

Biodiversity of fishes of Godavari river at Nanded, (Maharashtra) India

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ABSTRACT

River Godavari is the most important river in Marathwada and the source of capture fishery in this region. Fishes were collected during the two year 2005-2007, for the study of bio-diversity at Nanded, Maharashtra. Total number of 26 species belonging to 18 genera, 6 order and 9 family were recorded from this region. The results show rich fish diversity occurring in this stretch of the river.

Key word : Biodiversity, fishes, Godavari river.

INTRODUCTION

Fishes are form one of the most important groups of vertebrates influencing his life in various ways. Millions of human being are suffer from hunger and malnutrition and fish from a rich source of food and nutrition and provide a meal to tide over the nutritional difficulties of man in addition to serving as an important item of food. The fishes are also provided several products and by products including fish oil used for medicinal and industrial in the life of human being.

Fishes of the fresh or Inland water bodies of the Indian sub-continent have been a subject of study since last century; Hamilton Buchanan (1822); day (1878) ; Tiwari ; Jaryram (1981); Talwar and Jhingran (1991), Ghate and Wagh (1991); (1994;1995) Roa et.al. (1999) ; Dutta et.al.,2000 a,b,c Dutta et.al. (2003) ; paik *et.al.* (2003).

Reservoirs fishery in India is also important from social economic point of view assist has the potential providing employment to about millions people. According to Sugnan (1995); total area under the reservoirs in India 3.1 million hectares ; there are includes 19000 small reservoirs with a total water surface area 14855.57 hectares and about

180 medium and 56 large reservoirs of 527641 and 1140268 hectares reflectively. The Maharashtra is endowed with an area 179430 hectares under reservoirs and the staff produces more than 516 tones of fishes of these area; the state fisheries corporation was operating in 6,272 hectares of reservoirs and marketing the catches.

Fishes in river Godavari

Phylum	→	Chordata
Sub-phylum	→	Gnathostomata
Super - Class	→	Pisces
Class	→	Teleostomii
Sub-Class	→	Actinopterygii
Order	→	Cypriniformes
Family	→	Cyprinidae
Genus	→	Catla
Species	→	catla
Genus	→	Labeo
Species	→	rohita, bata and calbasu
Genus	→	Cirrhina
Species	→	mirigala and C.reba
Genus	→	Cyprinus
Species	→	carpio
genus	→	Punctius
Species	→	P. ticto and p. sarana
Genus	→	Chela
Species	→	phulo

Genus	→	Thynictlys	Sina, Sindhphana Bindusara, which are used for drinking water, Agriculture, Industries, and fisheries purpose, mainly in these rivers traditional capture fisheries is carried on the fishes caught in these rivers are Major carps, local majors, local minor carp.
Species	→	sankol	
Genus	→	Rohitee	
Species	→	catio	
Genus	→	Amblypharyngedon	
Species	→	mola	
Genes	→	Rasbora	In Godavari river at Nanded, it is rich in fish Fauna. Fishes are formed an important item of human diet from the time man appeared on earth and are primarily caught for this purposes. Fish diet provides proteins, fat a Vitamins A & D
Species	→	damiconus	
Order	→	Clupeiformes	
Family	→	Natopteridae	
Genus	→	Natopterus	
Species	→	natopterus and chitala	
Order	→	Siluriformes	Due to the high consumption of fish as food, fishes are having good market value, & it gives economy to people. In Godavari river all along over the river at various centers fishermen caught the dishes & sell in the market.
Family	→	Bagridae	
Genus	→	Mystus	
Species	→	M. Seenghala and M. Cavassius	
Family	→	Siluridae	At Nanded, In Godavari river , at morning time many fisherman are observed, for fish catching.
Genus	→	Wallago	
Species	→	attu	
Family	→	Clariidae	
Genus	→	Clarias	Due to small water quantity at Dunkin station fishermen are used the thermocol Tarafa for fishing.
Species	→	batrachus	
Family	→	Mugilidae	
Genus	→	Mugil	
Species	→	carsula	It is made up of Thermocol. There shape & size are vary, as fishermen choose the size. A large and strong tharmacol are choose, the length of the Tarafa is long than the side.
Order	→	Perciformes	
Family	→	Gobiidae	
Genus	→	Glossogobius	
Species	→	giuris	
Order	→	Channiformes	Fishermen are seet on the tarafa & simply pull the water back side in result tarafa goes ahead, Tarapha is generally covered by plastic for to put it dry and also for prevent from damaging. The weight of tharmacol is very low, hence it can easily handled after fishing operation.
Family	→	Channidae	
Genus	→	Channa	After the fishing is done fishes are removed from the nets are collected in pots.
Species	→	C.muralius, C.Gachua C.Striatus, C.Puctatus	
Order	→	Mastacem-beliformes	
Family	→	Mastacem-belidae	MATERIAL AND METHODS
Genus	→	mastacembelus	
Species	→	armatus	Fishes were collected from different fishing station with the help of local fisherman from river Godavari and Nanded fish market (Taroda fish market Friday fish market, Itwara fish market Nanded.) Examined for their colour pattern, cleaned with clean warm water to remove dirt, micro-organisms and blood strains and preserved in 10% formaldehyde solution.

