

Red List of Bangladesh Volume 5: Freshwater Fishes



INTERNATIONAL UNION FOR CONSERVATION OF NATURE











Red List of Bangladesh

Volume 5: Freshwater Fishes

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IUCN, International Union for Conservation of Nature Bangladesh Country Office 2015 The designation of geographical entitles in this book and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN, International Union for Conservation of Nature concerning the legal status of any country, territory, administration, or concerning the delimitation of its frontiers or boundaries. The biodiversity database and views expressed in this publication are not necessarily reflect those of IUCN, Bangladesh Forest Department and The World Bank.

This publication has been made possible because of the funding received from The World Bank through Bangladesh Forest Department to implement the subproject entitled 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project.



IUCN Bangladesh Country Office

Published by:



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Citation: Of this volume IUCN Bangladesh. 2015. Red List of Bangladesh Volume 5: Freshwater Fishes. IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, Bangladesh, pp xvi+360

Of individual species profile

[Last name of the assessor (s), initials]. 2015. [Species' scientific name]. *In:* IUCN Bangladesh. *Red List of Bangladesh Volume 5: Freshwater Fishes.* IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, Bangladesh. p. [Page number].

ISBN: 978-984-34-0738-2

Publication Assistant:

Sheikh Asaduzzaman

Design and

Printed by: Bangla Communications Ltd.

- Cover Photo: Front Cover: (top left) *Chitala chitala* © Balaram Mahalder, (top right) *Botia dario* © Mostafa A R Hossain, (bottom right) *Rita rita* © Balaram Mahalder, (bottom left) *Trichogaster fasciata* © Md. Sagir Ahmed Back Cover : (top) *Puntius chola* © IUCN/ Mohammed Noman, (bottom) *Tetraodon cutcutia* © Md. Sagir Ahmed
- Available from: IUCN, International Union for Conservation of Nature Bangladesh Country Office House 16, Road 2/3, Banani Dhaka 1213, Bangladesh

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- Volume 7: Butterflies

PREFACE

The IUCN Red List of Threatened Species[™] has been assessing the conservation status of plants, fungi and animal species on a global scale for the past 50 years. Since its conception in 1964, the Red List has evolved to become the world's most comprehensive information source on the extinction risk of species. Far more than a list of species and their status, it is a powerful tool to inform and catalyze action among scientists, activists, and politicians. It is used by government agencies, wildlife departments, conservation related non-governmental organizations (NGOs), natural resource planners, educational organizations, students, and the business community. The Red List process has become a massive enterprise involving the IUCN Global Species Program staff, partner organizations and experts in the IUCN Species Survival Commission and partner networks who compile the species information to make The IUCN Red List the indispensable product it is today.

IUCN Bangladesh had published the first Red List of Threatened Animals of Bangladesh in 2000. The list has been updated through a sub-project entitled 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of the Bangladesh Forest Department which is funded by The World Bank. The project commenced in December 2013 and ends in June 2016. A total of 1619 species has been assessed and updated from seven different animal groups (mammals, birds, reptiles, amphibians, freshwater fishes, crustaceans, and butterflies), subsequently published in seven volumes. In addition, summary volume (Vol: 01) has been translated into Bangla for reaching out its wider users. More than 300 national and international experts have contributed under the seven Red List Assessor Groups (RAGs) headed by respective Lead Assessors and Chief National Technical Expert to ensure that the updates are based on the best scientific information available.

A well-trained Red List project unit equipped with GIS support and all kinds of latest information technologies was established in IUCN Bangladesh to ensure the highest quality of assessment following the latest Red List categories and criteria guideline. For this purpose, more than 160 assessors have been trained on global standard Red List assessment guideline engaging international certified Red List trainers. A National Red List Database in the form of an online platform has been developed and made live for public dissemination on the <www.iucnredlistbd.org>. Data and information have been preserved for future use both electronically in offline database as well as hard copies for each individual species bearing unique Species Identification Number (SID). A National Red List Committee has been formed under the Ministry of Environment and Forests (MoEF) to ensure coordination among different agencies during the assessment process as well as for mainstreaming the findings into conservation policies. Series of dissemination workshops at national and regional levels were organized to share the preliminary assessment result to its wider stakeholders and ensure their participation in this highly scientific assessment process.

I would like to commend the assessors for their contributions to the assessment and for their commitment towards making this publication a reality. All the assessments have gone through a multistage review process engaging relevant experts and technical reviewers. The tireless efforts of the reviewers in making these books up to the global standard are gratefully acknowledged. Without their assistance this nationally important set of documents would not have been of the quality that it is now.

I also like to take this opportunity to express my sincere appreciation to all the members of 'Updating Species Red List of Bangladesh' project and all concerned people of publication work for publishing this manuscript. I would also express my gratitude to the Ministry of Environment and Forests (MoEF), Chief Conservator of Forests (CCF) and other Bangladesh Forest Department officials for their vigorous support and collaboration. I hope this publication will help the relevant agencies in taking appropriate conservation actions toward managing wildlife of Bangladesh.

Md. Akbar Hossain

Project Director Strengthening Regional Cooperation for Wildlife Protection (SRCWP) Project & Deputy Chief Conservator of Forests Bangladesh Forest Department

The Government of Bangladesh is committed to take all measures prerequisite for a sustainable future. In effort, the Government takes myriad programmes and initiatives with the support of different consortia. Bangladesh has recently achieved unprecedented successes in the environmental sector. It was no surprise that Her Excellency Prime Minister Sheikh Hasina was awarded '2015 Champion of the Earth' by the United Nations. Updated the 'Red List of Bangladesh' bears yet another signature of the goodwill and devotion rendered by the Government of Bangladesh. The publication sets another milestone in biodiversity conservation of the country.

The overwhelming evidence on the loss of biodiversity all over the world showcases that we, as a nation, must act to conserve biodiversity. Ministry of Environment and Forests has been playing a pivotal role in biodiversity conservation of Bangladesh through Bangladesh Forest Department, and other national and international organizations. This publication is one among many upshots envisioned by Bangladesh Forest Department through the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project. I would like to thank The World Bank for providing the financial support, and appreciate the effort of IUCN Bangladesh Country Office in implementing the project.

I am sanguine that the updated 'Red List of Bangladesh' will concurrently help the Government of Bangladesh towards achieving the Aichi Biodiversity Targets, the Sustainable Development Goals (SDGs) and the Vision 2021.

Finally, I wish that the 'Red List of Bangladesh' would go a long way in protecting the biodiversity of the country.

Anwar Hossain Manju, MP

Minister Ministry of Environment and Forests Government of the People's Republic of Bangladesh

I am very happy to know that *Red List of Bangladesh* - a set of visionary publications covering the status, extinction risks and possible conservation options for major biodiversity of Bangladesh has been thoroughly updated by the Bangladesh Forest Department with technical support from IUCN Bangladesh.

Bangladesh is bestowed with enviable natural resources. To save the bewildering inventory, Bangladesh is always strong-willed and committed to a number of Multilateral Environmental Agreements including the Convention on Biological Diversity (CBD). So as in harmony, the Government of Bangladesh has recently looked forward to engaging a globally recognized, powerful, most comprehensive conservation tool, i.e. IUCN Red List of Threatened Species[™] to update and assess the current biodiversity status. This has resulted in the rigorous effort entitling 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project initiative funded by The World Bank.

'Red List of Bangladesh' is a massive milestone in the conservation history of the country. I expect that these scientific publications will provide new information; will strengthen and update existing knowledge inventory. Everybody from government/non-government officials to scholars, researchers, students and enthusiasts - should make expansive usages of these books as the most updated biodiversity database available in the country.

I strongly hope that these works of multitude potentials will help the coordination and promotion of national efforts in effective policy making for ensuring appropriate and continual biodiversity management practices envisioned by the Government of Bangladesh.

Abdullah Al Islam Jakob, MP Deputy Minister Ministry of Environment and Forests Government of the People's Republic of Bangladesh

Biodiversity, the incredible variety of life on Earth that sustains us, is in peril. Species are becoming threatened at the most expeditious rate ever recorded. Over the past few decades it has become the issue of global concern for its rapid reduction worldwide. Bangladesh is no exception in this regard. Though the country is exceptionally endowed with a vast variety of flora and fauna, it is unfortunate that in recent decades the biodiversity of the country is under pressure due to incrementing population and over-exploitation of natural resources.

Today, many species of Bangladesh have reached a dreadful genetic loss. Unfortunately, detailed information and consummate inventories of such species often do not exist. The Government of Bangladesh is acutely conscious of this, and has in fact been preparing to face this challenge for several years now. Bangladesh has made a tremendous progress in terms of taking development initiatives towards conservation and sustainable use of the threatened species. However, Bangladesh Forest Department in collaboration with IUCN Bangladesh and with financial assistance from The World Bank, the project 'Strengthening Regional Cooperation for Wildlife Protection' under which the subproject 'Updating Species Red List of Bangladesh' has successfully updated the threat status of wildlife of the country. I would like to express my appreciation to all the experts involved in this noble initiative.

I am very proud to note that 1619 fauna species have been assessed over the two and half year period and subsequently published in seven volumes entitled the 'Red List of Bangladesh'. I strongly believe, this set of achievements is one of the pioneer encyclopedic compilations in Bangladesh that can provide its users with updated information of different species. I hope these books will have impact on the government's policy and planning towards achieving the targets set by the different national and global commitments, as well as taking measures to protect these threatened species.

Dr. Kamal Uddin Ahmed Secretary Ministry of Environment and Forests Government of the People's Republic of Bangladesh

Globally, biodiversity forms the foundation of the vast array of ecosystem services that critically contribute to human well being. The diversity of the Earth's natural assets are made up of many millions of distinct biological species of plants and animals on land, in water, in atmosphere - linking humans and environment into an interdependent ecosystem which makes the Earth unique and beautiful. But, it's really unfortunate that biodiversity worldwide is disappearing faster than ever and already has declined by more than a quarter in the last 35 years in terms of number of species. It is thus indispensable to gather knowledge scientifically of existing species, their habitats, threats, etc. for undertaking pragmatic protection and conservation measures.

In this context Bangladesh Forest Department together with IUCN Bangladesh has accomplished 'Updating Species Red List of Bangladseh', as a sub-project of the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of Bangladesh Forest Department following the most comprehensive 'IUCN Red List of Threatened Species[™]' approach. As a revolutionary outcome of the project, the books entitling the 'Red List of Bangladesh' aim to provide updated information and data of 1619 animal species under seven groups in total throughout the country. This national asset will undoubtedly serve the researcher and academicians as a scientific information hub for further research and the policy makers to occupy the gap of subsisting laws and policies to catalyze appropriate conservation action. By knowing the threatened species from this Red List, further, we can bring out incipient projects where these are exactly demanded and with the opportune execution of this undertaking, we can create a safe ground as a measure of conservation. In this whole process the Red List will be a great avail.

In addition, the status and trends of the threatened species of Bangladesh portrayed in these books have the impetus for taking up the stronger efforts towards the legislation of wildlife trafficking and trading of the country. Being a bio-rich country, Bangladesh has to adopt adequate measures to halt further degradation of our precious biological resources. We hope that these books could be a consequential material in the congruous execution of the objectives of numerous biodiversity conventions and treaties, like CBD, RAMSAR, and CITES.

I sincerely acknowledge the Government of the People's Republic of Bangladesh to initiate such a milestone project and The World Bank for providing financial support. I am also very thankful to those scientists, researchers, academicians and professionals involved with the project from the very beginning for their unwearied endeavour which finally make this most fruitful.

Md. Yunus Ali

Chief Conservator of Forests Bangladesh Forest Department Government of the People's Republic of Bangladesh

ACKNOWLEDGEMENTS

The IUCN Red List of Threatened Species[™] has been worldly recognized and used as the most comprehensive source for the conservation status of plant and animal species since 1964. IUCN Bangladesh first assessed the conservation status of species from Bangladesh in 2000. Fifteen years later, IUCN Bangladesh has updated the previous Red List implementing 'Updating Species Red List of Bangladesh' project. The final outcome of the project, the 'Red List of Bangladesh", is the fruit of a concerted effort from numerous individuals and bodies - all deserve a special note of thanks.

Our sincere gratitude to Dr. Kamal Uddin Ahmed, Secretary, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh and Chair, National Committee for Updating Species Red List of Bangladesh for his endless effort along with the officials involved from the ministry in making this initiative a success.

We extend a heartfelt thanks to Mr. Md. Yunus Ali, Chief Conservator of Forests, Bangladesh Forest Department and the officials nominated to implement 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project, especially Mr. Md. Akbar Hossain, Project Director and all other staff of the SRCWP project. Our special thanks to Mr. Ashit Ranjan Paul, Conservator of Forests, Wildlife Circle and Dr. Tapan Kumar Dey, former Conservator of Forests, Wildlife Management and Nature Conservation Division, Bangladesh Forest Department for their endless endeavor in all extent of the project. We would like to acknowledge The World Bank for financing SRCWP project. In addition, our sincere gratitude goes to Bangladesh Forest Department to entrust IUCN Bangladesh Country Office with the responsibility of 'Updating Species Red List of Bangladesh'.

We humbly acknowledge Dr. Mohammad Ali Reza Khan, Chief National Technical Expert, Updating Species Red List of Bangladesh for his expertise, knowledge and technical support used in these publications. Besides, seven Lead Assessors for seven animal groups namely, Professor Dr. Mohammed Mostafa Feeroz for mammals, Mr. Enam Ul Haque for birds, Professor Dr. Md. Farid Ahsan for reptiles, Professor Dr. M. Monirul H. Khan for amphibians, Professor Dr. Mohammad Sahadat Ali for freshwater fishes, Professor Dr. Mostafa Ali Reza Hossain for crustaceans, and Professor Dr. Md. Monwar Hossain for butterflies deserve special thanks. Besides, all other assessors, national and international photographers, contributors and geospatial analysts have indebted us with their time, effort and support. We sincerely thank all technical reviewers and editors, as well.

The Red List Project Unit of IUCN Bangladesh Country Office, along with other officials, merit special thanks for their relentless effort to finish this project successfully. Special thanks to Mr. Craig Hilton Taylor and Ms. Caroline Pollock from IUCN Red List Unit, Cambridge, UK and colleagues from IUCN Asia Regional Office for their technical support and guidance.

We humbly acknowledge Vice Chancellors from University of Dhaka, University of Chittagong, Bangladesh Agricultural University, Khulna University and Shahjalal University of Science and Technology for allowing us to use their premises for dissemination workshops. We also extend our gratitude to the officials from Department of Fisheries, Bangladesh Fisheries Research Institute, Bangladesh Forest Research Institute, Bangladesh National Herbarium, national universities, colleges, research institutes and other partners. Participants of all meetings and workshops, advisors, data contributors and personnel from electronic and print media deserve our appreciation for their support.

We hope that the publications entitled 'Red List of Bangladesh' would greatly accelerate conservation, management and policy interventions for the threatened species of Bangladesh.

Ishtiaq Uddin Ahmad Country Representative IUCN Bangladesh Country Office

LIST OF ABBREVIATIONS

AOO	Area of Occupancy
BoB	Bay of Bengal
BRAC	Bangladesh Rural Advancement Committee
BWDB	Bangladesh Water Development Board
CARITAS	Congregations Around Richmond Involved to Assure Shelter
CBD	Convention on Biological Diversity
CBFM	Community Based Fisheries Management
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CKMWS	Char Kukri Mukri Wildlife Sanctuary
CNRS	Center for Natural Resource Studies
cm	Centimeter
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CPUE	Catch per unit effort
CR	Critically Endangered
DD	Data Deficient
DoF	Department of Fisheries
ECR	Environment Conservation Rules
EEZ	Exclusive Economic Zone
EN	Endangered
EOO	Extent of Occurrence
ESCAP	Economic and Social Commission for Asia and the Pacific
EW	Extinct in the Wild
EX	Extinct
FA	Forest Act
FAP	Flood Action Plan
GBM	Ganges-Brahmaputra-Meghna
GDP	Gross Domestic Product
GIS	Geographical Information System
GO	Governmental Organization
GoB	Government of Bangladesh
Н	High
ha	Hectare
HNP	Himchhari National Park
HYV	High yielding varieties
INGO	International Non-governmental Organization

IUCN	International Union for Conservation of Nature		
kg	Kilogram		
km	Kilometer		
km ²	Square Kilometer		
L	Low		
LC	Least Concern		
Litt	Literature		
Μ	Moderate		
m	Metre		
m ³	Cubic metre		
MAF	Million acre-feet		
mm	Millimetre		
MoEF	Ministry of Environment and Forests		
MoFA	Ministry of Foreign Affairs		
MSY	Maximum Sustainable Yield		
mt	Metric ton		
mya	Million years ago		
NA	Not Applicable		
NBSAP	National Biodiversity Strategic and Action Plan		
NCS	National Conservation Strategy		
NC-USR	National Committee for Updating Species Red List of Bangladesh		
NE	Not Evaluated		
NGOs	Non-governmental Organizations		
NT	Near Threatened		
NWMP	National Water Management Plan		
PAs	Protected Areas		
PDR	People's Democratic Republic		
Pers. Comm.	Personal Communication		
PL	Post Larval		
ppt	Parts per thousand		
PROSHIKA	Proshikkhan Shikkha Karmo		
RAG	Red List Assessor Group		
RE	Regionally Extinct		
RLA	Red List Authority		
SID	Species Identification Number		
S/MFBZ	Sundarban/Mangrove Forest Biogeographic Zone		
SRCWP	Strengthening Regional Cooperation for Wildlife Protection Project		
UNESCO	United Nations Educational, Scientific and Cultural Organization		
US	United States		
USD	United States Dollar		
VH	Very High		
VL	Very Low		
VU	Vulnerable		
WRI	World Resources Institute		
WS	Wildlife Sanctuary		
Yrs	Years		

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INTRODUCTION



1. INTRODUCTION

1.1. Fish and Fisheries of Bangladesh

The diverse aquatic habitats in Bangladesh support a wide variety of fish. The total number of freshwater fish species occurring in Bangladesh compiled as 250 to 266 species (Rahman 2005, Siddigui et al. 2007). A modest estimate puts it to a total figure of 260 species. However, subsequently, a number of species have been added to the list (Ahmed et al. 2013, Singer and Page 2015, Kullander et al. 2015). It is believed that there are not many freshwater fish species that remain unexplored in Bangladesh. On the other hand, all the species reported as freshwater species are not exclusively freshwater, as many as 62 species are found in estuaries, many of them ascend tidal rivers from the Bay of Bengal (Rahman 2005, Siddigui et al. 2007). Of the reported species, 104 are considered riverine species, 36 migratory (travelling rivers and floodplains) and the rest 113 are floodplain resident species (FAP 17 1994). Riverine species breed in rivers, migratory species breed in rivers, but perform lateral migrations between river and floodplains during flood period and floodplain resident species breed and feed in floodplains, but may find refuge in rivers during dry season. Besides, a total of 20 species of prawns, 4 species of crabs and 26 species of molluscs are known to occur in freshwaters of Bangladesh (Ahmed and Ali 1996, Siddigui et al. 2008a and 2008b). A large number of freshwater fish species occur in hill streams, usually not found in other aquatic habitats. Hill stream fishes are specialized to adapt the fast flowing waters with sandy and pebbly bottoms. In addition, as many as 24 introduced exotic species are found

in freshwater aquaculture (Hossain 2014), some of which occasionally escape into open waters, but have not yet been able to establish in inland open waters.

Fish and fisheries play an important role in the nutrition, economy, employment and culture of Bangladesh people. In fact, fish is second staple food after rice in Bangladesh. It is the sixth freshwater fish producing country in the world (FAO 2005) and produces 961,458 mt freshwater fish annually (FRSS 2014). Fish still provides 60% animal protein to our diet and per capita fish intake in the country amounts to 52 g/capita/ day (DoF 2014) against a recommended level of 68 g/capita/day.

Freshwater capture fisheries contributes 9,46,458 mt to total fish production, which is 28.19% of the country's total fish production (FRSS 2014). Information on habitat wise fish production in the country is provided in Table 1. Fisheries contributes about 4.37 % to country's GDP and 23.37% to the Agricultural GDP. Fisheries also earn BDT 43,126.1 million from fish export, which is 2% of country's total foreign earnings (DoF 2014).

A total of 1.2 million professional fishers in Bangladesh are involved in fishing on a full-time basis for their livelihood, while another 10 million fishers undertake subsistence fishing either for supplementing their incomes or for household consumption. In fact, each household in rural Bangladesh undertakes some sort of fishing (DoF 2014). Any decline in fish production in the country will affect the nutrition, employment and livelihood of many people of the country. Therefore, sustenance of fisheries resources

Table 1. Extent of freshwater fish habitat areas and fish production in Bangladesh							
Sector of Fisheries	Water area (Hectare)	Total production (mt)	%				
Inland Fisheries							
(i) Inland Open Water (Capture)							
1. River and Estuary	8,53,863	1,47,264					
2. Sundarbans	1,77,700	15,945					
3. Beel	1,14,161	87,902					
4. Kaptai Lake	68,800	9,017					
5. Floodplain	27,02,304	7,01,330					
Capture Total	39,168,28	9,61,458	28.19%				
(ii) Inland Closed Water (Culture)							
6. Pond	3,71,309	14,46,594					
7. Seasonal cultured water body	1,30,488	2,00,833					
8. Baor	5,488	6,146					
9. Shrimp/Prawn Farm	2,75,274	2,06,235					
Culture Total	7,82,559	18,59,808	54.54%				
Inland Fisheries Total	46,99,387	28,21,266	82.73%				

Source: DoF, 2014

in Bangladesh is extremely necessary and remains an imperative for the country.

1.2. Issues in Bangladesh Fisheries

It is generally held that fish production from inland open waters is declining rapidly in Bangladesh and apparently abundance of many species are highly reduced. Habitat loss caused by massive siltation, infrastructure development, drying up of water bodies, dewatering, conversion of wetlands, overfishing and aquatic pollution are the major causes for the fish population decline in Bangladesh, Until 1970s, there was an abundance of fish in the natural waters of the country to well-satisfy the demand. However, capture fish production has declined more than 50%, with a negative trend of 1.24 % per year (Ahmed 1995). As a result, several fish species are in the verge of extinction, while many others

are facing the risk of extinction in future. Anecdotal statement in rural areas of the country about past fisheries reflects the magnitude of reduction in fish abundance in the country and the rural people cherish the memories of the glorious past days when fishes were plentiful in all water bodies. The declining situation in freshwater fisheries has created a great concern among politicians, professionals, managers and civil societies. The degrading situation in inland open water fisheries is likely to impact the loss of fish diversity and abundance detrimentally impacting the life and livelihood of the people historically dependent on it. The 2000 Red List of Bangladesh Fish shows that as many as 54 species were variously threatened in the country facing the risk of extinction. It is strongly argued that Bangladesh must conserve and manage fisheries on the basis of sustainability principle.

The declining trend in fish production and fish abundances in the country spurred government efforts for the conservation and management of fisheries resources sustainably. The concern for fish conservation in the country dates back to 1950 with the promulgation of Fish Conservation Act, 1950. To address the present day needs the Act was amended in 2012. A pragmatic Fisheries Policy (Bangladesh Fisheries Policy 2000) with major focus on Inland Open Water Fisheries has been developed. The Fish Act imposes mesh size restriction, bans on use of destructive gears and methods with provision for capital and financial punishment. Bangladesh Wildlife (Conservation and Security) Act 2012 also includes several fish in Schedule 2 with provision for imposition of restriction on fishing of these species. Besides, sectoral policies of many government agencies, for example, Ministry of Environment and Forests, Ministry of Land, Ministry of Water Resources, etc., have provisions for conservation of fishes and their enhancement. As a signatory to the Convention of Biological Diversity (CBD), Bangladesh is committed to list the species that need to be brought under protection scheme, requiring an assessment of fishes.

1.3. Fish Habitats in Bangladesh

Bangladesh is primarily a deltaic country in the Ganges, Brahmaputra and Meghna (GBM) drainage systems covering an area of 1,47,570 km². The country is located in the tropics and lies in between longitudes 88°01'E and 92°41'E and latitudes 20°34'N and 26°38'N. It is bounded in the west by Indian States of West Bengal, in the north and northeast by Indian states of Assam, Manipur, Meghalaya, Mizoram and Tripura, in the southeast by Myanmar and in the south by the Bay of Bengal. The most of the country, in average, is 0-10 m above the mean sea level, some areas are 0-1m above the mean sea level (Rashid 1991) and depending on the flood depths the country is divided into 30 Agro-ecological zones (A-E Zones). The country mainly comprises the plain lands, except hilly areas in the northeastern, eastern and southeastern parts of the country. Because of its low elevation and deltaic

nature, Bangladesh forms an extensive aquatic habitat, comprising a wide range of geographically and ecologically distinct water bodies in the forms of rivers and its tributaries, haors, baors, beels and floodplains. The distribution of wetlands in Bangladesh is shown in Figure 1. The extent of water areas of the country fluctuates greatly depending on the local hydrological regimes influenced by the monsoon rains. In wet season, the areas of aquatic habitats increase enormously with the inundation of the floodplain areas and swelling of the rivers over spilling its banks. The total freshwater area of the country is estimated to be 46,99,387 ha (FRSS 2014) (Table 1) and it provides an extensive habitat supporting wide varieties of fish and other aquatic organisms.

Rivers: There are about 700 rivers including tributaries in Bangladesh constituting a waterway of total length around 24,140 km (Rashid 1991) and these form the main perennial water areas which provide both breeding and feeding habitats, and also provide dry season refuge to fish and other aquatic organisms. The rivers and estuaries cover an area of 8,53,863 ha and produce about 1,47,264 mt fish (Table 1). The major rivers are the Padma, Meghna and Brahmaputra which take its origin from Nepal and India and these rivers with their branches and tributaries form complex network of river systems. The other notable rivers are the Karnaphuli, Matamuhuri, Sangu in the southeastern part, Surma, Kushiara and Kangsha in the northeastern part and the Mahananda, Tista, Atrai, Korotoa in the northwestern part of the country. The river depths range from 2 to 5.5 m, up to 36.5 m in the coast (Rahman 2005). While most of the rivers retain water throughout the year, many secondary and tertiary rivers dry out during dry season, particularly in the northwestern and western regions of the country. All the rivers drain southward to the Bay of Bengal. They increase in numbers and size from the northwest of the northern region to the southeast of southern region. Similarly, water flow in rivers and its tributaries increases manifolds during monsoon and diminishes with the



Figure 1. Rivers and Wetlands of Bangladesh

advancement of dry periods with a very lean flow in winter and post winter. Many rivers, particularly in the northwest and southwest parts of the country, almost dry up during the lean flow period.

There are about 104 species of riverine fishes, in addition to migratory fish species that travel between rivers and floodplains and also between marine and freshwaters. Rivers also provide dry season refuge to many floodplain resident species.

Canals: Canals are narrower water channels connecting rivers and floodplains, and act as both feeding and draining channels of floodplains. In fact, these are last part of the river network system. It is the migratory route of fishes between the rivers and floodplains/beels.

Haors: Haors are natural depressions over large areas formed due to subsidence of land. These are found in the northeastern

part of Bangladesh, particularly in the Greater Sylhet and Mymensingh Districts. During monsoon haors merge with nearby water bodies forming a vast water area and sometimes it is regarded as inland sea. Haor may contain a number of beels which hold waters during dry season, when rest of the areas dry out. Haors have diverse range of fish species and contribute significantly to country's fish production (Figure 2).

Estuaries: Bangladesh has also an extensive area of water in the coastal regions and cover an estimated area of 551,828 ha (Ameen 1987). These are highly tidally influenced and may contain water of 1 ppt to 20 ppt salinity depending on the tidal stage and upstream flow. Presently, salt water from the Bay of Bengal enters more than 100 km interior into the rivers (Mollah 2008). The estuarine habitat supports some fishes representing both freshwater and narine fishes, in addition to some specialized groups of fish (Figure 3).

Figure 2. Partial view of Tangaur Haor in moonsoon

Red List of Bangladesh: Freshwater Fishes



Figure 3. A view of coastal area near Char Kukri Mukri, Charfasion, Bhola.

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Beels: Beels are saucer shaped perennial water bodies in between the river leaves and constitute a major fish production habitat in the country. The total estimated beel area in Bangladesh accounts to 114,161 ha (Table 1) and contributes about 4.2% to the country's freshwater fish production (FRSS 2014). The major beels are located in the northeastern, northwestern, south central regions of Bangladesh (Figure 1). Beel areas expand during monsoon, and are over flooded and merge with floodplains forming continuous water bodies, making it indistinguishable from the adjacent floodplains and considered a single fish production system. In the dry season, the water level goes down and reeds and sedges make them look like marshes. Some beels dry up completely and are cultivated. The peripheral parts of the beels are comparatively shallower and abundant with aquatic vegetation. During dry season the water area squeezes greatly to a minimum and retain water in the deeper core areas. Beels provide major dry season habitat, breeding and nursing grounds for both white and black fish species of the country and are considered important for aquatic biodiversity.

Baors (Oxbow lakes): Baors represent the old course of rivers, which have been cut off from the main river in course of time. Most baors are located in the southwestern part of the country. These are productive water bodies with both riverine and floodplain fish species. Baors are perennial water bodies and deeper than beels. There are 37 large oxbow lakes and another 50 smaller ones (Ameen 1987) covering a total area of about 5,488 ha and produces 6146 mt fish (FRSS 2014). Sagarkhali, Jaleshwar, Bokor, Thampara, Rampur, Kathgara, Pathanpara are some of the notable boars of Bangladesh. Baors are not much rich in fish diversity, however, harbour some important fishes.

Lakes: There are only three natural lakes in Bangladesh. These are the Rainkhyongkine (22°01'N; 92°33'E) and Bogakine (21° 59'N; 92°29'E) lakes in the Chittagong Hills and the Ashuhila Beel (25°26´N; 89°03´E) at the northern end of the Barind Tract. Kaptai Lake (22°29'N; 92°17'E) is a man-made reservoir in the southeastern part of the country. It is located in the Kaptai Upazila under Rangamati District (Figure 4). The lake was created as a result of making the Kaptai Dam on the Karnaphuli River, as part of the Karnaphuli Hydro-electric project. The total area of Kaptai Lake is 68,800 ha and its average depth is 30 m and maximum depth is 150 m. A total of 74 fish fauna, including six exotic species are reported from the Kaptai Lake.

Ponds and Ditches: Ponds are purposefully dug out pits for fish aggregation, aquaculture and /or for other purposes. There are an estimated 1.3 million fish ponds in the country, covering an area of 3,71,990 ha, of

which 55.30 percent is used for pisciculture, 28.52 percent is fish farmable and 16.18 percent is derelict (Belton et al. 2011). In general, the size of fish ponds varies between 0.020 and 20 ha with an average of 0.30 ha (Belton et al. 2011). In the past, most of the ponds were dug out for auto-stocking of fish, however, in the recent decades most of these are used for aquaculture. The auto stocked ponds are considered as dry season refuge for breeding stocks in the floodplain areas. A large variety of fish species, representing the floodplain resident and some migratory species, occur in ponds. Ditches are burrow pits, usually found along the roads and other construction areas where soils have been removed for various development purposes, and some of these may have perennial waters. Aquatic vegetation is abundant in ditches. Most ditches dry up during dry season and/or dried out for fishing. These pits support variety of fish species, mostly the floodplain resident ones.



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Floodplains: Floodplains are flat lands that are alternately exposed and inundated depending on the monsoon wet and dry seasons. In Bangladesh, most of the floodplains are cultivated lands. Floodplains cover an estimated area of 27,02,304 ha and contribute most to the country's fish production (7,01,330 mt/yr.) (FRSS 2014). These are abundant with aquatic vegetation and support a wide variety of fish species, mostly the smaller ones. Most of the fishes found in this habitat type are floodplain resident species (Ahmed, 2008). During early monsoon the connection between the rivers and the floodplains occurs due to overspills and back up waters from rivers and local rainfalls allowing the lateral migration of spawns of riverine and migratory species from rivers to floodplains and utilizes this habitat



Figure 6. A view of a typical hill stream area

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as feeding ground. Floodplains retain waters for up to 5-7 months at varying flood depths (Figure 5).

Hill Streams: A huge number of hill streams occur largely in the hilly areas of the north eastern, eastern and southeastern regions of the country and in the north central areas bordering India (Figure 6). These are fast flowing water bodies and support specialized groups of fishes, which are not usually found in the other type of water bodies. A recent study explored as many as 86 freshwater species inhabiting hill streams, many of which are exclusive inhabitants of these water bodies (Ahmed *et al.* 2013). The hillstreams have extremely low flow during dry season and pools of water at places support fish and other aquatic organisms during the dry period.

1.4. Local Hydrological Cycles and Fish Production Systems

The hydrological cycles in Bangladesh are strongly related to monsoon rains at local level, Himalayan Region and also in the upstream catchment areas. Monsoon usually starts in April with sudden burst of rain and intense rains occur from late June continues up to the beginning of October. The water area in the floodplains expands with the onset of rain, flooding major areas in Bangladesh. Peak flooding occurs in August-September and draw down starts in October and low flow occurs from December to March (FAP 17 1995). Different water bodies merge together due to flooding to form vast water areas. Many water bodies dry out during lean period, when the remaining perennial water bodies contain reduced water.

Reproduction, growth, abundance and production of fish in Bangladesh are finely tuned to the dynamic hydrological regimes of the country (Halls et al. 1999, Ahmed 2008). Fish mostly reproduce during early monsoon and may continue the same up to July for some species. As the connection between floodplains and rivers are established, lateral migration of fish between rivers and floodplains/ beels takes place. The increased shallow water areas expand the feeding grounds of migratory and floodplain resident fish species. The shallow floodplains are also used as the nursery grounds. The abundance of food in feeding grounds enhances growth of fish (de Graaf et al. 2001, Ahmed 2002). Fish growth continues during the monsoon and early recession period. Most fishes in floodplain and shallow waters are harvested during the water receding period (October to November) (Ahmed 2008), However, in comparatively deep water bodies fishing may continue until March-April (FAP 17 1995).

1.5. Red Listing of Fishes in Bangladesh: History and needs for Updating

In 2000, the IUCN Bangladesh Country Office with support from the IUCN Global Office published the first Red Data Book in Bangladesh, where a total of 895 species (including 266 species of freshwater fishes) were assessed and a total of 201 species including fishes, amphibians, reptiles, birds and mammals were considered threatened according to Bangladesh National Criteria. Among these, there were 54 threatened species of fishes. The IUCN Red Books in Bangladesh are widely consulted by the government, non-government agencies and professionals of the country, and in many ways it effectively guided conservation policies and initiatives of the country for conservation of fishes.

More than a decade has passed since the Red List Assessment was done in Bangladesh. In September, 2003, the Assessment Criteria have been changed globally and as a result most countries are re-assessing or updating their list based on the new Assessment Criteria. There is also a concern in Bangladesh for the inclusion of other faunal groups, including crabs, prawns and butterflies for assessment as these are also affected by anthropogenic activities and other natural calamities.

Since the last Bangladesh Red List Assessment, there have been changes in the threat levels as human activities have tremendously increased, on the other hand, some efforts have been taken for the protection of some species and thus an updated assessment following new criteria was felt urgent. The previous Red List is also outdated as several new species have been explored in recent times. All these demanded the Updating Species Red List in Bangladesh. The freshwater fish species are no exception to this. Therefore, there was an urgent need for Bangladesh to re-assess the status of the freshwater fishes.



UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY



2. UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY

The IUCN Red List of Threatened Species[™] is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species and their links to livelihoods. Particularly, its scientifically rigorous approach to determine risks of extinction has become a world standard. Looking back at 50 years since its implementation in 1964, the IUCN Red List of Threatened Species[™] has been successfully established as a powerful conservation tool and has achieved its goal of providing information and analyses on the status, trends and threats to species. The assessment process of "Updating Species Red List of Bangladesh" took more than two and a half years. During the process, members of the IUCN Global Species Programme, Red List Unit based in Cambridge-UK, the IUCN Species Survival Commission, technical team members of the Red List unit of IUCN Bangladesh, Bangladesh Forest Department officials, officials from the Department of Fisheries, faculties of the universities, scientists of the research institutes, as well as conservationists, species specialists, nature lovers, and partner organizations and other governmental agencies worked closely to ensure most accurate information and analysis of the most current status, trends and threats to wildlife species in Bangladesh. For this purpose, an inter-ministerial committee named 'National Committee for Updating Species Red List of Bangladesh (NC-USR)' was formed to ensure highest level collaboration among involved organizations, and sustainability of the outcome of the assessment at the policy level. Seven Red List Assessor Groups (RAGs) at project level

led by renown species specialists have been formed to coordinate the assessment process engaging species specialists/assessors. In this course of assessment of the species strategies adapted to reduce knowledge gaps, influence national conservation, and build national capacity. A total of 1619 species status under seven groups of wildlife (Mammals, Reptiles, Amphibians. Birds, Freshwater Fishes, Crustaceans and Butterflies) have been assessed. Moreover, 160 assessors were trained on the latest Red List assessment auideline (ver 3.1) engaging certified Red List trainers from IUCN Red List Unit, Cambridge, UK. A vigorous work process was applied to finish the assessment within the given timeframe ensuring highest guality, using latest species information and sharing through wider dissemination among expert groups. An interactive website (www. iucnredlistbd.org) was also published to ensure participation of all stakeholders in the assessment process as well as collecting public opinion on the draft assessment.

Assessment was started in July, 2014 and stopped in November, 2015. While the project duration was from December, 2013 to June, 2016.

2.1. Red List Assessment: from Field to Publication

Categorization of Red List and criteria set up following latest Red List guideline, managing and storing the documents supporting the category and criteria of a species, and a map of species' distribution are the components of the Red List assessment. Before an assessment can be published on the Red List, it goes through a rigorous approval process



Pre-assessment (Project Managers or Assessors): convene experts and compile data, draft supporting documentation + range map

Figure 7. Red List assessment process

(Figure 7), which is one of the reasons that Red List is respected and valued for informing conservation decisions. This process differed slightly depending on the assessors expertise but the basic process involved was: First, an individual assessor was assigned to assess one species or multiple species based on his/her expertise. The convening experts assessed and compiled the data for all the species that were assigned through the project. This information often comes from published books, articles, reports and research findings but information from the grey literatures (unpublished material) and scientists' years of experience and observations were also used. Experts then examined the data and assigned a Red List category, and criteria for the species (often working with trained project staff). They also demarcated a range map and provided supporting documentations that justify the assessment. These draft assessments were then reviewed in three steps to check and make sure that all relevant data have included in the assessment, and the assessment was done using the most appropriate available data. Lead assessors of the respective animal groups were the first reviewers to provide

comments and suggestions on the initial assessment by the assessors. The assessors then had to share their findings in a monthly review workshop participated by different wildlife specialists incorporating lead assessors comments. If there were any problems, it was returned to the assessors with an explanation of further imporvement. After the further improvement, if everything was in place, the reviewers approve the assessment and let the assessor know it was ready for submission. The assessor then checked all the assessments for consistency, proofreading and formatting before submitting to the IUCN Red List Project Unit. The Red List Project Unit scanned the assessments for obvious errors and quality was checked through engaging independent technical reviewers. If there were problems, the assessment further returned to the assessor for improvement. Lead assessors worked with the technical reviewers following a multi-step review process before sending the assessments for final approval by the Chief National Technical Expert (CNTE). Lead assessors meeting was held at regular interval to monitor progress of the assessment. The project also organized field investigations using sophisticated wildlife

survey techniques and tools to collect missing data and information that required to make conclusive assessment of some important species. In addition, surveys were carried out in different museums owned by academic and research institutions of the country to know more about the historic information of different species. Besides, to enhance exposure of the draft assessment, number of dissemination events were organized in collaboration of different organizations throughout the project period in all over the country. Finally, if the assessments were accepted by CNTE, they were properly documented. All the assessment sheets including species photographs, distribution maps and others necessary documents were also recorded in a computer based database- finally published on the Red List website (www.iucnredlistbd.org) and Red List books containing seven volumes.

2.2. Red List Assessment Tools

All the assessors were trained on latest assessment guideline and its application at the local level context. Two major tools applied during the assessment process were respectively 'IUCN Red List Categories and Criteria Version 3.1 (IUCN 2012)' and 'Guidelines for Application of IUCN Red List Criteria at Regional and National Levels Version 4.0 (IUCN 2012)' prepared by IUCN Species Survival Commission (SSC). Both of these tools are available online (www. iucnredlist.org and www.iucnredlistbd.org). A species assessment sheet designed purposefully by the IUCN Red List Unit was used for assessing an individual taxon. A sample copy of the Assessment Sheet is provided in Appendix ii.

A wide range of information were required for the assessment of species. These included, among others, species taxonomic classification and synonyms, assessment history- global and regional, global and local distribution ranges, population size and trend, Extent of Occurrence (EOO), Area of Occupancy (AOO), habitat preferences and habits, major threats and conservation measures in practice, etc.

GIS software was used to estimate AOO and EOO to assess the distribution of the taxon plotting on a 2 km² grid map of Bangladesh. The geographic range of present assessment included all the areas within the political boundary of Bangladesh, including coastal territorial waters. It included rivers, flat lands areas, reservoirs, hilly areas, mangrove areas and the estuaries. However, the assessment process sometimes considered the distributional ranges of some species in its catchment areas beyond political boundary, particularly estimating EOO, in that case, a dot line was used on the map for that particular species.

All species have given a Species Identification Number i.e. SID for the first time in



Participants of the 5th training workshop on the Red List Assessment Process

Bangladesh, which will ensure a systematic national web-based Red List database that was synchronized with the published books. Species photographs and distribution maps were also aligned with this SID. Moreover, the assessment process also generated a large number of data sheets containing relevant and required information at various stages of the assessment.

In addition, large quantity of resource materials related to training, workshops, published and grey literatures on species were collected. All these information and materials have been electronically preserved in a purposefully designed database system in the IUCN Bangladesh Country Office to be managed in the future by the IUCN itself or the Bangladesh Forest Department. This would be used as a depository of resources and could be inspected and used by stakeholders.

Red List guideline has a number of technical terms used in different section of this document to represent assessment categories and criteria of a taxon, which are described in an Appendix iii.

2.3. Red List Assessment Guideline (version 3.1)¹

2.3.1. Taxonomic Range of the Assessment Regional Red List assessment initiatives are always encouraged to follow the same taxonomic checklists as used by the global IUCN Red List (See www.iucnredlist.org/ technical-documents/information-sourceand-quality). For other taxonomic groups or any deviations from the recommended list, the differences and the taxonomic authorities followed should be specified. The categorization process should be applied only to wild populations inside their natural range and to populations resulting from benign introductions (IUCN 1998, 2001, 2012). All taxa should be assessed for which an important part of any stage of their life cycle (breeding, wintering, migrating, etc.) takes place in the region. The regional Red List should include all globally red listed taxa present within the region, including those that are Not Applicable (NA) at the regional level, and the global category should not be displayed alongside the regional assessment. Taxa formerly considered Regionally Extinct (RE) that naturally re-colonize the region may be assessed after the first year of reproduction. Re-introduced, formerly RE taxa may be assessed as soon as at least a part of the population successfully reproduces without direct support and the offspring are shown to be viable. Assessors are encouraged to assess visiting taxa. Vagrant taxa should NOT be assessed.

Following the above mentioned conditional issues of regional assessment in the case of this particular group, taxonomic checklists of the global IUCN Red List was used after selection of the all 253 fish species, which included all recorded freshwater fishes of the country, excluding the Chondrichthyes and exotic species. However, it also included the migratory species that ascend the estuaries and tidal rivers. Species included in grey literature was omitted.

2.3.2. Categories

The information in this section is intended to direct and facilitate the use and interpretation of the categories, criteria and subcriteria. The criteria applied to any taxonomic unit at or below species level. In this document, the term 'taxon' is used for convenience, and may represent species or lower taxonomic levels. The Red List Categories considered were as set out in IUCN Red List Categories and Criteria Version 3.1. There are nine categories at global scale, ranging from Least Concern (LC) for species that are not threatened, to the Extinct (EX) Category, for species that have disappeared from the earth. The IUCN Red List Categories and Criteria were designed for global taxon assessments. Hence, applying

^{1.} This is a shorter form of general guideline summarizing most common rules appropriate for Bangladesh, adapted from 'IUCN Red List categories and criteria version 3.1 (IUCN 2012)' and 'Guidelines for application of IUCN Red List criteria at regional and national levels version 4.0 (IUCN 2012)'. It is purposely written in present form of sentences so that it can be reutilized as a guiding principle for any future Red List Assessment in Bangladesh.



Figure 8. Red List categories (Regional/National Level) (IUCN 2012)
them to subsets of global data, especially at regional, national or local levels needs to refer to the guidelines prepared by the IUCN/SSC Regional Applications Working Group and the National Red List Working Group of the IUCN SSC Red List Committee (e.g. Gardenfors *et. al.* 2001; IUCN 2003, 2012). All the rules and definitions in the IUCN Red List Categories and Criteria: Version 3.1 (IUCN 2001, 2012) apply at regional levels, unless otherwise indicated in the above regional guideline.

When applied at national or regional levels it must be recognized that a global category may not be the same as a national or regional category for a particular taxon. For example, taxa classified as Least Concern globally might be Critically Endangered within a particular region where numbers are very small or declining, perhaps only because they are at the margins of their global range. Conversely, taxa classified as Vulnerable on the basis of their global declines in numbers or range might be Least Concern within a particular region where their population are stable. Similar results were found in the cases of current assessment, many species assessment results differed from their category assessed at the global level.

It is also important to note that taxa endemic to regions or nations will be assessed globally in any regional or national applications of the criteria, and in these cases great care must be taken to check that an assessment has not already been undertaken by a Red List Authority (RLA), and that the categorization is agreed with relevant RLA. In Bangladesh, during this assessment process, no such endemic species were assessed that needed to be considered for above steps. However, following the regional assessment guideline two more categories were applied (IUCN, 2012), Regionally Extinct (RE) for those species extinct locally but still exist elsewhere and Not Applicable (NA) for species those are not native to the region or country concerned. All taxa listed as Critically Endangered qualify for Vulnerable and Endangered, and all listed as Endangered qualify for Vulnerable. Together

these categories are described as 'threatened'. The threatened categories form a part of the overall scheme. All the taxa were placed into one of the categories listed in the Figure 8.

Explanation of the above categories is given below:

EXTINCT (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

EXTINCT IN THE WILD (EW)

A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

REGIONALLY EXTINCT (RE)

Category for a taxon when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD.

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.

NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

NOT APPLICABLE (NA)

Category for a taxon deemed to be ineligible for assessment at a regional level. A taxon may be NA because it is not a wild population or not within its natural range in the region, or because it is a vagrant to the region. It may also be NA because it occurs at very low numbers in the region (i.e. when the regional Red List authority has decided to use a "filter" to exclude taxa before the assessment procedure) or the taxon may be classified at a lower taxonomic level (e.g. below the level of species or subspecies) than considered eligible by the regional Red List authority. In contrast to other Red List Categories, it is not mandatory to use NA for all taxa to which it applies; but is recommended for taxa where its use is informative.

2.3.3. Criteria for Critically Endangered,

Endangered and Vulnerable The Red List Assessment is based primarily on

five broad Criteria as follows:

- Criteria A: Population reduction (measured in percent reduction of population) for different threatened categories. This criterion has four sub-criteria which further take into accounts four factors.
- Criteria B: Geographic range in the form of either B1 (Extent of Occurrences-EOO) and B2 (Area of Occupancy-AOO)
- Criteria C: Applicable for small population size and decline
- Criteria D: Applicable for very small or restricted population (used in terms of number of mature individuals)
- Criteria E: Relates to Qualitative Analysis

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 - 1. An observed, estimated, inferred or

suspected population size reduction of 90% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
- 2. An observed, estimated, inferred or suspected population size reduction of 80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
- 3. A population size reduction of 80%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
- 4. An observed, estimated, inferred, projected or suspected population size reduction of 80% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
- B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:
 - Extent of occurrence estimated to be less than 100 km², and estimates indicating at least two of a-c:

- (a) Severely fragmented or known to exist at only a single location.
- (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
- (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
- Area of occupancy estimated to be less than 10 km², and estimate indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at only a single location.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
- C. Population size estimated to number fewer than 250 mature individuals and either:
 - 1. An estimated continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR
 - 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of

the following (a-b):

- (a) Population structure in the form of one of the following:
 - i) no subpopulation estimated to contain more than 50 mature individuals,

OR

- ii) at least 90% of mature individuals in one subpopulation.
- (b) Extreme fluctuations in number of mature individuals.
- D. Population size estimated to number fewer than 50 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years).

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 - An observed, estimated, inferred or suspected population size reduction of 70% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
 - (a) direct observation
 - (b) an index of abundance appropriate to the taxon
 - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
 - (d) actual or potential levels of exploitation
 - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
 - 2. An observed, estimated, inferred or suspected population size reduction of 50% over the last 10 years or three generations, whichever is the longer,

where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

- A population size reduction of 50%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
- 4. An observed, estimated, inferred, projected or suspected population size reduction of 50% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
- B. Geographic range in the form of either
 B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
 - Extent of occurrence estimated to be less than 5,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than five locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
 - 2. Area of occupancy estimated to be

less than 500 km², and estimates indicating at least two of a-c:

- (a) Severely fragmented or known to exist at no more than five locations.
- (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
- (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
- C. Population size estimated to number fewer than 2,500 mature individuals and either:
 - An estimated continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR
 - 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
 - (a) Population structure in the form of one of the following:
 - no subpopulation estimated to contain more than 250 mature individuals,

OR

- ii) at least 95% of mature individuals in one subpopulation.
- (b) Extreme fluctuations in number of mature individuals.
- D. Population size estimated to number fewer than 250 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years).

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild:

- A. Reduction in population size based on any of the following:
 - An observed, estimated, inferred or suspected population size reduction of 50% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
 - (a) direct observation
 - (b) an index of abundance appropriate to the taxon
 - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
 - (d) actual or potential levels of exploitation
 - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
 - 2. An observed, estimated, inferred or suspected population size reduction of 30% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased or may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
 - 3. A population size reduction of 30% projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
 - 4. An observed, estimated, inferred, projected or suspected population size reduction of 30% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the

past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

- B. Geographic range in the form of either
 B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
 - Extent of occurrence estimated to be less than 20,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than 10 locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) number of locations or subpopulations
 - iv) number of mature individuals.
 - Area of occupancy estimated to be less than 2,000 km², and estimates indicating at least two of a-c:
 - (a) Severely fragmented or known to exist at no more than 10 locations.
 - (b) Continuing decline, observed, inferred or projected, in any of the following:
 - i) extent of occurrence
 - ii) area of occupancy
 - iii) area, extent and/or quality of habitat
 - iv) number of locations or subpopulations
 - v) number of mature individuals.
 - (c) Extreme fluctuations in any of the following:

- i) extent of occurrence
- ii) area of occupancy
- iii) number of locations or subpopulations
- iv) number of mature individuals.
- C. Population size estimated to number fewer than 10,000 mature individuals and either:
 - An estimated continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OB
 - 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
 - (a) Population structure in the form of one of the following:
 - i) no subpopulation estimated to contain more than 1,000 mature individuals, OR
 - ii) all mature individuals in one subpopulation.
 - (b) Extreme fluctuations in number of mature individuals.
- D. Population very small or restricted in the form of either of the following:
 - 1. Population size estimated to number fewer than 1,000 mature individuals.
 - 2. Population with a very restricted area of occupancy (typically less than 20 km²) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

See Appendix iv for a summary of five criteria used to evaluate if a taxon belongs to an IUCN Red List threatened category i.e. Critically Endangered, Endangered or Vulnerable.



1st Meeting of the National Red List Committee



Regional dissemination workshop held in Bangladesh Agricultural University

STATUS OF FRESHWATER FISHES IN BANGLADESH



3. Status of Freshwater Fishes in Bangladesh

3.1. Present Status of Freshwater Fishes

In the current assessment, a total of 253 fish species were assessed, of which, 64 species have been found Threatened, which is 25.3% of the total species assessed. The Threatened fishes comprise nine species as Critically Endangered, 30 species Endangered and 25 species as Vulnerable. 27 species of fish were assessed as Near Threatened (NT), 122 species as Least Concern (LC) and the rest 40 species were considered Data Deficient (DD). No fish was found Extinct or Regionally Extinct. The percent occurrences of Bangladesh freshwater fishes under different Assessment Categories are shown in Figure 9. Further, a group (Order) wise distribution of the freshwater fishes of Bangladesh is presented in Table 2. whereas a list of the threatened freshwater

fishes with some relevant information is provided in Table 3. The majority (53%) of the threatened fish belong to carps, barbs and loaches (Order Cypriniformes), followed by catfishes (Siluriformes) and perches (Perciformes). Status and distribution of all assessed freshwater fishes are provided in Appendix-i.

3.2. Red List Assessment 2000 vs 2015

In the previous assessment (IUCN Bangladesh 2000), a total of 266 species of fishes were assessed, of which, 54 species were considered as Threatened. Among the assessed fishes, 12 species were Critically Endangered (CR), 28 species Endangered (EN), 14 species Vulnerable (VU), 66 species Data Deficient (DD) and the rest 146 species were considered Not Threatened (NO). This shows about 18.5% increase in threatened fish in the



Figure 9. Percent distribution of freshwater fishes of Bangladesh

Table 2. Order wise distribution of different categories of threatened and non-threatened

 freshwater fishes of Bangladesh

Status Code: EX- Extinct, EW- Extinct in the Wild, RE- Regionally Extinct, CR- Critically Endangered, EN- Endangered, VU- Vulnerable, NT- Near Threatened, LC- Least Concern, DD- Data Deficient, NE- Not Evaluated.

Name of Orders	Total	Threatened species (by number)				Total	Non-threatened species (by numbers)				Total Non-		
Nume of orders	assessed	EX	EW	RE	CR	EN	VU	Threatened	NT	LC	DD	NE	Threatened
Anguiliformes	3	-	-	-	-	-	1	1	-	2	-	-	2
Beloniformes	6	-	-	-	-	-	-	-	-	3	3	-	6
Clupeiformes	17	-	-	-	-	-	1	1	-	15	1	-	16
Cypriniformes	92	-	-	-	5	19	10	34	14	27	17	-	58
Cyprinodontiformes	1	-	-	-	-	-	-	-	-	1	-	-	1
Mugiliformes	6	-	-	-	-	-	1	1	-	5	-	-	5
Osteoglossiformes	2	-	-	-	-	1	1	2	-	-	-	-	-
Perciformes	56	-	-	-	1	1	2	4	4	41	7	-	52
Pleuronectiformes	4	-	-	-	-	-	-	-	-	4	-	-	4
Scorpaeniformes	1	-	-	-	-	-	-	-	-	1	-	-	1
Siluriformes	55	-	-	-	3	8	5	16	7	21	11	-	39
Synbranchiformes	5	-	-	-	-	1	2	3	1	1	-	-	2
Syngnathiformes	3	-	-	-	-	-	2	2	1	-	-	-	1
Tetratodontiformes	2	-	-	-	-	-	-	-	-	1	1	-	2
Total	253	-	-	-	9	30	25	64	27	122	40	-	189



Figure 10. Comparison of threated frishwater fishes of Bangladesh between IUCN 2000 and 2015 assessment.

2015 assessment over the previous assessment carried out in the Year 2000. However, there is a decrease in Critically Endangered species by 25% in the current assessment, whereas the Endangered and Vulnerable species showed increases by 21.4% and 78.5%, respectively, compared to the previous assessment. Of the 12 Critically Endangered species in the previous assessment, only six species have been reassessed as Critically Endangered and four species has down graded to Endangered and another two species (Eutropiichthys vacha and Silonia silondia) have been pushed up to Least Concern (LC) category in the current assessment. The Data Deficient Category also decreased in the current assessment by 40.9%, indicating an improvement in the availability of information on the Bangladesh fishes. In addition to 64 Threatened species, another 27 species have been assessed as Near Threatened in the present assessment. All these signify that in Bangladesh the threats to fish have not been reduced, rather increased and little has been done to protect the threatened fishes in Bangladesh since the year 2000. However, it is difficult to discern whether the assessment methods have any impacts on the observed differences on the number of

Threatened species between two assessments. Figure 10 compares the number of threatened species between IUCN Red List Assessment 2000 and 2015.

3.3. Global vs. Bangladesh National Assessment

Of the 253 freshwater fish species assessed in Bangladesh, a total of 189 fish species was also assessed globally (IUCN 2013), applying the same assessment Criteria as used as in the present assessment (version 3.1). None of the Critically Endangered (CR) and Endangered (EN) fishes of Bangladesh was assessed Threatened globally, however, only four species of Bangladesh fishes considered Vulnerable (VU) globally, of these two species are also Vulnerable (VU) nationally in current assessment. Of the globally threatened Bangladesh fishes, Cirrhinus cirrhosus is Near Threatened (NT), Devario anomalus is Least Concern (LC), Botia rostrata is Data Deficient (DD) and Monopterus cuchia is Vulnerable (VU) in Bangladesh. This clearly indicates that almost all Bangladesh Threatened freshwater fish species are not globally Threatened, which means that although these species have declined locally in Bangladesh waters,



Figure 11: Percent distribution of different categories of freshwater fishes in global assessment (IUCN 2013)

these are comparatively abundant within its global or regional distribution ranges. Of the 64 threatened fish species of Bangladesh, only two species have been considered threatened (Vulnerable) globally. The rest of the threatened fishes of Bangladesh have been globally assessed as 12 species Near Threatened, 41 species Least Concern (LC), one species Data Deficient (DD) and another seven species have not been evaluated globally. The percent distribution of Bangladesh freshwater fishes under different assessment categories according to global assessment (IUCN 2013) is shown in Figure 11

3.4. Large Fish vs. Small Threatened Fishes

The analysis of the assessment results shows that most of the Threatened species (about 80%) belong to medium to smaller (below 25 cm) fish groups. In Bangladesh, the smaller fishes are dominant group by species number and therefore, the percent occurrences of the Threatened fishes probably simply reflect the proportionate occurrences of small fishes in the country. Large fishes are predominantly riverine and usually inhabit larger river systems. Although, their habitats are altered greatly by siltation but still these hold plenty of water during dry season and thus complete



Figure 12. Local distribution ranges of threatened freshwater fishes of Bangladesh

fishing does not occur. On the other hand, smaller fishes mostly occupy various habitats, predominantly in small tributaries, floodplains and other smaller water bodies and many of these dry out during dry season. These fishes are also largely affected by pesticides, over fishing, like dewatering, use of small mesh size,etc.

3.5. Local Distribution Ranges of Threatened Fishes

Although most fish species in Bangladesh are widely distributed within the country, however, many species show localized distribution. Figure 12 shows the local distribution ranges of the threatened fishes in Bangladesh. The majority (in the range of 30-40 spp) of the threatened fishes are found mainly in the northwestern and northeastern parts of the country, while limited number of threatened species is found in the southern parts of the country (in the range of 10-20 spp). Some parts of northwestern, north central and northeastern and southeastern regions of the country also have moderate number of threatened fishes (in the range of 20-30 spp.). This distribution of Threatened fishes is probably related to the observed widespread habitat loss in the northern parts, compared to the southern parts of the country where rivers are still wider and deeper. The northeastern, northwestern and southeastern hilly areas of the country also support a good number (12 species) of Threatened species. This is again attributable to the widespread degradation to hill streams caused by siltation, removal of boulders and pebbles and increased fishing pressure.

3.6. Resident Categories and Habitat Preference of Threatened Fishes

Three resident categories of freshwater fishes, *viz.* Riverine, Migratory and Floodplain resident, are recognized in Bangladesh. The riverine fishes breed and feed in rivers, although they could be occasionally found in floodplains and beels, floodplain resident species breeds and

Table 3: Status of Threatened Freshwater Fishes in Bangladesh (arranged in taxonomic order) Status code: CR-Critically Endangered; EN-Endangered; VU-Vulnerable; NT-Near Threatened; LC-Least Concern;

SI. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Habitat	Species ID
1	Anguilliformes	Anguillidae	Anguilla bengalensis	Indian Mottled Eel, Giant Molted Eel, Mottled Eel	Bamosh, Banehara, Bao Baim, Bao Mach, Boa Baim, Telkoma	VU	NT	R	F10046
2	Clupeiformes	Clupeidae	Gudusia chapra	Indian river shad	Chapila, Chaipla, Suiya, Khaira	VU	LC	FP	FI0062
3	Cypriniformes	Cyprinidae	Chela cachius	Silver hatchlet barb	Chhep chela	VU	LC	FP	FI0018
4	Cypriniformes	Cyprinidae	Aspidoparia morar	Aspidopara	Morari, Morar, Piali, Piasi	VU	NE	R	FI0040
5	Cypriniformes	Cyprinidae	Barilius tileo	Tileo baril, Morari	Tila, Tila Koksa, Patharchata, Khorki	EN	LC	R	FI0043
6	Cypriniformes	Cyprinidae	Barilius barna	Barna Baril	Koksa, Bani Koksa	EN	LC	R	FI0066
7	Cypriniformes	Cyprinidae	Barilius bendelisis	Hamilton's Baril, Hill Trout	Tila, Chedra, Koksa	EN	LC	R	FI0067
8	Cypriniformes	Cyprinidae	Barilius vagra	Vagra Baril, Hill Trout	Khoksa, Vagra	EN	LC	R	FI0068
9	Cypriniformes	Cyprinidae	Megarasbora elanga	Bengala Barb	Elong, Sephatia, Elanga	EN	LC	R	FI0069
10	Cypriniformes	Cyprinidae	Chagunius chagunio	Chaguni	Jarua, Utti	VU	LC	R	FI0071

SI. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Habitat	Species ID
11	Cypriniformes	Cyprinidae	Crossocheilus latius	Gangetic Latia, Hill- stream Carp	Kala Bata	EN	LC	HS	FI0074
12	Cypriniformes	Cyprinidae	Danio dangila	Dangila Danio, Moustached Danio, Olive danio	Nipati, Gofi Chela	VU	LC	HS	FI0075
13	Cypriniformes	Cyprinidae	Devario anomalus	Anomalus Zebra	Unknown.	EN	VU	HS	FI0078
14	Cypriniformes	Cyprinidae	Garra annandalei	Annandale Garra, Tunga Garra, Log Sucker, Stone Roller	Ghor Poia	EN	LC	HS	FI0081
15	Cypriniformes	Cyprinidae	Garra gotyla	Gotyla, S ucker Head	Ghor Poia	EN	LC	HS	FI0082
16	Cypriniformes	Cyprinidae	Labeo ariza	Ariza Labeo	Lasso, Raik, Bata	VU	LC	R	FI0084
17	Cypriniformes	Cyprinidae	Labeo boga	Boga Labeo	Bhangan, Bhangan bata	CR	LC	R	FI0086
18	Cypriniformes	Cyprinidae	Labeo boggut	Boggut Labeo	Ghonia, Paharia maach, Naru maach	VU	LC	R	FI0087
19	Cypriniformes	Cyprinidae	Labeo nandina	Nandi Labeo	Nandil, Nandi, Nandina	CR	NT	R	FI0093
20	Cypriniformes	Cyprinidae	Labeo pangusia	Pangusia Labeo	Ghora maach, Longu, Ghora Muikha	EN	NT	R	FI0094
21	Cypriniformes	Cyprinidae	Oreichthys cosuatis	Cosuatis Barb	Kosuati punti, Kosua punti, Titkinda, Tit punti	EN	NE	FP	F10096
22	Cypriniformes	Cyprinidae	Osteochilus hasseltii	Bonylip barb; Hard- lipped Barb; Silvershark Minnow	Unknown.	VU	LC	HS	F10097
23	Cypriniformes	Cyprinidae	Pethia ticto	Two-spot Barb, Firefin Barb, Ticto Barb	Tit punti	VU	LC	FP, HS	FI0107
24	Cypriniformes	Cyprinidae	Raiamas bola	Trout barb; Bengal trout	Bole	EN	LC	R	FI0108
25	Cypriniformes	Cyprinidae	Tor putitora	Putitor mahseer, Golden	Mohashol, Mohsheer	EN	NT	R	FI0112
26	Cypriniformes	Cyprinidae	Tor tor	Tor Mahsheer	Mohashol,	CR	NT	R	FI0113
27	Cypriniformes	Cyprinidae	Neolissochilus	Copper	Unknown.	EN	NT	HS	FI0114
28	Cypriniformes	Balitoridae	Schistura	Not known	Dari	EN	LC	HS	FI0122
29	Cypriniformes	Balitoridae	Schistura corica	Polka Dotted	Khorka, Khorki	CR	LC	HS	FI0124
30	Cypriniformes	Balitoridae	Schistura scaturigina	Victory Loach	Dari	EN	LC	HS	FI0126
31	Cypriniformes	Cobitidae	Botia dario	Necktie Loach, Queen Loach, Bengal Loach	Rani Mach, Bou Mach	EN	LC	R	FI0127
32	Cypriniformes	Cobitidae	Botia dayi	Hora Loach, Botya Loach	Rani, Betangi	EN	NE	R	FI0128
33	Cypriniformes	Balitoridae	Botia lohachata	Y-loach, Reticulate Loach	Rani, Putul, Beti	EN	NE	R	FI0129

SI. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Habitat	Species ID
34	Cypriniformes	Cobitidae	Lepidocephalichthys annandalei	Annaldale Loach	Gutum, Puiya	VU	LC	FP, R	FI0132
35	Cypriniformes	Cobitidae	Lepidocephalichthys irrorata	Loktak Loach	Puiya	VU	LC	FP, R	FI0134
36	Cypriniformes	Cobitidae	Neoeucirrhichthys maydelli	Goalpara Loach	Unknown.	CR	LC	R	FI0135
37	Mugiliformes	Mugilidae	Sicamugil cascasia	Yellowtail Mullet	Bata, Kachki, Kachki Bata, Kechi Khalla	VU	LC	ET	FI0214
38	Osteoglossiformes	Notopteridae	Chitala chitala	Humped Featherback, Clown Knife Fish	Chital	EN	NT	R	FI0044
39	Osteoglossiformes	Notopteridae	Notopterus notopterus	Grey Featherback, Freshwater Knife Fish	Foli, Haila, Kanla	VU	LC	FP	F10045
40	Perciformes	Channidae	Channa barca	Barca Snakehead	Pipla, Pipla Shol, Tila, Tila Shol, Pipla Ool, Tia Shol, Bakka, Tati	CR	DD	FP	F10003
41	Perciformes	Channidae	Channa marulius	Giant Snakehead, Great Snakehead	Gajar, Gajal, Gajori	EN	LC	FP	F10005
42	Perciformes	Gobiidae	Awaous grammepomus	Scribbled goby	Shil Baila, Bele	VU	LC	ET, R	FI0019
43	Perciformes	Gobiidae	Eugnathogobius oligactis	Tiger Goby	Bele	VU	LC	ET, R	FI0034
44	Siluriformes	Bagridae	Batasio tengana	Dwarf Catfish	Tengra	EN	LC	R	FI0139
45	Siluriformes	Bagridae	Rita rita	Rita	Rita	EN	LC	R	FI0148
46	Siluriformes	Bagridae	Sperata aor	Long- whiskered Catfish	Air, Ayre, Bhangat, Talla Ayre	VU	LC	R	FI0149
47	Siluriformes	Bagridae	Sperata seenghala	Giant River- catfish	Guji, Guijja, Guijja Ayre, Bhangat	VU	LC	R	FI0150
48	Siluriformes	Siluridae	Ompok bimaculatus	Butter Catfish, Two Spot Glass Catfish	Kani Pabda, Boali Pabda	EN	NT	FP	FI0151
49	Siluriformes	Siluridae	Ompok pabda	Pabda catfish, two stripe Gulper catfish	Pabda, Madhu pabda, Paibba	EN	NT	FP	FI0152
50	Siluriformes	Siluridae	Ompok pabo	Pabo Catfish	Pabda, Kala Pabda	CR	NT	FP	FI0153
51	Siluriformes	Siluridae	Wallago attu	Freshwater shark	Boal, Boali,, Patari, Boyari, Boayair, Keyali.	VU	NT	R	FI0154
52	Siluriformes	Schilbeidae	Clupisoma garua	Garua Bacha, Gagra	Ghaura, Gharua, Gagra, Garua Bacha, Guarchcha	EN	NE	R	FI0157
53	Siluriformes	Pangasiidae	Pangasius pangasius	Pungas, Yellowtail Catfish, Pungas Catfish	Pangas, Pangwash	EN	LC	R, ET	FI0158
54	Siluriformes	Amblycipitidae	Amblyceps laticeps	Indian Torrent Catfish.	Chhota Shingi	VU	LC	R	FI0160

SI. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Habitat	Species ID
55	Siluriformes	Sisoridae	Bagarius bagarius	Gangetic Goonch, Devil catfish, Fishbase name: dwarf Goonch	Baghair, Baghari, Bagh mach.	CR	NT	R	FI0161
56	Siluriformes	Sisoridae	Glyptothorax telchitta	Copper Catfish	Teli, Telchitta	VU	LC	R	FI0167
57	Siluriformes	Sisoridae	Sisor rabdophorus	Sisor Catfish	Chenua; Cheuna; Sisor, Sai Sore	CR	LC	R	FI0174
58	Siluriformes	Chacidae	Chaca chaca	Squarehead or Angler Catfish	Chaka, Gangainna, Chaka Veka	EN	LC	FP	FI0183
59	Siluriformes	Olyridae	Olyra longicaudata	Longtail Catfish, Himalayan Olyra, Bannertail Catfish	Bot Shingi	EN	LC	HS	FI0184
60	Synbranchiformes	Synbranchidae	Monopterus cuchia	Gangetic mudeel; swamp eel	Kuchia, Cuchia, Kuiccha; কুচিয়া, কুইচ্চা	VU	VU	FP	FI0196
61	Synbranchiformes	Synbranchidae	Ophisternon bengalense	Bengal eel; Pygmy eel	Bamosh	VU	LC	ET, R	FI0197
62	Synbranchiformes	Mastacembelidae	Mastacembelus armatus	Tire-track Spinyeel	Baim, Sal Baim,	EN	NE	R	FI0243
63	Syngnathiformes	Syngnathidae	Microphis cuncalus	Crocodile Tooth Pipefish	Kumirer Khil, Kumirer Kona	VU	LC	ET, R	FI0194
64	Syngnathiformes	Syngnathidae	Microphis deocata	Deocata Pipefish	Kumirer Khil	VU	NT	ET, R	FI0195



Figure 13. Habitat preference of the threatened freshwater fishes of Bangladesh.

feeds in the floodplain areas and beels, but may take refuge in rivers during dry periods. The migratory fishes perform lateral migration between rivers and floodplains as strategies of their life cycles. Another group could be regarded as hill stream inhabitant. These fishes primarily feed and bread in hill streams.

In the present assessment, another group of fish inhabiting estuarine fishes has been assessed and categorized as estuarine. These fishes are found in estuarine areas. many of these migrate from sea to estuaries and some of these ascend tidal rivers. Accordingly, of the threatened fishes of Bangladesh, 33 species are riverine, 14 species floodplain resident, 6 species estuarine and another 11 species are exclusively hill stream inhabitants. Among the riverine species, at least 11 species are migratory in habit and travel to floodplain during monsoon for feeding or spawning. The percent occurrences of the Threatened species according to their habitat preference and resident category are shown in Figure 13 and Table 3. The categorization of fish according to habitats sometimes is arbitrary and tricky, as many species are widely distributed within different habitat types depending on the life stages, hydrological regimes and critical survival periods. For example, when floodplain areas dry out during winter, many floodplain resident species find their way into nearby perennial water bodies, like rivers.

3.7. Threats to Freshwater Fishes in Bangladesh

The rapid increase of human population and subsequent intensification of natural resource utilization, agricultural and industrial activities along with deficient water management have led to the enhancement of threats for freshwater fish extinction. Although, some species respond positively to anthropogenic pressures, the great majority show only limited tolerance of increasingly widespread and rapid changes to ecosystems. It is widely recognized that changes in the fish habitats in Bangladesh caused due to both natural and anthropogenic processes have led to the high degree of population decline and disappearances of some fish species from the country. Siltation of water bodies is also reducing the fish habitat. The major human induced impacts on freshwater fishes of Bangladesh are habitat destruction and fragmentation through blockade of migration routes, invasive alien species, over-exploitation, disease, aquatic pollution incidental mortality and climate change.

3.7.1. Habitat Loss

Bangladesh is probably losing its wetlands faster than any other habitat types, caused primarily due to massive siltation, conversion of wetlands, development interventions, like implementation of flood control projects, constructions of roads, townships and other developmental infrastructures. Being located in the lower basins of the mighty river systems that drain from Himalayan catchment areas, the aquatic habitat of Bangladesh is particularly affected by massive siltation causing widespread habitat loss in the country. In fact, siltation of water bodies contributes mostly to the aquatic habitat loss and degradation in Bangladesh (Craig et al. 2004). An estimate shows that the rivers carry annually 2.4 billion mt silts, which is deposited on the river beds and floodplains and beel bottoms (Spillmann and Bachler 1993). This has caused river bed and beel bottom up, rendering these to drying during lean flow periods or reducing its depths below the critical levels, unsuitable for fish to thrive. The erosion in the Himalayan areas and river banks generate this massive amount of silts. Conversion of wetlands is mainly done for claiming agricultural lands is also a major and widespread cause for the loss of wetlands in the country. In the past, huge water areas, particularly the peripheral areas of beels and marshes have been converted to agricultural fields and the process is still continuing. Similarly, expansion of human settlements and township into the wetlands by filling with dredged materials also contribute to that process. In Bangladesh, construction of embankments for the purpose of protection from tidal inundation and flood control and irrigation have contributed greatly to the degradation of wetlands and consequently to its resources. This intervention resulted in the control flooding reducing the viable areas

for fish growth and reproduction (Mirza and Ericksen 1996) Embankments along the river banks restricts the lateral migration of fishes, thus disrupt the river-floodplain fish production system having detrimental impacts on fish production. Convincing evidences suggest that the flood control interventions significantly reduced the fish diversity and its production (FAP-17, 1995). Similarly, construction of extensive road and cross road network across the floodplain areas of Bangladesh with little or/no fish passes has severely fragmented the wetlands. This fragmentation process restricts the movement of fish, which results in smaller, more isolated sub-populations of fish, with reduced possibilities for dispersal and increased risks of local and ultimately global extinction (Figure 14).

The rivers of the northern, western and northeastern parts of the country are particularly severely affected by siltation to such a state that most rivers of these areas dry up during lean flow periods and also these are squeezed to such an extent that now many of these are not recognizable as rivers. Beels and floodplain of these areas have also lost their depths greatly, no longer able to support many fish species.

3.7.2. Over and Unplanned Exploitation High demand and high price of fishes, coupled with country's high unemployment situation resulted in putting increased efforts in fishing and very often these lead to over-exploitation of aquatic resources, particularly the fishes. The situation has also aggravated because of invention and adoption of destructive fishing methods, practices, like use of small mesh size nets and monofilament gill nets, poisoning, dewatering of water bodies, etc. Because of poor implementation of fish acts and poor/or lack of management practices in the country, juvenile and brood fish exploitation continues, often leading to reproductive failure, hampering the future recruitment of fish. Overfishing not only affects the commercial species but also affects the non-targeted small species as by-catches. Fishing by dewatering of water bodies, particularly in winter (dry season) is another destructive fishing method, common

in Bangladesh which kills indiscriminately all aquatic organisms. Beel and floodplain resident species (black fishes) usually take shelter in ditches or pits in winter, fishing by dewatering of those water bodies kills all spanners resulting 'recruitment over fishing' for that population. This is characterized by a greatly reduced spawning stock, a decreasing proportion of older fish in the catch and generally very low recruitment year after year. In Bangladesh, over-and unplanned fishing, thus remain as a major widespread threat to fish.

3.7.3. Aquatic Pollution

Use of pesticides and fertilizers: The boosting up of crop production to meet the demands of the ever increasing population often involves the use of pesticides and fertilizers in the crop fields. Pesticides are poisons and thus are detrimental to aquatic life forms, affect ecosystem integrity and disrupt its functioning (Parveen and Faisal 2002). Many pesticides are persistent and

others degrade slowly and have a residual effect once it enters into the environment. Bangladesh uses huge amount of pesticides and fertilizers in crop fields. These pesticides ultimately find their way into the aquatic ecosystems. At present, the pesticide use in the country amounts to 13,000 mt (Banglapedia 2012). Pesticides are lethal at higher concentrations to fish and may cause fish mortality when sublethal concentrations may affect the growth, survival and reproduction of fish having adverse impacts on fish and fisheries (Pingali and Gerpacio 1997). The inundated floodplains of Bangladesh during monsoon are the seasonal habitat for the many indigenous fishes. The residual effects of pesticides applied to these floodplains for agricultural purpose before monsoon lead to the fish mass mortality (Rohar and Crumrine 2005).

