

Table 2. Checklist of indigenous ornamental freshwater ichthyofauna of Sundarban Biosphere Reserve along with their conservation status and other remarks

	Order: Family and scientific name	IUCN Status	Remarks
	Cypriniformes: Cyprinidae		
1	<i>Amblypharyngodon mola</i> (Hamilton, 1822)	LC	CA
2	<i>Bengala elanga</i> (Hamilton, 1822)	LC	CA
3	<i>Catla catla</i> (Hamilton, 1822)	LC	NCA
4	<i>Chela cachius</i> (Hamilton, 1822)	LC	CA
5	<i>Cirrhinus mrigala</i> (Hamilton, 1822)	LC	NCA
6	<i>Danio rerio</i> (Hamilton, 1822)	LC	CA
7	<i>Devario devario</i> (Hamilton, 1822)	LC	CA
8	<i>Esomus danricus</i> (Hamilton, 1822)	LC	CA
9	<i>Labeo bata</i> (Hamilton, 1822)	LC	NCA
10	<i>Labeo calbasu</i> (Hamilton, 1822)	LC	NCA
11	<i>Labeo rohita</i> (Hamilton, 1822)	LC	NCA
12	<i>Laubuka laubuca</i> (Hamilton, 1822)	LC	CA
13	<i>Puntius chola</i> (Hamilton, 1822)	LC	CA
14	<i>Pethia conchonius</i> (Hamilton, 1822)	LC	CA
15	<i>Pethia gelius</i> (Hamilton, 1822)	LC	CA
16	<i>Pethia phutunio</i> (Hamilton, 1822)	LC	CA
17	<i>Pethia ticto</i> (Hamilton, 1822)	LC	CA
18	<i>Puntius sophore</i> (Hamilton, 1822)	LC	CA
19	<i>Puntius terio</i> (Hamilton, 1822)	LC	CA
20	<i>Rasbora daniconius</i> (Hamilton, 1822)	LC	CA
21	<i>Salmostoma acinaces</i> (Valenciennes, 1844)	LC	CA
22	<i>Salmostoma bacaila</i> (Hamilton, 1822)	LC	CA
23	<i>Salmostoma phulo</i> (Hamilton, 1822)	LC	CA
24	<i>Securicula gora</i> (Hamilton, 1822)	LC	NCA
25	<i>Systomus sarana</i> (Hamilton, 1822)	LC	NCA
	Cobitidae		
26	<i>Lepidocephalichthys guntea</i> (Hamilton, 1822)	LC	CA
	Perciformes: Ambassidae		
27	<i>Chanda nama</i> (Hamilton, 1822)	LC	CA
28	<i>Parambassis lala</i> (Hamilton, 1822)	NT	CA
29	<i>Parambassis ranga</i> (Hamilton, 1822)	LC	CA
	Anabantidae		
30	<i>Anabas testudineus</i> (Bloch, 1792)	DD	NCA
	Osphronemidae		
31	<i>Trichogaster fasciata</i> (Bloch & Schneider, 1801)	LC	CA
32	<i>Trichogaster lalius</i> (Hamilton, 1822)	LC	CA
33	<i>Trichogaster chuna</i> (Hamilton, 1822)	LC	CA
	Perciformes: Nandidae		
34	<i>Nandus nandus</i> (Hamilton, 1822)	LC	CA
	Badidae		
35	<i>Badis badis</i> (Hamilton, 1822)	LC	CA
	Channidae		
36	<i>Channa barca</i> (Hamilton, 1822)	DD	NCA
37	<i>Channa marulius</i> (Hamilton, 1822)	LC	NCA
38	<i>Channa gachua</i> (Hamilton, 1822)	LC	CA
39	<i>Channa punctata</i> (Bloch, 1793)	LC	NCA
40	<i>Channa striata</i> (Bloch, 1793)	LC	NCA
	Gobiidae		
41	<i>Apocryptes bato</i> (Hamilton, 1822)	NE	CA
42	<i>Boleophthalmus boddarti</i> (Pallas, 1770)	LC	NCA
43	<i>Glossogobius giuris</i> (Hamilton, 1822)	LC	NCA
44	<i>Gobiopterus chuno</i> (Hamilton, 1822)	DD	CA
45	<i>Stigmatogobius sadanundio</i> (Hamilton, 1822)	NE	CA
	Scatophagidae		
46	<i>Scatophagus argus</i> (Linnaeus, 1766)	LC	NCA
	Teraponidae		
47	<i>Terapon jarbua</i> (Forsskal, 1775)	LC	NCA
	Synbranchiformes: Mastacembelidae		
48	<i>Mastacembelus armatus</i> (Lacepede, 1800)	LC	NCA
49	<i>Macrognathus aral</i> (Bloch & Schneider, 1801)	LC	NCA
50	<i>Macrognathus pancalus</i> (Hamilton, 1822)	LC	CA
	Synbranchidae		
51	<i>Monopterus albus</i> (Hamilton, 1822)	LC	NCA
	Clupeiformes: Clupeidae		
52	<i>Gonialosa manmina</i> (Hamilton, 1822)	LC	CA
53	<i>Gudusia chapra</i> (Hamilton, 1822)	LC	CA
	Osteoglossiformes: Notopteridae		
54	<i>Chitala chitala</i> (Hamilton, 1822)	NT	NCA
55	<i>Notopterus notopterus</i> (Pallas, 1769)	LC	NCA
	Tetraodontiformes: Tetraodontidae		
56	<i>Leiodon cutcutia</i> (Hamilton, 1822)	LC	CA
57	<i>Dichotomys myctere fluviatilis</i> (Hamilton, 1822)	LC	CA
	Cyprinodontiformes: Aplocheilidae		
58	<i>Aplocheilus panchax</i> (Hamilton, 1822)	LC	CA

