2013 from water body Sirsatwadi located in southern part of (19° 9' N, 75° 10' E) Pathardi Tahasil, District: Ahmednagar, Maharashtra, India. The Shirsatwadi reservoir is PT (Percolation Tank) type reservoir near village Shirsathwadi about 5 km from Pathardi (19° 9' N, 75° 10' E). It was constructed during the year 1974 having height of 12.63 meter. The catchment area is 5.28 square miles, which stores 30.00 meft water and indirectly area irrigated is 450 acres. The reservoir is situated in the southern part of Tahasil, which is a hilly area with draught conditions. The village Shirsathwadi is situated in command area of reservoir. The dug wells and bore wells in command area used for drinking water source and agriculture are depending on this reservoir. The villagers use this reservoir for bathing, cloths washing,

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vehicle washing, cattle wading, pisciculture and other domestic activities. The agriculture runoff and deforestation are major sources of pollution. The specimens of fishes were collected from local fishermen as well as from local fish market and preserve at Department of Zoology, Dr. B. A. M. University,

Aurangabad. The literature identified the fishes^{1,2,6,8}.

Results and Discussion

The result of present study confirms (Table 1) the occurrence of 20 fish species belonging to

TABLE-1: List of fish recorded from reservoirs.

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| Class : Pisces |
| Sub-Class : Teleostei |
| Order I : Clupeiformes |
| Sub-Order : Neopteroidei |
| Family I : Neoptenidae |
| 1. <i>Nematopent chitala</i> (Hamilton, 1822) |
| Order II : Cypriniformes |
| Sub-Order : Cyprinoides |
| Family II : Cyprinidae |
| 2. <i>Cyprin gladius</i> (Hamilton, 1822) |
| 3. <i>Catla catla</i> (Hamilton, 1822) |
| 4. <i>Cirrhinus reba</i> (Hamilton, 1822) |
| 5. <i>Amblyptherygoston nuda</i> (Hamilton, 1822) |
| 6. <i>Labeo rohita</i> (Hamilton, 1822) |
| 7. <i>Labeo bata</i> (Bleeker, 1794) |
| 8. <i>Kribia cotta</i> (Hamilton, 1822) |
| 9. <i>Cyprinus carpio</i> (Linnaeus, 1758) |
| 10. <i>Sorbus reba</i> (Hamilton, 1822) |
| Family III : Cebitidae |
| 11. <i>Nemachilus bota</i> (Hamilton, 1822) |
| Order III : Siluriformes |
| Sub-Order : Siluridae |
| Family IV : Bagridae |
| 12. <i>Axyris covarrus</i> (Hamilton, 1822) |

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| Family V : Siluridae |
| 13. <i>Wallago attu</i> (Bloach and Schneider, 1801) |
| Order IV : Belontiiformes |
| Sub-Order : Scomberesocoides |
| Family VI : Belontiidae |
| 14. <i>Xenentodon canalis</i> (Hamilton, 1822) |
| Order V : Mugiliformes |
| Sub-Order : Mugiloides |
| Family VII : Mugilidae |
| 15. <i>Mugil cephalus</i> (Linnaeus, 1758) |
| Order VI : Channiformes |
| Family VIII : Channidae |
| 16. <i>Channa punctata</i> (Hamilton, 1822) |
| Order VII : Mastacembeliformes |
| Family IX : Mastacembelidae |
| 17. <i>Mastacembelus armatus</i> (Lacépède, 1806) |
| Order VIII : Perciformes |
| Sub-Order : Labroidei |
| Family X : Labridae |
| 18. <i>Glyptothorax guari</i> (Hamilton, 1822) |
| Sub-Order : Percoides |
| Family XI : Ambassidae |
| 19. <i>Chanda ranga</i> (Hamilton, 1822) |
| Family XII : Cichlidae |
| 20. <i>Tilapia mossambica</i> (Hamilton, 1822) |

19 genera, 12 families and 8 orders. The order Cypriniformes was dominant with 10 species to be followed by order Perciformes with 3 species and Siluriforms with 2 species and rest of the orders. Clupeiformes, Channiformes, Mastacembeliformes, Mugiliformes and Belontiiformes by single species. The common fishery of this reservoir is unorganized due to lack of fisheries management techniques. In the present study the percentage of commercially important fishes were very low.

This may be due to the fact that there is no seed stocking operations made by outside sources in the reservoir. For development of commercial fisheries in this region it is therefore recommended that the commercial species should be introduced from exogenous sources which would certainly dominant the endogenous species and accommodate themselves successfully in these reservoir.

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