Discharges from industries and municipal sewerage: Discharges of untreated sewerage



Figure 15. Untreated industrial effluents and municipal discharge

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waters and industrial effluents into the water bodies have been a concern for localized aquatic pollution resulting in fish kills in many instances. Disappearances of fish from many water bodies have been attributed to pollution of water bodies by industries in many areas of the country. Rivers surrounding and nearby the townships are highly contaminated. The effluents from dyeing, leather, chemical, paper, etc., industries are major sources for aquatic pollution in Bangladesh. Similarly, municipal sewerage discharges also into open waters also pose serious threat to freshwater fishes locally. The most polluted rivers in Bangladesh include the Buriganga, Turag, Shitalakkha, Balu, Meghna, Karnaphuli, Surma, Dhaleswari, etc. (Figure 15)

3.7.4. Introduction of Exotic Fish

Over the last six decades, at least, 24 fishes have been introduced in Bangladesh, mostly for aquaculture purpose (Rahman 2005, Hossain 2014). Almost all the introduced species were meant only for captive cultivation in closed pond systems, but nobody succeeded to maintain the fish in captivity. During monsoon and/or flood the escapees easily found their way to the rivers and floodplains throughout the country. Sometimes, introduced or escaped fish may become established in natural and seminatural ecosystems or habitats as an invasive alien species and thus could be an agent of ecological catastrophe. All over the world the exotic species is recognized as an agent for the loss of indigenous biodiversity. Alteration of species abundance and ecosystem caused by exotic invasive animals and plants influence the functioning and overall health of the affected ecosystems.

The impacts of introduced fish species on local fishes have not been assessed properly in Bangladesh as there is a serious lack of information to arriving at any conclusion. Hossian (2014) have compiled the potential risks of the exotic fishes on our local biodiversity. These include predation by the exotic species, changes and disruption in food chain, transmission of diseases, competition for food and shelter, etc. In addition, a large number of ornamental fishes have also been imported in Bangladesh and many of them are locally bred. Although, there is less risk on local fishes from ornamental fish, however, careless dealing with those may lead to a catastrophe.

3.7.5. Impact of Climate Change on Freshwater Fishes

The impacts and expected consequences of climate change are uncertain and often fall outside the time window used for Red List assessments. Recent work examining the potential consequences of climate change across a range of global habitats suggests that floods or exceptionally large seasonal pulses and droughts or prolonged dry spells can cause population declines, reduced abundance and altered species composition (Ashely et al. 2007). As a result, changes in variability could select for generalist species or those with the ability to rapidly colonize defaunated habitats and possibly lead to a loss of locally adapted ones (Poff et al. 2001). Small increases (1–2 °C) in temperature may be sufficient to have sub lethal effects on tropical fish physiology and reproduction in particular, when they are combined with the possible effects of an altered hydrologic regime. It is evident that the annual growth patterns and spawning dates of some carps correspond to local flow regimes. There is a serious lack of information on the climate change impacts on freshwater fishes of Bangladesh. However, several authors have listed the predicted impacts on our local fishes as follows: recruitment failure, poor growth, increased disease prevalence, etc. (NAPA 2005, Mollah 2011).

CONCLUSION AND RECOMMENDATIONS



4. CONCLUSION AND RECOMMENDATIONS

The ultimate purpose of Species Red Listing is to contribute towards the conservation of faunal and floral species so that these do not become extinct in future. Updating of Red List in Bangladesh is again a milestone towards Bangladesh's efforts for conservation of biodiversity. It is an expectation of the present Red Listing that it would be utilized and consulted in country's conservation planning, while the policy makers and conservation managers are well informed about the status of the freshwater fishes of Bangladesh. It is also expected that it will create a new momentum in biodiversity conservation in the country. For effective use of this document and conservation of the country's biodiversity the following recommendations are put forward:

4.1. General Recommendations

- Effective dissemination of this Red List Book for informing entire range of stakeholders remains an imperative. Various awareness raising tools, including holding of workshops, use of electronic and print media, discussion meeting with decision makers, policy makers, civil and professional societies are to be organized to informing them on the current state of Bangladesh freshwater fishes, its future implications and need for undertaking conservation activities on priority basis.
- Efforts should also be taken to include Red List information in school, college and university course curricula to inform the students about the Red List and conservation needs of the country's biodiversity.

4.2. Legal and Policy Recommendations

- The present Fish Conservation Act of the country does not include the Threatened species for conservation. It is strongly suggested that the current fish acts need to be amended with provision for conservation and management of the threatened species.
- Wildlife (Conservation and Security) Act, 2012 also needs to be amended with more focus on threatened fish species.
- Sectoral policies on fish should also put more emphasis on the conservation of fishes, particularly the conservation of threatened species.

4.3. Conservation Measures

- It is highly recommended to draw up and implement a Species Action (Recovery) Plan for all Bangladesh freshwater fish species.
- The loss and degradation of aquatic habitats, particularly that of rivers need to be prevented.
- An elaborate program should be taken to rehabilitate the degraded aquatic habitats through reexcavation of water bodies, opening of connective channels, construction of fish passes, etc.
- There is a need for the strict imposition of ban on the discharge of untreated industrial effluents and municipal discharge into aquatic habitats.
- Use of long persistent pesticides must be banned. A guideline for the use of pesticides must be developed and implemented with

focus on environmental and fisheries protection.

- A strong water quality monitoring scheme should be developed on aquatic pollution and water quality.
- Further conversion of wetlands must be stopped and adequate fish passes must be constructed while implementing any flood protection projects or construction of roads and highways.
- Any development interventions must be screened for its impacts on fishes and other aquatic organisms, and provision for corrective measures must be strictly maintained.
- More fish sanctuaries must be established, particularly in the northwest, northwest and northcentral regions of the country and these should be effectively be managed and maintained.
- Massive awareness raising on the impacts of destructive fishing, like dewatering, use of destructive gears, etc. should be conducted and strong monitoring against these should be taken.

4.4. Recommendations on Future Works

- It will be necessary to periodically update the Red List of the country on a regular basis, particularly that of freshwater fishes in order to accommodate the accrued knowledge and information and also in response to the changing scenarios.
- There is also an urgent need for the preparation of Red List Index on freshwater fishes with a view to monitor the progress towards reducing the losses of freshwater fishes
- The present assessment was constrained by poor or lack of quantitative information, particularly data on population size and trend, distribution and precise threats. Therefore, future studies and researches in fisheries need to focus

on these.

• An elaborate monitoring protocol should be undertaken for the threatened fish species in order to track the changes in population of the threatened fishes.

4.5. Expected Application of the Assessment

- This assessment exercise has gathered huge amount of data on species distribution, population trend, ecology, threats, habitats, etc. These data could be easily available from website of IUCN and thus could be used as an information source for use by the academics, conservation planner and researchers.
- This assessment could be considered as key resources for policy makers, conservation managers and development planners.
- The Red Book could be used for the following purposes,
- Conservation planning and priority setting for fish conservation
- Guiding policy formulation for conservation and management
- Influencing future allocation for conservation in the country
- Education and public awareness about biodiversity conservation



Conclusion and Recommendations

SPECIES PROFILE





Schistura corica

Species ID: FI0124

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Schistura corica (Hamilton, 1822) English Name: Polka Dotted Loach Bengali Name: Khorka, Khorki Synonym/s: Cobitis corica Hamilton, 1822 Schistura punctata McClelland, 1839

Cobites cinerea Swainson, 1839 Nemachilus corica Shaw and Shabbeare, 1937 Noemacheilus corica Menon, 1987

Taxonomic Notes: Hamilton (1822) described the species as *Cobitis corica*. In recent update, Kullander *et al.* (1999) placed the species under the genus *Schistura*.

Assessment Information

Red List Category & Criteria: CR B1ab(i,ii,iii,iv)+2ab(i,ii,iii,iv) ver 3.1

Justification: A large number of *Schistura corica* was observed by Rahman (1989) in the two locations -Rangapani Khal of Sylhet (6 km NW of Jaintapur on Sylhet-Shillong highway) and the river Jagat (7 km east of Rangpur on Badargonj highway). However, since then, there was no published record of the species in Bangladesh. In 2009, the fish was observed in the Someswari in Susong Durgapur, Netrokona (one incidence, 25.03.09 pers obs). The species was not recorded from anywhere else in Bangladesh and almost no information is available about it. Given the threats facing the location where the fishes are found (ever increasing human settlement, agricultural and industrial pollution, overfishing, prolonged drought causing seasonal drying out of river Someswari etc.), it is inferred that its population will further





Schistura corica

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decline with a possibility of total extinction and hence the species is assessed as Critically Endangered.

Date Assessed: 20 November 2014

History

Regional Status: This taxon has been assessed as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Afghanistan, Bangladesh, India, Nepal and Pakistan (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: The species occurs in the River Someswari, Susong Durgapur, Netrokona (Rahman 1989).

EOO: 625 km² AOO: 236 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Its preferred habitat is clear waters of hill streams with sandy bottom. It is also available in large river with high, turbid monsoon flow and with diverse substrate consisting of sand, mud, gravel, pebble, cobble, and boulders. It feeds on insect larvae, shrimps, aquatic vegetations, etc.

Assessor: Mostafa Ali Reza Hossain

Neoeucirrhichthys maydelli

Species ID: FI0135

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Neoeucirrhichthys maydelli Banarescu and Nalbant, 1968 English Name: Goalpara Loach Bengali Name: Not Known Synonym/s: Not Known Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: CR B1ab(i,ii,iii,iv)+2ab(ii,iii,iv) ver 3.1

Justification: *Neoeucirrhichthys maydelli* was recorded by Rahman (1989) from three locations: Sari River and Lubachhara in Sylhet and Tangan River in Thakurgaon. However, since then there was no sighting record in Bangladesh. In 2009, the fish was observed in the Someswari in Susong Durgapur, Netrokona (one incidence, 25.03.09 pers obs). Given the threats facing the location where the fishes are found it can be inferred that its habitat quality will deteriorate more and population will further decline with a possibility of total extinction of the species. Therefore, *N. maydelli* is assessed as Critically Endangered.

Date Assessed: 30 November 2014

History

Regional Status: This taxon has been assessed as Data Deficient (IUCN Bangladesh 2000).





Neoeucirrhichthys maydelli

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Geographic Range

Global: It occurs in Bangladesh, India and Nepal (Rahman 1989, Sherstha 2008, Talwar and Jhingran 1991).

Bangladesh: The fish has been recorded from the Sari River and Lubachhara in Sylhet and Tangan River in Thakurgaon (Rahman 1989). Also reported from Someswari river in Susong Durgapur, Netrokona (pers. obs.).

EOO: 624 km² AOO: 237 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in shallow slow moving streams with sandy, silty and gravel bottom. This is also found in flooded wetland (Sherstha 2008).

Assessor: Mostafa Ali Reza Hossain

Labeo boga

Species ID: FI0086

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo boga (Hamilton, 1822) English Name: Boga Labeo Bengali Name: Bhangan, Bhangan Bata Synonym/s: Cirrhina boga Hamilton, 1822 Cyprinus boga Hamilton, 1822 Gobio boga Hamilton, 1822 Labeo boga Day, 1878 Labeo boga Shaw and Shebbeare, 1937 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: CR B2 ab(ii,iii,iv) ver 3.1

Justification: *L. boga* is known from few locations of the country and is rare within its habitat ranges (Rahman 2005). Although, the estimated Extent of Occurrence (29,884.84 km²) and Area of Occupancy (855.33 km²) are above the upper threshold values for any IUCN Threatened Category, however, a number of threats, including habitat loss, over exploitation and pollution, probably contributing to its apparent population decline. The fish was earlier assessed as Critically Endangered in the country (IUCN Bangladesh 2000) and since then, there has been no improvement in its abundance nor the threats were removed or reduced. Hence, the Threatened Category Critically Endangered is retained.

Date Assessed: 25 August 2014

History

Regional Status: The species has been considered as





Labeo boga

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Critically Endangered (CR) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *L. boga* is known to occur in Bangladesh, India, Myanmar, Nepal and Pakistan (Menon 1999).

Bangladesh: This fish has been recorded from only few locations in Bangladesh, including Padma River (Hossain and Haque 2005), Baral River (Flowra *et al.* 2013.), Chalan Beel (Hossain *et al.* 2009) and Kanchan River, Dinajpur (Rahman 2005).

EOO: 29,885 km² **AOO:** 855 km²

Population

Generation Time (Length): Unknown.

Total Population: Empirical data on the total population on the species are not currently available. However, the fish is rarely found in fish catches. Trend: Unknown.

Habitat and Ecology

It is a freshwater species, inhabits large rivers and their tributaries, above tidal influence (Menon 1999). This fish spawns in flooded rivers (Talwar and Jhingran 1991). It is a potamodromous bentho-pelagic species, feeds on phytoplankton, plants and crustaceans (Rahman and Ruma 2007).

Assessor: M. Niamul Naser Associate Assessor/s: Gawsia Wahidunessa Chowdhury

Labeo nandina

Species ID: FI0093

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo nandina (Hamilton, 1822) English Name: Nandi Labeo Bengali Name: Nandil, Nandi, Nandina Synonym/s: Cyprinus nandina Hamilton, 1822 Rohita nandina Valenciens, 1842 Labeo nandina Day, 1877 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: CR A2abcd ver 3.1

Justification: Although, distribution of Labeo nandina in the country has been stated to be limited in the rivers and beels of the northeastern region, particularly in the Greater Sylhet and Mymensingh Districts in the past (Rahman 2005, Islam 2007), however, in the recent decades the fish has rarely been seen in the area. During 1960' this fish was fairly common, but it was found rare during 90's (Tsai and Ali 1987). The population further declined subsequently due to habitat loss and over exploitation and in 2005 the fish was observed occasionally (Rahman 2005). Mahalder and Mustafa (2011) did not find the fish during their fish catch monitoring in a large number of beels in the Sunagonj and Sylhet areas. There are no reports on its occurrence in the recent past. The estimated Extent of Occurrence (17,182.32 km²) and Area of Occupancy (279.14 km²) gualify the fish for IUCN Red List Threatened Endangered Category. However, literature indicates its possible extinction from the country. Considering its near absence in the country it has been assessed as Critically Endangered Category.





Labeo nandina

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CRITICALLY

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Date Assessed: 25 January 2015

History

Regional Status: The species has been considered Critically Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Labeo nandina* is known to occur in Bangladesh, India and Myanmar (Talwar and Jhingran 1991).

Bangladesh: It is found in freshwater rivers and other wetlands (*beels* and *haors* clear sluggish water pools) of Greater Mymensingh and Sylhet Districts of Bangladesh (Rahman 2005).

EOO: 17,182 km² **AOO:** 279 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Highly declined.

Habitat and Ecology

Labeo nandina inhabits freshwaters and occurs in rivers and beels and haors. This fish is an omnivore and feeds on worms, insects and detritus.

Assessor: M. Niamul Naser

Tor tor

Species ID: FI0113

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Tor tor (Hamilton, 1822) English Name: Tor Mohsheer Bengali Name: Mohashol, Mohsheer Synonym/s: Cyprinus tor Hamilton, 1822 Tor hamiltoni Gray, 1834 Barbus megalepis McClelland, 1839 Barbus hexastichus McClelland, 1839 Barbus tor Day, 1878 Tor tor Misra, 1959 Tor tor Sen and Jayaram, 1982

Taxonomic Notes: The species Cyprinus tor was first described from the Mahananda River by Hamilton (1822). He included the fish under the genus Cyprinus with two species, i.e., Cyprinus putitora and C. mosa. Misra (1959) renamed the species as Tor tor which is still a valid name.

Assessment Information

Red List Category & Criteria: CR A2acd ver 3.1

Justification: The species T. tor has been assessed as Critically Endangered (CR). Its population reduction is inferred over 80% during the last ten years due to over exploitation, habitat destruction, water pollution and other anthropological activities. Recent faunal survey, personal interview and personal visits confirmed that the population has seriously declined and at present it is very rare in fish catches (Latifa et al. 2014, Naher 2014, per. obs.). Construction of dams in the up streams, extraction of sand, pebbles and rocks from the river bed are seriously destructing its feeding and spawning ground.

Date Assessed: 21 January 2015





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History

Regional Status: It was assessed as Critically Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: It is endemic to Asia and occurs in Bangladesh, India, Malaysia, Nepal, Pakistan, Sri Lanka, and some south east countries of Asia (Shrestha 1990). It has also been reported from Malay Peninsula and the larger Indonesian Islands across Sumatra, Borneo and Java (Menon 1992, Roberts 1999).

Bangladesh: In Bangladesh this mahseer occurs in Someshwari River at Netrokona, Karnaphully reservoir in Chittagong Hill Tracts, Mahananda River in Dinajpur and Para River in Sunamganj (Rahman 2005). It is occasionally found in Kaptai Lake in Rangamati.

EOO: 59,301 km² AOO: 1.225 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population is declining. Now a days, it is rarely found in its natural habitats in Bangladesh (Naher 2014). Trend: Declining.

Habitat and Ecology

T. tor inhabits riverine pools and lakes and also in streams with good flows and a rocky bottom. Rahman (2005) stated that mahseer is an omnivorous fish, feeds on filamentous algae, submerged plants, chironomid larvae, water beetles and crustaceans.

Assessor: Md. Sagir Ahmed

Channa barca

Species ID: FI0003

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa barca (Hamilton, 1822) English Name: Barca Snakehead Bengali Name: Pipla, Pipla Shol, Tila, Tila Shol, Pipla Ool, Tia Shol, Bakka, Tati Synonym/s: Ophiocephalus barca Hamilton, 1822 Ophicephalus nigricans Cuvier, 1831 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: CR B1ab(i,ii,iii,iv) ver 3.1

Justification: This species was recorded from the Dekhar Haor of Sunamganj District located in the north-eastern region of the country (Rahman 2005). The estimated EOO and AOO are175.67 km² and 166.23 km², respectively. Asides, this species is limited to a single location and there are several threats like pollution and low quality habitat. Moreover, the declination of EOO and AOO of this species can be inferred from increased agricultural pollution and habitat destruction. Data are not available on its population size and reduction. Though EOO and AOO of this species are greater than the thresholds of Critically Endangered category, the species is assessed as Critically Endangered based on its recent disappearance in the wild.

Date Assessed: 25 June 2014

History

Regional Status: The taxon was assessed Critically Endangered (CR) (IUCN Bangladesh 2000).





Channa barca

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CRITICALLY

Geographic Range

Global: Bangladesh, Indian (Goal Para, Assam; Nagaland) and Nepal (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: Large rivers, beels and haors of the greater Sylhet and Mymensingh-Districts (Rahman 1989).

EOO: 176 km² AOO: 166 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

C. barca is a carnivorous, benthopelagic, potamodromous species. It is a seasonal breeder and travel into mustard fields to eat the flowers during winter months. (Rahman, 1989)

Assessor: Ismot Ara

Ompok pabo

Species ID: FI0153

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SILURIDAE

Scientific Name: Ompok pabo (Hamilton, 1822) English Name: Pabo Catfish Bengali Name: Pabda, Kala Pabda Synonym/s: Silurus pabo Hamilton, 1822 Callichrous pabo Day, 1878 Ompok pabo Misra, 1976 Taxonomic Notes: None

Assessment Information:

Red List Category & Criteria: CR A2bc ver 3.1

Justification: *Ompok pabo* is extremely rare among other species under the genus *Ompok* present in Bangladesh. The occurrence of this species is limited to few locations with significant threats. Meanwhile, recent field visits, expert consultation and local catch suggest that the wild population of this species has reduced to about 80% during the last two decades due to massive deterioration of its habitat quality (M. S. Ahmed and M A R Hossain pers. comm.). Therefore, this species is assessed as Critically Endangered.

Date Assessed: 20 September 2014

History:

Regional Status: This taxon has been considered as Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: Ompok pabo has been recorded from Bangladesh,





Ompok pabo

C Mostafa A R Hossain

CRITICALLY

northeast India, Myanmar and Pakistan (Rahman and Chowdhury 2007).

Bangladesh: This species is reported from the Chalan Beel and Medha Beel in the Northern region, the Surma, Kushiara and Manu River of Sylhet Division. It is also found to occur in the Baikka Beel and Tanguar Haor of Sunamgon District (Chakraborty and Nur 2009, Ahmed *et al.* 2015).

EOO: 29,962 Km² AOO: 5,962 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

This species occurs in streams and rivers of all sizes with sluggish to moderate currents. Found in quiet, shallow, often-muddy water, in sandy streams, rivers. It occurs in canals, beels and inundated fields (Rahman and Chowdhury 2007). Moves into freshly inundated habitats during flood season. It is omnivorus and predatory in nature, feeds on crustacea larvae, fish fry, zooplankton, algae and small portion of sand and mud. Prefers to swim around shallow and often muddy waters. It spawns during the monsoon, extending from June to the middle of August.

Assessor: Md Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman
Bagarius bagarius

Species ID: FI0161

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: *Bagarius bagarius* (Hamilton, 1822) English Name: Gangetic Goonch, Devil catfish, Fishbase name: dwarf Goonch

Bengali Name: Baghair, Baghari, Bagh mach Synonym/s: Pimelodus bagarius Hamilton, 1822 Bagarius yarelli Day 1878

Taxonomic Notes: Taxonomic confusions led to the misidentification of the *Bagarius bagarius* (small sized fish, lives in streams) and *Bagarius yarelli* (large sized fish inhabiting large rivers). Most authors in Bangladesh considered large sized one as *B. bagarius* and most data are available on the large sized one. The IUCN Red list (2000) assessed the large one as *B. yarelli* and categorized as Critically Endangered species. However, the major compilation of Bangladesh fish, like Rahman (2005) and Siddiqui *et al.* (2007) described the large one as the *B. bagarius*.

Assessment Information

Red List Category & Criteria: CR A2cd ver 3.1 Justification: Earlier Baghair (Bagarius bagarius,) was fairly abundant in large and medium rivers, but due to habitat squeeze, caused by large scale siltation and over exploitation the abundance of the species declined drastically by 1990s (pers. obs.). In this situation, the species was enlisted as Critically Endangered in the IUCN Red List of Bangladesh (2000). Since then, the declining trend in its population is continuing, albeit at a slower rate and the cumulative population decline would be around 80% during the last 25 years (3 generation time). In recent studies, in most sites the species has been recorded as rare (NACOM 2010a, 2010b). Presently, there is no specific conservation activities targeting the species. However, habitat loss and its export potential is likely to continue to exert pressure on the species in the future, contributing to further reduction of its population.





Bagarius bagarius

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CRITICALLY

ENDANGERED

The Extent of Occurrence and Area of Occupancy, however, do not exceed the threshold values (82,771 km² and 9,431 km² respectively) of any threatened category and there is no known fragmentation of its habitat. However, based on rapid decline in population and serious reduction in habitat qualities, the species is assessed as Critically Endangered.

Date Assessed: 22 September 2014

History

Regional Status: Due to large scale population decline the species was enlisted in IUCN Red list for Bangladesh as Critically Endangered species. (IUCN Bangladesh 2000)

Geographic Range

Global: It is found in South and South-east Asia, including Bangladesh, Cambodia and Laos, India, Indonesia (Sumatra, Borneo and Java), Myanmar, Pakistan (http:// www.planetcatfish.com/) and also in Vietnam (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: *Bagarius bagarius* occurs in large river systems of the country and has been reported from Padma, Jamuna, Meghna, Daleswari, Bangali, Baral, Choto Jamuna, Surma, Kushiyara, Manu Baral, Mahananda, Kangsha, Brahmaputra, Titas and Karnafully Rivers and was also reported from Chalan Beel and Kaptai Reservoir (Ahmed 2002, Hossain *et al.* 2009, Alam 2007, Galib *et al.* 2012) . **EOC:** 82,772 km² **AOC:** 9.432 km²

AUU. 9,432

Population

Generation Time (Length): Generation time could be estimated as 7-8 years (http://www. Planetcatfish.com). Total Population: Unknown.

Trend: Anecdotal information, our long time field observation and expert consultation suggest that the species shows a continued decline in population abundance.

Habitat and Ecology

Bagarius bagarius prefers fast flowing waters and lives under stones and bog logs and it is carnivorous and predatory fish feeds on small fishes, prawns, frogs, etc. *Bagarius bagarius* lives in large rivers, particularly in deep areas. It is voracious and predatory. It usually feeds on small fishes, but also preys frogs and shrimps (Rahman 2005).

Assessor: Md. Abdur Rob Mollah

Sisor rabdophorus

Species ID: FI0174

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Sisor rabdophorus Hamilton, 1822 English Name: Sisor Catfish Bengali Name: Chenua; Cheuna; Sisor, Sai Sore Synonym/s: Sisor rhabdophorus Hamilton, 1822 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: CR B2ab(i,ii,iii) ver 3.1

Justification: *Sisor rabdophorus* was considered as Critically Endangered (CR) by IUCN Bangladesh (2000). Its Area of Occupancy (AOO) is restricted in two small rivers in northern Bangladesh. Siltation of upland rivers, lifting of stones and sands from river beds and construction of dam are the major threats for this species. These threats still persist and there is no sign of its recovery. Hence, it is assessed as Critically Endangered.

Date Assessed: 21 February 2015

History

Regional Status: Considered as Critically Endangered by Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It occurs in Bangladesh, India, Pakistan and Nepal (Talwar and Jhingran 1991, Shrestha 1994, Rahman 2005).

Bangladesh: It is found in the Dharla River of Rangpur District (Rahman 2005). It is also reported from Mahananda





Sisor rabdophorus

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CRITICALLY

River in the North Bengal (Jayaram and Singh 1977).

EOO: 8,989 km² **AOO:** 67 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species prefers to inhabit in freshwater system (Ng 2010), primarily at the base of the Himalayas (Talwar and Jhingran 1991). It is demersal and potamodromous. It inhabits swift rivers with a substrate of sand andgravel and feeds on bottom-dwelling organisms (Ng 2010, Rahman and Akter 2007). It exhibits adaptations for life at the bottom of high gradient low land or hill streams (IUCN Bangladesh 2000).

Assessor: Md. Monirul Islam



ENDANGERED 〈 EN 〉



Schistura scaturigina

Specied ID: FI0126

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Schistura scaturigina McClelland, 1839 English Name: Victory Loach Bengali Name: Dari Synonym/s: Cobitis scaturigina (McClelland, 1839) Nemacheilus mugah Day, 1869 Nemachilus shebbearei Hora, 1935 Noemacheilus scaturigina Menon, 1974 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN B1ab(i,ii,iii,iv)+2ab(ii,iii, iv) ver 3.1

Justification: Rahman (1989) described the availability of *Schistura scaturigina* in the rivers of Sylhet, Chittagong, Rangpur and Dinajzpur. During 2009-2013, the fish was observed in the Someswari in Susong Durgapur in Netrokona, Jafflong in Sylhet and in the Old Brahmaputra, under Mymensingh Sadar Upazila (Ahmed and Rahman 2014, pers. obs). Almost no information is available on its population and distribution. Given the threats facing the habitat/location where the fishes are found it is inferred that its habitat quality will deteriorate more and population will further decline with a possibility of total extinction and hence *S. scaturigina* is assessed as Endangered.

Date Assessed: 15 November 2014

History

Regional Status: This taxon has been assessed as Not





Schistura scaturigina

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Threatened (NO) (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Bhutan, India and Nepal (Rahman 1989, Menon 1999).

Bangladesh: The Someswari in Susong Durgapur in Netrokona, Jaflong in Sylhet and the Old Brahmaputra under Mymensingh Sadar Upazila (Rahman 1989)

EOO: 14,193 km² **AOO:** 871 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It inhabits streams with gravelly bottom. Breath sometimes atmospheric air by gulping at the surface and absorbing oxygen at the gut. It feeds on worms, insect larvae and aquatic vegetation. It breeds during April-June; fertilized reddish eggs become attached with aquatic plants.

Assessor: Mostafa Ali Reza Hossain

Schistura sikmaiensis

Species ID: FI0122

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Schistura sikmaiensis (Hora, 1921) English Name: Not known.

Bengali Name: Not known.

Synonym/s: Nemachilus sikmaiensis Hora, 1921 Noemacheilus sikmaiensis Menon, 1987 Taxonomic Notes: Hora (1921) described Nemachilus sikmaiensis from Sikmai stream (Chindwin basin), Manipur. Kottelat (1990) considers the species under genus

Schistura. Needs taxonomic revision of this species based on molecular taxonomy.

Assessment Information

Red List Category & Criteria: EN B1ab(i,ii,iii,iv)+2ab(i,ii,iii, iv) ver 3.1

Justification: Schistura sikmaiensis was observed by Rahman (1989) in the Piyan gang River in Sylhet. The author also described the probable presence of the species in the hill strems of Dinajpur and Chittagong. During the last 10 years the fish has only been observed in two locations in the river Old Brahmaputra in Mymensingh Sadar and in the Someshwari, Susong Durgapur, Netrokona (three incidences - (17.03.09. 25.03.09 and 17.04.09 pers obs). The species has not been recorded from anywhere else in Bangladesh and very little information is available about it. If the geographical location is considered, the Extent of Occurrence is less than 5,000 km² and Area of Occupancy less than 500 km². Given the threats facing the locations where the fishes are found (ever increasing human settlement, agricultural and industrial pollution, overfishing etc.), it is inferred that its population will further





Schistura sikmaiensis

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decline and *S. sikmaiensis* is potentially threatened and hence, it is assessed as Endangered. However, further information on threats to the species and its distribution is required.

Date Assessed: 20 November 2014

History

Regional Status: Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar and Yunnan in China (Rahman 1989, Kottelat 1990, Ahmed 2007).

Bangladesh: It recorded from the Matshyarani Fish Sanctuary, the Brahmaputra, Mymensingh Sadar, Mymensingh and the River Someshwari, Susong Durgapur, Netrokona.

EOO: 899 km² **AOO:** 103 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It inhabits cool, clear swift-streams with bottom of rocks and boulders. It prefers gravelly bottoms and hides underneath rocks and boulders in swift flowing streams (Ahmed 2007).

Assessor: Mostafa Ali Reza Hossain

Barilius barna

Species ID: FI0066

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPINIFORMES	CYPRINIDAE

Scientific Name: Barilius barna (Hamilton, 1822) English Name: Barna Baril Bengali Name: Koksa, Bani Koksa Synonym/s: Cyprinus barna Hamilton, 1822 Opsarius barna Hamilton, 1822 Opsarius fasciatus McClelland, 1839 Opsarius latipinnatus McClelland, 1839 Barilius barna Gunther, 1868 Barilius jayarami Barman, 1985

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2acde ver 3.1

Justification: *Barilius barna* occurs in hill streams and large rivers, and is fairly to less abundant within its habitat ranges (Rahman and Ruma 2007). In spite of its wide distribution, the population of the species has declined by about 75% during the last 20 years (Ahmed et al. 2015). In the backdrop of the continued population decline, there are several known widespread threats to the species, including habitat loss and over-exploitation, which are unlikely to be reduced in near future and thus the species is under a potential risk of extinction. The taxon *B. barna* is, therefore, considered as Endangered.

Date Assessed: 15 January 2015

History

Regional Status: *Barilius barna* has been considered as Data Deficient (IUCN Bangladesh 2000).





Barilius barna

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Geographic Range

Global: The species has been recoded from Bangladesh, India, Myanmar and Nepal (Rahman and Ruma 2007).

Bangladesh: The species is found in the Tangon River of Thakurgaon and streams and canals of the River Jamuna. The fish was also reported from the Korotoa, Atrai, Brahmaputra, Jamuna and the Padma Rivers. (Hossain and Haque 2005, Rahman and Akhter 2007, Rahman and Ruma 2007). It is also found in the Sangu River of Bandarban (Ahmed *et al.* 2015).

EOO: 90,242 km² **AOO:** 8,187 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, it has been reported fairly common in Tangon River (Rahman and Ruma 2007). In contrast, in a recent study the species was reported to be less abundant (Ahmed et al. 2015).

Trend: The species shows a declining trend. A recent field study reports about 75% decline in its abundance within its habitat range (Ahmed *et al.* 2015).

Habitat and Ecology

The fish inhabits freshwater and found in clear hill streams and large rivers with gravelly bottom. It is a voracious eater and bottom dwelling fish and feeds on other little fishes and aquatic animals, etc. (Rahman and Ruma 2007).

Barilius bendelisis

Species ID: FI0067

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Barilius bendelisis (Hamilton, 1807) English Name: Hamilton's Baril, Hill Trout Bengali Name: Joia, Hiralu, Tila, Chedra, Koksa Synonym/s: Cyprinus bendelisis Hamilton, 1807 Cyprinus cocsa Hamilton, 1822 Cyprinus chedra Hamilton, 1822 Leuciscus cocsa McClelland, 1839 Leuciscus tila Bleeker, 1853 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2acde ver 3.1

Justification: In spite of its wide distribution in the country, population abundance of *Barilius bendelisis* probably has reduced to about 70% over the last twenty years due to widespread threats like habitat loss, pollution and over-exploitation (Ahmed *et al.* 2015). Earlier, this species was considered Endangered in Bangladesh and since then no improvement in its population abundance was observed or the threats to the species were removed or reduced. Therefore, the Endangered category for the species is retained.

Date Assessed: 15 August 2014

History

Regional Status: *Barilius bendelisis* has been considered as Endangered (IUCN Bangladesh 2000).





Barilius bendelisis

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Geographic Range

Global: *Barilius bendelisis* is found throughout India, Bangladesh and Nepal. It was also recorded from Myanmar, Pakistan, Thailand and Sri Lanka (Rahman and Ruma 2007, Eschmeyer and Fricke 2010).

Bangladesh: The species is found in the streams and rivers of Dinajpur, Rangpur, Mymensingh and Sylhet Districts (Rahman and Ruma 2007). It is also found in the Sangu River of Bandarban (Ahmed *et al.* 2015).

EOO: 1,06,881 km² AOO: 3,152 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population is not presently available.

Trend: The species shows a decreasing population trend. A recent field survey indicates its continuous decline throughout its local ranges and the population abundance of this species probably has been reduced to about 70% during the last twenty years (Ahmed *et al.* 2015).

Habitat and Ecology

This fish inhabits freshwater and occurs in streams and rivers along the base of hills with pebbly, sandy and rocky bottom. This species is a benthopelagic and potamodromous fish; feeds on aquatic microorganisms, insects, plants, etc. Prior to spawning females release sex steroids that acts as a potent sex pheromone which stimulates milt production in males (Rahman and Ruma 2007, Ahmed *et al.* 2015).

Barilius tileo

Species ID: FI0043

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Barilius tileo (Hamilton, 1822) English Name: Tileo Baril, Morari Bengali Name: Tila, Tila Koksa, Patharchata, Khorki Synonym/s: Cyprinus tileo Hamilton, 1822 Opsarius tileo Hamilton, 1822 Opsarius brachialis McClelland, 1839 Leuciscus brachialis McClelland, 1839 Barilius menoni Sen, 1976 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN B2b(ii,iii,iv)c(ii) ver 3.1

Justification: *Barilius tileo* has limited distribution in the northern districts and is rarely seen in fish catches (Latifa 2007). The estimated Area of Occupancy (270 km²) is below the upper threshold for Endangered Category, while that of Extent of Occurrence is 30,256.27 km². Extensive habitat loss and prevailing threats as reflected in the drying up of hill streams and adjoining rivers in the northern parts of the country, the species also shows a continued decline in its population leading to an alarming state (Amin *et al.* 2010, Ahmed *et al.* 2015). Therefore, the species is assessed as Endangered.

Date Assessed: 25 June 2014

History

Regional Status: This species has been considered as Data Deficient darlier in Bangladesh (IUCN Bangladesh 2000).





Barilius tileo

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Geographic Range

Global: The species is known to occur in Bangladesh, India, Myanmar, and Nepal (Latifa 2007).

Bangladesh: The fish is found in the Someswari and Kangsha Rivers in Netrokona District, and the rivers of Dinajpur and Rangpur Districts (Amin *et al.* 2010). It was also reported from the Surma River and its branches in Sylhet and Sunamganj Districts (Mahalder and Mustafa 2013).

EOO: 30,256 km² **AOO:** 270 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, the fish is rarely seen in fishers' catches (Latifa 2007, Amin *et al.* 2010). **Trend:** The population abundance of *Barilius tileo* has declined greatly over the past few years rendering it to an alarming state (Amin *et al.* 2010, Ahmed *et al.* 2015).

Habitat and Ecology

It inhabits freshwater and found in hill streams and rivers with pebbly or sandy bottom. This benthopelagic species feeds on algae, detritus and other benthic organisms.

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa

Barilius vagra

Species ID: FI0068

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Barilius vagra (Hamilton, 1822) English Name: Vagra Baril, Hill Trout Bengali Name: Khoksa, Vagra Synonym/s: Cyprinus vagra Hamilton, 1822 Opsarius isocheilus McClelland, 1839 Opsarius piscatorius McCleleand, 1842 Leuciseus vagra Day, 1878 Barilius vagra Mirza and Sadiq, 1978 Taxonomic Notes: None



Barilius vagra

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Assessment Information

Red List Category & Criteria: EN A2acde ver 3.1

Justification: *Barilius vagra* occurs in the hill stream areas of northern Bangladesh (Haque 2007) and shows a continuous population decline. The abundance of the species has reduced to about 75% during the last 20 years due to siltation, drying up of streams and over exploitation (Ahmed *et al.* 2015). The species was earlier assessed as Endangered in Bangladesh. Since then, there has been no reduction in its threats, and in the absence of any conservation measures, the Endangered Category is retained for the species.

Date Assessed: 15 January 2015

History

Regional Status: *Barilius vagra* has been considered as Endangered (IUCN Bangladesh 2000).



Geographic Range

Global: *Barilius vagra* is found in Afghanistan, Bangladesh, India, and Nepal, Pakistan and Sri Lanka (Haque 2007).

Bangladesh: The species has been recorded from Tangon River of Dinajpur and Rangpur and Dhahuki River of Sylhet (Haque 2007). The fish is also found in the Sangu River of Bandarban and the River Brahmaputra-Jamuna, Atrai and Tista River of northern region of Bangladesh. (Rahman and Akhter 2007, Ahmed *et al.* 2015).

EOO: 96,246 km² **AOO:** 5,291 km²

Population

Generation Time (Length): Unknown.

Total Population: The total population of the species is not known.

Trend: The fish shows a declining population trend. A recent field survey, through interviews, indicates its continuous decline throughout its local ranges and it was inferred that the population abundance of this species probably has reduced to about 75% during the last twenty years (Ahmed *et al.* 2015).

Habitat and Ecology

This fish inhabits freshwaters and found in in hill streams with bed of rocks and gravels. It is a benthopelagic and omnivorous species and feeds on algae, detritus and other benthic organisms (Haque 2007, Ahmed *et al.* 2015).

Botia dario

Species ID: FI0127

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Botia Dario (Hamilton, 1822) English Name: Necktie Loach, Queen Loach, Bengal Loach Bengali Name: Rani Mach, Bou Mach Synonym/s: Cobitis dario Hamilton, 1822 Cobitis geto Hamilton, 1822 Diacanthus flavicauda Swainson, 1839 Botia dario Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ace ver 3.1

Justification: The population of *Botia dario* has declined significantly across its distribution range due to habitat loss resulting from the use of insecticides in the paddy fields, siltation of upland rivers, lifting of stones and sands from river beds and construction of flood control dams. From recent studies, it can be easily inferred that about 60 % population of this species has been reduced by last twenty years due to above threats (Ahmed and Rahman 2014). The Extent of Occurrence (EOO) and Area of Occupancy (AOO) do not qualify it for any Threatened Category though its habitats are found greatly reduced. Hence, this species is assessed as Endangered.

Date Assessed: 20 September 2014

History

Regional Status: The taxon was considered as Endangered (IUCN Bangladesh 2000).





Botia dario

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Geographic Range

Global: *Botia dario* is a native species of Bangladesh, Bhutan and India (IUCN Bangladesh 2000, Siddiqui *et al.* 2007).

Bangladesh: This species is distributed in the northern and eastern regions of Bangladesh, particularly in the Greater Sylhet, Mymensingh, Dinajpur, Rangpur and Chittagong Hill Tracts (Hossain and Haque 2005, Rahman 2005, Rahman and Akhter 2007, Ahmed 2008, Mahsin and Haque 2009, Ahmed *et al.* 2015).

EOO: 83,773 km² **AOO:** 6,360 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It inhabits hill streams, rivers and creeks and wetlands. It is carnivorous in habit and known to control the snail population in the ecosystem. It prefers rocks or plants to rest.

Botia dayi

Species ID: FI0128

Taxonomy



Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Botia dayi Hora, 1932 English Name: Hora Loach, Botya Loach Bengali Name: Rani, Betangi Synonym/s: Botia geto Day, 1878 Botia dayi Hora, 1932 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ace ver 3.1

Justification: Observations on fish catches in fish landing centres and fish markets reveal that the species is rare and is occasionally seen with *B. dario* and *B. lohachata* (Siddiqui *et al.* 2007). Its population has declined significantly across its local range due to habitat loss, particularly the construction of dams in upstream resulting in silting up of upland rivers, lifting of stones and sands from river beds and construction of flood control dams. From the recent studies, it can be easily inferred that about 70% population of this species has been reduced during last ten years due to these factors (Ahmed *et al.* 2015). Hence, this species is assessed as Endangered.

Date Assessed: 20 January 2015

History

Regional Status: Considered as Data Deficient (IUCN Bangladesh 2000).





Botia dayi

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Geographic Range

Global: This species has been recorded from Bangladesh, India, and Pakistan (Rahman and Akhter 2007, Talwar and Jhingran 1991).

Bangladesh: It is reported from the Someshwari and Kongsho River of Netrokona, the River Surma, Piyang and Sari of Sylhet, haor area of Sunamgonj District; the Kortoa, Atrai and Mahananda River of Northern region. Also it was recorded from the Old Brahmaputra River (Rahman and Akhter 2007, Rahman *et al.* 2011, Naser *et al.* 2013, Ahmed *et al.* 2015).

EOO: 77,892 km² **AOO:** 9,345 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in sandy and muddy bottoms of ditches, beels, canals, inundated fields and rivers (Rahman andAkhter 2007). It feeds on detritus and insect larvae (Latifa 2007).

Botia lohachata

Species ID: FI0129

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: *Botia lohachata* Chaudhuri, 1912 English Name: Y-loach, Reticulate Loach Bengali Name: Rani, Putul, Beti Synonym/s: Not known. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ace ver 3.1

Justification: *Botia lohachata* population has declined significantly across its range due to habitat loss particularly due to construction of dams in the upstream rivers, siltation, lifting of stones and sands from river beds and construction of flood control embankments. From the recent studies, it can be easily inferred that about 60% of its population has been reduced during the last ten years due to above threats (Ahmed *et al.* 2015). Hence, this species is assessed as Endangered.

Date Assessed: 20 September 2014

History

Regional Status: It was considered as Endangered (IUCN Bangladesh 2000)

Geographic Range

Global: This species has been recorded from Bangladesh, India, Nepal and Pakistan (Rahman and Ruma 2007, Kottelat 2012).





Botia lohachata

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Bangladesh: It is reported from the Someshwari and Kongsho River of Netrokona, the River Surma, Piyang and Sari of Sylhet, the Kortoa, Atrai and Mahananda River of Northern region. Also recorded from the Old Brahmaputra River, Jamuna River and from the Padma River (Rahman 2005, Hossain and Haque 2005, Rahman and Akhter 2007).

EOO: 56,252 km² **AOO:** 3,475 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits creeks, rivers and streams with rocky and sandy bottoms. *B. lohachata* is sociable as well as less shy and pugnacious than other *Botia* species. It can burrow under the gravel and likes to hide. Primarily nocturnal and feeds on worms, snails, small fishes, etc.

Crossocheilus latius

Species ID: FI0074

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Crossocheilus latius (Hamilton, 1822) English Name: Gangetic Latia, Stone roller, Hill-stream Carp Bengali Name: Kala Bata

Synonym/s: Chondrostoma wattanah Sykes, 1839 Cyprinus gohama Hamilton, 1822 Cyprinus latius Hamilton, 1822 Cyprinus sada Hamilton, 1822 Gonorhynchus brevis McClelland, 1839 Gonorhynchus fimbriatus McClelland, 1839 Gonorhynchus macrosomus McClelland, 1839

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2bcd ver 3.1

Justification: The Extent of Occurrence (>20000 sq. km) and the Area of Occupancy (> 2000 sq. km) of this species indicates a wide distribution throughout its local distribution ranges in the country but it is seen occasionally. From the recent collection, local catch observation and local accounts, it can be inferred that the population abundance of *Crossocheilus latius* reduced about 75% over the last twenty years due to widespread destruction of habitats and over exploitation.Therefore, this species has been assessed as Endangered.

Date Assessed: 15 February 2015

History

Regional Status: This taxon has been consider as Endangered (IUCN Bangladesh 2000).





Crossocheilus latius

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Geographic Range

Global: *Crossocheilus latius* is found in Bangladesh, India, China and Myanmer (Rahman 2005, Oo 2002, Talwar and Jhingran 1991).

Bangladesh: It occurs in the hill streams and some rivers of the country, including Someshwari and Kongsho of Netrokona District, the Piyang of Sylhet District, Padma, Jamuna, Brahmaputra, Korotoa, Atrai and Tista (Hossain and Haque 2005, Rahman 2005, Rahman and Akhter 2007, Galib *et al.* 2013).

EOO: 77,599 km² **AOO:** 8,368 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

This fish inhabits streams and rivers. Found over gravel and stony bottoms of mountain streams. It is found in large schools in still or slow-flowing water, on the bottom during the day but it may swim at the surface in the evening. It is potamodromous. A bottom-feeding herbivore taking more than 90% plant food, such as algae, diatoms and macrophytes as well as detritus (Rahman and Ruma 2007).

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Devario anomalus

Species ID: FI0078

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Devario anomalus Conway, Mayden & Tang, 2009 English Name: Anomalus Zebra Bengali Name: Not known Synonym/s: Not known

Taxonomic Notes: Conway *et al.* (2009) described *D. anomalus* for the first time as a new species from a small hillstream of southern Cox's Bazar, Bangladesh

Assessment Information

Red List Category & Criteria: EN B1+2 ab (iii) ver 3.1

Justification: Devario anomalus is a new species, presently known only from three close locations in Cox's Bazaar, Bangladesh (Conway et al. 2009; Ahmed et al. 2013). Very little information is available on the species. As the species occurs in shallow water pools, the fish is likely to be vulnerable to fishing. The estimated extent of occurrence (72.21 km²) and area of occupancy (0.06 km²) are much less than the upper thresholds for the IUCN highest threatened category. However, it is likely to be present in other similar places within the region. Considering the restricted locations and limited information and in the absence of any known conservation measures, presently the species is assessed Endangered.

Date Assessed: 20 October 2014

History

Regional Status: This taxon has not been assessed earlier in Bangladesh.





Devario anomalus

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Geographic Range

Global: *Devario anomalus* has been reported only from Cox's Bazar District in Bangladesh (Conway *et al.* 2009, Ahmed *et al.* 2013).

Bangladesh: The species is reported from Himchari hill stream near Cox's Bazar (Conway *et al.* 2009), Borochara and Kudum cave of Cox's Bazar District (Ahmed *et al.* 2013). However, it is anticipated that the species could be found in other places within the region.

EOO: 72 km² AOO: 0.06 km²

Population

Generation Time (Length): Unknown.

Total Population: The total population of the species is unknown. However, the species is relatively rare in its known places of occurrence. **Trend:** Unknown.

Habitat and Ecology

It is a pelagic fish and inhabits freshwater hill streams with, fragmented rock, gravelly bottom in clear, low flow water pools at the foot of waterfalls and also in caves with stagnant waters.

Assessor: Mostafa Ali Reza Hossain

Garra annadalei

Species ID: FI0081

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYRINIFORMES	CYPRINIDAE

Scientific Name: Garra annandalei Hora, 1921 English Name: Annandale Garra, Tunga Garra, Log Sucker, Stone Roller Bengali Name: Ghor Poa Synonym/s: Garra chaudhurii Hora, 1921 Garra satyendranathis Ganguly & Dutta, 1973 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN B1ab(ii,iii,iv)+2ab (ii,iii,iv) ver 3.1

Justification: *Garra anandalei* has restricted distribution in the northeastern and southeastern hill streams of the country and the fish is reported to be rare within its habitat ranges (Mohsin 2007). The estimated Extent of Occurrence (147 km²) and Area of Occupancy (84 km²) of the species are less than the upper the threshold values of IUCN Endangered Red List Category. There is also a continued threat to the species from habitat loss caused due to removal of stones and siltation of hill streams and low stream flow affecting abundance of the species. In the absence of any targeted conservation measures the fish is assessed as Endangered.

Date Assessed: 24 July 2014

History

Regional Status: The taxon has been assessed as Data Deficient (DD) earlier in Bangladesh (IUCN Bangladesh 2000).





Garra annandalei

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Geographic Range

Global: The species is known from Bangladesh, India, Myanmar and Nepal (Rayamajhi and Jha 2010) and also from Bhutan (Mohsin 2007).

Bangladesh: The species is only available in the hill streams of southeastern and northeastern parts of Bangladesh (Mohsin 2007), specifically the fish was reported from Piyangang River in Sylhet District (Rahman 2005).

EOO: 147 km² **AOO:** 84 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, it is seen in very small quantities and rare in Bangladesh (Mohsin 2007).

Trend: Population of the species has declined within its habitat ranges in Bangladesh (Mohsin 2007).

Habitat and Ecology

The fish inhabits freshwaters and found in swift and clear mountain stream with beds of rocks and boulders. This bentho-pelagic fish mainly feeds on the algal felts on the stones. It adheres to rocks with the help of the sectorial disc on its chin. It hides below the rocks and boulders in swift and clear water.

Assessor: Afshana Parven Associate Assessor/s: Mostafa Ali Reza Hossain and Mst. Kaniz Fatema

Garra gotyla

Species ID: FI0082

Taxonomy

ANIMALIA CHORDATA ACTINOPTERYGII CYPRINIFORMES CYPRINIDAE	Kingdom	Phylum	Class	Order	Family
	ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Garra gotyla (Gray, 1832) English Name: Gotyla, Sucker Head Bengali Name: Ghor Poia Synonym/s: Cyprinus gotyla Gray, 1832 Garra bimaculatus McClelland, 1839 Discognathus lamta Day, 1878 Garra gotyla Hora, 1921 Garra gotyla Monon, 1964 Taxonomic Notes: None



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Assessment Information

Red List Category & Criteria: EN B1ab(ii,iii,iv)+2ab(ii,iii,iv) ver 3.1

Justification: *Garra gotyla* is distributed in the limited hilly areas of the country, particularly found in cooler hill streams. The estimated Area of Occupancy (110 km²) is less than the upper threshold for IUCN Redlist Endangered Category. The fish is very rare across its entire ranges and was recorded from less than five locations. Moreover, the species shows a declining population trend (Ahmed *et al.* 2015, Rahman and Ruma 2007). Several major threats, including stone and boulder removal, siltation of hill streams and low stream flow have been contributing to its population decline. On the other hand, no conservation measure targeting this species is in place to protect the fish. Hence, *G. gotyla* is assessed as Endangered.

Date Assessed: 10 August 2014 History



Regional Status: The fish has been assessed earlier as Data Deficient (DD) in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is reported from Bangladesh, India, Myanmar, Nepal and Pakistan (Rahman and Ruma 2007).

Bangladesh: *G. gotyla* has limited distribution in the country and has been reported from Piyang River in the Sylhet-Jaflong area (Rahman and Ruma 2007), and Shailopropat hill stream and Nafakum areas of Bandarban District (Ahmed *et al.* 2015).

EOO: 10,549 km² **AOO:** 110 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population is not currently available. However, it is stated to be less abundant and rare in the country (Rahman and Ruma 2007, Ahmed *et al.* 2015).

Trend: This fish was abundant during 1970's, however, currently it is becoming rare (Rahman and Ruma 2007). As per local accounts the abundance of the species has been decreasing (Ahmed *et al.* 2015).

Habitat and Ecology

This species inhabits freshwater and is found in fast flowing river and streams in the hilly areas with boulders and rocks on the bottom. It is bentho-pelagic and occupies middle reach of the hill stream pools. The fish remains attached to substratum with its sucker. It is mainly a herbivore fish, feeds on algae and plants. It also takes detritus as food (Rahman and Ruma 2007).

Labeo pangusia

Species ID: FI0094

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo pangusia (Hamilton, 1822) English Name: Pangusia Labeo Bengali Name: Ghora Maach, Longu, Ghora Muikha Synonym/s: Cyprinus pangusia Hamilton, 1822 Labeo dyocheilus McClelland 1839 Gobio pangusia McClelland, 1839 Labeo kunki Chaudhuri 1912

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN B2ab(i,ii,iii) ver 3.1

Justification: Labeo pangusia has restricted distribution in the hilly rivers of the Sylhet region and is found rare (Rahman 2005, Haque 2007). Earlier, the fish was also reported from the Padma River system (Islam and Hossain, 1983) and recently from Sunamgonj haor areas (Mahalder and Mustafa 2011). However, recent surveys in hilly areas of the country could not find the fish (Azadi and Arshad-UI-Alam 2013, Ahmed *et al.* 2014). Considering the estimated Extent of Occurrence (7,045.73 km²) and Area of Occupancy (760.65 km²) the fish is assessed as Endangered.

Date Assessed: 25 December 2014

History

Regional Status: The taxon has been assessed as Critically Endangered (CR) earlier in Bangladesh (IUCN Bangladesh 2000).





Labeo pangusia

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Geographic Range

Global: *Labeo pangusia* is known to occur in Bangladesh, Bhutan, India, Nepal and Pakistan (Talwar and Jhingran 1991, Menon 1999).

Bangladesh: It is found in the Surma River (Rahman 2005), Padma River (Islam and Hossian, 1983) and also from Sunamgonj haor areas (Mahalder and Mustafa 2011).

EOO: 7,046 km² **AOO:** 761 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. However, it is rarely found in catches. Trend: Declining.

Habitat and Ecology

L. pangusia inhabits freshwater and occurs in hill streams and rivers of the hilly regions. The fish is benthopelagic and feeds on algae and diatoms and also grazes on aquatic plants. Lives in the active current of large streams and adjacent rivers (Haque 2007).

Assessor: M Niamul Naser

Megarasbora elanga

Species ID: FI0069

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Megarasbora elanga (Hamilton, 1822) English Name: Bengala Barb Bengali Name: Elong, Sephatia, Elanga Synonym/s: Bengala elanga Hamilton, 1822 Cyprinus elanga Hamilton, 1822 Leuciscus elanga Hamilton, 1822 Rasbora elanga Hamilton, 1822

Megarasbora elenga Mirza, 2003

Taxonomic Notes: This species was misidentified earlier as *Bengala elanga* in Bangladesh by Rahman (2005) and Haque (2007) and its accepted name is *Megarasbora elanga*.

Assessment Information

Red List Category & Criteria: EN A2 acde ver 3.1

Justification: *Megarasbora elanga* is a widely distributed species in the river systems of Bangladesh. However, it is relatively rare within its habitat ranges (Haque 2007). Due to overfishing and habitat degradation caused by siltation and aquatic pollution, the population of the species in Bangladesh is continually declining and recent studies inferred a 50% reduction in its abundance (Latifa *et al.* In Press). The species was assessed Endangered earlier in Bangladesh and since then there has been no improvements in its population abundance or reduction in threats. Considering the above and in the absence of any conservation measures in place, the risk Category Endangered is retained for the species.

Date Assessed: 17 August 2014





Megarasbora elanga

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History

Regional Status: The species has been considered Endangered (IUCN Bangladesh 2000).

Geographic Range

Global : *Megarasbora elanga* has a South Asian distribution. It is known from Bangladesh, India and Myanmar (Rahman 2005, Talwar and Jhingran 1991). It was also reported from Nepal (Shrestha 1990) and Pakistan (Mirza 2003).

Bangladesh: The species occurs in rivers throughout Bangladesh (Rahman 2005) and was abundant in every district of Bangladesh (Bhuiyan 1964). There used to be super abundance of this fish soon after yearly flood water started receding inautumn during 1950s and 60s. Sometimes, even there were no takers of this fish and the fishers were forced to dump it to a nearby field (M.A.R. Khan pers. comm.).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown, however, currently the species is relatively rare within its habitat ranges (Haque 2007).

Trend: The population of the species is declining. Recent faunal survey inferred a 50% population decline (Latifa *et al.* In Press).

Habitat and Ecology

Megarasbora elanga is a freshwater species and found in ponds and in the middle and lower reaches of rivers (Menon, 1999). It is a pelagic and omnivorous species and its main food comprises aquatic insects, algae and protozoans (Haque 2007).

Assessor: Md. Sagir Ahmed

Neolissochilus hexagonolepis

Species ID: FI0114

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Neolissochilus hexagonolepis (McClelland, 1839) English Name: Copper mahseer Bengali Name: Not known.

Synonym/s: Barbus hexagonolepis McClelland, 1839 Acrossocheilus hexagonolepis (McClelland, 1839) Barbodes hexagonolepis (McClelland, 1839) Accrossocheilus hexagonolepis (McClelland, 1839) Acrosocheilus hexagonolepis (McClelland, 1839) Barbus hexagonolepis McClelland, 1839 Neolissocheilus hexagonolepis (McClelland, 1839) Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN B1b(i,ii)c(iii) ver 3.1

Justification: Neolissochilus hexagonolepis was once found in Sangu River near Bandarban city (pers obs 12.11.14). The species has not been recorded from anywhere else and very little information is available about the species. Its Extent of Occurrence is less than 5000 km² and Area of Occupancy is just 182 km². There is severe siltation and narrowing of the river due to bad forestry practices in the hills surrounding the river and wrong use of land by the local residents for shifting of Jhum cultivation aggravated by settlements of the plains-dwellers to the hills causing serious shrinkages to the habitats of the species. So, it is assessed as Endangered.

Date Assessed: 16 October 2014





Neolissochilus hexagonolepsis

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History

Regional Status: *Neolissochilus hexagonolepis* has not been assessed before in Bangladesh.

Geographic Range

Global: Neolissochilus hexagonolepis is found from Bangladesh, Bhutan, China, India (Arunachal Pradesh, Assam, Bihar, Darjeeling, Jharkhand, Meghalaya, Nagaland, Uttar Pradesh), Indonesia Malaysia, Myanmar, Nepal, Pakistan, Thailand and Viet Nam (Jayaram1981, Petr 1999). Bangladesh: Only confirmed record of it is by Mohammad Arshad-ul-Alam, Assistant Professor, Department of Zoology, Bandarban Government College who photographed a few individuals over the last few years from the river Sangu in the Hill Districts of Bandarban. An individual fish was recorded by the IUCN crustacean team for Updating Red List led by the author in a recent exploration survey from the Sangu River of Bandarban District. EOC: 3,094 km² AOC: 182 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Adults feed mainly on filamentous green algae, lesser on chironomid larvae, crustaceans and water beetles. They migrate upstream during the breeding season where spawning takes place on stones and gravel. Tropical, Freshwater; benthopelagic; potamodromous. The species is co-occuring with *Tor* sp. Adults occur in fast flowing streams and rivers with rocky bottom, mainly in the middle of streams. Omnivorous. Inhabits hilly streams with fast flowing water. It prefers rocky and boulder areas with rapid water flow. *N. hexagonolopis* breed in running water pools during April - October with a peak between August and September.

Assessor: Mostafa Ali Reza Hossain

Oreichthys cosuatis

Specied ID: FI0096

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Oreichthys cosuatis (Hamilton, 1822) English Name: Cosuatis Barb Bengali Name: Kosuati punti, Kosua punti, Titkinda, Tit punti Synonym/s: Cyptinus cosuatis (Hamilton, 1822)

Barbus cosuatis (Hamilton, 1822) Leuciscus cosuatis (Hamilton, 1822) Puntius coorgensis (Jayaram, 1982) Puntius cosuatis (Hamilton, 1822) Rohtee pangut (Sykes, 1839) Systomus malacopterus (McClelland, 1839)

Taxonomic Notes: The species was originally described as *Puntius cosuatis* by Hamilton in 1822 but Jayaram adopted the species name 'coorgensis' in 1982. Hamilton reclassified it as *Leuciscus cosuatis* in 1822; he had again reclassified it as *Barbus cosuatis* in 1822, and again adopted as *Cyptinus cosuatis*. The species name finally adopted as *Oreichthys cosuatis* in 1822 by Hamilton. According to http://www.iucnredlist.org/details/168538/0 - the taxonomy of this species needs to be revised. Its wide distribution in different drainages suggests that there may be more than one species involved.

Assessment Information

Red List Category & Criteria: EN B2bc(i,ii) ver 3.1

Justification: The Area of Occupancy of Oreichthys cosuatis is estimated 3,110 km² and Extent of Occurrence measured 1,74,915 km² but it is encountered very rarely throughout distribution in the country. It is found just in a handful of locations and in small quantity.





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Moreover, its habitat is declining at an alarming rate. Considering all these, the species is assessed as Endangered.

Date Assessed: 6 August 2014

History

Regional Status: The species assessed as Threatened by Red List of IUCN Bangladesh (2000).

Geographic Range

Global: Oreichthys cosuatis is found in Bangladesh, India, Myanmar, Nepal and Thailand (Mahalder and Mustafa 2013).

Bangladesh: It is found in canals, beels and haors mostly in southern part of Bangladesh as occasional incidental catch.

EOO: 1,74,915 km² **AOO:** 3,110 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species is found in wide variety of habitat including streams, rivers, ponds and ditches in small qauntity. It spends much of its time in rivers and streams as well as in ditches, ponds, streams and canals.

Assessor: Md. Golam Mustafa Associate Assessor/s: Bolaram Mohalder

Raiamas bola

Specied ID: FI0108

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Raiamas bola (Hamilton, 1822) English Name: Trout Barb; Bengal Trout Bengali Name: Bole, Bhol Synonym/s: Cyprinus bola Hamilton, 1822 Barilius bola Day, 1878 Leuciscus salmoides Blyth, 1858 Barilius corbetti Tilak & Husain, 1980 Raiamas bola Hora & Mukerjee, 1936 Taxonomic Notes: None



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Assessment Information

Red List Category & Criteria: EN A2acd ver 3.1

Justification: The distribution of *Raiamas bola* is restricted with rocky beds in the River Someshwari and Kangsha (under Netrakona District) and also Punarbhaba River (under Dinajpur District) and certain rivers in Sylhet District. Due to degradation of habitats resulting from siltation, its population has reduced severely and is limited only to the clear waters of those rocky rivers. Population of this species may become critical in the near future since habitat degradation is continuing in these rivers. Considering the current limited range of distribution, probable shrinkages in its abundance in Bangladesh, the species is considered as Endangered.

Date Assessed: 22 September 2014

History

Regional Status: The species was assessed Endangered (IUCN Bangladesh 2000).



Geographic Range

Global: *Raiamas bola* is found in Bangladesh, Bhutan, India (hilly streams of the Northern provinces), Myanmar, Nepal and Thailand (Suvatti 1981, Rajbanshi and Csavas 1982, Rahman and Ruma 2007).

Bangladesh: Rivers of clear streams with rocky beds particularly in some hilly streams of Mymensingh, Sylhet and Dinajpur regions (Rahman 2005).

EOO: 38,598 km² **AOO:** 2,143 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available on wild population. Trend: Unknown.

Habitat and Ecology

Shallow clear hilly tropical streams with rocky beds. A low fecund species, breeds during early monsoon (June) in quite inundated areas (Talwar and Jhingran 1991). It is a demersal and potamodromous species.

Assessor: Harunur Rashid

Tor putitora

Species ID: FI0112

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: *Tor putitora* (Hamilton, 1822) English Name: Putitor mahseer, Golden mahseer Bengali Name: Mohashol, Mohsheer Synonym/s: *Cyprinus putitora* Hamilton, 1822 *Tor putitora* Tilak & Sharma, 1982 *Barbus putitora* Hora, 1939

Taxonomic Notes: The species was first described by Hamilton (1822) as *Cyprinus putitora*. He included two other species, i.e. *Cyprinus tor* and *C. mosa* under the same genus *Cyprinus*. Menon (1954) placed this under the genus *Tor*.

Assessment Information

Red List Category & Criteria: EN B1ab(i,ii,iii)+2ab(i,ii,iii) ver 3.1

Justification: The species is under severe threat from overfishing, loss of habitat, and decline in quality of habitat resulting in the loss of breeding grounds, and from other anthropogenic effects that have directly resulted in declines in harvest in its entire locations. Its Extent of Occurrence (EOO) and Area of Occupancy (AOO) is estimated as 1,300 km² and 488 km², respectively. It has so far been noted just from two locations in the upstream of the trans-boundary rivers with India. The species is, therefore, assessed as Endangered and is in need of urgent conservation efforts to save it from becoming regionally extinct in the country.

Date Assessed: 21 January 2015





Tor putitora

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History

Regional Status: It was not evaluated in the past (IUCN Bangladesh 2000)

Geographic Range

Global: It is endemic to Asia and distributed in Bangladesh, India, Malaysia, Nepal, Pakistan, Sri L anka, and some south east countries of Asia (Shrestha1990, Rahman 2005, Nguyen *et al.* 2008). It has also been reported from Malay Peninsula and the larger Indonesian Island sacross Sumatra, Borneo and Java (Menon 1992, Roberts 1999).

Bangladesh: In Bangladesh, Tor mahseer occurs in Someswari River in Netrokona. It is found occasionally in Kaptai Lake in Rangamati District and Tanguar Haor, Sunamgong (pers. obs. 16 June 2014).

EOO: 1,300 km² **AOO:** 488 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population is declining. It is extremely rarely found in its natural habitats in Bangladesh (Naher 2014).

Trend: Unknown.

Habitat and Ecology

It inhabits streams, riverine pools and lakes. This fish likes rapid streams with rocky bottom. It is an omnivorous species, feeds on fish, zooplankton, dipterans larvae and plant matter (Shrestha 1999). Juveniles subsists on plankton while fingerlings feed mainly on algae. It ascends to the streams to breed over gravel and stones and returns to perennial ponds after breeding.

Assessor: Md. Sagir Ahmed

Chitala chitala

Species ID: FI0044

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	OSTEOGLOSSIFORMES	NOTOPTERIDAE

Scientific Name: Chitala chitala (Hamilton, 1822) English Name: Humped Featherback, Clown Knife Fish Bengali Name: Chital, Chitna Synonym/s: Mystus chitala Hamilton, 1822 Notopterus chitala Day, 1878 Notopterus ocellifer Bleeker, 1865 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ce ver 3.1

Justification: Chitala chitala is an apparently widespread species in Bangladesh and found in the markets throughout the year (Alam 2007). However, local distribution ranges of the species are most probably becoming restricted to some areas of the country, which could be inferred from its reduced estimated Area of Occupancy (7.302.25 km²). The fish is highly utilized and fetches high prices in the markets. Based on field observations, it was suspected that the population of this species has declined by about 75% over the last two decades (Ahmed et al. 2015). Earlier, this species was assessed as Endangered in the country, however, since then the existing threats have not been removed nor the population decline has halted. In the absence of any pragmatic conservation measures targeting the species, and existing continued widespread threats, it is unlikely that the situation will improve in near future. Therefore, threatened category Endangered is retained for the species.

Date Assessed: 25 June 2014





Chitala chitala

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History

Regional Status: The taxon has been considered as Endangered earlier in IUCN Bangladesh 2000.

Geographic Range

Global: The species is recorded from Bangladesh, India, Malaysia, Myanmar, Nepal, Pakistan, the Philippines and also from Thailand. (Alam 2007).

Bangladesh: Chitala chitala is described as a widely distributed species in rivers, beels, haors, reservoirs, canals and ponds (Rahman 2005). However, the species is specifically reported from the river Brahmaputra, Jamuna, Padma, Meghna, Someshwari and Kongsho River of Netrokona, Korotoa and Atrai River of Dinajpur, the Suma River of Sylhet, the Kirtonkhola and Shugandha River of Barishal Division. This species has also been recorded from the Kaptai Lake of Rangamati and the Tanguar Haor of Sunamgonj (Hossain and Haque 2005, Rahman and Akhter 2007, Nath *et al.* 2010, Galib *et al.* 2013, Ahmed *et al.* 2015). **EOC:** 1,31,403 km² **AOC:** 7,302 km²

Population

Generation Time (Length): Unknown. Total Population: Information on the total population of the fish is not available.

Trend: Based on field observations, it is suspected that the population of the species has probably declined by about 75% during the last two decades in Bangladesh (Ahmed *et al.* 2015).

Habitat and Ecology

C. chitala is carnivorous in habit and predatory in nature. It feeds on aquatic insects, molluscs, shrimps and small fishes. At its early stage, it lives on insects and tender roots of aquatic plants. It builds nest for breeding and protects it (Alam 2007). The species congregate in large numbers, where it lives.

Assessor: Md. Mizanur Rahman Associate Assessor/s: Gawsia Wahedunessa Chowdhury

Channa marulius

Species ID: FI0005

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa marulius (Hamilton, 1822) English Name: Giant Snakehead, Great Snakehead Bengali Name: Gajar, Gajal, Sal, Gajori Synonym/s: Channa marulia (Hamilton, 1822)

Ophicephalus marulius Hamilton, 1822 Ophicephalus grandinosus Cuvier, 1831 Ophicephalus sowara Cuvier, 1831 Ophicephalus marulius Shaw and Shebbeare, 1937 **Taxonomic Note:** None



Viet Nam. (Talwer and Jhingran 1991, Rainboth 1996,

Bangladesh: The Padma, Padma distributaries, Borulia

Ichanoi Beel (Gaibandha), Dogger Beel (Chandpur), Titas

(Rahman 2005, Ahmed and Akhter 2008), larger haors in

water bodies in Dhaka, Manikganj and Tangail Districts.

Greater Sylhet and Mymensingh Districts, beels and larger

haor (Nikli, Kishorganj), Mahananda, Choto Jamuna,

Channa marulius

Rahman 2005)

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Assessment Information

Red List Category & Criteria: EN A2bcd ver 3.1

Justification: *Channa marulius* is a wide spread species but scarce in comparison to other species of *Channa*. Although, there is no reported population decline it is inferred that its population has been reduced over 50% in the last ten years due to over exploitation and habitat destruction. Therefore, this species is assessed as Endangered (EN).

Date Assessed: 25 June 2014

History

Regional Status: It was assessed as Endangered (EN) by IUCN Bangladesh (2000).

Geographic Range

Global: It is found in Bangladesh, China, India, Cambodia, Lao, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and



EOO: 70,254 km² **AOO:** 1,352 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

It is a carnivorous, surface dweller, predatory fish and prefers deep clear water with muddy, sandy and rocky bottom. When water dries up it goes deeper into the mud to avoid desiccation and death. It breeds with the onset of monsoon.

Assessor: Ismot Ara

Batasio tengana

Species ID: FI0139

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Batasio tengana (Hamilton, 1822) English Name: Dwarf Catfish Bengali Name: Tengra Synonym/s: Pimelodus tengana Hamilton, 1822 Macrones tengana Günther, 1864 Gagata tengana Day, 1878 Batasio tengana Rahman, 1974

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ace ver 3.1

Justification: Fisher's catch, fish landing centres and fish market surveys reveal that the species is not common and is occasionally seen with *other Mystus* species (Latifa *et al.* In Press). Its population declined significantly across its range due to habitat loss (Wahab 2003, Ahmed *et al.* 2015). From the recent studies, it can be easily inferred that about 70% population of this species has been reduced during the last ten years due to these threats. The Extent of Occurrence and Area of Occupancy do not qualify for any Threatened Category though the species found n to be declining in trend. Hence, this species is assessed as Endangered based on its inferred population size reduction.

Date Assessed: 15 October 2014

History

Regional Status: It has been considered as Endangered (IUCN Bangladesh 2000).





Batasio tengana

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Geographic Range

Global: It occurs in Bangladesh, India and Nepal (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: This is a riverine species (Hossain *et al.* 2012) particularly reported from the old Brahmaputra River and Tista River drainage and torrential streams in the north-eastern part of Bangladesh (Rahman 2005). Also found in the Piyang and Sari Rivers in in Sylhet District (Ahmed *et al.* 2015).

EOO: 50,252 km² **AOO:** 15,219 km²

Population

Generation Time (Length): Unknown, Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It generally inhabits rivers and torrential streams. The species is a detritus feeder and prefers to live in the upper reaches of riverine habitats

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Rita rita

Species ID: FI0148

Та

Тахопотту				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE
Scientific Name: Rita rit English Name: Rita Bengali Name: Rita, Ric Synonym/s: Pimelodus Arius ritoide Rita bucha. Rita bucha. Rita rita Sh	a (Hamilton, 1822) la <i>rita</i> Hamilton, 1822; es Valenciennes, 1840; <i>nani</i> Bleeker, 1854; <i>nani</i> Day, 1877; aw and Shebbeare, 1937			

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2bc ver 3.1

Justification: The species is widely distributed within Bangladesh and its estimated Area of Occupancy and Extent of Occurrence are much higher than the lower thresholds for any threatened category. Recent field and market visits (NACOM 2007, 2008, 2010, Ahmed et al. 2015) indicate that the fish is available in good numbers in some areas within its local range and the population abundance remains stable, while in the north-western Bangladesh the population registered a sharp decline (more than 50%, pers. obs.) during the last 15 years. Considering the habitat loss, fishing pressure and continuing population decline, the species is evaluated as Endangered.

Date Assessed: 27 August 2014





Rita rita

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ENDENGERED <EN>

History

Regional Status: It was assessed as Critically Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Afghanistan, Bangladesh, India (mostly in northern part), Myanmar, Nepal and Pakistan (Talwar and Jhingran 1991, Alam 2007).

Bangladesh: Padma River, Arial Kha River, Chalan Beel, Barnai River of Rajshahi, Bangali River of Bogra, Baral River of Natore, River Choto Jamuna, Brahmaputra, Turag River, "Ichhanoi Beel" at Palashbari Upzila of Gaibandha (extremely rare), Mahananda River at Chapai Nawabganj District, Medha Beel, Upazilla of Kolmakanda, Netrokona, Someshari and Kangsha River of Netrakona, Kritonkhola, Barisal, Surma River in Sylhet, Surma River, Sunamganj, Surma River, Rupsha River (Khulna), Meghna river Chandpur and Bhairab, Baleswar River (Pirojpur) (Hossain et al. 2012, Ahmed et al. 2015).

EOO: 79.633 km² AOO: 7,861 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

This species inhabits both fresh and brackish waters and prefers muddy to clear water (Bhuiyan 1964). It is potamodromous and carnivore in habit. This catfish feeds on insects, molluscs, shrimps, fishes and roots of aquatic plants. It also take putrid carcass or flesh of animals (Alam 2007).

Assessor: Md. Abdur Rob Mollah

Chaca chaca

Species ID: FI0183

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	CHACIDAE

Scientific Name: Chaca chaca (Hamilton, 1822) English Name: Squarehead Catfish, Angler Catfish Bengali Name: Chaka, Gangainna, Chaka Veka Synonym/s: Platystacus chaca Hamilton, 1822; Chaca buchanani Günther, 1846, Chaca lophioides Day, 1878,

Chaca chaca Misra, 1976

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2ace ver 3.1

Justification: Although, *Chaca chaca* is found in all ranges of water bodies throughout the country, but the population of this species has declined in most parts of its habitats due to habitat loss, aquatic pollution and other anthropogenic activities. It can be inferred from recent field observations and local accounts that more than 70% population of the fish has reduced during the last two decades. Hence, it is assessed as Edangered.

Date Assessed: 20 March, 2015

History

Regional Status: The taxon has been considered as Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species occurs in Bangladesh, India and Nepal (Talwar and Jhingran 1991, Rahman and





Chaca chaca

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Chowdhury 2007).

Bangladesh: It is found in rivers, canals, ponds, inundated paddy fields throughout Bangladesh (Rahman and Chowdhury 2007). In particular, it has been recorded from Tanguar Haor, Myttain Haor (Taherpur, Sunamganj), Patlai River (Taherpur), Hail Haor (Mowlavibazar), Derai Haor (Sylhet), Someshwari River (Durgapur), Dhalai River (Pabna), Chalan Beel (Natore, Sirajganj), Buriganga River, Turag River (Gopinpur,Kaliakoir), Bangshi River(Mirzapur) (Latifa *et. al.* In Press).

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown.

Total Population: Empirical data on the total population is not available but the species is less abundant (Latifa *et. al.* In Press).

Trend: Declining.

Habitat and Ecology

It is a potamodromous and carnivorous fish, and predatory in habit. It feeds on insect larvae, small fishes and bottom detritus. *C. chaca* inhabits freshwater and found in streams or even clear standing rivers, ponds, ditches, canals and inundated floodplain areas (Rahman and Chowdhury 2007).

