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ICHTHYOFAUNA OF EAST SIANG DISTRICT, ARUNACHAL PRADESH, INDIA

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INTRODUCTION

Arunachal Pradesh, the easternmost state of India, forms a part of Eastern Himalaya global biodiversity hotspot (Myers *et al*., 2000) and is also among the 200 globally important ecoregions (Olson and Dinerstein, 1998). Its unique geophysical location in the transition zone between the Palearctic and Orioental biogeogrpahic regions is one of prime reasons for its rich biodiversity. Being in the ecotone of the two regions, due to edge effect, the state possess biotic elements from both the regions as well as have its exclusive components and thus represent Indo-Chinese, Indo-Malayan, Indo-Burmese and Indian biotic components. This had earned the state the distinction of one of the main corridor for eastern entrant of the Indian sub-region (Borang, 2001).

Further, due to its strategic bio-geographic

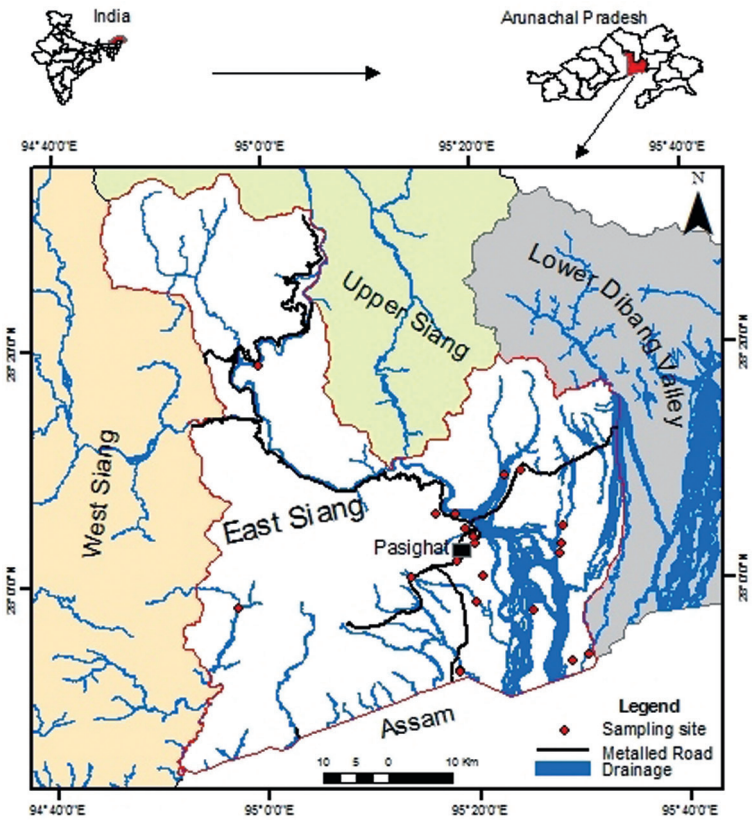

Fig. 1. Map of East Siang district, Arunachal Pradesh

location, wide altitudinal variation and wide ranges of climatic conditions from temperate to alpine, the landmass supports a phenomenal range of biological diversity (Borang, 2001). The peculiar topography of hill and mountains and deep valleys criss-crossed by a number of rivers, rivulets and innumerable streams also buttresses the existence and evolution of diverse forms of biota. That is why it is also referred as an active centre of organic evolution (Rao, 1994). However, the biodiversity of the state is yet to be explored properly as evident from almost regular and frequent new records and new discoveries of both flora and fauna, particularly fish from the state.

The area of the present study is the East Siang District of Arunachal Pradesh with its headquarter at Pasighat (Fig. 1). It is situated between longitude 94°42´E to 95°35´E and latitude 27°43´N to 29°20´N. The district has an area of 4,687 sq.km bordering West Siang in West, Assam in South, Upper Siang in the northwest & Dibang Valley in the southeast. The district lies almost in the centre of the state thus having the faunal elements from both eastern and western Arunachal Pradesh as well as components of the bordering state Assam. The altitude of the district varies from 13 to 273 m from the sea level. East Siang is one of the wetland rich districts of Arunachal Pradesh. The district has a total wetland area of about 25,512 ha covering 5.4% of the total geographic area of the district and accounting for about 16% of the total wetland area of the state. The major wetland types are rivers/streams, waterlogged, and ox-bow lakes. Lentic water bodies which accounts about 3.5% of the total wetland area of the district comprises of 3 ox-bow lakes/cut-off meanders, 15 waterlogged area, 15 tanks/ponds and 130 wetlands (mainly tanks) of <2.25 ha (SAC, 2009).

