ICHTHYOFAUNAL DIVERSITY IN THE VIDARBHA REGION: A REVIEW STUDY

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Abstract: *The review study aims to prepare a checklist of ichthyofaunal diversity in the Vidarbha region. Vidarbha is a geographical region in the eastern part of Maharashtra State. There is a rich diversity of fishes in Vidarbha. This review paper provides information about ichthyofaunal diversity in this region and helps in providing baseline information on the fishes which would be useful for further studies. Still, there is a lot of work to be done on it; every year new species is discovered and new facts about these animals are opened to this world. In the mentioned checklist, a total of 138 species of ichthyofauna under 68 genera, 27 families and 11 order were recorded. Out of which 68 sp belongs to the Cyprinidae family, 12 sp of Bagridae family, 6 sp of Ambassidae family, 5 sp each of Siluridae, Channidae, Mastacembelidae and Ophiocephalidae family, 4 sp of Cichlidae family, 3 sp each of Nemachelidae, Notopteridae and Gobidae family, 2 sp each of Anguilliadae, Claridae and Schilbedae family, 1 sp each of Heteropneustidae, Belonidae, Clupeidae, Cobitidae, Nandidae, Anabantidae, Badidae, Balitoridae, Poecilidae, Pangasiidae, Osphronemidae, Sisoridae, and Synbranchidae family. The present study shows that the Cyprinidae family is dominant over all among these families. In this review study, the authors want to show that the species diversity is at its peak in post-monsoon coinciding with favorable conditions such as sufficient water supply and ample food. The diversity was low in pre-monsoon probably due to the shrinkage of water spread of the river. Fishery practices operate throughout the year, however different kinds of fish species are caught in the monsoon season compared to post-monsoon and summer seasons. Fish diversity depends upon the biotic and abiotic factors, age of the water body, mean depth, fluctuation of water levels and contamination levels etc.*

Keywords : *Fish, Diversity, Checklist, Cyprinidae.*

Introduction:

The North Eastern part of Maharashtra is situated between latitude 17° 57′ N to 21° 46′ N & longitudinal 75° 57′ E to 80° 59′ E is commonly referred as Vidarbha region and

comprises eleven districts viz; Nagpur, Amaravati, Akola, Yavatmal, Buldhana, Chandrapur, Wardha, Gadchiroli, Bhandara, Gondia and Washim. By its geographical situation in the monsoon belt, eastern parts of the Vidarbha region are endowed with fairly good rainfall and consequently, extensive water bodies are found especially in the regions of Bhandara, Gondia, and Nagpur.

The Vidarbha region is drained by the tributaries of the Tapi River in the Northern parts and the rest by the Wainganga, Wardha, and Painganga River which are tributaries of the Pranhita sub-basin under the Godavari basin. The fish fauna of Vidarbha region is situated at few localities such as Wardha river basin, Pradhan (1997), Pench National Park,Yadav (2004), Melghat Tiger Reserve, Yadav (2005), Tadoba National Park, Yadav (2006) and Chandrapur District, Nagpur District and Akola District andTodoba National Park, Karmakar *et al*, (2012). Heda (2009) surveyed the river Kathani a tributary of Wainganga which lies more than 80 Km South of Gosekhurd Dam and river Adan a tributaries of river Painganga (Penganga) in the West Vidarbha region.

The fish production plays a significant role in the human economy. Fish is one of the most important sources of animal diet and human diet. Kar *et al* (2003) reported that around the world approximately 22,000 species of fish have been recorded of which nearly 2420 species are found in India from which 930 species are found in fresh water and 1570 species are found in marine habitats. Biodiversity affects the capacity of living systems to respond to changes in the environment and is essential for providing goods and services from ecosystem nutrient cycling and clean water (Rahbek and Colwell 2011). Globally, especially fish which form an important source of protein for human food. The development of fisheries in freshwater resources needs to be increased through the scientist development (Pawar *et al* 2014).

Fishes form the most diverse group of vertebrates and have importance as human food and as sampling material for scientific study (Marshell 2000). Fish diet provides protein, fat, vitamin A and D. The ichthyofaunal diversity is changing and getting depleted as fast as a result of water pollution, destruction or degradation of habitats, and invasion of exotic species (Revenga *et al* 2005). For the economic importance and scope of fish and fisheries especially in Vidarbha, it is essential to study the distribution and availability of fish from rivers, freshwater reservoirs, and tanks.