Assessor: Gulshan Ara Latifa

Olyra longicaudata

Species ID: FI0184

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	OLYRIDAE

Scientific Name: Olyra longicaudata McClelland, 1842 English Name: Longtail Catfish, Himalayan Olyra, Bannertail Catfish Bengali Name: Bot Shinghi Synonym/s: Olyra longicaudata McClelland, 1842 Olyra elongata Günther, 1883 Olyra kempi Chaudhuri, 1912. Taxonomic Notes: This species was described earlier in

Bangladesh as *Olyra kempi* (Rhaman 2005).

Assessment Information

Red List Category & Criteria: EN A2bc ver 3.1

Justification: *Olyra longicaudata* has been reported only from Padma and Jamuna Rivers, Himchori and Inani hill streams of Cox's Bazar District and Dahuki River of Sylhet District. This species is stated to be very rare within its local distribution ranges. Although, little is known about its threats, however, its habitat destruction is clearly evident from recent field visits. The estimated Area of Occupancy (1,519.73 km²) qualifies the species for IUCN Threatened Category. Based on local accounts and field observations, it was inferred that around 70% population decline of the species occurred during the last two decades (Ahmed *et al.* 2015), which is below the upper threshold value for Endangered Category. Therefore, this species has been assessed as Endangered.

Date Assessed: 15 February 2015

History





Olyra longicaudata

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Regional Status: The species has been considered as Data Deficient (DD) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *O. longicaudata* occurs in Bangladesh, India and Myanmar (Rahman and Chowdhury 2007).

Bangladesh: This species has been recorded from the Himchori and Inani hill streams of Cox's Bazar District (Ahmed *et al.* 2015), River Brahmaputra and the Jamuna (Rahman and Akter 2007) and Dahuki River of Sylhet District. The hill streams of Sylhet District and Chittagong Hill Tracts are stated to be the ideal habitat for this species (Rahman and Chowdhury 2007).

EOO: 1,02,143 km² AOO: 1,520 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population of the species is not available, however, it is stated to be rare in Dahuki River of Sylhet District and Inani and Himchori hill streams (Rahman and Chowdhury 2007, Ahmed *et al.* 2015).

Trend: Declining.

Habitat and Ecology

It feeds on benthic organisms from the bottom of the rocky streams. This species inhabits small clean water, rocky streams and pebbly beds in in swift currents at the base of hills. It occurs among rocks and boulders on the bottom of fast flowing upland streams (Rahman and Chowdhury 2007, Ahmed *et al.* 2015).

Clupisoma garua

Species ID: FI0157

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Clupisoma garua (Hamilton, 1822) English Name: Garua Bacha, Gagra Bengali Name: Ghaura, Gharua, Gagra, Garua Bacha, Guarchcha Synonym/s: Silurus garua Hamilton-Buchanan, 1822 Clupisoma argentata Swainson, 1839 Schilbegarua Valenciennes, 1839 Schilbegarua Valenciennes, 1855 Clupisoma garua Bleeker, 1863 Pseudeutropius garua Day, 1878

Taxonomic Notes: The *garua* is one of the six species of the genus *Clupisoma* so far recorded from the Ganges water (Talwar & Jhingran 1991), while it is one of the two available species under the stated genus in Bangladesh Rivers (Rahman 2005). Recently, its molecular taxonomy through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene indicated that the species is *C. prateri* (Ahmed *et al.* In Press, GenBank: KT364783.1).

Assessment Information

Red List Category & Criteria: EN A2bcd ver 3.1

Justification: *Clupisoma garua* is widely distributed and fairly common in its habitats. It was enlisted in the IUCN Red List for Bangladesh as a Critically Endangered species (IUCN 2000) due to its highly declined population, caused by threats, like siltation, overexploitation, aquatic pollution, etc. These threats still persist and there is no sign of its recovery (pers. obs.). The species is distributed throughout Bangladesh and expected to have a large population and recent faunal survey (Latifa *et al.* In Press) showed that the relative abundances of the species is fairly common. However, the prevailing idea is that that the population of the species is declining at a slower rate and it is





Clupisoma garua

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inferred that the population abundance has probably declined by 50% during the last 15 years (Ahmed *et al.* 2015). Considering potential threats to its habitats and steady decline in population, the species is assessed as Endangered. **Date Assessed**: 04 August 2014

History

Regional Status: This taxon has been considered as Critically Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: Globally the *Clupisoma garua* is found in the freshwater river systems in Bangladesh, India and Pakistan (IUCN 2000, Talwar and Jhingran 1991). Bangladesh: The species is widely distributed throughout the country. Tista and Padma-Jamuna-Meghna River systems and their connected beels, baors, lakes, flooded low lands in the north-west to central regions; the Surma, Kushiara, Titas and Kangsha River basins and the connected haors and beels in the north-east region, Sangu River and the inter-tidal estuarine rivers and canals in the south-west to south-east regions in Bangladesh (Ahmed 2002, Ahmed *et al.* 2003, Rahman 2005, Rahman and Akhter 2007). EOO: 1,73,814 km² AOO: 10,687 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

Clupisoma garua inhabits in rivers and connected large water bodies with sandy to muddy bottoms (Rahman 2005). Primarily it lives in freshwater rivers up to Meghna Estuary and secondarily, move to haors, baors and beels during monsoon. It is carnivorous, feeds on insect, shrimp, other crustaceans, small fishes and other decaying matters. It is also known as coprophagous.

Assessor: Md. Rafigun Nabi

Ompok bimaculatus

Species ID: FI0151

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SILURIDAE

Scientific Name: Ompok bimaculatus (Bloch, 1797) English Name: Butter Catfish, Two Spot Glass Catfish Bengali Name: Kani Pabda, Boali Pabda Synonym/s: Silurus bimaculatus Bloch, 1797; Silurus canio Hamilton, 1822; Silurus indicus McClelland, 1842; Wallago microcephalus Bleeker, 1853;

> Pseudosilurus macropthalmus Blyth, 1860; Callichrous bimaculatus Day, 1877;

Ompok bimaculatus Munro, 1955.

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2cde ver 3.1

Justification: Ompok bimaculatus is reported as fairly distributed species, but it is less common than its congener. The threats to the species also persist and unlikely to halt or reverse in the near future. It is conjectured that this species has started to disappear from many water bodies and the population decline is also continuing at a significant rate due to habitat shrinkage caused by siltation, wetland conversion and other factors. Recent studies suggest that the population abundance of the species has probably declined by more than 60% during the last two decades. Hence, considering the declining population trend, the earlier Endangered Category could be retained for this species though the Extent of Occurrence and Area of Occupancy exceed the threshold values of Threatened Categories. Therefore, this species has been assessed as Endangered.

Date Assessed: 10 August 2014





Ompok bimaculatus

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ENDENGERED

History

Regional Status: It was considered as Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: *Ompok bimaculatus* is widely distributed in Indian subcontinent to Southeast Asia including Bangladesh, India Myanmar, Pakistan and Sri Lanka (Talwar and Jhingran 1991, Parween 2007).

Bangladesh: It is distributed throughout the country (Parween 2007) but particularly reported from the Bangali River of Bogra (De *et al.* 2011), Halda River of Chittagong (Alam *et al.* 2013), Tanguar and Hakaluki Haor (Pers. obs.), Brahmaputra-Jamuna (Rahman and Akhter 2007), River Mahanada, Padma River (Mohsin *et. al.* 2013).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: Absolute population data are not available. Trend: Decreasing.

Habitat and Ecology

It occurs in streams and rivers of all sizes with sluggish to moderate currents. Prefers quiet, shallow, muddy water to live. It is found also in canals, beels and inundated fields. This fish is omnivorous and predatory in nature. This catfish feeds on the crustacean larvae, fish fries, zooplankton, algae and small portion of sand and mud. (Parween 2007).

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Ompok pabda

Species ID: FI0152

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SILURIDAE

Scientific Name: Ompok pabda (Hamilton, 1822) English Name: Pabda catfish, two stripe Gulper catfish Bengali Name: Madhu pabda, Pabda, Paibba Synonym/s: Silurus pabde Hamilton, 1822, Wallago pabda Bleeker 1853, Callichronus pabda Day 1878. Taxonomic Notes: Ompok pabda is sometimes confused with Ompok bimaculatus.

Assessment Information

Red List Category & Criteria: EN A2cd ver 3.1

Justification: Ompok pabda was fairly abundant throughout Bangladesh but due to habitat shrinkage caused by massive siltation and wetland conversion followed by overexploitation and aquatic pollution, etc. The abundance of the species declined drastically during 1980s (pers. obs.). The species has also disappeared from many water bodies. The population decline is also continuing, but at a slower rate. In recent studies (NACOM 2007, 2010a, 2010b) recorded the the species as a rare one in almost all sites studied. The threats to the species persist and unlikely to halt or reverse in the near future. Our long field experiences, anecdotal information and expert consultation (M. S. Ahmed pers. comm.) suggest that the population abundance of the species has probably cumulatively declined by more than 60% during the last 10 years (3 generation time). The Extent of Occurrence and Area of Occupancy data, however, do not exceed the threshold values of any threatened category and there is no known fragmentation of its habitat. Therefore, Endangered Category is retained for the species.





Ompok pabda

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Date Assessed: 22 September 2014

History

Regional Status: *Ompok pabda* was categorized as Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: It is reported from southern Afghanistan, most parts of India, Bangladesh, Pakistan (along Indus) and Myanmar (Talwer and Jhingran 1991, Rahman 2005).

Bangladesh: The species is widely distributed throughout Bangladesh and reported from Padma, Jamuna, Meghna, Surma, Kushira, Manu Ichamati, Banglali, Turag, Baral, Choto Jamuna, Mahananda, Muhuri, Barnai and Titas Rivers Feni Reserviour, Tanguar Haor, Hakaluki Haor, Chalan Beel and Medha Beel (Rahman 2005, Rahman and Chowdhury 2007, Ahmed 2008).

EOO: 1,21,601 km² **AOO:** 13,519 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

The species inhabits both lotic and lentic waters. It is found in rivers of all sizes, canals, beels, lake, auto- stocked ponds and floodplains and even found in roadside ditches. It is usually a surface feeder and omnivorous in nature, generally feeds on aquatic insects, crustaceans, moss, protozoa, etc. It also predates on fish fry and larvae.

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Pangasius pangasius

Species ID: FI0158

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	PANGASIIDAE

Scientific Name: Pangasius pangasius (Hamilton, 1822) English Name: Pungas, Yellowtail Catfish, Pungas Catfish Bengali Name: Pangas, Pangwash Synonym/s: Pimelodus pangasius Hamilton, 1822

Pangasius buchanani Valenciennes, 1840 Pangasius pangasius upiensis Srivastava, 1968 Pangasius pangasius godavarii David, 1962

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2bcd ver 3.1

Justification: *Pangasius pangasius* is one of the uncommonly caught commercial fishes in Bangladesh. It is inferred that its population has been declined by about 50% over the last 20 years due to habitat destruction and over exploitation throughout the country (A. R. Mollah and M. S. Ahmed pers. comm.). Although the Extent of Occurrence (2,17,485 km²) and Area of Occupancy (14,982 km²) exceed the threshold value of the Threatened Category, considering the major threats to its habitats and declining trend in its wild population, it has been assessed as Endangered.

Date Assessed: 25 February 2015

History

Regional Status: It was considered as Critically Endangered (IUCN Bangladesh 2000).





Pangasius pangasius

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ENDENGERED

Geographic Range

Global: Widely distributed in the large rivers and reservoirs of Bangladesh, India, Myanmar, Nepal and Pakistan (Mohsin 2007, Pal 2009).

Bangladesh: Estuaries, large rivers, haors, baors, beels and floodplains throughout Bangladesh (Ahmed 2002, Mohosin 2007, Hossain *et al.* 2009).

EOO: 2,17,486 km² **AOO:** 14,982 km²

Population

Generation Time (Length): Unknown.

Total Population: Recorded as abundant previously in the rivers of Bangladesh (Rahman 2005) but serious declines in its populations and abunadnaces have been reported (Hossain *et al.* 2009). There is no empirical evidence to support this decline for this species throughout its range. However, localized catch data suggests that this species is being overfished (Hoq 2007). Trend: Decreasing (Mohsin 2007, FRSS 2013).

Habitat and Ecology

Pangasius pangasius inhabits freshwaters of the tidal zone as juveniles, moves to brackish water as sub-adults and finally as adults to river mouths and inshore areas. It is potamodromous and voracious,feeds on snails, other mollusks and plants (Rainboth 1996). Usually breeds in the estuary during the rain.

Assessor: Gawsia Wahidunnessa Chowdhury

Mastacembalus armatus

Species ID: FI0243

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNBRANCHIFORMES	MASTACEMBELIDAE

Scientific Name: *Mastacembalus armatus* (Lacepede, 1800) English Name: Tire-track Spinyeel Bengali Name: Baim, Sal Baim

Synonym/s: Macrognathus armatus Lacepede, 1800

Mastacembelus armatus Valenciennes, 1831 Mastacembelus ponticerianus Cuvier, 1832 Macrognathus caudatus McClelland, 1842 Mastacembelus armatus Day, 1878 Mastacembelus manipurensis Hora, 1921

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: EN A2bc ver 3.1

Justification: Although the estimated Area of Occupancy and Extent of Occurrence of this species indicate its wide distribution throughout its range, the reduction of its population can be easily speculated based on recent field surveys. The current low population and its declining trends can be inferred from squeezing of its natural habitats due to different anthropogenic activities. In earlier assessment by IUCN this species was enlisted as Endangered but no remarkable measures were taken to halt its population reduction or reverse its habitat quality except establishment of some fish sanctuaries. However, based on local accounts collected through field visits and personal communication with local people it is assumed that this species has reduced more than 50% by the last two decades (Ahmed et al. 2015). Therefore. Mastacembalus armatus is assessed as Endangered.





ENDENGERED

Date Assessed: 15 October 2014

History

Regional Status: It was considered as Endangered by the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Pakistan, India, Myanmar, Malaysia to southern China, Nepal, Sri Lanka and Thailand (Jhingran and Jalwar 1991, Rahman 2005).

Bangladesh: It is distributed in rivers, canals, beels, ponds and inundated fields in the freshwater regimes throughout Bangladesh (Rahman 2005, Rahman and Akhter 2007, Ahmed 2008, Mahsin and Haque 2009, Galib *et al.* 2013, Ahmed *et al.* 2015).

EOO: 2,17,468 km² **AOO:** 1,1857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

it is carnivorous in habit, juveniles feed on crustaceans and insect larvae. Adults feed on barbs, minnows, other small fishes, shrimps and prawns and tadpoles. It inhabits within the bottom substrate of rivers, canals, streams, beels, ponds and inundated fields. It also ventures into brackish water.

Assessor: Md. Abdur Rob Mollah

#


Anguilla bengalensis

Species ID: FI0046

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	ANGUILLIFORMES	ANGUILLIDAE

Scientific Name: Anguilla bengalensis (Gray, 1831) English Name: Indian Mottled Eel Giant Molted Eel, Mottled Eel Bengali Name: Bamosh,Banehara, Bao Baim, Bao Mach, Boa Baim, Telkoma Synonym/s: Anguilla arracana McClelland, 1844 Anguilla brevirostris McClelland, 1844 Anguilla lephinstonei Sykes, 1839 Anguilla nebulosa McClelland, 1844 Anguilla variegata McClelland, 1844 Muraena bengalensis Gray, 1831

Muraena labiata Peters. 1852

Muraena macrophthalmos Peters, 1852

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2d ver 3.1 Justification: The fish is found in some big river systems and hill stream areas of Bangladesh. In spite of its wide distribution, the species has been experiencing a suspected population decline, at least about 30% during the last ten years, due to its habitat loss and perceived over-exploitation for export (Ahmed 2014, Ahmed *et al.* 2015). Earlier, the fish was assessed as Vulnerable in Bangladesh. The prevailing threats are unlikely to halt in near future and in the absence of any targeted conservation measures the Vulnerable Category is retained for the species. Date Assessed: 20 November 2014

History

Regional Status: The taxon has been considered as Vulnerable (VU) earlier in IUCN Bangladesh 2000.





Anguilla bengalensis

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VULNERABLE

<VU>

Geographic Range

Global: The species is recorded from Bangladesh, India, Myanmar, Nepal, Pakistan, Sri Lanka, and also in southeast Africa. (Jacoby *et al.* 2014)
Bangladesh: It is reported from the rivers Padma, Meghna, Jamuna and Brahmaputra (Sada 2007). It is also found in the hill-streams of Mymensingh and Chittagong Hill Tracts (Rahman pers. comm.), Karnafuli Reservoir, Chittagong; and Kangsha River near Netrokona. It descends to the Bay of Bengal during rainy season. (Rahman 2005)

EOO: 1,08,672 km² **AOO:** 4,731 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population of the taxon is not currently available.

Trend: The population of the species has probably declined by 30% throughout its habitat ranges in Bangladesh due to overexploitation and habitat degradation over the last ten years (Ahmed *et al.* 2015) also noted a significant decline in its population.

Habitat and Ecology

The fish inhabits fresh and brackish waters and found in big rivers, estuaries; and hill streams, and sometimes enter into Ocean. It occupies various niches in river systems from quiet undisturbed areas containing mud substrate to deep water, fast-flowing rock pools of rivers (Bell-Cross and Minshull 1988 cited in Jacoby *et al.* 2014). *Anguilla bengalensis* is a semelparous and catadromous species. Juveniles feed on insects and other aquatic invertebrates. During breeding season it travels to river mouths and breeds in the ocean and the juveniles migrate into freshwaters, large rivers and estuaries (Jacoby *et al.* 2014). It is a predatory fish, especially prey on crabs, frogs and fish, and active at night (Sada 2007).

Assessor: Md. Monirul Islam

Gudusia chapra

Species ID: FI0062

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Gudusia chapra (Hamilton, 1822) English Name: Indian River Shad Bengali Name: Chapila, Chaipla, Suiya, Khaira Synonym/s: Clupanodon chapra Hamilton, 1822 Gadusia chapra Hamilton, 1822 Clupea chapra Hamilton, 1822 Clupea indica Gray, 1834 Gudusia godanahiai Srivastava, 1968 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: Gudusia chapra occurs in rivers, reservoirs, ponds, lakes, beels, canals and floodplains throughout the country and is fairly common within its habitat ranges (Saha 2007). It is apparent that its population has declined due to habitat loss and indiscriminate harvesting (Ahmed 2002) and also its production has declined by about 48% from beel habitats over the last 10 years (FRSS 2012). But, no empirical data or information is available on declining population from other water body types of the country. In contrast, in Kaptai Lake a 50% increase in production has been observed over the last 10 years (FRSS 2012). Although, the estimated Extent of Occurrence (2,17,467.88 km²) and the Area of Occupancy (11,856.77 km²) values are higher than the upper thresholds for IUCN Redlist Vulnerable category, however, considering its population decline caused due to potential levels of exploitation and habitat loss, and continued widespread threats, the species is assessed as Vulnerable.





Gudusia chapra

© Md. Mizanur Rahman

VULNERABLE

Date Assessed: 20 November 2014

History

Regional Status: The species has been considered Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: This species is reported from Bangladesh, India, Malaysia, Myanmar, Nepal and Pakistan (Saha 2007).

Bangladesh: The species is distributed widely in the country and known to inhabit all rivers and streams. It is also found in reservoir, haors, baors, ponds and floodplains (Rahman 2005, Saha 2007).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: There are confronting reports on the population trend of the species. There is an estimated 48% decline in its catches in beel fishery over the last 10 years (FRSS 2012). Declining trend was also observed in some parts of its distribution range in the country due to over-exploitation (Azadi *et al.* 1997, Ahmed 2002). However, in Kaptai Lake a 50% increase in its production was reported over the last 10 years as a result of adoption of new management policy (FRSS 2012).

Habitat and Ecology

This is a freshwater; pelagic fish and found in ponds, beels, canals and rivers. The fish is omnivore and surface feeder in habit, feeds mainly on phytoplankton, zooplankton, debris, plant and animal matters (Saha 2007). The species avoids weedy areas and prefers clear water.

Assessor: Md. Sagir Ahmed

Lepidocephalichthyes annandalei

Species ID: FI0132

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Lepidocephalichthyes annandalei Chaudhuri, 1912 English Name: Annaldale Loach Bengali Name: Gutum, Puiya Synonym/s: Lepidocephalus memoni Pillai and Yazdani, 1976 Lepidocephalus annandalei Tilak and Hussain, 1981 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B1ab(i,ii,iii) ver 3.1

Justification: Lepidocephalichthyes annandalei is distributed in the upstream rivers in the north and northeast region of Bangladesh. Although there is no information on its population, it is assumed that population has declined significantly across its range due to habitat loss particularly for the construction of dams in the upstream rivers, siltation, lifting of sands from river beds and construction of flood control dams. Moreover, it's Extent of Occurrence (1,02,301.79 km²) is within the threshold level for Vulnerable Category. So, the species is assessed as Vulnerable.

Date Assessed: 17 December 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).





VULNERABLE

<VU>

Geographic Range

Global: Bangladesh, India and Nepal (Tapwar and Jhingran 1991, Rahman 2005).

Bangladesh: *L. annandalei* occurs in the Tangan River in Thankurgaon, the Tista River of Northern Bangladesh and Muhuri River of Feni (Rahman 2005). It is also reported from Sunamgonj hoar areas, Kaptai Lake, Padma River and Korotoa River near Nilfamari (Latifa *et al.* In Press)

EOO: 1,02,302 km² **AOO:** 5,403 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits clear, swift streams with sandy bottom (Rahman 2005). It feeds mainly on mud and organisms of the benthic region (Shafi and Quddus 1982).

Assessor: Sumaiya Ahmed

Lepidocephalichthys irrorata

Species ID: FI0134

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Lepidocephalichthys irrorata Hora, 1921 English Name: Loktak Loach Bengali Name: Puiya Synonym/s: Lepidocephalus irrorata Banarescu and

Synonym/s: Lepidocephalus irrorata Banarescu and Nalbant, 1968

Lepidocephalus irroratal Menon, 1992 **Taxonomic Notes:** Cobitis guntea was described only from Ganges River by Hamilton (1822). Later it was placed under the genus Lepidocephalus. There was confusion over its generic placement as Lepidocephalus or Lepidocephalichthys. The correct placement of the species is under Lepidocephalichthys (Havird and Page 2010).

Assessment Information

Red List Category & Criteria: VU B1ab(i,ii,iii iv)+2ab(ii,iii,iv) ver 3.1

Justification: Lepidocephalichthys irrorata was recorded from the Muhuri River, Feni River and streams of Sylhet by Rahman (1989). However, since then, there was no published record on the species in Bangladesh. During 2008-13, the fish was observed in the River Someswari in Susong Durgapur, Netrokona, Jaflong, Sylhet, the Old Brahmaputra, Mymensingh Sadar and the Kanchan River near Dinajpur town (several incidences of pers obs). Given the threats facing the habitat/location where the fish is found it can be said that its habitat quality will deteriorate further and population will further decline, and hence *L. irrorata* is assessed as Vulnerable.

Date Assessed: 15 January 2015





Lepidocephalichthys irrorata

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VULNERABLE

<VU>

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh and India (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It occurs in the River Someswari in Susong Durgapur, Netrokona, Jaflong, Sylhet, the Old Brahmaputra, Mymensingh Sadar and the Kanchan River near Dianajpur Town (Rahman 1989, Hasan *et al.* 2012).

EOO: 26,300 km² **AOO:** 1,186 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits flowing waters in shallow, slow-moving sections of streams or calm habitats such as swamps, oxbow lakes, brackish waters and paddy fields often heavilyvegetated or littered with submerged roots, branches and leaf litter, with substrates composed of soft mud or silt. *L. irrorata* uses its intestine as a supplementary breathing organ and has been observed darting to the surface to gulp atmospheric air, and some have even been recorded to survive dry periods in moist sand or mud. Feeds through sifting mouthfuls of substrate through the gills from which insect larvae and small crustaceans are extracted (Talwar and Jhingran 1991).

Assessor: Mostafa Ali Reza Hossain

Aspidoparia morar

Species ID: FI0040

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Aspidoparia morar (Hamilton, 1822) English Name: Aspidoparia Bengali Name: Morari, Morar, Piali, Piasi Synonym/s: Cabdio morar Hamilton, 1822 Cyprinus morar Hamilton, 1822 Leuciscus morar Hamilton, 1822 Morara morar Hamilton, 1822 Aspidoparia sardina Heckel, 1845 Aspidoparia morar Day, 1878

Taxonomic Notes: The species is described as *Cabdio morar* in IUCN Global Redlist of Threatened Species (2010), which appears to be a synonym of *Aspidoparia morar*.

Assessment Information

Red List Category & Criteria: VU A2c; B2ab(ii,iii) ver 3.1

Justification: Aspidoparaia morar is less common in Bangladesh and found in the upper reaches of the Padma and Jamuna Rivers and their tributaries. The estimated Area of Occupancy (AOO) is 1,846.24 km², which is less than the upper threshold for IUCN Red List Vulnerable Category. The population abundance of the species is also suspected to be declined significantly during the last 10 years with a continuous reduction in its habitat with fragmentation of its places of occurrence (Galib *et al.* 2013, Ahmed *et al.* 2015), primarily due to continued dynamic siltation of rivers in the upland areas and pollution of water bodies, hence it is considered as Vulnerable.

Date Assessed: 25 June 2014





Aspidoparia morar

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VULNERABLE

<VU>

History

Regional Status: The taxon has been assessed Data Deficient (DD) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The species is distributed in Afghanistan, Bangladesh, India, Iran, Myanmar, Nepal, Pakistan and Thailand. The taxonomic identity of the records in Iran, Myanmar, Pakistan and Thailand needs to be confirmed (Choudhury 2010).

Bangladesh: It is found in the lower and upper reaches of Padma and Jamuna Rivers and their tributaries (Ahmed 2007, Hossain 2010, Galib *et al.* 2013).

EOO: 47,768 km² **AOO:** 1,846 km²

Population

Generation Time (Length): Unknown. However, the minimum population doubling time is less than 15 months (Breder and Rosen 1966: cited in Ahmed 2007). Total Population: Total population of the species is unknown but it is found in small quantities in fishers' catches (Ahmed 2007) and are relatively less common. Trend: It is suspected that the population of the fish has declined significantly during the last 10 years and it has currently become rare in the country (Galib *et al.* 2013, Ahmed *et al.* 2015).

Habitat and Ecology

The fish inhabits freshwater and occurs in rivers, streams, ditches and ponds in floodplains. It is a benthopelagic species, feeds on insects, benthic organisms and detritus.

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa.

Chagunius chagunio

Species ID: FI0071

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Chagunius chagunio (Hamilton, 1822) English Name: Chaguni Bengali Name: Jarua, Utti Synonym/s: Puntius chagunio (Hamilton, 1822) Cyprinus chagunio Hamilton, 1822 Rohita chagunio (Hamilton, 1822) Barbas chagunio (Hamilton, 1822) Barbas beavani Gunther, 1868

Barbas spilopholus McClelland, 1839

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B2b(iii)c(ii) ver 3.1

Justification: The species has limited distribution in some northern districts of Bangladesh, however, the exact number of locations are not known. As per local accounts, the population of the species and its habitat range are declining due to massive siltation and drying up of northern rivers of the country and intense fishing pressure. The estimated Area of Occupancy (843.29 km²) of the species is less than the upper threshold value for the IUCN Red list vulnerable category. Hence, *Chagunius chagunio* is assessed as Vulnerable.

Date Assessed: 16 March 2015

History

Regional Status: The species has been assessed as Data Deficient (DD) (IUCN Bangladesh 2000).





VULNERABLE

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Geographic Range

Global: *Chagunius chagunio* occurs in the Ganges and Brahmaputra drainages of northern and northeastern Bangladesh, India, Myanmar, Nepal, Thailand and Pakistan (Kader 2007).

Bangladesh: The species is reported from the streams of Chittagong Hill Tracts, Dinajpur, Rangpur, Mymensingh and Sylhet District (Rahman 2005).

EOO: 1,04,368 km² AOO: 843 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, this species is fairly common in streams of Dinajpur, Rangpur, Mymensingh, Sylhet, and Chittagong Hill Tracts (Rahman 2005). It is relatively less abundant than the other species of carps. Trend: No information is available on the population trend of this species. However, local accounts suggest that the population abundance is declining (pers. obs.).

Habitat and Ecology

Chagunius chagunio inhabits freshwater and occurs in highland fast flowing rivers and tributaries containing clear water and substrates of rock, gravel and sand. This fish is demersal and potamodromous. It is omnivorous in habit and feeds mainly on insects, algae and detritus. Its movement is fairly restricted.

Assessor: Mst. Kaniz Fatema

Chela cachius

Species ID: FI0018

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Chela cachius (Hamilton, 1822) English Name: Silver Hatchlet Barb Bengali Name: Chhep chela Synonym/s: Cyprinus cachius Hamilton, 1822 Cyprinus apter Hamilton, 1822 Perilampus apter Day, 1878 Chela apter Rahman, 1974

Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: *Chela cachius* is fairly common and widespread species in all freshwater habitats (haor, baor, beels, floodplain, canals, ditches, ponds, rivers and streams) in Bangladesh. Recent survey indicates that its population has declined over 30% in last ten years due to pollution (industrial effluents, pesticides and agrochemicals) and habitat destruction. Siltation, drying up of habitats, destruction of breeding grounds and fishing by dewatering are the major threats to the species. So, the species is assessed as Vulnerable.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).





Chela cachius

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<VU>

Geographic Range

Global: Its range includes Bangladesh, India, Myanmar and Pakistan (Talwer and Jhingran 1991, Rahman 2005).

Bangladesh: Found in Brahmaputra- Jamuna River (Rahman and Akhter 2007), Chalan Beel (Kostori *et al.* 2011), Chandpur (Rahman 2005), Feni-Muhuri River (Haroon *et al.* 1989), Matshaya Rani Fish Sanctuary -Brahmaputra River (Hasan *et al.* 2012), Noakhali (Hossain 2013), Padma River- Rajshahi (Hossain and Haque 2005), Titas River- Brahmanbaria (Ahmed and Akther 2008), Rivers and Haors of Moulvibazar, Sylhet and Sunamgonj (Surma River, Kushiara River, Hakaluki Haor, Kawadhighi Haor, Deker Haor, Sanghair Haor), ponds, ditches, canals and tanks throughout the country (Rahman 2005).

EOO: 78,908 km² **AOO:** 1,334 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: Recent survey indicates that its population has declined over 30% in last 10 years due to pollution and habitat destruction.

Habitat and Ecology

It inhabits all freshwater habitats but prefers stagnant streams, ponds and tanks (Rahman 2005). Spawning takes place in ponds, tanks and small streams (Talwar and Jhingran 1991). The species can be utilized as larvaecidal fish.

Assessor: Mohammad Ali Azadi Associate Assessor/s: Mohammad Arshad-ul-Alam

Danio dangila

Species ID: FI0075

Taxonomy

nony				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Danio dangila (Hamilton, 1822) English Name: Dangila Danio, Moustached Danio, Olive Danio Bengali Name: Nipati, Gofi Chela Synonym/s: Cyprinus dangila Hamilton, 1822

Perilampus reticulatus McClelland, 1839 Danio dangila Day, 1878 Danio meghalayensis Sen& Dey, 1985

Taxonomic Notes: This species has the longest pairs of barbels among *Danio spp.* which enables it to be easily identified.

Assessment Information

Red List Category & Criteria: VU B2ab(ii,iii,iv) ver 3.1

Justification: *Danio dangilla* is found in hill stream and its adjoining water bodies, particularly in the south-eastern part of the country and presently the species is known only from six or seven locations. The population of the species also shows a declining trend (Ahmed *et al.* 2015). Habitat loss caused due to siltation and aquatic pollution. These are the major threats to the species. The estimated Area of Occupancy (1,153 km²) is below the upper threshold value for the IUCN Red List Vulnerable Category. Hence, the fish is assessed as Vulnerable.

Date Assessed: 20 August 2014

History

Regional Status: This species has been considered as Data Deficient (DD) earlier in Bangladesh (IUCN Bangladesh 2000).





Danio dangila

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Geographic Range

Global: This fish is known from Bangladesh, India, Myanmar, Nepal and Pakistan (Rahman and Chowdury 2007).

Bangladesh: *Danio dangila* has been reported from the mountain streams of Cox's Bazar, (Barachara, Inani, Himchori and Teknaf hill streams) extreme upstream of Someshwari River (area located at the base of Meghalaya hills), upstream of Chittagong Hill Tracts area, also from the area located at the base of Meghalaya hills in Sylhet (Ahmed *et al.* 2015).

EOO: 44,743 km² **AOO:** 1,153 km²

Population

Generation Time (Length): Unknown. Total Population: Information on total population is not available.

Trend: Decreasing (Ahmed et al. 2015).

Habitat and Ecology

The fish inhabits freshwater and occurs in slow moving to stagnant standing water bodies, particularly the hill streams, canals, ditches, ponds and beels near the mountains. *D. dangila* is a bentho-pelagic fish, feeds on worms and small crustaceans, also on insect larvae (Rahman and Chowdhury 2007). In hill streams, the species prefers rocky and stony bottom (Ahmed *et al.* 2015). It is a schooling species.

Assessor: Md. Mizanur Rahman

Labeo ariza

Species ID: FI0084

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo ariza (Hamilton, 1807) English Name: Ariza Labeo Bengali Name: Lasso, Raik, Bata Synonym/s: Cirrhinus ariza Hamilton, 1807 Cyprinus ariza Hamilton, 1807 Labeo ariza Hamilton, 1807 Tylognathus ariza Hamilton, 1807 Labeo ariza Day, 1887

Taxonomic Notes: The generic status of this fish is under debate. Roberts (1997) considered this species as *Cirrhinus ariza* while Talwar and Jhingran (1991) and Menon (1999) have considered this species as *Labeo ariza*. Liu and Zhou (2009) consider this species as *Bangana ariza*. In IUCN Global Redlist, the species was also treated as *Bangana ariza*.

Assessment Information

Red List Category & Criteria: VU B1ab(ii.iii.iv) ver 3.1

Justification: *L. ariza* is reported from limited areas of the country. The estimated Extent of Occurrence (14,180 km²) of the fish is less than the upper threshold for IUCN Vulnerable Category. The Area of Occupancy (2,788 km²) is also nearer to upper threshold for Vulnerable Category. Considering existing major threats, such as the habitat loss, aquatic pollution and over fishing, the population of the species shows a declining trend. The fish is therefore considered as Vulnerable.

Date Assessed: 24 August 2014





Labeo ariza

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History

Regional Status: *L. ariza* has not been assessed earlier in Bangladesh.

Geographic Range

Global: It has a wide distribution in Pakistan, India, Nepal, Bangladesh and Myanmar (Roberts 1997, Menon 1999, Dahanukar 2010).

Bangladesh: This species is reported from Chalan Beel, Natore (Hossain *et al.*, 2009) and Halda River, Chittagong (Azadi and Arshad-Ul-Alam 2013).

EOO: 14,180 km² **AOO:** 2,788 km²

Population

Generation Time (Length): Unknown.

Total Population: Currently, no population status data is available.

Trend: The population trend is probably declining.

Habitat and Ecology

The species inhabits freshwater, found in clear rivers and tanks, ponds, beels and inundated fields. It is a benthopelagic, potamodromous fish and feeds on plankton and detritus. It is a prolific breeder, laying about 3 million ova per female. Male is smaller than female. Its fingerlings grow fairly rapid. It breeds in flooded shallows from June to September (Talwar and Jhingran 1991).

Assessor: M. Niamul Naser Associate Assessor/s: Gawsia Wahidunessa Chowdhury

Labeo boggut

Species ID: FI0087

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo boggut (Sykes, 1839) English Name: Boggut Labeo Bengali Name: Ghonia, Paharia Maach, Naru Maach Synonym/s: Chondrostoma boggut Sykes, 1839 Tylognathus striolatus Günther, 1868 Labeo boggut Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B1+2ab(iii,iv) ver 3.1

Justification: Labeo boggut is known from the northwestern and northeastern parts of Bangladesh. The estimated Extent of Occurrence (EOO) is 5,585.78 km² and the Area of Occupancy (AOO) is 1,793.79 km². Both the values are below the threshold values for the IUCN Redlist Vulnerable Category. Moreover, the species is rare within the country. Considering the above and in the absence of any conservation activities targeting the species, it is assessed as Vulnerable.

Date Assessed: 24 August 2014

History

Regional Status: This species has been assessed Data Deficient (DD) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Labeo boggut has been recorded from Bangladesh, India and Pakistan (Talwar and Jhingran 1991).





Labeo boggut

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Bangladesh: It is found in the northwestern and northern hilly parts of the country and particularly it has been reported from Kangsha River, Somshwari River of Netrokona District (Ahmed *et al.* 2013) and from haor areas of Sunamgonj District (Mahalder and Mustafa 2013).

EOO: 5,586 km² **AOO:** 1,794 km²

Population

Generation Time (Length): Population generation time is unknown, however, population doubling time is less than 15 months.

Total Population: Information on total population of this species is not available. However, presently it is rarely found (Rahman 2005, Mohsin 2007). **Trend:** Exact population trend of this is not known, but apparently it is declining.

Habitat and Ecology

Labeo boggut inhabits tropical freshwater and found in rivers and reservoirs (Menon 1999), particularly in the upper reaches of the rivers (Mohsin 2007). It is a benthopelagic species and plankton feeder.

Assessor: M. Niamul Naser Associate Assessor/s: Gawsia Wahidunnessa Chowdhury

Osteochilus hasseltii

Species ID: FI0097

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Osteochilus hasseltii (Valencienens, 1842) English Name: Bonylip Barb, Hard-lipped Barb, Silvershark Minnow Bengali Name: Not known. Synonym/s: Rohita hasseltii Cuvier and Valenciennes, 1842 Osteochilus hasselti Valenciennes, 1842 Rohita rostellatus Valenciennes, 1842 Rohita erythrura Valenciennes, 1842 Rohita kuhli Bleeker, 1860

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B2ab(ii,iii,iv) ver 3.1

Justification: Osteochilus hasseltii is reported from eight Upazilas of Greater Noakhali District (Hossain *et al.* 2014) and has not been reported from anywhere else in the country. The estimated Extent of Occurrence (4,115.06 km²) and Area of Occupancy (2,147.58 km²) are around the upper threshold values for the IUCN Vulnerable Category. Several major threats, viz. aquatic pollution, habitat loss and overfishing probably affect its population in the country (Hossain *et al.* 2014). It is apparent that the fish is potentially threatened and hence, it is assessed as Vulnerable.

Date Assessed: 20 October 2014

History

Regional Status: This taxon has not been assessed in Bangladesh earlier.





Osteochilus hasseltii

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<VU>

Geographic Range

Global: Osteochilus hasseltii is reported from Bangladesh (Hossain *et al.* 2011), Cambodia, China (Yunnan), Indonesia (Jawa, Kalimantan, Sumatera), Lao People's Democratic Republic, Malaysia (Peninsular Malaysia, Sarawak), Myanmar (mainland), Thailand and Viet Nam (Vidthayanon 2012).

Bangladesh: It has been reported from eight Upazilas of Feni District, Dagonbhuya, Companiganj, Zaminderhat, Chamuhani, Maijdee, Ramgati and Ramganj of the Greater Noakhali District during July-October, 2011.

EOO: 4,115 km² **AOO:** 2,148 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Osteochilus hasseltii is a freshwater benthopelagic fish and inhabits a wide range of freshwater habitats from lowland marshlands, peat swamps, rivers and tributaries to hill streams. The adult fish feeds on roots of plants (*Hydrilla verticillata*), unicellular algae and some crustaceans. It migrates from river to flooded areas during the onset of the flood season and returns to river habitats at the end of that period. Juveniles are usually seen first in August, they move back to permanent water as flooded lands dry up. Back in the rivers they are attached to brush piles, tree roots and other solid objects.

Assessor: Mostafa Ali Reza Hossain

Pethia ticto

Species ID: FI0

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Pethia ticto (Hamilton, 1822) English Name: Two-spot Barb, Firefin Barb, Ticto Barb Bengali Name: Tit punti Synonym/s: Cyprinus ticto Hamilton, 1822 Barbus ticto Day, 1878 Systoma ticto McClelland, 1853 Puntius ticto Rahman, 1974 Taxonomic Notes: None

Taxonomic Notes. None

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: *Pethia ticto* is widely distributed in inland waters of Bangladesh. The species was previously abundant in the rivers, creeks, canals, reservoirs, lakes, beels, haors, baors and ponds of Bangladesh. Recent surveys and personal visits indicate that its population has declined over 30% during the last ten years due to over exploitation and habitat destruction (Latifa *et al.* In Press, M. S. Ahmed, pers. comm.). Therefore, the species is assessed as Vulnerable (VU).

Date Assessed: 21 January 2015

History

Regional Status: It was considered Vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Nepal, Pakistan, Sri Lanka and Thailand (Goswami *et al.* 2012).





Pethia ticto

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VULNERABLE

<VU>

Bangladesh: It occurs in rivers, canals, beels, ponds and similar waters in Bangladesh (Rahman 1989, Mian *et al.* 2013).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available on wild population and its trends. Trend: Declining.

Habitat and Ecology

It inhabits rivers, canals, beels, ponds and lowlands with sand and mud substrate (Rahman 1989). It can live in both fresh and brackish waters. It is an omnivorous fish, feeding on mosquito larvae, detritus, vegetation and associated aquatic insects, including chironomid larvae.

Assessor: Md. Enamul Hoq

Sicamugil cascasia

Species ID: FI0214

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE

Scientific Name: Sicamugil cascasia(Hamilton, 1822) English Name: Yellowtail Mullet Bengali Name: Bata, Kachki, Kachki Bata, Kechi Khalla Synonym/s: Mugil cascasia Hamilton, 1822 Liza cascasia Munro, 1955 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B2ab(ii,iii) ver 3.1

Justification: Sicamugil cascasia is occasionally reported from some rivers in the middle and north-eastern part of Bangladesh. Although Extent of Occurrence of this species is higher than the threshold level of Vulnerable Category (>20,000 km²), it meets the Criteria of Vulnerable Category as Area of Occupancy is less than 2,000 km² and the number of locations of its occurrence is less than 10 and furthermore, there is a continuing decline in quality of habitat due to construction of dam, sand and stone lifting from river bed. Hence, the species is assessed as vulnerable.

Date Assessed: 19 December 2014

History

Regional Status: It is listed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, India and





Sicamugil cascasia

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Pakistan (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It is found in some selected freshwater rivers of Bangladesh, especially in the Brahmaputra River (Rahman 2005), the Padma River (Hossain and Haque 2005) and the Mohananda River (Nahar *et al.* 2011).

EOO: 37,696 km² **AOO:** 950 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a potamodromous species (Riede 2004). It is oviparous, eggs are pelagic and non-adhesive (Breder and Rosen, 1966). This is purely a freshwater species, found in big as well as small rivers (Rahman 2005, Hossain and Haque 2005, Chandra 2009, Nahar *et al.* 2011).

Assessor: Md. Monirul Islam

Notopterus notopterus

Species ID: FI0045

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	OSTEOGLOSSIFORMES	NOTOPTERIDAE

Scientific Name: Notopterus notopterus (Pallas, 1769) English Name: Grey Featherback, Freshwater Knife Fish Bengali Name: Foli, Haila, Kanla Synonym/s: Gymnotus notopterus Pallas, 1769 Mystus kapirat Hamilton, 1822 Notopterus kapirat Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B2b(ii,iii)c(ii) ver 3.1

Justification: *Notopterus notopterus* is widely distributed throughout the country and inhabits a wide variety of water bodies, including rivers, canals, beels, floodplains and ponds. Although, it is found in good numbers in markets (Alam 2007), however, the species shows a clear declining population trend (Ahmed *et al.* 2015). The decline in population abundance may also be inferred from the reduction in its habitat and several other prevailing widespread threats, including siltation, over-exploitation and aquatic pollution, which are unlikely to be removed in near future. The fish was earlier assessed as Vulnerable in Bangladesh. Therefore, the Vulnerable category is retained for the species.

Date Assessed: 21 August 2014

History

Regional Status : The taxon has been assessed as Vulnerable (VU) earlier in Bangladesh (IUCN Bangladesh 2000).





Notopterus notopterus

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VULNERABLE

<VU>

Geographic Range

Global: The species is recorded from Bangladesh, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Thailand and Viet Nam (Ng 2010).

Bangladesh: They are found all over Bangladesh in all kinds of water bodies (Alam 2007). However, specifically they have been reported from Tanguar Haor, Hakaluki Haor, Marjat Baor, Chalan Beel and Sundarbans (Akhter *et al.* 2011, Alam *et al.* 2012, IPAC 2013).

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length) Unknown.

Total Population: Information on the total population of the fish is not available

Trend: Earlier the fish was common throughout its habitat ranges. However, currently it shows a continued decline in its abundance (Alam 2007, Ahmed *et al.* 2015).

Habitat and Ecology

This fish inhabits a wide range of freshwater bodies, including rivers, canals, floodplains, beels and ponds throughout Bangladesh. The species is carnivore and predatory in nature and it feeds on small fish, larvae and aquatic arthropods, small crustaceans and zooplanktons. It breeds in stagnant or running waters during the months of May-June. Parental care observed in the breeding period and males protect the eggs (Alam 2007).

Assessor: Gawsia Wahedunessa Chowdhury

Awaous grammepomus

Species ID: FI0019

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Awaous grammepomus (Bleeker, 1849) English Name: Scribbled Goby Bengali Name: Shil Baila, Bele Synonym/s: Gobius grammepomus Bleeker, 1849 Gobius personatus Day, 1876 Awaous grammepomu Kaumans, 1953 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B2ab(iii) ver 3.1

Justification: Although Extent of Occurrence (EOO>20,000 km²), of this species is higher than the threshold level of Vulnerable Category, however it meets the criteria of Vulnerable Category as Area of Occupancy (AOO) is less than 2,000 km² and it also occurs in less than 10 locations. Furthermore, there is a continuous decline in quality of habitat due to sand and stone lifting from river bed. Another threat is domestic and urban sewage pollution in hilly urban area. No data were found on its population and population size. Considering all these factors it can be considered as the Vulnerable Category based on Criteria B.

Date Assessed: 25 June 2014

History

Regional Status: The species was assessed as Not Threatened (NO) (IUCN Bangladesh 2000).





Awaous grammepomus

© Md. Sagir Ahmed

VULNERABLE

<VU>

Geographic Range

Global: It occurs in Bangladesh, Cambodia, East Indies, India, Malaysia, Myanmar, New Guinea, Philippines, Sri Lanka, Southern China, Taiwan, Thailand and Viet Nam (Pethiyagoda 1991, Talwer and Jhingran 1991, Rahman 2005)

Bangladesh: It lives in Dakatia, Kangsa, Meghna, Sangu and Someswari Rivers as well as in the hilly streams of Bandarban, Cox's Bazar and Rangamati Districts (Rahman 2005, Ahmad *et al.* 2013, M.M. Rahman pers.comm. 2014).

EOO: 41,193 km² **AOO:** 1,367 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: Recent survey indicates that its population has declined over 30% in last 10 years due to pollution and habitat destruction.

Habitat and Ecology

Freshwater; hilly streams, rivers, enters in estuaries. Usually found in streams with gravel or sandy bottom. Benthopelagic species, feeds on filamentous algae, insect larvae, small fishes and crustaceans.

Assessor: Mohammad Arshad-ul-Alam Associate Assessor/s: Mohammad Ali Azadi

Eugnathogobius oligactis

Species ID: FI0034

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: *Eugnathogobius oligactis* (Bleeker, 1875) English Name: Tiger Goby Bengali Name: Bele

Synonym/s: Pseudogobiopsis oligactis Bleeker, 1875 Gobiopsis oligactis Bleeker, 1875 Stigmatogobius oligactis Bleeker, 1875 Pseudogobius neglectus Bleeker, 1931 Stigmatogobius neglectus Koumans, 1932 Pseudogobiopsis campbellianus Jordan & Seale, 1907 Mugilogobius perakensis Herre, 1940 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU B1+2b(i,ii) ver 3.1

Justification: *Eugnathogobius oligactis* occurs in the lower reaches of tidal rivers and estuaries. It is found in small quantities in the fish catches. The estimated Area Extent of Occurrence (75,282.64 km²) and Area of Occupancy (12,073.80 km²). Considering the reduction in its habitat and prevailing threats and in the absence of any conservation activities, the species is assessed Vulnerable (VU).

Date Assessed: 25 June 2014

History

Regional Status: The taxon has not been evaluated earlier in Bangladesh.





Eugnathogobius oligactis

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VULNERABLE

<VU>

Geographic Range

Global: The species occurs in Bangladesh, Brunei, Cambodia, India, Indonesia, Malaysia, Singapore, and Thailand (Rahman and Akter 2007).

Bangladesh: The species occurs in Bangladesh, Brunei, Cambodia, India, Indonesia, Malaysia, Singapore and Thailand (Rahman and Akter 2007).

EOO: 75,283 km² AOO: 12,074 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species is found in tidal rivers and estuaries of coastal areas of the country (Rahman and Akter 2007). It is a benthic fish and predator in nature, feeds on small fishes and invertebrates.

Assessor: Syeda Ismat Ara Associate Assessor/s: Mohammad Ali Azadi

Amblyceps laticeps

Species ID: FI0160

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	AMBLYCIPITIDAE

Scientific Name: *Amblyceps laticeps* (McClelland, 1842) English Name: Indian Torrent Catfish Bengali Name: Chotta Shinghi Synonym/s: *Olyra laticeps* McClelland, 1842 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: VU B2ab ver 3.1

Justification: *Amblyceps laticeps* is well distributed in its habitat range. As it is a non-targeted fish for consumption, the potential threats were not identified earlier but recent study locations suggested that the degradation of habitat quality and the decline of Area of Occupancy. It is distributed in 10 sites only. However, its Extent of Occurrence is much higher than the threshold for Threatened Categories but Area of Occupancy is estimated to be 1,448.77 km². Therefore, this species has been assessed as Vulnerable considering its Area of Occurrence and habitat loss.

Date Assessed: 15 February 2015

History

Regional Status: Not assessed in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: The species has been recorded from Bangladesh





Amblyceps laticeps

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<VU>

and India (Meghalaya and northern West Bengal) (Ng 2005).

Bangladesh: *Amblyceps laticeps* is reported from the Piyang and Sari Rivers of Sylhet. This species is also found in lower reaches of Himchori hill streams of Cox's Bazar and Madhabkundo hill stream of Moulvi Bazar District and Chittagong University Campus hill streams. Also reported from the Tanguar Haor of Sunamganj, the Korotoa, Atrai and Mahananda Rivers of Northern region of the country (Hossain *et al.* 2012).

EOO: 1,16,846 km² **AOO:** 1,449 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is carnivorous in habit and feeds on aquatic insects. It hides under the rocks and pebbles at the bottom of streams. This species inhabits faster-flowing hill streams and rivers with a bottom of sand/rocks (Ng 2005, Ahmed *et al.* 2015).

Assessor: Md. Mizanur Rahman

Sperata aor

Species ID: FI0149

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Sperata aor (Hamilton, 1822) English Name: Long-whiskered Catfish Bengali Name: Ayre, Bhangat, Talla Ayre Synonym/s: Pimelodus aor Hamilton, 1822; Macrones aor Day, 1878; Mystus (Osteobagrus) aor Jayaram, 1955; Mystus aor Bhuiyan, 1964; Aorichthys aor Jayaram, 1977. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2bc ver 3.1

Justification: The species occurs throughout Bangladesh and inhabits most rivers and its tributaries, and its Extent of Occurrence and Area of Occupancy are much higher than the lower thresholds for any threatened category. However, the species shows continued population decline and was previously assessed as Vulnerable (IUCN Red List 2000). Recent field visits (Ahmed *et al.* 2015, and pers. obs) suggest that threats are not removed and declining trend in population still continues, albeit at a much slower rate. Considering the habitat loss and fishing pressure and other threats, the species is assessed as Vulnerable.

Date Assessed: 27 August 2014

History

Regional Status: It was assessed as Vulnerable (IUCN Bangladesh 2000).





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<VU>

Geographic Range

Ferraris and Runge 1999, Kibria 2007).

Global: Sperata aor occurs in Bangladesh, India, upper Myanmar, Nepal and Pakistan (Talwar and Jhingaran 1991,

Bangladesh: Widely distributed within Bangladesh (Rahman 2005) and a number of authors reported the species from the flowing waterbodies: Padma River, Chalan Beel, Barulia Beel, Bangali River, Baral River, River Choto Jamuna, Attrai River, Meghna River, Bhairab River, Turag River, Balla Beel, "Ichhanoi Beel", Medha beel, Brahmaputra River, Titas River, Arialkha, Pungli River, Dhaleswari River, Ichamoti Kushiara River, Monu River, Pyra River, Bishkhali River, Tetulia River, Baleshwar River, Kritonkhola River, Patnai River, Someshari and Kangsha River, Surma River, Bhairab and Rupsha River, Jamuna River, Meghna River (Rahman 2005, Kibria 2007, Ahmed 2008, Hossain *et al.* 2009, Rahman *et al.* 2012).

EOO: 1,46,159 km² **AOO:** 16,677 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

A freshwater species inhabits rivers and their tributaries, channels, reservoirs, large beels and occasionally found in ponds and ditches. It is a predatory fish, preys on fishes, shrimps and other bottom dwelling organisms (Rahman 2005, Kibria 2007). The fish digs out 30 to 50 cm deep pit in the bottom of slow moving or virtually stagnant portion of the river or in a beel, baor and haor where it lays eggs and guards the brood for sometime during the breeding season and maintains territory (M.A.R. Khan Pers. comm. pers. obs by the author).

Assessor: Md. Abdur Rob Mollah

Sperata seenghala

Species ID: FI0150

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Sperata seenghala (Sykes, 1839) English Name: Giant River-catfish Bengali Name: Guijja, Guijja Ayre, Bhangat Synonym/s: Platystoma seenghala Sykes, 1839; Macrones seenghala Day, 1878; Mystus seenghala Shaw and Shebbeare, 1937;

Mystus (Osteobagrus) seenghala Jayaram, 1955; Aorichthys seenghala Jayaram, 1977

Taxonomic Notes: None

Assessment Information



Sperata seenghala

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<VU>

Red List Category & Criteria: VU A2bc ver 3.1

Justification: Sperata seenghala occurs throughout Bangladesh and is found in a wide range of water bodies. Although, the species was assessed as Endangered in the past (IUCN Bangladesh 2000), however, recent field and market surveys (NACOM 2007, 2008 and 2010, Ahmed *et al.* 2015 and pers. obs.) clearly indicate that the species is fairly abundant, although a population decline continues due to habitat loss and fishing pressure and it is inferred that about 50% decline in population might have occurred during the last 20 years. Considering the habitat loss and population decline the species is assessed as Vulnerable.

Date Assessed: 14 August 2014

History

Regional Status: This species was assessed as Endangered (IUCN Bangladesh 2000).

Geographic Range



Global: It is found in Afganistan, Bangladesh, Burma, India, Pakistan and Nepal (Talwar and Jhungran 1991, Rahman 2005).

Bangladesh: It is known to occur in Narsunda River, Padma River, Chalan Beel, Barnai River, Bangali River, Baral River, River Choto Jamuna, "Ichhanoi Beel, Mahananda River, Medha Beel, Attrai River, Arialkha, Ichamoti, Kushiara River, Monu River, Pyra River, Kritonkhola River, Bishkhali River, Tetulia River, Baleshwar River, Someshari and Kangsha River, Surma River, Meghna River (Rahman 2005, Hossain 2009, Galib *et al.* 2013).

EOO: 1,35,628 km² **AOO:** 10,399 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in rivers, canals, beels, baors, inundated fields and other freshwater habitats (Chowdhury 2007). Mainly bottom-feeder and predatory in nature, feeds on benthos, fish larvae and algae. The fish excavates a pit in the form of a nest in the bottom of the river and guards the nest up to the time the of hatchings.

Assessor: Md. Abdur Rob Mollah

Wallago attu

Species ID: FI0154

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SILURIDAE

Scientific Name: Wallago attu (Bloch & Schneider 1801) English Name: Freshwater Shark, Wallago Bengali Name: Boal, Boali, Patari, Boyari, Boayair, Keyali Synonym/s: Silurus attu Bloch & Schneider, 1801 Silurus boalis Hamilton, 1822 Silurus macrostomus Swainson, 1839 Wallagonia attu Smith, 1945 Silurus wallago Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2cd ver 3.1

Justification: Wallgo attu was enlisted in the IUCN Redlist for Bangladesh as an Endangered species (IUCN 2000) due to its highly declining population, caused by threats like siltation, overexploitation, aquatic pollution, etc. These threats still persist and there is no sign of its recovery (pers. obs.). Since the species is distributed throughout Bangladesh and expected to have a large population but recent studies (NACOM 2007, 2010a, 2010b) showed that the relative abundances of the species range from rare to less common and the population of the species is declining at a slower rate and it is inferred that the population abundance has probably declined by 60% during the last 25 years. Also some escaped specimens from fish cuture ponds are getting added to the declining natural population. Considering all these factors, the species has been assessed as Vulnerable.

Date Assessed: 22 September 2014





Wallago attu

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<VU>

History

Regional Status: *Wallago attu* has been considered as Endangered for the IUCN Red List, 2000.

Geographic Range

Global: *Wallago attu* occurs all over South and Southeast Asia, including Pakistan, India, Nepal, Bangladesh, Myanmar, Malaysia, Indonesia, Thailand, Viet Nam, Laos and Cambodia (Taki 1974, Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: *Wallago attu* is widely distributed in all aquatic habitat systems throughout the country (Rahman 2005, Ahmed 2008, Hossain *et al.* 2009, Bashar *et al.* 2009, Akhtaruzzaman and Alam 2012).

EOO: 1,21,601 km² **AOO:** 13,519 km²

Population

Generation Time (Length): Life span of the species extends from 8-10 years (http://ww. The Aquarium Wiki.com) and it attains maturity by two years. Generation time could be estimated as 7-8 years (http://www.Planetcatfish.com). Total Population: Unknown.

Trend: The abundance of the species declined over a long period of time. Highly declining trend was observed during 1980s. However, during the last ten years, rate of population decline has slowed down.

Habitat and Ecology

Wallago attu inhabits rivers, large and small, beels, reservoir, baors and enters the floodplains and roadside ditches. It is a voracious, carnivorous, well known predatory fish. Because of its large mouth size, it predates on large fishes, frogs and other aquatic animals. Juveniles feed on crustaceans, insects (Mohsin 2007). For breeding purposes, the fish enters into shallower waters (Pethiyagoda 1991).

Assessor: Md Abdur Rob Mollah

Glyptothorax telchitta

Species ID: FI0167

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Glyptothorax telchitta (Hamilton, 1822) English Name: Copper Catfish Bengali Name: Teli, Telchitta Synonym/s: Pimelodus telchitta Hamilton, 1822 Dimelodus botius Hamilton, 1822 Glyptosternum botia Day, 1878 Glyptothorax telchitta Hora, 1923 Taxonomic Notes: Often Glyptothorax telchitta is misidentified as Glyptothorax indicus and Conta conta of

Assessment Information

the same family.

Red List Category & Criteria: VU A2bc ver 3.1

Justification: Although the Area of Occupancy and Extent of Occurrence of this species indicate its wide distribution throughout the country, the reduction of its population has been conjectured from local catch. As a commercially less important species, all possible threats to this fish are not yet known. However, current low population and its declining trends can be inferred from squeezing of its natural habitats due to different anthropogenic activities. From the data of key informant interviews of surveys and personal communication with local people it is assumed that its population has reduced more than 30% during the last two decades (Ahmed *et al.* 2015). Therefore. *Glyptothorax telchitta* is assessed as Vulnerable.

Date Assessed: 15 October 2014





Glypothorax telchitta

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<VU>

History

Regional Status: Considered as Data Deficient in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It occurs in Bangladesh, India (Arunachal Pradesh, Bihar, Madhya Pradesh, Nagaland, Uttaranchal, Uttar Pradesh, West Bengal, Nepal and Pakistan (Rahman 2005, Raknuzzaman 2007).

Bangladesh: This species has been reported from the up streams of Shomeshwari and Kangsha Rivers of Netrokona, Surma, Piyang and Sari Rivers of Sylhet, Korotoa, Atra and Mahananda river of Northern region. Found in the Old Brahmaputra, Jamuna and in the River Padma and Buriganga. It has also been recorded from the Tanguar Haor of Sunamganj and in the high altitude of Sangu River (Rahman and Akhter 2007, Mahsin and Haque 2009, Ahmed *et al.* 2015).

EOO: 1,27,049 km² AOO: 8,020 km²

Population

Generation Time (Length): Unknown.

Total Population: Although the present population and its trends are unknown for this species, current indications from field surveys are that this species is not abundant and the population is decreasing in their natural habitats (Ahmed *et al.* 2015). **Trend:** Declining.

Habitat and Ecology

It inhabits primarily hill-streams. Descends to the plains from the hills in the fast flowing waters during rains. This fish also occurs in rivers, haors, beels near the hills. It feeds mainly on bottom organisms. *Glyptothorax telchitta* clings to the stones in the bottom by means of adhesive thoracic apparatus (Raknuzzaman 2007).

Assessor: Md. Mizanur Rahman

Monopterus cuchia

Specied ID: FI0196

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNBRANCHIFORMES	SYNBRANCHIDAE

Scientific Name: Monopterus cuchia (Hamilton, 1822) English Name: Gangetic Mud Eel, Swamp Eel Bengali Name: Kuchia, Cuchia, Kuiccha Synonym/s: Unibranchapertura cuchia Hamilton, 1822 Amphipnous cuchia Hamilton, 1822 Pneumabranchus albinas McClelland, 1844 Opoichthys punctata McClelland, 1844

Taxonomic Notes: There are differences between populations from different parts of its range and further taxonomic investigation is required. Taxonomic investigation is needed to clarify possible confusion between *M. cuchia* and *M. albus*, which could impact upon the species (Dahanukar 2010, Miah *et al.* 2013).

Assessment Information

Red List Category & Criteria: VU A2acd ver 3.1

Justification: *Monopterus cuchia* occurs throughout the country in all types of freshwater bodies. Although, empirical data are not available, the fish shows a clear population decline. Several threats, including overexploitation for export, drying up and conversion of wetlands into crop fields and human settlement areas negatively impact the abundance of the fish in nature. Based on the recent field studies (Ahmed *et al.* 2015, Latifa *et al.* In Press), it has been inferred that probably the population of this species has declined by more than 50% during the last ten years. So, the fish is assessed as Vulnerable.

Date Assessed: 22 September 2014





Monopterus cuchia

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<VU>

History

Regional Status: It has been considered as Vulnerable earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Monopterus cuchia* is native to Bangladesh, India, Myanmar, Nepal and Pakistan (Haque 2007).

Bangladesh: It is available throughout Bangladesh (Rahman 2005), particularly it is more abundant in Sylhet, Mymensingh and Tangail Districts. Frequently reported from almost all the shallow freshwater habitats of Bangladesh, including shallow river basins, floodplains and haor areas, burrows in rice fields throughout the country.

EOO: 2,17,468 km² **AOO:** 47,196 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: It is declining due to habitat degradation and overexploitation. During 1960's it was abundant and used to be seen in all ditches, beels, and inundated fields throughout the country. However, currently it is not seen in large numbers (Haque 2007). Based on the recent field studies the population of the species has declined by more than 50% during the last ten years (Ahmed *et al.* 2015).

Habitat and Ecology

Monopterus cuchia inhabits fresh and brackish waters, prefers to live in areas with aquatic vegetation during monsoon since it adheres its eggs in cluster with aquatic vegetation. It lives in burrows of rice fields, shallow river basins, floodplains and haor areas. It hibernates in bottom or dike of shallow waterbody during winter. It is carnivorous and feeds on small fishes, tadpoles and insects (Haque 2007).

Assessor: Harunur Rashid

Ophisternon bengalense

Specied ID: FI0197

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNBRANCHIFORMES	SYNBRANCHIDAE

Scientific Name: Ophisternon bengalense McClelland, 1844 English Name: Bengal Eel; Pygmy Eel, Asian Swamp Eel Bengali Name: Bamosh, Kunche Synonym/s: Synbranchus bengalensis McClelland, 1844 Ophisternon hepaticus McClelland, 1844 Tetrabranchus microphthalmus Bleeker, 1851 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2acd ver 3.1

Justification: *Ophisternon bengalense* is distributed in the tidal influences of the estuaries and swamps of the country. Due to indiscriminate harvest and habitat degradation caused by vegetation removal from coastal areas, the population abundance of the species has declined by more than 50% (M A. R. Hossain and A. R. Mollah pers. comm.) during the last ten years. On the other hand, no conservation actions targeting the fish are in place. Hence, it is assessed as Vulnerable.

Date Assessed: 22 September 2014

History

Regional Status: This taxon has not been assessed earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *O. bengalense* is reported from Australia, Bangladesh, China, India; Myanmar, Malaysia, Pakistan,





Ophisternon bengalense

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Philippines, Sri Lanka and Thailand (Rahman and Chowdhury 2007).

Bangladesh: It is available in tidal rivers, estuaries, shrimp farms, enclosure and ditches situated in the coastal region of Bangladesh.

EOO: 77,229 km² **AOO:** 12,024km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: Population of the species is declining probably due to overexploitation and habitat destruction caused by vegetation removal. Apparently, the population has declined by more than 50% during the last ten years (M A. R. Hossain and A. R. Molla pers. comm.)

Habitat and Ecology

Ophisternon bengalense inhabits estuaries and freshwater within the influence of tide. It occurs mainly in thick vegetation of muddy, still water bodies, such as lagoons, swamps, canals and rice fields and mostly remains in bottom sediments and burrows (Rahman 2005). It is carnivorous and feeds on small fishes. The male guards eggs and builds nest or burrows.

Assessor: Harunur Rashid

Microphis cuncalus

Species ID: FI0194

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNGNATHIFORMES	SYNGNATHIDAE

Scientific Name: Microphis cuncalus (Hamilton, 1822) English Name: Crocodile Tooth Pipefish Bengali Name: Kumirer Khil, Kumirer Kona Synonym/s: Syngnathus cuncalus Hamilton, 1822 Doryichthys cuncalus Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2ad ver 3.1

Justification: This pipefish was very common and widley distributed in all freshwater rivers in Bangladesh. It is used to be caught in thousands in the fishing nets along with commercial fishes but were thrown overland enmasse causing severe decline in its population (M. A. R. Khan pers. comm.). Over the last 10 years the abundance of the species conjectured to have been reduced to about 50-60% (A. R. Mollah and M A R Hossain pers. comm.) Several anthropogenic activities have been well known as major threats to the existence of this species. Exploitation of the species (within Bangladesh range) is potentially high to contribute to population decline. Therefore, this species is assessed as Vulnerable.

Date Assessed: 20 October 2014

History

Regional Status: Considered as Not Threatened in Red List of IUCN Bangladesh 2000.





Microphis cuncalus

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<VU>

Geographic Range

Global: Recorded from the estuaries near Kolkota, India and Bangladesh. Study also reported that the species has been found throughout Bangladesh, India and Sri Lanka.

Bangladesh: Recorded from the Padma River, Halda River (Azadi and Alam 2011) and estuaries throughout Bangladesh.

EOO: 2,24,779 km² **AOO:** 16,871 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

This species has been recorded from a wide variety of habitats and prefers freshwater or low salinity regimes (Dhanya *et al.* 2007). Recorded from the rivers, streams and estuaries throughout Bangladesh (Hossain and Haq 2005, Siddique *et al.* 2007). It is demersal, amphidromous and ovoviviparous and feeds on worms, crustaceans and small zooplankton. Male carries eggs in a brood pouch, located under the tail (Siddiqui *et al.* 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Microphis deocata

Specied ID: FI0195

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNGNATHIFORMES	SYNGNATHIDAE
Niontifia Name: Miaranhia daggata (Hamilton, 1822)				

Scientific Name: *Microphis deocata* (Hamilton, 1822) English Name: Deocata Pipefish Bengali Name: Kumirer Khil Synonym/s: *Syngnathus deocata* Hamilton, 1822 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: VU A2ad ver 3.1

Justification: *Microphis deocata* is distributed in the northern Bangladesh and has also been recorded from Sundarbans. Its habitat has been highly degraded due to siltation, conversion and drying up of wetlands. Pollution is also a threat to the species. Consequently, the species has been declined in population. The estimated Extent of Occurrence and Area of Occupancy are much higher than the threshold level of the Threatened Category. But considering its population decline and serious threat to its habitat it is assessed as Vulnerable.

Date Assessed: 20 March 2015

History

Regional Status: This species has been considered as Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Microphis deocata is found in Bangladesh and





VULNERABLE

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India and Bangladesh (Talwar and Jhingran 1991, Rahman and Ruma 2007).

Bangladesh: It is found in the rivers in the northern Bangladesh (Rahman 2005) and has also been recorded from the Sundarbans (Hoq 2003).

EOO: 70,895 km² **AOO:** 2,299 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

Microphis deocata is a freshwater fish, found in rivers often among aquatic plants (Menon 1991). It is amphidromous and feeds on plankton, worms, crustaceans, etc. The fish swims in a vertical position by the undulating movement of its dorsal fin.

Assessor: Gawsia Wahidunnessa Chowdhury

Fishermen catching fish at Brahmaputra River, Mymensingh

© IUCN/ Mohammed Noman

NEAR THREATENED 〈 NT 〉



Schistura savona

Species ID: FI0125

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Schistura savona (Hamilton, 1822) English Name: Savona Loach, Half Banded Loach, Bicolor Loach

Bengali Name: Puiya, Savon Khorka

Synonym/s: Cobitis savona Hamilton, 1822 Schistura savona McClelland, 1839 Nemachilus savona Günther, 1868 Noemacheilus savona Menon, 1974

Taxonomic Notes: None Assessment Information



Schistura savona

© Md. Mizanur Rahman

NEAR

THREATENED

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Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Schistura savona is distributed in the hill stream rivers of Bangladesh. As this species is found in specific habitats like sandy and gravely bottom of the hill streams, the degradation of these habitats is likely to be the main cause of its declination in nature. Though the Extent of Occurrence is 1,22,855.72 km² and Area of Occupancy is 4,490.88 km² are higher than the threshold values of the lowest Threatened Category, however, considering the population decline this species is assessed as Near Threatened.

Date Assessed: 15 November 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).



Geographic Range

Global: It is found in Bangladesh, India and Myanmar (Talwer and Jhingran 1991, Rahman and Ruma 2007).

Bangladesh: The Dahuki River in Sylhet is an ideal habitat for the species. This species is reported from the upstream of the Piyang and Sari River of Sylhet; the Kortoa, Atrai and Mahananda River of Northern region; and the River Brahmaputra-Jamuna. Also it has been recorded from the water falls at Chittagong University Campus and from high altitude of Sangu River (Rahman and Akhter 2007, Ahmed *et al.* 2015).

EOO: 1,22,856 km² AOO: 4,491 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in rapid streams with bottoms of rocks and stones. It hides underneath the rocks for its protection (Rahman and Ruma 2007). The species is mainly omnivorous, generally feeds on mosquito larvae, shrimps, tubifex, *Daphnia* and some algae.

Assessor: Md. Mizanur Rahman

Canthophrys gongota

Species ID: FI0138

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Canthophrys gongota (Hamilton, 1822) English Name: Gongota Loach

Bengali Name: Ghora Gutum, Ghora Poia, Pahari Gutum Synonym/s: *Cobitis gongota* Hamilton, 1822 *Cobitis cucura* Hamilton, 1822

Somileptis bispinosa Swainson, 1839 Cobitis oculata McClelland, 1839 Somileptes gongota Bleeker, 1868. **Taxonomic Notes:** None



NEAR

THREATENED

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Canthophrys gongota is widely distributed in the country but has low population density as evidenced from the low catch appearing in the market (Ahmed et al. 2015). As this species prefers to live in special type of habitats like sandy and gravely bottom of the hill streams, the degradation of these habitats is the main cause of its decline. Though the Extent of Occurrence and Area of Occupancy surmounts the threshold value of lowest Threatened Category, this species is assessed as Near Threatened.

Date Assessed: 15 October 2014

History

Regional Status: It was listed as Not Threatened (IUCN Bangladesh 2000).



Geographic Range

Global: It occurs in Bangladesh, India and Nepal (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: This species has been reported from hill streams and rivers including the rivers Padma and its tributaries, Choto Jamuna, Someshwari and Kongsho of Netrokona, Surma and Pyiang River of Sylhet, Baral, Kortoa, Atrai and the Mahananda River of Northern region in the country. Also it has been reported from the Tanguar Haor of Sunamgonj, the Itna and Nikli Haor of Kishoregonj Districts (Mahsin and Haque 2009, Galib *et al.* 2013, Ahmed *et al.* 2015).

EOO: 70,378 km² **AOO:** 6,216 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits muddy hill streams and mostly known from shallow, slow-moving, relatively shallow tributaries and minor rivers with substrates of mud, sand or gravel (Rahman 2005). It is a gregarious species usually moves in a group and feeds on worms, crustaceans, insects, etc. The species has the habit of burying in the sand quickly when frightened (Rahman and Ruma 2007).

Assessor: Md Mizanur Rahman

Cirrhinus cirrhosus

Species ID: FI0072

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Cirrhinus cirrhosus (Bloch, 1795) English Name: Mrigal Carp, Mrigal Bengali Name: Mrigal, Mirka, Mahal, Malmuch. Synonym/s: Cyprinus cirrhosus Bloch, 1795

Cyprinus mrigala Hamilton, 1822 Cirrhina blochii Valenciennes, 1842 Cirrhina leschenaultii Günther, 1868 Cirrhina mrigala Day, 1878

Cirrhinus cirrhosus Talwar and Jhingran, 1991 **Taxonomic Notes:** Though Roberts (1997) considered *C. mrigala* a synonym of this species, it was observed that both were quite distinct. *C. cirrhosus* has four barbels whereas *C. mrigala* has only two barbels; dorsal branched rays are 15-16 in *cirrhosus* vs. 12-13 in *mrigala*. Earlier, this species was described as *Cirrhinus mrigala*.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Cirrhinus cirrhosus* is widely distributed but not common in its habitats. In recent faunal survey, the distribution of *Cirrhinus cirrhosus* was observed in most study sites but its abundance was low. The habitats of the species are being destroyed due to the accelerated anthropogenic activities. Though, the Extent of Occurrence and Area of Occupancy are higher than the threshold values of lowest Threatened Category, this species is assessed as Near Threatened considering significant population decline due to habitat loss.

Date Assessed: 15 February 2015





Cirrhinus cirrhosus

© Md. Mizanur Rahman

NEAR

THREATENED

History

Regional Status: Not assessed in the Red List (IUCN Bangladesh 2000).

Geographic Range

Global: *Cirrhinus cirrhosus* is found in Bangladesh, India and Pakistan (Talwar and Jhingran 1991, Rahman 2005, Latifa 2007).

Bangladesh: This species is widely distributed throughout Bangladesh (Rahman 2005). This species has been reported from the vast and different regions of the country, in particular from the river Padma, Jamuna, Brahmaputra, Titas, Sangu and from the Halda River (Hossain and Haque 2005, Rahman and Akhter 2007, Ahmed 2008, Azadi and Arshad-UI-Alam 2013, Galib *et al.* 2013). The species had been introduced outside of its native range for stocking reservoirs for aquaculture.

EOO: 1,89,935 km² AOO: 9,012 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

This fish inhabits rivers, lakes and ponds (Rahman 2005). *Cirrhinus cirrhosus* is essentially a plankton feeder, but also browses on algae in marginal shallows. Juveniles are omnivorous and adults are herbivorous. It breeds during May-July in shallow sections of selected rivers. (Talwar and Jhingran 1991, Rahman 2005).

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Cirrhinus reba

Species ID: FI0073

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Cirrhinus reba (Hamilton, 1822) English Name: Reba Bengali Name: Bhanga, Tatkini, Bata, Laccho Synonym/s: Cyprinus reba Hamilton, 1822 Cirrhina reba Vallenciennes, 1842 Crossocheilus reba Günther, 1868 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Cirrhinus reba occurs in the rivers, streams, canals, ponds, beels and inundated fields throughout Bangladesh and it is relatively fairly common species in the country (Alam 2007). Although, the Extent of Occurrence and Area of Occupancy are higher than the upper thresholds of any IUCN Threatened Category. however, due to several widespread threats like siltation, conversion of wetlands and aquatic pollution from agricultural sources the population is experiencing a significant declination (M.A.R. Hossain pers. comm., G. Mustafa pers. comm.). The existing threats to the species are unlikely to be reduced in near future and there is no targeted measures for the conservation of the species and thus the population is unlikely to improve in the near future. Therefore, the species is considered as Near Threatened.

Date Assessed: 21 October 2014

History





Cirrhinus reba

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NEAR

THREATENED

Regional Status: The taxon has been considered Vulnerable earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Cirrhinus reba* occurs in Bangladesh, India, Myanmar, Nepal and Pakistan (Menon 1999).