McClelland (1839) probably initiated ichthyofaunal studies in Arunachal Pradesh. The next important contribution to the ichthyofauna of the state was made by Chaudhuri (1913) through the Abor expedition. It was followed by the exemplary works of Hora (1921), Jayaram and Majumdar (1964), Srivastava (1966), Choudhury and Sen (1977), and Nath and Dey (1997, 2000). First report on ichthyofauna of East Siang district was made by Ghosh (1979) by reporting 16 species of fishes from the district. Sen (1999) made the next significant contribution to the fish fauna of the district and increased the number of fishes from the district to 32 species. In the first comprehensive book on the fish fauna of Arunachal Pradesh, Nath and Dey (2000) reported the occurrence of 49 species of fishes from East Siang district. However, Sen (2006) in the Fauna of Arunachal Pradesh mentions about the occurrence of only 21 species in the district. Moreover, many new records and also new species of fishes were described from Arunachal Pradesh including East Siang district. Thus, an attempt has been made to present correct, accurate and latest ichthyofaunal diversity of the district with comments on pattern of diversity and conservation status.

MATERIALS & METHODS

Fish sampling was done in different lotic and lentic bodies of the district by using cast net, gill net and several types of traditional gear like ‘Lipum’. In the field, fish were preserved in 10% formalin and brought to laboratory for further identification. Fishes were identified following Talwar & Jhingran (1991) and Jayaram (2013). The identified fishes were deposited in the Zoological Survey of India (ZSI), Arunachal Pradesh Regional Centre (APRC), Itanagar. In addition, the old identified as well as unidentified collections from East Siang district present in the APRC museum were also studied. Information on other fishes were obtained from published literature such as those of Ghosh (1979), Sen (1999), Sen (2006) and Nath and Dey (1997, 2000). A collated picture of the ichthyofauna of East Siang district is presented herewith along with their habitat locality, conservation status, and reference of first report of each species.

RESULTS & DISCUSSION

A total of 121 species of fishes under 70 genera, 27 families and 9 orders has been recorded from East Siang district of Arunachal Pradesh (Table 1).

This is by far the highest fish diversity recorded from the district so far, much higher than the numbers reported by Sen (1999), Nath and Dey (2000) and Sen (2006). This is also the highest diversity recorded from any district of the state and it accounts for nearly 50% of the ichthyofauna known so far from the state. This relatively higher diversity is most probably due to the advantageous position of the district in almost centre of the state bordering Assam thus representing elements of both eastern and western Arunachal Pradesh as well as elements from Assam. Further, different climatic conditions and wide altitudinal variations might also have enriched the fish diversity of the district. With 64 species, the order cypriniformes dominated (53%) the fish diversity of East Siang district followed by Siluriformes with 33 species and Perciformes with 14 species (Fig. 2).