Review of Literature:

Sr. No.	Year	Author	Topics of Research	Results
1	2012	D.B.Khamankar, R.R.Kamdi and A.P.Sawane	Ichthyofaunadiversity of Wardha river and Nirguda river in selected stretch of Wani, Dist. Yeotmal, (MS), India	37 Species of 24 different genera, 14 families and 7 orders were recorded. Order Cypriniformes were dominated with18 Sp, Siluriformes and Perciformes with 8 Sp each and Osteoformes,Anguilliformes and Cyprinodontiformes with 1 Sp each

				are observed.
2	2012	S.B. Ubharhande and Sonwane, S.R.	Study of Freshwater fish fauna & water quality at Paintakli dam from Buldhana District (MS) India	Ichthyofauna belongs to 7 order, 10 families, 19 genus and 21 Species were observed. Cyprinidae family is dominant with 10 Sp, Channidae and Mastacembelidae with 2 Sp, Balitoridae, Bagridae, Clariidae, Belonidae, Notopteridae, Cichlidae and Poecilidae contribute 1 Sp each.
3	2012	Joshi P.S., S.A. Tantarpale, V.T. Tantarpale, K.M. Kulkarni	Ichthyological fauna of Buldhana District Maharashtra India	20 Species belongs to 7 families recorded. Family Cyprinidae (10), Notopteridae (01), Siluride (01), Saccobranchidae (01), Clariidae (01), Ophiocephalidae (04) and Mastocembelidae (02) were observed.
4	2013	Dhamani A.A. Chavan A.W Murkute V.B.	Fish Biodiversity of Wainganga River Near Bramhapuri, Dist; Chandrapur (MS)	51 Species belonging to 7 different orders of 18 families and 35 genera are reported. The dominating group of fishes belonging to Cypriniformes (21 Species), followed by Siluriformes (13 Species), Perciformes (12 Species), Osteoglossiformes (2 Species), Anguiliformes (1 Species), Atheriniformes (1 Species) and Synbranchiformes (1 Species).
5	2013	A.D.Bobdey	A Study of fish diversity in Bhandara District (MS) India with special emphasis on pollution & human interference in aquatic habitats.	53 Species of fishes are reported with 17 families. Three threatened species are observed are 1) Puntiussarana, 2) Bagariusbagarius and 3) Heteropneustus .
6	2014	S.R.Sheikh	Studies on ichthyofaunal diversity of Pranhita river, Sironcha District GadchiroliMaharashtra,India	37 Species belongs to 21 different genera, in 11 Families, 08 Order were recorded. Order Cypriniformes were dominated by 18 Sp, Siluriformes 08 Sp, Perciformes 03 Sp, Mastacembeliformes 03 Sp, Channiformes 02 Sp, Antheriniformes 01 Sp, Anguilliformes 01 sp and Osteoglossiformes 01 Sp.
7	2014	A.D. Bobdey	Ichthyodiversity & Conservation aspects	63 Species are collected of 8 Orders & 17 Families. Harvested data indicate