Bangladesh: *Cirrhinus reba* is found in rivers, streams, canals, ponds, beels and inundated fields throughout Bangladesh. The fish has been reported from the Ganges-Brahmaputra Basin, Karnaphuli and adjacent basins of the Chittagong Hill Tracts, in the Bookbhara Boar in Jessore, Chalan Beel in Rajshahi, Halti Beel in Natore, Choto Jamuna River and Turag River (Alam 2007, Hossain *et al.* 2013).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population is unknown. However, it is relatively common and always seen in large quantities in fish markets.

Trend: The species shows a continuous decline in population and is relatively less abundant in the local markets (M.G. Golam Mustafa pers. comm., M.A.R. Hossain pers. comm.)

Habitat and Ecology

C. reba inhabits freshwaters and occurs in a wide variety of habitats, such as rivers, streams, canals, ponds, beels and inundated fields throughout Bangladesh (Hossain and Haq 2005, Alam 2007). The fish is bentho-pelagic and feeds mainly on plankton and detritus. It is a potamodromous and prolific breeder (Alam 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Danio rerio

Species ID: FI0076

Taxonomy



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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINID
ciontific Nomer Dania	raria (Hamilton 1900)			

Scientific Name: Danio rerio (Hamilton, 1822) English Name: Zebra Danio Bengali Name: Anju Synonym/s: Cyprinus rerio Hamilton, 1822 Nuria rerio Bleeker, 1853 Danio rerio Day, 1878 Brachydanio rerio Hora, 1937

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Danio rerio* is widely distributed throughout Bangladesh and occupies a wide range of habitat types. The Extent of Occurrence and the Area of Occupancy of this species are higher than the upper thresholds for any IUCN Red List Threatened Category. However, the species is apparently declining due to several threats including habitat loss and aquatic pollution (Ahmed *et al.* 2015). Unless the threats are removed the fish is likely to face risk of extinction in future. Therefore, the fish is assessed as Near Threatened.

Date Assessed: 25 July 2015

History

Regional Status: The species has not been assessed in Bangladesh earlier.





Danio rerio

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Geographic Range

Global: *D. rerio* is known to occur in Bangladesh, India, Myanmar, Nepal and Pakistan (Rahman and Chowdhury 2007).

Bangladesh: The species has a wide distribution throughout Bangladesh and is particularly reported from Khulna, Mymenshingh, Netrokona, Chalan Beel area (Pabna, Shirajgonj), Sylhet, Cox's Bazar and Chittagong Hill Tracts (Spence *et. al.* 2006, Rahman and Chowdhury 2007, Kostori *et al.* 2011 and Ahmed *et al.* 2015). **EOO:** 1,27,267 km² **AOO:** 10,829 km²

Population

Generation Time (Length): Three months (Spence *et al.* 2007) Total Population: Unknown.

Trend: No empirical data on population trend is available on the species. However, the population of the species is apparently declining throughout its habitat ranges in Bangladesh (Ahmed *et al.* 2015).

Habitat and Ecology

Zebra Danio commonly inhabits slow-moving or standing freshwater bodies, particularly at the edges of streams and ditches, canals, ponds adjacent to rice-fields (Talwar Jhingran 1991, Spence *et al.* 2006, Engeszer *et al.* 2007). However, it has also been reported to inhabit rivers and hill streams (Ahmed *et al.* 2015). *Danio rerio* is benthopelagic and omnivorous fish, feeds on worms and small crustaceans and insect larvae as well as phytoplankton, filamentous algae and vascular plant materials (Spence *et al.* 2007). This fish is active, social and diurnal. It is a shoaling species and shoaling behavior commences soon after hatching (Engeszer *et al.* 2007).

Assessor: Md. Mizanur Rahman

Labeo gonius

Species ID: FI0092

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo gonius (Hamilton, 1822) English Name: Kuria Labeo Bengali Name: Gonia, Ghannia,Goni, Kurchi Synonym/s: Cyprinus gonius Hamilton, 1822 Rohita gonius Hamilton, 1822 Labeo microlepidotus Valenciennes, 1842 Rohita microlepidota Valenciennes, 1842 Rohita chalybeata Valenciennes, 1842

Osteochilus chalybeatus Valenciennes, 1842

Labeo gonius Day 1878

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near threatened (NT) ver 3.1

Justification: *Labeo gonius* is widely distributed throughout Bangladesh, but its natural population has declined in recent years (Ahmed 2007, Hossain *et al.* 2009). The estimated Area of Occupancy (4,755.25 km²) and Extent of Occurrence (74,258.02 km²) of the species are above the upper threshold values. However, the fish is facing widespread threats and may face risk of extinction in the future. Hence, the fish is assessed as Near Threatened.

Date Assessed: 25 January 2014

History

Regional Status: The species has been assessed Endangered earlier in Bangladesh (IUCN Bangladesh 2000).





Labeo gonius

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NEAR

THREATENED

Geographic Range

Global: *Labeo gonius* has been reported from Afghanistan, Bangladesh, Burma, India, Nepal and Pakistan (Ahmed 2007).

Bangladesh: It inhabits in major rivers (Meghna, Jamuna, Sangu, Turag, Halda, and Atrai), beels, Tanguar Haor of Sunamgonj District and Kaptai Lake (Alam *et al.* 2012, FRSS 2012, Alam *et al.* 2013, Mahalder and Mustafa 2013, Chaki *et al.* 2014, IUCN 2014).

EOO: 74,258 km² **AOO:** 4,755 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining (Ahmed 2007).

Habitat and Ecology

The species inhabits freshwaters and found in rivers, haors, beels and lakes. It is benthopelagic and potamodromous, and feeds on phytoplankton, algae and crustaceans (Ahmed 2007).

Assessor: Md. Selim Reza Associate Assessor/s: Selina Sultana and Jannatul Ferdous

Osteobrama cotio

Species ID: FI0026

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Osteobrama cotio (Hamilton, 1822) English Name: Cotio

Bengali Name: Dhela, Mou Mach, Bolungo Melanda, Gunta, Keti, Mauwa, Chela, Moa, Lohasura, Dhipali, Gilachaki. **Synonym/s:** *Abramis cotis* Hamilton, 1822

Cyprinus cotio Hamilton, 1822 Leuciscus cotio Hamilton, 1822 Rohtee cotio Hamilton, 1822 Abramis gangeticus Swainson, 1839 Leuciscus gangeticus Swainson, 1839 **Taxonomic Notes:** None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Osteobrama cotio occurs throughout the country in small population and found in rivers, beels, ponds, floodplains, ditches, etc. (Saha 2007). However, the species is relatively less abundant (amounts to just 0.04- to 00.17% of total catches) (Mahalder and Mustafa 2013) and showing a significant population decline (Ahmed *et al.* 2015). The Extent of Occurrence and Area of Occupancy do not qualify the species for any IUCN threatened category. It is inferred from the available information that if the population decline continues and the existing threats are not removed, the species is likely to face a risk of extinction in future. Therefore, it is assessed as Near Threatened.

Date Assessed: 24 June 2014

History



Regional Status: It has been considered as Endangered



Osteobrama cotio

© Balaram Mahalder

NEAR

THREATENED

earlier in Bangladesh (IUCN Bangladesh 2000)

Geographic Range

Global: Its range countries include Bangladesh, India, Nepal and Pakistan (Vishwanath and M Shantakumar 2007).

Bangladesh: *O. cotio* occurs throughout Bangladesh and inhabits most water body types (Rahman 2005, Saha 2007). This fish was recorded from about 75% water bodies sampled for catch assessment study under a fisheries management project in the Sunamgonj haor areas of the country (Mahalder and Mustafa 2013). The species was also reported from the Rivers Padma, Jamuna, Kangsha, Kirtonkhola, Surma, Choto Jamuna, Atrai and other rivers (Ahmed *et al.* 2015).

EOO: 2,17,468 km² **AOO:** 47,216 km²

Population

Generation Time (Length): Unknown.

Total Population : Total population of the species is unknown, but it is relatively less abundant (0.04-0.17% of total catches) as reflected in fish catch analysis from 30 water bodies under a Community-Based Resource Management Project during the period 2009-2011 (Mahalder and Mustafa 2013).

Trend: The species shows a declining trend. Abundances of the species stated to be reduced in the country (Rahman 2005).

Habitat and Ecology

O. cotio inhabits lotic and lentic freshwaters. It is a pelagic omnivore and surface feeder consuming algae, protozoans, crustaceans and aquatic insects. The fish usually moves in small groups and breeds in stagnant waters twice a year (Saha 2007).

Assessor: Mohammad Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas
Pethia gelius

Species ID: FI0100

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Pethia gelius (Hamilton, 1822) English Name: Golden Dwarf Barb, Golden Barb Bengali Name: Gili Punti Synonym/s: Barbus gelius Hamilton, 1822

Cyprinus gelius Hamilton, 1822 *Systomus gelius* Hamilton, 1822 *Puntius gelius* David, 1965 *Pethia gelius* Pethiyagoda *et al.*, 2012 **Taxonomic Note:** None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Pethia gelius* is stated to occur throughout Bangladesh (Rahman and Ruma 2007), however, currently it is mainly found in Sylhet-Mymensingh basin (Hasan *et al.* 2013, Mian *et al.* 2013, Worldfish 2013). Once the species was abundant in inland waters of Bangladesh, but at present apparently it is rare (Hossain and Haque 2005, Chakraboty 2011, Rahman *et al.* 2011). The estimated Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (11,128.35 km²) are higher than the upper threshold values of any IUCN Threatened Category. However, due to population reduction and negative impact of anthropogenic factors on this fish habitat it is likely to face risk of extinction in future. The fish is, therefore, assessed as Near Threatened.

Date Assessed: 20 August 2014

History





Pethia gelius

© Md. Sagir Ahmed

Regional Status: The species has been assessed as Data Deficient earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Pethia gelius* is known to occur in Bangladesh, India, Nepal and Pakistan (Pethiyagoda 2012).

Bangladesh: It occurs throughout Bangladesh. Presently, it is mainly observed in the Mymensingh and Sylhet basin (Hossain and Haque 2005, Chakraborty 2011, Rahman *et al.* 2011).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown.

Total Population: No information on the total population of this fish is available.

Trend: Actual information on the population trend of the fish is not known. However, once it was abundant in inland waters of Bangladesh, but some recent studies observed it as a rare species (Hossain and Haque 2005, Chakraborty 2011, Rahman *et al.* 2011).

Habitat and Ecology

This benthopelagic fish inhabits freshwater and is found in rivers, canals, beels, floodplains, ditches and ponds (Rahman and Ruma 2007). It is an omnivore fish and feeds mainly on planktonic crustaceans, worms, insects and plant matters.

Assessor: Md. Enamul Hoq

Rasbora rasbora

Species ID: FI0028

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: *Rasbora rasbora* (Hamilton, 1822) English Name: Gangetic Scissortail Rasbora Bengali Name: Darkina, Leuzza Darkina Synonym/s: *Cyprinus rasbora* Hamilton, 1822

Leuciscus rasbora Hamilton, 1822 Leuciscus presbyter Valenciennes, 1844 Leuciscus presbiter Valenciennes, 1844 Leuciscus microcephalus Jerdon, 1849 Rasbora buchanani Bleeker, 1860

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Rasbora rasbora was abundant throughout Bangladesh in the past, but currently its population has declined due to use of agro-chemicals in the crop fields and loss of habitats (Rahman and Chowdhury 2007). Moreover, in the recent years, the fish has been reported from few locations among some selected fish monitoring sites and also its abundance noted to be reduced (Mahalder and Mustafa 2013, Ahmed et al. 2015). The fish was assessed Endangered earlier in Bangladesh (IUCN Bangladesh (2000). However, no empirical data are available on its population abundance and trend. The estimated Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (9,400 km²) are much higher than the upper threshold values for any IUCN threatened category. Considering these and in the absence of any conservation measures targeting the species, it is assessed Near Threatened until further information become available.





Rasbora rasbora

© Md. Mizanur Rahman

NEAR

THREATENED

Date Assessed: 25 June 2014

History

Regional Status: This species has been considered as Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The fish is reported from Bangladesh, India, Myanmar, Pakistan, and Thailand (Vishwanath 2010).

Bangladesh: The species occurs throughout Bangladesh (Rahman and Chowdhury 2007), however, presently it is reported from few locations among some selected fish monitoring sites in the country (Mahalder and Mustafa 2013, Ahmed *et al.* 2015).

EOO: 2,17,468 km² **AOO:** 9,400 km²

Population

Generation Time (Length): Unknown. Total Population: Information on the total population is not available. However, in Bangladesh the species is relatively less common (Rahman 2005, Rahman and Chowdhury 2007, Ahmed *et al.* 2015). Trend: Declining

Habitat and Ecology

R. rasbora inhabits freshwaters and found in rivers, streams, canals, ponds and floodplains, but prefers sandy areas. The fish is benthopelagic and potamodromous (Rahman and Chowdhury 2007). It mainly feeds on aquatic insects and detritus. Sometimes, they move in large groups.

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Salmostoma phulo

Species ID: FI0031

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Salmostoma phulo (Hamilton, 1822) English Name: Finescale Razorbelly Minnow Bengali Name: Fulchela, Phulo Chela, Prem Chela Synonym/s: Cyprinus phulo Hamilton, 1822 Chela phulo Hamilton, 1822 Leuciscus phulo Hamilton, 1822 Oxygaster phulo Hamilton, 1822 Opsarius albulus McClelland, 1839 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Salmostoma phulo is widely distributed in rivers, ponds, beels, floodplains, ditches and canals throughout Bangladesh. However, the estimated Area of Occupancy of 5,651.97 km² is near to the upper limit of Vulnerable Category. The population abundance of the species is also declining in the country under continued threats (Rahman and Chowdhury 2007, Ahmed *et al.* 2015). Unless the threats are removed the species is likely to face risk of extinction in near future, and hence the species is assessed as Near Threatened.

Date Assessed: 25 Jun 2014

History

Regional Status: The species has been assessed as Not Threatened in Bangladesh. (IUCN Bangladesh 2000)





Salmostoma phulo

© Md. Mizanur Rahman

NEAR

THREATENED

Geographic Range

Global: It lives in Gangetic and Brahmaputra drainages of Bangladesh and India (Rahman and Chowdhury 2007).

Bangladesh: The species is widely distributed throughout Bangladesh, particularly in Gangetic and Brahmaputra basins. However, it is more abundant in northern parts of Bangladesh (Rahman and Chowdhury 2007).

EOO: 1,05,819 km² AOO: 5,652 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on its total population is not available.

Trend: The fish was abundant earlier in Bangladesh, however, currently the population has declined due to excessive use of insecticides, siltation and drying up of water bodies (Rahman and Chowdury 2007). Recent studies also suggest that probably the population of the species has declined significantly during the last 10 years (Ahmed *et al.* 2015).

Habitat and Ecology

The fish inhabits fresh and brackish water habitats and occupies a wide range of water bodies. However, they are predominantly found in slow running water bodies (Rahman and Chowdury 2007). The species is a surface feeder and consumes aquatic insects and detritus. It has the habit of jumping above the water surface and generally moves in small groups.

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Securicula gora

Species ID: FI0111

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Securicula gora (Hamilton, 1822) English Name: Ghora chela Bengali Name: Ghora chela, Gora chela, Chela, dhak chela, Naukka chela Synonym/s: Cyprinus gora Hamilton, 1822

Chela gora Günther, 1868 Opsarius pholicephalus McClelland, 1839 Leuciscus cultellus Valenciennes, 1844 Oxygaster gora Rahman, 1974

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is fairly common in certain parts of the country, especially in northern districts and Sunamganj hoar area. Its Extent of Occurrence measured to be 53,817.23 km² and Area of Occupancy being 2,314.33 km² are on the higher threshold levels in the Red List Category and Criteria. Despite that, fish catch statistics is reduced in recent times as well as there are noticeable changes in the quality of its habitat. Hence, the species is considered as Near Threatened.

Date Assessed: 06 August 2014

History

Regional Status: Securicula gora was considered Not Threatened (NO) (IUCN Bangladesh 2000).





Securicula gora

© Mostafa A R Hossain

Geographic Range

Global: Securicula gora is found in Bangladesh, India, Pakistan and probably Nepal (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It is found in canals, beels, haors and mostly north-southern part of Bangladesh in occasional incidental catches.

EOO: 53,817 km² **AOO:** 2,314 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

Securicula gora is a pelagic, surface feeder, predatory in nature and feeds on insects, their larvae and crustaceans. It occurs in rivers, beels and canals. It is common in water bodies of northern districts of Bangladesh (Rahman 2005).

Assessor: Md. Golam Mustafa Associate Assessor/s: Selina Sultana and Mohammed Noman

Systomus sarana

Species ID: FI0104

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Systomus sarana (Hamilton, 1822) English Name: Olive barb, Peninsular Olive Barb Bengali Name: Sarpunti, Sharputi, Sarnapunti, Saralpunti, Kurti

Synonym/s: Cyprinus sarana Hamilton, 1822 Barbus diliciosus McClelland, 1839 Barbus sarana Day, 1878 Puntius sarana Rahman, 1974

Taxonomic Notes: The species was originally described as *Cyprinus sarana* by Hamilton (1822). *C. sarana* has been adopted as *Systomus sarana* by Pethiyagoda *et al.* (2012).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Systomus sarana* is widely distributed in inland waters of Bangladesh. There is no wide spread threat across its habitat range. Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (11,128.35 km²) are higher than any upper threshold values of IUCN threatened category. However, the taxon was considered as Critically Endangered (IUCN 2000) but recent studies (Ahmed 2008, Hossain *et al.* 2009a, Hossain *et al.* 2009b, Galib *et al.* 2013, Hossain *et al.* 2014, Jahan 2014, Kabir *et al.* 2015) showed the reliable abundance of the species, although the populations are declining due to over-exploitation, pollution, environmental degradation, disease and lack of proper management. Therefore, *Systomus sarana* is currently assessed and placed under the category Near Threatened (NT).





Systomus sarana

© Md. Mizanur Rahman

NEAR

THREATENED

Date Assessed: 21 January 2015

History

Regional Status: It was considered as Critically Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: It is reported from Afghanistan, Bangladesh, Bhutan, India, Myanmur, Nepal, Pakistan, Sri-Lanka, Thailand and Vietnam.

Bangladesh: It occurs in rivers, canals, beels, ponds and inundated fields throughout Bangladesh.

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available on wild population and its population trends. Trend: Declining.

Habitat and Ecology

S. sarana inhabits in standing and running water in rivers, canals, beels, ponds and inundated fields of Bangladesh (Rahman 1989). It is omnivorous in nature, usually feeds on plants, insects, molluscs, worms, detritus and plankton. This fish attains the sexual maturity in the first year of its life and prefers shallow water of floodplain for the breeding (Chakraborty *et al.* 2006).

Assessor: Md. Enamul Hoq

Psilorhynchus gracilis

Species ID: FI0116

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	PSILORHYNCHIDAE

Scientific Name: Psilorhynchus gracilis Rainboth, 1983 English Name: Rainbow Minnow Bengali Name: Balitora Synonym/s: Psilorhynchus nudithoracicus Tilak & Husain, 1980 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Despite *Psilorhynchus gracilis* is found in its all ranges of habitats but its abundance is low, which is easily inferred from its catch and in the local markets (Ahmed *et al.* 2015). As this species prefers to live in special type of habitats like sandy and gravelly bottom of the hill streams, the degradation of these habitats is likely to be the main cause of its declination. The Extent of Occurrence (1,22,353 km²) and Area of Occupancy (5,833.26 km²) surmounts the threshold value of lowest Threatened Category. This species is assessed as Near Threatened.

Date Assessed: 21 January 2015

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh and India (Ahmed 2007).





Psilorhynchus gracilis

© Md. Mizanur Rahman

NEAR

THREATENED

Bangladesh: This species is available in the Mahananda and Korotoa rivers in Dinajpur and the Dahuki River in Sylhet (Rahman 2005). It is also reported from the rivers in Feni, the Brahmaputra and the Jamuna Rivers (Haroon *et al.* 1989, Rahman and Akhter 2007). Recently this fish has been collected from the Piyang River of Sylhet, Chittagong University waterfall and also from the upstream of the Sangu River (Ahmed *et al.* 2015). *Psilorhynchus gracilis* is found in the Jabuneswari River in Badarganj, Rangpur; the Jagat River in Rangpur; the Mahananda River in Panchaghar; the Tangan River in Thankurgaon and the Sangu River in Bandarban (Ahmed 2007).

EOO: 1,22,353 km² **AOO:** 5,833 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Apparently declining.

Habitat and Ecology

P. gracilis occurs over small pebbles in shallow running waters where the bottom is primarily sandy (Ahmed 2007). Mostly found in rapidly flowing streams below the foothills. It is generally a fast swimmer, occasionally rests on its spread paired fins. It feeds mainly on zooplankton and phytoplankton.

Assessor: Md. Mizanur Rahman

Psilorhynchus sucatio

Species ID: FI0118

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	PSILORHYNCHIDAE

Scientific Name: *Psilorhynchus sucatio* (Hamilton, 1822) English Name: River Stone Carp, Sucatio Minnow Bengali Name: Titari

Synonym/s: Cyprinus sucatio Hamilton, 1822, Psilorhynchus sucatio Hora, 1924, Psilorhynchus sucatio nudithoracicus Tilak and Hussain, 1980

Taxonomic Notes: Day (1877) considered *Psilorhynchus sucatio* as a doubtful synonym of *Homaloptera bilineata*. However, it is currently considered as a valid species.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The low abundance of *Psilorhynchus sucatio* has been noted from its meagerness in the local markets (Ahmed *et al.* 2015). As this species prefers to live in special type of habitats, like sandy and gravely bottom of the hill streams, the degradation of these habitats is likely to be the main cause of its declination. Though the Extent of Occurrence (76,623.28 km²) and Area of Occupancy (3,922.18 km²) surmounts the threshold value of lowest Threatened Category, this species is assessed as Near Threatened considering its significant population declination due to habitat loss.

Date Assessed: 21 January 2015

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).





Psilorhynchus sucatio

© Md. Mizanur Rahman

NEAR

THREATENED

Geographic Range

Global: It is found in Bangladesh, India and Nepal (Talwar and Jhingran 1991).

Bangladesh: It is found in the tributaries of the Ganges and Brahmaputra rivers are ideal habitats for the species although it has been found in the streams of Chittagong Hilly Districts. It was also found in the Rangapani Khal along the Sylhet-Shillong Highway and the Mahananda River near Tetulia (Rahman 2005, Rahman and Akter 2007). Also reported from the Rivers of Feni, Brahmaputra and the Jamuna (Haroon *et al.* 1989, Rahman *et al.* 2007). Recently, this fish has been collected from Chittagong University waterfalls and also from the upstream of the Sangu River (Ahmed *et al.* 2015).

EOO: 76,623 km² **AOO:** 3,922 km²

Population

Generation Time (Length): Unknown.

Total Population: Unknown. However, recent field surveys in selected locations indicate that this species is not abundant in natural habitats (M. S. Ahmed pers. comm.). Trend: Unknown.

Habitat and Ecology

The species is found in fast flowing water and it inhabits primarily the edges of sandy streams. It is abundant near emergent of overhanging vegetation in lowlands (Talwar and Jhingran 1991).

Assessor: Md. Mizanur Rahman

Pseudambassis baculis

Species ID: FI0201

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	AMBASSIDAE

Scientific Name: Pseudambassis baculis (Hamilton, 1822) English Name: Himalayan Glassy Perchlet, Indian Glassy Fish. Bengali Name: Kata Chanda, Phopa Chanda Synonym/s: Ambassis baculis (Hamilton, 1822) Chanda baculis Hamilton, 1822 Parambassis baculis (Hamilton, 1822) Taxonomic Notes: There are no taxonomic discrepancies associated with this species. Some authors consider it to belong to the genus Parambassis.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Pseudambassis baculis* is a widely distributed species throughout Bangladesh and occurs in a wide range of water bodies. Though there is no empirical data on its population abundance and trend, however, recent local accounts indicate a substantial population abundance in recent decades. Several threats, like habitat loss, detrimental fishing and pollution of water bodies are affecting its population. In the absence of any conservation measure, the species is assessed as Near Threatened.

Date Assessed: 10 March 2015

History

Regional Status: The taxon has been considered as Data Deficient (DD) earlier in IUCN Bangladesh 2000.





Pseudambassis baculis

© Md. Mizanur Rahman

NEAR

THREATENED

Geographic Range

Global: *P. baculis* is known to occur in Bangladesh, India, Myanmar and Nepal (Wahab 2007, Dahanukar 2010).

Bangladesh: The species is distributed throughout the country in major water bodies including brackish waters.

EOO: 2,17,468 km² **AOO:** 47,212 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

Pseudambassis baculis is a nocturnal or crepuscular and larvivorous fish. Frequently moves in schools in flooded paddy fields during the rainy seasons (Shafi and Quddus 2001). It consumes insect larvae and worms (Wahab 2007). It inhabits freshwater ponds, ditches, pools and rivers (Talwar and Jhingran 1991).

Assessor: Md. Mizanur Rahman

Nandus nandus

Species ID: FI0208

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	NANDIDAE

Scientific Name: Nandus nandus (Hamilton, 1822) English Name: Mottled Nandus, Mud Perch Bengali Name: Bheda, Meni, Roina, Nandui Synonym/s: Coius nandus Hamilton, 1822 Nandus marmoratus Valenciennes, 1831 Bengula hamiltonii Gray, 1834 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The wide distribution of *Nandus nandus* is clearly evident from its occurrence in all over Bangladesh. However, the abundance of this species is gradually reducing which can be easily inferred from the poor catch and less availability of this species in the local markets. The Extent of Occurrence and Area of Occupancy exceed the threshold values of the Threatened Category. Wahab (2007) has identified loss of habitat and over-exploitation as the threats for this species. Hence, this species is assessed as the Near Threatened.

Date Assessed: 19 December 2014

History

Regional Status: It was considered as vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Nepal, Pakistan, Myanmar and Thailand (Rahman 2005).





Nandus nandus

© Balaram Mahalder

NEAR

THREATENED

Bangladesh: It occurs in all types of fresh and brackish waters including ditches, ponds, beels and inundated fields throughout Bangladesh (Rahman 2005, Ahmed 2008).

EOO: 2,24,779 km² **AOO:** 1,414 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

This species is capable of changing color to camouflage against its environment. Prey on small fishes and other aquatic organisms (Hossain *et al.* 1991). It inhabits rivers and floodplains. Commonly collected in the winter months from dried-up beds of tanks, beels, etc. (Ahmed and Akhter 2008).

Assessor: Gawsia Wahidunnessa Chowdhury

Badis badis

Species ID: FI0022

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	PRISTOLEPIDAE

Scientific Name: *Badis badis* (Hamilton, 1822) English Name: Badis, Blue Perch, Dwarf Chameleon Fish, Mud Perch.

Bengali Name: Naptey Koi, Napit Koi, Kala Koi, Kali Koi, Pote Koi, Koi Bandi, Napit, Koidum Synonym/s: Labrus badis Hamilton, 1822

> Labrus fasciata Swainson, 1839 Badis buchanani Bleeker, 1854

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: (Near Threatened (NT) ver 3.1

Justification: *Badis badis* is distributed in a wide range of habitats throughout the country, but observed significantly low in number the catches over time. Recent fish catch statistics of the 30 study sites that monitored monthly for at least three years under a Community-Based Resource Management Project of Local Government Engineering Department, showed that the *B. badis* negligibly occurred in annual catches averaging just 0.06 to 0.08% (Mahaldar and Mostafa 2013). Moreover, it has some consistent threats of habitat destruction. Hence, the species *Badis badis* is assessed as Near Threatened.

Date Assessed: 25 July 2014

History

Regional Status: It was assessed as Endangered (IUCN Bangladesh 2000).





Badis badis

© Md. Mizanur Rahman

NEAR

THREATENED

Geographic Range

Global: It lives in Bangladesh, Bhutan, India, Nepal, and Pakistan. (Rahman 1989, Rajbanshi and Csavas 1982, Mirza 2002, Kullander and Britz, 2002).

Bangladesh: This fish is found in rivers, canals, beels, haor, ponds, ditches and swamps throughout Bangladesh (Rahman and Chowdhury 2007), but always in an insignificant number.

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown.

Total Population: Recent fish catch statistics from 30 different sites of the country indicated that the *B. badis* occurred in annual catches from just 0.06% to 0.08% (Mahaldar and Mostafa 2013). **Trend:** Declining.

Habitat and Ecology

It occurs in freshwater canals, beels, ditches, paddy fields, and swamps (Rahman 1989). This fish is benthopelagic and lives among vegetation in swamps and floodplains. It feeds on worms, crustaceans and insects (Rahman and Chowdhury 2007). The species is capable of changing its colour like a chameleon.

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Macrospinosa cuja

Species ID: FI0206

Тахо

nomy				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	SCIAENIDAE

Scientific Name: Macrospinosa cuja(Hamilton, 1822) English Name: Cuja Bola, Cuja Croaker Bengali Name: Kuli, Bhout bele Synonym/s: Bola cuja Hamilton, 1822 Sciaena coitor Day, 1876 Sciaena cuja Day, 1878 Johnius cujas Fowler, 1933 Macrospinosa cuja Talwar, 1991 Taxonomic Notes: None



Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Although, the species is widely distributed in the coastal waters of the Bay of Bengal and estuaries of the country, however, decade long studies indicate its apparent continuous population decline (Bernacsek 2001, Hog 2008, Nabi et al. 2011), caused mainly due to over and unplanned exploitation and massive siltation in the estuaries. Considering its rapid population decline within its habitat ranges, Macrospinosa cuja is assessed as Near Threatened.

Date Assessed: 17 December 2014

History

Regional Status: Considered as Not Threatened in Red List of IUCN Bandladesh 2000.



Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Malaya and Sumatra (Jayaram 1999).

Bangladesh: It is known to occur in the Bay of Bengal and its estuaries to all the tidal rivers up to the freshwater part in the southern regions of Bangladesh (Bernacsek 2001). Also reported from the Halda River (Azadi and Arshad-Ul-Alam 2013).

EOO: 75,800 km² AOO: 12,207 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the population and its trends for this species. The species is relatively common in the coastal catches in Bangladesh (Huda and Haque 2003, Nabi et al. 2011). Trend: Unknown.

Habitat and Ecology

It is carnivorous, feeds on small fish, crustaceans and other small invertebrates (Rahman and Morshed 2007). Anadromous. Commonly lives in marine to estuarine and their tidal rivers. Occasionally it visits the freshwater part of inter-tidal rivers. Primarily Bay of Bengal and its estuaries to inter-tidal rivers in the south-west and south-east regions of Bangladesh are its major habitats. Occasionally it is found in freshwater part of the inter-tidal rivers.

Assessor: Md. Rafigun Nabi

NEAR

THREATENED

Batasio batasio

Species ID: FI0013

Kingd ANIMA

Taxonomy

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om	Phylum	Class	Order	Family
LIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Batasio batasio (Hamilton, 1822) English Name: Tista Batasio Bengali Name: Tengra, Batasi Synonym/s: Pimelodus batasio Hamilton, 1822 Bagrus batasio Valenciennes, 1839 Macrones batasio Günther, 1864 Gagata batasio Day, 1878 Batasio batasio Shaw and Shebbeare, 1937 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is reported from rivers and its adjacent canals, and haors of the northeatsern and northwestern parts of the country. Although, the population size and trend are not known, however, expert consultation and local accounts suggest that the population of the species is declining in the country. Similarly, its habitat quality is also degrading due to siltation and other anthropogenic activities. The estimated Area of Occupancy (3,276 km²) just exceeds the threshold value (2,000 km²) for the Vulnerable Category. In the face of the existing threats, which are likely to continue, the fish is thought to be potentially threatened and hence, *Batasio batasio* is considered as Near Threatened.

Date Assessed: 25 June 2014

History

Regional Status: Considered Not Threatened (IUCN Bangladesh 2000).





Batasio batasio

© Md. Mizanur Rahman

NFAR

THREATENED

Geographic Range

Global : It is found in Bangladesh, India, Nepal and Bhutan. (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: *Batasio batasio* is treated as a freshwater river fish with populations living in adjacent canals in the country as well as some selective haors in Syllhet (Hossain and Haque 2005, Mostafa 2007).

EOO: 61,187 km² AOO: 3,276 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown Trend: Its population is decreasing due to habitat destruction and excessive catch.

Habitat and Ecology

This species inhabits larger rivers with clear water having predominantly sandy bottom. It is a voracious carnivorous species.

Assessor: M. Kamrujjaman

Hemibagrus menoda

Species ID: FI0140

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Hemibagrus menoda (Hamilton, 1822) English Name: Menoda Catfish Bengali Name: Ghagla, Gang Tengra, Arwari, Kawni Synonym/s: Pimelodus menoda Hamilton, 1822 Bagrus corsula Valenciennes, 1839 Marcones corsula Dav. 1878 Mystus menoda Shaw and Shebbeare, 1937 Mystus menoda Jayaram, 1955

Taxonomic Notes: None Assessment Information



Hemibagrus menoda

© Mostafa A R Hossain

NEAR

THREATENED <NT>

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Hemibagrus menoda is known from a number of rivers and few haors of the country. The Extent of Occurrence (57,600 km²) and Area of Occupancy (7,877 km²) estimated for the species are higher than the upper threshold limits of any Red List Threatened Category. Information on its population size and trend are not currently available. However, our recent field surveys, expert consultation and personal observation suggest that the population of the species is continually declining within its entire distribution ranges. In addition, its habitat is also squeezing due to massive siltation and some other anthropogenic activities. Considering its continuous population decline and habitat degradation, it can be inferred that the species is potentially threatened and likely to be extinct in future. Hence, *H. menoda* is assessed Near Threatened. Date Assessed: 15 August 2014

History

Regional Status: It was assessed as Not Threatened (IUCN Bangladesh 2000).



Global: Its global range includes Bangladesh, India

Geographic Range

(Assam, West Bengal, Bihar, Orissa and Maharashtra), Myanmar and Nepal (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: Rakanuzzaman (2007) reported that it is a fairly common species in rivers and tributaries of Bangladesh but recently this species is found to occur only in the rivers Someshwari, Kongsho of Netrokona (Ahmed et al. 2015), the Brahmaputra-Jamuna River (Rahman and Akhter 2007); the Surma, Kushiara and Shari Rivers of Sylhet division and Itna Haor in Kishoregoni (Pers. obs.) and was also recorded from Mahananda River of Chapai Nawabgonj and their tributaries (Mohsin and Haque 2009).

EOO: 57,600 km² AOO: 7,877 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: Its population is in declining trend for its habitat loss due to massive siltation in river beds and exploitation irrespective of the sizes and breeding time.

Habitat and Ecology

This species inhabits rivers, larger streams and their tributaries. It is a carnivorous fish, feeds on shrimps and other bottom dwelling organisms. It buries in soft and wet clay in bottoms of rivers.

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Mystus cavasius

Species ID: FI0143

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Mystus cavasius (Hamilton, 1822) English Name: Gangetic Mystus Bengali Name: Golsha/ Kabashi-Tengra/ Golsha Tengra Synonym/s: Pimelodus cavasius Hamilton, 1822 Mcrones cavasius Day, 1877 Mystus cavasius Shaw and Shebbeare, 1937 Mystus (Mystus) cavasius Jayaram, 1955 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Mystus cavasius* is widely distributed in the country as reflected in its estimated Extent of Occurrence (2,24,068.36 km²) and Area of Occupancy (18,554.12 km²), both of which are far above the upper thresholds for any IUCN's threatened category. However, widespread habitat loss and degradation, and over- and unplanned exploitation have been causing rapid continuous population decline (pers. obs.). These threats are unlikely to be halted or reversed in near future and thus the fish is potentially threatened. In the absence any conservation measure targeting this species, it is considered as Near Threatened.

Date Assessed: 21 August 2014

History

Regional Status: It was assessed as Vulnerable (IUCN Bangladesh 2000).





Mystus cavasius

© Md. Mizanur Rahman

NEAR

THREATENED

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Nepal, Pakistan, Sri Lanka and Thailand (Talwar and Jhingran 1991, Chakrabarty and Ng 2005, Rahman 2005).

Bangladesh: This fish occurs in Tista and Padma-Jamuna-Meghna River systems and their connected beels, baors, lakes, flooded low lands in the north-west to central regions; the Surma, Kushiara and Knagsha River basins and the connected haors and beels in the north-east region, Sangu River and the inter-tidal estuarine rivers and cannels in the south-west to south-east regions in Bangladesh (Islam 2007, Rahman and Akhter 2007).

EOO: 2,24,068 km² **AOO:** 18,554 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It lives in freshwater large rivers with sandy to muddy bottoms and there move into haors, baors, beels, canals and inundated fields. Also available in tidal rivers and canals (Islam 2007). The species is amphidromus and potamodromus in habit. Adults usually feed on insect larvae, small fish and detritus along the bottom, while the younger individuals feed partially on zooplankton near the demersal part of the respective habitats.

Assessor: Md. Rafigun Nabi

Mystus gulio

Species ID: FI0144

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: *Mystus gulio* (Hamilton, 1822) English Name: Long-whiskered Catfish, Gulio Catfish Bengali Name: Nuna-tengra/ Guillya/ Penchgula Synonym/s: *Pimelodus gulio* Hamilton, 1822 *Macrones gulio* Day, 1878 *Aoria gulio* Prashad and Mukerji, 1929 *Mystus* (*Mystus*) *gulio* Jayaram, 1955

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: Although, *Mystus gulio* has been stated to be common in intertidal rivers and estuaries in the south-western and south-eastern parts of the country, however, recent field visits, expert consultation and personal communication (M.M. Rahman; August 2014) suggest a rapid population decline of the species within its entire distribution ranges. The fish is thus potentially threatened and in the absence of any conservation measure targeting the fish, *M. gulio* is considered Near Threatened.

Date Assessed: 21 August 2014

History

Regional Status: It was treated as Data Deficient (DD) (IUCN Bangladesh 2000).





Mystus gulio

© IUCN/ Mohammed Noman

NEAR

THREATENED

Geographic Range

Global: It is distributed in the Asian countries bordering the Indian Ocean from India to Indonesia, including Bangladesh, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Viet Nam (Pethiyagod 1991, Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It prefers estuary, inter-tidal rivers and canals present at the south-west and south-eastern districts of Bangladesh, like Khulna, Bagerhut, Satkhira, Patuakhali, Barguna, Barishal, Noakhali, Moheskhali, Chittagong and Cox's Bazar (Rahman and Akhter 2007).

EOO: 46,216 km² **AOO:** 10,111 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

Mystus gulio is primarily a brackish water fish. Adult enters and lives in the inter-tidal part of rivers and connected large water bodies with mud or clay substratum. It is rarely found in smaller streams (Pethiyagoda 1991), but available in marine water. This fish is euryphagous to omnivorous in habit. The adult fish prefers to feed on debries, zooplankton, zoobenthos, other benthic invertebrates, fish eggs and larvae, while the immature and juvenile fish like to feed on diatoms, copepods, cladocerans and rotifers (Rahman and Akhter 2007).

Assessor: Md. Rafiqun Nabi

Conta conta

Species ID: FI0175

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Conta conta (Hamilton, 1822) English Name: Conta Catfish Bengali Name: Bot-tengara, Kutakanti Synonym/s: Conta conta (Hamilton, 1822) Conta elongata (Day, 1872) Pimelodus conta (Hamilton, 1822) Hara elongata (Day, 1872) Hara conta (Hamilton, 1822)

Taxonomic Notes: The species was originally described as *Hara conta* by Hamilton in 1822 later had Hamilton reclassified it as *Pimelodus conta* in 1822; Day adopted the species name '*elongata*' in 1872 and he had reclassified it as *Conta elongata* in 1872. The species name finally adopted as *Conta conta* in 1822 by Hamilton.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The fish has been reported from some locations within its limited distribution range in the northeaster parts of the country and is less abundant within its distribution ranges. Information on its population size or trend are not currently available. However, expert consultation suggests that the species has been experiencing a population decline and number threats have caused degradation to its habitats, which are unlikely to be reversed or halted in near future. Hence, *Conta conta is* assessed as Near Threatened.

Date Assessed: 23 September 2014





Conta conta

© Md. Mizanur Rahman

NEAR

THREATENED

History

Regional Status: Considered as Not Threatened in Red List of IUCN Bangladesh 2000.

Geographic Range

Global: The species is found in Bangladesh, India, Myanmar and Nepal.

Bangladesh: It is found in rocky streams at the base of hills, mostly in north-eastern parts of Bangladesh.

EOO: 19,087 km² **AOO:** 598 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species is found in a wide variety of habitats including streams, rivers and pools.

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Gagata youssoufi

Species ID: FI0163

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Gagata youssoufi Rahman, 1976 English Name: Gangetic Gagata Bengali Name: Gang Tengra Synonym/s: None Taxonomic Notes: In www.iucnredlist.org, Gagata

youssoufi is described as a junior synonym of Gagata sexualis, however in the Interagency Taxonomic Information System (www.itis.gov), Gagata youssoufi is a valid name and Gagata sexualis is a separate species.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Gagata youssoufi* is reported from a large number of locations of the country, but found in negligible numbers in fish catches. Fish catch monitoring programme in 30 sites under the Community Based Resource Management Project of the Local Government Engineering Department (LGED) for three years recorded the fish only from 3% and 7% sites of the studied sitews in the year 2008 and 2010. In the year 2009, however, the fish was not observed. There is no information on the population size or population trend of the species. However, local accounts suggest that the population is probably declining compared to earlier days. Expert consultation suggests that the fish is potentially threatened and has a risk of extinction in future, if not protected. Hence, the fish is considered as Near Threatened.

Date Assessed: 06 August 2014





Gagata youssoufi

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NEAR

THREATENED

History

Regional Status: The specie was evaluated as Not Threatened (IUCN Bangladesh 2000).

Global: The fish is found in Bangladesh, Indiaand Myanmar (Rahman 2005).

Bangladesh: It is found in the Old Brahmaputra River near Mymensingh, Sangu River near Bandarban, Shashikar Beel near Shariatpur and the Meghna River near Chadpur (Rahman 2005). The fish was also reported from the Jamuna River near kazipur Upazila and also from 3-7% study sites studied under fish catch monitoring programme of the LGED (LGED-CLP).

EOO: 39,826 km² **AOO:** 1,330 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is mainly found in freshwater rivers and estuaries. It is a bottom feeder and consumes benthos and ooze (Rahman 2005).

Assessor: Md. Golam Mustafa Associate Assessor/s: Selina Sultana and Mohammed Noman

Plotosus canius

Species ID: FI0186

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	PLOTOSIDAE

Scientific Name: *Plotosus canius* Hamilton, 1822 English Name: Canine Catfish Eel, Gray Eel Catfish, Eeltail Catfish

Bengali Name: Kain Magur, Gang Magur Synonym/s: Plotosus canius Hamilton, 1822 Plotosus horridus Bleeker, 1846 Plotosus multiradiatus Bleeker, 1846 Plotosus unicolor Valenciennes, 1840 Plotosus viviparous Bleeker, 1846 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The fish is distributed in the estuaries, particularly in the south west coast of the country and the mangrove areas. It is a less common species and its population abundance shows a declining trend. Although, the estimated Extent of Occurrence (46,947.01 km²) and Area of Occupancy (10,178.31 km²) are above the threshold values for any IUCN Threatened Category but the fish is impacted by some major threats, including habitat destruction and overexploitation and poses a risk for its extinction in future. It is, therefore, considered as Near Threatened.

Date Assessed: 21 August 2014

History

Regional Status: This fish has been considered as Vulnerable in Bangladesh earlier (IUCN Bangladesh 2000).





Plotosus canius

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Geographic Range

Global: *Plotosus canius* has been reported to be distributed in the west and south coasts of India and off Sri Lanka, eastward along the coasts of Bangladesh and Myanmar, through the Indo-Australian Archipelago and the Philippines as far as Papua New Guinea (Islam 2007).

Bangladesh: It is found in estuaries and the Bay of the country (Rahman 2005), particularly in the southwest coast and mangrove areas (Islam 2007, IPAC 2013).

EOO: 46,947 km² **AOO:** 10,178 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

It is a predatory fish, feeds on crustaceans, mollusks and fishes, and also consumes aquatic detritus. It is an amphidromous species. Its pectoral fin can sting and may cause painful wounds (Islam 2007). The fish inhabits marine and brackish waters and also freshwaters (Reide 2004).

Assessor: Gawsia Wahidunnessa Chowdhury Associate Assessor/s: Mst. Sharmin Bulbul

Macrognathus aculeatus

Species ID: FI0239

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNBRANCHIFORMES	MASTACEMBELIDAE

Scientific Name: Macrognathus aculeatus (Bloch, 1786) English Name: One-stripe Spinyeel Bengali Name: Tara Baim Synonym/s: Ophidium aculeatum Bloch, 1786 Rhynchobdella aculeata Day, 1878 Macrognathus aculeatus Smith, 1945 Macrognathus aral Talwar and Jhingran, 1991. Taxonomic Notes: This species is often misidentified

as *Macrognathus aral.* Recently, its taxonomy has been confirmed through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene (Ahmed *et al.* 2015).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *Macrognathus aculeatus* is a widely distributed species in almost all parts of the country but due to habitat loss caused by wetland conversion, squeeze of rivers, canals and floodplains and aquatic pollution, this species is not now abundant within its ranges. Regionally, it was enlisted as Vulnerable earlier, but the present estimation of Extent of Occurrence and Area of Occupancy are much higher than the thereshold values of any Theatened Category. It can be assumed from local catches and field visits that the population is declining in many sites studied (pers. obs.) but the quantitative data on its population size reduction are not available. So, *Macrognathus aculeatus* has been assessed as Near Threatened.

Date Assessed: 15 October 2014





Macrognathus aculeatus

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History

Regional Status: Considered as Vulnerable in the Red List of IUCN Bangladesh (2000).

Geographic Range

Global: Bangladesh, India, Myanmar, Nepal, Pakistan, Sri Lanka, Malay Archipelago, Syria and West Africa (Saha 2007).

Bangladesh: The species is widely distributed throughout Bangladesh and reported from all the major rivers of the country but in diminished numbers (Rahman 2005, Rahman and Akhter 2007, Ahmed and Akhter 2008, Mahsin and Haque 2009, Galib *et al.* 2013).

EOO: 2,17,468 km² **AOO:** 1,1857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is detritus and insect larvae feeder. It breeds during monsoon when eggs are attached to aquatic substrata (Saha 2007). It is an inhabitant of muddy bottom of the ponds, ditches, beels, canals, inundated fields and rivers.

Assessor: Md. Abdur Rob Mollah

Ichthyocampus carce

Species ID: FI0192

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNGNATHIFORMES	SYNGNATHIDAE

Scientific Name: Ichthyocampus carce (Hamilton, 1822) English Name: Freshwater Pipefish Bengali Name: Kumirer Khil, Kata Kumirer Khil Synonym/s: Syngnathus carce Hamilton, 1822 Ichthyocampus ponticerianus Kaup, 1855 Ichthyocampus carce Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: *lchthyocampus carce* occurs in rivers and estuaries of the country and comparatively it is a rare fish. Field observations suggest that the population of the species has declined significantly during the last two decades (M. A. R. Hossain pers. comm.) due to some unidentified reasons, it is inferred that the fish is potentially threatened and hence it is assessed as Near Threatened.

Date Assessed: 21 October 2014

History

Regional Status: The taxon has been assessed Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is known to occur from West coast of India to Bangladesh and up to Indonesia (Ahmed 2007).





Ichthyocampus carce

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Bangladesh: *Ichthyocampus carce* has been recorded from the Padma River (Hossain and Haque, 2005), Halda River (Azadi and Alam 2011), Dhalwashary River in Munshigonj District (M. A. R. Hossain pers. comm.) and estuaries throughout Bangladesh (Hossain and Haque 2005, Rahman 2005) and also from Sonadia Island (CWBMP 2006).

EOO: 2,24,779 km² **AOO:** 16,871 km²

Population

Generation Time (Length): Unknown.

Total Population: No information on the total population is available. However, it is stated to be rare within its habitat range in Bangladesh (Ahmed 2007).

Trend: Presently, the fish is much less available compared to earlier and the population has apparently has declined significantly (M. A. R. Hossain pers.comm).

Habitat and Ecology

This species inhabits a wide variety of habitats and prefers freshwater or low salinity regimes (Dhanya *et al.* 2007). The fish is amphidromous and ovoviviparous. It feeds on worms, crustaceans and small zooplankton. Male carries the eggs in a brood pouch, located under the tail (Ahmed 2007).

Assessor: Gawsia Wahidunnessa Chowdhury



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Pisodonophis boro

Species ID: FI0047

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	ANGUILLIFORMES	OPICHTHIDAE

Scientific Name: Pisodonophis boro (Hamilton, 1822) English Name: Rice-paddy Eel, Bengal's Snake-Eel, Estuary Snake-Eel, Snake Eel Bengali Name: Bamosh, Kharu, Hijra, Kecho Baim, Nol Baim Synonym/s: Conger microstoma Eydoux & Souleyet, 1850 Ophichthys boro Hamilton, 1822 Pisodonophis assamensis Sen, 1986 Ophisurus potamophilus Bleeker, 1854 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pisodonophis boro* occurs in estuaries, coastal waters, tidal rivers and nearby rice fields in the southern parts of Bangladesh. It is fairly common in the estuaries and coastal waters. In the absence of any known widespread major threats, the species is assessed Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: Considered Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global : This spcies was recorded from Australia, Bangladesh, China, India, Indonesia, Kenya, Madagascar, Philippines, Saudi Arabia, South Africa, Seychelles,





Pisodonophis boro

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Thailand, Taiwan, Viet Nam, Yemen and, elsewhere (Chaudhry 2010).

Bangladesh: It is found in the estuaries and coastal waters of Bangladesh (Rahman and Chowdhury 2007). Rahman (2005) stated that the species is common in estuaries, ascends most tidal rivers and rice fields.

EOO: 46,971 km² **AOO:** 10,190 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population is unknown. However, it is common in tidal reaches and nearby upstream areas and the juveniles of the species is quite common in the catches of fishermen operating in Dakatia River near Chandpur (Rahman and Chowdury 2007). **Trend:** Unknown.

Habitat and Ecology

The species inhabits both fresh and brackish waters and occurs in coastal waters, estuaries, tidal rivers and rice fields (Rahmam 2005, Chaudhry 2010). Bottom dwellers, lives in holes in the river bottom and bank (Froese and Pauly 2014). *P. boro* is an anadromous and nocturnal fish (Rainboth 1996). It is reported to spawn in rice fields during the rainy season (Rainboth 1996). The species is carnivore and subsists mainly on fish items, crabs and molluscs (Froese and Pauly 2014). The fish moves most effectively backwards (Rahman and Chowdhury 2007).

Assessor: Md. Monirul Islam

Pisodonophis cancrivorus

Species ID: FI0048

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	ANGUILLIFORMES	OPHICHTHIDAE

Scientific Name: *Pisodonophis cancrivorus* (Richardson, 1848)

English Name: Estuary Snake Eel, Longfin Snake Eel, Snake Eel

Bengali Name: Baim

Synonym/s: Ophhisurus cancrivorus Richardson, 1848 Myrophis chrysogaster Macleay, 1881 Pisodonophis chitkensis Jones & Sujansigham, 1954 Ophichthus madagascariensis Fourmanoir, 1961

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pisodonophis cancrivorus* occurs in coastal waters, estuaries and tidal rivers of Bangladesh with no known major threats. Its estimated Extent of Occurrence (46,970.81 km²) and Area of Occupancy (10,189.88 km²) are greater than the upper limits of thresholds for any IUCN threatened category. There is no known report on its population decline. It is hence assessed as Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: The taxon has been considered as Not Threatened (NO) earlier in IUCN Bangladesh 2000.

Geographic Range





Pisodonophis cancrivorus

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Global: This species is generally found in tropical and sub-tropical seas and known to occur in Red Sea and East Africa to French Polynesia, north to the Ogasawara Islands, south to Australia (Froese and Pauly 2014) and in Bangladesh.

Bangladesh: It is found in the tidal rivers, estuaries and coastal waters of the country. (Rahman and Chowdhury 2007).

EOO: 46,971 km² **AOO:** 10,190 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: No information is available on the population trend of the fish.

Habitat and Ecology

P. cancrivorus inhabits marine, freshwater, brackish water, and reef-associated areas. In tidal channels loose groups of this species often congregate and usually seen with just the head exposed (Kuiter and Tonozuka 2001 cited in Froese and Pauly 2014). It is a bottom dweller and lives in the water depth between 1- 20 m (Allen and Erdmann 2012). It is a carnivorous fish, subsisting mainly on a fish diet consisting of teleosts, crustaceans and cephalopods (Rahman and Chowdhury 2007). Like crayfishes, snake eels move most effectively backwards. It spawns twice a year: April-May (primary) and September-October (secondary) (Bal and Rao 1984 cited in Rahman and Chowdhury 2007).

Assessor: Md. Monirul Islam

Xenentodon cancila

Species ID: FI0244

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	BELONIDAE

Scientific Name: Xenentodon cancila (Hamilton, 1822) English Name: Freshwater Garfish), Needle Fish, Silver Needle Fish

Bengali Name: Kankila, Kaikya, Kakila, Kakhla, Kaikka Synonym/s: Esox cancila Hamilton, 1822

Belone graii Sykes, 1839 & 1841 Esox indica McClelland, 1842 Esox hindostanicus Falconer, 1868 Xenentodon cancila Shaw and Shebbeare, 1937.

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Xenentodon cancila is one of the commonest freshwater fish species in the country. Recent faunal survey indicates slight decline in population, but there is no concrete data to categorize it under any Threatened Category. Moreover, the Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (11,856.77 km²) surpass the threshold values of any Threatened Category. Therefore, this species is assessed as Least Concern.

Date Assessed: 20 December 2014

History

Regional Status: Not Threatened (IUCN -Bangladesh 2000).





Xenentodon cancila

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Geographic Range

Global: It occurs in Bangladesh, India, Malaysian Peninsula, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand (Talwar and Jhingran 1991, Rainboth 1996, Islam 2007).

Bangladesh: It lives in freshwater rivers, hoars, baors, beels, lakes and ponds and inter-tidal brackish water rivers and their tributaries all over Bangladesh (Bernacsek 2001, Rahman 2005, Islam 2007, Ahmed 2008, Azadi and Arshad-Ul-Alam 2013).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is an obligate predator to predator, feeding on live small fishes, tadpoles, shrimps, crickets and other insects. In captive condition, it can be offered bloodworm and small earth worms (Islam 2007). Adult can be found in fast-flowing open waters, otherwise, tends to inhabit in littoral parts or slow-flowing pools in rivers with aquatic vegetations, rocky or sandy substrates. Also, found within the aquatic vegetations and debris in haors, baors, beels, ponds, canals and inundated flood plains during the annual monsoon (Ahmed 2008). Pelagic (Islam 2007) and middle littoral zones (Riede 2004) of both lentic and lotic freshwater ecosystems. Amphidromous between rivers and its tributaries as well as in all kinds of fresh and brackish water habitats in Bangladesh (Rahman 2005).

Assessor: Md. Rafiqun Nabi

Oryzias melastigma

Species ID: FI0189

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	ADRIANICHTHYIDAE

Scientific Name: Oryzias melastigma (McClelland, 1839) English Name: Estuarine Ricefish Bengali Name: Bechi, Kanpona Synonym/s: Aplocheilus melastigma MCClelland, 1839 Panchax argenteus Day, 1868 Haplochilus melastigma Day, 1878 Panchax melastigma Munro, 1955 Oryzias melastigma Sterba. 1962 Taxonomic Notes: None



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Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: Oryzias melastigma is found in the coastal districts and haor areas of the country and it is a fairly abundant species. In the absence of any known major widespread threats to the fish, it is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: Not assessed in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is reported from Bangladesh, India and Indo-Malaysian Archipelago, Myanmar, Nepal and Pakistan (Rahman and Chowdhury 2007).



Bangladesh: *O. melastigma* is found in estuaries and tidal rivers in southern Bangladesh, particularly abundant in Khulna Region (Rahman and Chowdhury 2007). It is also found in freshwater bodies, particularly in the Sunamganj Haor areas (WorldFish 2013).

EOO: 34,025 km² **AOO:** 5,063 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

O. melastigma is a larvivorous fish and feeds on larvae of aquatic insects and mosquitoes (Rahman and Chowdhury 2007). This fish primarily inhabits estuarine and brackish waters, usually in shallow lagoons and swamps among roots and mangroves along the margin of water, readily adapts to freshwater conditions and even breeds in freshwater ponds, lakes and rivers (Menon 1999).

Assessor: Sumaiya Ahmed

Dermogenys pusillus

Species ID: FI0246

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	HEMIRAMPHIDAE

Scientific Name: Dermogenys pusillus van Hasselt, 1823 English Name: Wrestling Halfbeak, Sumatran Halfbeak, Malayan Halfbeak

Bengali Name: Ek Thota

Synonym/s: Dermogenys pusillus van Hasselt, 1823 Dermogenys burmanicus Mukerji, 1935 Taxonomic Notes: Livebearer D. pusillus differ from other halfbeak in the presence of upper jaw longer than broad. Males with a clear red spot on pelvic fins. First anal finray bright red.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Dermogenys pusillus* is widely found in the brackish and inter-tidal to freshwater habitats in Bangladesh. There is no specific information about its population size. The Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (9,400 km²) are very large. Therefore, *Dermogenys pusillus* has been assessed as Least Concern.

Date Assessed: 23 January 2015

History

Regional Status: Assessed as Endangered in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in wide range of southeast Asian





Dermogenys pussillus

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countries like Bangladesh, China, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippine, Singapore, Thailand, Vietnam (Wongsiri 1982) and later introduced elsewhere due to its popularity as a fighting fish (Axelrod and Shaw 1967, Wischnath 1993).

Bangladesh: It inhabits shallow brackish to freshwater rivers, rivulets, canal, drains, mangrove swamps, ponds and lakes along the southern and central regions in Bangladesh (Rahman and Gawsia 2007, Chandra *et al.* 2011), Karnaphully River and Reservoir near Kaptai Lake (Rahman 2005). It has also been encountered in the Kudum Cave, Whykeong, Teknaf under Cox's Bazar District (M A R Khan pers. comm.).

EOO: 2,17,468 km² AOO: 9,400 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It feeds on live animals like small invertebrates, including crustaceans, insect larvae and flying insects that have fallen in the surface of the water (Rahman and Gawsia 2007), *Artemia nauplii*, small crustaceans, worms and flakes in aquarium condition (Siriwat 1982, Dawes 1995). Juveniles are found in the surface water of shallow well vegetated brackish to freshwater canals, drains, ponds and lakes along the coastal regions and the mixed-evergreen forest wetlands. The adults can live in the still water part of all kinds of natural water habitats (Chandra *et al.* 2011). Pelagic, inhabits at the surface of water. It prefers shallow well vegetated brackish to slightly brackish as well as freshwater running to still water habitats of all the southern and central parts of Bangladesh (Rahman 2005, Chandra *et al.* 2011).

Assessor: Md. Rafiqun Nabi

Hyporhamphus limbatus

Species ID: FI0247

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	HEMIRAMPHIDAE

Scientific Name: Hyporhamphus limbatus (Valenciennes, 1847) English Name: Congaturi Halfbeak Bengali Name: Ek Thuita, Ek Thuitta, Ek Thota Synonym/s: Hemiramphus limbatus Valenciennes, 1847 Hemiramphus tridentifer Cantor, 1849 Hemirhamphus gorakhpurensis Srivastava, 1967 Taxonomic Notes: Specific taxonomic notes about the species is the presence of beak like short triangular and scaly

upper jaw, but longer lower jaw with fleshy reddish tip. The species was originally described as *Hemiramphus limbatus* by Valenciennes (1847) from Malabar Coast of India.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hyporhamphus limbatus* occurs in the brackish and inter-tidal to freshwater habitats in Bangladesh, but nothing is known about the population size. But the Extent of Occurrence (75,823.69 km²) and Area of Occupancy (12,335.40 km²) as well as the number of location (10) do not support any Threatened status. Similarly, no observed or estimated data are available to predict any quantitative status about the mature individuals and their probability of extinction in the wild too. Therefore, the species is assessed as Least Concern.

Date Assessed: 23 January 2015

History

Regional Status: Assessed as Not Threatened (IUCN Bangladesh 2000).





Hyporhamphus limbatus

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Geographic Range

Global: It is found along the mainland coast of Indo-West Pacific and Persian Gulf to China (Collette and Su 1986). In Asia, it is known from Bangladesh, China, India, Malaysia, Myanmar, Pakistan, Sri Lanka, Taiwan, Thailand and Viet Nam (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It lives in all tidal freshwater and brackish estuaries of all the south-west and south-eastern districts of Bangladesh (Rahman 2005), Halda River (Azadi and Arshad-UI-Alam 2013) and the Sundarbans Mangrove Forest (Huda *et al.* 2003).

EOO: 75,824 km² **AOO:** 12,335 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It mainly feeds on zooplankton and aquatic insects (Rainboth 1996, Lim *et al.* 1999, Rahman and Morshed 2007). It is potamodromous. It inhabits coastal waters, estuaries and freshwater of the inter-tidal rivers in the southern districts of Bangladesh (Talwar and Jhingran 1991, Riede 2004, Rahman and Morshed 2007).

Assessor: Md. Rafiqun Nabi

Anodontostoma chacunda

Species ID: FI0049

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Anodontostoma chacunda (Hamilton, 1822) English Name: Shortnosed Gizzard Shad, Chacunda Gizzard Shad

Bengali Name: Chacunda, Dombura, Koiputi Synonym/s: Anodontostoma chanpole Hamilton, 1822 Dorosoma chacunda Hamilton, 1822 Clupanodon chanpole Hamilton, 1822 Anodontostoma hasseltii Bleeker, 1849 Gonostoma javanicum Hyrtl, 1855 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Anodontostoma chacunda occurs along the coasts of Bangladesh, including coastal waters and estuaries. The estimated Extent of Occurrence (1,45,629.65 km²) and the Area of Occupancy (1,17,811.32km²) of the species are much higher than the upper threshold values for any IUCN threatened category. The fish is common in coastal fish catches and also observed abundant in local fish markets and landing centres of Satkhira, Alipur-Mohipur, Barisal, Chittagong and Cox's Bazar (Hossain and Ahmed 2013, Hossain et al. 2013). It comprised about 0.35% by weight of the total fish catches in greater Noakhali areas (Hossain et al. 2014). Considering the above and in the absence of any known major threats it is assessed Least Concern.

Date Assessed: 16 September 2014





Anodontostoma chacunda

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LEAST

CONCERN <LC:

History

Regional Status: This taxon has been assessed as Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Global distribution of this species ranges from Persian Gulf to coasts of India and Andaman Sea, to Gulf of Thailand, Indonesia, Viet Nam, and Philippines, south to northern Australia, the Caroline Islands and New Caledonia (Whitehead 1985)

Bangladesh: It occurs in the Bay of Bengal and the coast of Alipur-Mohipur (Patuakhali), Barisal, Chittagong, Cox's Bazar, Noakhali, Satkhira, Teknaf and also Sundarbans (Hossain and Ahmed 2013, Hossain et al. 2013, Hossain et al. 2014).

EOO: 1,45,630 km² AOO: 1,17,811 km²

Population

Generation Time (Length): Unknown. Total Population: Total population is unkown. However, it is a common species in fish catches from marine and coastal waters. Trend: Unknown.

Habitat and Ecology

A. chacunda inhabits marine and brackish waters and ususlly lives in marine-coastal environment and ascends rivers to the upper tidal zone. It is an anadromous pelagicneritic fish in the depth range 0-50 m, feeds on diatoms, radiolarians, copepods and crustaceans. It breeds from November to February, mainly in the later part of the month.

Assessor: Mostafa Ali Reza Hossain

Corica soborna

Species ID: FI0050

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Corica soborna Hamilon, 1822 English Name: Ganges River-sprat Bengali Name: Kachki, Subarna, Kharika Synonym/s: Spratella pseudopterus Bleeker, 1852 Corica biharensis Kamal & Ahsan, 1979 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Corica soborna* is widely distributed in river and estuarine systems of Bangladesh and relatively abundant within its habitat ranges. The estimated Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (9,326.97 km²) of this species are much higher than the upper threshold values for any IUCN threatenend category. In the absence of any known major widespread threat it is assessed as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: It has been considered as Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *C. soborna* is known to occur in India (West Bengal, Orissa), Bangladesh and Indonesia. It is also reported from the Bangpakong River in Thailand (Suvatti 1981, Wahab 2007).





Corica soborna

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Bangladesh: It occurs throughout Bangladesh and has been recorded from the major rivers of the country and also from the Kaptai Lake (Wahab 2007).

EOO: 2,17,468 km² AOO: 9,327 km²

Population

Generation Time (Length): The exact generation time of this fish is not known. However, its minimum population doubling time is less than 15 months.

Total Population: Total population of this species is not known, however, it is found abundant within its habitat ranges. It comprised about 20% of the fish total fish catches from Kaptai Lake (Wahab 2007). **Trend:** Information on its population trend is unknown.

Habitat and Ecology

The fish inhabits freshwaters and occurs in rivers and estuaries and in reseviours. This pelagic species is amphidromous and plankton feeder with numerous long gillrakers, which serve as efficient straining devices (Wahab 2007).

Assessor: Gawsia Wahedunessa Chowdhury

Gonialosa manmina

Species ID: FI0051

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Gonialosa manmina (Hamilton, 1822) English Name: Ganges River Gizzard Shad Bengali Name: Chapila, Goni Chapila Synonym/s: Clupanodon manmina Hamilton, 1822 Chatoessus manmina Day, 1878 Gonialosa manmina Munro, 1955 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Gonialosa manmina occurs in the rivers and estuaries throughout Bangladesh (Rahman and Ruma 2007; Hossain *et al.* 2012). There is no known report on its population decline. In the absence of any known major widespread threats the species is assessed as Least Concern.

Date Assessed: 25 February 2014

History

Regional Status: Gonialosa manmina was assessed as Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Gonialosa manmina* is reported from Bangladesh, India, Pakistan and Sri Lanka (Rahman and Ruma 2007).





Gonialosa manmina

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Bangladesh: This fish has been recorded from almost all the rivers and estuaries in Bangladesh, particularly from the Padma, Jamuna, Brhmaputra, Surma, Kushiara, Karnaphuli Rivers (Rahman 2007, Azadi and Arshad-UI Alam 2013, Hossain *et al.* 2014).

EOO: 2,24,779 km² **AOO:** 16,360 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

G. manmina inhabits estuaries and tidal rivers. It is a pelagic, amphidromous fish and plankton feeder. It breeds mainly in the river mouths in near shore areas.

Assessor: Gawsia Wahidunnessa Chowdhury

Hilsa kelee

Species ID: FI0052

Taxonomy

iomy				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: *Hilsa kelee* (Cuvier, 1829) English Name: Kelee Shad, Five Spot Herring Bengali Name: Gurta Ilish Synonym/s: *Macrura kelee* Cuvier, 1829

Alosa brevis Bleeker, 1848 Alausa kanagurta Bleeker, 1852 Alosa malayana Bleeker, 1852 Alosa malayana Bleeker, 1866 Clupea platygaster Günther, 1868 Clupea durbanensis Regan, 1906 Macrura durbanensis Regan, 1906

Taxonomic Notes: *Hilsa kelee* has not been described in Rahman (2005) and also in Encyclopedia of Freshwater Fishes of Bangladesh (Siddiqui *et al.* 2007). Its occurrence in Bangladesh waters needs to be verified.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hilsa kelee* occurs in the Bay of Bengal, along the coasts, upstream rivers and floodplains. Both the Extent of Occurrence (64,962 km²) and the Area of Occupancy (50,756 km²) are much higher than the upper thresholds of any IUCN Threatened Category. Although, the species is less abundant in the hilsa catches (Hoq and Haroon 2012), however, it comprised 0.05% of total fish catches and 0.71% of the small pelagics in the trawl survey carried out in the Bay of Bengal (Mustafa 2003). There is no major known widespread threat to its abundance and quality of its habitat. Therefore, Hilsa *kelee* is assessed as Least Concern.

Date Assessed: 17 September 2014





Hilsa kelee

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History

Regional Status: Not assessed earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Hilsa kelee is found in Indo-West Pacific: probably all coasts of Indian Ocean. from Gulf of Oman and Gulf of Aden south to Transkei, South Africa and Madagascar, across the Bay of Bengal, Gulf of Thailand, Java Sea and north to Hong Kong and east to Papua New Guinea and possibly further. Also found in the basin-wide mainstream of the lower Mekong. Native to Andaman Sea, Arabian Sea, Bay of Bengal, East China Sea, Gulf of Aden, Gulf of Oman. Gulf of Thailand. Indian Ocean. Indonesian Sea. Lagonoy Gulf, Pacific Ocean, Peng-hu Island, Red Sea, San Miguel Bay, Somali Coastal Current, South China Sea, Sulu-Celebes Sea, Godavari, Mekong, Zambezi and Chilika Lake/Lagoon. Bangladesh: Recorded from Cox's Bazar Mangrooves, three oxbow lakes- Bookbhora, Kanadaha and Rajgonj of Jessore, Bay of Bengal and coastal areas of Bangladesh (Mahmood 1995, Middendorp et al. 1999, Mustafa 2003, Hog and Haroon 2012). EOO: 64,962 km² AOO: 50,756 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, *Hilsa kelee* comprised about 0.05% of the total fish catches and 0.71% of the small pelagics in the trawl survey in the Bay of Bengal (Mostafa 2003). Hoq and Haroon (2012) recorded the species as a less dominant among the hilsa catches from the Bay of Bengal. **Trend:** Unknown.

Habitat and Ecology

Hilsa kelee Inhabits marine, brackish, freshwaters and mainly found in coastal waters and enters estuaries. This pelagic fish feeds chiefly on phytoplankton but also takes copepods, molluscan and crustacean larvae, prawns, amphipods and polychaetes. The fish can tolerate quite low salinities (7 ppt).

Assessor: Mostafa Ali Reza Hossain

Nematalosa nasus

Species ID: FI0053

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Nematalosa nasus (Bloch, 1795) English Name: Bloch's Gizzard Shad, Long-ray Bony Bream, Hairback, Long-finned Gizzard Shad, Gizzard shad, Thread-finned Gizzard Shad Bengali Name: Barang, Borong Synonym/s: Clupea nasus Bloch, 1795 Dorosoma nasus Bloch, 1795 Nematalosus nasus Bloch, 1795 Clupanodon nasica Lacepède, 1803 Chatoessus altus Gray, 1834 Chatoessus chrysopterus Richardson, 1846 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Nematalosa nasus is widely distributed in the coastal waters and estuaries. There is no known reports on its population decline. In the absence of any known major widespread threat Nematolosa nasus is assessed as Least Concern.

Date Assessed: 16 March 2015

History

Regional Status: *Nematolosa nasus* has been considered Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).





Nematolosa nasus

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Geographic Range

Global: Nematalosa nasus is known to occur in the Gulf of Aden north to the Persian Gulf, then eastward to the Andaman Sea, South China Sea and the Philippines, and north to southern tip of Korea. There is a single record from South Africa (Whitehead 1985).

Bangladesh: The species occurs in the Bay of Bengal and mouths of large rivers in Bangladesh (Rahman 2005).

EOO: 61,448 km² AOO: 34,618 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Nematalosa nasus inhabits fresh, marine and brackish waters and found in bays and lagoons, intertidal zone around estuaries, coastal areas, and mangrove forests (Rainboth 1996) Occasionally, the fish also ascends into the upper reaches of the tidal zone. Pelagic-neritic, depth range 0-30 m. It is tolerant of a range of salinities from freshwater to marine. This species is a filter feeder. Adults and juveniles frequently visit mangroves and brackish waters. It is an anadromous species and ascends rivers to spawn.

Assessor: Mst. Kaniz Fatema

Tenualosa ilisha

Species ID: FI0054

Taxonomy

in only				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Tenualosa ilisha (Hamilton, 1822) English Name: River Shad, Hilsha Shad Bengali Name: Ilish, Ilsha Synonym/s: Clupanodon ilisha Hamilton, 1822 Clupea palasah Cuvier, 1829 Clupea ilisha Day, 1878 Hilsha ilisha Regan, 1917 Macrura ilisha Fowler, 1941 Tenualosa ilisha Munro, 1955 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Tenualosa ilisha* occurs throughout the entire coastal waters, estuaries and tidal rivers and also in the further upstream rivers in Bangladesh (Rahman 2007). The species is common within its habitat ranges and it is the single most species contributing most (4.27%) to the total fish catch in the country (FRSS 2013). Although, habitat destruction in the estuarine and riverine areas is considered a threat to the species, however, several management action are in place for the sustainable management of the species. There is no major widespread threat to the species. Hence, the species is assessed as Least Concern. **Date Assessed:** 19 December 2014

History

Regional Status: The taxon has been assessed Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).





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Geographic Range

Global: *Tenualosa ilisha* occurs in the Indian Ocean from the Gulf, east to the coasts of India, as far as Myanmar (Burma). It has also been reported from the Gulf of Tonkin (Viet Nam) as well as the Tigris River and probably other rivers of southern Iran. Native countries of the species include Bangladesh, India, Iran, Iraq, Kuwait, Malaysia (Peninsular Malaysia), Myanmar, Oman, Pakistan, Qatar, Saudi Arabia, Sri Lanka, Thailand, United Arab Emirates and Viet Nam (Freyhof 2014).

Bangladesh: This species is found in coastal shelf, brackish water estuaries and freshwater rivers far above the tidal influences. It is abundant in the lower Padma River, lower Meghna River, Rupsha River, Sibsha River, Biskhali River, Tetulia River, Arial Kha River, Galachipa River, Pyra River and a few other rivers in the coastal region of Bangladesh (Rahman 2007). **EOO:** 75,824 km² **AOO:** 12,336 km²

Population

Generation Time (Length): Life-span of this species has been recorded up to 2–4 years (Milton 2009). Total Population: The total population of the sepcies is unknown. However, the fish is common within its habitat ranges, being more in estuaries and coastal waters (Rahman 2007). Trend: Catch statistics shows an increasing trend in hilsa production (FRSS 2013). The total hilsa production has increased by about 48% during the period 1987-2007 (Mome 2007).

Habitat and Ecology

The fish inhabits marine and brackish waters, and ascends rivers far above the tidal influence. This pelagic fish is mostly found in the clean water in the sandy or weedy grounds along the coast and also in the lower estuaries. It is usually found in the depth range 0-100 m. This is an anadromous and euryhaline species, feeds mainly on planktonic organism, especially diatoms, forms large schools in coastal waters (Rahman 2007). This species is a fast swimmer and ascends rivers to spawn. It grows fast and reaches sexual maturity within 6–12 months (Hossain *et al.* 2014).

Assessor: Gawsia Wahidunnessa Chowdhury

Tenualosa toli

Species ID: FI0055

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	CLUPEIDAE

Scientific Name: Tenualosa toli (Valenciennes, 1847) English Name: Toli Shad, Shad Bengali Name: Chandana Ilish Synonym/s: Alausa toli Valenciennes, 1847 Clupea toli Day, 1878 Tenualos sinensis Munro, 1955 Hilsa toli Regan, 1917

Taxonomic Notes: Sometimes, the species is confused with the *Tenualosa ilisha*, especially at the juvenile stage and therefore it may not be always distinguishable from *T. ilisha* in catches (Rahman and Chowdhury 2007).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has a wide range of distribution and occurs in marine, estuarine and riverine environments in Bangladesh (Rahman 2007, Hossain *et al.* 2014). Although, the species is highly sought along with other shad, there is no reports on its population decline. Hence, the species is assessed as Least Concern.

Date Assessed: 19 December 2014

History

Regional Status: The taxon was assessed as Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The species occurs in the Indo-West Pacific





Tenualosa toli

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LEAST

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region from eastern and western coasts and rivers of India, Bangladesh, Andaman Sea. Indonesia to Java Sea, Gulf of Thailand and South China Sea (http://www.fishbase.org/ summary/1600 Accessed on 5 November 2014).

Bangladesh: Chandana Ilish is abundant in the lower Padma, lower Meghna River, Rupsha River, Sibsha River, Biskhali River, Tetulia River, Arial Kha River, Galachipa River, Pyra River and other rivers in the coastal region of Bangladesh (Rahman and Chowdhury 2007, Hossain *et al.* 2014).

EOO: 78,779 km² **AOO:** 5,247 km²

Population

Generation Time (Length): Unknown. Total Population: The total population is unknown, however, they are abundant in the coastal waters and estuaries.

Trend: Unknown.

Habitat and Ecology

T. toil linhabits marine, coastal brackish waters and ascends to tidal rivers. This fish is pelagic euryhaline, anadromous and often found schooling in the coastal waters. The fish feeds on plankton, mainly by filter feeding but apparently also by grubbing on the muddy bottoms. Diatoms, protozoans, crustaceans, mollusks and tunicates are recorded as food items for the Chandana llish. It breeds mainly in the river mouth in near shore areas. The main breeding season is during the southwest monsoon, with another shorter breeding season from January to February or March (Hossain *et al.* 2014, Rahman and Chowdhury 2007).