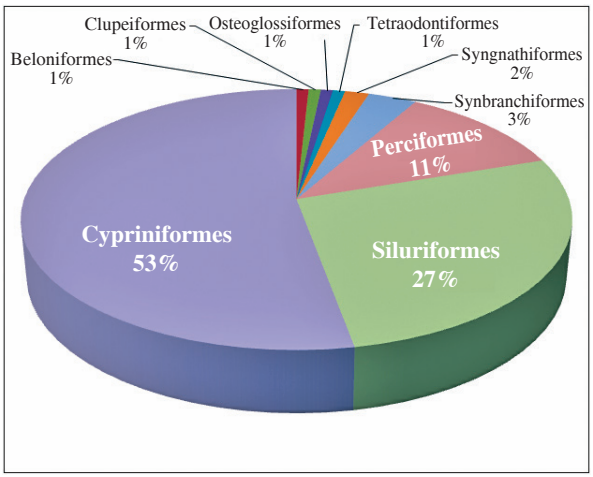

Fig. 2. Percentage share of the orders of fishes of East Siang district

Of the 27 families recorded from the district, Cyprinidae is the most dominant family with 50 species followed by Sisoridae (10 species), 7 species of Cobitidae and Bagridae, 5 species each of Siluridae and Channidae and other families having poor representations (Fig. 3). In terms of genera, *Garra* Hamilton, 1822 is the dominant genus with 7 species and *Barilius* Hamilton, 1822 with 6 species, followed by *Glyptothorax* Blyth, 1860 (5 species), *Channa* Scopoli, 1778 (5 species), *Mystus* Scopoli, 1777 (4 species) and *Pethia* Pethiyagoda, Meegaskumbura & Maduwage, 2012 (4 species). As per IUCN evaluation, of the recorded fishes, 15 species needs conservation initiatives. These are 3 vulnerable species, 10 near threatened species and 2 endangered species, namely *Tor putitora* (Hamilton, 1822), and *Lepidocephalichthys arunachalensis* (Datta & Barman, 1984). The present study also added 11 new records to the fish diversity of East Siang district. Out of the newly recorded fishes special mention may made of *L. arunachalensis* (Datta and Barman, 1984) as it is an endangered species, *Glyptothorax conirostris* (Steindachner, 1867) and *Erethistoides senkhiensis* (Tamang *et al*., 2008) being deficient in data for evaluation and *Chaca chaca* (Hamilton, 1822) is a rare fish. Thus, thorough exploration of the district may reveal much more conservationally important fishes. Some doubtful fishes were earlier reported from East Siang by other workers but could not be confirmed as those are not reflected in our collection and hence omitted from the present list. These fishes are *Garra mcclellandi, Schistura kanjupkhulensis, S. sikmaiensis, Clarius batrachus* and *Barilius dogarsinghi*.

Siang river is the major drainage of East Siang district and is apparent from the list that most of the fishes have been reported from it and its tributaries. However, drainage systems in the upper reaches of the district have been relatively remains unexplored. Another issue that needs immediate attention of ichthyologists is the virtually non-exploration of the lentic bodies of the district as far as fish fauna is concerned. Exploration of the lentic bodies may enrich further the fish diversity of the district as evident from the recent report of some important fishes from two wetlands of the district. These are *Systomus sarana* and *Rasbora daniconius* from Azo Paatang, a wetland on the eastern bank of Siang river near Namsing village and *Chaca chaca* and *Tetraodon cutcutia* from Ramro lake (Sinha and Tamang, 2015), a wetland of recent origin on the western bank of Siang river located hardly 5 km from Pasighat. The necessity

of exploring the lentic bodies of the district is further buttressed by the recording of rare fishes like *C. chaca*.

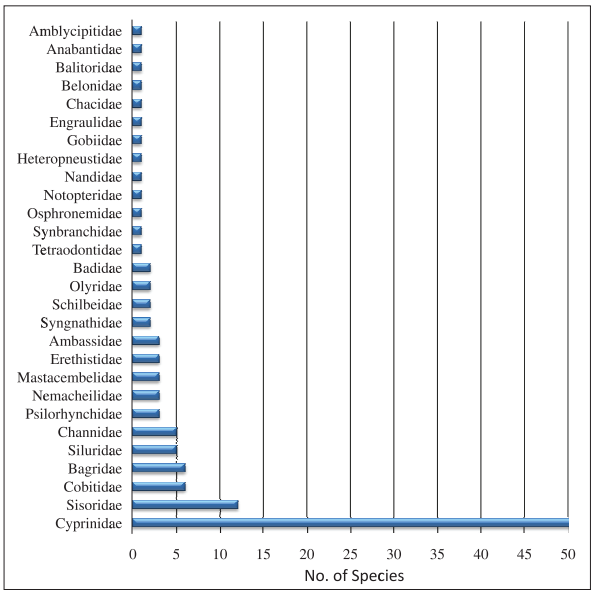

Fig. 3. Family-wise composition of fishes of East Siang district

SUMMARY

121 fish species belonging to 27 families have been recorded from the natural water bodies including lotic and lentic bodies of East Siang district. Cyprinidae was found to be the dominant family with 50 species. Sisoridae, Cobitidae, Nemacheilidae, Siluridae, Erethistidae, Channidae, and Bagridae were the other species rich families containing five to ten fish species. The collection contained 2, 3 and 10 fish species belonging to Endangered, Vulnerable and Near Threatened categories respectively. Further, 9 Data Deficient fishes were also collected during the study. *Garra* and *Barilius* are the two dominant genera with 7 and 6 species respectively. The checklist of fishes presented herein will serve as a database for future studies of fishes in the district particularly regarding conservation and EIA studies.