	Order: Family and scientific name	IUCN Status	Remarks
	Beloniformes: Belontiidae		
59	<i>Xenentodon cancila</i> (Hamilton, 1822)	LC	NCA
	Siluriformes: Bagridae		
60	<i>Mystus cavasius</i> (Hamilton, 1822)	LC	NCA
61	<i>Mystus gulio</i> (Hamilton, 1822)	LC	NCA
62	<i>Mystus tengara</i> (Hamilton, 1822)	LC	CA
63	<i>Mystus vittatus</i> (Bloch, 1794)	LC	CA
64	<i>Sperata aor</i> (Hamilton, 1822)	LC	NCA
65	<i>Sperata seenghala</i> (Sykes, 1839)	LC	NCA
	Siluridae		
66	<i>Ompok bimaculatus</i> (Bloch, 1794)	NT	NCA
67	<i>Ompok pabda</i> (Hamilton, 1822)	NT	CA
68	<i>Wallago attu</i> (Bloch & Schneider, 1801)	NT	NCA
	Schilbeidae		
69	<i>Ailia coila</i> (Hamilton, 1822)	NT	NCA
70	<i>Clupisoma garua</i> (Hamilton, 1822)	LC	NCA
71	<i>Eutropiichthys vacha</i> (Hamilton, 1822)	LC	NCA
72	<i>Pachypterus atherinoides</i> (Bloch, 1794)	LC	CA
73	<i>Silonia silondia</i> (Hamilton, 1822)	LC	NCA
	Pangasiidae		
74	<i>Pangasius pangasius</i> (Hamilton, 1822)	LC	NCA
	Sisoridae		
75	<i>Bagarius bagarius</i> (Hamilton, 1822)	NT	NCA
76	<i>Gagata cenia</i> (Hamilton, 1822)	LC	CA
77	<i>Gagata gagata</i> (Hamilton, 1822)	LC	NCA
78	<i>Glyptothorax telchitta</i> (Hamilton, 1822)	LC	CA
79	<i>Gogangra viridescens</i> (Hamilton, 1822)	LC	CA
	Heteropneustidae		
80	<i>Heteropneustes fossilis</i> (Bloch, 1794)	LC	NCA
	Clariidae		
81	<i>Clarias magur</i> (Hamilton, 1822)	LC	NCA
	Anguilliformes: Anguillidae		
82	<i>Anguilla bengalensis</i> (Gray, 1831)	NT	NCA
	Ophichthidae		
83	<i>Pisodonophis boro</i> (Hamilton, 1822)	LC	NCA
	Syngnathiformes: Syngnathidae		
84	<i>Microphis deocata</i> (Hamilton, 1822)	NT	CA

NE - Not Evaluated; NT - Near Threatened; LC - Least Concern; DD - Data Deficient; CA - Classified Aquarium Fish; NCA - Non-Classified Aquarium Fish

magur, *Heteropneustes fossilis*, *C. punctata*, *C. striata*, *Anabas testudineus* etc were introduced naturally and breed automatically in culture ponds and replenish after harvest for few years (Dubey et al. 2016). Moreover, the majority of these fishes have drawn special attention due to their food value and for providing nutritional security through their high vitamin and mineral contents (Thilsted et al. 1997). Although without any focus on conservation and sustainable use, freshwater fishes are collected from nature as an open access resource for the aquarium trade (Raghavan et al. 2013), resulting in their population decline and general decline of the state of freshwater biodiversity (Allen et al. 2010; Molur et al. 2011). Raghavan et al. (2013) stated that more than 1.5 million freshwater fish belonging to 30 threatened species were exported from India to Europe, US and other Asian countries during 2005–2012. Of these, *Botia striata* (Endangered), *Carinotetraodon travancoricus* (Vulnerable), *Sahyadria denisonii* and *S. chalakudiensis* (both Endangered) and range-restricted species like *Garra hughii* (Endangered) and *Channa aurantimaculata* (Data Deficient; single location endemic) were the major exported species (Raghavan et al. 2013).

In Sundarban, fisheries (fishing and aquaculture) is the second major livelihood option after agriculture (Chand et al. 2012a). Fishing is a seasonal occupation for communities in the area. While most fishing is undertaken by men; crab collection and prawn seed collection are practiced by both men and women in the inter-tidal waters. Non timber forest produce (NTFPs) and honey collections are also an integral part of the livelihoods of many forest fringe dwellers of Sundarban. However, the majorities of these livelihood options are exposed to human-wildlife conflict issues and hamper the natural continuity of the ecosystem (World Bank 2014). The Sundarban contains over 4.4 million people of which majority belong to largely impoverished and vulnerable communities, and 80% of the households earn their living that involves inefficient production methods of agriculture, fishing, and aquaculture associated with multiple stressors (World Bank 2014). Till date, the ornamental fish trade involving indigenous fishes more or less depends on capture and backyard-pond based fishery, without any need for additional expenditure. So, in this backdrop, ornamental fish trade can be a lucrative business for the local people to supplement their traditional livelihood options.

Apart from the economic aspects of the trade in freshwater indigenous ornamental fishes of Sundarban Biosphere Reserve, proper attention needs to be given for improved ecosystem sustainability and conservation