Assessor: Gawsia Wahidunnessa Chowdhury
Coilia dussumieri

Species ID: FI0060

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	ENGRAULIDAE

Scientific Name: Coilia dussumieri Valenciennes, 1848 English Name: Gold Spotted Grenadier Anchovy Bengali Name: Olua

Synonym/s: Coilia quadrifilis Günther, 1868

Demicoilia margaritifera Jordan & Seale, 1926 Democoilia margaratifera Jordan & Seale, 1926 Leptonurus chrysostigma Bleeker, 1849

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species occurs along the coast of the Bay of Bengal and estuaries in Bangladesh and found fairly common in the Sundarbans estuaries (Rahman and Chowdhury 2007). Apparently, the species is not overexploited and in the absence of any known widespread threat, *Coilia dussumieri* is assessed as Least Concern.

Date Assessed: 19 November 2014

History

Regional Status: This species has been assessed Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *C. dussumieri* is found in Bangladesh, India Myanmar and, Sri Lanka, eastwards to Southeast Asia (Rahman and Chowdhury 2007).





Coilia dussumieri

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Bangladesh: It occurs in coastal waters of the Bay of Bengal and estuaries of Bangladesh and enters tidal rivers (Rahman and Chowdhury 2007).

EOO: 1,40,457 km² **AOO:** 99,519 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

C. dussumieri inhabits marine and brackish waters and ascends tidal rivers. This pelagic fish feeds on copepods, prawns, fish larvae, crustacean larvae and polychaete larvae. It breeds mainly in the estuaries during March-May (Rahman and Chowdhury 2007).

Assessor: Gawsia Wahidunnessa Chowdhury Associate Assessor/s: Md. Anwar Hossain

Coilia ramcarati

Species ID: FI0061

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	ENGRAULIDAE

Scientific Name: Coilia ramcarati (Hamilton, 1822) English Name: Grenadier Anchovy, Ramcarat, Tapetail Anchovy, Rat-tailed Anchovy Bengali Name: Megha Olua, Olua, Boiragi Synonym/s: Mystus ramcarati Hamilton, 1822 Engraulis hamiltonii Gray, 1830 Coilia quadragesimalis Valenciennes, 1848 Coilia cantoris Bleeker, 1853 Taxonomic Notes: None



Coilia ramcarati

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species occurs along the coast of the Bay of Bengal, estuaries and tidal rivers of Bangladesh (Rahman and Chowdhury 2007) and contributes significantly to the coastal artisanal fishery (Nabi 2007). There is no evidence that the species is over-exploited or it experiences a population decline. Hence, in the absence of any major widespread threat, *Coilia ramcarati* is considered as Least Concern.

Date Assessed: 19 November 2014

History

Regional Status: The taxon has been assessed as Not Threatened (NO) (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in the Indian Ocean, Ganges delta and



the Bay of Bengal (Rahman and Chowdhury 2007).

Bangladesh: The species is found in all coastal waters, estuaries and lower tidal rivers of Bangladesh (Rahman and Chowdhury 2007) and also in the Sundarbans (Huda *et al.* 2003).

EOO: 75,800 km² **AOO:** 12,207 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population of the species is unknown. However, it contributes about 0.12%-2.25% to the artisanal fishery in the coastal waters of Bangladesh (Nabi 2007). Trend: Unknown.

Habitat and Ecology

The fish inhabits marine and coastal waters and ascends to the tidal rivers. It is a pelagic species, feeds on copepods, prawns, fish larvae, crustacean larvae and polychaete larvae. It usually schools in large numbers and breeds mainly in the estuaries, during March-May (Rahman and Chowdhury 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Setipinna phasa

Species ID: FI0063

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	ENGRAULIDAE

Scientific Name: Setipinna phasa (Hamilton, 1822) English Name: Gangetic Hairfin Anchovy Bengali Name: Phasa, Phaissa, Phasa Kata, Tel-tampori Synonym/s: Clupea phasa Hamilton, 1822 Clupea telara Hamilton, 1822 Engraulis telara Hamilton, 1822 Setipinna megalura Swaison, 1839 Setipinna truncata Swaison, 1839 Taxonomic Notes: This species is often confused with Setipinna taty. The fish could be identified by its deep

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

black pectoral fin and anal with 64-72 fin rays.

Justification: Setipinna phasa occurs in all rivers and estuaries throughout Bangladesh (Saha 2007). It is doubted that its population is declining due to habitat loss and overexploitation. However, no published empirical data are available on its population trend. The estimated Extent of Occurrence (2, 24,779.16 km²) and Area of Occupancy (16,343.33 km²) are above the upper threshold values of any IUCN Redlist Threatened Category. As a widespread species with limited threats, the species is unlikely to face the risk of extinction in near future and hence, it is assessed as Least Concern.

Regional Status: The species has been considered as Not

Date Assessed: 20 November 2014

History

BANGLADESH IUCN RANGE MAP Setipinna ph species Red List of Capital Divisional Headquart International Boundary V Divisional Boundary ected Area Type Eco Park Garh 0 National Park Safari Park Wildlife Sanchuary Area of Occupancy Extent of Occurence Extent of Occurence Out of Bangladesh Forest Cover River/Coast Sa

Threatened (IUCN Bangladesh 2000).

Geographic Range

Setipinna phasa

Global: This species is found in Bangladesh, India and Myanmar (Saha 2007).

Bangladesh: The species occurs in most rivers and estuaries throughout Bangladesh and also in the Sundarbans (Rahman 2005, Saha 2007).

EOO: 2,24,779 km² **AOO:** 16,343 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population of the species is currently unavailable.

Trend: Although no empirical data are available, recent surveys by the Department of Zoology, Dhaka University suggest that the species is declining. Interview of local fishers also indicates a decline in the population abundance of the species due to habitat loss and over-exploitation (Ahmed *et al.* 2015).

Habitat and Ecology

Setipinna phasa inhabits fresh- and brackish waters, and occurs in rivers and estuaries, usually not in shallow water bodies. This pelagic fish is omnivorous habit, adults feed mainly on mysids and small prawns, and juveniles mainly subsit on unicellular and multicellular algae, protozoans and crustaceans (Saha 2007). It possibly breeds throughout the year, with peaks in October and November in the estuaries or March-May in the rivers (Whitehead *et al.* 1988).

Assessor: Md. Sagir Ahmed

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Setipinna taty

Species ID: FI0064

Taxonomy



Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	ENGRAULIDAE

Scientific Name: Setipinna taty (Valenciennes, 1848) English Name: Scaly Hairfin Anchovy Bengali Name: Teli Phasa Synonym/s: Engraulis taty Valenciennes, 1848 Engraulis telaroides Bleeker, 1849 Stolephorus taty Valenciennes, 1848 Setipinna lighti Wu, 1929

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 31

Justification: Setipinna taty occurs in all rivers and estuaries throughout Bangladesh. Apparently, the species shows a population decline due to habitat destruction and indiscriminate harvesting throughout its habitat ranges. However, no empirical data are available on its population decline. The estimated Extent of Occurrence (2,24,779.16 km²) and the Area of Occupancy (16,343.33 km²) are above the upper thresholds for Vulnerable category. As a widespread species with known limited threats, *S. taty* is assessed as Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: The species has been assessed as Not Threatened (NO) (IUCN Bangladesh 2000).





Geographic Range

Global: It is reported from Indo-West Pacific Region, including the Bay of Bengal south to Penang; Thailand south to Java and southern Kalimantan (Munroe and Nizinski 1999).

Bangladesh: The species occurs in all major rivers and estuaries throughout Bangladesh, including the Sundarbans (Huda and Haque 2003, Rahman and Chowdhury 2007).

EOO: 2,24,779 km² **AOO:** 16,343 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, the species is reported to be common (Rahman and Chowdhury 2007).

Trend: The prevailing idea is that its population is declining.

Habitat and Ecology

Setipinna taty is omnivorous and adults feed mainly on unicellular and multicellular algae, protozoans and crustaceans. Probably, it breeds throughout the year, with peaks in October and November in the estuaries and March-May in the rivers (Whitehead *et al.* 1988). It is a surface- dwelling fish and inhabits both fresh and brackish waters and found mostly in large rivers and estuaries (Rahman 2005).

Assessor: Md. Sagir Ahmed

Thryssa purava

Species ID: FI0065

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	ENGRAULIDAE

Scientific Name: Thryssa purava (Hamilton 1822) English Name: Oblique-Jaw Thryssa, Gangetic Anchovy Bengali Name: Fasha, Phansa Synonym/s: Clupea purava Hamilton, 1822 Thrissa purava Hamilton, 1822 Thryssa megastoma Swainson, 1839 Engraulis annandalei Chaudhuri, 1916

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: It is found throughout the coastal waters of Bangladesh, mostly in inshore areas and also available in low salinity estuarine areas. As a widespread species with no known major widespread threat, *T. purava* is assessed as Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: This species has been considered as Not Threatened (NO) (IUCN Bangladesh 2000).

Geographic Range

Global: The species is known to occur in the east coast of India, coasts of Bangladesh and Myanmar to Penang; Thailand south to Java and southern Kalimantan (Munroe and Nizinski 1999).





Thryssa purava

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Bangladesh: The fish occurs all along the coastal waters of Bangladesh and estuaries, and also in the Sundarbans (Huda and Haque 2003, Rahman 2005, Rahman and Chowdhury 2007).

EOO: 84,958 km² AOO: 50,025 km²

Population

Generation Time (Length): Unknown.

Total Population: No information on the total population of the species is currently available. However, a large quantity of the fish is landed from the catches of marine set-bag net catches (Rahman and Chowdhury 2007). **Trend:** Unknown.

Habitat and Ecology

T. purava inhabits marine and brackish waters. It is pelagicneritic, and occurs in the depth range of 0-50 m. The fish is an omnivore, adults feed mainly on unicellular and multicellular algae, protozoans and crustaceans. The fish probably breeds throughout the year with peaks in October and November in estuary or March-May in rivers. The fish is oceanodromous (Riede 2004).

Assessor: Md. Sagir Ahmed

llisha filigera

Species ID: FI0056

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	PRISTIGASTERIDAE

Scientific Name: Ilisha filigera (Valenciennes, 1847) English Name: Coromondel Ilish, Jewelled Ilisha, Jewelled Shad, Big-eyed Herring, Big Eye Shad Bengali Name: Choukkha Phasia Synonym/s: Pellona filigera Valenciennes, 1847 Pellona xanthopterus Bleeker, 1851 llisha xanthopterus Bleeker, 1851 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Ilisha filigera is one of the most commonly caught clupeid in coastal waters of Bangladesh. The estimated Extent of Occurrence (2,44,971 km²) and and Area of Occupancy (58,052 km²) of the species are far above the upper threshold values for any IUCN Threatened Category. Current population size is not known for Bangladesh. Some documents, however, report a healthy catch of I. filigera in the country (Khan et al. 2003, Mustafa 2003, CPGCBL 2013), therefore, the fish is assessed as Least Concern.

Date Assessed: 19 September 2014

History

Regional Status: The taxon has not been assessed earlier in Bangladesh.





LEAST

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Geographic Range

Global: I. filigera is native to Arabian Sea, Bay of Bengal, Indian Ocean, Indonesian Sea, Pacific Ocean and South China Sea (Rashid et al. 2007).

Bangladesh: The species occurs in all along the coastal waters and lower estuaries in Bangladesh (Rashid et al. 2007).

EOO: 2,44,971 km² AOO: 58.052 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of *I. filigera* is unknown. However, in 2003 the total catch of I. filigera was about 677 metric tons which is 1.36% of the total fish catch from the Bay of Bengal (Mustafa 2003). The species accounted 0.44% of the fish catch from the Bay of Bengal (Khan et al. 2003). It is abundantly found in the marine catches of Bangladesh (Nowsad et al. 2007). A total of nine individual fish/haul was observed in a survey conducted by Tokyo Electric Power Services Co. Ltd (CPGCBL 2013) around the Sonadia Island during January 2013.

Trend: Information on the population is currently unavailable; however, it might be slightly over-fished.

Habitat and Ecology

This Ilisha inhabits fresh, brackish, marine waters and coastal waters, apparently entering estuaries. The pelagic fish mostly found in the clean water in the sandy or weedy ground along the coast and also in the lower estuary (Rashid et al. 2007). This fish is anadromous and ascends to rivers to spawn. Migration is cyclical, predictable and covers more than 100 km. This is an euryhaline species and can tolerate a salinity range of 5-38 ppt. This is a pelagic species in the depth range of 0-100 m.

Assessor: Mostafa Ali Reza Hossain

llisha megaloptera

Species ID: FI0057

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	PRISTIGASTERIDAE

Scientific Name: Ilisha megaloptera (Swanison, 1839) English Name: Bigeye Ilisha Bengali Name: Chapila, Choukkha Synonym/s: Clupanodon motius Hamilton, 1822 Ilisha motius Hamilton, 1822 Platygaster macropthalma Swainson, 1838 Clupea megalopterus Swainson, 1839 Pellona megaloptera Swainson, 1839 Clupea parva Swainson, 1839 Pellona dussumieri Valenciennes, 1847 Ilisha dussumieri Valenciennes, 1847 Pellona russellii Bleeker, 1852

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Ilisha megaloptera* has a wide range of distribution and occurs in marine, estuarine and tidal riverine environments of Bangladesh (Rahman and Chowdhury 2007). The fish constitutes a moderate catch in the coastal waters (Bernacsek 2001 Mostafa 2003, Hossain 2014). There is no reports on the population decline of the fish. In the absence of any major widespread threats to the species, *Ilisha megaloptera* is assessed as Least Concern.

Date Assessed: 17 September 2014

History

Regional Status: This taxon has been assessed as Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).





LEAST

CONCERN <LC>

Geographic Range

Global: It is reported from Indo-Pacific Region, including Indian Ocean (Bombay to Bay of Bengal and Andaman coast of Thailand), Java Sea (off Java, Singapore) Sarawak (Ramaiyan and Whitehead 1979, Whitehead 1985).

Bangladesh: This fish mainly occurs in the coastal waters and estuaries of Bangladesh, particularly it is reported from Bakkhali river estuary, Saint Martin Island, Noakhali, Sundarban, Dublar Char (Bernacsek 2001, Mostafa 2003, Hossain 2014) Meghna and Padma Rivers and their tributaries, etc. (Rahman and Chowdhury 2007).

EOO: 77,388 km² **AOO:** 51,735 km²

Population

Generation Time (Length): Unknown.

Total Population: The total population of the species is unknown. However, abundant numbers were observed in Dublar Char during December, 2000 and January and November, 2001 (Bernacsek 2001). It is found fairly common in Meghna River near Chandpur (Rahman and Chowdhury 2007).

Trend: No information on the population trend of the species is available.

Habitat and Ecology

It inhabits marine, fresh and brackish waters, particularly in inshore areas, but apparently occurs also in rivers. Pelagic-neritic preferring a depth range of 0-50 m. *I. megaloptera* feeds on small fishes, crustaceans, amphipods, occasionally polychaetes, tunicates and small amounts of algae and diatoms (Rahman and Chowdhury 2007) and it is an anadromous species, ascends into the upper ends of the tidal zones.

Assessor: Mostafa Ali Reza Hossain

Pellona ditchela

Species ID: FI0059



Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	PRISTIGASTERIDAE

Scientific Name: Pellona ditchela Valenciennes, 1847 English Name: Indian Pellona Bengali Name: Choukkha, Ramkorati, Amkorati Synonym/s: Pellona ditcheli Valenciennes, 1847 Pellona hoevenii Bleeker, 1852 Ilisha hoevenii Bleeker, 1852 Ilisha hoevenii (Bleeker, 1852) Pellona hoevenii Bleeker, 1852 Pellona natalensis Gilchrist & Thompson, 1908 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pellona ditchela* occurs all along the coast of the Bay of Bengal and estuaries of Bangladesh, namely the Sundarbans, Satkhira, Alipur-Mohipur, Barisal, Chittagong, Cox's Bazar, St. Martins Island, Patuakhali, Chandpur areas. It is found abundantly in fish markets and landing centers in some coastal areas of the country (Hossain and Ahmed 2013). There is no report on its population decline. In the absence of any known widespread threat, *P. ditchela* is assessed as Least Concern.

Date Assessed: 17 September 2014

History

Regional Status: This taxon has been assessed as Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).





Pellona ditchela

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Geographic Range

Global: *P. ditchela* is native to Andaman Sea, Arabian Sea, Bay of Bengal,Great Barrier Reef Gulf of Aden, Gulf of Oman, Indian Ocean, Indonesian Sea, Lagonoy Gulf, North Australian Shelf, Northeast Australian Shelf, Northwest Australian Shelf, Pacific Ocean, Ragay Gulf, San Miguel Bay, South China Sea, Sulu-Celebes Sea, Sabaki and Tana River.

Bangladesh: The species occurs in the coastal waters and estuaries of Bangladesh, namely Sundarbans, Satkhira, Alipur-Mohipur, Barisal, Chittagong and Cox's Bazar, St. Martins Island, Patuakhali, Dogger Beel of Chandpur (Hossain and Ahmed 2013).

EOO: 71,300 km² **AOO:** 6,827 km²

Population

Generation Time (Length): Unknown. Total Population: Information on the total population of the species is not currently available. However, it is considered as a common fish. Trend: Unknown.

Habitat and Ecology

The fish Inhabits marine fresh and brackish waters, mainly found in coastal waters, enters mangrove areas and estuaries and freshwater as well. The fish is pelagicneritic and occurs in the depth range of 10-50 m. This euryhaline fish is a plankton feeder, mainly consuming small planktonic organisms, especially diatoms (Rahman and Chowdhury 2007).

Assessor: Mostafa Ali Reza Hossain

Acanthocobitis botia

Species ID: FI0119

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Acanthocobitis botia (Hamilton, 1822) English Name: Zipper Loach, Sand Loach, Mottled Loach Bengali Name: Bilturi, Balichata Synonym/s: Cobitis botia Hamilton,1822 Botia nebulosa Blyth,1861 Acanthocobitis longipinnis Peters,1861 Nemacheilus botia Günther,1868 Nemachilus botius Day,1889 Noemacheilus botia Menon,1987 Taxonomic Notes: None



Acanthocobitis botia

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LEAST

CONCERN <LC>

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Acanthocobitis botia lives in diversified habitats, including hill streams. The populations of this species are unlikely to be adversely affected by the threats immediately for its considerable declination. Moreover, the Extent of Occurrence (1,29,141.05 km²) and Area of Occupancy (4,123.29 km²) surpass the threshold values of any threatened category, therefore, this species is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range



Global: It is native to Bangladesh, India and Pakistan. Also reported from Bhutan, China, Myanmar, Nepal, and Thailand (Talwar and Jhingran 1991, Doi 1997, Rahman 2005).

Bangladesh: *A. botia* is found in the hill streams of Sylhet and streams of Dinajpur, Rangpur and Mymensingh (Rahman 2005). This species is reported from the upstream of Someshwari and Kongsho River of Netrokona; Piyang and Sari River of Sylhet; Kortoa, Atrai and Mahananda River of Northern region. Also recorded from the Tanguar Haor of Sunamgonj and in the high altitude of Sangu River (Rahman and Akhter 2007, Mahsin and Haque 2009, Ahmed *et al.* 2015).

EOO: 1,29,141 km² **AOO:** 4,123 km²

Population

Generation Time (Length): Unknown.

Total Population: The current population and its trends are unknown. However, recent field surveys in selected locations indicate that this species is not abundant in their natural habitats (Ahmed and Rahman 2014). **Trend:** Unknown.

Habitat and Ecology

It occurs in shallow, swift, clear, cool streams and rivers with sandy or gravelly bottom (Rahman 2005). It feeds on zoobenthos and insect larvae. Nocturnal in habit and it prefers to hide in sand and gravel bottoms of hill-stream environment. It protects itself by burying its body in the sand and gravel with great rapidity.

Acanthocobitis zonalternans

Species ID: FI0120

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Acanthocobitis zonalternans (Hamilton, 1822) English Name: River Loach, Creek Loach Bengali Name: Puiya, Balichata Synonym/s: Cobitis zonalternans Blyth, 1860 Nemachilus zonalternans Day, 1878 Noemacheilus zonalternans Menon, 1987

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Acanthocobitis zonalternans is widely distributed and a common loach. As this is a hardy species and lives in diversified habitats in hill streams, the populations of this species are not likely to be adversely affected by the possible threats immediately. Moreover, the Extent of Occurrence (1,17,580.52 km²) and Area of Occupancy (5,243.31 km²) surpass the threshold values of any threatened category, therefore, this species is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: The taxon was assessed as Data Deficient (IUCN Bangladesh 2000).





Acanthocobitis zonalternans

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Geographic Range

Global: Its global range includes Bangladesh, India and Myanmar (Talwar and Jhingran 1991, Doi 1997, Rahman and Ruma 2007).

Bangladesh: The Dahuki River in Sylhet is an ideal habitat for the species (Rahman and Ruma 2007). This species is reported from the upstreams of Someshwari and Kongsho River of Netrokona; the Piyang and Sari River of Sylhet; Mohuri Project area of the Feni River; the Kortoa, Atrai and Mahananda River of Northern region; and the river Brahmaputra-Jamuna. Also recorded from the Tanguar Haor of Sunamgonj and in the high altitude of the Sangu River (Haroon *et al.* 1989, Rahman and Akhter 2007, Ahmed *et al.* 2015).

EOO: 1,17,581 km² **AOO:** 5,243 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It occurs in shallow and clear water of rivers and streams with a pebbly bottom. Found in a variety of streams from river main streams to small brooks. It prefers shallow riffles in the upstream over small pebbles. It feeds on zoobenthos and insect larvae. Nocturnal in habit it prefers to hide in sand and gravel bottoms of hill-stream environment (Rahman and Ruma 2007).

Lepidocephalichthys berdmorei

Species ID: FI0131

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Lepidocephalichthys berdmorei (Blyth, 1861) English Name: Burmese Loach Bengali Name: Gutum, Puiya Synonym/s: Acanthopsis berdmorei Blyth, 1860 Lepidocephalus berdmorei Blyth, 1861 Cobitis berdmorei Day, 1869 Lepidocephalichthys berdmorei Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Lepidocephalichthys berdmorei has very wide distribution in the country. Moreover, the Extent of Occurrence (66,226.57 km²) and Area of Occupancy (4,766.31 km²) are much higher than the threshold values of threatened category. Therefore, Lepidocephalichthys berdmorei assessed as Least Concern.

Date Assessed: 15 January 2015

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, China India, Myanmar and Thailand (Tapwar and Jhingran 1991, Rahman 2005).





Lepidocephalichthys berdmorei

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Bangladesh: *Lepidocephalichthys berdmorei* had a limited distribution in the clear swift water hill-streams of Sylhet region in Bangladesh and was fairly common in Dahuki River and other hilly rivers of Sylhet during the mid-1970s (Rahman 2005). Also reported from the Mahananda River of the northern region of the country. Recently, it was also recorded from Chalan Beel, the Tangon River of Thakurgaon, the Brahmaputra-Jamuna, the Kortoa, Atrai and the Tista river of Northern regions (Rahman *et al.* 2007, Kostori 2011).

EOO: 66,227 km² **AOO:** 4,766 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits hill streams with moderate current and pebble to stone bottom. Also found in clear, swift streams and lakes with sandy bottoms (Rahman 2005). It burrows quickly in the sand and gravels when frightened. Like a micro predator it feeds on insect larvae.

Lepidocephalichthys guntea

Species ID: FI0133

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Lepidocephalichthys guntea (Hamilton, 1822) English Name: Peppered Loach, Guntea Loach Bengali Name: Gutum, Puiya Synonym/s: Cobitis guntea Hamilton, 1822

Cobitis guinea riamiton, 1822 Cobitis balgara Hamilton, 1822 Lepidocephalichthys guntea Day, 1878 Lepidocephalus guntea birmanicus Banarescu and Nalbant, 1968 Lepidocephalus (Lepidocephalichthys) guntea Tilak and Hussain, 1981

Taxonomic Notes: *Cobitis guntea* was described only from Ganges River by Hamilton (1822). Later it was placed under the genus *Lepidocephalus*. There was confusion over its generic placement as *Lepidocephalus* or *Lepidocephalichthys*. The correct placement of the species is under *Lepidocephalichthys* (Havird and Page 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Lepidocephalichthys guntea is fairly common species in its all habitat ranges across the country. It is the most abundant species among the other species of the genus Lepidocephalichthys. The estimated Extent of Occurrence (1,86,252.67 km²) and Area of Occupancy (7,394.64 km²) are much higher than the upper threshold values for any IUCN threatened category and almost stable abundance of this species indicate that it is unlikely to declinine in near the future. Therefore, *L. guntea* is assessed as Least Concern.





Lepidocephalichthys guntea

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LEAST

CONCERN <LC>

Date Assessed: 15 January 2015

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: Its distribution range is restricted to Bangladesh, India, Myanmar, Nepal, Pakistan and Thailand (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It is available in swamps, streams, floodplains and beels throughout Bangladesh. Commonly occurs in the streams of Mymensingh, Sylhet, Dinajpur and Rangpur (Rahman 2005, Rahman and Akhter 2007, Rahman *et al.* 2007, Kostori *et al.* 2011).

EOO: 1,86,253 km² **AOO:** 7,395 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in free flowing streams or even clear standing waters like rivers, streams, canals and inundated floodplain areas. It is a potamodromous species. This fish feeds on insect larvae and bottom detritus (Kibria 2007).

Pangio pangia

Species ID: FI0137

Taxonomy

hony				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Pangio pangia (Hamilton, 1822) English Name: Pangia Coolie-Ioach, Cinnamon Loach Bengali Name: Pangya, Panga Synonym/s: Cobitis pangia Hamilton, 1822 Cobitis cinnamomea McClelland, 1839 Apua fusca Blyth, 1861 Acanthopthalmus pangia Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pangio pangia* has a wide range of distribution though its abundance is low in its all habitats. The Area of Occupancy is 2,299.64 km² that is slightly higher than that of Vulnerable Category but its Extent of Occurrence of 76,682.89 km² indicates its extended availability in the country. There is no identified potential threat by which this species may cause decline in numbers or risk of extinction in future. Therefore, this species has been assessed as Least Concern.

Date Assessed: 15 January, 2015

History

Regional Status: It was listed as Not Threatened (IUCN Bangladesh 2000).





Pangio pangia

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Geographic Range

Global: It is found in Bangladesh, India and Myanmar (Rahman 1989, Talwar and Jhingran, 1991).

Bangladesh: This species is reported from the Jabuneswari River in Rangpur, Matshaya Rani Fish Sanctuary in Mymenshingh, the Sunamganj Haor R, hill streams of Rangamati, Madhabpkundo Water Fall of Moulovibazar and upstream of Sangu Rivers of Bandarban District (Hasan *et al.* 2012, Naser *et al.* 2013, Ahmed *et al.* 2015).

EOO: 76,683 km² **AOO:** 2,300 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It occurs in clear streams with bushy vegetation, sand and gravels at the bottom. It feeds on bottom organisms and detritus. It buries itself rapidly in sand when gets frightened.

Amblypharyngodon microlepis

Species ID: FI0014

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Amblypharyngodon microlepis (Bleeker 1853) English Name: Indian Carplet, Carplet Bengali Name: Mola, Moilla Synonym/s: Leuciscus pellucidus McClelland, 1839 Leuciscus microlepis Bleeker, 1853 Amblyphyaryngodon microlepis Day, 1878 Taxonomic Notes: A. microlepis is often misidentified as A. mola.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Amblypharyngodon microlepis is widely distributed in the country, living mostly in ponds, canals, ditches, slow moving streams, rivers and paddy fields. There is apparently no major known threat for its population decline. So, the species is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species was assessed as Not Threatened earlier (IUCN Bangladesh 2000).

Geographic Range

Global: Its distribution range includes Bangladesh and India (Talwer and Jhingran 1991, Rahman 2005).





Amblypharyngodon microlepis

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Bangladesh: It occurs in the River Padma and its distributaries, Mahananda River, Chalan Beel, freshwater ponds, canals and ditches throughout Bangladesh (Hossain and Haque 2005, Rahman 2005, Kostori *et al.* 2011, Rahman *et al.* 2012).

EOO: 1,77,080 km² **AOO:** 2,206 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Due to over exploitation and habitat destruction its population is decreasing.

Habitat and Ecology

It is found in freshwater ponds, rivers, ditches, roadside pits, and slow moving stream (Rahman 2005). This benthopelagic species, feeds on algae, worms, crustaceans, insects, insects larvae and organic debris.

Assessor: M. Kamrujjaman

Amblypharyngodon mola

Species ID: FI0015

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: *Amblypharyngodon mola* (Hamilton, 1822) English Name: Mola Carplet, Pale Carplet Bengali Name: Mola, Molongi, Moya, Moilla Synonym/s: *Cyprinus mola* Hamilton, 1822

Amblypharyngodon mola Day, 1878 Amblypharyngodon pellucidus (McClelland, 1839) Leuciscus pellucidus McClelland, 1839 Mola buchanani Blyth, 1860 Amblypharyngodon saranensis Chaudhuri, 1912 Amblypharyngodon gadigarhi Malhotra & Singh Dutta, 1975 **Taxonomic Notes:** None



Amblypharyngodon mola

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LEAST

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Amblypharyngodon mola is fairly common all over Bangladesh and inhabits a wide range of freshwater habitats. (*i.e.* ponds, lakes and rivers). In the absence of any known threat, the species is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species was assessed as Not Threatened earlier in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: Its range extends from Afghanistan, Bangladesh,



India, Myanma and Nepal to Pakistan (Talwer and Jhingran 1991, Rahman 2005).

Bangladesh: It is widely distributed in the major river systems of the country, including the hill rivers, manmade Kaptai Lake, ponds, ditches, canals and all other freshwater wetlands. (Ahmed and Hasan 1981, Haroon *et al.* 1989, Halder *et al.* 1991, Rahman 2005, Rahman and Akhter 2005, Azadi and Arshad-ul-Alam 2014).

EOO: 1,89,369 km² **AOO:** 5,258 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It lives in freshwater ponds, rivers, ditches, roadside pits, and slow moving streams (Rahman 2005). This benthopelagic species, feeds on algae, worms, crustaceans, insects, insect larvae and organic debris. It breeds thrice in a year (Azadi and Mamun 2004).

Assessor: Mohammad Ali Azadi

Esomus danricus

Species ID: FI0025

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Esomus danricus (Hamilton, 1822) English Name: Flying Barb Bengali Name: Darkina, Darkinda, Danrika, Darka, Dadhika, Dankan, Dakkan, Chukkuni, Bore chela. Synonym/s: Cyprinus danrica Hamilton, 1822 Nuria danrica Day, 1878 Esomus danricus Shaw & Shebbeare, 1937 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Esomus danricus* is found in small streams, ditches, ponds, beels and inundated fields throughout the country as well as freshwater rivers and river mouths, although prefers quitter waters. There is no major reported threat is that can reduce its population to a level of any threatened category in near future. So, *E. danricus* is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It has been assessed as Data Deficient (DD) (IUCN Bangladesh 2000).

Geographic Range

Global: It lives in Afghanistan, Bangladesh, India, Nepal, Myanmar, Pakistan and Sri Lanka (Rahman 1989,





Esomus danricus

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LEAST

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Pethiyagoda 1991, Talwer and Jhingran 1991, Shaji and Gopalakrishnan 2000).

Bangladesh: The species is fairly common in streams, canals, ponds and inundated fields throughout Bangladesh (Rahman 1989).

EOO: 1,41,119 km² **AOO:** 36,507 km²

Population

Generation Time (Length): Unknown. Total Population Unknown. Trend: Declining.

Habitat and Ecology

It occurs in freshwater and brackish water. It is benthopelagic and potamodromous in habit. It can control insect population and algal bloom from the surface layer of the aquatic environment. By eating aquatic detritus it keeps the water clean (Rahman and Chowdhury 2007).

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Rasbora daniconius

Species ID: FI0027

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Rasbora daniconius (Hamilton, 1822) English Name: Blackline Rasbora, Common Rasbora, Slender Rasbora Slender Barb, Striped Rasbora Bengali Name: Darkina, Darkinda, Dankina Chela, Bore Chela, Pati Chela

Synonym/s: Cyprinus daniconius Hamilton, 1822 Leuciscus lateralis McClelland, 1839 Leuciscus dandia Valenciennes, 1844 Leuciscus dandria Valenciennes, 1844 Leuciscus malabaricus Jerdon, 1849 Rasbora malabarica Jerdon, 1849 Rasbora malabarica Jerdon, 1849 Rasbora malabarica Jerdon, 1867 Rasbora voolaree Day, 1867 Rasbora zanzibarensis Günther, 1867 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Rasbora daniconius* is found all over Bangladesh in all kinds of freshwater bodies. Although, the fish shows a declining trend in abundance in the country, however, still it is relatively abundant throughout its local habitat ranges and the fish can survive in shallow water bodies. Considering the above and in the absence of any major widespread threat, the species is assessed as Least Concern.

Date Assessed: 25 June 2014





Rasbora daniconius

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LEAST

CONCERN <LC>

History

Regional Status: The species has not been assessed earlier in Bangladesh.

Geographic Range

Global: Its range countries include Bangladesh, India, Malaysia, Myanmar, Nepal, Pakistan, South China, Thailand and Viet Nam (Rahman and Chowdhury 2007).

Bangladesh: *Rasbora daniconius* occurs throughout Bangladesh and occupies almost all kinds of water bodies (Rahman 2005).

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown. Total Population: Total population of the species is unknown, but it is relatively abundant in Bangladesh (Rahman and Chowdhury 2007). Trend: Declining.

Habitat and Ecology

The species inhabits fresh and brackish water ecosystems, including ditches, ponds, canals, haors, streams, rivers and floodplains. It is a bethopelagic fish and usually feeds on aquatic insects and detritus. Spawning sites of the species are found in rivers and ponds. Sometimes, the fish forms large school.

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Salmophasia bacaila

Species ID: FI0030

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Salmophasia bacaila (Hamilton, 1822) English Name: Large Razorbelly Minnow Bengali Name: Chela, Narkali chela, Katari, Narkoli chela Synonym/s: Chela bacaila Hamilton, 1822

> Cyprinus bacaila Hamilton, 1822 Leuciscus bacaila Hamilton, 1822 Opsarius bacaila Hamilton, 1822 Oxygaster bacaila Hamilton, 1822 Salmostoma bacaila Hamilton, 1822 Opsarius leucerus McClelland, 1839 Cyprinus oblonga Swainson, 1839 Salmophasia oblonga Swainson, 1839

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Salmophasia bacaila occurs abundantly throughout Bangladesh and inhabits most freshwater bodies (Rahman and Chowdhury 2007, Mustafa and Graaf 2011). The prevailing threats to the fish are in general and in the absence of any reliable information on the population trend *S. bacaila* is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species has been considered as Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).





LEAST

CONCERN <LC>

Geographic Range

Global: The species is known to occur in Afghanistan, Bangladesh, India, Pakistan, and Nepal (Rahman and Chowdhury 2007).

Bangladesh: The species occurs throughout the country (Rahman and Chowdhury 2007). Fish catch monitoring in 30 sites in the haor basin during the year 2009-2011 showed that the species was present in 70-90% of the surveyed sites. However, it is more abundant in the northern parts of the country (Mustafa and Graaf 2008).

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown, but fish catches from Sunderbans comprised about 0.11% of the sampled catches (IRG-Worldfish 2011).

Trend: Population of the fish was noted to be declining in Bangladesh (Rahman and Chowdhury 2007). However, no reliable empirical data on this are available.

Habitat and Ecology

The fish inhabits lotic and lentic waters of both fresh and brackish water habitats and is usually found in slow running water bodies (Rahman and Chowdhury 2007). It is a surface feeder and consumes mainly aquatic insects and detritus. It has the habit of jumping above the water surface and usually moves in small groups.

Assessor: Mohammad Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Chela laubuca

Species ID: FI0032

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Chela laubuca (Hamilton, 1822) English Name: Indian Glass Barb Bengali Name: Kash Khaira, Chhep Chela, Laubuca Synonym/s: Cyprinus laubuca Hamilton, 1822 Perilampus laubuca Day, 1878 Laubuca laubuca Shaw and Shebbeare, 1937 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Chela laubuca* is fairly common throughout Bangladesh and found in a wide range of habitats including rivers, canals, ditches, floodplains and ponds. Although the species experiences a population decline, however, the Extent of Occurrence (217467.88 km²) and Area of Occupancy (11964.42 km²) are far above the upper threshold limits for any threatened category. The prevailing threats are rather in general. In the absence of any reliable information on the population decline and its population size, the species is currently assessed as Least Concern (LC).

Date Assessed: 25 Jun 2014

History

Regional Status: The species has been assessed as Endangered earlier in Bangladesh (IUCN Bangladesh 2000).





Chela laubuca

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Geographic Range

Global: The taxon is known to occur in Bangladesh, Chao Phraya basins, India, Indochina (Mekong), Indonesia, Malay Peninsula, Myanmar, Nepal, Pakistan, and Sri Lanka. (Rahman and Chowdhury 2007).

Bangladesh: The species is widely distributed in Bangladesh (Rahman, 2005) and reported from Muhuri Ilrrigation Project and its surrounding areas (Haroon *et al.* 1989), River Brahmaputra-Jamuna (Rahman and Akhter 2007), Feni River (Halder *et al.* 1991) and Halda River (Azadi and Arshad-ul-Alam 2013).

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population of the fish is unknown, but the fish is fairly common all over Bangaldesh (Rahman 2005).

Trend: The species shows a declining trend in Bangladesh (Rahman and Chowdhury 2007).

Habitat and Ecology

The species occurs in fresh and brackish water habitats, and found in stagnant pools of streams, rivers, canals, floodplains, ponds and beels. The fish is pelagic in nature in the depth range 0-2 m, found usually in middle-depth area of streams, ponds and tanks. They prefer still and relatively low-flowing waters. It feeds mainly on insects, but also takes plants. This species breeds freely in ponds, tanks and small streams. It moves in small groups of 15-30 individuals.

Assessor: Syeda Ismat Ara Associate Assessor: Mohammad Ali Azadi

Aspidoparia jaya

Species ID: FI0039

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Aspidoparia jaya (Hamilton, 1822) English Name: Jaya Bengali Name: Jaya, Peali, Peashi Synonym/s: Cyprinus jaya Hamilton, 1822 Leuciscus jaya Hamilton, 1822 Leuciscus margarodes McClelland, 1839 Leuciscus margarodis McClelland, 1839

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Although, *Aspidoparia jaya* is relatively rare and shows a declining trend, however, it is found in a wide areas of the country and adapted to thrive in a variety of water bodies including rivers, streams, ponds, floodplains (Rahman and Ruma 2007). The estimated Extent of Occurrence (66,154 km²) and Area of Occupancy (2,617.49 km²) are also higher than the upper threshold values for the Vulnerable Category. Prevailing threats are general and in the absence of adequate population data the species is currently assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The taxon has been considered Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).





Aspidoparia jaya

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Geographic Range

Global: The fish is known to occur in Afghanistan, Bangladesh India and Nepal (Talwar and Jhingran 1991).

Bangladesh: This fish is found in the rivers of the northern parts of Bangladesh, and particularly it was reported from the Jamuna River, near Bhuapur and the old Brahmaputra River, near Mymensingh (Rahman and Chowdhury 2007) and Kuttanadi River in Panchagar (Rahman 2005). The fish has also been reported from Rivers Padma and it's tributaries in the Greater Faridpur District (Rahman *et al.* 2012, Mohsin *et al.* 2013).

EOO: 66,154 km² AOO: 2,617 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the fish is unknown, but it is relatively rare within its habitat ranges (Rahman and Ruma 2007).

Trend: Unknown.

Habitat and Ecology

The fish inhabits freshwater bodies, including rivers, ponds, plains, and also streams in mountainous regions (Rahman and Ruma 2007). It is benthopelagic in nature and feeds on micro-crustacean, insects and detritus.

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa.

Barilius shacra

Species ID: FI0042

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Barilius shacra (Hamilton, 1822) English Name: Shacra Baril Bengali Name: Koksa, Saku Koksha Synonym/s: Barilius shacra Hamilton, 1822 Cyprinus shacra Hamilton, 1822 Barbus shacra Hamilton, 1822 Opsarius shacra Hamilton, 1822 Opsarius cirratus McClelland, 1839 Opsarius cirrhatus McClelland, 1839 Schacra cirrhatus McClelland, 1839

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Barilius shacra is fairly common in the rivers and streams of Thakurgaon, Dinajpur and Rangur and also found in the Brahmaputra and Jamuna drainages (Latifa 2007). Although, some widespread threats are affecting its population abundance, however, the Extent of Occurrence and Area of Occupancy of the species are higher than the upper thresholds of any IUCN Redlist threatened category. Currently, no reliable information on population trend of the species is available. Therefore, it is assessed as Least Concern until further data are available.

Date Assessed: 25 June 2014

History

Regional Status: This species has been considered as





Barilius shacra

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Data Deficient (DD) earlier in IUCN Bangladesh 2000.

Geographic Range

Global: The species is distributed in Bangladesh, India, and Nepal (Latifa 2007).

Bangladesh: It occurs in the rivers and streams of Thakurgaon, Dinajpur and Rangpur and also found in the Brahamaputra and Jamuna drainages. (Latifa 2007, Rahman 2005)

EOO: 45,491 km² **AOO:** 1,372 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the sepcies is unknown. However, the fish is fairly common within its habitat ranges in the northern parts of the country (Latifa 2007).

Trend: The population abundance of the species has been stated to be reduced (Latifa 2007).

Habitat and Ecology

The species inhabits freshwater and found in rivers and streams with diverse substrate consisting of sand, mud, gravel, pebble, cobble, and boulders. The fish is benthopelagic in habit and feeds on algae, detritus and other benthic organisms.

Assessor: Balaram Mahalder Associate Assessor/s: Md Golam Mustafa.

Catla catla

Species ID: FI0070

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Catla catla (Hamilton, 1822) English Name: Catla Bengali Name: Catla, Katol Synonym/s: Cyprinus catla Hamilton, 1822 Gebelion catla Hamilton, 1822 Cyprinus abraminoides Sykes, 1841 Catla buchanani Day, 1878 Catla catla Jhingran, 1966 Taxonomic notes: Catla catla has been described as

Jaxonomic notes: *Catla catla* has been described as *Gebelion catla* in Species Redlist of IUCN. Its accepted name is *Catla catla.*

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Catla catla* is widely distributed in all ranges of freshwater habitats of Bangladesh, although its abundance is observed to be low. In spite of its continued decline in the past and existing threats, the reduction in population abundance appears less than 20% during the last 6-7 years (Ahmed *et al.* 2015). Captive breeding of the species is widely practiced and the fish is cultured extensively almost in all parts of the country. The species has also been introduced in floodplain culture fisheries. The estimated Area of Occupancy (1,11,856.76 km²) and Extent of Occurrence (2,17,467.88 km²) are far above the threshold values for any IUCN threatened category. Hence, the species is assessed as Least Concern.

Date Assessed: 15 February 2015





Catla catla

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History

Regional Status: *Catla catla* has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: The species is native to Bangladesh, India (Central and northern parts), Pakistan, Myanmar and Nepal. The species has been introduced in peninsular India, Sri Lanka and China (Talwar and Jhingran 1991, Rahman and Chowdhury 2007, Tenzin 2010). Bangladesh: The species occurs throughout the country except the estuaries (Rahman 2005, Rahman and Chowdhury 2007) and has been reported from almost all parts of the country, including major river systems and other water bodies (NACOM 2008, Bashar *et al.* 2009, Chakraborty and Nur 2009, Azadi and Arshad-UI-Alam

2013, Flowra *et al.* 2013, Galib *et al.* 2013). **EOO:** 2,17,468 km² **AOO:** 1,11,857 km²

1,11,037

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population is not currently available. However, it is relatively fairly common (Rahman and Chowdhury 2007)

Trend: The species shows a declining population trend (Ahmed *et al.* 2015).

Habitat and Ecology

Catla catla inhabits freshwaters and found in rivers, lakes, haors, baors and culture ponds and also in seasonal floodplains (pers. obs.). It is surface and mid-water dweller and omnivorous fish in habit, with juveniles feeding on insects, detritus and phytoplankton. Main food consists of algae, crustaceans and higher plants. It breeds in selected parts of certain rivers in June-July (Rahman and Chowdhury 2007).

Assessor: Md Abdur Rob Mollah

Devario devario

Species ID: FI0079

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Dvario devario (Hamilton, 1822). English Name: Sind Danio Bengali Name: Chebli, Debashi, Chapchela, Debari Synonym/s: Cyprinus devario Hamilton, 1822 Devario buchanani Bleeker, 1860 Danio devario Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Devario devario* is abundantly found throughout Bangladesh and occupies wide range of habitats. Although, empirical data are not available on its population trend, however, population of the species probably shows a declining trend (Ahmed 2007, Ahmed *et al.* 2015). In spite of some existing threats, it is apparent that the fish is unlikely to face the risk of extinction in near future. Hence, this species is assessed as Least Concern.

Date Assessed: 17 July 2014

History

Regional Status: This species has been considered as Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is known from plains and adjoining hilly areas of Bangladesh, India, Nepal and Pakistan (Talwar





Devario devario

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and Jhingran 1991). Recently, the species has been reported from Afghanistan (Petra 1999).

Bangladesh: The species is widely distributed throughout Bangladesh (Rahman 2005). This species is also reported from the Sangu River of Bandarban, the Someshwari and Kongsha Rivers of Netrokona, the Piyang and Sari Rivers of Sylhet (Ahmed 2007, Galib *et al.* 2009, Ahmed *et al.* 2015).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown.

Total Population: The total population is unknown. However, currently it is relatively less abundant (Ahmed 2007). **Trend:** The fish has been probably experiencing a population decline due to siltation and drying up of river beds (Ahmed 2007, Ahmed *et al.* 2015).

Habitat and Ecology

D. devario is bentho-pelagic in habit and feeds on worms, small crustaceans and insects and hovers near the surface of water (Mills and Vevers 1989). The species inhabits freshwaters and is found in rivers, canals, ponds, beels and inundated fields throughout Bangladesh (Rahman 2005).

Labeo angra

Species ID: FI0083

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE
Scientific Name: Labeo English Name: Angra La	angra (Hamilton, 1822) abeo			

Scientific Name: Labeo angra (Hamilton, 1822) English Name: Angra Labeo Bengali Name: Kharsa, Angrot, Kharish Synonym/s: Cyprinus angra Hamilton, 1822 Labeo morala Hamilton, 1822 Cyprinus hamiltonii Gray, 1830 Gobio angra Hamilton, 1822

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Labeo angra is fairly abundant in the northern parts of the country and occupies a number of habitat types. Although, some threats are affecting the population, the species is still thriving well and there is no report on its noticeable population decline. It is inferred that under the prevailing situation the species is unlikely to face the risk of extinction in near future. Hence, the species is assessed as Least Concern.

Date Assessed: 21 August 2014

History

Regional Status: It has been considered Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *L. angra* is reported from northern Bangladesh and India Myanmar, Nepal (in Kosi and Karnali rivers to an





Labeo angra

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altitude of 1,650 m), and Pakistan (Devi and Boguskaya 2009). It is also reported from Afghanistan (Rahman and Ruma 2007).

Bangladesh: The fish occurs in the streams and rivers of Dinajpur, Mymensingh, Rangpur and Sylhet Districts and also in some other districts (Rahman 2005). In particular, the fish was recorded from Kangsha River, Somshwari River, Padma River, etc. (Ahmed *et al.* 2015).

EOO: 45,123 km² **AOO:** 6,324 km²

Population

Generation Time (Length): Unknown.

Total Population: At present no empirical data on total population are available. However, it is stated to be abundant within its distribution ranges in the country (Rahman 2005).

Trend: There are no reports on its noticeable population decline.

Habitat and Ecology

The fish inhabits freshwaters and occurs in rivers, lakes and ponds. It is a bentho-pelagic, potamodromous species. It is a column feeder and mainly consumes insect larvae, shrimps and other crustaceans, worms and snails as well as some plant matters (Rahman and Ruma 2007).

Assessor: M. Niamul Naser Associate Assessor/s: Gawsia Wahidunnessa Chowdhury

Labeo bata

Species ID: FI0085

Taxonomy



Taxonomic Notes: None Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Labeo bata Day, 1878

Justification: Labeo bata is widely distributed throughout the country. In spite of some existing threats to the fish, there is no reports on its population decline. This fish is commercially cultured and no risk is anticipated in near future. Hence, the species is currently assessed Least Concern.

Date Assessed: 24 August 2014

History

Regional Status: It has been assessed Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: L. bata is known from India and Bangladesh and is also reported from Pakistan and has been introduced in





Labeo bata

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Nepal (Robins et al. 1991, Rahman and Ruma 2007).

Bangladesh: The fish is widely distributed in all freshwater ecosystems throughout Bangladesh (Rahman 2005, Chakraborty and Nur 2009, Glib et al. 2013, Hossain et al. 2009, Rahman et al. 2011, Mahalder and Mustafa 2013). This fish is cultured in many places of the country.

EOO: 46,089 km² AOO: 4.839 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Currently, there is no reports on its population trend.

Habitat and Ecology

This fish Inhabits freshwaters and found in ponds, beels and rivers (Rema and Ali 2013). It is a potamodromous and herbivorous column feeder. It breeds in rivers during monsoon.

Assessor: M. Niamul Naser Associate Assessor/s: Gawsia Wahidunessa Chowdhury

Labeo calbasu

Species ID: FI0088

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo calbasu (Hamilton, 1822) English Name: Orangefin Labeo, Black Rohu Bengali Name: Kalibaos, Baus Synonym/s: Catla calbasu Hamilton, 1822 Cyprinus calbasu Hamilton, 1822 Rohita calbasu Hamilton, 1822 Labeo calbasu Day, 1878

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Labeo calbasu is widely distributed in the country and found in a wide range of water bodies. It is apparent that its natural population has declined due to habitat destruction and indiscriminate catch within its entire ranges and its production dropped by about 20% during the period 2001 to 2009 in beel fishery (FRSS 2009). However, since 2010 its production from open waters is slightly increasing, might be due to the recruitment of escaped individuals from culture ponds during flooding. The fish is extensively used in stocking culture ponds. The threats to the species are in general. As a wide spread species and with no specific known threats, the species is assessed as Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: This species has been considered





Labeo calbasu

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Endangered earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Labeo calbasu* occurs throughout India, Bangladesh, Nepal, Myanmar, Pakistan, Thailand and Yunnan (southern China) (Talwar and Jhingran 1991).

Bangladesh: It is found in haor, baor, beels and rivers throughout the country (Rahman 2005).

EOO: 2,17,468 km² **AOO:** 47,216 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown.

Trend: Although, the species experiences a population decline in the past in the country, since 2011, its production from inland open water has substituted the loss.

Habitat and Ecology

This fish inhabits freshwaters and is a bottom dweller. It feeds on organic matters, molluscs, other sediment fauna, diatoms, green algae, zooplankton, etc. (Ahmed and Niazi 1988, Rahman and Ruma 2007). Juveniles prefers zooplanktoic organisms. The adults of the species prefer slow-moving waters of rivers. It is a potamodromous species.

Assessor: Md. Sagir Ahmed

Labeo rohita

Species ID: FI0095

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CPRINIDAE

Scientific Name: Labeo rohita (Hamilton, 1822) English Name: Ruhu Bengali Name: Rui, Rohit, Ruee Synonym/s: Cyprinus rohita Hamilton, 1822 Rohita buchanani Valencienns, 1842 Labeo dussumeri Valencienns 1842 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Labeo rohita is widely distributed in the country. Although, the natural populations shows declining trend, however, it is still available in good numbers throughout its habitat ranges. The fish is extensively cultured in the country and is used in floodplain programmes. The threats to the fish are in general. Hence, the fish is assessed as Least Concern.

Date Assessed: 25 November 2014

History

Regional Status: Labeo rohita has been considered Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Labeo rohita* is known to occur in Bangladesh India, Myanmar, Nepal and Pakistan (Talwar and Jhingran 1991).





Labeo rohita

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Bangladesh: It is found in major freshwater rivers, and other types of wetlands (*Beels* and clear sluggish water pools) throughout Bangladesh.

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown.

Total Population: Unknown. However, the fish is abundant in its entire habitat ranges. **Trend:** Natural population is declining.

Habitat and Ecology

The fish occurs in freshwater water bodies including rivers, beels, reservoirs, pond and inundated lands. It may also be found in low range brackish water habitat. Freshwater rivers and large wetlands (*Beels, Haors* and *Baors*). It is a diurnal species and usually solitary (Riede 2004). It is a column feeder at mid-water and prefers to feed on plant matters including decaying vegetation. Its food may also contain algae, higher plants, protozoans, insects, their larvae crustaceans, mud and sand (Mukerjee *et al.* 1946). Spawning season generally coincides with the southwest monsoon.

Assessor: M. Niamul Naser

Puntius chola

Species ID: FI0098

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Puntius chola (Hamilton, 1822) English Name: Chola Barb, Green Barb, Swamp Barb Bengali Name: Chola Punti Synonym/s: Capoeta chola Hamilton, 1822 Barbus titius Hamilton, 1822 Cyprinus chola Hamilton, 1822 Barbus unimaculatus (Blyth, 1860) Barbus chola Day, 1878 Barbus chola Day, 1878 Barbus chola (Hamilton, 1822) Barbus tetrarupagus (McClelland, 1839) Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Puntius chola* is widely distributed in inland waters of Bangladesh and relatively common within its habitat ranges. In the absence of any known major threat, the fish is assessed as Least Concern.

Date Assessed: 20 August 2014

History

Regional Status: *Puntius chola* has been assessed as Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Puntius chola* is reported from Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan and Sri Lanka (Peter 1999, Goswami *et al.* 2012).





Puntius chola

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Bangladesh: It is found in rivers, canals, *beels*, ponds and inundated fields throughout Bangladesh (Rahman 2005, Kibria 2007).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown.

Total Population: No information on the total population is available. However, it is relatively common within its habitat ranges (Rahman 2005, Kibria 2007). Trend: Unknown.

Habitat and Ecology

Puntius chola inhabits freshwaters and found in rivers, canals, beels, inundated fields, ditches and ponds (Kibria 2007). It is benthopelagic fish and is omnivorous in habit, feeds on wide variety of food items, like worms, crustaceans, insects and plant matter (Ansari *et al.* 2006). It exhibits prolific breeding with high growth rate but minimum population (Talwar and Jhingran 1991). It is a shallow water fish.

Assessor: Md. Enamul Hoq

Pethia conchonius

Species ID: FI0099

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Pethia conchonius (Hamilton, 1822) English Name: Red Barb, Rosy Barb Bengali Name: Kanchan Punti, Taka Punti Synonym/s: Barbus conchonius Hamilton, 1822 Cyprinus conchonius Hamilton, 1822 Systomus chola Hamilton, 1822 Puntius conchonius Hamilton 1822 Pethia conchonius Pethiyagoda et al., 2012. Taxonomic Notes: None



Pethia conchonius

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pethia conchonius* is widely distributed in inland waters of Bangladesh and fairly to less abundant in the country. The estimated Extent of Occurrence (2,17,467.88 km²) and Area of Occupancy (11,128.35 km²) values are much higher than the upper limits of any IUCN Threatened Category. There are no specific major threats to the species. It is, therefore, assessed as Least Concern.

Date Assessed: 20 August 2014

History

Regional Status: The species has been assessed Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).



Geographic Range

Global: *Pethia conchonius* is found in Afghanistan, Bangladesh, India, Myanmar, Nepal and Pakistan (Goswami *et al.* 2012).

Bangladesh: It occurs in a wide range of habitats, including in rivers, canals, *beels*, ponds and inundated fields throughout Bangladesh (Roknuzzaman 2007).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Information on generation time is unknown, however, life span of the fish is about five years (Sharpe 2004).

Total Population: No empirical population data is available.

Trend: Unknown.

Habitat and Ecology

Pethia conchonius is a freshwater species and inhabits a wide range of microhabitats. It is a benthopelagic fish and feeds mainly on planktonic crustaceans, worms, insects and plant matters (Mills and Vevers 1989). The fish is a partial (heterochronal) spawner (Mitra *et al.* 2006). Rosy barb is a shoaling fish (Talwar and Jhingran 1991).

Assessor: Md. Enamul Hoq

Pethia guganio

Species ID: FI0101

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Pethia guganio (Hamilton, 1822) English Name: Glass Barb Bengali Name: Mola Punti Synonym/s: Barbus guganio (Hamilton, 1822)

Cyprinus guganio (Hamilton, 1822) Puntius ambassis (Rahman, 1974) **Taxonomic Notes:** The species was originally described as Barbus guganio by Hamilton in 1822. He had adopted the genus as Barbus and then changed it to Puntius. This cyprinid genus Puntius, which contains some 120 valid species, has long been suspected to be polyphyletic. The Puntius guganios was finally adopted as Pethia guganio in 2012 by Pethiyagoda et al. (2012).



Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pethia guganio* is widely distributed in inland waters of Bangladesh. There are no major widespread threats to its habitats. It has large Extent of Occurrence and Area of Occupancy. It is, therefore, assessed under the Category Least Concern.

Date Assessed: 20 August 2014

History

Regional Status: Evaluated (Galib *et al.* 2013, Hossain *et al.* 2014, WorldFish 2013).





Pethia guganio

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Geographic Range

Global: *Pethia guganio* is available in Bangladesh, India and Nepal (Goswami *et al.* 2012).

Bangladesh: It is found in rivers, canals, *beels*, ponds and hill rivers in Bangladesh.

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: Abundant, but no information is available about its wild population trend. Trend: Unknown.

Habitat and Ecology

Pethia guganio inhabits from tropical to sub-tropical rivers and ponds, rivers of the hills with sand and mud substrate. Omnivorous, feeding on detritus, vegetation and associated aquatic insects. This species breeds in upper reaches of permanent rivers, ponds and lakes and breeding season falls in December (Shrestha and David 2012).

Assessor: Md. Enamul Hoq

Pethia phutunio

Species ID: FI0102

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: *Pethia phutunio* (Hamilton, 1822) English Name: Spotted Sail Barb, Dwarf Barb, Pygmy Barb Bengali Name: Phutani punti Synonym/s: *Barbus phutunio* Day, 1878

Cyprinus phutunio Hamilton, 1822 Systomus phutunio Bleeker, 1853 Puntius phutunio Rahman, 1974

Taxonomic Notes: The species was originally described as *Cyprinus phutunio* by Hamilton (1822). This cyprinid genus *Puntius*, which contains some 120 valid species, has long been suspected to be polyphyletic. The *Puntius phutunio* was finally adopted as *Pethia phutunio* by Pethiyagoda *et al.* (2012).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pethia phutunio* is widely distributed in inland waters of Bangladesh. There is no major widespread threat to its population and habitat. It is therefore, assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).





Pethia phutunio

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Geographic Range

Global: *Pethia phutunio* is found in Bangladesh, India, Myanmar and Pakistan (Goswami *et al.* 2012).

Bangladesh: It is available in rivers, streams, canals, beels, ponds and similar waters in Bangladesh (Rahman 1989).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown.

Total Population: Comparatively less abundant than other barbs, but no information is available in wild population trend.

Trend: Unknown.

Habitat and Ecology

It is a very small barb (4 cm), adults feed on debris and zoobenthos, such as small insects, crustaceans and worms. It inhabits in small, slow flowing and standing waters. Spawning usually takes place in the morning between plants near the surface. It is a bentho-pelagic species and occurs in standing waters, over silt and mud substrate (Mills and Vevers 1989).

Assessor: Md. Enamul Hoq

Puntius sophore

Species ID: FI0105

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Puntius sophore (Hamilton, 1822) English Name: Spotfin Swamp Barb, Pool Barb, Stigma Barb

Bengali Name: Jat Punti, Vadi Punti

Synonym/s: Cyprinus sophore Hamilton, 1822 Systomus chrysopterus McClelland, 1839 Barbus annandalei Fowler, 1924 Puntius stigma Rahman, 1974 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Puntius sophore* is widely distributed in inland waters of Bangladesh. This is the most common species under the genus *Puntius.* Moreover, the extent of occurrence and area of occupancy have been estimated as 2,17,467.88 km² and 11,128.35 km² respectively, which are much higher than the threshold values for any threatened category. The species is, therefore, assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: The taxon was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Afghanistan, Bangladesh, Bhutan,





Puntius sophore

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China, India, Nepal, Pakistan and Sri Lanka (Goswami et al. 2012).

Bangladesh: This fish is abundant in rivers, canals, beels, ponds and inundated fields of Bangladesh (Rahman 1989, Ahmed 2008, Rahman *et al.* 2012, Miah *et al.* 2013).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available on population and its trend. Trend: Unknown.

Habitat and Ecology

It inhabits rivers, streams, ponds, beels, floodplains, baors, haors in plains and sub-montane regions predominantly (Rahman 1989). It is voracious eater of floating organisms and aquatic plants. This fish can breed everywhere in its habitat during the rainy season. It lives in and move in groups (Rahman and Ruma 2007).

Assessor: Md. Enamul Hoq

Puntius terio

Species ID: FI0106

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Puntius terio (Hamilton, 1822) English Name: One Spot Barb, Teri Barb Bengali Name: Teri Punti Synonym/s: Cyprinus terio Hamilton, 1822 Systomus terio Bleeker, 1853 Barbus terio Day, 1878 Puntius terio Rahman, 1974

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is fairly common in freshwater habitats and recorded from eastern to western parts of Bangladesh, including the Sundarbans (Bernacsek 2001, Alam *et al.* 2013, Flowra *et al.* 2013, Mian *et al.* 2013, Hossain *et al.* 2014). There is no major widespread threat across its distribution. Therefore, *P. terio* is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: The taxon was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, India, Nepal, Myanmar, Pakistan (Goswami *et al.* 2012).





Puntius terio

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Bangladesh: It is available in rivers, canals, beels, ponds and similar waters in Bangladesh (Mian *et al.* 2013, Hossain *et al.* 2014).

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available on population size and its trend. Trend: Unknown.

Habitat and Ecology

It inhabits rivers, canals, ponds and inundated fields, over a silt and mud substrate. It feeds mainly on diatoms, algae, crustaceans, insects and mud-sands.

Assessor: Md. Enamul Hoq

Salmostoma acinaces

Species ID: FI0251

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Salmostoma acinaces (Valenciennes, 1844) English Name: Silver Razorbelly Minnow Bengali Name: Chela Synonym/s: Leuciscus acinaces Valenciennes, 1844 Pelecus diffusus Jerdon, 1849

Chela argentea Day, 1867 **Taxonomic Notes:** Salmophasia acinaces was originally described as Leuciscus acinaces by Valenciennes (1844) from India. Presently described as Salmophasia acinaces in different literatures.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Salmostoma acinaces* is distributed all over Bangladesh with a moderate abundance. The estimated Extent of Occurrence and Area of Occupancy are higher than the upper threshold values of any IUCN threatened category. There are no reports on its population size. In the circumstances, the fish is assessed as Least Concen.

Date Assessed: 16 October 2014

History

Regional Status: This taxon has been assessed as Data Deficient (DD) in Bangladesh (IUCN Bangladesh, 2000) and assessed as Least Concern (LC) ver 3.1 at global level.

Geographic Range

Global: It occurs in Bangladesh and India.





Salmostoma acinaces

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Bangladesh: This fish is found in almost all freshwater bodies in Bangladesh (Ali *et al.* 2004, Das and Saha 2008, Hossain *et al.* 2009, Rubel *et al.* 2014).

EOO: 20,140 km² **AOO:** 2,767 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is bentho-pelagic. This fish feeds on both plant and animal matters as well as on debris.

Assessor: Mostafa Ali Reza Hossain

Psilorhynchus balitora

Species ID: FI0115

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	PSILORHYNCHIDAE

Scientific Name: Psilorhynchus balitora (Hamilton, 1822) English Name: Balitora Minnow Bengali Name: Balichata Synonym/s: Cyprinus balitora Hamilton, 1822 Psilorhynchus variegatus McClelland, 1839 Psilorhynchus balitora Day, 1878

Taxonomic Notes: Originally described as *Cyprinus balitora* by Hamilton (1822) from rivers of north-east Bengal. Day (1877) recognized it as *Psilorhynchus balitora* which is the valid name to date.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Psilorhynchus balitora* is widely distributed in its all ranges though its abundance is low all over (Ahmed and Rahman 2014). As this species lives in diversified range of habitats, including hill streams, the populations of this species are not likely to be adversely affected by the threats immediately for its significant declination. Moreover, the Extent of Occurrence (1,10,401.12 km²) and Area of Occupancy (4,685.90 km²) surpass the threshold values of lowest Threatened Category; therefore, this species is assessed as Least Concern.

Date Assessed: 21 January 2015

History

Regional Status: The taxon was assessed as Data Deficient (IUCN Bangladesh 2000).





Psilorhynchus balitora

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Geographic Range

Global: It is found in Bangladesh, India, Myanmar and Nepal (Raknuzzaman 2007).

Bangladesh: This species is available in the Mahananda and Korotoa Rivers in Dinajpur and the Dahuki River in Sylhet (Rahman 2005). Also reported from the Feni, Brahmaputra and the Jamuna Rivers (Haroon *et al.* 1989, Rahman and Akhter 2007). Recently, this fish has been collected from the Piyang River of Sylhet, Chittagong University waterfalls and also from the upstream of the Sangu River (Ahmed *et al.* 2015).

EOO: 1,10,401 km² **AOO:** 4,686 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species is found in fast streams and shallow rivers, especially where the bottom is rocky, adhering tightly to the rocky substratum with the expanded paired fins and the breast applied to the rocks (Talwar and Jhingran 1991). It feeds mainly on protozoans, cyclops, daphnia, phytoplankton, etc (Raknuzzaman 2007).

Aplocheilus panchax

Species ID: FI0188

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINODONTIFORMES	APLOCHEILIDAE

Scientific Name: Aplocheilus panchax (Hamilton, 1822) English Name: Blue Panchax, Panchax Minnow Bengali Name: Teen Chokha, Kanpona, Naharol Synonym/s: Esox panchax Hamilton, 1822

Aplocheilus chrysostigmus McClelland, 1839 Panchax buchanani Valenciennes, 1864 Hoplochilus panchax Day, 1878

Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: Aplocheilus panchax occurs in a wide variety of water bodies throughout Bangladesh. Although its population shows a declining trend but still it is common and abundant throughout its entire habitat range (Rahman 2005, Alam 2007). Threats are general and not specific to this species. Hence, it is assessed as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: The taxon has been considered Vulnerable earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is reported from Bangladesh, India, Myanmar, Malayan Archipelago, Nepal, Pakistan and Sri Lanka (Talwar and Jhingran 1991, Pethiyagoda 1991, Huber 1996).





Aplocheilus panchax

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Bangladesh: *A. panchanx* is widely distributed throughout Bangladesh (Rahman 2005, Alam 2007) and found in all types of water bodies.

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown. Total Population: Information on total population is not available. However, the fish is fairly common within its habitat ranges (Rahman 2005, Alam 2007). Trend: Unknown.

Habitat and Ecology

It is a surface feeder and feeds on insect larvae, particularly that of mosquitos. It inhabits fresh and brackish waters and is found in canals, rivers, beels, haors, ponds, ditches and inundated fields (Alam 2007).

Assessor: Md. Golam Mustafa
Liza parsia

Species ID: FI0210

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE

Scientific Name: Liza parsia (Hamilton, 1822) English Name: Goldspot Mullet, Brackish Water Mullet, Grey Mullet Bengali Name: Parsia, Parse, Parse Bata Synonym/s: Mugil parsia Hamilton, 1822 Mugil olivaceus Day, 1889 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: *Liza parsia* is widely distributed in coastal waters, estuaries, lagoons and tidal rivers throughout the coastal districts of Bangladesh. It is the commonest species in estuarine commercial catch. There is no known major threat to the species. So, the species is listed as Least Concern.

Date Assessed: 18 October 2014

History

Regional Status: This species is categorized as Not Threatened in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Australia, Bangladesh, India, Pakistan, New Guinea and Sri Lanka. (Talwar and Jhingran 1991, Rahman 2005)

Bangladesh: Liza parsia is described as a common





Liza parsia

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species in coastal waters and estuaries of Bangladesh (Quddus and Shafi 2003, Rahman 2005) especially in the south-western part of the country (Wahab 2007). It also enters into the tidal rivers but breeds in the deep sea (the Bay of Bengal) (Quddus and Shafi 2003). It is very tasty with high commercial value and is cultured in the brackish water ponds in coastal Bangladesh.

EOO: 75,824 km² **AOO:** 12,183 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Its fry feeds on phytoplankton and zooplankton. Its adults feed on algae, diatom, copepods, polychaeta as well as other organic matters. Inhabits shallow coastal waters, estuaries and lagoons. Sometimes it enters into tidal rivers but does not breed there (Quddus and Shafi 2003). It has a high resilience, the population doubles within 15 months (Froese and Pauly 2014). It breeds in the deep sea (Talwar and Jhingran 1991, Quddus and Shafi 2003). It is a demersal and catadromous species.

Assessor: Md. Monirul Islam

Liza subviridis

Kingdom ANIMALIA

Species ID: FI0211

Taxonomy

				<lc></lc>
	Phylum	Class	Order	Family
	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE
.iza su	<i>ubviridis</i> (Valenciennes, 1	836)		

Scientific Name: Liza subviridis (Valenciennes, 1836) English Name: Greenback Mullet Bengali Name: Bata Synonym/s: Mugil subviridis Valenciennes, 1836 Mugil jerdoni Day, 1876 Mugil javanicu Bleeker, 1853 Taxonomic Notes: None



Liza subviridis

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LEAST

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This is a widespread species in southeastern coast of Bangladesh with no known major threats. Its Extent of Occurrence (8,528.90 km²) and Area of Occupancy (3,760.92 km²) are higher than the upper threshold values of the any Threatened Category. Also no fluctuation or reduction of its population is reported. It is therefore, listed as Least Concern.

Date Assessed: 18 October 2014

History

Regional Status: This species was categorized as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Arabian Gulf, Pakistan, India, Bangladesh, Sri Lanka, through the East Indies to China, Queensland and Ploynesia (Talwar and Jhingran 1991, Rahman and Ruma 2007).



Bangladesh: In Bangladesh, it inhabits in the estuarine and shallow coastal waters in the Chittagong and Cox's Bazar areas (Rahman and Ruma 2007). Rahman (2005) reported that this species was found in tidal rivers in the coastal areas of Bangladesh.

EOO: 8,529 km² AOO: 3,761 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It picks up mud from the bottom and strains plant and animal materials with it sieve-like gill rakers. Adults feed on small algae, diatoms and benthic detritus. Its fry takes zooplankton, diatoms, detritus and inorganic sediment. It forms schools in shallow coastal waters and enters lagoons, estuaries and freshwater for feeding. Its juveniles may enter rice fields and mangroves (Rahman and Ruma 2007). It is oviparous and spawning occurs at sea (Harrison and Senou 1997). It is a demersal amphidromous species.

Assessor: Md. Monirul Islam

Mugil cephalus

Species ID: FI0212

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE

Scientific Name: Mugil cephalus Linnaeus, 1758 English Name: Flathead Mullet, Stripped Mullet, Black Mullet, Fatback, Bright Mullet, Bully Mullet, Callifaver Mullet, Common Grey Mullet Bengali Name: Bhangan, Bhangan Bata Synonym/s: Mugil albula Linnaeus, 1766 Mugil ashanteensis Bleeker, 1863 Mugil cephalotus Valenciennes, 1836 Mugil dobula Günther, 1861 Mugil gelatinosus Klunzinger, 1872 Mugil grandis Castelnau, 1879 Mugil hypselosoma Ogilby, 1897 Mugil japonicus Temminck & Schlegel, 1845 Mugil lineatus Valenciennes, 1836 Mugil mexicanus Steindachner, 1876 Mugil muelleri Klunzinger, 1880 Mugil provensalis Risso, 1810 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: This is a widespread species in southern coast of Bangladesh with no known major threats. Its Extent of Occurrence is 75,823.70 km² and Area of Occupancy is 12,183.48 km² both of which are greater than those of the Threatened Category. No fluctuation or reduction of its population is reported. Thus, it is listed as Least Concern.

Date Assessed: 18 October 2014





Mugil cephalus

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CONCERN <LC>

History

Regional Status: It has not been assessed for IUCN Red List in Bangladesh.

Geographic Range

Global: It is distributed worldwide it inhabits in the temperate and tropical waters of the seas, estuaries and tidal rivers (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It inhabits the estuarine and tidal rivers throughout Bangladesh (Rahman 2005), especially in the southeastern and southwestern coasts (Haroon 2007).

EOO: 75,824 km² **AOO:** 12,183 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Adults are found in coastal waters often entering estuaries and rivers (Harrison1995). Its youngs are omnivorous but feed on zooplankton, small fish and crustaceans as they grow. It spawns in shallow seas, the young enters the estuarine nursery areas at about 1-1.5 cm sizes. It picks up mud from the bottom and strain plant and animal material from it through their sieve-like gillrakers and pharyngeal teeth. Indigestible materials are spat out (Haroon 2007). It inhabits in the temperate and tropical waters in the seas, estuaries and tidal rivers (Talwar and Jhingran 1991, Harrison 1995). It is also found abundantly in saline water lakes (Talwar and Jhingran 1991) and coastal ponds (Haroon 2007).

Assessor: Md. Monirul Islam

Paramugil parmata

Species ID: FI0209

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE

Scientific Name: Paramugil parmata (Cantor, 1849) English Name: Broad-mouthed Mullet, Giantscale Mullet Bengali Name: Bata Synonym/s: Mugil parmatus Cantor, 1849 Liza oligolepis Bleeker, 1859 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: *Paramugil parmata* is a widespread species in southern coastal districts of Bangladesh with no known major threats. Its Extent of Occurrence and Area of Occupancy are 46,947.01 km² and 10,178.31 km², respectively, which are higher than the threshold values for any Threatened Category. So, the species is assessed as Least Concern.

Date Assessed: 18 December 2014

History

Regional Status: This has not been assessed by Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Indian Ocean, Western Pacific including South China Sea, Malaysia, Indonesia, New Guinea, the Philippines, India and Bangladesh (Harrison and Senou 1997, Alam 2007).





Paramugil parmata

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CONCERN <LC>

Bangladesh: It inhabits the estuary and shallow coastal areas of Bangladesh. It contributes a negligible to fisheries in the Meghna estuary of Bangladesh (Alam 2007).

EOO: 46,947 km² **AOO:** 10,178 km²

Population

Generation Time (Length): Unknown.

Total Population: Although no data exist on trends in population size in Bangladesh, it is believed that the population is more or less stable at this time Trend: Unknown.

Habitat and Ecology

It is a catadromous species (McDowall 1997). It browses on submerged surface and filtering large quantity of benthic detritus (Alam 2007). It consumes minor fish and takes part in aquatic food chain. This species inhabits marine waters, brackish water lagoons, estuaries and river mouth (Harrison and Senou 1997, Alam 2007).

Assessor: Md. Monirul Islam

Rhinomugil corsula

Species ID: FI0213

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	MUGILIFORMES	MUGILIDAE

Scientific Name: Rhinomugil corsula (Hamilton, 1822) English Name: Corsula, Kakunda, Corsula Mullet Bengali Name: Khorsula, Bata, Khalla Synonym/s: Mugil corsula Hamilton, 1822 Mugil squamipinnis Swainson, 1839 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: *Rhinomugil corsula* is a widespread and very common species with no known major widespread threats and is assessed as Least Concern.

Date Assessed: 19 December 2014

History

Regional Status: It was listed as Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar and Nepal (Dahanukar 2010).

Bangladesh: It is available throughout the rivers and estuaries of Bangladesh (Rahman 2005). It is reported from the River Padma (Rahman *et al.* 2012), the River Choto Jamuna (in the north-west region) (Galib *et al.* 2013) and the Meghna River (Rahman 2005).





Rhinomugil corsula

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LEAST

CONCERN <LC>

EOO: 2,24,779 km² **AOO:** 16,871 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is an anadromous species (Riede 2004). It usually swims over sandy-muddy bottoms and sea grass meadows, in relatively still waters. It is a surface dweller fish and takes small fish, insects, leaves of plant, organic matter. Breeding time of this fish starts in the month of April and continues till July (Sultana *et al.* 2013). The fish is oviparous, eggs are pelagic and non-adhesive (Breder and Rosen 1966, Froese and Pauly 2014). It can tolerate a wide range of temperature and salinity. It inhabits rivers and estuaries (Rahman 2005). It commonly occurs at water depths of up to 20 metres but may be found offshore or in deeper waters (Sultana *et al.* 2013).