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Table 1. Systematic list of fishes of East Siang District, Arunachal Pradesh

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
Order Osteoglossiformes				
Family Notopteridae				
Genus *Notopterus* Lacepède, 1800				
1. *Notopterus notopterus* (Pallas, 1769)	Siang River	NA	Nath & Dey, 2000	LC
Order Clupeiformes				
Family Engraulidae				
Genus *Setipinna* Swainson, 1839				
2. *Setipinna phasa* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Order Cypriniformes				
Family Cyprinidae				
Genus *Tor* Gray, 1834				

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
3. *Tor putitora* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	EN
4. *Tor* (Hamilton, 1822)	Siang River	NA	Ghosh & Lipton, 1982	NT
Genus *Neolissochilus* Rainboth, 1985				
5. *Neolissochilus hexagonolepis* (McClelland, 1839)	Siang River	NA	Nath & Dey, 2000	NT
Genus Chagunius Smith, 1938				
6. *Chagunius chagunio* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Cyprinion* Heckel, 1843				
7. *Cyprinion semiplotum* (McClelland, 1839)	Siang River	NA	Nath & Dey, 2000	VU
Subfamily Barbinae				
Genus *Schizothorax* Heckel, 1838				
8. *Schizothorax esocinus* Heckel, 1838#	Siang River	NA	Nath & Dey, 2000	NE
9. *Schizothorax progastus* (McClelland, 1839)*	Siang River	Pasighat	APFS/P-100-101	LC
10. *Schizothorax richardsonii* (Gray, 1832)	Siue River	Kyak village	Sen, 2006	VU
Genus *Pethia* Pethiyagoda *et al*., 2012				
11. *Pethia conchonius* (Hamilton, 1822)	Siang River	NA	Ghosh, 1979	NE
12. *Pethia gelius* (Hamilton, 1822)*	7th mile river	Rani	APRC/P-731	LC
13. *Pethia guganio* (Hamilton, 1822)#	Siang River	NA	Sen, 1999	NE
14. *Pethia ticto* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Puntius* Hamilton, 1822				
15. *Puntius chola* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
16. *Puntius sophore* (Hamilton, 1822)	Siue River	Ruksin	Sen, 2006	LC
17. *Puntius terio* (Hamilton, 1822)#	Tango Epong stream	Mottum village	Jha *et al*., 2013	LC
Genus *Systomus* McClelland, 1839				
18. *Systomus sarana* (Hamilton, 1832)	Azo Patang	Namsing village	Sinha & Tamang, 2015	LC
Genus *Oreichthys* Smith, 1933				
19. *Oreichthys cosuatis* (Hamilton, 1822)*	Tara-Tamag river	Namsing village	APRC/P-649	LC
Subfamily Labeoninae				
Genus *Garra* Hamilton, 1822				
20. *Garra annandalei* Hora, 1921#	Siang River	NA	Nath & Dey, 2000	LC
21. *Garra arunachalensis* Nebeshwar & Vishwanath, 2013*	Siang river	Pasighat	APRC/P-1045	NE
22. *Garra birostris* Nebeshwar & Vishwanath, 2013*	Siang River	Ranaghat	APRC/P-802	NE
23. *Garra lamta* (Hamilton, 1822)#	Tributary of Siang River	NA	Sen, 1999	LC