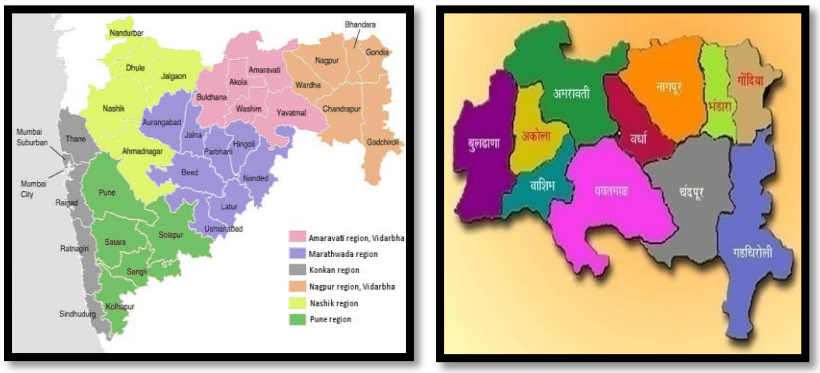
			in a lake & river ecosystem in Bhandara District of Maharashtra India-A comprehensive study of surface water bodies.	dominance of species Family Cyprinidae>Ophiocephalidae>Bagridae>Siluridae>Notopteridae=Ambassidae=Claridae>Nandidae=Anabantidae=Osphronemidae=Gobidae=Cichlidae=Anguillidae=Saccobranchidae=Pangasiidae=Sisoridae=Belonidae.
8	2015	G.P.Gedekar	Fish diversity of Bagh river District Gondia Maharashtra India	29 Species of 12 families and 7 Orders were recorded. Order Cypriniformes were dominant. Among the order Cypriniforms constituting 36.66% followed by Siluriformes 12.6%, Ophiocephaliformes 9.4%, Synbranchiformes 4.3%, Perciformes 2.1%, Cyprinodontiformes and Clupeiformes Constituting 1 % of total fish species.
9	2015	G.P.Gadekar	Ichthyofaunal Diversity of Wainganga river District Bhandara, Maharashtra	51 Species of 31 different genera, 15 familes and 8 orders were recorded. Order Cypriniformes were dominated by 22 Sp, Siluriformes 10 Sp, Ophiocephaliformes 6 Sp, Synbranchiformes 5 Sp, Perciformes 3 Sp, Cypriniformes and Clupeiformes with 2 Sp and Anguilliformes with 1 Sp were observed.
10	2015	V.R.Wankhede	Ichthyofaunal fauna of Amravati District (MS) India	36 Species belongs to 11 families were recorded. Cyprinidae family was more dominant. These families were Cyprinidae (20),Channidae (03), Mastocembelidae (03), Ambassidae (02), Bagridae (02), Siluridae (02), Gobiidae (01), Notopteridae (01), Saccobranchidae (01), Claridae (01) and Belonidae (01) were recorded.
11	2016	R.V. Tijare and A.J. Shastrakar	Inventorisation & Study of ichthyonal diversity from Asolamendha lake Tahasil Sindewahi, District Chandrapur (MS)	32 Species from 24 different Genera and 12 Families belongs to 7 Order. Order Cypriniformes were dominant with 12 Sp, Perciformes 9 Sp, Siluriformes 6 Sp, Synbranchiformes 2 Sp, Osteoglossiformes 1 Sp, Antheriniformes 1 Sp and Anguilliformes 1 Sp were observed.
12	2016	S.S.Khekare and	Ichthyofaunal Diversity of Wardha	40 Species from 26 genera belongs to 15 families and 6 order were

		A.P.Sawane	river in the vicinity of Warora, District Chandrapur (MS) India	observed. Order Cypriniformes were dominated by 17 Sp, Perciformes 10 Sp, Siluriformes 9 Sp, Osteoglossiformes 2 Sp, Antheriniformes and Synbranchiformes 1 Sp each.
13	2017	S.K. Waware and R.R. Kamdi	Studies on fish biodiversity of Nawargaon lake in MaregaonTaluka District Yavatmal (MS) India	23 Species belongs to 5 Orders and 12 Families were identifies. Order Cypriniformes were dominated with 9 Sp, Ophiocephaliformes 2 Sp, Osteoglossiformes 1 Sp, Perciformes 4 Sp and Siluriformes 7 Sp are observed.
14	2017	P.M.Telkhade and S.H. Jambhule	Fish diversity of Lohara lake, Lohara District Chandrapur Maharashtra India	30 Species belongs to 5 different orders and 9 families were observed. Cypriniformes orders dominated with 20 Sp followed by Ophiocephaliformes with 6 Sp, Perciformes with 2 Sp, Clupeiformes and Auguliformes shows 1 Sp each.
15	2017	Gulhane R.A.	Checklist of Ichthyofaunal fauna of Washim District Maharashtra India	36 Species belongs to 11 families were recorded. Cyprinidae family was more dominant. These families were Cyprinidae (20),Channidae (03), Mastocembelidae (02), Ambassidae (02), Bagridae (02), Siluridae (02), Gobiidae (01), Notopteridae (01), Paccobranchidae (01), Claridae (01) and Belonidae (01) were recorded.
16	2020	Kamble S.M. and Indurkar U.S.	Ichthyofaunal Diversity of Wainganga river near AA energy plant Desaiganj (Wadsa) District Gadchiroli, Maharashtra	16 Species belongs to 4 orders & 8 families were observed. 6 Sp from order Cypriniformes, 6 sp from Siluriformes, 3 Sp from Anabantiformes and 1 Sp from Perciformes were observed.
17	2020	Chaudhari A.N. and Sitre S.R.	Fish Diversity of Pothra dam of Samadrapur Tehsil in Wardha District	17 Species belongs to 4 different orders and 5 different families are recorded. Cyprinidae family were dominant with 12 Sp, Notopteridae 2 Sp, Anguilidae 1 Sp, Siluridae 1 Sp and Clariidae 1 Sp observed.
18	2021	Goghate N.D., Raut M.B. and Ingale P.P.	Diversity & Conservation State of fish fauna in Chichtola Lake, Gondia District	31 Species from 13 families were recorded. Cyprinidae was the most dominant. Family Cyprinidae (16), Channidae (3), Bagridae (02),