Assessor: Md. Monirul Islam

Chanda nama

Specied ID: FI0200

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	AMBASSIDAE

Scientific Name: Chanda nama (Hamilton, 1822) English Name: Elongate Glass-Perchlet, Asian Glass Fish Bengali Name: Nama Chanda, Chanda Synonym/s: Ambassis indica McClelland & Griffith, 1842 Ambassis oblonga Cuvier, 1828 Chanda bogoda Hamilton, 1822 Chanda phula Hamilton, 1822 Equula ovata Swainson, 1839 Taxonomic Notes: None



Chanda nama

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LEAST

CONCERN <LC>

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Chanda nama* is a widely distributed species and found throughout Bangladesh, and occurs in a wide range of water bodies. Although, the fish is apparently declining in population, it is still common within its habitat ranges. The observed threats are general and it is unlikely that this fish will face the risk of extinction in future. Hence, it is assessed as Least Concern.

Date Assessed: 10 March 2015

History

Regional Status: *Chanda nama* has been assessed as Vulnerable earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Chanda nama* is reported from Bangladesh, India, Nepal and Pakistan (Wahab 2007).



Bangladesh: It is distributed in most types of freshwater bodies throughout the country (Wahab 2007).

EOO: 2,24,779 km² **AOO:** 54,683 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

Chanda nama inhabits fresh and brackish waters, both in standing and running waters (Talwar and Jhingran 1991). Its habitats include clear streams, canals, beels, ponds and inundated paddy fields (Wahab 2007). It is a crepuscular and larvivorous fish. It spends most of its time in small shoals, under the cover of marginal roots or floating vegetation (Daniels 2002).

Assessor: Md. Mizanur Rahman

Pseudambassis lala

Species ID: FI0202

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	AMBASSIDAE

Scientific Name: Pseudambassis Iala (Hamilton, 1822) English Name: Lal Chanda, Ranga Chanda, Chandu Bengali Name: Mola punti Synonym/s: Amhassis alta (Cuvier, 1828) Chanda Iala (Hamilton, 1822) Parambassis Iala (Hamilton, 1822) Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pseudambassis lala* is particularly distributed in the southeastern part of the country. It is a less abundant species. The estimated Extent of Occurrence (EOO) and Area of Occupancy (AOO) are higher than the upper threshold values for any IUCN threatened category. Hence, the species is considered as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: This taxon has not been assessed earlier in Bangladesh.

Geographic Range

Global: *Pseudambassis lala* is found in India, Bangladesh and Myanmar (Wahab 2007).

Bangladesh: It is sporadically found in canals, beels, haor and rivers mostly in south-eastern part of Bangladesh.





Pseudambassis lala

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LEAST

CONCERN <LC>

EOO: 77,229 km² **AOO:** 12,024 km²

Population

Generation Time (Length): Unknown. Total Population: Abundant, but no information is available in population trend. Trend: Unknown.

Habitat and Ecology

Pseudambassis lala inhabits fresh and brackish waters and river mouths. It is a surface and bottom feeder, feeds on insect larvae and attached periphyton. It breeds during the rains. (http://www.iucnredlist.org/details/166569/0).

Assessor: Md. Golam Mustafa Associate Assessor/s: Balaram Mahalder and Mohammad Ilyas

Parambasis ranga

Species ID: FI0203

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	AMBASSIDAE

Scientific Name: Parambasis ranga (Hamilton, 1822) English Name: Indian Glassy Fish, Indian Glass Perch. Bengali Name: Gol chanda, Chanda, Chandu, Tek Chanda. Synonym/s: Chanda ranga Hamilton, 1822 Ambassis alta Cuvier, 1828 Ambassis ranga Day, 1878 Pseudammbassis ranga Talwar & Jhingran, 1991 Taxonomic Notes: There is a debate over whether the generic status of this species should be Parambassis or Pseudambassis (Dahanukar 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Parambasis ranga* occurs in a wide range of habitats throughout the country and common in fish catches. No major threat is reported for its habitats or population decline. So, the species is assessed as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: It was considered as vulnerable (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Bangladesh, India, Malaysia, Myanmar, Nepal, Pakistan and Thailand (Talwar and Jhingran 1991, Srestha 1994 and Rahman 2005).





Parambasis ranga

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LEAST

CONCERN <LC>

Bangladesh: It occurs in river, haor, baor, beel, floodplain, canals, ponds and streams all over Bangladesh (Rahman 2005).

EOO: 1,86,253 km² **AOO**: 7,502 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It occurs in river, haor, baor, beel, floodplain, canals, ponds and streams all over Bangladesh (Rahman 2005). This fish is a migrant from river to floodplain. It feeds on invertebrates, worms and crustaceans.

Assessor: Md. Golam Mustafa Associate Assessor/s: Mohammad Ilyas

Anabas testudineus

Species ID: FI0231

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ANABANTIDAE

Scientific Name: Anabas testudineus (Bloch, 1792) English Name: Climbing Perch, Climbing Bass, Walking Fish Bengali Name: Koi, Corvu, Kai Synonym/s: Anthias testudineus Bloch, 1792 Perca scandens Daldorff, 1797 Amphiprion testudineus Schneider, 1801 Cojus cobojius Hamilton, 1822 Anabas macrocephalus Bleeker, 1854 Anabas scandens Day, 1878 Anabas testudineus Thakur & Das, 1968 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Anabas testudineus is widely distributed and fairly common in all ranges of its habitats. The Extent of Occurrence and Area of Occupancy have been estimated as 1,74,914.88 km² and 3,002.03 km², respectively, which are higher than the threshold values of any Threatened Category. Although there are some potential threats like complete dewatering and drying of its habitats but the fish is known to withstand such adverse conditions. As a very hardy fish with wide range of habitats the species has been considered as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: This taxon has not yet been assessed for the IUCN Red List.





Anabas testudineus

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CONCERN <LC>

Geographic Range

Global: It is found in Bangladesh, China, India, Malaysia, Myanmar, Pakistan, Philippines, Polynesia, Sri Lanka and Thailand (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: Anabas testudineus found in canals, ditches, ponds, beels and swamps and freshwater wetlands throughout Bangladesh (Ahmed and Akhter 2008, Fawzia et al. 2013, Bhuiyan et al. 2014, Latifa et al. In Press).

EOO: 1,74,915 km² **AOO:** 3,002 km²

Population

Generation Time (Length): Unknown. Total Population: Total population is unknown but is common in floodplains, beels and ditches. Trend: Unknown.

Habitat and Ecology

It is an insectivore, feeding on invertebrates, fish and plants. Visual feeder, thus, feeding primarily during the day. During heavy rains, the fish is found to wander long distances on land. The species is renowned for its ability to migrate long distances over land. Occurs mainly in lowlying swamps, marsh-lands, lakes, canals, pools, small pits and puddles. Abundant in paddy fields and water bodies with water hyacinth (Saha 2007).

Assessor/s: Gulshan Ara Latifa

Channa gachua

Species ID: FI0004

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa gachua (Hamilton, 1822) English Name: Dwarf Snakehead Bengali Name: Chang, Chyang, Ookal, Tetya, Telo Taki, Chang Taki, Gachua,Gori, Pagla, Hulpa, Chaitan Synonym/s: Ophicephalus kela Gunther, 1861 Ophicephalus gachua Bleeker 1877 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Channa gachua is widely distributed in all freshwater habitats throughout the country but it is comparatively less abundant than the related species out the genus. As a non-commercial species, there is no known major threat to the fish. So, the species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was listed as Not Threatened (IUCN Bangladesh 2000)

Geographic Range

Global: It is found Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Iran, Iraq, Laos, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Singapore, Thailand and Vietnam. (Rahman 2005)





Channa gachua

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CONCERN <LC>

Bangladesh: It is found in different types of freshwater habitats throughout the country (Rahman 1989).

EOO: 24,100 km² **AOO:** 2,063 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a carnivorous species and feeds on small fishes, insects and crustaceans. It exhibits parental care, with the male brooding eggs and fry in its mouth (Lim *et al.* 2008). Adults inhabit medium to large rivers, brooks, rapid-running mountain streams and stagnant water bodies including sluggish flowing canals (Taki 1978).

Assessor: Ismot Ara

Channa orientalis

Species ID: FI0006

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa orientalis Bloch and Schneider, 1801 English Name: Asiatic Snakehead, Walking Snakehead Bengali Name: Telo Taki, Gachua, Raga, Cheng, Gaira, Ragua Synonym/s: Ophiocephalus gachua Hamilton, 1822

Ophiocephalus apus Canestrini, 1861 *Ophicephalus gachua* Shaw and Shebbeare, 1937

Channa orientalis Menon 1974 **Taxonomic Notes:** Sometimes misidentified as *Channa gachua*. It is evident that *C. orientalis* as presently understood is a species complex (S. Ahmed, pers. comm. 2014).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Channa orientalis* is a wide spread species in all freshwater habitats of Bangladesh. It has no specific major threat that can qualify the species in any threatened category. So, the species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: Earlier it was listed as Vulnerable (VU) in IUCN Bangladesh (2000).

Geographic Range

Global: It is found in Afghanistan, Bangladesh, Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal,





Channa orientalis

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CONCERN <LC>

Pakistan, Sri Lanka, Singapore, Thailand and Vietnam. (Talwer and Jhingran 1991, Rainboth 1996, Rahman 2005)

Bangladesh: It is known to occur in all freshwater systems in Bangladesh (Rahman 2005).

EOO: 2,20,440 km² **AOO:** 10,669 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

C. orientalis is broadly adapted species occurring in rivers, lakes, ponds, mountain streams and even brackish water (Rainboth 1996). It usually hides under the cover of marginal roots and bogwood. It can tolerate very stagnant, poorly oxygenated and turbid water. This species spawns in shallow water with silt or gravel substrate.

Assessor: Ismot Ara

Channa punctata

Species ID: FI0007

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa punctata (Bloch, 1793) English Name: Spotted Snakehead, Green Snakehead Bengali Name: Taki, Lata, Chaitan, Lati, Okol, Sati, Rakhta Taki, Bheto Taki, Bhatua Taki, Gorai Synonym/s: Ophicephalus punctatus Bloch, 1793 Channa punctatus (Bloch, 1793)

Ophiocephalus lata Hamilton, 1822 Ophiocephalus punctatus Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Chana punctata is widely distributed in the country in all types of water bodies. The fish is relatively commmon within all of its habitat ranges. it is found in good numbers in markets. The threats to the species are general. Thus the species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species was assessed as Not Threatened in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Afghanistan, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka, and Yunnan (China). (Talwer and Jhingran 1991, Rainboth 1996, Rahman 2005).





Channa punctatus

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CONCERN <LC>

Bangladesh: It occurs in river, streams, beels, ponds, ditches generally in floodplains and also found in rice field and irrigation channels throughout the country. (Rahman 2005).

EOO: 2,20,440 km² **AOO:** 10,669 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

They are carnivorous (voracious) and predatory to fish, prefers stagnant water and muddy stream, prolific breeder and shows rapid development (Talwer and Jhingran 1991) and found in fresh and brackish waters as benthopelagic species.

Assessor: Ismot Ara

Channa striatas

Species ID: FI0008

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	CHANNIDAE

Scientific Name: Channa striatas (Bloch, 1793) English Name: Snakehead Murrel, Stripped or banded Snakehead, Common Snakehead, Asian Snakehead, Chevron Snakehead Bengali Name: Shol, Shoul, Chol,Chena Synonym/s: Ophicephalus striatus Bloch, 1793

Channa striatus (Bloch, 1793) Ophiocephalus wrathl Lacepede, 1801 Ophiocephalus chena Hamilton, 1822 Ophiocephalus planiceps, Cuvier, 1831 Ophiocephalus stewartii, Playfair, 1867 Ophiocephalus striatus Day, 1878

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: It is the most common species of the genus *Channa* next to *Channa punctata* and widely distributed in all freshwater bodies in the country and no major known threat is observed. Therefore, this species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Not Threatened by Red List of IUCN Bangladesh 2000.





Channa striatas

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LEAST

CONCERN <LC>

Geographic Range

Global: It is found in Bangladesh, Cambodia, China, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Viet Nam. (Talwer and Jhingran 1991, Rainboth 1996, Rahman 2005).

Bangladesh: It occurs in rivers, beels, baors, streams, ponds, ditches, swamps and floodplains throughout Bangladesh (Rahman 2005, Ahmed and Akhter 2008).

EOO: 2,20,440 km² **AOO:** 47,287 km²

Population

Generation Time (Length): Unknown.

Total Population: Unknown; siltation and drying of beels and swamps are the possible threats for wild population. Trend: Declining.

Habitat and Ecology

It occurs usually in all freshwater bodies. They are carnivorous, bottom dweller, prefer stagnant muddy water and grassy tanks, breed in ditches, ponds and flooded paddy fields in rainy season (Talwer and Jhingran 1991).

Assessor: Md. Sagir Ahmed

Butis butis

Species ID: FI0227

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ELEOTRIDAE

Scientific Name: Butis butis (Hamilton, 1822) English Name: Crimson-tipped Gudgeon, Duckbill Sleeper, Crimson-tipped Flathead-sleeper, Crazy Fish, Crimson-tipped Flathead Gudgeon, Flat-headed Gudgeon, Pointed Head Gudgeon, Upside Down Sleeper Bengali Name: Kuli, Bhout Bele Synonym/s: Cheilodipterus butis Hamilton, 1822 Eleotris humeralis Valenciennes, 1837 Elestris butis (Günther, 1861) Butis butis Koumans, 1953

Taxonomic Notes: This species is often confused with *Butis amboinensis.*

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species occurs in the coastal region of Bangladesh including the Sundarban estuary. It has fairly large Extent of Occurrence and Area of Occupancy that are above the threshold levels of any Threatened Category. As a widespread species with no known major threat, *Butis butis* is assessed as Least Concern.

Date Assessed: 17 September 2014

History

Regional Status: This taxon has not yet been assessed for the IUCN Red List.





Butis butis

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LEAST

CONCERN <LC>

Geographic Range

Global: This species has a wide geographic range from east Africa, Seychelles, western Mascarenes including Madagascar and the Comoros in the Indian Ocean (Keith *et al.* 2006), across to Sri Lanka and Bangladesh (Rahman 1989), north to the South China Sea, south through the Indo-West Pacific region to Australia and New Caledonia (Allen *et al.* 2002) and as far east as Fiji (Ryan 1981).

Bangladesh: It is usually found around the mouths of rivers or in brackish mangrove estuaries and sometimes penetrates freshwater. It is reported from Bakkhali River, Meghna River Estuary, Patuakhali and Sundarbans (Huda and Haque 2003, Nabi *et al.* 2011, Hossain *et al.* 2012).

EOO: 77,285 km² **AOO:** 16,594 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is an ambush hunter, feeding mainly on small fishes and crustaceans and is famous for using sticks and floating leaves as stalking-horses. This species is found in coastal marine to brackish habitats, mangroves (Huda and Haque 2003) and in the lower reaches of rivers, usually on muddy bottoms (Allen *et al.* 2002). It occasionally ascends to rivers.

Assessor: Md. Sagir Ahmed

Butis melanostigma

Species ID: FI0228

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ELEOTRIDAE

Scientific Name: Butis melanostigma (Bleeker, 1849) English Name: Black Spotted Gudgeon, Black Spot Sleeper

Bengali Name: Kuli, Kalo baila

Synonym/s: Eleotris melanostigma Bleeker, 1849 Butis melanostigma Koumans, 1953

Taxonomic Notes: This species is often confused with *Butis butis.* A scarlet spot at the base of the pectoral and interorbital crest not denticulated are the key characters.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is widely distributed in the coastal region of Bangladesh. It has fairly large Extent of Occurrence and Area of Occupancy. No cognisible threat has been found against the species or its habitats. Therefore, *Butis melanostigma* is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: Not assessed in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: Indo-West Pacific: East Africa to New Guinea. Including Bangladesh, India, Myanmar, Pakistan and Taiwan (Hoese 1986, Allen 1991).





LEAST

CONCERN <LC>

Bangladesh: It inhabits around the mouths of rivers or in brackish mangrove estuaries and sometimes penetrates freshwater (Huda and Haque 2003, Nabi *et al.* 2011, Hossain *et al.* 2012).

EOO: 12,355 km² **AOO:** 46,971 km²

Population

Generation Time (Length): Unknown.

Total Population: There is no information on the population and its trends of this species. This species is relatively common in the coastal catches in Bangladesh (Huda and Haque 2003, Nabi *et al.* 2011, Hossain *et al.* 2012).

Trend: Unknown.

Habitat and Ecology

It is demersal, solitary and carnivorous species feeding mainly on small fishes and crustaceans. It is famous for using sticks and floating leaves as stalking-horses. Being an amphidromous species, occasionally it ascends the rivers (Hoese 1986, Allen *et al.* 2002). This species occurs in coastal marine to brackish habitats, mangroves and in the lower reaches of rivers, usually on muddy bottoms (Hoese 1986, Allen *et al.* 2002, Huda and Haque 2003).

Assessor: Md. Sagir Ahmed

Eleotris fusca

Species ID: FI0229

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ELEOTRIDAE

Scientific Name: Eleotris fusca (Forster, 1801) English Name: Dusky Sleeper, Brown Spinecheek Gudgeon Bengali Name: Kuli, Bhout Bele Synonym/s: Poecilia fusca Forster, 1801

Eleotris niger Quoy & Gaimard, 1824 **Taxonomic Notes:** *Eleotris fusca* is sometimes confusing with *E. lutea.* In *E. fusca* predorsal scales extend upto the snout.

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: *Eleotris fusca* occurs widely in the coastal region of Bangladesh. There is no known major widespread threat to the species. So, it is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: It was not assessed in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: This species has a wide geographic range in Indo-West Pacific: East Africa to French Polynesia. Bangladesh, India, Myanmar, Sri Lanka, Maldives, Malaysia, Indonesia and the Philippines.





Eleotris fusca

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LEAST

CONCERN <LC>

Bangladesh: It is usually found around the mouths of rivers or in brackish mangrove estuaries and sometimes penetrates freshwater bordering these areas (Huda and Haque 2003, Rahman 2005, Nabi *et al.* 2011).

EOO: 12,354 km² **AOO:** 46,971 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is demersal, amphidromous, feeding mainly on small fishes and crustaceans aswell as insects (Reide 2004). This fish spawns on submerged plants with small leaves. The female tends and fans the eggs until hatching and loosely guards the fry for a few days thereafter. Adults inhabit near coast, lagoons, estuaries, tidal rivers and freshwater. They occur in the lower reaches of freshwater streams, usually on mud bottoms. (Pethiyagoda 1991, Allen *et al.* 2002). Juveniles are found mainly among mangrove roots in the more saline areas of lagoons and estuaries.

Assessor: Md. Sagir Ahmed

Glossogobius giuris

Species ID: FI0001

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: *Glossogobius giuris* (Hamilton, 1822) English Name: Fresh Water Goby, Bar Eyed Goby, Flat-headed Goby, Forktongue Goby, Gangetic Tank Goby, Tank Goby, White goby.

Bengali Name: Baila, Bailly, Bele, Bailla, Belia, Bhalia Tia Shol, Bakka, Tati)

Synonym/s: Gobius giuris Hamilton, 1822 Gobius gutum Hamilton, 1822 Gobius russelli Cuvier, 1829 Gobius striatus (Day, 1868) Gobius grandidieri Playfair, 1868 Eleotris laticeps De Vis, 1884

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is available in all kinds of fresh, estuarine and sea waters in Bangladesh. However, apparent data suggest its population decline but there exists no empirical information to support it and no major widespread threats are reported so far to place this species in any threatened category. Thus, it is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Not Threatened (NO) (IUCN Bangladesh 2000).





Glossogobius giuris

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LEAST

CONCERN <LC>

Geographic Range

Global: This fish is known from South-East Asia, Indo-West Pacific to Indo-China, Africa, Central Australia and the East Indies (Larsen and Britz 2012).

Bangladesh: It is primarily available in rivers, haors, baors, beels, lakes, ponds, swamps and similar water bodies all overs Bangladesh and secondarily moves from estuarine to sea water (Rahman 1989).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The juveniles are omnivorous and adults are predatory (Rahman 1989, Islam 2002). It inhabits aquatic vegetation of clear to turbid freshwater, sandy, gravel or rock substrate of estuaries and sea waters. The species is benthopelagic and amphidromous (Riede 2004).

Assessor: Md. Rafiqun Nabi

Brachygobius nunus

Species ID: FI0002

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Brachygobius nunus (Hamilton, 1822) English Name: Short Goby, Golden-banded Goby, Bumblebee Goby, Buzz Goby Bengali Name: Nuna Bailla Synonym/s: Gobius nunus Hamilton, 1822 Gobius alcockii Annandale, 1906 Gobius bombayensis Annandale, 1919 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is common in brackish water and occasionally found in freshwater in Bangladesh. Due to its wide distribution and no major known threat the species is considered as Least Concern.

Date Assessed: 26 June 2014

History

Regional Status: It was considered Not Threatened in IUCN Red List Bangladesh (2000).

Geographic Range

Global: The *Brachygobius nunus* is known from Bangladesh, Myanmar, India, Indonesia, Malaysia and Thailand (Rahman 1989, Talwer and Jhingran 1991)

Bangladesh: Primarily estuarine but occasionally migrates to freshwater. Reported from the Old Kangsa River near





Brachygobius nunus

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LEAST

CONCERN <LC>

Netrokona town as well as river Dakatia and Meghna near Chandpur (Rahman 1989).

EOO: 64,055 km² **AOO:** 12,668 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The fish produces few (100-150) but large sized eggs. The youngs hatch often within about 4-5 days, even earlier and guarded by the male and are not cannibalized. Both fries and adults feed on live brine shrimp, *Daphnia* and white worms. It inhabits estuarine swamps, streams, mangroves, tidal creeks and occasionally freshwater rivers. It is demersal and remains attached to various substrates.

Assessor: Md. Rafiqun Nabi

Apocryptes bato

Species ID: FI0016

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Apocryptes bato (Hamilton, 1822) English Name: Goby Bengali Name: Chiring, Ful Chiring, Dalli Chewa Synonym/s: Gobius bato Hamilton, 1822 Apocryptes batoides, Day 1876 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has wide range of distribution and abundant in almost all the estuaries and tidal rivers throughout the country and no major threat is recognized. So, the species is justified as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: Its range is limited to Bangladesh, India, and Myanmar. (Talwer and Jhingran 1991, Rahman 2005)

Bangladesh: The fish occurs along the coast line of Bangladesh, including estuaries and lower tidal rivers (Rahman 2005), Halda River, Karnaphuli, Sangu, Shikalbaha and Chandkhali rivers (Azadi and Arshad-ul-Alam 2013).





Apocryptes bato

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LEAST

CONCERN <LC>

EOO: 76,035 km² **AOO:** 12,322 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: The fish was monitored over the 10 years, found stable, widespread and abundant.

Habitat and Ecology

It inhabits coastal waters, estuaries/brackish water and tidal rivers. It burrows within tidal limits of river deltas (Rahman 2005). This amphidromous species feeds on small invertebrates, mostly small crustaceans, zooplanktons and phytoplanktons.

Assessor: Mohammad Ali Azadi Associate Assessor: Mohammad Arshad-ul-Alam

Oxyurichthys microlepis

Species ID: FI0017

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Oxyurichthys microlepis (Bleeker, 1849) English Name: Maned Goby Bengali Name: Sabuj Chiring Synonym/s: Gobius microlepis Bleeker, 1849 Gobius cristatus (Day, 1873) Euctenogobius cristatus Day, 1873 Gobius longicauda Steindachner, 1893 Gobius nuchalis Barnard, 1927 Taxonomic Notes: None



Oxyurichthys microlepis

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LEAST

CONCERN <LC>

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species is fairly common and widely distributed along the coast line, estuaries and lower tidal rivers of Bangladesh. No major threat is reported, so the species is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Indo-West Pacific: Mekong delta, Cambodia; Kenya to South Africa and western Pacific. (Rainboth 1996, Munroe 2001, Rahman 2005)



Bangladesh: It is found along the coast line of Bangladesh, including estuaries and lower tidal rivers (Rahman 2005), Halda River, Karnaphuli, Sangu, Shikalbaha and Chandkhali rivers (Azadi and Arshad-Ul Alam 2013).

EOO: 76,035 km² **AOO:** 12,322 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: No information is available on population trend.

Habitat and Ecology

It inhabits in coastal waters and tidal rivers. It burrows within tidal limits of river deltas (Rahman 2005). This fish amphidromous; feeds on small invertebrates, mostly small crustaceans, zooplanktons and phytoplankton.

Assessor: Mohammad Ali Azadi Associate Assessor/s: Mohammad Arshad-ul-Alam

Awaous guamensis

Species ID: FI0020

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Awaous guamensis (Valenciennes, 1837) English Name: Scribbled Goby, Pacific River Goby Bengali Name: Shil Baila, Bele Synonym/s: Gobius guamensis Valenciennes, 1837 Gobius stamineus Valenciennes, 1842

Gobius striatus Day, 1878

Taxonomic Notes: This species is regularly confused with *Awaous stamineus*, which is endemic to Hawaii and distinct from *Awaous guamensis*. Further taxonomic work is needed to clarify this species.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Awaous guamensis* is fairly common within its habitat ranges. The estimated Extent of Occurrence (67969.46 km²) and Area of Occupancy (2,237.03 km²) of this species are much higher than the upper threshold values for any threatened category. There is no known major threat to the fish. So, *A. guamensis* is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species has been assessed as Least Concern (IUCN Bangladesh 2000).

Geographic Range

Global: Its range includes Bangladesh, India, This species





Awaous guamensis

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is found in the Northern Mariana Islands, Guam and in Melanesia (New Caledonia, Fiji and Vanuatu) (Talwer and Jhingran 1991, Watson 1992, Rahman 2005)

Bangladesh: This species is found in the River Dakatia, Jamuna, Kangsa, Meghna and Someswari as well as hilly streams of Bandarban and Cox's Bazar Districts (Rahman 2005, Ahmad *et al.* 2013).

EOO: 67,969 km² AOO: 2,237 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It inhabits coastal rivers and estuaries. It is an amphidromous species, feeds on filamentous algae, worms, crustaceans, insects, small fishes and suspended food particles. It prefers clear water with rocky or pebble substrate.

Assessor: Mohammad Arshad-ul-Alam Associate Assessor/s: Mohammad Ali Azadi

Boleophthalmus boddarti

Species ID: FI0033

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Boleophthalmus boddarti (Pallas, 1770) English Name: Boddart's Goggle-eyed Goby, Blue Spotted Mudskipper, Mudskipper Bengali Name: Dahuk, Menua Synonym/s: Gobius boddarti Pallas, 1770 Gobius striatus Bloch & Schneider, 1801 Gobius plinianus Hamilton, 1822 Boleophthalmus inornatus Blyth, 1860 Boleophthalmus sculptus Günther, 1861

Taxonomic Notes: None

Boleophthalmus boddarti © Md. Mizanur Rahman

Global: It is found in India to New Guinea and north to

southern China (Rainboth1996), and also in Persian Gulf

Bangladesh: The species inhabits intertidal waters and

estuaries of the country (Rahman 2005) and has been reported particularly from Muhuri Irrigation Project and

its surrounding areas (Haroon et al. 1989), Maheshkhali

channel (Sanaullah and Chowdhury 1992) and the

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Boleophthalmus boddarti is widely distributed in the tidal rivers and their creeks, estuaries and the coastal beaches in the southern Bangladesh. No evidences are found on its population declination and there is no known widespread threat to the species which could affect its population in near future. Therefore, the species is considered Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The taxon has been assessed as Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).



EOO: 55.051 km² AOO: 18,951 km²

Geographic Range

(Wright 1988)

Population

Generation Time (Length): Unknown.

Sundarbans (Mustafa and Graaf 2008)

Total Population: Information on total population of the species is not currently available. Trend: Unknown.

Habitat and Ecology

The species inhabits the tidal rivers, estuaries and seas. It is an intertidal dweller and air-breather, walk on land and rest in burrows and holes. The fish actively forages on mudflats and feeds on multicelluar algae and worms. The fish is amphibious and most of the time walks on lands and mudflats, and cannot remain under water for prolonged period of time (Rahman and Chowdhury 2007). The fish is also migratory in habit. It is found in scattered schools when foraging.

Assessor: Syeda Ismat Ara Associate Assessor/s: Mohammad Ali Azadi

Gobiopterus chuno

Species ID: FI0035

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Gobiopterus chuno (Hamilton, 1822) English Name: Glass Goby Bengali Name: Chuna Bele Synonym/s: Gobius chuno Hamilton, 1822 *Micrapocryptes fragilis* Hora, 1923 *Gobiella pellucid* Smith, 1931 *Gobiopterus chuno* Smith, 1945 Taxonomic Notes: None

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Gobiopterus chuno* is widely distributed in the estuaries and tidal rivers, and reported to be fairly common in Dakatia and Meghna Rivers (Rahman 2005). The estimated Extent of Occurrence and Area of Occupancy are above the upper limits for Vulnerable Category. In the absence of any major threat, the species is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The taxon has been considered Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The taxon is reported from Bangladesh, Chao





Gobiopterus chuno

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Phraya basins, India, Sumatra of Indonesia, Malay Peninsula, Mekong River of Indo-China, Myanmar and Singapore. (Khan 2007)

Bangladesh: It occurs in Dakatia and Meghna Rivers (Rahman 2005), Muhuri Irrigation Project and its surrounding areas (Haroon *et al.* 1989), Feni River (Halder *et al.* 1991). The fish is also reported to be found in other coastal districts of Bangladesh.

EOO: 78,485 km² **AOO:** 8,647 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population of the fish is not available However, the species is fairly common in rainy season in Dakatia and Meghna Rivers (Rahman 2005).

Trend: Information on the population trend of the species is not currently available.

Habitat and Ecology

Gobiopterus chuno inhabits fresh and brackish waters of estuaries and lower courses of tidal rivers and also enters into swamps. It is a bottom dwelling amphidromous species, carnivore in nature and feeds mainly on zooplanktons (Khan 2007).

Assessor: Syeda Ismat Ara Associate Assessor/s: Mohammad Ali Azadi

Parapocryptes batoides

Species ID: FI0216

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Parapocryptes batoides (Day, 1876) English Name: Gobi, Mudskipper Bengali Name: Dali Chewa, Chiring Synonym/s: Apocryptes bata (Hamilton, 1822) Gobius bato Hamilton, 1822 Apocryptes batoides Day, 1876 Taxonomic Notes: It needs more study to differentiate Parapocryptes batoides from Apocryptes bato. It might be a species complex.



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Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: This species is widely distributed in the coastal tidal rivers, mangrove ecosystems, and estuaries of Bangladesh. There is no evidence of decline in population and extreme fluctuation of Extent of Occurrence and Area of Occupancy. Due to wide distribution and without any known major widespread threats, the species is considered as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: This taxon has not yet been assessed in Bangladesh.

Geographic Range

Global: Indian Ocean: India, Bangladesh and Myanmar (Talwar and Jhingran 1991, Rahman 2005).



Bangladesh: It is found in estuaries and rivers (Ahmed 1991, Rahman 2005), Dakatia and Meghna Rivers (Rahman 2005), Sundarban (Alom and Mowgli 2013) and tidal rivers of Patuakhali (Mohsin *et al.* 2014).

EOO: 20,072 km² **AOO:** 4,607 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is omnivorous and burrows within tidal limits of river deltas. It occurs in muddy bottoms of tidal rivers and mangroves.

Assessor: Mohammad Ali Azadi

Periophthalmodon schlosseri

Species ID: FI0217

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Periophthalmodon schlosseri (Pallas, 1770) English Name: Giant Mudskipper Bengali Name: Dahuk

Synonym/s: Gobius schlosseri Pallas, 1770

Periophthalmus schlosseri Bloch & Schneider. 1801

Periophthalmus ruber Bloch & Schneider, 1801 Periophthalmus phya Johnstone, 1903 Periophthalmodon schlosseri argentiventralis Eggert, 1935

Periophthalmodon Schlosseri Koumans, 1941 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least concern (LC) ver 3.1

Justification: *Periophthalmodon schlosseri* is widely distributed in the mudflats of the tidal rivers, mangrove ecosystems and estuaries in Bangladesh. There is no evidence of decline in population and extreme fluctuation of Extent of Occurrence and Area of Occupancy. Data are not available on its population trend, number of mature individuals and its decline. Due to its distribution and without any known major widespread threats, the species is considered as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: The species was not assessed earlier in Bangladesh.





Periophthalmodon schlosseri

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Geographic Range

Global: It is found in Australia, Bangladesh, Cambodia, India, Indonesia, Malaysia, the Philippines, Seychelles, Thailand, Singapore, and Vietnam (Weber and Beaufort 1953, Talwar and Jhingran 1991, Rainboth 1996, Rahman 2005).

Bangladesh: The fish occurs in intertidal zone of the coast and almost all the lower reaches of tidal rivers, Halda, Karnaphuli, Sangu, Sikalbaha, Chandkhali, Bakkhali, Naf Rivers and in creeks of Sundarbans. (Ahmed 1991, Rahman 2005, Saha 2012, Azadi and Arshad-Ul Alam 2013 and pers. obs.)

EOO: 85,517 km² **AOO:** 13,235 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is carnivorous, hunting mainly on arthropods (insects and crustaceans). It may even eat smaller mudskippers. During low tide it is found on open mudflats of river banks, along mangrove forests marine fringes, creeks, always in the water's edge or in the large pools of their burrows in the soft mud. It spends an appreciable time out of water in basking or 'mud-walking'. Large birds, like storks and herons feed on it. In the bank of River Naaf Long-tailed or Crab-eating Macaque eat this fish too (M. A. R. Khan pers. comm.).

Periophthalmus barbarous

Species ID: FI0218

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Periophthalmus barbarous (Linnaeus, 1766) English Name: Atlantic Mudskipper Bengali Name: Dahuk Synonym/s: Gobius barbarus Linnaeus, 1766 Gobius koelreuteri Pallas, 1770 Periophthalmus koelreuteri papilio Bloch & Schneider, 1801 Peiophthalmus erythronemus Guichenot, 1858 Taxonomic Notes: None



Periophthalmus barbarous

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Periophthalmus barbarous* is widely distributed in the mudflats of tidal rivers, mangrove ecosystems and estuaries of Bangladesh. It is common in all its habitat ranges. Due to wide distribution and in the absence of major threats, the species is considered as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: This taxon has not yet been assessed in Bangladesh.

Geographic Range

Global: This species occurs throughout most of the west African coastline from Mauritania in the north southwards



as far as Angola, Bangladesh, Benin, Côte d'Ivoire, Cameroon, Congo, The Democratic Republic of the Congo, Gabon, Ghana, Gambia, India, Philippines, Liberia, Morocco, Nigeria, Sierra Leone, Senegal and Togo (Ahmed 1991, Harrison *et al.* 2003).

Bangladesh: It occurs in intertidal mudflats of the Sundarbans mangrove swamps and brackish waters of Bangladesh (Ahmed 1991, pers. obs.)

EOO: 72,355 km² **AOO:** 12,710 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is omnivorous in habit, feeds on algae, macrophytes, arthropods (mainly insects and crabs), nematodes, bivalves and fishes. This species forages more actively during the breeding time in the dry season (King and Udo 1998). *P. barbarus* inhabits muddy substrates and in brackish waters of estuaries, lagoons and mangrove swamps. It is an amphibious air-breather and skips or walks on sand or mud in search of food usually during low tide (Martin *et al.* 1999).

Periophthalmus koelreuteri

Species ID: FI0219

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Periophthalmus koelreuteri (Pallas, 1770) English Name: Mudskipper Bengali Name: Dahuk Synonym/s: Gobius koelreuteri Pallas, 1770 Periophthalmus koelreuteri Day, 1878

Periophthalmus koelreuteri africanus Eggert, 1935 Periophthalmus koelreuteri koelreuteri Eggert, 1935 Periophthalmus koelreuteri albostriatus Eggert, 1935

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Periophthalmus koelreuteri is widely distributed in the mudflats of tidal rivers, mangrove ecosystems and estuaries in the Bay of Bengal part in Bangladesh. The Extent of Occurrence and Area of Occupancy are much higher than the threshold levels of Threated Category. In the absence of having wide distribution and any known major widespread threat, the species has been assessed as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: The taxon has not yet been assessed in Bangladesh.





Periophthalmus koelreuteri

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Geographic Range

Global: It is found in Indo-west Pacific, including Bangladesh, India (Talwar and Jhingran 2001, Harrison *et al.* 2003, Rahman 2005).

Bangladesh: This species occurs in intertidal sand or mudflats of the Sundarbans mangrove swamps, estuaries and the bay areas (Rahman 2005, pers. obs.)

EOO: 72,359 km² **AOO:** 16,793 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is carnivorous and feeds mainly on arthropods (Harrison *et al.* 2003). As an amphibious fish it lives in intertidal zone, mudflats of tidal river banks and mangrove forests (Miller 1981).

Pseudapocryptes elongatus

Species ID: FI0220

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Pseudapocryptes elongatus (Cuvier, 1816) English Name: Lanceolate Goby, Goby, Mudskipper Bengali Name: Chiring, Jaid Chirring, Chewa Synonym/s: Apocryptes dentatus Valenciennes, 1837 Apocryptes lanceolatus (Bloch & Schneider, 1801) Aprocryptodon edwardi Fowler, 1937 Boleophthalmus taylori Fowler, 1934

Gobius changua Hamilton, 1822 Gobius changua Hamilton, 1822 Gobius elongatus Cuvier, 1816



Pseudapocryptes elongatus

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Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The fish has large Extent of Occurrence and Area of Occupancy. Because of its wide distribution, and without any known major widespread threat, the species is assessed as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: It was not assessed in Bangladesh.

Geographic Range

Global: The fish is distributed from India to Tahiti and north to China, Bangladesh, Cambodia, China, India, Indonesia, Japan, Malaysia, Singapore, Taiwan, Thailand and Viet Nam (Talwar and Jhingran 1991, Rainboth 1996, Rahman 2005).



Bangladesh: The species occurs in estuaries, coastal and tidal freshwater rivers and creeks of Cox's Bazar, Chittagong, Bhola, Noakhali, Barisal, Patuakhali, Bagerhat, Khulna and Satkhira. It is also reported from inshore islands of Moheskhali, Kutubdia, Sandwip and Hatia. Mangroves of Chakaria Sundarban and Khulna Sundarbans (Rahman 2005, Hossain *et al.* 2007, Azadi and Arshad-ul-Alam 2013, 2014, Hossain 2013 and pers. obs.).

EOO: 66,842 km² **AOO:** 2,565 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is an amphibious air-breather, benthic omnivorous, prevalently feeding on phytoplankton (epibenthic diatoms, cyanobacteria) and small invertebrates, such as juvenile shrimps. It inhabits mudflats of estuaries and the freshwater tidal zone of rivers. It is amphidromous and found in mudflats of estuaries and the freshwater tidal rivers, mangrove creeks and small and muddy tidal inlets.

Assessor: Mohammad Ali Azadi

Scartelaos histophorus

Species ID: FI0221

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Scartelaos histophorus (Valenciennes, 1837) English Name: Walking goby Bengali Name: Dahuk

Synonym/s: Gobius viridis Hamilton, 1822

Boleophthalmus viridis Day, 1878 Scartelaos viridis Koumans, 1953 Boleophthalmus histophorus Valenciennes, 1837 Boleophthalmus sinicus Valenciennes, 1837 Boleophthalmus chinensis Valenciennes, 1837 Boleophthalmus aucupatorius Richardson, 1845 Boleophthalmus campylostomus Richardson, 1846 Apocryptes macrophthalmus Castelnau, 1873 Cobiscoma cuttulatum Maclagy, 1878

Gobiosoma guttulatum Macleay, 1878 Gobiosoma punctularum De Vis, 1884 Boleophthalmus novaeguineae Hase, 1914

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species is distributed in the Bay of Bengal shores, coastal mudflats, freshwater tidal rivers, mangrove ecosystems and estuaries within Bangladesh. Because of its wide distribution and in the absence of any known major threats, the species is considered as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: This taxon has not yet been assessed in Bangladesh.





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Geographic Range

Global: It is found in Australia, Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Myanmar, Pakistan, Papua New Guinea, Philippines, Ryukyu Island, Singapore, Taiwan and Thailand (Rainboth 1996, Talwar and Jhingran 2001, Rahman 2005).

Bangladesh: It is found in tidal mud and sand along the Bay Shore, estuaries, swamps, marshy areas, tidal zone of freshwater rivers and mangroves of Cox's Bazar, Moheskhali, Chakraia, Hatia, Chittagong, Bhola, Noakhali, Barisal, Patuakhali, Bagerhat, Khulna and Satkhira. (Talwar and Jhingran 2001, Rahman 2005, Chandan *et al.* 2011, Ahsan *et al.* 2014 and pers. obs.).

EOO: 66,842 km² **AOO:** 2,565 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This fish is a benthic feeder, omnivorous consuming diatoms and small invertebrates (nematodes, ostracodes, copepods). During low tide it is found in mixed or mud tidal flats and in areas with different density of tide pools and structural elements (plant debris, mangrove pneumatophores, etc.). It, moves (jumps) on the mud with the aid of pectoral fin. An intertidal species found on sand and mud flats along bay shores, estuarine areas, swamps, marshy areas and on tidal mud flats (Martin and Bridges 1999).

Stigmatogobius sadanundio

Species ID: FI0222

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Stigmatogobius sadanundio (Hamilton, 1822) English Name: Knight Goby Bengali Name: Baila Synonym/s: Gobius sadanundio Hamilton, 1822 Gobius apogonius Cantor, 1849 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Stigmatogobius sadanundio* in one of the rarely caught gobiid in coastal water tidal rivers of Bangladesh. Its Extent of Occurrence is 75823.69 km² followed by having Area of Occupancy 12335.40 km². In addition to this, there is no record to support that the species is severely fragmented or the number of location is less than 10. As a widely distributed species with no known major threats this taxon is assessed as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: The taxon has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Sri Lanka and the Andamans to Singapore and Indonesia (Talwar and Jhingran 1991, Rahman 2007).





Stigmatogobius sadanundio

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Bangladesh: It inhabits estuaries and freshwater rivers far above the tidal influence. Abundant in the lower Padma River, lower Meghna River, Rupsha River, Sibsha River, Biskhali River, Tetulia River, Arial Kha River, Galachipa Rirver, Pyra River and a few other rivers in the coastal region of Bangladesh (Rahman 2007).

EOO: 75,824 km² **AOO:** 12,335 km²

Population

Generation Time (Length): Life-span of this species has been recorded up to 2–4 years (Milton 2009). Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is amphidromous and feeds on small fishes and invertebrates, including mosquito larvae. It occurs in estuaries and tidal zone of rivers. However, it is also found in freshwater habitats (Rahman 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Odontamblyopus rubicundus

Species ID: FI0223

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Odontamblyopus rubicundus (Hamilton, 1822) English Name: Rubicundus Eelgoby Bengali Name: Lal Chewa Synonym/s: Gobioides rubicundus Hamilton, 1822 Amblyopus mayenna Valenciennes, 1837 Amblyopus taenia Günther, 1861





Odontamblyopus rubicundus

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This is a widespread species in coastal waters, estuaries and tidal rivers of Bangladesh. There are no identified major threats to the species. Its Extent of Occurrence is about 75,823 km² and Area of Occupancyis about 12,183 km². These are greater than the threshold of any Threatened Category. No data has been recorded on its population reduction. Therefore, this species has been assessed as Least Concern.

Date Assessed: 19 December 2014

History

Regional Status: This species has not yet been assessed for IUCN Red List.

Geographic Range

Global: It is found in Indo-Pacific: including Bangladesh, India and Myanmar (Talwar and Jhingran 1991, Alam 2007).



Bangladesh: It inhabits estuarine and tidal rivers throughout Bangladesh (Rahman 2005). Frequently wriggles along the mud in the mouth of the tidal rivers during low tide (Alam 2007).

EOO: 75,824 km² **AOO:** 12,335 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is an amphidromous species, feeds on the bottom detritus, chironomid larvae and worms. It inhabits estuaries and tidal rivers and also prefers the holllows beneath tide pools in the near shore areas (Alam 2007, Alam *et al.* 2013).

Assessor: Gawsia Wahidunnessa Chowdhury

Taenioides buchanani

Species ID: FI0224

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Taenioides buchanani (Day, 1873) English Name: Burmese Gobyeel Bengali Name: Raja Chewa Synonym/s: Amblyopus buchanani Day, 1873 Gobioides buchanani Day, 1878 Taenioides buchanani Koumans, 1953. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Taenioides buchanani* is a widespread species in coastal rivers and estuaries of Bangladesh. It is unlikely to have potetial threats to reduce the population of this species in near future and no threat has yet been reported. The Extent of Occurrence (42,296.76 km²) and Area of Occupancy (6,895.59km²) are fairly large that indicate its expanded distribution in all habitats. Therefore, *T. buchanani* has been assessed as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: Not evaluated earlier in Bangladesh.

Geographic Range

Global: Bangladesh, India and Myanmar (Talwar and Jhingran 1991, Rahman and Chowdhury 2007).





Taenoides buchanani

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Bangladesh: It is found in estuaries and muddy marine areas along the coastal parts of the Bay of Bengal in Bangladesh (Rahman 2005).

EOO: 42,297 km² **AOO:** 6,896 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a carnivorous species, feeding upon amphipods, mysid shrimp and small fish. (Rahman and Chowdhury 2007). Inhibits rivers mouths and estuaries and coastal areas (Talwar and Jhingran 1991).

Assessor: Md. Mizanur Rahman

Taenioides cirratus

Species ID: FI0225

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Taenioides cirratus (Blyth, 1860) English Name: Bearded Worm Goby Bengali Name: Chewa Synonym/s: Amblyopus cirratus Blyth, 1860 Gobioides cirratus Day, 1878 Taenioides cirratus Koumans, 1953. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Taenioides cirratus is a common species in coastal rivers and estuaries of Bangladesh. It is unlikely to have potential threats to reduce the population of this species in near future and no threat has yet been identified. The Extent of Occurrence (68,331.45 km²) and Area of Occupancy (4,432.16 km²) are fairly large that are above the threshold level of any Threatened Category. Therefore, this species has been assessed as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: Not assessed earlier in Bangladesh.

Geographic Range

Global: It is found in Indo-Pacific: offshore islands of east Africa, India and Australia. Also reported from Bangladesh,





Taenioides cirratus

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Japan, New Guinea and New Caledonia (Masuda *et al.* 1984, Talwar and Jhingran 1991, Marquet 1997, Rahman 2005).

Bangladesh: It occurs in the coastal rivers of the country, particularly reported from the Meghna and Dakatia Rivers near Chandpur (Rahman and Chowdhury 2007).

EOO: 68,331 km² **AOO:** 4,432 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The fish can live out of water for a considerable time by taking air into the branchial chambers. It feeds on crustaceans and other invertebrates as well as small fishes (Rahman and Chowdhury 2007). It inhabits coastal waters and estuaries (Talwar and Jhingran 1991).

Assessor: Md. Mizanur Rahman

Trypauchen vagina

Species ID: FI0226

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Trypauchen vagina (Bloch & Schneider, 1801) English Name: Burrowing Goby Bengali Name: Sada Chewa Synonym/s: Gobioides ruber Hamilton, 1822 Gobius vagina Bloch & Schneider, 1801 Trypauchen wakae Jordan & Snyder, 1901 Taxonomic Notes: None



Lim 2005).

EOO: 1,11,058 km²

AOO: 97,440 km²

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LEAST

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Trypauchen vagina* is fairly common in estuaries, coastal areas including river mouths of Bangladesh. It is unlikely to have potetial threats to reduce the population of this species in near future. The Extent of Occurrence (1,11,058.46 km²) and Area of Occupancy (97,440.03 km²) indicated its expanded distribution in all habitats. Therefore, this species has been assessed as Least Concern.

Date Assessed: 15 December 2014

History

Regional Status: This taxon has not yet been assessed for the IUCN Red List.

Geographic Range

Global: It occurs in Bangladesh, China, India, Indonesia, Kuwait, the Philippines, Taiwan, Myanmar, Singapore and

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown. Habitat and Ecology

Population

It is an omnivorous benthic feeder. *T. vagina* inhabits estuarine and coastal areas including river mouths. It burrows in silty mud (Chen and Fang 1999).

Thailand (Chen and Fang 1999, Rahman 2005, Larson and

Bangladesh: This fish is fairly common in the coastal

Bengal in Bangladesh (Rahman 2005).

waters and estuaries and tidal rivers along the the Bay of



Assessor: Md. Mizanur Rahman

Pseudosphromenus cupanus

Species ID: FI0232

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: Pseudosphromenus cupanus (Cuvier, 1831) English Name: Spiketail Paradisefish, Red eyed Spiketail Paradise Fish Bengali Name: Koi Bandi Synonym/s: Polyacanthus cupanus Cuvier, 1831

Macropodus cupanus Hora & Law, 1941 Pseudosphromenus cupanus Pethiyagoda, 1991 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Pseudosphromenus cupanus* occurs in ponds, ditches, paddy fields and shallow stagnant waters in small numbers. It has fairly large Extent of Occurrence and Area of Occupancy and there is no known major widespread threat to the fish. So, *P. cupanus* is assessed as Least Concern.

Date Assessed: 20 January 2015

History

Regional Status: It was considered as Threatened in Red List (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Indonesia, Malay Peninsula, Myanmar and Sri Lanka (Rahman 2005, Jayaram 2010).





Pseudosphromenus cupanus

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Bangladesh: It occurs in ponds, ditches, paddy fields and shallow stagnant waters and rarely in estuarine area of Bangladesh (Rahman 2005).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It feeds on insects and zooplankton. Builds a bubble nest. Male gathers the eggs in its mouth and spits them into the nest, sometimes female assist. Eggs hatch in a day. Male guards the nest and the young until they reach the free-swimming stage, which is about a week later. Male has also been observed building more than one bubble nest and moves the eggs from one nest to the other (Pethiyagoda 1991). It inhabits freshwater ponds, ditches, paddy fields and shallow water not far from tidal influence (Rahman 2005). It is benthopelagic and prefers stagnant or slow-flowing water with thick vegetation such as grasses, roots and floating plants.

Assessor: Md. Sagir Ahmed

Trichogaster fasciata

Species ID: FI0233

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: Trichogaster fasciata Bloch & Schneider, 1801 English Name: Banded Gourami, Stripled Gourami, Giant Gourami Bengali Name: Khailsha, Khoila, Cheli, Khoira Synonym/s: Trichogaster fasciatus Bloch & Schneider, 1801 Colisa fasciata Sterba, 1962 Trichopodus colisa Hamilton, 1822 Trichopodus bejens Hamilton, 1822 Trichopodus cotra Hamilton, 1822 Colisa vulgaris Cuvier, 1832

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Trichogaster fasciata* occurs in all kinds of freshwater habitats throughout Bangladesh. Along with other species its population has been known to have declined to some extent but due to quite large Extent of Occurrence and Area of Occupancy measuring 1,83,565.72 km² and 38,357.69 km² respectively, *T. fasciata* is assessed as Least Concern.

Date Assessed: 20 January 2015

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Nepal





Trichogaster fasciata

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and Pakistan (Welcomme 1988, Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It inhabits all kinds of freshwater habitats (river, haor, baor, beel, ponds, ditches, canals, etc.) throughout Bangladesh (Rahman 2005).

EOO: 1,83,566 km² AOO: 38,358 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the total population and its trends for this species. Trend: Unknown.

Habitat and Ecology

It is omnivorous, prefers to feed on insect larvae in dense shallow aquatic vegetations. It breeds several times in a year in stagnant water of paddy fields during monsoon. A rather shy species, it is easily bred and adapts well to life in community aquaria. It is a very hardy species. Found to inhabit transparent, shallow stagnant waters, including haor, baor, beel, ponds, ditches, canals, rice fields and floodplains (Rahman 2005, Ahmed and Akhter 2008).

Assessor: Md. Sagir Ahmed
Trichogaster labiosus

Species ID: FI0234

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: *Trichogaster labiosus* Day, 1877 English Name: Thick-lipped Gourami Bengali Name: Khalisha Synonym/s: *Colisa labiosa* (Day, 1877) Taxonomic Notes: The species might be confused with the other species under the genus *Trichogaster* (Vishwanath 2010).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Trichogaster labiosus* has been reported to be found in the freshwater rivers and all other wetlands of Bangladesh (Hossain *et al.* 2012). However, detailed study is required to understand the local distribution range and status. Considering the relevant species under the same genus, this species can be considered as one of the most commonly caught species in the freshwater rivers of Bangladesh. The Extent of Occurrence is 2,16,184.01 km², followed by having Area of Occupancy as 9,197.33 km². Therefore, *T. labiosus* is assessed as Least Concern.

Date Assessed: 19 January 2015

History

Regional Status: The taxon has not yet been assessed as threatened species globally.

Geographic Range

Global: This species is known from northeast India only





Trichogaster labiosus

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from the Chindwin drainage, Manipur, and from Myanmar (Vishwanath 2010) and from Bangladesh (Hossain *et al.* 2012).

Bangladesh: It inhabits in the freshwater rivers and all other wetlands in all over Bangladesh (Hossain *et al.* 2012).

EOO: 2,16,184 km² AOO: 9,197 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is bentho-pelagic, generally feeds on aquatic plants and insects (Rahman and Chowdhury 2007). Most specimens have been recorded from the freshwater rivers (Hossain *et al.* 2012). However, this species can be found in the ponds, irrigation channels and rice fields too (Vishwanath 2010).

Assessor: Gawsia Wahidunnessa Chowdhury

Trichogaster lalius

Species ID: FI0235

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: *Trichogaster Ialius* (Hamilton, 1822) English Name: Dwarf Gourami, Red Gourami Bengali Name: Baicha, Lal Khailsha, Ranga khailsha Synonym/s: *Trichopodus Ialius* Hamilton, 1822 *Colisa unicolor* Cuvier, 1831 *Trichogaster Ialius* Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Trichogaster lalius* is very common in fish catches from all types of freshwater habitas throughout Bangladesh. As a widespread species with no significant threats across its range and having very large Extent of Occurrence and Area of Occupancy, *T. lalius* is assessed as Least Concern.

Date Assessed: 20 January 2015

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Nepal and Pakistan (Welcomme 1988, Rahman 2005).





Trichogaster lalius

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Bangladesh: It lives in all kinds of freshwater habitats such as rivers, haors, baors, beels, ponds, ditches, canals, etc. throughout Bangladesh (Rahman 2005).

EOO: 1,83,566 km² **AOO:** 38,358 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the total population and its population trend for this species. Trend: Unknown.

Habitat and Ecology

It is omnivorous, prefers to feed on insect larvae and some vegetable matters from dense shallow aquatic vegetation. It is known to breed several times a year in stagnant water of paddy fields during monsoon (Menon 1999). Male guards the bubble-nest but eats the young after 2-3 days. Found to inhabit transparent, shallow stagnant waters, including rice fields and floodplains (Rahman 2005).

Assessor: Md. Sagir Ahmed

Ctenops nobilis

Species ID: FI0236

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: Ctenops nobilis McClellend, 1845 English Name: Indian Paradise Fish, Frail Gourami, Indian Gourami.

Bengali Name: Neftani, Napit Khaiisha, Napit khayra, Modhumaloti.

Synonym/s: Osphronemus nobilis Day, 1876 Ctenops nobilis Regan, 1909

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Ctenops nobilis* is widely distributed but found in small quantities in catch (pers. obs.). It is well above the Threatened Categories considering its large Area of Occupancy (6,216.36 km²) as well as Extent of Occurrence (1,04,137.95 km²). Though, there are some threats and decreasing tendency in some areas but no empirical information is available concerning population size, number of matured individual and its declination. Thus, the species is assessed as Least Concern.

Date Assessed: 20 January 2015

History

Regional Status: Considered as Endangered (IUCN Bangladesh 2000).

Geographic Range

Global: Assam, Bihar, Sikkim, West Bengal in India and in





Ctenops nobilis

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Bangladesh (Talwar and Jhingran 1991, Wahab 2007).

Bangladesh: *Ctenops nobilis* is freshwater fish, distributed in rivers, canals, haors, baors, beels and pond of north-west, north-east, south-west and central regions of Bangladesh (Sobhan *et al.* 2012, Samad *et al.* 2013, Hossain *et al.* 2014).

EOO: 1,04,138 km² AOO: 6,216 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is larvivorous, likes to stay and swim in surface water (Wahab 2007). It lives in freshwater rivers, canals, haors, baors, beels and ponds. In winter it usually sticks to the roots of the water hyacinth (Shafi and Quddus 2001). Primarily lives in river and canals as well as in connected haors, baors, beels and ponds.

Assessor: M. Kamrujjaman

Trichogaster chuna

Species ID: FI0237

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE

Scientific Name: *Trichogaster chuna* (Hamilton, 1822) English Name: Honey Gourami, Dwarf Gourami, Sunset Gourami.

Bengali Name: Chuna khaiisha, Baicha, Baichi, Boicha. Synonym/s: Trichopodus chuna Hamilton, 1822 Trichopodus sota Hamilton, 1822

> *Trichogast chuna* Day, 1878 *Colisa chuna* Qureshi, 1965

- Colisa sota Menon, 1974
- Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Trichogastar chuna* is widely distributed in freshwater rivers, haors, baors, beels and ponds all over Bangladesh. The estimated Extent of Occurrence (1,14,271.90 km²) and Area of Occupancy (7,284.76 km²) is well above the Threatened Categories. The species is not severely fragmented and number of locations are numerous, no evidences are available on the continuing declination and extreme fluctuation of extent of occurrence and area of occupancy. Thus, the species is categorized as Least Concern.

Date Assessed: 15 January 2015

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).





Trichogaster chuna

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Geographic Range

Global: It occurs in the Gangetic provinces, Assam in India and in Bangladesh (Talwar and Jhingran 1991, Alam 2007).

Bangladesh: *Trichogaster chuna* is a freshwater fish, distributed widely in rivers, haors, baors, beels and ponds of the country (Rahman 2005, Hossain and Haque 2005).

EOO: 1,14,272 km² **AOO:** 7,285 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is omnivorous in habit. Its males guard the bubble nests during breeding season (Alam 2007). It inhabits fresh water bodies with vegetation.

Assessor: M. Kamrujjaman

Trichopsis vittata

Species ID: FI0238

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	OSPHRONEMIDAE
Scientific Name: Trichop English Name: Croaking Bengali Name: Not Kno Synonym/s: Osphromer Trichopis vitta Taxonomic Notes: None Assessment Informatio	os <i>is vittata</i> (Cuvier, 1831) g Gourami wn nus vittatus Cuvier, 1831 itus (Cuvier, 1831) e n:	0		

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has been reported to be occured in the freshwater rivers of Bangladesh (Hossain *et al.* 2012). The Extent of Occurrence is 2,16,184.01 km² and Area of Occupancy is 8,681.77 km². In the absence of major threats to its population and habitats and being widely distributed, *Trichopsis vittata* is assessed as Least Concern.

Date Assessed: 19 January 2015

History

Regional Status: The taxon has not been assessed in Bangladesh.

Geographic Range

Global: The species is widely distributed throughout mainland of Southeast Asia, Cambodia, Lao People's Democratic Republic, Malaysia (Peninsular Malaysia), Myanmar, Singapore Thailand and Viet Nam.



Trichopsis vittata © Mostafa A R Hossain

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Bangladesh: This species has been recorded from the freshwater rivers of Bangladesh (Hossain *et al.* 2012).

EOO: 2,16,184 km² **AOO:** 8,682 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Most specimens have been recorded from the freshwater rivers (Hossain *et al.* 2012).

Assessor: Gawsia Wahidunnessa Chowdhury

Polynemous paradiseus

Species ID: FI0215

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	POLYNEMIDAE

Scientific Name: Polynemous paradiseus Linnaeus, 1758 English Name: Paradise Threadfin Bengali Name: Topshe, Taposi, Tapsi, Bairagi, Muni, Rishi Synonym/s: Polynemus aureus Hamilton, 1822 Polynemus toposui Hamilton, 1822 Polynemus longifilis Cuvier, 1829 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This is a widespread species in southern coast of Bangladesh. There are no identified major threats to this species. Its Extent of Occurrence is about 75,823.69 km² and Area of Occupancy is about 12,335.40 km², both of which are greater than the threshold values of any Threatened Category and the sub-criteria of this section do not support any Threatened status. So, *Polynemous paradiseus* is assessed as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: The taxon has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Mekong River, Arabian Sea, Bay of Bengal, Indian Ocean, Indonesian Seas, South China Sea





Polynemous paradiseus

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and Pacific Ocean and Rivers and estuaries in Bangladesh (Alam 2007, Alam *et al.* 2013, Motomura *et al.* 2002).

Bangladesh: The species occurs in tidal rivers, estuaries and the Bay of Bengal in Bangladesh. It was recorded as abundant from the Meghna River near Chandpur and Hatiya (Alam 2007).

EOO: 75,824 km² **AOO:** 12,335 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It feeds on small fishes, crustaceans and other benthic organisms. This fish enters freshwater during the breeding season (Alam 2007). *P. paradiseus* usually breeds in the estuary during the rains. It is found in the freshwaters of the tidal zone as juveniles that moves to brackish water as sub-adults and finally as adults to river mouths and inshore areas (Mohsin 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Johnius coitor

Species ID: FI0205

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	SCIAENIDAE

Scientific Name: Johnius coitor (Hamilton, 1822) English Name: Big-eyed Jewfish, Coitor Croacker, Ganges Croaker. Bengali Name: Koitor, Koitor Poa, Decre Poa Synonym/s: Bola coitor Hamilton, 1822 Sciaena coitor Day, 1878 Johnius coitor Talwar and Shetty, 1971 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Johnius coitor is known to occur in shallow coastal areas, estuaries and all the tidal rivers in the southern regions of Bangladesh. Recent faunal survey, field visits and personal observation indicated that the species is common in commercial catchs throughout its range of distribution. There is no known threat that might affect its population or habitats in near future. So, the species is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Australia, Bangladesh, Brunei, Darussalam, India, Indonesia, Malaysia, Myanmar, Nepal,





Johnius coitor

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Papua New Guinea, southward to Singapore and Borneo (Sasaki 2001).

Bangladesh: It is known to occur in shallow coastal areas, estuaries and all the tidal rivers in the southern regions of Bangladesh. Also reported from the Kaptai Lake, Halda River, upper reaches of the Meghna River, Sitalakshya River and Haors (Rahman and Farhana 2007).

EOO: 85,517 km² **AOO:** 12,753 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species is a carnivorous and active predator, feeds generally on the crustaceans, fishes, mollusks and echinoderms. It is amphidromous. It refers shallow coastal areas to estuarine inter-tidal rivers and eventually found in fresh water large rivers. Primarily estuarine, secondarily migrate to large freshwater rivers for breeding.

Assessor: Md. Rafiqun Nabi

Otolithoides pama

Species ID: FI0207

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	SCIAENIDAE

Scientific Name: Otolithoides pama (Hamilton, 1822) English Name: Pama Croaker, Pama Bengali Name: Poa, Poma, Koi Bola, Bola. Synonym/s: Bola pama Hamilton, 1822 Sciaenoides hardwickii Blyth, 1860 Sciaenoides pama Day, 1878 Pama pama Fowler, 1933. Taxonomic Notes: None



Otolithoides pama

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Otolithoides pama is widely distributed throughout the coastal region, including estuaries and tidal rivers of Bangladesh. It is the commonest species among other croakers available in the country and contributes significantly to in commercial catches. As a wide spread species with no known threat, it is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Australia, Bangladesh, India, Indonesia, Malaysia, Myanmar, Pakistan, Papua New



Guinea, Sri Lanka and Thailand (Talwar and Jhingran 1991, Jawaram 1991, Alam 2007).

Bangladesh: The species occurs in southern estuaries areas of the Bay of Bengal and their inter-tidal rivers to far inland freshwater parts of these rivers and tributaries lying at the south-east, south-west and central to north-west parts of Bangladesh (Fawzia *et al.* 2013, Mohsin *et al.* 2013).

EOO: 1,38,366 km² **AOO:** 13,915 km²

Population

Generation Time (Length): Unknown.

Total Population: There is no information on the population and its trend for this species. The species is relatively common in the coastal fish catch in Bangladesh (Huda and Haque 2003, Nabi *et al.* 2011). Trend: Unknown.

Habitat and Ecology

Planktivorous in habit, feeds on both phyto- and zooplankton throughout its life (Alam 2007). Amphidromous. Frequently visit within the estuary to inter-tidal brackish water parts of the rivers. Occasionally move to freshwater parts of these rivers and tributaries. Primarily estuary to all the brackish water inter-tidal rivers in southern region, while, in monsoon to postmonsoon seasons also reported in the central to north-western rivers of Bangladesh (Fawzia *et al.* 2013, Mohsin *et al.* 2013).

Assessor: Md. Rafiqun Nabi

Sillaginopsis panijus

Species ID: FI0204

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	SILLAGINIDAE

Scientific Name: Sillaginopsis panijus (Hamilton, 1822) English Name: Hundra, Tulardandi Bengali Name: Hundra, Tulardandi Synonym/s: Cheilodipterus panijus Hamilton, 1822 Sillaginopsisdomina (Cuview, 1829) Sillago domina Cuvier, 1829 Taxonomic Notes: None



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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Sillaginopsis panijus* is widely distributed in the coastal region of Bangladesh including estuaries and river mouths. As there is no known threat to this species and its Extent of Occurrence (46,413.83 km²) and Area of Occupancy (10,065.17 km²) are much higher than the threshold values for any Threatened Category, the species is assessed as Least Concern.

Date Assessed: 23 September 2014

History

Regional Status: Considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: The species is found in Bangladesh, India (southwest coast, Ganges delta and east coast), Myanmar, and Southwards to Malaysia, and rarely to the Indonesian Archipelagic (Rahman 2005, Talwar and Jhingran 1991).



Bangladesh: It occurs in coastal waters of the Bay of Bengal, estuaries and river mouths of Bangladesh.

EOO: 46,414 km² **AOO:** 10,065 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. In 2013 this species contributed about 1.44% of total catch in Khulna region (WorldFish-IPAC 2013). Trend: Unknown.

Habitat and Ecology

It is predatory in habits and feeds on fish, crustaceans and algae. Probably spawns twice a year during the months November to February and August to September and the juveniles migrate toward the upper reaches during March and April and during December where they remain for two to three months. Tidal rivers, estuaries and coastal areas are the principal habitats for this species (Alam 2007). Demersal, adapted to muddy water conditions (Talwar and Jhingran 1991). Found in coastal waters of the Bay of Bengal to estuaries and tidal rivers of Bangladesh (Rahman 2005).

Cynoglossus cynoglossus

Species ID: FI0023

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PLEURONECTIFORMES	CYNOGLOSSIDAE

Scientific Name: Cynoglossus cynoglossus (Hamilton, 1822)

English Name: Bengal Tongue Sole, Gangetic Tongue-Sole, Indian Turbot, Tonguefish, Tonguesole Bengali Name: Kukur Jeeb, Banspata Synonym/s: Achirus cynoglossus Hamilton, 1822 Plagusia oxyrhynchos Bleeker, 1851 Plagusia bengalensis Bleeker, 1853 Plagusia sumatrana Bleeker, 1854 Cynoglossus buchanani Day, 1870 Cynoglossus cynoglossus Day, 1878

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Cynoglossus cynoglossus* is widely distributed in the river mouths and the brackish water zones of the country and there is no major threats to the species. So, the *C. cynoglossus* has been assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: Besides the Bay of Bengal, its distribution is





Cynoglossus cynoglossus

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reported from Malay Archipelago to the Philippines; in the Malacca Straits, Indonesia Sea, South China Sea and Gulf of Siam (Thailand) and westward to Myanmar, Bangladesh and India (West Bengal) to the Arabian Sea in Pakistan. (Rahman 1989, Rainboth 1996, Munroe 2001)

Bangladesh: It occurs in coastal areas, estuaries and tidal rivers.

EOO: 2,24,779 km² **AOO:** 16,871 km²

Population

Generation Time (Length): Unknown. Total Population Unknown. Trend: Declining as per perception of local fishers.

Habitat and Ecology

It inhabits muddy and sandy bottoms of the continental shelf. Often lives in shallow areas, including rivers, estuaries and brackish waters (Rahman 1989). This Tongue Sole feeds mostly on bottom-living invertebrates, It breeds off-shore, produce pelagic, and non-adhesive eggs (Rainboth 1996). As a demersal species it has the habit of hiding its full body under sand or in the soft bottom keeping eyes outside to capture prey wandering to its peripheral areas.

Cynoglossus lingua

Species ID: FI0024

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PLEURONECTIFORMES	CYNOGLOSSIDAE

Scientific Name: Cynoglossus lingua Hamilton, 1822 English Name: Long Tongue Sole Bengali Name: Kukur Jeeb, Banspata Synonym/s: Achirus cynoglossus Hamilton, 1822 Plagusia oxyrhynchos Bleeker, 1851 Pleuronectes potous Cuvier, 1829 Plagusia macrorhynchos Bleeker, 1851 Cynoglossus acinaces Jenkins, 1910 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Cynoglossus lingua* is widely distributed in the Bay of Bengal, coastal region, estuaries and tidal rivers of Bangladesh. The species is common in commercial catchs and no major known threat is reported. Thus, *C. lingua* has been assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: This fish is found in Malay Archipelago, including Thailand, Viet Nam, the Philippines and Indonesia westward to seas and estuaries of India, Bangladesh and





Cynoglossus lingua

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Pakistan to the Red Sea. (Rahman 1989, Rainboth 1996, Munroe 2001).

Bangladesh: It occurs in the Bay of Bengal, estuaries, Sundarbans and tidal rivers of Bangladesh.

EOO: 3,38,768 km² **AOO:** 1,23,738 km²

Population

Generation Time (Length): Unknown. Total Population Unknown. Trend: Declining.

Habitat and Ecology

This Tongue Sole is found in marine and brackish waters. Adults live mainly in shallow muddy and sandy bottoms of the continental shelf, sometimes entering into estuaries and tidal rivers (Rahman 1989). It is an amphidromous species and feeds mainly on the benthic invertebrates (Rahman and Ruma 2007). It has the habit of hiding its full body under sand or in the soft bottom keeping eyes outside to capture prey wandering to its peripheral areas (Rahman 2005).

Cynoglossus arel

Species ID: FI0037

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PLEURONECTFORMES	CYNOGLOSSIDAE

Scientific Name: *Cynoglossus arel* (Bloch & Schneider, 1801) English Name: Largescale Tonguesole Bengali Name: Kukur Jeeb Synonym/s: *Pleuronectes arel* Bloch & Schneider, 1801 *Cynoglossus macrolepidus* Bleeker, 1851 *Cynoglossus arel* Day, 1878

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Cynoglossus arel* is reported from the entire coastal and brackish waters of Bangladesh. There is no report on the reduction in its habitats or on its population decline. Considering the above and in the absence of any known widespread threats, the species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The taxon has been considered Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000)

Geographic Range

Global: Besides the Bay of Bengal, its distribution has been reported from the Persian Gulf to Sri Lanka, eastward to Indonesia, Southern China, Taiwan, Thailand, the Philippines and Southern Japan. (Hossain and Sultana 2007).





Cynoglossus aral

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Bangladesh: This fish is found in the continental shelf of the Bay of Bengal, the estuaries and coastal rivers in Bangladesh. Its occurrences were particularly reported from Satkhira, Khulna, Bagerhat, Barisal, Narail, Patuakhali regions and also from Halda River in Chittagong. (Hossain and Sultana 2007)

EOO: 16,759 km² AOO: 3,198 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: No information is available on its population trend.

Habitat and Ecology

The species inhabits marine and brackish waters, also enters estuaries and tidal rivers (Rahman 2005). It is a bottom-dweller. The species is amphidromous and euryhaline in nature and has the habit of hiding its full body under sand or soft bottom, keeping the eyes outside to capture prey wandering in its vicinity. It feeds predominantly on the bottom-living invertebrates and small fishes (Hossain and Sultana 2007).

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa.

Paraplagusia bilineata

Species ID: FI0038

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PLEURONECTFORMES	CYNOGLOSSIDAE

Scientific Name: Paraplagusia bilineata (Bloch, 1784) English Name: Fingerlip Tonguesole, Doublelined Tonguesole, Lemon Tonguesole Bengali Name: Kukur Jeeb Synonym/s: Pleuronectes bilineata Bloch, 1784 Paraplagusia bilineata (Bloch, 1787) Pleuronectes bilineatus (Bloch, 1787) Plagusia bilineata (Bloch, 1787) Paraplagusia bilineatus (Bloch, 1787) Pleuronectes bilineata Bloch, 1787)

> Plagusia dipterigia (Rüppell, 1830) Plagusia dypterygia (Rüppell, 1830) Plagusia marmorata (Bleeker, 1851) Paraplagusis bilineata Munro 1955

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Paraplagusia bilineata* is widely distributed and relatively fairly common in coastal waters, estuaries and tidal rivers (Rahman 2005, Haque 2007). There is no report on its population decline or reduction in its habitats. In the absence of any known widespread threat, the species is considered as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: The species has been assessed as Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).





Paraplagusia bilineata

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Geographic Range

Global: The taxon is known to occur in Red Sea and east coast of Africa to the Philippines, north to southern Japan, south to New Guinea and northeastern Australia. Also found in the Bay of Bengal of Bangladesh, China, India and Myanmar (Haque 2007).

Bangladesh: The species is widely distributed in the coastal waters, estuaries and tidal rivers of Bangladesh (Rahman 2005) and it has also been found in the Halda River in Chittagong.

EOO: 1,68,664 km² AOO: 1,18,981 km²

Population

Generation Time (Length): Unknown.

Total Population: The total population of the species is not known. However, it is fairly common in the Bay of Bengal, but not abundant anywhere else within its habitat ranges in the country (Haque 2007).

Trend: Information on its population trend is not available.

Habitat and Ecology

The species inhabits marine and coastal waters, often enters estuaries and tidal rivers (Haque 2007). It is a bottom dweller. The fish feeds predominantly on the bottom-living invertebrates. It swims by body movement and/or by the movement of the caudal fin.

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa

Platycephalus indicus

Specied ID: FI0198

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SCORPAENIFORMES	PLATYCEPHALIDAE

Scientific Name: Platycephalus indicus (Linnaeus, 1758) English Name: Bar-tailed Flathead, Bartail Flathead, Flathead, Gobi, Indian Flathead, Indo-Pacific Flathead Bengali Name: Mur Bailla Synonym/s: Callionymus indicus Linnaeus, 1758

Cottus insidiator Forsskål, 1775 Cottus madagascariensis Lacepède, 1801 Platycephalus insidiator Forsskål, 1775 Taxonomic Notes: None



Platycephalus indicus

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Platycephalus indicus* is common in the estuaries and coastal waters of Bangladesh. There is no report on its population decline. In the absence of any major widespread threat, the fish is considered as Least Concern.

Date Assessed: 20 November 2014

History

Regional Status: This species has been considered as Data Deficient (DD) earlier in Bangladesh (UCN Bangladesh 2000).

Geographic Range

Global: *Platycephalus indicus* is recorded from across the Indo-West Pacific: Red Sea and East Africa to the



Philippines, north to southern Japan and Korea, and south to northern Australia. It has widespread distribution through the eastern Indian Ocean from the Bay of Bengal and the Gulf of Thailand, south to Northern Australia (Knapp 2010).

Bangladesh: *P. indicus* occurs in the Bay of Bengal and enters the rivers and estuaries of Khulna, Barisal and Patuakhali Districts (Rahman 2005). This species is common in the coastal areas of Bangladesh and particularly it has been reported from several places, such as the Sundarbans (Huda and Haque 2003), Teknaf coast (Hossain *et al.* 2008), Meghna estuary (Hossain *et al.* 2012) and Andharmanik River, Patuakhali (Mohsin *et al.* 2014).

EOO: 1,11,058 km² **AOO:** 97,440 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

P. indicus inhabits marine, brackish and also freshwaters. Younger life stages use estuaries and freshwater habitats as nursery grounds (Knapp 2010). It is a benthic fish and stays on sand or mud bottoms (Talwar and Jhingran 1991, Knapp 2010), however, its eggs and larvae are pelagic. It is a carnivorous fish and feeds on small fishes and benthic crustaceans (CSIRO Marine and Atmospheric Research 2014). It can travel long distances and is an active forager and predator, using ambush method of attack. It breeds between July and November (Alam 2007).

Assessor: Md. Monirul Islam

Amblyceps mangois

Species ID: FI0159

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	AMBLYCIPITIDAE

Scientific Name: Amblyceps mangois (Hamilton, 1822) English Name: Indian Torrent Catfish Bengali Name: Chotta Shinghi Synonym/s: Pimelodus mangois Hamilton, 1822 Pimelodus indicus McClelland, 1842 Amblyceps caecutiens Blyth, 1858 Amblyceps mangois Day, 1869

Olyra laticeps Hora, 1936

Taxonomic Notes: *A. mangois* differs from other species in having a relatively short body with 34-36 (versus 38-40) vertebrae and a caudal fin with upper and lower lobes of distinctly different shapes. Recently, its taxonomy has been confirmed through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene from the Tanguar haor (Ahmed *et al.* 2015).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Amblyceps mangois is widely distributed and common in its ranges though it is under threat due to loss of habitat quality. As it is a non-targeted fish for consumption, the potential threats are not identified for the significant decline of this species. The geographic ranges in the form of Extent of Occurrence and Area of Occurrence estimated much higher than the threshold for lowest Threatened Categories. Therefore, this species has been assessed as Least Concern.