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
24. *Garra naganensis* Hora, 1921#	Siue River	Kyak village	Sen, 2006	LC
25. *Garra quadratirostris* Nebeshwar & Viswanath, 2013#	Mibung River	Boleng	Nebeshwar & Viswanath, 2013	NE
26. *Garra nigricauda* Arunachalam *et al*., 2013#	Siang River	Pasighat	Arunachalam *et al*., 2013	NE
Genus *Crossocheilus* Kuhl & van Hasselt, 1823				
27. *Crossocheilus latius* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Cirrhinus* Oken 1817				
28. *Cirrhina mrigala* (Hamilton, 1822)#	Siang River	NA	Ghosh, 1979	LC
29. *Cirrhinus reba* (Hamilton, 1822)#	Siang River	NA	Ghosh, 1979	LC
Genus *Bangana* Hamilton, 1822				
30. *Bangana dero* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Labeo* Cuvier, 1816				
31. *Labeo calbasu* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
32. *Labeo gonius* (Hamilton, 1822)	Siang River	Sille village	Sen, 2006	LC
33. *Labeo pangusia* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	NT
Subfamily Danioninae				
Genus *Barilius* Hamilton, 1822				
34. *Barilius arunachalensis* Nath, Dam & Kumar, 2010	Agari River	D'Ering Memorial Wildlife Sanctuary	Nath *et al.*, 2010	NE
35. *Barilius barna* (Hamilton, 1807)	Siang River	NA	Ghosh, 1979	LC
36. *Barilius bendelisis* (Hamilton, 1807)	Siang River	NA	Nath & Dey, 2000	LC
37. *Barilius shacra* (Hamilton, 1822)#	Tributary of Siang River	NA	Sen, 1999	LC
38. *Barilius tileo* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
39. *Barilius vagra* (Hamilton, 1822)#	Siue River	Ruksin	Sen, 2006	LC
Genus *Raiamas* Jordan, 1919				
40. *Raiamas bola* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Amblypharyngodon* Bleeker, 1860				
41. *Amblypharyngodon mola* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Aspidoparia* Heckel, 1847				
42. *Aspidoparia jaya* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Cabdio* Hamilton, 1822				
43. *Cabdio morar* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Genus *Danio* (Hamilton, 1822)				
44. *Danio dangila* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
45. *Danio rerio* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
Genus *Devario* Heckel, 1843				
46. *Davario devario* (Hamilton, 1822)	Sille River	Sille village	Sen, 2006	LC
47. *Devario aequipinnatus* (McClelland, 1839)	NA	NA	Sen, 1999	LC
Genus *Esomus* Swainson, 1839				
48. *Esomus danricus* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Genus *Rasbora* Bleeker, 1859				
49. *Rasbora daniconius* (Hamilton, 1822)	Azo Patang	Namsing village	Sinha & Tamang, 2015	LC
50. *Rasbora elanga* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
51. *Rasbora rasbora* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Genus *Salmostoma* Swainson, 1839				
52. *Salmostoma bacaila* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Family Psilorhynchidae				
Genus *Psilorhynchus* McClelland, 1839				
53. *Psilorhynchus arunachalensis* Nebeshwar *et al*., 2007	Siang River & Siren River	Pasighat & Rottung village	Bagra *et al*., 2009	DD
54. *Psilorhynchus balitora* (Hamilton, 1822)	Siue River	Ruksin	Sen, 2006	LC
55. *Psilorhynchus sucatio* (Hamilton, 1822)#	Tributary of Siang River	NA	Sen, 1999	LC
Family Cobitidae				
Subfamily Botiinae				
Genus *Botia* Gray, 1831				
56. *Botia dario* (Hamilton, 1822)#	Siang River	NA	Ghosh, 1979	LC
57. *Botia rostrata* Günther, 1868	Sille River	Sille village	Sen, 2006	VU
Subfamily Cobitinae				
Genus *Canthophrys* Swainson, 1839				
58. *Canthophrys gongota* (Hamilton, 1822)*	Sille River	Sille village	APRC/P-877	LC
Genus *Lepidocephalichthys* Bleeker, 1863				
59. *Lepidocephalichthys annandalei* Chaudhuri, 1912	Siang River	NA	Nath & Dey, 2000	LC
60. *Lepidocephalichthys arunachalensis* (Datta & Barman, 1984)*	Kemi River	NA	APFS/P-170	EN
61. *Lepidocephalichthys guntea* (Hamilton,1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Pangio* Blyth, 1860				
62. *Pangio pangia* (Hamilton, 1822)	Sille River	Sille village	Ng & Tamang, 2012	LC
Family Nemacheilidae				
Genus *Aborichthys* Chaudhuri, 1913				
63. *Aborichthys elongatus* Hora, 1921.	Siang River	NA	Nath & Dey, 2000	LC