			Maharashtra India	Ambassidae (01), Anabantidae (01), Badidae (01), Belonidae (01), Claridae (01), Cichlidae (01), Heteropneustidae (01), Nandidae (01), Notopteridae (01) and Siluridae (01).
19	2022	P.N.Paunikarand Dr. R.D. Kamdi	Diversity of freshwater fishes from Erai river near Datala Bridge District Chandrapur Maharashtra India	17 Species belongs to 6 different Orders & 10 Families were observed. Order Cypriniformes most dominant with 6 Sp, Perciformes 2 Sp, Siluriformes 3 Sp, Anabantiformes 3 Sp, Osteoglossiformes 1 Sp, Synbranchiformes 1 Sp, Cichliformes 1 Sp are observed.
20	2023	P.D. Jambhulkar and R.R.Kamdi	A Study on Ichthyofaunal Diversity of Naleshwar in Sindewahi Tehasil, District Chandrapur State Maharashtra	35 Species of fresh water fish from 11 families, 6 different orders and 23 genera were recorded. Cypriniformes orders dominated. The percentage contribution according to IUCN categories, most fresh water fishes comes under the least concern (LC) category which contribute 85.7% followed by 5.7 % data deficient (DD), 5.7 % nearly threatened (NT), 2.9% are vulnerable (VU).
21	2023	Madhuri G. Bhadange, Praveen P. Joshi	Seasonal Ichthyological Diversity in the Bembla Reservoir of Yavatmal District, Maharashtra.	10 Species of fishes belongs to 6 different orders and 7 families were observed. Out of 6 Orders Cypriniformes was dominant with 4 Sp, Siluriformes 2 Sp, Anabantiformes 1 Sp, Osteoglossiformes 1 Sp and Anguliniformes 1 Sp and Cichliformes 1 Sp are observed.

Materials and Methods:

As this study is only on review, the methodology used for this is, all research papers and reference books regarding this topic.



Map of Vidarbha Region in Maharashtra

Observation and Result:

In the mentioned checklist, a total of 138 species of ichthyofauna under 68 genera, 27 families and 11 order were recorded. Out of which 68 sp belongs to the Cyprinidae family, 12 sp of Bagridae family, 6 sp of Ambassidae family, 5 sp each of Siluridae, Channidae, Mastacembelidae and Ophiocephalidae family, 4 sp of Cichlidae family, 3 sp each of Nemachelidae, Notopteridae and Gobidae family, 2 sp each of Anguilliadae, Claridae and Schilbedae family, 1 sp each of Heteropneustidae, Belonidae, Clupeidae, Cobitidae, Nandidae, Anabantidae, Badidae, Balitoridae, Poecilidae, Pangasiidae, Osphronemidae, Sisoridae, and Synbranchidae family. The present study shows that the Cyprinidae family is dominant over all among these families.