Date Assessed: 15 October 2014

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).





Amblyceps mangois

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Geographic Range

Global: *A. mangois* is found in Bangladesh, India (Arunachal Pradesh, Assam, Bihar, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttar Pradesh, West Bengal), Nepal, Pakistan and Thailand (Rahman and Ruma 2007).

Bangladesh: The Dahuki River in Sylhet, Mahananda River in Panchagar, Jabanreswari River in Rangpur, Kangsha and Someswari Rivers in Netrokona are the ideal habitats for this species in Bangladesh (Rahman, 2005, Rahman and Ruma 2007). *A. mangois* is also reported from the Piyang and Sari River of Sylhet; Korotoa, Atrai and Mahananda Rivers of Northern region; Old Brahmaputra, Jamuna and the River Padma; Tanguar Haor of Sunamgonj (Ahmed *et al.* 2015). This species is has been found in lower reaches of Himchori hill streams of Cox's Bazar and Madhabkundo hill streams of Moulvibazar District (Rahman and Akhter 2007, Latifa *et al.* In Press).

EOO: 1,33,052 km² **AOO:** 10,576 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Declining.

Habitat and Ecology

Predominantly hill stream fish, occurs in pebbly beds in swift currents at the base of hills. Also found among rocks and boulders on the bottom of fast flowing upland streams and rivers (Talwar and Jhingran 1991). It is carnivorous in habit and feeds on aquatic insects. It hides amongst the rocks and pebbles at the bottom of the streams. This species breeds in the summer.

Assessor: Md. Mizanur Rahman

Osteogeneiosus militaris

Species ID: FI0185

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ARIIDAE

Scientific Name: Osteogeneiosus militaris(Linnaeus, 1758) English Name: Soldier Catfish Bengali Name: Apuia Synonym/s: Silurus militaris Linnaeus, 1758

Arius militaris Valenciennes, 1840 Osteogeneiosus blochii Bleeker, 1846 Osteogeneiosus macrocephalus Bleeker, 1846 Osteogeneiosus sthenocephalus Day, 1877 **Taxonomic Notes:** None.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Osteogeneiosus militaris occurs in the coastal waters of the Bay of Bengal, estuaries and tidal rivers of Bangladesh (Rahman 2005, Rahman and Chowdhury 2007, Dutta *et al.* 2012). The fish is considered less abundant but there is no information on its population decline. In the absence of any known major widespread threat to the fish, it is assessed as Least Concern.

Date Assessed: 21 August 2014

History

Regional Status: It has been considered as Not Threatened in Red List of IUCN Bangladesh 2000.

Geographic Range

Global: *O. militaris* has been recorded from the West coast of India to Bangladesh, Brunei Darussalam, Indonesia,





Osteogeneiosus militaris

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Malacca, Malaysia, Myanmar, Pakistan, Singapore, Sri Lanka and Thailand (Rahman and Chowdhury 2007).

Bangladesh: The fish occurs in estuaries and the Bay of Bengal and ascends tidal rivers (Rahman 2005). It was also recorded from Meghna River near Chandpur (Rahman 2005).

EOO: 74,038 km² AOO: 12,328 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a potamodromous, predaceous and carnivorous fish, feeds mainly on invertebrates and small fishes. This fish inhabits marine freshwater and brackish waters (Reide 2004). It also occurs in mangroves tidal creeks and occasionally found in freshwater rivers.

Assessor: Gawsia Wahidunnessa Chowdhury

Mystus bleekeri

Species ID: FI0142

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Mystus bleekeri (Day, 1865) English Name: Bleeker's Mystus, Day's Mystus Bengali Name: Tengra, Golsha-Tengra, Gulsha Tengra Synonym/s: Bagrus keletius Bleeker, 1846 Macrones bleekeri Day, 1877 Mystus bleekeri var. burmanicus Jenkins, 1910 Mystus bleekeri Shaw and Shebbeare, 1937 Mystus (Mystus) bleekeri Misra, 1976

Taxonomic Notes: None Assessment Information:

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Mystus bleekeri* is assessed at Least Concern, because the species is still relatively widespread and the present level of exploitation is not deemed high enough to be a threat to long-term existence of this species. Simultaneously, the Extent of Occurrence, 1,35,013.68 km² and Area of Occupancy, 4,122.93 km² are far above the threshold for Vulnerable. Furthermore, no specific threats so far been identified as well no numerical data refer to continuing decline or extreme fluctuation in the mature individuals and their population size are available at the exploitation and marketing levels to justify any of the stated Threatened categories.

Date Assessed: 04 August 2014

History

Regional Status: It was considered as Not Threatened (IUCN Bangladesh 2000).





Mystus bleekeri

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Geographic Range

Global: *Mystus bleekeri* is found all over the Asian countries like Bangladesh, Bhutan, India, Indonesia, Myanmar, Nepal, Pakistan, Sri Llanka and Sumatra in Indonesia (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It is found in freshwater rivers. From there it often moves into other connected natural water bodies laying in the north-west to north and south-eastern districts of Bangladesh with monsoon floodwaters. Occasionally, it ventures into estuarine waters (Rahman and Akhter 2007).

EOO: 1,35,014 km² **AOO:** 4,123 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The fish is potamodromous in habitat within rivers and connected natural water bodies of sandy to muddy bottom. It is preferably carnivorous in habit, feeds on insect larvae, zooplankton and small fishes but may take detritus to supplement natural foods and thereby help to control water pollution (Rahman and Akhter 2007).

Assessor: Md. Rafiqun Nabi

Mystus tengara

Species ID FI0145

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: *Mystus tengara* (Hamilton, 1822) English Name: Tengara Catfish Bengali Name: Bajari Tengra, Bujuri Tengra, Choto Tengra,

Guitta Tengra

Synonym/s: Pimelodus tengra Hamilton, 1822 Macrones tengara Day, 1877 Bagrus tengara Cuvier & Valenciennes, 1840 Mystus carcio Drashan et al., 2010 Taxonomic Notes: None



Mystus tengara

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Mystus tengara* is fairly common and widely distributed in all types of freshwater habitats throughout the country (Rahman 2005, Alam 2007). No potential threat is identified which can reduce its population in the near future. So, it is assessed as Least Concern.

Date Assessed: 19 March 2015

History

Regional Status: The fish was considered as Not Threatened (NO) (IUCN Bangladesh 2000).

Geographic Range

Global: *Mystus tengara* is found in Bangladesh, Pakistan, India and Nepal (Talwar and Jhingran1991, Rahman 2005).



Bangladesh: It inhabits river, haor, baor, beels, canals, streams and ponds all over the country.

EOO: 32,012 km² **AOO:** 5,412 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Mystus tengara is found in weedy, sandy, muddy places of pools, streams, canals and river in the rainy season (Alam 2007). It feeds on insect larvae, earthworms, mollusks, crustaceans, algae, a little sands and mud.

Assessor: Selina Sultana Associate Assessor/s: Mohammed Noman

Mystus vittatus

Species ID: FI0146

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Mystus vittatus (Bloch, 1797) English Name: Striped Dwarf Catfish, Asian Striped Catfish Bengali Name: Tengra Synonym/s: Silurus vittatus Bloch, 1797 Bagrus vittatus Jerdon, 1849 Macrones vittatus Day, 1878 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This is a widespread species in all freshwater habitats in Bangladesh. There are no identified major threats reported for this species. It's Extent of Occurrence (2,17,467.88 km²) and the Area of Occupancy (47,212.41 km²) are greater than the threshold value for any Threatened Category. No data has been recorded on the population reduction of this species. Therefore, this species has been assessed as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: This species has been assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India and Myanmar (Talwar and Jhingran 1991, Alam 2007).





Mystus vittatus

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Bangladesh: It inhabits estuarine and tidal rivers throughout Bangladesh (Rahman 2005, Ahmed 2008). Frequently wriggles along the mud in the mouth of the tidal rivers during low tide.

EOO: 2,17,468 km² **AOO:** 47,212 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Mystus vittatus is mainly found in the flooded ponds, lakes, canals, beels, paddy and jute fields, streams and rivers of Bangladesh. It inhabits standing as well as flowing waters. Recorded from the marginal waters of lakes and swamps with mud substrate (Mohsin 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Rama chandramara

Species ID: FI0147

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFOMES	BAGRIDAE

Scientific Name: Rama chandramara (Hamilton, 1822) English Name: Asian Cory, Golden Shadow Catfish, Hovering Catfish, Humming Bird Catfish Bengali Name: Gura Tengra, Futki Bujurii, Bajaria Tengra Synonym/s: Pimelodus chandramara Hamilton, 1822 Pimelodus rama Hamilton, 1822 Leiocassis rama Day, 1877 Rama rama Rossell, 1964 Chandramara chandramara Jayaram, 1972

Taxonomic Notes: This genus *Rama* has been revised several times on the basis of presence and absence of black dots on the body, shoulder spot translucent or not as well as size and extend of barbels. Thus, it needs further investigation.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Rama chandramara is common in freshwater ecosystem of the country and there is in no danger of habitat loss or population decline. So, it has been assessed as Least Concern.

Date Assessed: 27 August 2014

History

Regional Status: *Rama chandramara* was assessed Data Deficient (DD) (IUCN Bangladesh 2000).





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Geographic Range

Global: *Rama chandramara* is native in Bangladesh and India (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It is found in freshwater beels, baors, ditches, streams and canals of the Padma and Jamuna drainages in the north-east regions, upper and lower Meghna drainages in the north-west to central districts in Bangladesh (Mohsin 2007).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Rama chandramara is omnivorous in habit. It feeds on small organism like daphnia, cyclops, blood- worms, whiteworms and decomposed matter. It inhabits beels, haors, baors, ditches, streams and canals with a sandy or muddy bottoms. In rainy season, it moves in to the swamps and flooded jute and paddy fields (Rahman 2005).

Assessor: Md. Rafiqun Nabi

Clarias batrachus

Species ID: FI0181

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	CLARIIDAE

Scientific Name: Clarias batrachus (Linnaeus, 1758) English Name: Walking Catfish, Clarias Catfish, Freshwater Catfish Bengali Name: Magur, Mosqur, Mojgor, Jiol Synonym/s: Silurus batrachus Linnaeus, 1758 Silurus angularis Russel, 1803 Clarias punctatus Valenciennes, 1840 Clarias assamensis Day, 1877 Clarias magur Day, 1889

Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Clarias batrachus* is widely distributed throughout Bangladesh and occupies a wide variety of water bodies. Threats to the species are general and it has the ability to withstand marginalized and poor quality water allowing it to thrive in adverse conditions. Moreover, the species is cultured in many parts of the country. Therefore, the fish is unlikely to face a risk of extinction in near future. Hence, *C. batrachus* is assessed as Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: The taxon has been considered Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).





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Geographic Range

Global: This species has been reported as native to Bangladesh, Cambodia, China, India, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Thailand and Viet Nam. The species has also been widely introduced for cultivation in many countries, like Philippines, and also in the eastern and western coasts of the USA (Talwar and Jhingran 1991, Allen 2013)

Bangladesh: The fish has been reported from the rivers and wetlands (such as muddy ponds, canals, ditches, swamps and floodplains) all over Bangladesh.

EOO: 2,17,468 km² **AOO:** 11,964 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population is unknown. However, it is common within its habitat ranges. **Trend:** Declining (pers. obs.).

Habitat and Ecology

This species is an omnivore and considered as scavenger. It searches for food actively and consumes a wide variety of prey, including eggs or larvae of other fishes, small fishes and a number of invertebrates, such as annelids, crustaceans and insects. It attains maturity at the end of the first year of its life and breeds in shallow water during monsoon in May-July (Alam 2007). This fish is able to survive in warm, stagnant, often hypoxic waters (Alam 2007). *C. batrachus* inhabits fresh- and brackish waters and found in a wide variety of water bodies including lakes, rivers, ponds, ditches, canals, floodplains and even in mangrove streams. It is nocturnal in habit (Alam 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Hara jerdoni

Species ID: FI0170

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Hara jerdoni Day, 1870 English Name: Sylhet Hara Bengali Name: Kutakanti Synonym/s: Erethistes jerdoni Day, 1878 Hara jerdoni Hora, 1949 Hara jerdoni Menon, 1974

Taxonomic Notes: Recently, molecular taxonomy through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene of this species has been confirmed from the specimen collected from Tanguar haor (Ahmed et al. 2015, GenBank: KT762372).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hara jerdoni* is a widely distributed but rarely met species in the country. It is less abundant than its congeners are. No potential threat to its habitats has yet been identified. The Extent of Occurrence and Area of Occurrence estimated to be much higher than the Threshold for lowest Threatened Category. Therefore, this species has been assessed as Least Concern.

Date Assessed: 25 February 2015

History

Regional Status: It was considered as Not Threatened (NO) in Red List by IUCN Bangladesh 2000.





Hara jerdoni

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Geographic Range

Global: The species is recorded from Bangladesh, Northern part of the Indian subcontinent and Thailand (Rahman and Ruma 2007).

Bangladesh: It occurs in river, streams and canals of Sylhet Division, Mymensingh, Tangail and Chandpur Districts and the Tanguar Haor of Sunamganj District of Bangladesh (Rahman 2005, Ahmed *et al.* 2015).

EOO: 44,194 km² AOO: 2,531 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species inhabits slow-moving streams and narrow rivers. Its preferred habitats are characterized by soft substrates (Ng 2010). A shy and nocturnal fish, it prefers to be in groups than alone.

Assessor: Md. Ahsanul Islam

Erethistes pusillus

Species ID: FI0176

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Erethistes pusillus Müller and Troschel, 1849 English Name: Moth Catfish Bengali Name: Kutakanti

Synonym/s: Erethistes hara (Hamilton, 1822)

Erethistes pussilus Müller & Troschel, 1849 **Taxonomic Notes:** The species is wrongly described as *Erethistes hara* by Hamilton in 1822. Latter on the species was finally described as *Erethistes pussilus* by Müller and Troschelin 1849. However, the species is distinguished from the genus Hara in having divergent serrations on anterior edge of the pectoral spine.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species has just been found at few locations within the country. The Area of Occupancy of this species is 1,089.35 km². The Extent of Occurrence has been estimated as 22,173.59 km². The decline in its population is based on fisher's perception. Thus the species assessed as Least Concern.

Date Assessed: 23 September 2014

History

Regional Status: It was not considered as Threatened in Red List by IUCN Bangladesh 2000.





Erethistes pusillus

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Geographic Range

Global: The species is found in India, Bangladesh and Myanmar.

Bangladesh: It is found in Brahmaputra drainages.

EOO: 22,174 km² **AOO:** 1,089 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species is found in slower stretches of the sandy parts of rivers and hill streams where considerable vegetation is present.

Heteropneustes fossilis

Species ID: FI0182

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	HETEROPNEUSTIDAE

Scientific Name: Heteropneustes fossilis (Bloch, 1794) English Name: Stinging Catfish, Fossil Catfish, Liver Catfish Bengali Name: Shing, Jiol, Shinghi, Jill Shinghi Synonym/s: Silurus fossilis Bloch, 1797, Silurus singio Hamilton, 1822, Saccobranchus fossiltis Day, 1878, Heteropneustes fossilis Misra, 1976

Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Heteropneustes fossilis is widely distributed in the country and occupies a wide range of water bodies. It experienced an insignificant decline in population that has been substituted by the recruitment of escaped fishes from pond aquaculture. The prevailing threats are general. So, it has been assessed Least Concern.

Date Assessed: 20 March 2015

History

Regional Status: This species has been considered Not Threatened earlier in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The fish is known to occur in Bangladesh. India. Laos, Myanmar, Nepal, Pakistan, Sri Lanka and Thailand (Talwar and Jhingran 1991).





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Bangladesh: H. fossilis is widely distributed in lentic freshwaters and also occasionally in brackish waters throughout Bangladesh. It was very common in Buriganga and Turag River. Recently, it has also been recorded from Chalan Beel, Halti Beel, Tanguar Haor, Kapotakkho River, Padma River, Jamuna River (Latifa et al. In Press).

EOO: 2,17,468 km² AOO: 11.964 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population is unknown, but it is fairly common throughout its entire habitat ranges (Saha 2007). At present, this fish is cultured in many parts of the country. Trend: Unknown.

Habitat and Ecology

The fish is omnivorous and predatory in nature. It feeds on bottom dwelling small invertebrates, detritus, and eggs of other fishes, larvae of fish, insects and others. It is much dreaded because of its aggressive behavior and can inflict painful wounds with its potentially dangerous pectoral spines. It is able to tolerate slightly brackish water conditions. Its air breathing apparatus enables it to exist in almost any kind of waters. It comes to water surface at times for air breathing. This is primarily a freshwater fish and utilizes a wide range of water bodies, including ponds, ditches, beels, swamps and marshes, also occurs in muddy rivers. It is also occasionally found in slightly brackish waters (Saha 2007).

Assessor: Gulshan Ara Latifa

Eutropiichthys murius

Species ID: FI0009

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Eutropiichthys murius (Hamilton, 1822) English Name: Indus Garua Bengali Name: Muri Bacha, Motus Synonym/s: Clupisoma murius, Hamilton, 1822 Eutropius murius, Hamilton, 1822 Pseudeutropius murius, Day, 1878 Eutropiichthys murius, Hora 1937 Clupisoma nazri, Mirza & Awan, 1973 Pseudeutropius murius batarensis, Shrestha, 1982 Taxonomic Notes: None



Eutropiichthys murius

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LEAST

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Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Eutropiichthy murius* was described from the Mahananda River (part of the Brahmaputra River drainage) in Bangladesh, and is known throughout the Ganges and Brahmaputra river drainages in northern, northeastern and southern part of Bangladesh. Although the threats to this species are unknown, it is assumed that its wild population is in declining due to over exploitation and habitat destruction. Recent field surveys (M.S. Ahmed pers. comm. 2014) indicated that this species is still relatively abundant and widespread, and therefore, the species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was not considered as threatened



species in IUCN Bangladesh (2000).

Geographic Range

Global: It is found Bangladesh, India and Nepal. (Rahman 1989, Talwer and Jhingran 1991).

Bangladesh: *Eutropiichthys murius is* freshwater riverine fish found in the Padma, Meghna, Old Brahmaputra, Greater Mymensingh and Syllhet Districts. (Rahman 1989).

EOO: 91,108 km² **AOO:** 3,145 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Its wild population declining due to over exploitation and habitat destruction.

Habitat and Ecology

It inhabits main channels of large rivers and their tributaries. During monsoon migrate to the adjacent floodplain of the rivers (M. S. Ahmed pers. comm. 2014).

Assessor: M. Kamrujjaman

Eutropiichthys vacha

Species ID: FI0010

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Eutropiichthys vacha (Hamilton, 1822) English Name: Batchwa Vacha, Bacha Bengali Name: Bacha, Garua Bacha Synonym/s: Pimelodus vacha Hamilton, 1822 Bagrus vacha Valenciennes,1839 Pachypterus punctatus Swainson, 1839 Eutropiichthys burmannicus Day, 1877 Eutropiichthys vacha Day, 1878 Taxonomic Notes: None



LEAST

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Eutropiichthys vacha* is widely distributed in freshwater and coastal rivers. Current data suggests that this species is still relatively abundant in all over Bangladesh. Though, population might be declining locally in some areas due to overexploitation and habitat destruction, recent information indicates it has much greater area of EOO (2,20,042.27 km²) and AOO (10,587.65 km²). Therefore, this species is assessed as Least Concern.

Date Assessed: 25 June 2014

History

Regional Status: It was assessed as Critically Endangered in IUCN Bangladesh (2000).



Geographic Range

Global: It is found Bangladesh, India, Myanmar, Nepal, Pakistan, and Thailand. (Rahman 2005, Ferraris & Vari 2007, Talwer and Jhingran 1991).

Bangladesh: *Eutropiichthys vacha* is mainly a freshwater fish but it is also available in coastal rivers. This species is widely distributed in major rivers and their tributaries, haors, and beels all over the country Kaptai Lake in the hilly districts of Bandarban and Rangamati. (Rahman 2005, Chowdhury 2007, Kostori *et al.* 2011).

EOO: 2,20,042 km² **AOO:** 10,588 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Its wild population is in declining due to over exploitation and habitat destruction.

Habitat and Ecology

Eutropiichthys vacha is mainly a freshwater fish but it is also available in coastal rivers. This species is widely distributed in major rivers and their tributaries, haors, and beels all over the country and Kaptai Lake in the hill districts of Bandarban and Rangamati. (Rahman 2005, Chowdhury 2007, Kostori *et al.* 2011). It is potamodromous, voracious and feeding on small fishes and insects. (Talwar and Jhingran 1991).

Assessor: M. Kamrujjaman

Neotropius atherinoides

Species ID: FI0011

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Neotropius atherinoides (Bloch, 1794) English Name: Indian Potasi Bengali Name: Batasi, Bataiya, Batais, Bashpata, Fultengra, Tinkata batashi Synonym/s: Silurius atherinoides Bloch, 1794 Bagrus atherionoides Valenciennes, 1839 Pachypterus atherinoides Swainson, 1839 Bogrus exodon Bleeker, 1853 Pseudeutropius atherinoides Day, 1878

Taxonomic Notes: None

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Neotropius atherinoides

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LEAST

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Neotropius atherinoides has been assessed as Least Concern due to its wide distribution range and abundance in all aquatic ecosystems in the country. The population size and trend of this species remained unknown but facing some threats of overexploitation and habitat destruction.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Not Threatened in IUCN Bangladesh (2000).

Geographic Range

Global: It is native to Asia, including Bangladesh, India,



Myanmar, Nepal and Pakistan (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: *Neotropius atherinoides* inhabits in major freshwater rivers and coastal rivers. This species is widely distributed in major fresh and tidal water rivers and their tributaries, haors and beels of all over the country.

EOO: 2,20,042 km² **AOO:** 10,588 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the global population is unavailable.

Trend: Its wild population is showing declining trend over due to over exploitation and habitat destruction.

Habitat and Ecology

It is amphidromous and fast swimmer; feeds on algae, plant material and debris (Talwar and Jhingran 1991).

Assessor: M. Kamrujjaman

Silonia silondia

Species ID: FI0012

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Silonia silondia (Hamilton, 1822) English Name: Silond Catfish, Silonida Vacha Bengali Name: Shilong, Silond, Dhain, Siloin, Jilang Synonym/s: Pimelodus silondia Hamilton, 1822 Silonia lurida (Swainson, 1838) Silundia gangetica Valenciennes, 1840 Silondia silondia Hora, 1937

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Silonia silondia is distributed in large river systems of the country. Although, the species suffered a population decline in the past, presently the population is recovering. Availability of the fish in markets and perception of the local fishers suggest that the species is in good condition. The estimated Extent of Occurrence (EOO) and Area of Occupancy (AOO) of the species are higher than the upper threshold values for any IUCN threatened category. The threats to the fish are general. The risk of extinction of the species in near future is not anticipated. Hence, the species is assessed as Least Concern.

Date Assessed: 25 July 2014

History

Regional Status: It was considered as Endangered in IUCN Bangladesh 2000.





Silonia silondia

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Geographic Range

Global: Its range includes Bangladesh, India, Nepal, Pakistan and probably Myanmar (Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: *Silonia silondia* is available in rivers, estuaries and beels all over Bangladesh (Rahman 2005).

EOO: 21,468 km² AOO: 11,964 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Its population is declining due to uncontrolled exploitation and silting up of major rivers.

Habitat and Ecology

It is a riverine fish but inhabits beels and reservoirs as well. It prefers well-oxygenated and clear waters. It is carnivorous and voracious in habit. This amphidromous catfish moves in shoals and breeds during monsoon (Talwar and Jhingran 1991).

Assessor: M. Kamrujjaman

Ailia coila

Species ID: FI0155

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE

Scientific Name: Ailia coila (Hamilton, 1822) English Name: Gangetic Ailia Bengali Name: Kajuli, Bashpata Synonym/s: Malapterurus coila Hamilton, 1822,

Malapterus bengalensis Gray, 1830 Acanthonotus hardwickii Gray, 1830 Silurus cuvieri Gray, 1830 Melapterurus cuvieri Swainson, 1839 Ailia affinis Gunther, 1864 Ailia coila Day, 1877 & 1889

Taxonomic Notes: The specific characters that separate from the related species, *A. punctata* are the presence of small pelvic fin and silvery body with black caudal fin edge but no black spot on the base of caudal fin (Talwar and Jhingran, 1991). Recently, its taxonomy has been confirmed through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene (Ahmed *et al.* 2015, GenBank: KT364782.1).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Ailia coila* is well known and very popular fish, widely distributed in all the major river systems and their connected water bodies throughout Bangladesh. Considering its large Extent of Occurrence and the Area of Occupancy and little or no threat to the fish it has been assessed as Least Concern.

Date Assessed: 04 August 2014





Ailia coila

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History

Regional Status: It has been considered as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: The genus *Ailia* is endemic to the South Asian. Therefore, the species is confined in the Jamuna, Ganga, Bramhaputra and Mahananda rivers in India; Indus plains in Pakistan; Nepal; Padma-Jamuna-Meghna river systems in Bangladesh (Talwar and Jhingran 1991, Rahman 2005, Parween, 2007).

Bangladesh: It lives in rivers and connected hoars, baors, beels, and other flooded lands particularly in the north-west to north and south-eastern districts of Bangladesh (Ahmed 2002, Parween 2007, Chandra 2009, Galib *et al.* 2013).

EOO: 1,73,814 km² **AOO:** 10,687 km²

Population.

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Ailia coila usually lives in shoals in rivers to connected large natural water bodies with sand or mud created turbid water (Parween 2007). They migrate to connected water bodies during monsoon and even moves to estuarine waters in the south of Bangladesh (Rahman 2005, Parween 2007). It is a carnivore, mostly feeding on zooplankton, but occasionally prefers algae, plant materials and debris.

Assessor: Md. Rafiqun Nabi

Ailia punctata

Species ID: FI0156

Taxonomy

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ingdom	Phylum	Class	Order	Family
NIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SCHILBEIDAE
Name: Ailia n	unctata (Day, 1872)			

Scientific Name: Ailia punctata (Day, 1872) English Name: Jamuna Ailia Bengali Name: Kajuli, Bashpata Synonym/s: Ailiichthys punctata Day, 1872 Ailia punctata Jayaram, 1962 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Ailia punctata is available in good quantity in river systems and connected water bodies like haors, baors, beels and floodplains all over Bangladesh. On the basis of it's large Extent of Occurrence and Area of Occupancy and apparent absence of any major threat to it or its habitats Ailia punctata has been evaluated as Least Concern.

Date Assessed: 04 August 2014

History

Regional Status: This taxon has been considered as Vulnerable for the IUCN Red List 2000.

Geographic Range

Global: *Ailia punctata* is a widely distributed in the freshwater river systems in Bangladesh, India and Pakistan (Talwar and Jhingran 1991, Rahman 2005, Rahman and Ruma 2007).





Ailia punctata

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Bangladesh: The species is found in rivers, haors, baors and beels in the north-west to north and south-west districts of Bangladesh.

EOO: 1,73,814 km² **AOO:** 10,687 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Ailia punctata lives in shoals in rivers and connected natural water bodies with sand or mud created turbid waters. They migrate to connected water bodies from monsoon to onward months of the year. Probably not available in the estuarine waters. It is diurnal in habit and feeds on primarily algae and plant materials and occasionally intake debris.

Assessor: Md. Rafiqun Nabi

Gagata cenia

Species ID: FI0162

Taxonomy



Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Gagata cenia (Hamilton, 1822) English Name Indian Gagata Bengali Name: Cenia, Jungla, Kauwa, Tengra , Gang Tengra, Gang Magur, Gun Mach Synonym/s: Pimelodus cenia Hamilton, 1822, Ggata cenia Day, 1878 Gagata dolichonema He, 1996 Gagata typus, Bleeker 1863 Taxonomic Notes: None



Gagata cenia

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Gagata cenia* is widely distributed throughout the country including estuaries. It is relatively common compared to its congeners (Ahmed *et al.* 2015). Although Area of Occupancy is squeezing, it is still above the threshold level of the Threatened Category. As a widespread species, with no major threats to the habitats, the species is assessed as Least Concern.

Date Assessed: 24 July 2014

History

Regional Status: It was considered as not threatened (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Pakistan,



Myanmer, Nepal and Thailand (Suvatti 1981, Talwar and Jhingran 1991, Rahman 2005).

Bangladesh: It occurs in Ganges-Brahmatra system. Also reported from Haors and Rivers of Sylhet, Durgapur of Netrokona (specially in the Someswari River), Mohanonda River, Chalan Beel, Mymensingh Sadar (Brahmaputra river), Dinajpur Rivers (Chhoto Jamuna, Garveswari, Atrai and Kanchon) Boral River of Natore, hill streams of Bandarbans and Cox's Bazar, Feni River, Tanguar Haor (Rahman 2005, Ahmed *et al.* 2015 and M A R Hossain pers. com.).

EOO: 90,691 km² **AOO:** 10,520 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It occurs in large rivers with sandy/muddy bottoms and also in hill streams. Benthic feeder, probably decomposing matter and small organisms.

Assessor: Afshana Parven Associate Assessor/s: Mostafa Ali Reza Hossain and Mst. Kaniz Fatema

Gagata gagata

Species ID: FI0164

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Gagata gagata Hamilton, 1822 English Name: Gangetic Gagata Bengali Name: Gang tengra, Jungla, Ghorakata, Hudda Synonym/s: Pimelodus gagata Hamilton, 1822 Gagata cenia Day, 1878 Gagata gagata Hora and Law, 1941 Gagata cenia Bhuiyan, 1964

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Gagata gagata* is widely distributed and relatively common in catches along with other commercial species. There is no known threat to the species. So, *G. gagata* is assessed as Least Concern.

Date Assessed: 17 December 2014

History

Regional Status: It was considered as Not Threatened (NO) in Red List by IUCN Bangladesh 2000.

Geographic Range

Global: This species is known from the Ganges and Brahmaputra rivers drainage of Bangladesh, India, Irrawaddy River system in Myanmar and Nepal (Chowdhury 2007).



Bangladesh: *Gagata gagata* is found all over Bangladesh, in both freashwater and estuarine habitats (Ahmed *et al.* 2015, Chowdhury 2007, Hossain *et al.* 2005).

EOO: 95,883 km² **AOO:** 5,185 km²

Population

Gagata gagata

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species inhabits rivers and estuaries with sandy or muddy bottoms. It is a bottom feeder, mainly feeds on benthos and ooze (Chowdhury 2007).

Assessor: Sumaiya Ahmed



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Gogangra viridescens

Species ID: FI0168

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Gogangra viridescens (Hamilton, 1822) English Name: Huddah Nangra Bengali Name: Gang Tengra Synonym/s: Pimelodus viridescens Hamilton, 1822 Gagata viridescens Hora & law, 1941 Nangra viridescens Day, 1878 Nangra punctata Day, 1877

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: The species occurs in the upstream rivers of Bangladesh. Recent faunal survey indicates that the species is still abundant within its range. Although it is inferred that its population has declined in some of its ranges but there is no information on population and its trend. Its Extent of Occurrence (EOO) and the Area of Occupancy (AOO) found to be too large for the threshold of Vulnerable Category and the sub-criterions of this section do not support any Threatened status. So, *G. viridescens* is assessed as Least Concern.

Date Assessed: 20 February 2015

History

Regional Status: It was considered as Data Deficient in Red List of IUCN Bangladesh 2000.





Gogangra viridescens

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Geographic Range

Global: The species has been recorded from Bangladesh, Bhutan, India, Nepal and Pakistan (Shrestha 1990, Petra 1999, Rahman 2005).

Bangladesh: It is found in upstream Rivers of Dinajpur, Rangpur, Mymensingh and Sylhet (Rahman 1989).

EOO: 38,279 km² AOO: 269 km²

Population

Generation Time (Length): Unknown.

Total Population: Although the present population and its trends are unknown for this species, recent field surveys are that this species suggest is not abundant and the population is decreasing in its natural habitats (Ahmed *et al.* 2015).

Trend: Declining.

Habitat and Ecology

This species inhabits larger rivers with moderate current and sandy substrate (Menon 1999).

Assessor: Md. Sagir Ahmed

Hara hara

Species ID: FI0169

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHIISTIDAE

Scientific Name: Hara hara (Hamilton, 1822) English Name: Kosi Hara Bengali Name: Kutakanti Synonym/s: Pimelodus hara Hamilton, 1822 Hara filamentosa Blyth, 1860 Erethistes hara Day, 1877 Hara hara Hora, 1949

Hara serrata Vishwanath and Kosygin, 2000 **Taxonomic Notes:** Hara hara was originally described from the Kosi River by Hamilton (1822). Ng and Kottelat (2005) designated a neotype from the Hooghly River to fix the identification of this species. Hara serrata Vishwanath and Kosygin 2000, a species described from the Barak River drainage in Manipur, is considered to be a junior subjective synonym of *H.* hara.



Hara hara

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Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Hara hara* is a widely distributed and fairly common species in Bangladesh. The Extent of Occurrence and Area of Occupancy estimated to be much higher than the upper threshold values for lowest Threatened Category. There is no report on its population decline (Ahmed *et al.* 2015). Therefore, this species has been assessed as Least Concern.

Date Assessed: 20 September 2014



History

Regional Status: It was not considered as threatened in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: This species is widely distributed in the Ganges-Brahmaputra system in the northern and northeastern parts of the Indian subcontinent, including Bangladesh, India and Nepal (Ng 2010).

Bangladesh: *Hara hara* is a widely distributed species encompassing different rivers, hill streams, creeks and floodplain areas in the country (Hossain and Haque 2005, Rahman 2005, Rahman and Akhter 2007, Mahsin and Haque 2009, Ahmed *et al.* 2015).

EOO: 82,772 km² AOO: 9,432 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species is found in slower-moving rivers, creeks, streams and floodplain areas. Its preferred habitats are characterized by soft sandy substrates. It is active at night and hides under the sand and pebbles during daytime.

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Nangra nangra

Species ID: FI0171

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Nangra nangra (Hamilton, 1822) English Name: Kosi Nangra Bengali Name: Gang Tengra Synonym/s: Gagata nangra Hamilton, 1822 Macrones nangra Hamilton, 1822 Nangra buchanani Day, 1877 Pimelodus nangra Hamilton, 1822 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: *Nangra nangra* is widley distributed in the Meghna and Dakatia Rivers of Bangladesh. No information is available on its population size and abundance. As no potential threats are reported the species is assessed as Least Concern.

Date Assessed: 21 February 2015

History

Regional Status: It was listed as Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Nepal and Pakistan (Rahman 2005, Devi and Boguskaya 2009).

Bangladesh: It occurs in the Meghna and Dakatia Rivers near Chandpur (Rahman 2005). It is not yet reported from





Nangra nangra

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any other location of the country.

EOO: 33,932 km² **AOO:** 2,538 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

N. nangra lives in freshwater. It is a demersal species and inhabits the upper reaches of rivers (Devi and Boguskaya 2009). It feeds on bottom dwelling organisms (Rahman and Ruma 2007).

Assessor: Md. Monirul Islam

Macrognathus pancalus

Species ID: FI0241

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SYNBRANCIFORMES	MASTACEMBELIDAE

Scientific Name: Macrognathus pancalus Hamilton, 1822 English Name: Stripped Spinyeel, Barred Spiny Eel Bengali Name: Guchi, Guchibaim, Chirka, Turi Synonym/s: Mastacembelus punctatus Cuvier and Valencies, 1832 Mastacembelus pancalus Day, 1876. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species occurs throughout the country in all types of slow and shallow freshwater bodies (Rahman 2005, Wahab 2007). The relative abundance of the species reported to be fairly common to common (NACOM, 2005, 2006, 2008, 2010 and pers. obs.) and highly abundant in rainy season (Rahman 2005). Because of its capacity to survive in shallow and small water bodies and hiding behaviour, the species is less affected by many threats. The Extent of Occurrence and and Area of Occupancy are much higher than the lower thresholds for any threatened category. Therefore, the species is considered as Least Concern.

Date Assessed: 19 October 2014

History

Regional Status: This taxon has not yet been assessed for the IUCN Red List.





LEAST

CONCERN <LC>

Geographic Range

Global: The species is distributed in Bangladesh, India Pakistan, Sri Lanka, Myanmar and Nepal (Talwar and Jhingran 1991, Froese and Pauly 2014).

Bangladesh: The species is found throughout Bangladesh, except the lower estuaries and high altitude areas (Rahman 2005, Ahmed 2008, Mohsin and Haque 2009, Galib 2013).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Slightly declining.

Habitat and Ecology

It feeds on bottom debris along with all types of benthic oligocahetes, nematodes and insect larvae (Ali and Serajuddin 2005, Wahab 2007). The fish can hide in the mud and may avoid predation and vulnerability to some gears. Breeding occurs in upper surface, usually in shallow waters. Several males take part in courting one female (Talwar and Jhingran 1991). It inhabits rivers of all sizes, canals, beels, lake, auto stocked ponds, floodplains and in roadside ditches. Bottom dweller and can inhabit swallow waters, which are unsuitable for many fish species.

Assessor: Md. Sagir Ahmed
Tetraodon cutcutia

Species ID: FI0249

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	TETRAODONTIFORMES	TETRAODONTIDAE

Scientific Name: Tetraodon cutcutia Hamilton, 1822 English Name: Ocellated Pufferfish, Ocellated Blowfish Bengali Name: Tepa, Potka, Kutkuitta Synonym/s: Tetrodon cutcutia, Hamilton, 1822 Leisomus cutcutia, Blyth, 1855 Monotretus cutcutia, Munro, 1955 Tetrodon caria, Hamilton, 1822 Leisomus marmoratus, Swainson, 1839 Taxonomic Notes: None



Assessment Information

Tetraodon cutcutia

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LEAST

CONCERN <LC>

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species occurs in ponds, beels, canals and rivers as well as in all other freshwater wetlands of the country. The Extent of Occurrence and the Area of Occupancy (AOO) found much higher than the threshold for Vulnerable Category, as well as the sub-criterions of this section do not support any Threatened status. As a widespread species with no known major threat, *T. cutcutia* is assessed as Least Concern.

Date Assessed: 17 September 2014

History

Regional Status: It was assessed as Not Threatened (IUCN Bangladesh 2000).



Geographic Range

Global: It is found in Bangladesh, Cambodia, India, Malaysia, Myanmar and Sri Lanka (Taki 1974, Talwar and Jhingran 1991, Rahman 2005)

Bangladesh: It occurs in ponds, beels, canals, floodplains, wetlands and rivers throughout the country (Rahman 2005, Ahmed 2008).

EOO: 2,17,468 km² **AOO:** 11,857 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It can make a loud rasping noise by grinding the teeth. It has the ability to inflate the body with air or water, gulping quickly and then turning upside down so that it can float to the surface. It expels the air or water rapidly with a loud belch to return to the normal size. Its skin, muscle, liver and gonad contains highly toxic paralytic shell fish poison (Ahmed *et al.* 2002). It inhabits freshwater ponds, beels, haor, baor, canals, wetlands and rivers.

Assessor: Md. Sagir Ahmed

DATA DEFICIENT 〈 DD 〉



Zenarchopterus ectuntio

Species ID: FI0248

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	HEMIRRAMPHIDAE

Scientific Name: Zenarchopterus ectuntio (Hamilton, 1822) English Name: Ectuntio Halfbeak Bengali Name: Ek Thutta, Ek Thuta Synonym/s: Esox ectuntio Hamilton, 1822 Hemirhamphus ectunctio Day, 1878 Hemiramphus amblyurus Bleeker, 1849 Zenarchopterus hendersoni Flower, 1919

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *The species Zenarchopterus ectuntio has* only been reported once from Bangladesh (Rahman 1989). But no other information is available on its distribution, abundace, population status and trends from Bangladesh waters. So, *Z. ectuntio* is assessed as Data Deficient.

Date Assessed: 20 January 2015

History

Regional Status: It was considered as Not Threatened in Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It occurs in Bangladesh, India, Nepal, Myanmar, Thailand and upstream to lower Makong river (Talwar and Jhingran 1991, Rainboth 1996, Rahman 2005).





Zenarchopterus ectuntio

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Bangladesh: There is an unsubstantiated report of its occurrence from the estuarine area of Bangladesh.

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is ovoviviparous and stays close to shore, feeds on terrestrial insects that come close to or falls on the water surface (Rainboth 1996).



Oryzias carnaticus

Species ID: FI0190

Taxonomy

Choing				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	ADRIANICHTHYIDAE

Scientific Name: Oryzias carnaticus (Jerdon, 1849) English Name: Spotted Ricefish Bengali Name: Bechi Synonym/s: Aplocheilus carnaticus Jerdon, 1849 Panchax argenteus Day, 1868 Panchax cyanopthalma Blyth, 1858 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Oryzias carnaticus* has been reported from few locations of the country. Although, the estimated Area of Occupancy (1,031 km²) qualifies the species for the threatened category. Vulnerable but detailed information on its distribution, population abundance and trend, ecological requirements and threats to the species are not currently available. Therefore, the species is assessed as Data Deficient.

Date Assessed: 17 December 2014

History

Regional Status: The species was not assessed earlier in Bangladesh.

Geographic Range

Global: *O. carnaticus* is known to occur in Bangladesh, India, Myanmar and Srilanka (Abraham 2013).





Oryzias carnaticus

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DATA DEFICIENT

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Bangladesh: In Bangladesh, this species has been reported from Pasur River of Sundarbans, ponds, ditches and canals of Khulna District (Roberts 1998). It is also reported from Brahmaputra River and Haibatnagar in Mymensingh District (Spence 2006).

EOO: 26,715 km² **AOO:** 1,032 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a larvivorous fish (Ravindran 2012) and feeds on larvae of mosquito or other aquatic insects. This species is found near the coast but may live in freshwater as well as in brackish water habitat (Roberts 1998). It is very common in paddy fields adjacent to canals (Arunachalam 2004 cited in Abraham 2013).

Assessor: Sumaiya Ahmed

Oryzias dancena

Species ID: FI0191

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	ADRIANICHTHYIDAE

Scientific Name: Oryzias dancena (Hamilton 1822) English Name: Indian Ricefish/Ricefish Bengali Name: Bechi Synonym/s: Cyprinus dancena Hamilton, 1822; Aplocheilus mcclellandi Bleeker, 1854 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Oryzias dancena* is assessed as Data Deficient because of insufficient data on taxonomy, distribution, population abundance, trend and threat to the species.

Date Assessed: 17 December 2014

History

Regional Status: The species has not been assessed earlier in Bangladesh.

Geographic Range

Global: *O. dancena* is reported from Bangladesh, India Myanmar, Sri Lanka and Thailand (Abraham 2013).

Bangladesh: This species is reported from freshwater ponds at Pipral village, Khulna District (Roberts 1998). Greater Noakhali District (Feni, Laxmipur and Noakhali Districts) (Hossain 2013) and Halda River of Chittagong District (Azadi and Alam 2011).





Oryzias dancena

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DATA DEFICIENT

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EOO: 32,578 km² **AOO:** 2768 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It usually occurs near the coast but may live in freshwater as well as in brackish water habitat (Froese and Pauly 2014). It is a micro predator and feeds on small insects, worms, crustaceans and other zooplankton.

Assessor: Sumaiya Ahmed

Dermogenus brachynotopterus

Species ID: FI0245

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	BELONIFORMES	HEMIRAMPHIDAE

Scientific Name: Dermogenus brachynotopterus (Bleeker, 1853) English Name: Gangetic Halfbeak Bengali Name: Ek Thota Synonym/s: Hemirhamphus brachynotopterus Bleeker, 1853 Hemirhampus brachynopterus Day, 1877 Dermogenys brachynopterus Mukerji, 1935 Zenarchopterus brachynotopterus Jayaram, 1981 Taxonomic Notes: None



Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: In Bangladesh, occurrence of the species is only known from a single specimen collected at Gallamari, Khulna (Rahman 1989) and then from the Fish Markets in Barisal along with other locally harvested fishes (Al-Hassan et al. 2014). The Eextent of Occurrence and Area of Occupancy are estimated as 75,823.69 km² and 12,335.40 km², respectively are based on two disjunct reports. There is no further information on the ecology and population. Therefore Dermogenus brachynotopterus is assessed as Data Deficient.

Date Assessed: 20 January 2015

History

Regional Status: It was considered as Data Deficient (DD) in Red List of IUCN Bangladesh 2000.



Geographic Range

Global: It is widely distributed in South and Southeast Asia, ranging from Bangladesh, India to the Philippines and Greater Sundas.

Bangladesh: Dermogenus brachynotopterus is obtained only one specimen from Gollamari canal near Khulna Fish Seed Farm (Rahman 1989) and lower courses of rivers and possibly estuarine habitats of the Barisal Division like Mohipur, Patuakhali, Bhola, Pirojpur and Mehendigonj (Al-Hasan et al. 2014).

EOO: 16,749 km² AOO: 4,016 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It feeds extensively on small insects (Latifa 2007), either in the form of aquatic larvae or flying insects that have fallen onto the surface of the water (Torres 2014). It is also an important predator on mosquito larvae. It lives in estuaries and lower courses of inter-tidal rivers in the southern part of Bangladesh. It occasionally ventures into freshwater habitats.

Assessor: Md. Rafigun Nabi

DATA DEFICIENT

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llisha melastoma

Species ID: FI0058

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CLUPEIFORMES	PRISTIGASTERIDAE

Scientific Name: Ilisha melastoma (Bloch & Schneider, 1801) English Name: Indian Ilisha Bengali Name: Khorchuna, Peti Choukkha Synonym/s: Clupanodon motius Hamilton, 1822 Platygaster indica Swainson, 183 Ilisha indica Swainson, 1839 Pellona ditchoa Valenciennes, 1847 Pellona brachysoma Bleeker, 1852 Taxonomic Notes: None



Global: The species is native to Andaman Sea, Arabian

Sea, Bay of Bengal, East China Sea, Gulf of Oman,

Australian Shelf. Northeast Australian Shelf. Pacific

Gulf of Thailand, Indian Ocean, Indonesian Sea, North

Creek and Chilika Lake/Lagoon (Russell and Houston

Ocean, Persian Gulf, South China Sea, Tung-hsiao, Sikao

Bangladesh: In Bangladesh the species probably occurs

DATA DEFICIENT

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species has been noted from the coast of Sundarbans and Saint. Martin's Island of Bangladesh (Chantarasri 1994, BOBLME 2010, Hoq and Haroon 2012). However, information on its population abundance and trend are lacking. Moreover, information on its full ranges of distribution within Bangladesh waters, habitat quality and threats are also inadequate. Therefore, *Ilisha melastoma* is assessed as Data Deficient.

Date Assessed: 17 September 2014

History

Regional Status: This taxon has been assessed as Not Threatened (NO) in Bangladesh (IUCN Bangladesh 2000).



in the Bay of Bengal, along the coasts of Sundarbans and Saint Martin's Island.

Geographic Range

EOO: 21,041 km² **AOO:** 3,079 km²

Population

1989).

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The species inhabits marine and brackish waters; it is a pelagic-neretic species living at the depth range of 0-50 m. It is a surface feeder and feeds on aquatic insects and detritus. The fish can tolerate low salinities.

Assessor: Mostafa Ali Reza Hossain

Balitora brucei

Species ID: FI0121

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Balitora brucei Gray, 1830 English Name: Gray's Stone Loach, Rock Carp Bengali Name: Not known. Synonym/s: Balitora brucei brucei Gray, 1830 Balitora maculata Gray, 1830 Platycara anisura McClelland & Griffith, 1842 Balitora brucei burmanicus Hora, 1932 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Balitora brucei has been mentioned to be present in Bangladesh by Talwar and Jhingran (1991) and Sherstha (2008) without any sighting or specimen record. There are no further information on its distribution and population abundance from the country. Therefore, the status of *B. brucei* is assessed as Data Deficient.

Date Assessed: 20 November 2014

History

Regional Status: It was not assessed in Bangladesh.

Geographic Range

Global: *Balitora brucei* is found from Bangladesh, India, Nepal, Tibet, Bhutan, Myanmar, Pakistan and Sri Lanka (Talwar and Jhingran 1991, Oo 2002, Sherstha 2008).

Bangladesh: Unknown.





Balitora brucei

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DATA DEFICIENT

<DD>

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Outside Bangladesh *B. brucei* is found in fast flowing torrential hill streams in riffles, hilly rapid flowing water bodies and waterfalls. The fish prefers backwater and quiet eddies. Breeders ascend small hill streams and creeks for spawning during monsoon. Eggs are laid on gravel beds (Sherstha 2008).

Assessor: Mostafa Ali Reza Hossain

Schistura beavani

Species ID: FI0123

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	BALITORIDAE

Scientific Name: Schistura beavani (Günther, 1868) English Name: Creek Loach Bengali Name: Puiya, Balichata

Synonym/s: Nemacheilus beavani Günther, 1868 Noemacheilus beavani Menon, 1987

Taxonomic Notes: Günther (1868) described *Nemachilus beavani* from Kosi River, Uttar Pradesh, India. Banarescu and Nalbant (1995) treated the species under the Genus *Schistura.*



Schistura beavani

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DATA DEFICIENT

<DD>

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Schistura beavani is reported only from a single location though other species of the same genus found in similar habitats of different areas in the country. Data are not available for assessment of its status but the estimated Extent of Occurrence and Area of Occupancy qualify for the Threatened Categories. Due to insufficient information, this species is assessed as Data Deficient.

Date Assessed: 15 November 2014

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India and Nepal (Rahman and Chowdhury 2007).



Bangladesh: The Dahuki River in Sylhet is an ideal habitat for the species (Rahman and Chowdhury 2007). Recently, this species has been reported from the upstream of the Piyang River of Sylhet (Ahmed *et al.* 2015).

EOO: 523 km² **AOO:** 86 km²

Population

Generation Time (Length): Unknown. Total Population: The current population and its trends are unknown. However, recent field surveys indicates that this species is very rare (Ahmed and Rahman 2014). Trend: Unknown.

Habitat and Ecology

It inhabits rivers and streams adjoining hills with gravelly and rocky bottoms. It hides underneath rocks and stones in shallow and swift clear streams with pebbly bottoms. Feeds on algae, detritus and other benthic organisms (Rahman and Chowdhury 2007).

Assessor: Md. Mizanur Rahman

Botia rostrata

Species ID: FI0130

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Botia rostrata Günther, 1868 English Name: Gangetic Loach Bengali Name: Rani Mach Synonym/s: Not known. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Botia rostrata* has been recorded from Bangladesh (Hossain *et al.* 2012). However, the distribution of this species has not yet been recorded by others in Bangladesh. Moreover, there is no report of its population size or population trend, number of locations or quality of habitat from Bangladesh. Hence, the status of *B. rostrata* is assessed as Data Deficient.

Date Assessed: 25 February 2015

History

Regional Status: The species was not assessed earlier in Bangladesh.

Geographic Range

Global: *Botia rostrata* are reported from Bangladesh (Hossain *et al* 2012, Kottelat 1989) and India (Chaudhury 2010, Kottelat 1989). Also recorded from the Salween and Irrawaddy basin in China, adjacent to the Myanmar border (Kottelat 1989).





Botia rostrata

© Balaram Mahalder

DATA DEFICIENT

<DD>

Bangladesh: It is supposed to be found in the freshwater rivers of Bangladesh (Hossain *et al.* 2012).

EOO: 2,17,468 km² **AOO:** 9,400 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

They live in medium to fast current waters (Chaudhury 2010).

Assessor: Gawsia Wahidunnessa Chowdhury

Pangio oblonga

Species ID: FI0136

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	COBITIDAE

Scientific Name: Pangio oblonga (Valenciennes, 1846) English Name: Java Loach, Cinnamon Loach Bengali Name: Panga, Kalo Kuhli Synonym/s: Pangio javanicus, Bleeker, 1860 Cobitis oblonga Valenciennes, 1846 Acanthophthalmus javanicus Bleeker, 1860 Acantophthalmus javanicus van Hasselt, 1823

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species has been recorded only once from Bangladesh (Hossain *et al.* 2012). However, the distribution of this species has not yet been confirmed by others in Bangladesh. Moreover, there is no record of its population trend, number of locations or quality of habitat. Thus, the status of *Pangio oblonga* is assessed as Data Deficient.

Date Assessed: 20 March 2015

History

Regional Status: This taxon has not yet been assessed in Bangladesh.

Geographic Range

Global: It has reported from Bangladesh, India and Myanmar, Viet Nam and Cambodia, Lao PDR, Malaysia and Thailand (Talwar and Jhingran 1991, Bohlen *et al.* 2011).





Pangio oblonga

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DATA DEFICIENT

<DD>

Bangladesh: It is known only from the river Brahmaputra and greater district of Mymensingh and Sylhet.

EOO: 14,742 km² **AOO:** 454 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Decreasing.

Habitat and Ecology

It inhabits river, shallow water, streams with muddy bottom, among shore vegetation (Kottelat *et al.* 2005). It feeds on benthic invertebrates and spawns in very shallow water of flooded forests.

Assessor: Mohammad Abdul Baki Associate Assessor/s: Selina Sultana and Mohammed Noman

Salmostoma argentea

Species ID: FI0029

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Salmostoma argentea (Day, 1867) English Name: Silver Razorbelly Minnow Bengali Name: Chela Synonym/s: Chela argentea Day 1867 Oxygaster argentea (Day 1867) Salmostoma acinaces (Valenciennes 1844) Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Although *Salmostoma argentea* was reported from the Meghna drainage, and a few other places, little is known about this species' distribution, population trend, habitat requirements or threats. More information is needed on its extent of occurrence, ecological requirements, population size, population trends, and long-term threats. Therefore, it is listed as Data Deficient.

Date Assessed: 25 June 2014

History

Regional Status: It was considered as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: Unknown.





Salmostoma argentea

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DATA DEFICIENT

<DD>

Bangladesh: The species is found in the Meghna drainage (Rahman 2005) and inhabits rivers, streams, canals, floodplains (Rahman and Chowdhury 2007).

EOO: 2,17,468 km² **AOO:** 44,652 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is not known. However, percent catch analysis from Baikka Beel in 2011 shows that relative abundance was only 0.01% in the catches (IRG-Worldfish 2011). **Trend:** Declining

Habitat and Ecology

The habitat of silver razorbelly Minnow is freshwater, including lower reaches of rivers, ponds, beels, ditches, canals and hill streams. *Salmostoma argentea* is a surface feeder species and feeds mainly on aquatic insects and detritus. It is a benthopelagic and potamodromous species (Rrahman and Chowdhury 2007).

Assessor: Md. Golam Mustafa Associate Assessor/s: Selina Sultana and Mohammed Noman

Barilius barila

Species ID: FI0041

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Barilius barila (Hamilton, 1822) English Name: Barred Barila Bengali Name: Barali, Koksa Synonym/s: Barilius barila Hamilton, 1822 Cyprinus barila Hamilton, 1822

Leuciscus barila Hamilton, 1822 Cyprinus chedrio Hamilton, 1822 Opsarius anisocheilus McClelland, 1839 Barilius barnoides Vinciguerra, 1890 Opsarius barnoides(Vinciguerra, 1890 Barilius shanensis Fowler, 1958 Danio monshiensis Yang & Hwang, 1964

Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Barilius barila is fairly common in hill streams and shallow foothill rivers in the northern Bangladesh. However, there are inadequate information available on its Area of Occupancy, distribution and population trend to assess its status, therefore the species is considered as Data Deficient.

Date Assessed: 25 June 2014

History

Regional Status: The species has been assessed as Data Deficient in IUCN Bangladesh 2000.





Barilius barila

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DATA DEFICIENT

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Geographic Range

Global: The taxon is distributed in Bangladesh, India, Myanmar and Nepal (Rahman and Ruma 2007).

Bangladesh: It occurs in hill streams of northern Bangladesh (Rahman and Ruma 2007).

EOO: 4,412 km² AOO: 298 km²

Population

Generation Time (Length): Unknown.

Total Population: Total population of the species is unknown. However, it is fairly common in hill streams of northern Bangladesh (Rahman and Ruma 2007). **Trend:** Information on the population of the species is currently not available.

Habitat and Ecology

Barilius barila inhabits freshwaters and occurs in large hill streams and shallow clear rivers along foothills. The fish is benthopelagic in habit and feeds on aquatic vegetation, crustaceans and insect larvae (Rahman and Ruma 2007).

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golum Mustafa

Devario aequipinnatus

Species ID: FI0077

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Devario aequipinnatus (McClelland, 1839) English Name: Giant Danio Bengali Name: Chebli

Synonym/s: Danio aequipinnatus McClelland, 1839

Leuciscus aequipinnatus McClelland, 1839 Pteropsarion aequipinnatus McClelland, 1839 Danio aequipinnulus McClelland, 1839 Leuciscus lineolatus Blyth, 1858 Danio lineolatus Blyth, 1858

Taxonomic Notes: *Devario aequipinnatus* was described as *Danio devario* in IUCN Red Book of Threatened Species in Bangladesh (IUCN Bangladesh 2000) and as *Danio aequipinnatus* in Rahman (2005).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Devario aequipinnatus occur at the surface in small high-gradient upland streams of hilly districts in Bangladesh including Jaflong Waterfall (Sylhet), Hamham Waterfall (Sreemangal, Moulvibazar), Shuvolog and Bangchari Puran Para Chara (Kaptai, Rangamati). There is no information on the population and trends for this species. So, it is assessed as Data Deficient.

Date Assessed: 17 August 2014

History

Regional Status: The species was considered Not Threatened (NO) in Bangladesh, (IUCN Bangladesh 2000).





Devario aequipinnatus

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DATA DEFICIENT

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Geographic Range

Global: *Devario aequipinnatus* is found in Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal, Pakistan, Sri Lanka and Thailand (Pethiyagoda 1994).

Bangladesh: It is found in small high-gradient upland streams of the hilly districts in Bangladesh, particularly in Greater Sylhet, Moulvibazar and Rangamati (Rahman 2005, Ahmed *et al.* 2015).

EOO: 56,944 km² **AOO:** 84 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the population and its trends for this species, but recent faunal survey data suggest that it is uncommon in hilly streams (Kader 2007, Ahmed *et al.* 2015). Trend: Unknown.

Habitat and Ecology

Devario aequipinnatus mainly feeds on worms, crustaceans and insects and moves in schools (Kader 2007). The fish is accustomed to live under varying water conditions in nature. It is peaceful and hardy in aquariums. Giant danios abound in running streams and rivers and are generally accustomed to moderately cool and well-aerated water. The species inhabits freshwaters and occur in still and slow-moving rivers and streams. It is particularly, found in shaded, mid-hill clear waters with pebble/gravel substrates. This fish is benthopelagic in hill streams up to an elevation of 300 m above mean sea level (Talwar and Jhingran 1991).

Assessor: Md. Sagir Ahmed

Esomus lineatus

Species ID: FI0080

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Esomus lineatus Ahl, 1923 English Name: Stripped Flying Barb Bengali Name: Not known Synonym/s: Not known Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The occurrence of the species in Bangladesh is known from limited sources (Hossain *et al.* 2012, Froese and Pauly 2014). However, no other information is available on the species. So, the species is tassessed as Data Deficient.

Date Assessed: 20 October 2014

History

Regional Status: This taxon has not been assessed earlier in Bangladesh.

Geographic Range

Global: This species was reported only from Bangladesh by Froese and Pauly 2014.

Bangladesh: The fish was reported from the mouth of the Ganges River once by Froese and Pauly 2014.

EOO: 1,451 km² **AOO:** 161 km²





Esomus lineatus

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Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This fish inhabits fresh- and brackish waters and benthopelagic in nature (Froese and Pauly 2014).

Assessor: Mostafa Ali Reza Hossain

Bangana dero

Species ID: FI0089

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Bangana dero (Hamilton, 1822) English Name: Kalabans Bengali Name: Kursha, Katal Kushi Synonym/s: Chondrostoma semivelatus Valenciennes, 1844 Cyprinus dero Hamilton, 1822 Labeo dero Hamilton, 1822 Labeo rilli Chaudhuri, 1912 Sinilabeo dero Hamilton, 1822

Taxonomic Notes: In Bangladesh, this species has been described as *Labeo dero* (IUCN Bangladesh 2000, Rahman 2005, Rahman and Ruma 2007). *Bangana* was considered to be a Subgenous of the Genus *Labeo*. However, Subgenus *Bangana* has been upgraded to the Genus status, and Kullander *et al.* (1999) recognized the species as *Bangana* dero.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The occurrence of *Bangana dero* in Bangladesh has only been mentioned by Rahman (2005). However, recent fish survey could not confirm its presence in the country (Ahmed *et al.* 2015). Moreover, no other report is available on this fish from Bangladesh. Hence, *Bangana dero* is assessed as Data Deficient.

Date Assessed: 20 January 2015

History

Regional Status: *Bangana dero* has been considered Not Threatened (NO) earlier in Bangladesh (IUCN Bangladesh 2000).





Bangana dero

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DATA DEFICIENT

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Geographic Range

Global: *Bangana dero* is found in Bangladesh, China, India and Nepal (Talwar and Jhingran 1991).

Bangladesh: It has been mentioned to be present in the rivers of Dinajpur, Rangpur and Mynensingh by Rahman (2005).

EOO: 20,218 km² AOO: 206 km²

Population

Generation Time (Length): Unknown. Total Population: Information on the total population of this fish is not known. Trend: Unknown.

Habitat and Ecology

Bangana dero inhabits freshwater hill-streams. This benthopelagic fish is a herbivore and mainly feeds on aquatic debris and detritus (Rahman and Ruma 2007). Adults of this fish inhabit torrential hill-streams in shallow waters (Talwar and Jhingran 1991). They migrate to warmer regions of lakes and streams during winter (Raina and Petr 1999).

Assessor: Md. Sagir Ahmed

Labeo dyocheilus

Species ID: FI0090

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo dyocheilus (McClelland, 1839) English Name: Kalabans Bengali Name: Kursha, Katal Kushi Synonym/s: Cyprinus dyocheilus McClelland, 1839 Gobio bicolor McClelland, 1839 Labeo tezpurinensis Chaudhuri, 1912 Taxonomic Notes: Menon (1999) considered Labeo dyocheilus as a junior synonym of Labeo pangusia

Assessment Information

(Hamilton 1822).

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is no confirmed report on the occurrence of the species in the country. So, *Labeo dyocheilus* is assessed as Data Deficient.

Date Assessed: 20 January 2015

History

Regional Status: The species was not assessed earlier in Bangladesh.

Geographic Range

Global: *Labeo dyocheilus* is found in Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan (Talwar and Jhingran 1991) and also recorded from Mekong Basin (Vidthayanon *et al.* 1997).





Labeo dyocheilus

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DATA DEFICIENT

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Bangladesh: The presence of this fish in Bangladesh has only been mentioned by Talwar and Jhingran (1991).

Population

Generation Time (Length): Uknown. Total Population: No population estimate is available on this species. Trend: Unknown.

Habitat and Ecology

This benthopelagic fish inhabits hill-streams, rivers and its adults live in clear active currents of large rivers (Talwar and Jhingran 1991). It is a migratory species (Hill and Hill 1994).

Assessor: Md. Sagir Ahmed

Labeo fimbriatus

Species Id: FI0091

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Labeo fimbriatus (Bloch, 1795) English Name: Fringed-lipped Peninsula Carp Bengali Name: Not known. Synonym/s: Cirrhinus fimbriatus Bloch, 1795 Cyprinus fimbriatus Bloch, 1795 Taxonomic Notes: None.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Labeo fimbriatus* is noted to be present in Bangladesh by Menon (1999). However, no reports from Bangladesh confirms its occurrence in the country. Therefore, this species is assessed as Data Deficient.

Date Assessed: 25 February 2015

History

Regional Status: This species has not been assessed earlier in Bangladesh.

Geographic Range

Global: Labeo fimbriatus has been noted to occur in Bangladesh (Menon 1999), India, Myanmar, Nepal and Pakistan (Talwar and Jhingran 1991).

Bangladesh: Not known.



Labeo fimbriatus

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Population

Generation Time (Length): Unknown. Total Population: Information on the total population is not available. Trend: Unknown.

Habitat and Ecology

Labeo fimbriatus is a freshwater fish and found in rivers above tidal reaches and culture ponds (Menon 1999). This fish is potamodromous (Riede 2004). It is a herbivore (Talwar and Jhingran 1991).



Puntius puntio

Species ID: FI0103

Taxonomy

-				
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Puntius puntio (Hamilton, 1822) English Name: Puntio Barb Bengali Name: Punti Synonym/s: Cyprinus puntio Hamilton, 1822 Puntius brevis (Bleeker, 1860) Barbus puntio (Hamilton, 1822) Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is no justifiable information to make a direct or indirect assessment of its risk of extinction only based on its Extent of Occurrence and Area of Occupancy. Neither present nor past data on population size, distribution pattern of this species throughout its ranges inside Bangladesh waters. Therefore, it is assessed as Data Deficient.

Date Assessed: 21 January 2015

History

Regional Status: It was considered as Data Deficient (DD) (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Cambodia, India and Myanmar (Rainboth 1996, Goswami *et al.* 2012).

Bangladesh: It is found in rivers, canals, beels, ponds and





Puntius puntio

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DATA DEFICIENT

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inundated fields throughout Bangladesh.

EOO: 2,17,468 km² **AOO:** 11,128 km²

Population

Generation Time (Length): Unknown. Total Population: No information is available in wild population and its trends. Trend: Unknown.

Habitat and Ecology

The fish inhabits mainly shallow waters of rivers, canals, beels and ponds. It prefers to live in tropical and sub-tropical climate. It is an omnivorous fish and feeds on wide variety of food like worms, crustaceans, insects and plant matter (Goswami *et al.* 2012).

Assessor: Md. Enamul Hoq

Raiamas guttatus

Species ID: FI0109

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Raiamas guttatus (Day, 1870) English Name: Burmese Trout Bengali Name: Not known Synonym/s: Barilius guttatus (Day, 1870) Opsarius guttatus Day, 1870 Bola harmandi Sauvage, 1880 Barilius harmandi (Sauvage, 1880) Luciosoma fasciata Yang & Hwang, 1964 Taxonomic Notes: Day (1870) described Opsarius guttatus from Myanmar. Kottelat (2001) placed the species under the genus Raiamas.



Raiamas guttatus

© Mostafa A R Hossain

DATA DEFICIENT

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is no detailed information on the distribution and abundance of the species in the country. So, the species is assessed as Data Deficient.

Date Assessed: 22 September 2014

History

Regional Status: The species is not assessed before in Bangladesh.

Geographic Range

Global: *Raiamas guttatus* is found in Bangladesh, Cambodia, China, India, Malaysia, Myanmar, Nepal, Laos, Thailand and Viet Nam (Talwar and Jhingran 1991, Kottelat 2001).



Bangladesh: It is known to be present in Shomeswari River, Netrokona and Kangsha River, Mymensingh (M A R Hossain pers. comm).

EOO: 1,274.91 km² **AOO:** 419.72 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Its diet consists of insects and small fishes. Inhabits shady areas and muddy bottoms in deep hill streams. It is found in medium to large-sized rivers, flooded fields and rapidrunning mountain streams (http://zipcodezoo.com/index. php/Raiamas).

Assessor: Harunur Rashid Associate Assessor/s: Mohammed Noman and Selina Sultana

Salmostoma sardinella

Species ID: FI0110

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Salmostoma sardinella (Valenciennes, 1844) English Name: Sardinella Razorbelly Minnow Bengali Name: Not known.

Synonym/s: Chela sardinella (Valenciennes, 1844) Leuciscus sardinella Valenciennes, 1844 Salmostoma sardinella poonpuni Tilak, 1967 Salmophasia sardinella (Valenciennes, 1844) Chela untrahi (non Day, 1869)

Taxonomic Notes: In some documents the genus *Salmostoma sardinella* is described as *Salmophasia sardinella*. According to Doi (1997) this genus better fits as *Salmophasia*.

Salmostoma sardinella

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Salmostoma sardinella has been assessed as Data Deficient due to lack of any information on it, barring its mention in a checklist of fishes of Bangladesh.

Date Assessed: 16 October 2014

History

Regional Status: *Salmostoma sardinella* has not been assessed earlier in Bangladesh.

Geographic Range

Global: Salmostoma sardinella is found in Bangladesh, India (Ganges-Brahmaputra drainage, Orissa and Poonpun



river of Patna, Bihar) and Myanmar (Devi and Boguskaya 2009).

Bangladesh: Not known.

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Salmostoma sardinella is a freshwater benthopelagic species and occurs in the lower reaches of rivers.

Assessor: Mostafa Ali Reza Hossain

Danio annulosus

Species ID: FI0256

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: *Danio annulosus* Kullander, Rahman, Norén & Mollah 2015 English Name: Chain Danio Bengali Name: Chela

Synonym/s: Unknown

Taxonomic Notes: It is a new species of the genus *Danio* and distinguished from all other species of *Danio* except *D. assamila*, *D. dangila*, *D. catenatus*, *D. concatenatus*, and *D. sysphigmatus* by produced first ray in pectoral and pelvic fins, large cleithral spot, and pattern of dark rings enclosing light interspaces on the side. Distinguished from those species by slightly horizontally extended cleithral spot (vs. vertically extended in *D. dangila*, round in the other species), anterior interstripe la usually present (vs. absent in *D. dangila* and *D. catenatus*), ring pattern usually not extending onto caudal peduncle (vs. present on part of caudal peduncle in *D. dangila*, *D. catenatus* and *D. concatenatus*) (Kullander *et al.* 2015)

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Danio annulosus* is a new species, recently described from a single locality of hill streams (waterfalls) in Bangladesh. This species has been described based on its detail morpho-meristic study and DNA barcoding of a mitochondrial gene (COI) including its description of type locality. No data is available on population and distribution in other parts of the country. Therefore, it is assessed as Data Deficient.

Date Assessed: 25 August 2015





Danio annulosus

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DATA DEFICIENT

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History

Regional Status: Unkhown

Geographic Range

Global: It has so far recorded only from Bangladesh. (Kullander *et al.* 2015).

Bangladesh: *Danio annulosus* is so far known only from the type locality at the foot of Shuvolong Waterfall draining into the Kaptai Lake. Although recorded from only a single locality, it is expected to have a wider distribution in the Karnafully River drainage (Kullander *et al.* 2015).

EOO: 8,823 km² **AOO:** 588 km²

Population

Generation Time (Length): Unknown. Total Population: Total population of the species is unknown, but it is relatively less abundant in its locality. Trend: Unknown.

Habitat and Ecology:

It is a rheophilic fish, prefers to live in the fast flowing cold water with sands, rocks and pebbles. It is found to live with shrimp, snails, and a small species of *Garra* (Kullander *et al.* 2015). Inhabits hill streams particularly in pool at the foot of the waterfall holding some pieces of rock but devoid of vegetation.

Assessor: Md. Mizanur Rahman Associate Assessor/s: Sven O Kullander, Md. Abdur Rob Mollah, Michael Noren and Mohammed Noman

Laubuca brahmaputraensis

Species ID: FI0257

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	CYPRINIDAE

Scientific Name: Laubuca brahmaputraensis Kulabtong 2012 English Name: Not known Bengali Name: Not known Synonym/s: Not known Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Laubuca brahmaputraensis* has been recorded and described by Kulabtong *et al.* (2012) from the River Brahmaputra. Since then, there is no published or unpublished reports on the species from Bangladesh. Therefore, the species is assessed Data Deficient.

Date Assessed: 28 August 2015

History

Regional Status: This taxon has not been assessed in Bangladesh earlier for IUCN Red List.

Geographic Range

Global: *Laubuca brahmaputraensis* has so far been recorded only from Bangladesh (Kulabtong *et al.* 2012).

Bangladesh: This species is known only from Brahmaputra River in Bangladesh.



Laubuca brahmaputraensis

© Kulabtong, Suksri & Nonpayom

DATA DEFICIENT

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EOO: 1,711 km² **AOO:** 278 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Unknown.



Assessor: Mostafa Ali Reza Hossain

Psilorhynchus rahmani

Species ID: FI0117

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	PSILORHYNCHIDAE

Scientific Name: Psilorhynchus rahmani Conway & Mayden, 2008 English Name: Hill stream Minnow Bengali Name: Balichata Synonym/s: Not known Taxonomic Notes: Psilorhynchus rahmani is a new species described by Conway and Mayden (2008) from Chittagong, Bangladesh.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Psilorhynchus rahmani* has an apparently restricted range. It is reported only from a small stream in Chittagong Division, Bangladesh (Conway and Mayden 2008) where it's total Extent of Occurrence (EOO) is approximately 321.09 km². It is likely to be present in other regions of the country. Further research is needed to determine its distribution, population, and threats. The species is, therefore, assessed as Data Deficient.

Date Assessed: 15 December 2014

History

Regional Status: The taxon has not yet been evaluated as it was described as a new species in 2008.

Geographic Range

Global: It is found only in Bangladesh (Conway and Mayden 2008).





Psilorhynchus rahmani

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Bangladesh: *P. rahmani* is known to occurs in a small hill stream north of Chittagong University (22°28'25.8"N, 91°46'59.3"E), Chittagong, Bangladesh.

EOO: 321 km² **AOO:** 4 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the population and its trends for this species. Further survey is needed to determine whether this species is experiencing a population decline. Trend: Unknown.

Habitat and Ecology

It inhabits primarily hill-streams with pebbles, cobbles and rocky bottom. It prefers to live in small hill streams requiring high levels of oxygen. It is generally a fast swimmer, occasionally rests on its spread paired fins and feeds mainly on zooplankton and phytoplankton.

Assessor: Md. Mizanur Rahman

Ambassis nalua

Specied ID: FI0199

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	AMBASSIDAE

Scientific Name: Ambassis nalua (Hamilton, 1822) English Name: Scalloped Perchlet, Scalloped Glassfish Bengali Name: Nalua Chanda Synonym/s: Chanda nalua Hamilton, 1822 Taxonomic Notes: Ambassis nalua was originally described as Chanda nalua by Hamilton (1822) from freshwaters of lower Bengal. The species was reviewed by Allen and Burgess (1990).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Ambassis nalua* is a very poorly studied species in the country and its occurrence in Bangladesh has been noted only in a checklist for freshwater fishes of Bangladesh (Hossain *et al.* 2012). Therefore, the species is assessed *as* Data Deficient.

Date Assessed: 15 February 2015

History

Regional Status: This taxon has not been assessed earlier in Bangladesh for IUCN Red List.

Geographic Range

Global: *Ambassis nalua* is known to occur in Australia, Bangladesh, India, Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore and Thailand (Dahanukar 2012).





Ambassis nalua

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DATA DEFICIENT

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Bangladesh: There is no published reports on the occurrence and distribution of the species in the country. However, Hossain *et al.* (2012) mentioned it as a riverine fish of Bangladesh.

EOO: 2,17,468 km² **AOO:** 9,400 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Ambassis nalua inhabits tropical fresh and brackish waters in bays, estuaries and tidal creeks and often in mangroves (Haywood *et al.* 1998, www.fishbase.org). It feeds on annelids, crustaceans (Brachyurans and Penaeids), molluscs and small teleosts (Haywood *et al.* 1998).

Assessor: Md. Mizanur Rahman

Anabas cobojius

Species ID: FI0255

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ANABANTIDAE

Scientific Name: Anabas cobojius (Hamilton,1822) English Name: Gangetic Koi Bengali Name: Koi Synonym/s: Coius cobojius Hamilton, 1822 Anabas oligolepis Bleeker, 1855 Taxonomic Notes: This is a species complex. Probalbly, young A. testudineus is misidentified.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species is found in tropical freshwaters and has been recorded from Bangladesh (Hossain *et al.* 2012) without specifically mentioning its distribution in the country. Moreover, there is no information on its population size or population trend, number of locations or quality of habitat in Bangladesh. Hence, *A. cobojius* is assessed as Data Deficient.

Date Assessed: 20 March, 2015

History

Regional Status: The species was not included in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Bangladesh, India and Nepal (Chaudhry *et al.* 2010).

Bangladesh: Unknown.





Anabas cobojius

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Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is known to be a very hardy fish and able to live out of water for protracted period. It has been said to inhabit beels, lakes, ponds, ditches and paddy fields. This fish has been recorded from many types of standing water bodies in countries other than Bangladesh.