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
64. *Aborichthys kempi* Chaudhuri, 1913#	Siang River	NA	Nath & Dey, 2000	NT
Genus *Acanthocobitis* Peters, 1861				
65. *Acanthocobitis botia* (Hamilton, 1822)	Siang River	NA	Ghosh, 1979	LC
Genus *Schistura* McClelland, 1838				
66. *Schistura rupecula* McClelland, 1838*	Ngopuk river	Mebo	APRC/P-726	LC
Order Siluriformes				
Family Bagridae				
Genus Batasio Blyth, 1860				
67. *Batasio merianiensis* (Chaudhuri, 1913)	Sille River	Sille village	Tamang & Sinha, 2014	DD
Genus *Mystu*s Scopoli, 1777				
68. *Mystus montanus* (Jerdon, 1849)	Tributary of Siang River	NA	Sen, 1999	LC
69. *Mystus bleekeri* (Day, 1877)#	Sille River	Sille village	Sen, 2006	LC
70. *Mystus cavasius* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
71. *Mystus vittatus* (Bloch, 1794)	Siang River	NA	Ghosh, 1979	LC
Genus *Sperata* Holly, 1939				
72. *Sperata seenghala* (Sykes, 1839)#	Siang River	NA	Ghosh, 1979	LC
Family Siluridae				
Genus *Ompok* Lacepède, 1803				
73. *Ompok pabda* (Hamilton, 1822)	Tributary of Siang River	NA	Sen, 1999	NT
74. *Ompok bimaculatus* (Bloch, 1794)#	Siang River	NA	Ghosh, 1979	NT
75. *Ompok pabo* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	NT
Genus *Wallago Bleeker,* 1851				
76. *Wallago attu* (Bloch & Schneider, 1801)	Sille River	Sille village	Sen, 2006	NT
Genus *Pterocryptis* Peters, 1861				
77. *Pterocryptis gangelica* Peters, 1861	Siang River	NA	Nath & Dey, 2000	DD
Family Schilbeidae				
Genus *Neotropius* Kulkarni, 1952				
78. *Neotropius atherinoides* (Bloch, 1794)#	Siue River	Ruksin	Sen, 2006	LC
Genus Clupisoma (Hamilton, 1822)				
79. *Clupisoma garua* (Hamilton, 1822)#	Siang River	NA	Ghosh, 1979	LC
Family Amblycipitidae				
Genus *Amblyceps* Blyth, 1858				
80. *Amblyceps mangois* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Family Sisoridae				
Subfamily Sisorinae				
Genus *Sisor* Hamilton, 1822				
81. *Sisor rabdophorus* Hamilton, 1822#	NA	NA	Sen, 2006	LC

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
Genus *Gagata* Bleeker,1858				
82. *Gagata cenia* (Hamilton, 1822)#	NA	NA	Sen, 2006	LC
Genus *Bagarius* Bleeker, 1854				
83. *Bagarius bagarius* (Hamilton, 1822)#	Siang River	NA	Ghosh, 1979	NT
Subfamily Glyptosterninae				
Genus *Glyptothorax* Blyth, 1860				
84. *Glyptothorax indicus* Talwar, 1991	Siang River	NA	Nath & Dey, 2000	LC
85. *Glyptothorax brevipinnis* Hora, 1923#	Siang River	NA	Nath & Dey, 2000	DD
86. *Glyptothorax cavia* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
87. *Glyptothorax conirostris* (Steindachner, 1867)*	Siang River	Pasighat	APFS/P-060	DD
88. *Glyptothorax telchitta* (Hamilton, 1822)	Singen River	NA	Bagra *et al.,* 2009	LC
Genus *Exostoma* Blyth, 1860				
89. *Exostoma labiatum* (McClelland, 1842)#	Siang River	NA	Nath & Dey, 2000	LC
Genus *Pseudecheneis* Blyth, 1860				
90. *Pseudecheneis sulcata* (McClelland, 1842)	Siang River	NA	Nath & Dey, 2000	LC
Family Erethistidae				
Genus *Conta* Hora, 1950				
91. *Conta conta* (Hamilton,1822)#	Tributary of Siang River	NA	Sen, 1999	DD
92. *Conta pectinata* Ng, 2005	Sille River	Sille village	Tamang & Chaudhry, 2012	DD
Genus *Erethistoides* Hora, 1950				
93. *Erethistoides senkhiensis* (Tamang *et al*., 2008)*	Sirum river	Sirum village	APRC/P-692	DD
Genus *Pseudolaguvia* Misra, 1976				
94. *Pseudolaguvia ribeiroi* (Hora, 1921)#	Tributary of Siang River	NA	Sen, 1999	LC
95. *Pseudolaguvia viriosa* Ng & Tamang, 2012	Sille River	Sille Village	Ng & Tamang, 2012	NE
Family Heteropneustidae				
Genus *Heteropneustes* Müller, 1840				
96. *Heteropneustes fossilis* (Bloch, 1794)	Siang River	NA	Ghosh, 1979	LC
Family Chacidae				
Genus *Chaca* Gray, 1831				
97. *Chaca chaca* (Hamilton, 1822)	Ramro lake	Pasighat	Sinha & Tamang, 2015	LC
Family Olyridae				
Genus *Olyra* McClelland, 1842				
98. *Olyra longicaudata* McClelland, 1842	Siang River	NA	Nath & Dey, 2000	LC