Table 1. Ichthyofaunal Diversity in Vidarbha Region

Sr.No.	Order	Family	Scientific Name
1	Cypriniformes	Cyprinidae	Barilius *barna*
2	Cypriniformes	Cyprinidae	Cyprinus *bendelisis*
3	Cypriniformes	Cyprinidae	Rasbara *daniconius*
4	Cypriniformes	Cyprinidae	Cyprinus *mola*
5	Cypriniformes	Cyprinidae	Osteobrama *cotio*
6	Cypriniformes	Cyprinidae	Punctius *dorsalis*
7	Cypriniformes	Cyprinidae	Punctius *sarana*
8	Cypriniformes	Cyprinidae	Punctius *sophore*
9	Cypriniformes	Cyprinidae	Punctius *ticto*
10	Cypriniformes	Cyprinidae	Punctius *curmuca*
11	Cypriniformes	Cyprinidae	Punctius *amphibius*
12	Cypriniformes	Cyprinidae	Garra *mullaya*
13	Cypriniformes	Cyprinidae	Cirrhinus *mrigala*
14	Cypriniformes	Cyprinidae	Catla *catla*
15	Cypriniformes	Cyprinidae	Labeo *rohita*
16	Cypriniformes	Cyprinidae	Labeo *calbasu*
17	Cypriniformes	Cyprinidae	Cyprinus *carpio*
18	Cypriniformes	Cyprinidae	Ctenopharyngodon *idella*
19	Cypriniformes	Cyprinidae	Tor *khudree*

20	Cypriniformes	Cyprinidae	Labeo *bata*
21	Cypriniformes	Cyprinidae	Oxygaster *bacaila*
22	Cypriniformes	Cyprinidae	Punctius *stigma*
23	Cypriniformes	Cyprinidae	Acanthocobities *murreh*
24	Cypriniformes	Cyprinidae	Amblypharyngodon *mola*
25	Cypriniformes	Cyprinidae	Crossocheilus *latius*
26	Cypriniformes	Cyprinidae	Labeo *baggut*
27	Cypriniformes	Cyprinidae	Pethia *ticto*
28	Cypriniformes	Cyprinidae	Salmophasia *bacaila*
29	Cypriniformes	Cyprinidae	Salmophasia *balooki*
30	Cypriniformes	Cyprinidae	Hypopthalmichthys *nobilis*
31	Cypriniformes	Cyprinidae	Labeo *gonius*
32	Cypriniformes	Cyprinidae	Pethia *conchonius*
33	Cypriniformes	Cyprinidae	Punctius *chola*
34	Cypriniformes	Cyprinidae	Labeo *fimbriatus*
35	Cypriniformes	Cyprinidae	Devario *aequipinnatus*
36	Cypriniformes	Cyprinidae	Barilius *bendelisis*
37	Cypriniformes	Cyprinidae	Punctius *conchonius*
38	Cypriniformes	Cyprinidae	Aristichphys *nobilis*
39	Cypriniformes	Cyprinidae	Hypothalmichthys *molitrix*
40	Cypriniformes	Cyprinidae	Cirrhina *latia*
41	Cypriniformes	Cyprinidae	Cirrhina *reba*
42	Cypriniformes	Cyprinidae	Cyprinus carpio *specularis*
43	Cypriniformes	Cyprinidae	Cyprinus carpio *communis*
44	Cypriniformes	Cyprinidae	Cirrhinus *cirrohosis*
45	Cypriniformes	Cyprinidae	Puntius *bravis*
46	Cypriniformes	Cyprinidae	Puntius *ophore*
47	Cypriniformes	Cyprinidae	Chela *phulo*
48	Cypriniformes	Cyprinidae	Chela *sladoni*
49	Cypriniformes	Cyprinidae	Danio *devario*
50	Cypriniformes	Cyprinidae	Garra *lamta*
51	Cypriniformes	Cyprinidae	Osteobrama *cotio*
52	Cypriniformes	Cyprinidae	Thynnichthys *sandkhol*
53	Cypriniformes	Cyprinidae	Salmostoma *phulo*
54	Cypriniformes	Cyprinidae	Labeo *dero*
55	Cypriniformes	Cyprinidae	Dicognathus *modestus*
56	Cypriniformes	Cyprinidae	Osteobrama *vigorsii*
57	Cypriniformes	Cyprinidae	Salmophasia *clupeoides*
58	Cypriniformes	Cyprinidae	Pseudo *oxygaster*
59	Cypriniformes	Cyprinidae	Chela *sladoni*
60	Cypriniformes	Cyprinidae	Salmostoma *bacila*
61	Cypriniformes	Cyprinidae	Rohtee *ogilbii*
62	Cypriniformes	Cyprinidae	Rosbora *rasbora*
63	Cypriniformes	Cyprinidae	Barilius *barila*