Assessor: Mohammad Abdul Baki

Badis chittagongis

Species ID: FI0036

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	BADIDAE

Scientific Name: Badis chittagongis Kullander & Britz, 2002 English Name: Unknown. Bengali Name: Unknown. Synonym/s: Badis badis (Hamilton, 1822) Taxonomic Notes: A new species endemic to the Chittagong hill areas in Bangladesh.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This is a new species of the genus *Badis* described from hill streams of Khagrachari District under the Chittagong Hill Tracts in 2002. Although, the estimated Extent of Occurrence (4,113.25 km²) and Area of Occupancy (17.79 km²) apparently qualify the species to be placed under IUCN threatened categories, however, since the fish is known only from two locations and information on its population distribution and abundance are not currently available, the fish is assessed as Data Deficient until further data become available.

Date Assessed: 25 June 2014

History

Regional Status: The taxon has not been evaluated earlier in Bangladesh because it has only been found as a new species in 2002.

Geographic Range

Global: Hill streams near Chittagong in Bangladesh,





Badis chittagongis

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including the Matamohuri River drainage. No other material exist north of the type locality, in the adjacent Indian states of Tripura or Mizoram, or the eastern coast of Myanmar, but these areas are still to be properly surveyed (Kullander and Britz 2002, Froese and Pauly 2014).

Bangladesh: The species occurs only in the hill streams near Chittagong in Bangladesh (Kullander and Britz 2002).

EOO: 4,113 km² **AOO:** 18 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on total population of the species is not available.

Trend: Information on the population trend of the fish is not currently available.

Habitat and Ecology

The taxon inhabits freshwater hill streams and it is benthopealgic in habit.

Assessor: Balaram Mahalder Associate Assessor/s: Md. Golam Mustafa

Eleotris lutea

Species ID: FI0230

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	ELEOTRIDAE

Scientific Name: Electris lutea Day, 1876 English Name: Lutea sleeper Bengali Name: Kuli, Gobi Synonym/s: None Taxonomia Natae: Electris lutea is someti

Taxonomic Notes: *Eleotris lutea* is sometimes confused with *E. fusca*. In *E. lutea* scales extend up to the eyes whereas in *E. fusca* predorsal scales extend up to the snout.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is reported from the Meghna estuary of Bangladesh (Rahman 1989). There is inadequate information to make a direct or indirect, assessment of its risk of extinction based on its distribution. So, *Elutris lutea* is assessed as Data Deficient.

Date Assessed: 17 December 2014

History

Regional Status: It was not assessed in the Red List by IUCN Bangladesh 2000.

Geographic Range

Global: It is found in Bangladesh, Indian Ocean: India and Myanmar (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: This fish lives around the mouths of rivers or in brackish mangrove estuaries and sometimes penetrates





Eleotris lutea

© Md. Mizanur Rahman

DATA DEFICIENT

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freshwater. It has so far been reported only from the Meghna River Estuary (Rahman1989).

EOO: 12,355 km² **AOO:** 46,971 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the population and its trend for this species. Trend: Unknown.

Habitat and Ecology

Eleotris lutea is demersal, amphidromous, feeding mainly on small fishes, crustaceans and insects. Adults inhabit rivers, estuaries and freshwater (Talwar and Jhingran 1991). They occur in the lower reaches of freshwater streams, usually on mud bottoms.

Assessor: Md. Sagir Ahmed

Gobiopsis macrostoma

Species ID: FI0021

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	GOBIIDAE

Scientific Name: Gobiopsis macrostoma Steindachner, 1861 English Name: Longjaw Gobi Bengali Name: Baila, Bayla Synonym/s: Gobius planifrons Day, 1876 Pogonogobius planifrons Smith, 1945 Barbatogobius asanai Koumans, 1941





Bangladesh: It is found in Brahmaputra-Jamuna Rivers

Gobiopsis macrostoma

EOO: 2,17,468 km² **AOO:** 892 km²

Trend: Unknown.

Habitat and Ecology

Population

(Rahman and Akhter 2007).

Generation Time (Length): Unknown. Total Population: Unknown.

small fishes, crustaceans and insects.

It inhabits mud and rocky bottom of coastal waters,

estuaries and tidal rivers. This demersal species feeds on

© Md. Sagir Ahmed

DATA DEFICIENT

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This fish is known only from a secondary literature (Rahman and Akhter 2007) and from a single studied specimen of unknown origin of collection (Rahman 2005). It may be marine or estuarine species which enters freshwater. No data is available on its population size, population trend or threats. Therefore, it is considered as Data Deficient.

Date Assessed: 25 June 2014

History

Regional Status: It was not assessed before (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Indo-West Pacific: Western India to the Mekong, India, Thailand (Talwar and Jhingran 1991, Rainboth 1996, Rahman 2005)



Assessor: Mohammad Arshad-ul-Alam Associate Assessor/s: Mohammad Ali Azadi

Nangra bucculenta

Species ID: FI0258

Taxonomy

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Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	CYPRINIFORMES	SISORIDAE

Scientific Name: Nangra bucculenta Roberts and Ferraris, 1998 English Name: Not known Bengali Name: Not known Synonym/s: Not known Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Nangra bucculenta – a new species described from a single location of a floodplain near Jamuna River by Roberts and Ferraris (1998). However, since then, there was no published literature on the occurrence of the species in Bangladesh. Hence, the species is assessed as Data Deficient.

Date Assessed: 28 August 2015

History

Regional Status: This taxon has not been assessed in Bangladesh earlier by IUCN Red List.

Geographic Range

Global: *Nangra bucculenta* is recorded from Bangladesh (Roberts and Ferraris 1998).

Bangladesh: The species has been reported from a floodplain of the Jamuna River basin in Tangail District, in Bangladesh (Roberts and Ferraris 1998).





Nangra bucculenta

© Tyson R. Roberts & Carl J. Ferraris, Jr.

DATA DEFICIENT

<DD>

EOO: 3,967 km² AOO: 3,291 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species is found in the swift-flowing rivers, typically with turbid water and a substrate of sand or fine gravel (Ng 2010).

Assessor: Mostafa Ali Reza Hossain

Mystus armatus

Species ID: FI0141

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	BAGRIDAE

Scientific Name: Mystus armatus (Day, 1865) English Name: Kerala Mystus Bengali Name: Tangra Synonym/s: Hypselobagrus armatus Day, 1865 Macrones armatus Day, 1865 Mustus armatus Jayaram, 1977 Taxonomic Notes: None

Assessment Information:

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Mystus armatus* is one of the poorly described species among the freshwater fishes of Bangladesh. There is no adequate information on its distribution, population size and threats to assess the present status though its Extent of Occurrence and Area of Occupancy have been estimated as 33,018.93 km² and 214 km² respectively. However, it is unlikely to place this species under any Threatened Category with its insufficient data. Therefore, this species has been assessed as Data Deficient.

Date Assessed: 15 January 2015

History

Regional Status: It was considered as Data Deficient (DD) (IUCN Bangladesh 2000).

Geographic Range

Global: Its global range includes Bangladesh (Northwest



Mystus armatus

© Balaram Mahalder

DATA DEFICIENT

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part and Sylhet District), India (Wynaad Range of Hills, Western Gghats and Nagaland) and Myanmar (Rahman 1989, Talwar and Jhingran 1991).

Bangladesh: It is distributed in the northwest part and hilly water bodies in Sylhet District (Rahman 2007).

EOO: 33,019 km² **AOO**: 214 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Mystus armatus inhabits clear water in swift flowing hill streams with rocks and boulders. It consumes benthos and aquatic insects. This fish hides below rocks and boulders (Rahman 2007).

BANGLADESH IUCN RANGE MAP Mystus armatus cies Red List of egend Divisional Headquarte International Boundary Divisional Boundary stected Area Type Eco Park G Garh National Park Safari Park Wildlife Sancti ea of Occupancy Extent of Occurence Extent of Occure Out of Bangladesh Forest Cover Wetlands (Haor, B River/Sea

Assessor: Mohammed Noman Associate Assessor/s: Selina Sultana

Pseudolaguvia inornata

Species ID: FI0177

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Pseudolaguvia inornata Ng, 2005 English Name: Painted Catfish Bengali Name: Kani Tengra Synonym/s: Glyptothorax sp. Rahman, 1989 Taxonomic Notes: This species has been identified as Glyptothorax sp. by Rahman (1989). Later, Ng (2005) described as Pseudolaguvia inornata.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Pseudolaguvia inornata* has only been reported from Bangladesh by Ng (2005). But nobody else has reported its presence in the country. Information on its population size and trend, detail distribution threats, etc. are not currently available in Bangladesh. Hence, it is assessed as Data Deficient (DD).

Date Assessed: 20 February 2015

History

Regional Status: It was considered as Data Deficient (DD) (IUCN Bangladesh 2000).

Geographic Range

Global: The species is recorded from Bangladesh (Rahman 1989).



Pseudolaguvia inornata

C Heok Hee Ng

DATA DEFICIENT

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Bangladesh: It is found in Feni River and Koilla Khal in Ramghar, Chittagoang (Rahman 1989).

EOO: 768 km² **AOO:** 29 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is inhabits clear, shallow, moderately flowing stream with a predominantly sandy bottom.



Assessor: Md. Sagir Ahmed

Pseudolaguvia muricata

Species ID: FI0178

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: *Pseudolaguvia muricata* Ng 2005 English Name: Painted Catfish Gudgeon Bengali Name: Kani Tengra Synonym/s: Not Known. Taxonomic Notes: This species was described as *Glyptothorax* sp. in Bangladesh (Rahman 2005).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is insufficient information on the distribution, population abundance and trend, biology, ecological requirements and threats to the species. *Pseudolaguvia muricata* is, therefore, assessed as Data Deficient.

Date Assessed: 21 February 2015

History

Regional Status: This taxon has not been assessed earlier in Bangladesh for IUCN Redlist.

Geographic Range

Global: *Pseudolaguvia muricata* is found in Bangladesh and India (Ng 2010).

Bangladesh: The fish is stated to be present in the Brahmaputra River drainage in northern Bangladesh (Rahman and Chowdhury 2007). Several specimens





Pseudolaguvia muricata

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DATA DEFICIENT

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were collected from the Jagat River in Rangpur (Rahman and Chowdhury 2007). It has also been reported from Rangapani Khal Creek of Sylhet District (Ng 2005), Jubaneshwari River and Ghaghat River of Rangpur District, Tangam River of Dhinajpur District and Brahmaputra River drainage in Bangladesh (Ng 2010).

EOO: 33,153 km² AOO: 422 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

The fish is considered a minor predator among the benthic population of the aquatic ecosystem (Rahman and Chowdhury 2007). It inhabits clear, shallow, slow-flowing freshwater streams and adjacent rivers with a mixed substrate of sand and detritus (Ng 2005). In the Tista River, its habitat is a swift and turbid river with a substrate of sand and rocks (Ng 2010).

Assessor: Md. Monirul Islam

Pseudolaguvia ribeiroi

Species ID: FI0179

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Pseudolaguvia ribeiroi (Hora, 1921) English Name: Painted Catfish Bengali Name: Kani Tengra Synonym/s: Laguvia ribeiroi Hora, 1921 Glyptothorax ribeiroi Menon, 1954 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Pseudolaguvia ribeiroi* has been reported only from Mahananda River in Rajshahi District and Koila Khal of Ramgarh in Khagrachhori District (Rahman 2005, Alam 2007). Because of insufficient information available on its distribution, population abundance and trend, threats and other biological data, it is assessed as Data Deficient.

Date Assessed: 20 March 2015

History

Regional Status: This taxon has not been assessed earlier in Bangladesh for the IUCN Red List.

Geographic Range

Global: It is found in Bangladesh, India and Nepal (Ng 2010).

Bangladesh: The fish is reported from the Mahananda River near Tetulia and Koilla Khal on the road to Ramgarh, Khagrachhori District (Rahman 2005, Alam 2007).





Pseudolaguvia ribeiroi

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DATA DEFICIENT

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EOO: 10,674 km² **AOO:** 251 km²

Population

Generation Time (Length): Unknown.

Total Population: Information on the total population of the species is not available. However, it is stated to be rare within its distribution range in Bangladesh (Alam 2007). **Trend:** Unknown.

Habitat and Ecology

It feeds on worms and insects. This species inhabits pools and run off areas of swift freshwater streams (Alam 2007).

Assessor: Gawsia Wahidunnessa Chowdhury

Pseudolaguvia shawi

Species ID: FI0180

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	ERETHISTIDAE

Scientific Name: Pseudolaguvia shawi (Hora, 1921) English Name: Shaws Catfish Bengali Name: Kani Tengra Synonym/s: Laguvia shawi Hora, 1921 Glyptothorax shawi Menon, 1954 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Pseudolaguvia shawi* has been report from Bangladesh by Rahman (2005) and Islam (2007). But detailed information are not available on its distribution, population size, population trend, fand threats to determine its conservation status. Hence, it is assessed as Data Deficient.

Date Assessed: 20 March 2015

History

Regional Status: This species has been considered earlier in Bangladesh as Data Deficient (IUCN Bangladesh 2000).

Geographic Range

Global: This species is known from the Brahmaputra and Tista River drainage in India and Bangladesh (Islam 2007, Ng 2010).

Bangladesh: It is reported from the Tangan River in Dinajpur District and the Kangsha River in Netrokona





Pseudolaguvia shawi

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DATA DEFICIENT

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District (Rahman 2005) and occasionally found in Tista River (Islam 2007).

EOO: 15,575 km² **AOO:** 171 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It remains attached to the bottom of rivers by means of its thoracic adhesive pads. This fish feeds on small invertebrates (Islam 2007). It inhabits clear, shallow, moderately flowing freshwater streams with a predominantly sandy bottom.

Assessor: Gawsia Wahidunnessa Chowdhury
Glyptothorax cavia

Species ID: FI0165

Taxonomy

Kingdom	Phylum	Phylum Class Order		Family		
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE		

Scientific Name: Glyptothorax cavia (Hamilton, 1822) English Name: Cat Fish Bengali Name: Kani Tengra Synonym/s: Pimelodus cavia (Hamilton, 1822) Bagarius cavia (Hamilton, 1822) Glyptostemum cavia (Hamilton, 1822) Euglyptostemum lineatum (Day, 1877) Glyptothorax lineatus (Day, 1877) Taxonomic Notes: None



Glyptothorax cavia

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DATA DEFICIENT

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Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: It is found in canals, beels, haors and also in the hill streams of Bangladesh as occasionally in incidental catches and no record on its trend and population is available. Since there is little information on the biology and threat of this species, it is assessed as Data Deficient.

Date Assessed: 06 August 2014

History

Regional Status: It has not been assessed earlier in Bangladesh.

Geographic Range

Global: The species is found in Bangladesh, China, India, Myanmar, Nepal, and Pakistan (http://www.planetcatfish.com).



Bangladesh: It is rarely found in canals, beels, haors and mostly southern part of Bangladesh.

EOO: 1,82,094 km² **AOO:** 18,102 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species inhabits swift-flowing larger rivers with a substrate of sand and rocks. It is known to take only live food, like blood worms.

Assessor: Md. Golam Mustafa Associate Assessor/s: Selina Sultana and Mohammed Noman

Glyptothorax indicus

Species ID: FI0166

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Glyptothorax indicus Talwar, 1991 English Name: Sylhet Hara Bengali Name: Teli, Telchitta Synonym/s: Glyptothorax horai Shaw & Shebbeare, 1936 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Glyptothorax indicus* has been reported from some selected hill streams of Bangladesh (Ahmed 2005). It appears rarely in catches.As information on its distribution, population and potential threats are lacking, the species is assessed as Data Deficient.

Date Assessed: 20 February 2015

History

Regional Status: This taxon has been considered as Data Deficient in Bangladesh IUCN Red List 2000.

Geographic Range

Global: It has been reported from Bangladesh, India, Nepal and Pakistan (Rahman 1989, Talwar and Jhingran 1991, Ahmed 2015).

Bangladesh: Collected from the up streams of Sangu River, Bandarbans (Ahmed 2015). It might occur in other hill streams of Bangladesh too.





Glyptothorax indicus

© Md. Mizanur Rahman

DATA DEFICIENT

<DD>

EOO: 1,74,915 km² **AOO:** 3,110 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It inhabits primarily hill streams with rocky boulders and fast flowing waters (Rahman 1989, Ahmed et al. 2015). It is also occasionally found in a large river with high, turbid monsoon flow and with diverse substrate consisting of sand, mud, gravel, pebble, cobble and boulders.

Assessor: Md. Sagir Ahmed

Nangra ornata

Species ID: FI0172

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE

Scientific Name: Nangra ornata Roberts and Ferrairis, 1998 English Name: Unknown. Bengali Name: Gang Tengra Synonym/s: Unknown. Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Nangra ornata* has only been reported from northeastern Bangladesh when the species was founded based on type specimens collected from this region (Roberts and Ferrairis 1998). No other information is available on its distribution and population from Bangladesh waters. Thus, *Nangra ornata* is assessed as Data Deficient.

Date Assessed: 19 January 2015

History

Regional Status: This taxon has not yet been assessed for the IUCN Red List.

Geographic Range

Global: The species has only been reported from Bangladesh (Roberts and Ferrairis 1998).

Bangladesh: This species inhabits swift-flowing rivers typically with turbid water and a substrate of sand or fine gravel (Ng 2010).





Nangra ornata

© Tyson R. Roberts & Carl J. Ferraris, Jr.

DATA DEFICIENT

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EOO: 2,17,468 km² **AOO:** 9,400 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It has been recorded from the freshwater rivers (Hossain *et al.* 2012). This species inhabits swift-flowing rivers, typically with turbid water and a substrate of sand or fine gravel of ponds, irrigation channels and rice fields (Ng 2010).

Assessor: Gawsia Wahidunnessa Chowdhury

Pseudecheneis sulcata

Species ID: FI0173

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	MALIA CHORDATA ACTINOPT		SILURIFORMES	SISORIDAE

Scientific Name: Pseudecheneis sulcata (McClelland, 1842) English Name: Sucker throat catfish Bengali Name: Unknown. Synonym/s: Glyptosternon sulcatus McClelland, 1842 Taxonomic Notes: None

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Pseudecheneis sulcata* has been enlisted from Bangladesh by Rahman (2005) and Hossain *et al.* (2012) without any specimen or sight record from the country. So, the species is assessed as Data Deficient.

Date Assessed: 19 January 2015

History

Regional Status: The taxon has been assessed as Data Diffident (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, China, India, Myanmer and Nepal (Shrestha 1990, Rahman 2005).

Bangladesh: This species is found in the swift hill streams, typically with torrential areas and riffles, and a substrate of coarse gravel and fine sand mixed with rock in Bangladesh (Shrestha 1990, Ng 2010). According to Hossain *et al.* (2012), this species has also been found in freshwater rivers in Bangladesh.





Pseudecheneis sulcata

© Julian Dignall

DATA DEFICIENT

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EOO: 56,945 km² AOO: 821 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

This species prefers to inhabit in fast-flowing hill streams also in deep riffles and runs over gravel, cobble substrates (Shrestha 1990).

Assessor: Gawsia Wahidunnessa Chowdhury

Bagarius yarrelli

Species ID: FI0254

Taxonomy

Kingdom	Kingdom Phylum		Order	Family	
ANIMALIA	CHORDATA	ACTINOPTERYGII	SILURIFORMES	SISORIDAE	

Scientific Name: Bagarius yarrelli (Sykes, 1839) English Name: Goonch

Bengali Name: Baghair, Baghari, Bagh Machh Synonym/s: Bagrus yarrelli Sykes, 1839

Pimelodus carnaticus Jerdon, 1849 Bagarius bagarius Weber & de Beau-fort, 1913 Bagarius nieuwenhuisii Popta, 1904

Taxonomic Notes: There is a taxonomic confusion among the species of *Bagarius yarrelli*, in particular between *Bagarius bagarius* and *Bagarius yarrelli*. In the most of the reports and studies of Bangladesh, all Goonch or Devil catfish have been descirbed only as *Bagarius bagarius*. Still there is tremendous ambiguity among the reserchers about its proper identification in Bangladesh waters. Most authors in Bangladesh considered large sized one as *B. bagarius* and most data are available on the large sized one. The IUCN Redist (2000) assessed the large one as *B. yarelli* and categorized as Critically Endangered species. However, the major compilation of Bangladeshi fish, like Rahman (2005) and Alam (2007) described the large one as the *B. bagarius*.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Irrespective of the confusion surrounding the taxonomy of this species, the currently known populations of *Bagarius yarrelli* are likely caught in different parts of its range with *B. bagarius* as food fish. However, there is no confirmed information on its distribution, abundance and population size to assess the status of this species. Therefore, *Bagarius yarrelli* has been assessed as Data Deficient.





Bagarius yarrelli

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DATA DEFICIENT

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Date Assessed: 15 January 2015

History

Regional Status: The IUCN Redlist (2000) assessed the large one as *B. yarelli* and categorized as Critically Endangered species.

Geographic Range

Global: *Bagarius yarrelli* has been reported from Bangladesh, China, India and Nepal (Rainboth 1996).

Bangladesh: It is likely to be found in the upstream of the hilly rivers of Bangladesh particularly Kongsho, Somesswari of Netrokona District; the Shurma, Kushiara and Pyiang river of Sylhet; the Shangu river of Bandarban; also may found in the floodplains of Netrokona and Mymensingh Districts with *Bagarius bagarius*.

EOO: 60,537 km² **AOO:** 6,000 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

Like *Bagarius bagarius*, it prefers flowing waters and lives under stones and it is likely to be carnivorous and predatory fish feeds on small fishes, prawns. etc. This species inhabits a variety of fluviatile habitats, although it is typically associated with swift, clear rivers with a substrate of rocks and sand (Ng 2010).

Assessor: Md. Abdur Rob Mollah Associate Assessor/s: Md. Mizanur Rahman

Macrognathus aral

Species ID: FI0240

Taxonomy

Kingdom	jdom Phylum (Order	Family		
ANIMALIA	CHORDATA	ACTINOPTERYGII	PERCIFORMES	MASTACEMBELIDAE		

Scientific Name: *Macrognathus aral* (Bloch & Schneider, 1801)

English Name: One-stripe Spiny Eel

Bengali Name: Tara Baim

Synonym/s: Rhynchodella aral Bloch and Schneider, 1801 Macrognathus jammuensis Malhotra & Singh Dutta, 1975

Taxonomic Notes: *Macrognathus aral* is very poorly studied species with huge taxonomic ambiguity with other species of *Macrognathus*. Recently, its taxonomy has been confirmed through DNA barcoding of mitochondrial Cytochrome Oxydase I (COI) gene (Ahmed *et al.* 2015).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: *Macrognathus aral* has been noted from the country without sufficient published or available information covering its population and distributional range. So, the species is assessed as Data Deficient.

Date Assessed: 15 January 2015

History

Regional Status: It was not assessed in the Red List of IUCN Bangladesh 2000.

Geographic Range

Global: Macrognathus aral is widely distributed throughout





Macrognathus aral

© Md. Mizanur Rahman

DATA DEFICIENT

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Bangladesh, India, Nepal and Pakistan. It is present in most of the Ganges drainage but scarcer in numbers in Nepal (Vishwanath 2010).

Bangladesh: There is no particular literature about its distribution in the country except in the Fishbase database and in a checklist of riverine fish prepared by Hossain *et al.* (2012). However, it may suspected to be found in riverine waterbodies with other *Macrognathus* species particularly in the Brahmaputra, Padma, Jamuna rivers and its adjacent floodplain areas.

EOO: 50,252 km² **AOO:** 15,219 km²

Population

Generation Time (Length): Unknown. Total Population: Unknown. Trend: Unknown.

Habitat and Ecology

It is a nocturnal feeder, consuming insects and worms in lowland habitats and at moderate elevation in all the larger river systems (Vishwanath 2010) outside Bangladesh. *M. aral* occurs in running and stagnant waters. Found in fresh and brackish waters and deltas of large rivers, common in ponds and slow flowing rivers with vegetation in plains. Inhabits still waters with silt or mud substrate. Believed to be common in rice paddy fields (Vishwanath 2010).

Assessor: Md. Abdur Rob Mollah

Chelonodon patoca

Species ID: FI0250

Taxonomy

Kingdom Phylum		Class	Order	Family	
ANIMALIA	CHORDATA	ACTINOPTERYGII	TETRAODONTIFORMES	TETRAODONTIDAE	

Scientific Name: Chelonodon patoca (Hamilton, 1822) English Name: Milkspotted Puffer, Marbled Toad, Gangetic Puffer Bengali Name: Potka, Tepa Synonym/s: Tetraodon patoca Hamilton, 1822 Tetrodon dissutidens Cantor, 1849 Tetraodon kappa Bleeker, 1850 Taxonomic Notes: The species was first described by

Hamilton (1822) as *Tetraodon patoca.*

Assessment Information



Chelonodon patoca

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DATA DEFICIENT

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Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is assessed as Data Deficient because there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution. Its biology and toxicity are well known but data on abundance and/or distribution are lacking.

Date Assessed: 17 September 2014

History

Regional Status: It was assessed as Not Threatened (IUCN Bangladesh 2000).

Geographic Range

Global: Its range includes Indo-Pacific: East Africa to the Admiralty Islands, New Britain and Trobiand Islands, north to China, south to northern Australia.



Bangladesh: It is conjectured to be found around the mouths of rivers or in brackish mangrove estuaries (Sundarbans) (Huda and Haque 2003) and sometimes it penetrates freshwater but is never found more than a few km from the sea.

EOO: 77,285 km² **AOO:** 16,594 km²

Population

Generation Time (Length): Unknown. Total Population: There is no information on the population and its trend for this species. Trend: Unknown.

Habitat and Ecology

It is an omnivorous and anadromous fish. Its skin, muscle, liver and gonads are known to be highly toxic and contains paralytic shell fish poison (PSP) (Mahmud *et al.* 2001, Noguchi and Ebesu 2001, Ahmed *et al.* 2002). It inhabits coastal waters and enters the lower reaches of rivers and lagoons (Talwar and Jhingran 1991). It occurs in sand and mudflats, usually in estuaries.

Assessor: Md. Sagir Ahmed

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A boy with harvested fish

APPENDICES



Appendix-i

Status of Freshwater Fishes in Bangladesh (arranged in taxonomic order) Status Code: EX- Extinct, EW- Extinct in the Wild, RE- Regionally Extinct, CR- Critically Endangered, EN- Endangered, VU- Vulnerable, NT- Near Threatened, LC- Least Concern, DD- Data Deficient, NE- Not Evaluated

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
1	Anguilliformes	Anguillidae	Anguilla bengalensis	Indian Mottled Eel, Giant Molted Eel, Mottled Eel	VU	NT	R	FI0046	93
2	Anguilliformes	Ophichthidae	Pisodonophis boro	Rice-paddy Eel, Bengal's Snake-Eel, Snake Eel	LC	LC	ET, R	FI0047	151
3	Anguilliformes	Ophichthidae	Pisodonophis cancrivorus	Estuary Snake Eel, Longfin Snake Eel, Snake Eel	LC	NE	ET	FI0048	152
4	Beloniformes	Adrianichthyidae	Oryzias melastigma	ET Ricefish	LC	LC	ET, PP	FI0189	154
5	Beloniformes	Adrianichthyidae	Oryzias carnaticus	Spotted Ricefish	DD	LC	ET, FP	FI0190	276
6	Beloniformes	Adrianichthyidae	Oryzias dancena	Indian Ricefish/Ricefish	DD	LC	ET, FP	FI0191	277
7	Beloniformes	Hemiramphidae	Dermogenus brachvnotopterus	Gangetic Halfbeak	DD	-	R, ET	FI0245	278
8	Beloniformes	Hemiramphidae	Dermogenys pusillus	Wrestling Halfbeak	LC	-	R, ET	FI0246	155
9	Beloniformes	Hemiramphidae	Hyporhamphus limbatus	Congaturi halfbeak	LC	NE	R, ET	FI0247	156
10	Clupeiformes	Clupeidae	Anodontostoma chacunda	Shortnosed Gizzard Shad, Chacunda Gizzard Shad	LC	NE	ET	FI0049	157
11	Clupeiformes	Clupeidae	Corica soborna	Ganges River-sprat	LC	LC	R, FP	FI0050	158
12	Clupeiformes	Clupeidae	Gonialosa manmina	Ganges River Gizzard Shad	LC	LC	R, ET	FI0051	159
13	Clupeiformes	Clupeidae	Hilsa kelee	Kelee Shad, Five Spot Herring	LC	NE	Migratory	FI0052	160
14	Clupeiformes	Clupeidae	Nematalosa nasus	Bloch's Gizzard Shad, Long- ray Bony Bream, Thread- finned Gizzard Shad	LC	LC	ET,R	F10053	161
15	Clupeiformes	Clupeidae	Tenualosa ilisha	River Shad, Hilsha Shad	LC	LC	Migratory	FI0054	162
16	Clupeiformes	Clupeidae	Tenualosa toli	Toli Shad, Shad	LC	NE	ET	FI0055	163
17	Clupeiformes	Pristigasteridae	llisha filigera	Coromondel Ilish, Jewelled Ilisha, Jewelled Shad, Big- eyed Herring, Big Eye Shad	LC	NE	Migra- tory, ET	F10056	169
18	Clupeiformes	Pristigasteridae	llisha megaloptera	Bigeye Ilisha	LC	NE	Migra- tory, ET	FI0057	170
19	Clupeiformes	Pristigasteridae	llisha melastoma	Indian Ilisha	DD	NE	Migra- tory, ET	FI0058	279
20	Clupeiformes	Pristigasteridae	Pellona ditchela	Indian Pellona	LC	NE	R,ET	FI0059	171
21	Clupeiformes	Engraulidae	Coilia dussumieri	Gold Spotted Grenadier Anchovy	LC	NE	ET, R	FI0060	164
22	Clupeiformes	Engraulidae	Coilia ramcarati	Grenadier Anchovy, Ramcarat, Tapetail Anchovy, Rat-tailed Anchovy	LC	NE	ET, R	FI0061	165
23	Clupeiformes	Clupeidae	Gudusia chapra	Indian river shad	VU	LC	R, FP	FI0062	94
24	Clupeiformes	Engraulidae	Setipinna phasa	Gangetic Hairfin Anchovy	LC	LC	R,ET	FI0063	166
25	Clupeiformes	Engraulidae	Setipinna taty	Scaly Hairfin Anchovy	LC	NE	R,ET	FI0064	167

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
26	Clupeiformes	Engraulidae	Thryssa purava	Oblique-Jaw Thryssa, Gangetic Anchovy	LC	NE	R, ET	FI0065	168
27	Cypriniformes	Cyprinidae	Amblypharyngodon microlepis	Indian Carplet, Carplet	LC	NE	FP, R	FI0014	177
28	Cypriniformes	Cyprinidae	Amblypharyngodon mola	Mola Carplet, Pale Carplet	LC	LC	FP, R	FI0015	178
29	Cypriniformes	Cyprinidae	Chela cachius	Silver hatchlet barb	VU	LC	R, FP	FI0018	99
30	Cypriniformes	Cyprinidae	Esomus danricus	Flying barb	LC	LC	FP	FI0025	179
31	Cypriniformes	Cyprinidae	Osteobrama cotio	Cotio	NT	LC	R, FP	FI0026	127
32	Cypriniformes	Cyprinidae	Rasbora daniconius	Blackline Rasbora, Common Rasbora, Slender Rasbora Slender Barb, Striped Rasbora	LC	LC	FP	FI0027	180
33	Cypriniformes	Cyprinidae	Rasbora rasbora	Gangetic scissortail rasbora	NT	LC	FP	FI0028	129
34	Cypriniformes	Cyprinidae	Salmostoma argentea	Silver Razorbelly Minnow	DD	LC	R	FI0029	284
35	Cypriniformes	Cyprinidae	Salmophasia bacaila	Large Razorbelly Minnow	LC	LC	R	FI0030	181
36	Cypriniformes	Cyprinidae	Salmostoma phulo	Finescale Razorbelly Minnow	NT	LC	R,FP	FI0031	130
37	Cypriniformes	Cyprinidae	Chela laubuca	Indian Glass Barb	LC	NE	FP, R	FI0032	182
38	Cypriniformes	Cyprinidae	Aspidoparia jaya	Jaya	LC	NE	R	FI0039	183
39	Cypriniformes	Cyprinidae	Aspidoparia morar	Aspidopara	VU	NE	R	FI0040	97
40	Cypriniformes	Cyprinidae	Barilius barila	Barred baril	DD	LC	R	FI0041	285
41	Cypriniformes	Cyprinidae	Barilius shacra	Shacra Baril	LC	LC	R	FI0042	184
42	Cypriniformes	Cyprinidae	Barilius tileo	Tileo baril, Morari	EN	LC	R	FI0043	65
43	Cypriniformes	Cyprinidae	Barilius barna	Barna Baril	EN	LC	R	FI0066	63
44	Cypriniformes	Cyprinidae	Barilius bendelisis	Hamilton's Baril, Hill Trout	EN	LC	R, HS	FI0067	64
45	Cypriniformes	Cyprinidae	Barilius vagra	Vagra Baril, Hill Trout	EN	LC	R	FI0068	66
46	Cypriniformes	Cyprinidae	Megarasbora elanga	Bengala Barb	EN	LC	R	FI0069	75
47	Cypriniformes	Cyprinidae	Catla catla	Catla	LC	NE	R, Migra-	FI0070	185
48	Cypriniformes	Cyprinidae	Chagunius chagunio	Chaguni	VU	LC	R	FI0071	98
49	Cypriniformes	Cyprinidae	Cirrhinus cirrhosus	Mrigal Carp, Mrigal.	NT	VU	R	FI0072	123
50	Cypriniformes	Cyprinidae	Cirrhinus reba	Reba	NT	LC	R, FP	FI0073	124
51	Cypriniformes	Cyprinidae	Crossocheilus latius	Gangetic Latia, Hill-stream Carp	EN	LC	HS, R	FI0074	70
52	Cypriniformes	Cyprinidae	Danio dangila	Dangila Danio, Moustached Danio, Olive danio	VU	LC	HS	FI0075	100
53	Cypriniformes	Cyprinidae	Danio rerio	Zebra Danio	NT	LC	HS	FI0076	125
54	Cypriniformes	Cyprinidae	Devario aequipinnatus	Giant Danio	DD	LC	HS	FI0077	286
55	Cypriniformes	Cyprinidae	Devario anomalus	Anomalus Zebra	EN	VU	HS	FI0078	71
56	Cypriniformes	Cyprinidae	Devario devario	Sind Danio.	LC	LC	FP	FI0079	186
57	Cypriniformes	Cyprinidae	Esomus lineatus	Stripped Flying Barb	DD	NE	R	FI0080	287
58	Cypriniformes	Cyprinidae	Garra annandalei	Annandale Garra, Tunga Garra, Log Sucker, Stone Roller	EN	LC	HS	FI0081	72
59	Cypriniformes	Cyprinidae	Garra gotyla	Gotyla, Sucker Head	EN	LC	HS	FI0082	73
60	Cypriniformes	Cyprinidae	Labeo angra	Angra Labeo	LC	LC	R	FI0083	187

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
61	Cypriniformes	Cyprinidae	Labeo ariza	Ariza Labeo	VU	LC	R	FI0084	101
62	Cypriniformes	Cyprinidae	Labeo bata	Bata Labeo	LC	LC	R	FI0085	188
63	Cypriniformes	Cyprinidae	Labeo boga	Boga Labeo	CR	LC	R	FI0086	51
64	Cypriniformes	Cyprinidae	Labeo boggut	Boggut Labeo	VU	LC	R	FI0087	102
65	Cypriniformes	Cyprinidae	Labeo calbasu	Orangefin labeo, Black rohu	LC	LC	R, FP	FI0088	189
66	Cypriniformes	Cyprinidae	Bangana dero	Kalabans	DD	LC	R	FI0089	288
67	Cypriniformes	Cyprinidae	Labeo dyocheilus	Kalabans	DD	LC	R	FI0090	289
68	Cypriniformes	Cyprinidae	Labeo fimbriatus	Fringed-lipped peninsula carp	DD	LC	R	FI0091	290
69	Cypriniformes	Cyprinidae	Labeo gonius	Kuria labeo	NT	LC	R	FI0092	126
70	Cypriniformes	Cyprinidae	Labeo nandina	Nandi Labeo	CR	NT	R	FI0093	52
71	Cypriniformes	Cyprinidae	Labeo pangusia	Pangusia Labeo	EN	NT	R	FI0094	74
72	Cypriniformes	Cyprinidae	Labeo rohita	Rohu	LC	LC	R, Migra- tory	FI0095	190
73	Cypriniformes	Cyprinidae	Oreichthys cosuatis	Cosuatis Barb	EN	NE	Fp	FI0096	77
74	Cypriniformes	Cyprinidae	Osteochilus hasseltii	Bonylip barb; Hard-lipped Barb; Silvershark Minnow	VU	LC	HS	FI0097	103
75	Cypriniformes	Cyprinidae	Puntius chola	Chola barb, Green barb, Swamp barb	LC	LC	FP	FI0098	191
76	Cypriniformes	Cyprinidae	Pethia conchonius	Red barb, Rosy barb	LC	LC	FP	FI0099	192
77	Cypriniformes	Cyprinidae	Pethia gelius	Golden dwarf barb	NT	LC	FP	FI0100	128
78	Cypriniformes	Cyprinidae	Pethia guganio	Glass barb	LC	LC	FP	FI0101	193
79	Cypriniformes	Cyprinidae	Pethia phutunio	Spotted sail barb, Dwarf barb, Pygmy barb	LC	LC	FP	FI0102	194
80	Cypriniformes	Cyprinidae	Puntius puntio	Puntio barb	DD	NE	FP	FI0103	291
81	Cypriniformes	Cyprinidae	Systomus sarana	Olive barb, Peninsular olive barb	NT	LC	FP	FI0104	132
82	Cypriniformes	Cyprinidae	Puntius sophore	Spotfin swamp barb, Pool barb, Stigma barb	LC	LC	FP	FI0105	195
83	Cypriniformes	Cyprinidae	Puntius terio	One spot barb, Teri barb	LC	LC	FP, HS	FI0106	196
84	Cypriniformes	Cyprinidae	Pethia ticto	Two-spot Barb, Firefin Barb, Ticto Barb	VU	LC	FP, HS	FI0107	104
85	Cypriniformes	Cyprinidae	Raiamas bola	Trout barb; Bengal trout	EN	LC	R	FI0108	78
86	Cypriniformes	Cyprinidae	Raiamas guttatus	Bengal trout; Burmese trout	DD	LC	R	FI0109	292
87	Cypriniformes	Cyprinidae	Salmostoma sardinella	Sardinella Razorbelly Minnow	DD	LC	R	FI0110	293
88	Cypriniformes	Cyprinidae	Securicula gora	-	NT	LC	FP	FI0111	131
89	Cypriniformes	Cyprinidae	Tor putitora	Putitor mahseer, Golden mahseer	EN	NT	R	FI0112	79
90	Cypriniformes	Cyprinidae	Tor tor	Tor Mahsheer	CR	NT	R	FI0113	53
91	Cypriniformes	Cyprinidae	Neolissochilus hexagonolepis	Copper mahseer	EN	NT	HS	FI0114	76
SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
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92	Cypriniformes	Psilorhynchidae	Psilorhynchus balitora	Balitora Minnow	LC	LC	HS	FI0115	198
93	Cypriniformes	Psilorhynchidae	Psilorhynchus gracilis	Rainbow Minnow	NT	LC	HS	FI0116	133
94	Cypriniformes	Psilorhynchidae	Psilorhynchus rahmani	Hill stream Minnow	DD	DD	HS	FI0117	296
95	Cypriniformes	Psilorhynchidae	Psilorhynchus sucatio	River Stone Carp, Sucatio Minnow	NT	LC	HS	FI0118	134
96	Cypriniformes	Balitoridae	Acanthocobitis botia	Zipper Loach, Sand Loach, Mottled Loach	LC	LC	FP	FI0119	172
97	Cypriniformes	Balitoridae	Acanthocobitis zonaltemans	River Loach, Creek Loach	LC	LC	FP	FI0120	173
98	Cypriniformes	Balitoridae	Balitora brucei	Gray's Stone Loach, Rock Carp	DD	NT	HS	FI0121	280
99	Cypriniformes	Balitoridae	Schistura sikmaiensis	Not known	EN	LC	HS	FI0122	62
100	Cypriniformes	Balitoridae	Schistura beavani	Creek Loach	DD	LC	HS	FI0123	281
101	Cypriniformes	Balitoridae	Schistura corica	Polka Dotted Loach	CR	LC	HS	FI0124	49
102	Cypriniformes	Balitoridae	Schistura savona	Savona Loach, Half Banded Loach, Bicolor Loach	NT	LC	HS	FI0125	121
103	Cypriniformes	Balitoridae	Schistura scaturigina	Victory Loach	EN	LC	HS	FI0126	61
104	Cypriniformes	Cobitidae	Botia dario	Necktie Loach, Queen Loach, Bengal Loach	EN	LC	FP	FI0127	67
105	Cypriniformes	Cobitidae	Botia dayi	Hora Loach, Botya Loach	EN	NE	R	FI0128	68
106	Cypriniformes	Cobitidae	Botia lohachata	Y-loach, Reticulate Loach	EN	NE	R	FI0129	69
107	Cypriniformes	Cobitidae	Botia rostrata	Gangetic Loach	DD	VU	R	FI0130	282
108	Cypriniformes	Cobitidae	Lepidocephalichthys berdmorei	Burmese Loach	LC	LC	FP	FI0131	174
109	Cypriniformes	Cobitidae	Lepidocephalichthys annandalei	Annaldale Loach	VU	LC	FP	FI0132	95
110	Cypriniformes	Cobitidae	Lepidocephalichthys guntea	Peppered Loach, Guntea Loach	LC	LC	FP	FI0133	175
111	Cypriniformes	Cobitidae	Lepidocephalichthys irrorata	Loktak Loach	VU	LC	R	FI0134	96
112	Cypriniformes	Cobitidae	Neoeucirrhichthys maydelli	Goalpara Loach	CR	LC	HS	FI0135	50
113	Cypriniformes	Cobitidae	Pangio oblonga	Java Loach, Cinnamon Loach	DD	-	R	FI0136	283
114	Cypriniformes	Cobitidae	Pangio pangia	Pangia Coolie-Ioach, Cinnamon Loach	LC	LC	R	FI0137	176
115	Cypriniformes	Cobitidae	Canthophrys gongota	Gongota Loach.	NT	LC	R	FI0138	122
116	Cypriniformes	Cyprinidae	Salmostoma acinaces	Silver razorbelly minnow	LC	LC	R	FI0251	197
117	Cypriniformes	Cyprinidae	Danio annulosus	Chain Danio	DD	NE	R	FI0256	294
118	Cypriniformes	Cyprinidae	Laubuca brahmaputraensis	-	DD	NE	R	FI0257	295
119	Cyprinodonti- formes	Aplocheilidae	Aplocheilus panchax	Blue panchax, Panchax minnow	LC	LC	FP	FI0188	199
120	Mugiliformes	Mugilidae	Paramugil parmata	Broad-mouthed Mullet, Giantscale Mullet	LC	NE	ET	FI0209	203
121	Mugiliformes	Mugilidae	Liza parsia	Goldspot Mullet, Brackish Water Mullet, Grey Mullet	LC	NE	ET	FI0210	200
122	Mugiliformes	Mugilidae	Liza subviridis	Greenback Mullet	LC	NE	ET	FI0211	201
123	Mugiliformes	Mugilidae	Mugil cephalus	Flathead Mullet, Stripped Mullet, Black Mullet, Fatback, Bright Mullet, Bully Mullet, Callifaver Mullet, Common Grey Mullet	LC	LC	ET	FI0212	202

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
124	Mugiliformes	Mugilidae	Rhinomugil corsula	Corsula, Kakunda, Corsula Mullet	LC	LC	R, ET	FI0213	204
125	Mugiliformes	Mugilidae	Sicamugil cascasia	Yellowtail Mullet	VU	LC	ET	FI0214	105
126	Osteoglos- siformes	Notopteridae	Chitala chitala	Humped Featherback, Clown Knife Fish	EN	NT	R	FI0044	80
127	Osteoglos- siformes	Notopteridae	Notopterus notopterus	Grey Featherback, Freshwater Knife Fish	VU	LC	FP	FI0045	106
128	Perciformes	Gobiidae	Glossogobius giuris	Fresh Water Goby, Flat- headed Goby, Forktongue Goby, Gangetic Tank Goby	LC	LC	R,FP,ET	FI0001	216
129	Perciformes	Gobiidae	Brachygobius nunus	Short goby, Golden-banded goby, Bumblebee goby, Buzz goby	LC	NE	ET, Mi- gratory	F10002	217
130	Perciformes	Channidae	Channa barca	Barca Snakehead	CR	DD	FP	FI0003	54
131	Perciformes	Channidae	Channa gachua	Dwarf Snakehead	LC	LC	FP	F10004	209
132	Perciformes	Channidae	Channa marulius	Giant Snakehead, Great Snakehead	EN	LC	FP	FI0005	81
133	Perciformes	Channidae	Channa orientalis	AsiaticSnakehead, Walking Snakehead	LC	LC	FP	F10006	210
134	Perciformes	Channidae	Channa punctatus	Spotted Snakehead, Green Snakehead	LC	LC	FP	FI0007	211
135	Perciformes	Channidae	Channa striatus	Snakehead Murrel, Stripped or bBanded Snakehead, Common Snakehead, Asian Snakehead, Chevron Snakehead	LC	LC	FP	F10008	212
136	Perciformes	Gobiidae	Apocryptes bato	Goby	LC	LC	ET	FI0016	218
137	Perciformes	Gobiidae	Oxyurichthys microlepis	Maned Goby	LC	NE	R,ET	FI0017	219
138	Perciformes	Gobiidae	Awaous grammepomus	Scribbled goby	VU	LC	R,ET	FI0019	107
139	Perciformes	Gobiidae	Awaous guamensis	Scribbled Goby, Pacific river goby	LC	LC	R,ET	FI0020	220
140	Perciformes	Gobiidae	Gobiopsis macrostoma	Longjaw gobi,	DD	NE	R, ET	FI0021	301
141	Perciformes	Badidae	Badis badis	Badis, Blue perch, Dwarf chameleon fish, Mud perch	NT	LC	FP, HS	FI0022	137
142	Perciformes	Gobiidae	Boleophthalmus boddarti	Boddart's Goggle-eyed Goby, Blue Spotted Mud skipper, Mudskipper	LC	LC	R,ET	FI0033	221
143	Perciformes	Gobiidae	Eugnathogobius oligactis	Tiger Goby	VU	LC	R,ET	FI0034	108
144	Perciformes	Gobiidae	Gobiopterus chuno	Glass Goby	LC	Unknown	R, ET	FI0035	222
144	Perciformes	Badidae	Badis chittagongis	Not known	DD	DD	HS	FI0036	299
146	Perciformes	Ambassidae	Ambassis nalua	Scalloped Perchlet, Scalloped Glassfish	DD	LC	FP	FI0199	297
147	Perciformes	Ambassidae	Chanda nama	Elongate Glass-perchlet Asian Glass Fish	LC	LC	FP	FI0200	205
148	Perciformes	Ambassidae	Pseudambassis baculis	Himalayan Glassy Perchlet, Indian Glassy Fish.	NT	LC	FP	FI0201	135
149	Perciformes	Ambassidae	Pseudambassis lala	Highfin Glassy Perchlet	LC	NE	FP	FI0202	206
150	Perciformes	Ambassidae	Pseudambassis ranga	Indian Glassy Fish, Indian Glass Perch	LC	LC	FP	FI0203	207

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
151	Perciformes	Sillaginidae	Sillaginopsis panijus	Flathead sillago and Gangetic sillago	LC	NE	ET	FI0204	244
152	Perciformes	Sciaenidae	Johnius coitor	Big-eyed Jewfish, Coitor Croacker, Ganges Croaker.	LC	LC	ET, R, FP	FI0205	242
153	Perciformes	Sciaenidae	Macrospinosa cuja	Cuja Bola	NT	NE	ET, R	FI0206	138
154	Perciformes	Sciaenidae	Otolithoides pama	Pama Croaker, Pama	LC	NE	ET, R	FI0207	243
155	Perciformes	Nandidae	Nandus nandus	Mottled Nandus, Mud Perch	NT	LC	FP	FI0208	136
156	Perciformes	Polynemidae	Polynemous paradiseus	Paradise Threadfin	LC	NE	ET	FI0215	241
157	Perciformes	Gobiidae	Parapocryptes batoides	Gobi, Mudskipper	LC	NE	ET, R	FI0216	223
158	Perciformes	Gobiidae	Periophthalmodon schlosseri	Giant Mudskipper	LC	NE	ET, R	FI0217	224
159	Perciformes	Gobiidae	Periophthalmus barbarous	Atlantic Mudskipper	LC	LC	ET, R	FI0218	225
160	Perciformes	Gobiidae	Periophthalmus koelreuteri	Mudskipper	LC	NE	ET	FI0219	226
161	Perciformes	Gobiidae	Pseudapocryptes elongatus	Lanceolate goby, Goby, Mud skipper	LC	LC	ET, R	FI0220	227
162	Perciformes	Gobiidae	Scartelaos histophorus	Walking goby	LC	NE	ET, R	FI0221	228
163	Perciformes	Gobiidae	Stigmatogobius sadanundio	Knight Goby	LC	NE	ET, R	FI0222	229
164	Perciformes	Gobiidae	Odontamblyopus rubicundus	Rubicundus Eelgoby	LC	NE	ET, R	FI0223	230
165	Perciformes	Gobiidae	Taenioides buchanani	Burmese Gobyeel	LC	NE	ET	FI0224	231
166	Perciformes	Gobiidae	Taenioides cirratus	Bearded Worm Goby	LC	NE	ET, R	FI0225	232
167	Perciformes	Gobiidae	Trypauchen vagina	Burrowing Goby	LC	NE	ET	FI0226	233
168	Perciformes	Eleotridae	Butis butis	Crimson-tipped Gudgeon, Duckbill Sleeper, Crimson- tipped Flathead-sleeper	LC	LC	ET, R	FI0227	213
169	Perciformes	Eleotridae	Butis melanostigma	Black spotted Gudgeon, black spot Sleeper,	LC	NE	ET, R	FI0228	214
170	Perciformes	Eleotridae	Eleotris fusca	Dusky sleeper, Brown Spinecheek Gudgeon	LC	LC	ET, R	FI0229	215
171	Perciformes	Eleotridae	Eleotris lutea	Lutea sleeper	DD	NE	ET, R	FI0230	300
172	Perciformes	Anabantidae	Anabas testudineas	The Climbing Perch, Climbing Bass, Walking Fish	LC	DD	FP	FI0231	208
173	Perciformes	Osphronemidae	Pseudosphromenus cupanus	Spiketail paradisefish, Red eyed Spiketail paradise fish	LC	LC	ET	FI0232	234
174	Perciformes	Osphronemidae	Trichogaster fasciata	Banded gourami, Stripled gourami, Giant gourami	LC	LC	FP	FI0233	235
175	Perciformes	Osphronemidae	Trichogaster labiosus	Thick-lipped Gourami	LC	LC	FP	FI0234	236
176	Perciformes	Osphronemidae	Trichogaster lalius	Dwarf gourami, Red gourami	LC	LC	FP	FI0235	237
177	Perciformes	Osphronemidae	Ctenops nobilis	Indian Paradise fish, Frail Gourami, Indian Gourami.	LC	NT	F:P	FI0236	238
178	Perciformes	Osphronemidae	Trichogaster chuna	Honey Gourami, Dwarf Gourami, Sunset Gourami.	LC	LC	FP	FI0237	239
179	Perciformes	Osphronemidae	Trichopsis vittata	Croaking Gourami	LC	LC	FP, R	FI0238	240
180	Perciformes	Mastacembeli- dae	Macrognathus aral	One-stripe Spiny Eel	DD	LC	FP	FI0240	313

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
181	Perciformes	Belonidae	Xenentodon cancila	Freshwater Garfish	LC	NE	FP	FI0244	153
182	Perciformes	Hemiramphidae	Zenarchopterus ectuntio	Ectuntio Halfbeak	DD	LC	ET	FI0248	275
183	Perciformes	Anabantidae	Anabas cobojius	Gangetic Koi	DD	DD	FP, R	FI0255	298
184	Pleuronecti- formes	Cynoglossidae	Cynoglossus cynoglossus	Bengal Tongue Sole, Gangetic Tongue-Sole, Indian Turbot, Tonguefish, Tonguesole	LC	NE	ET,R	F10023	245
185	Pleuronecti- formes	Cynoglossidae	Cynoglossus lingua	Long tongue sole	LC	NE	ET,R	FI0024	246
186	Pleuronecti- formes	Cynoglossidae	Cynoglossus arel	Largescale Tonguesole	LC	NE	ET,R	FI0037	247
187	Pleuronecti- formes	Cynoglossidae	Paraplagusia bilineata	Fingerlip Tonguesole, Doublelined Tonguesole, Lemon Tonguesole	LC	NE	ET	F10038	248
188	Scorpaeni- formes	Platycephalidae	Platycephalus indicus	Bar-tailed Flathead, Bartail Flathead, Flathead, Gobi, Indian Flathead, Indo-Pacific Flathead	LC	DD	ET,R	FI0198	249
189	Siluriformes	Sisoridae	Nangra bucculenta	-	DD	DD	R	FI0258	302
190	Siluriformes	Schilbeidae	Eutropiichthys murius	Indus garua	LC	LC	R	FI0009	260
191	Siluriformes	Schilbeidae	Eutropiichthys vacha	Batchwa Vacha, Bacha	LC	LC	R	FI0010	261
192	Siluriformes	Schilbeidae	Pseudeutropius atherinoides	Indian Potasi	LC	LC	R, FP	FI0011	262
193	Siluriformes	Schilbeidae	Silonia silondia	Silond catfish, Silonida Vacha	LC	LC	R,ET	FI0012	263
194	Siluriformes	Bagridae	Batasio batasio	Titsta Batasio	NT	LC	R	FI0013	139
195	Siluriformes	Bagridae	Batasio tengana	Dwarf Catfish	EN	LC	R	FI0139	82
196	Siluriformes	Bagridae	Hemibagrus menoda	Menoda Catfish	NT	LC	R	FI0140	140
197	Siluriformes	Bagridae	Mystus armatus	Kerala Mystus	DD	LC	R	FI0141	303
198	Siluriformes	Bagridae	Mystus bleekeri	Bleeker's Mystus, Day's Mystus	LC	LC	FP	FI0142	252
199	Siluriformes	Bagridae	Mystus cavasius	Gangetic Mystus	NT	LC	R	FI0143	141
200	Siluriformes	Bagridae	Mystus gulio	Long-whiskered Catfish, Gulio Catfish	NT	LC	ET, R	FI0144	142
201	Siluriformes	Bagridae	Mystus tengara	Tengara Mystus	LC	LC	FP	FI0145	253
202	Siluriformes	Bagridae	Mystus vittatus	Striped Dwarf Catfish, Asian Striped Catfish	LC	LC	FP	FI0146	254
203	Siluriformes	Bagridae	Rama chandramara	Asian Cory, Golden Shadow Catfish, Hovering Catfish, Humming Bird Catfish	LC	LC	FP	FI0147	255
204	Siluriformes	Bagridae	Rita rita	Rita	EN	LC	R	FI0148	83
205	Siluriformes	Bagridae	Sperata aor	Long-whiskered Catfish	VU	LC	R	FI0149	110
206	Siluriformes	Bagridae	Sperata seenghala	Giant River-catfish	VU	LC	R	FI0150	111
207	Siluriformes	Siluridae	Ompok bimaculatus	Butter Catfish, Two Spot Glass Catfish	EN	NT	FP	FI0151	87
208	Siluriformes	Siluridae	Ompok pabda	Pabda catfish, two stripe Gulper catfish	EN	NT	FP	FI0152	88
209	Siluriformes	Siluridae	Ompok pabo	Pabo Catfish	CR	NT	FP	FI0153	55

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
210	Siluriformes	Siluridae	Wallago attu	Freshwater shark	VU	NT	R, Migra- tory	FI0154	112
211	Siluriformes	Schilbeidae	Ailia coila	Gangetic Ailia	LC	NT	R, FP	FI0155	264
212	Siluriformes	Schilbeidae	Ailia punctata	Jamuna Ailia	LC	NE	R, FP	FI0156	265
213	Siluriformes	Schilbeidae	Clupisoma garua	Garua Bacha, Gagra	EN	NE	R	FI0157	86
214	Siluriformes	Pangasiidae	Pangasius pangasius	Pungas, Yellowtail Catfish, Pungas Catfish	EN	LC	R, ET	FI0158	89
215	Siluriformes	Amblycipitidae	Amblyceps mangois	Indian Torrent Catfish.	LC	LC	HS	FI0159	250
216	Siluriformes	Amblycipitidae	Amblyceps laticeps	Indian Torrent Catfish.	VU	LC	HS	FI0160	109
217	Siluriformes	Sisoridae	Bagarius bagarius	Gangetic Goonch, Devil catfish, Fishbase name: dwarf Goonch	CR	NT	R	FI0161	56
218	Siluriformes	Sisoridae	Gagata cenia	Indian gagata	LC	LC	R	FI0162	266
219	Siluriformes	Sisoridae	Gagata youssoufi	Gangetic gagata, Indian gagata, Clown catfish	NT	LC	R	FI0163	144
220	Siluriformes	Sisoridae	Gagata gagata	Gangetic Gagata	LC	LC	R	FI0164	267
221	Siluriformes	Sisoridae	Glyptothorax cavia	Cat fish	DD	LC	R, FP	FI0165	308
222	Siluriformes	Sisoridae	Glyptothorax indicus Talwar, 1991	Sylhet Hara	DD	LC	R	FI0166	309
223	Siluriformes	Sissoridae	Glyptothorax telchitta	Copper Catfish	VU	LC	R	FI0167	113
224	Siluriformes	Sisoridae	Gogangra viridescens	Huddah Nangra	LC	LC	R	FI0168	268
225	Siluriformes	Sisoridae	Hara hara	Kosi Hara	LC	LC	R, FP	FI0169	269
226	Siluriformes	Erethistidae	Hara jerdoni	Sylhet Hara	LC	LC	R, FP	FI0170	257
227	Siluriformes	Sisoridae	Nangra nangra	Kosi Nangra	LC	LC	R	FI0171	270
228	Siluriformes	Sisoridae	Nangra ornata	-	DD	DD	R	FI0172	310
229	Siluriformes	Sisoridae	Pseudecheneis sulcata	Sucker throat catfish	DD	LC	R	FI0173	311
230	Siluriformes	Sisoridae	Sisor rabdophorus	Sisor Catfish	CR	LC	R	FI0174	57
231	Siluriformes	Erethistidae	Conta conta	Conta catfish	NT	NE	R	FI0175	143
232	Siluriformes	Erethistidae	Erethistes pusillus	Moth Catfish	LC	NE	R, HS	FI0176	258
233	Siluriformes	Erethistidae	Pseudolaguvia inomata	Painted catfish	DD	DD	R	FI0177	304
234	Siluriformes	Erethistidae	Pseudolaguvia muricata	Painted Catfish	DD	DD	R	FI0178	305
235	Siluriformes	Erethistidae	Pseudolaguvia ribeiroi	Painted Catfish	DD	LC	R	FI0179	306
236	Siluriformes	Erethistidae	Pseudolaguvia shawi	Shaws Catfish	DD	DD	R	FI0180	307
237	Siluriformes	Clariidae	Clarias batrachus	Walking Catfish, Clarias Catfish, Freshwater Catfish	LC	LC	FP	FI0181	256
238	Siluriformes	Heteropneus- tidae	Heteropneustes fossilis	Stinging Catfish, Fossil Catfish, Liver Catfish	LC	LC	FP	FI0182	259
239	Siluriformes	Chacidae	Chaca chaca	Squarehead or Angler Catfish	EN	LC	FP	FI0183	84
240	Siluriformes	Olyridae	Olyra longicaudata	Longtail Catfish, Himalayan Olyra, Bannertail Catfish	EN	LC	HS	FI0184	85
241	Siluriformes	Ariidae	Osteogeneiosus militaris	Soldier Catfish, Walking Catfish, Clarias Catfish, Freshwater Catfish	LC	NE	ET	FI0185	251
242	Siluriformes	Plotosidae	Plotosus canius	Canine Catfish Eel, Gray Eel Catfish, Eel-tail Catfish	NT	NE	ET	FI0186	145

SI. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Habitat	Species ID	Page No.
243	Siluriformes	Sisoridae	Bagarius yarrelli	Goonch	DD	LC	R	FI0254	312
244	Synbranchi- formes	Synbranchidae	Monopterus cuchia	Gangetic mudeel; swamp eel	VU	VU	FP	FI0196	114
245	Synbranchi- formes	Synbranchidae	Ophisternon bengalense	Bengal eel; Pygmy eel	VU	LC	R, ET	FI0197	115
246	Synbranchi- formes	Mastacembeli- dae	Macrognathus aculeatus	One-stripe Spinyeel	NT	NE	R	FI0239	146
247	Synbranchi- formes	Mastacembeli- dae	Mastacembelus armatus	Tire-track Spinyeel	EN	NE	R	FI0243	90
248	Synbranchi- formes	Mastacembeli- dae	Macrognathus pancalus	Stripped Spinyeel (Fish base name: Barred spiny eel)	LC	LC	FP	FI0241	271
249	Syngnathi- formes	Syngnathidae	Ichthyocampus carce	Freshwater Pipefish	NT	LC	ET	FI0192	147
250	Syngnathi- formes	Syngnathidae	Microphis cuncalus	Crocodile Tooth Pipefish	VU	LC	R, ET	FI0194	116
251	Syngnathi- formes	Syngnathidae	Microphis deocata	Deocata Pipefish	VU	NT	R, ET	FI0195	117
252	Tetraodonti- formes	Tetraodontidae	Tetraodon cutcutia	Ocellated pufferfish, ocellated blowfish	LC	LC	FP	FI0249	272
253	Tetraodonti- formes	Tetraodontidae	Chelonodon patoca	Milkspotted puffer, Marbled toad, Gangetic puffer	DD	NE	ET	FI0250	314

Appendix-ii

Sample Assessment Sheet

Updating Species Red List of Bangladesh Assessment Sheet

Name of Species:

Species ID:

Taxonomy

Kingdom	Phylum	Class	Order	Family
Scientific Name:				
Species Authority:				
English Name:				
Local Name:				
Synonym/s:				
Taxonomic Notes:				
Assessment Informa	ition			
Red List Category & Criteria (Status):				
Justification:				
Level of Assessment:				
Date Assessed:				
History:				
Geographic Range				
Global Range				
Global Status				
Global Population				
Local Range Descript	ion:			
Presence in Protected	d Areas:			
Extent of Occurrence				
Area of Occupancy				
Range Map:				
Population				
Generation Time (Len	gth)			
Total Population				
No. of Sub-population	<u>ו</u>			
Trend				
Habitat and Ecology	,			
Habit				
Habitat				
Niche				
Elevation				
Home Range				
Active Period				

Threats	
Habitat Destruction	
Trade	
Hunting/Poaching	
Other 1	
Other 2	

Conservation Actions	
Wildlife Legislation	
CITES	
Other 1	
Other 2	

Recommendations					
Research					
Management					
Captive stocks					
Other 1					
Other 2					

Sources/References

Citation (To be Piled up by Lead Assessor)

Name of the Contributors					
Assessor:					
Associate Assessor/s:					
Reviewer/s:					
Facilitator:					

Appendix-iii

Technical Terms

Population and Population Size (Criteria A, C and D)

The term 'population' is used in a specific sense in the Red List Criteria that is different to its common biological usage. Population is here defined as the total number of individuals of the taxon. For functional reasons, primarily owing to differences between life forms, population size is measured as numbers of mature individuals only. In the case of taxa obligately dependent on other taxa for all or part of their life cycles, biologically appropriate values for the host taxon should be used.

Subpopulations (Criteria B and C)

Subpopulations are defined as geographically or otherwise distinct groups in the population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less).

Mature individuals (Criteria A, B, C and D)

The number of mature individuals is the number of individuals known, estimated or inferred to be capable of reproduction. When estimating this quantity, the following points should be borne in mind:

- Mature individuals that will never produce new recruits should not be counted (e.g. densities are too low for fertilization).
- In the case of populations with biased adult or breeding sex ratios, it is appropriate to use lower estimates for the number of mature individuals, which take this into account.
- Where the population size fluctuates, use a lower estimate. In most cases this will be much less than the mean.
- Reproducing units within a clone should be counted as individuals, except where such units are unable to survive alone (e.g. corals).
- In the case of taxa that naturally lose all or a subset of mature individuals at some point in their life cycle, the estimate should be made at the appropriate time, when mature individuals are available for breeding.
- Re-introduced individuals must have produced viable offspring before they are counted as mature individuals.

Generation (Criteria A, C and E)

Generation length is the average age of parents of the current cohort (i.e. newborn individuals in the population). Generation length therefore reflects the turnover rate of breeding individuals in a population. Generation length is greater than the age at first breeding and less than the age of the oldest breeding individual, except in taxa that breed only once. Where generation length varies under threat, the more natural, i.e. predisturbance, generation length should be used.

Reduction (Criterion A)

A reduction is a decline in the number of mature individuals of at least the amount (%) stated under the criterion over the time period (years) specified, although the decline need not be continuing. A reduction should not be interpreted as part of a fluctuation unless there is good evidence for this. The downward phase of a fluctuation will not normally count as a reduction.

Continuing decline (Criteria B and C)

A continuing decline is a recent, current or projected future decline (which may be smooth, irregular or sporadic) which is liable to continue unless remedial measures are taken. Fluctuations will not normally count as continuing declines, but an observed decline should not be considered as a fluctuation unless there is evidence for this.

Extreme fluctuations (Criteria B and C)

Extreme fluctuations can be said to occur in a number of taxa when population size or distribution area varies widely, rapidly and frequently, typically with a variation greater than one order of magnitude (i.e. a tenfold increase or decrease).

Severely fragmented (Criterion B)

The phrase 'severely fragmented' refers to the situation in which increased extinction risk to the taxon results from the fact that most of its individuals are found in small and relatively isolated subpopulations (in certain circumstances this may be inferred from habitat information). These small subpopulations may go extinct, with a reduced probability of recolonization.

Extent of occurrence (Criteria A and B)

Extent of occurrence is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of present occurrence of a taxon, excluding cases of vagrancy. This measure may exclude discontinuities or disjunctions within the overall distributions of taxa (e.g. large areas of obviously unsuitable habitat) (but see 'area of occupancy' below). Extent of occurrence can often be measured by a minimum convex polygon (the smallest polygon in which no internal angle exceeds 180 degrees and which contains all the sites of occurrence).

Area of occupancy (Criteria A, B and D)

Area of occupancy is defined as the area within its 'extent of occurrence' (see point 9 above) which is occupied by a taxon, excluding cases of vagrancy. The measure reflects the fact that a taxon will not usually occur throughout the area of its extent of occurrence, which may contain unsuitable or unoccupied habitats. In some cases (e.g. irreplaceable colonial nesting sites, crucial feeding sites for migratory taxa) the area of occupancy is the smallest area essential at any stage to the survival of existing populations of a taxon. The size of the area of occupancy will be a function of the scale at which it is measured, and should be at a scale appropriate to relevant biological aspects of the taxon, the nature of threats and the available data. To avoid inconsistencies and bias in assessments caused by estimating area of occupancy at different scales, it may be necessary to standardize estimates by applying a scale-correction factor. It is difficult to give strict guidance on how standardization should be done because different types of taxa have different scale-area relationships.

Location (Criteria B and D)

The term 'location' defines a geographically or ecologically distinct area in which a single threatening event can rapidly affect all individuals of the taxon present. The size of the location depends on the area covered by the threatening event and may include part of one or many subpopulations. Where a taxon is affected by more than one threatening event, location should be defined by considering the most serious plausible threat.

Quantitative analysis (Criterion E)

A quantitative analysis is defined here as any form of analysis which estimates the extinction probability of a taxon based on known life history, habitat requirements, threats and any specified management options. Population viability analysis (PVA) is one such technique. Quantitative analyses should make full use of all relevant available data. In a situation in which there is limited information, such data as are available can be used to provide an estimate of extinction risk (for instance, estimating the impact of stochastic events on habitat). In presenting the results of quantitative analyses, the assumptions (which must be appropriate and defensible), the data used and the uncertainty in the data or quantitative model must be documented.

Benign introduction

An attempt to establish a taxon, for the purpose of conservation, outside its recorded distribution but within an appropriate habitat and ecogeographical area; a feasible conservation tool only when there is no remaining area left within a taxon's historic range (IUCN 1998).

Breeding population

A (sub) population that reproduces within the region, whether this involves the entire reproductive cycle or any essential part of it.

Conspecific population

Populations of the same species; here applied to any taxonomic unit at or below the species level.

Downlisting and uplisting

The process for adjusting the Red List Category of a regional population according to a decreased or increased risk of extinction; downlisting refers to a reduced extinction risk and uplisting to an increased extinction risk.

Endemic taxon

A taxon naturally found in any specific area and nowhere else; this is a relative term in that a taxon can be endemic to a small island, to a country, or to a continent.

Global population

Total number of individuals of a taxon (see Population).

Metapopulation

A collection of subpopulations of a taxon, each occupying a suitable patch of habitat in a landscape of otherwise unsuitable habitat. The survival of the metapopulation is dependent on the rate of local extinctions of occupied patches and the rate of (re-) colonization of empty patches (Levins 1969, Hanski 1999).

Natural range

Range of a taxon, excluding any portion that is the result of an introduction to a region or neighbouring region. The delimitation between wild and introduced populations within a region may be based on a pre-set year or event, but this decision is left to the regional Red List authority.

Population

This term is used in a specific sense in the IUCN Red List Criteria (IUCN 2001, 2012), different from its common biological usage. Population is defined as the total number of individuals of the taxon. Within the context of a regional assessment, it may be advisable to use the term global population for this. In the Guidelines the term population is used for convenience, when reference is made to a group of individuals of a given taxon that may or may not interchange propagules with other such entities (see Regional population and Subpopulations).

Propagule

A living entity capable of dispersal and of producing a new mature individual (e.g. a spore, seed, fruit, egg, larva, or part of or an entire individual). Gametes and pollen are not considered propagules in this context.

Region

A subglobal geographical area, such as a continent, country, state, or province.

Regional assessment

Process for determining the relative extinction risk of a regional population according to the Guidelines.

Regional population

The portion of the global population within the area being studied, which may comprise one or more subpopulations.

Rescue effect

Process by which immigrating propagules result in a lower extinction risk for the target population.

Sink

An area where the local reproduction of a taxon is lower than local mortality. The term is normally used for a subpopulation experiencing immigration from a source where the local reproduction is higher than the local mortality

Subpopulations

Geographically or otherwise distinct groups in the (global) population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less; IUCN 2001, 2012); a subpopulation may or may not be restricted to a region.

Taxon

A species or infra specific entity whose extinction risk is being assessed.

Vagrant

A taxon that is currently found only occasionally within the boundaries of a region (see Visitor). *Visitor (also, visiting taxon)*

A taxon that does not reproduce within a region but regularly occurs within its boundaries either now or during some period of the last century. Regions have several options on how to decide the boundaries between visitors and vagrants, e.g. using a preset percentage of the global population found in the region or predictability of occurrence.

Wild population

A population within its natural range in which the individuals are the result of natural reproduction (i.e. not the result of humanmediated release or translocation); if a population is the result of a benign introduction that is now or has previously been successful (i.e. self-sustaining), the population is considered wild.

Source: IUCN Red List Categories and Criteria version 3.1 (IUCN 2012).

Appendix-iv

SUMMARY OF THE FIVE CRITERIA (A-E) USED TO EVALUATE IF A TAXON BELONGS IN AN IUCN RED LIST THREATENED CATEGORY (CRITICALLY ENDANGERED, ENDANGERED OR VULNERABLE)¹.

A. F	Population sizereduction. Population reduction (measured	d over the longer of 10 ye	ears or 3 generations) ba	ised on any of A1 to A4
		Critically Endangered	Endangered	Vulnerable
A1		≥ 90%	≥ 70%	\ge 50%
A2,	A3 & A4	≥ 90%	\ge 50%	\ge 30%
A1	Population reduction observed, estimated, inferred, c the past where the causes of the reduction are clearly understood AND have ceased.	r suspected in reversible AND	(a) direct o (b) an inde priate to	bservation [except A3] x of abundance appro- o the taxon
A2	Population reduction observed, estimated, inferred, o the past where the causes of reduction may not have o not be understood OR may notbe reversible.	er suspected in seased OR may	(c) a dedin pased on (A00), any of the (E00) ar	e in area of occupancy extent of occurrence nd/or habitat quality
A3	Population reduction projected, inferred or suspected t future (up to a maximum of 100 years) [(a) cannot be up	o be met in the finds sed for A3].	following: (d) actual c	or potential levels of ex-
A 4	An observed, estimated, inferred, projected or suspect reduction he time period must indude both the past and a max. of 100 years in future), and where the causes of re- have ceased OR may not be undeerstood OR may not be	cted population the future (up to duction may not reversible.	(e) effects bridizati ants, cc	of introduced taxa, hy- on, pathogens, pollut- ompetitors or parasites.
В. С	Geographic range in the form of either B1 (extent of occu	rrence) AND/OR B2 (area	a of occupancy)	
		Critically Endangered	Endangered	Vulnerable
B1.	Extent of occurrence (EOO)	< 100 km ²	< 5,000 km ²	< 20,000 km ²
B2.	Area of occupancy (AOO)	< 10 km2	< 500 km ²	< 2.000 km ²
AN) at least 2 of the following 3 conditions:			
(a)	Severely fragmented OR Number of locations	= 1	≤ 5	≤ 10
(b)	Continuing decline observed, estimated, inferred or pro	jected in any of: (i) exter	nt of occurrence; (ii) area	of occupancy; (iii) area,
(C)	Extreme fluctuations in any of: (i) extent of occurrence; (ii)) area of occupancy; (iii) n	number of locations or su	bpopulation; (iv) number
0	Small population size and dedine			
0.		Critically Endangered	Endangered	Vulnerable
Nur	aber of mature individuals			
	at least one of C1 or C2	200	< 2,000	< 10,000
C1.	An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future):	25% in 3 years or 1 generation (whichever is longer)	20% in 5 years or 2 generation (whichever is longer)	10% in 10 years or 3 generation (whichever is longer)
C2.	An observed, estimated, projected or inferred continuing decline AND at least 1 of the following 3 conditions:		、 、 、 、	
(a)	(i) Number of mature individuals in each subpopulation	≤ 50	≤ 250	≤ 1,000
. ,	(ii) % of mature individuals in one subpopulation =	90-100%	95-100%	100%
(b)	Extreme fluctuations in the number of mature individuals			
D.	Very small or restricted population			
		Critically Endangered	Endangered	Vulnerable
D.	Number of mature individuals	< 50	< 250	D1. < 1,000
D2.	Only applies to the VU category Restricted area of occupancy or number of locations with a plausible future threat that could drive the taxon to CR or EX in a very short time.			D2. typically: A00 < $20km^2$ or number of locations ≤ 5
E.	Quantitative Analysis			
		Critically Endangered	Endangered	Vulnerable
India	cating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generation, whichever is longer (100 years max.)	≥ 20% in 20 years or 5 generation, whichever is longer (100 years max.)	\ge 0% in 100 years

1 Use of this summary sheet requires full under standing of the IUCN Red List Categories and Criteria and Guidelines for Using the IUCN Red List Categories and Criteria. Please refer to both documents for explanations of terms and concepts used here.

Source: IUCN Red List Categories and Criteria version 3.1 (IUCN 2012).

Appendix-v

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Strengthening Regional Co-operation for Wildlife Protection (SRCWP) Project

The Strengthening Regional Co-operation for Wildlife Protection (SRCWP) project, the first World Bank supported regional project in South Asia, aims to build country capacity and incentives for tackling the illegal wildlife trade and other selected regional conservation threats to habitats in border areas. The project was launched in 2011in Bangladesh and Nepal in the first phase and Bhutan joined in the second phase to bring regional collaboration in combating wildlife crime through strengthened legislative and regulatory frameworks and well-equipped specialized agencies and systems, as well as relevant training and awareness programmes for staff responsible for enforcementof wildlife law and regulations. The project is also supporting the strengthening of the South Asia Wildlife Enforcement Network (SAWEN) which was established by SAARC countries in 2011 to combat wildlife crime in South Asia region.

The Bangladesh Forest Department (BFD) is implementing the project through a partnership with research institutes, universities and environmental NGOs. A total of 36 sub-projects have been supported to improve the management of protected areas and conservation of flagship species through a landscape approach. Some of the sub-projects are addressing human-wildlife conflict through engagement with the local communities and civil society to foster an enduring culture of wildlife stewardship and protection. The regional wildlife project has supported the establishment of a Wildlife Crime Control Unit (WCCU) within the Wildlife Circle, three Wildlife divisions in the Forest Department, and a Wildlife Center to undertake training, research, education and awareness on the issues of wildlife conservation and protection.







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