The Godavari river is the most important river in Marathwada region. It has the source at Trimbakeswar in Sahyadris hills near Nasik this river enters in Aurangabad district and flowing in Beed, Parbhani and Nanded district. The other rivers of Marathwada region are Penganga, Budna, Asna,

A systematic identification of fishes was

done with the help of standard literature (Day, 1878; Talwar and Jhingran, 1991; Khanna, 1992 and Srivastava *et al.*, 1994.)

RESULTS AND DISCUSSION

The fish fauna is an important aspect of fishery potential of a water body more work has been carried out on fish found ichthyofauna fish inhabiting water bodies and reservoirs. Distribution of fish species is variable because of geographical and geological conditions. The present work confirms the occurrence of 26 fish species belonging to 6 orders 18 genera and 9 families. The order cypriniformes was dominant with 13 fish species to be followed order silluriformes (4) and channiformes with 4 species, order clupeiformes², perciformes, mastacembeliformes & mugiliformes with one fish species each.

The work is supported by number of earlier studies on similar lines. Das and Nath (1996 a,b) were the first to describe 23 fish species belonging to 7 families and 14 genera inhabiting river Tawi and its tributaries. Das and Nath (1971) revised fish fauna of Jammu enlisted the presence of 27 fish species belonging to 8 families and 15 genera in

river Tawi and its tributaries. Tilak (1971) surveyed river Tawi and its tributaries and reported the presence of 35 fish species inhabiting river and Tawi and its Gadigarh tributary. Malhotra *et al.* (1975) prepared an identification key of 45 fish species including 37 fish species inhabiting river Tawi and its tributaries Gadigarh. Dutta (1978) have reported fish species belonging to 32 genera inhabiting a spring fed Gadigrah stream, a tributary of river Tawi. Nath (1986) prepared a checklist of fishes of Jammu and Kashmir state and enlisted 28 fish species inhabiting river Tawi. Fish found of river Tawi is more diversified as compared to the 59 species belonging to 5 orders, 15 families and 41 genera inhabiting river. Basantar and Dutta (2000 a, 2001c) and 26 fish species belonging to 3 orders 6 families and 18 genera collected from the river Chenab. Dutta *et al.* (2001 a) worked out the presence of 88 fish species belonging to 7 orders, 20 families and 51 genera inhabiting river Tawi & its various tributaries. Dutta *et al.* (2003) in a survey of river Tawi and its various tributaries have reported the occurrence of 96 fish species belonging to 7 orders 20 families and 52 genera. Pawar *et al.* (2003) studied fish diversity in the Sirur dam and confirmed the occurrence of 11 fish species belonging to 5 orders.

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