64	Cypriniformes	Cyprinidae	Brachydanio *rerio*
65	Cypriniformes	Cyprinidae	Esomus *dancricus*
66	Cypriniformes	Cyprinidae	Puntius *conchonius*
67	Cypriniformes	Cyprinidae	Chela *bacaila*
68	Siluriformes	Cyprinidae	Rasbora *rasbora*
69	Siluriformes	Bagridae	Rita *rita*
70	Siluriformes	Bagridae	Aorichthys *seenghala*
71	Siluriformes	Bagridae	Aorichthys *aor*
72	Siluriformes	Bagridae	Mystus *cavasius*
73	Siluriformes	Bagridae	Mystus *seenghala*
74	Siluriformes	Bagridae	Sperata *seenghala*
75	Siluriformes	Bagridae	Mystus *bleekeri*
76	Siluriformes	Bagridae	Mystus *vittatus*
77	Siluriformes	Bagridae	Mystus *leucophasis*
78	Siluriformes	Bagridae	Mystus *tengara*
79	Siluriformes	Bagridae	Rita *chrysa*
80	Siluriformes	Bagridae	Rita *pavimentata*
81	Perciformes	Ambassidae	Ambasis *nama*
82	Perciformes	Ambassidae	Ambasis *ranga*
83	Perciformes	Ambassidae	Chanda *nama*
84	Perciformes	Ambassidae	Parambassis *ranga*
85	Perciformes	Ambassidae	Parambassis *lala*
86	Perciformes	Ambassidae	Chanda *ranga*
87	Siluriformes	Siluridae	Ompok *bimaculatus*
88	Siluriformes	Siluridae	Ompok *pobo*
89	Siluriformes	Siluridae	Wallago *attu*
90	Siluriformes	Siluridae	Ompok *pabda*
91	Siluriformes	Siluridae	Pterocryptis *wynaadensis*
92	Perciformes	Channidae	Channa *punctatus*
93	Perciformes	Channidae	Chana *striatus*
94	Anabantiformes	Channidae	Channa *marulius*
95	Anabantiformes	Channidae	Channa *orientalis*
96	Anabantiformes	Channidae	Channa *gachua*
97	Synbranchiformes	Mastacembelidae	Mastacembelus *armatus*
98	Synbranchiformes	Mastacembelidae	Mastacembelus *pancalus*
99	Synbranchiformes	Mastacembelidae	Mastacembaelus *aculeatus*
100	Synbranchiformes	Mastacembelidae	Macrognathus *pancalus*
101	Synbranchiformes	Mastacembelidae	Macrognathus *aculeatus*
102	Perciformes	Ophiocephalidae	Ophiocephalus *punctatus*
103	Perciformes	Ophiocephalidae	Ophiocephalus *striatus*
104	Perciformes	Ophiocephalidae	Ophiocephalus *gachua*
105	Perciformes	Ophiocephalidae	Ophiocephalus *marulis*
106	Perciformes	Ophiocephalidae	Ophiocephalus *orientalis*
107	Perciformes	Cichlidae	Tilapia *mossambicus*