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
99. *Olyra kempi* Chaudhuri, 1912#	Sille River	Sille village	Sen, 2006	LC
Order Beloniformes				
Family Belonidae				
Genus *Xenentodon* Regan, 1911				
100. *Xenentodon cancila* (Hamilton, 1822)	Siang River	NA	Ghosh, 1979	LC
Order Syngnathiformes				
Family Syngnathidae				
Subfamily Syngnathinae				
Genus *Doryichthys* Kaup, 1853				
101. *Doryichthys martensii* (Peters, 1868)#	Tributary of Siang River	Mebo	Jha & Chetri, 2014	LC
Genus *Microphis* Kaup, 1853				
102. *Microphis deocata* (Hamilton 1822)#	Tributary of Siang River	NA	Sen, 1999	NT
Order Synbranchiformes				
Family Synbranchidae				
Genus *Monopterus* Lacepede, 1800				
103. *Monopterus cuchia* (Hamilton, 1822)*	Banku nallah	Sille village	APFS/P-077	LC
Family Mastacembelidae				
Genus *Macrognathus* Lacepède, 1800				
104. *Macrognathus aculeatus* (Bloch, 1786)#	Siang River	NA	Nath & Dey, 2000	NE
105. *Macrognathus pancalus* Hamilton, 1822#	Siang River	NA	Nath & Dey, 2000	LC
Genus *Mastacembelus* Scopoli, 1777				
106. *Mastacembelus armatus* (Lacepede, 1800)	Siang River	NA	Ghosh & Lipton, 1982	LC
Order Perciformes				
Suborder Percoidei				
Family Ambassidae				
Genus Parambassis Bleeker, 1874				
107. *Parambassis baculis* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
108. *Parambassis ranga* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
Genus *Chanda* Hamilton, 1822				
109. *Chanda nama* Hamilton, 1822	Siang River	NA	Nath & Dey, 2000	LC
Family Nandidae				
Genus *Nandus* Valenciennes, 1831				
110. *Nandus nandus* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Family Badidae				
Genus *Badis* Bleeker, 1854				

Table 1. Contd.

TAXON	Habitat	Locality	Ref/Voucher No.	Status (IUCN)
111. *Badis badis* (Hamilton, 1822)	Tributary of Siang River	NA	Sen, 1999	LC
112. *Badis singenensis* Geetakumari & Kadu, 2011	Singen River	Saku-Kadu village	Geetakumari & Kadu, 2011	NE
Family Gobiidae				
Subfamily Gobiinae				
Genus *Glossogobius* Gill, 1859				
113. *Glossogobius giuris* (Hamilton, 1822)#	Siang River	NA	Nath & Dey, 2000	LC
Suborder Anabantoidei				
Family Anabantidae				
Genus *Anabas* Cloquet, 1816				
114. *Anabas testudineus* (Bloch, 1792)#	Siang River	NA	Ghosh, 1979	DD
Family Osphronemidae				
Subfamily Luciocephalinae				
Genus *Trichogaster* Bloch & Schneider, 1801				
115. *Trichogaster fasciata* Bloch & Schneider, 1801	Tributary of Siang River	NA	Sen, 1999	LC
Suborder Channoidei				
Family Channidae				
Genus *Channa* Scopoli, 1777				
116. *Channa gachua* (Hamilton, 1822)*	Sali River	NA	APFS/P-/362	
117. *Channa marulius* (Hamilton, 1822)	Siang River	NA	Nath & Dey, 2000	LC
118. *Channa punctata* (Bloch, 1793)	Siang River	NA	Ghosh, 1979	LC
119. *Channa stewartii* (Playfair, 1867)#	Tributary of Siang River	NA	Sen, 1999	LC
120. *Channa striata* (Bloch, 1793)#	Siang River	NA	Nath & Dey, 2000	LC
Order Tetraodontiformes				
Family Tetraodontidae				
Genus *Tetraodon* Linnaeus, 1758				
121. *Tetraodon cutcutia* (Hamilton, 1822)	Ramro lake	Pasighat	Sinha & Tamang, 2015	LC

VU-Vulnerable, LC- Least Concern, NT- Near Threatened, EN- Endangered, NE-Not Evaluated, DD-Data Deficient

* **New record to the district**

\# **Fishes not recorded during the present study**

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