108	Perciformes	Cichlidae	Oreochromis *niloticus*
109	Cichliformes	Cichlidae	Sorotherodon *mossambicus*
110	Perciformes	Cichlidae	Oreochromis *mossambica*
111	Cypriniformes	Nemachelidae	Nemachelius *savona*
112	Cypriniformes	Nemacheilidae	Acanthocobitis *botia*
113	Cypriniformes	Nemacheilidae	Nemacheilus *botia*
114	Osteoglossiformes	Notopteridae	Notopterus *notopterus*
115	Osteoglossiformes	Notopteridae	Notopterus *chitala*
116	Osteoglossiformes	Notopteridae	Chitala *chitala*
117	Perciformes	Gobidae	Glossogobius *guiris*
118	Gobiformes	Gobidae	Gobius *albopunctatus*
119	Perciformes	Gobidae	Gobiopsis *macrostoma*
120	Anguilliformes	Anguillidae	Anguilla *bengalensis*
121	Anguilliformes	Anguillidae	Anguila *anguilla*
122	Siluriformes	Claridae	Clarius *batrachus*
123	Siluriformes	Claridae	Clarius *gariepinus*
124	Siluriformes	Schilbeidae	Ailia *coila*
125	Siluriformes	Schilbeidae	Eutropiichthys *vacha*
126	Siluriformes	Heteropneustidae	Heteropneustus *fossilis*
127	Cyprinodontiformes	Belonidae	Xenentodon *cancilla*
128	Clupeiformes	Clupeidae	Gudusia *chapra*
129	Cypriniformes	Cobitidae	Lepidocephalichthys *guntea*
130	Perciformes	Nandidae	Nandus *nandus*
131	Anabantiformes	Anabantidae	Anabus *tesudineus*
132	Perciformes	Badidae	Badis *badis*
133	Cypriniformes	Balitoridae	Nemachelius *bavani*
134	Cyprinodontiformes	Poecilidae	Poecilia *reticulata*
135	Siluriformes	Pangasiidae	Pangasius *pangasius*
136	Perciformes	Osphronemidae	Colisa *fascinatus*
137	Siluriformes	Sisoridae	Bagarius *bagarius*
138	Synbranchiformes	Synbranchidae	Amphinous *cuchia*

Discussion:

According to the review study, it is observed that to avoid the fish species loss and restore habitat these river systems should be given an urgent priority in the management planning. The fish faunal diversity changes from river to river depending on water quality, nutrient enrichment as well as the presence and absence of weeds and bottom biota. The physicochemical conditions also play a major role in it. In these reported fishes, the Cyprinidae family was more dominant. Many researchers reported strong dominance of the Cyprinidae family in their investigation.

The fishery operation goes on by the local fisherman throughout the year with low catches in monsoon compared to high harvests in post-monsoon season. The ichthyological fauna of rivers is under threat as a result of several anthropogenic activities such as

deforestation leading to siltation, recreational activities, and sand mining are common in most of the stretches of the river. The fish fauna of rivers is also subjected to overfishing for consumption. Inorganic pollution of the river due to industrial and agricultural activities is another important threat to the fish fauna.

The fishery authorities should investigate and practice the proper exploitation and management of fishery resources according to ecological principles. Scientific fishing standards and fishing quotas are to be worked out; this will play an important role in the protection of the reservoir biodiversity. Thus every individual has to play an important role in conserving biodiversity and sustaining the resources in a healthy condition to the future generation.

Conclusion:

Based on the review study, it is informed that a survey of fish diversity is important for the development of sustainable fishery practices & and proper documentation leading to diversity information systems is an urgent need. Fishes are commonly caught by fishermen and local people and these fishes are part of their food and they sell these fishes for commercial purposes. It helps to improve their economy. It is suggested that the fishery authorities should investigate and practice the proper management of fishery resources according to the ecological principle. The use of illegal methods to catch fish should be banned to prevent for depletion of varieties of fish. The fisherman should be aware of fishery and scientific training methods which may help in high yield of fish production.

Fish fauna and their distribution are useful for designing and implementing conservation strategies to aware fisherman of fishing practices. Scientific training needs to teach the fish farmers in such a way that they should avoid immature fishing practices. There is an urgent need to provide subsidies on loan and to adopt legislation & other measures for mining anthropogenic activities for the conservation of fish.

This review study shows that among different types of fishes, the Cyprinidae family most dominated all over the families like Channidae, Mastocembelidae, Balitoridae, Bagridae, Claridae, Belonidae, Notopteridae, Cichlidae, Poecilidae, Saccobranchidae, Ophiocephalidae, Siluridae, Ambassidae, Nandidae, Anabantidae, Osphronemidae, Gobiidae, Pangasiidae, Sisoridae, Saccobranchidae, Anguilidae and Badidae etc.

There is a rich diversity of fish in Vidarbha which are threatened due to several anthropogenic activities like deforestation, overfishing, sand mining, recreational activities, brick kilns organic and inorganic pollution,and invasion of exotic species also. It also helps to know all the water parameters are within permissible limits and show a supportive correlation to the ichthyofaunal diversity.

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