



Fish Mapping of River Ganga A GIS Perspective

Authors

Basanta Kumar Das, Ranjan Kumar Manna
Manisha Bhor, Rama Shankar Srivastava
Trupti Rani Mohanty, Himanshu Sekhar Swain
Raju Baitha, Archisman Ray
Supriti Bayen



ICAR-CENTRAL INLAND FISHERIES RESEARCH INSTITUTE, BARRACKPORE



Fish Mapping of River Ganga : A GIS Perspective

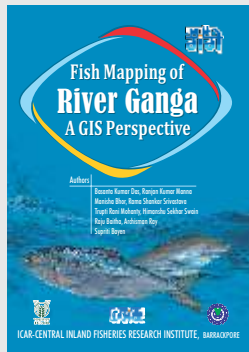
| Authors |

Basanta Kumar Das
Ranjan Kumar Manna
Manisha Bhor
Rama Shankar Srivastava
Trupti Rani Mohanty
Himanshu Sekhar Swain
Raju Baitha
Archisman Ray
Supriti Bayen



ICAR-Central Inland Fisheries Research Institute
Barrackpore

Fish Mapping of River Ganga A GIS Perspective



Authors:

Basanta Kumar Das, Ranjan Kumar Manna, Manisha Bhor, Rama Shankar Srivastava,
Trupti Rani Mohanty, Himanshu Sekhar Swain, Raju Baitha, Archisman Ray, Supriti Bayen

Editorial Assistance:

Shubhadeep Das Gupta, Shreya Roy, Nitish Kumar Tiwari

Published by:

Director, ICAR-Central Inland Fisheries Research Institute, Barrackpore

Citation:

Das, et. al. 2020. Fish Mapping of River Ganga: A GIS perspective, ICAR- Central Inland Fisheries Research Institute, Barrackpore, Kolkata and National Mission for Clean Ganga, New Delhi. 448 p

Copyright:

@2020 ICAR-CIFRI

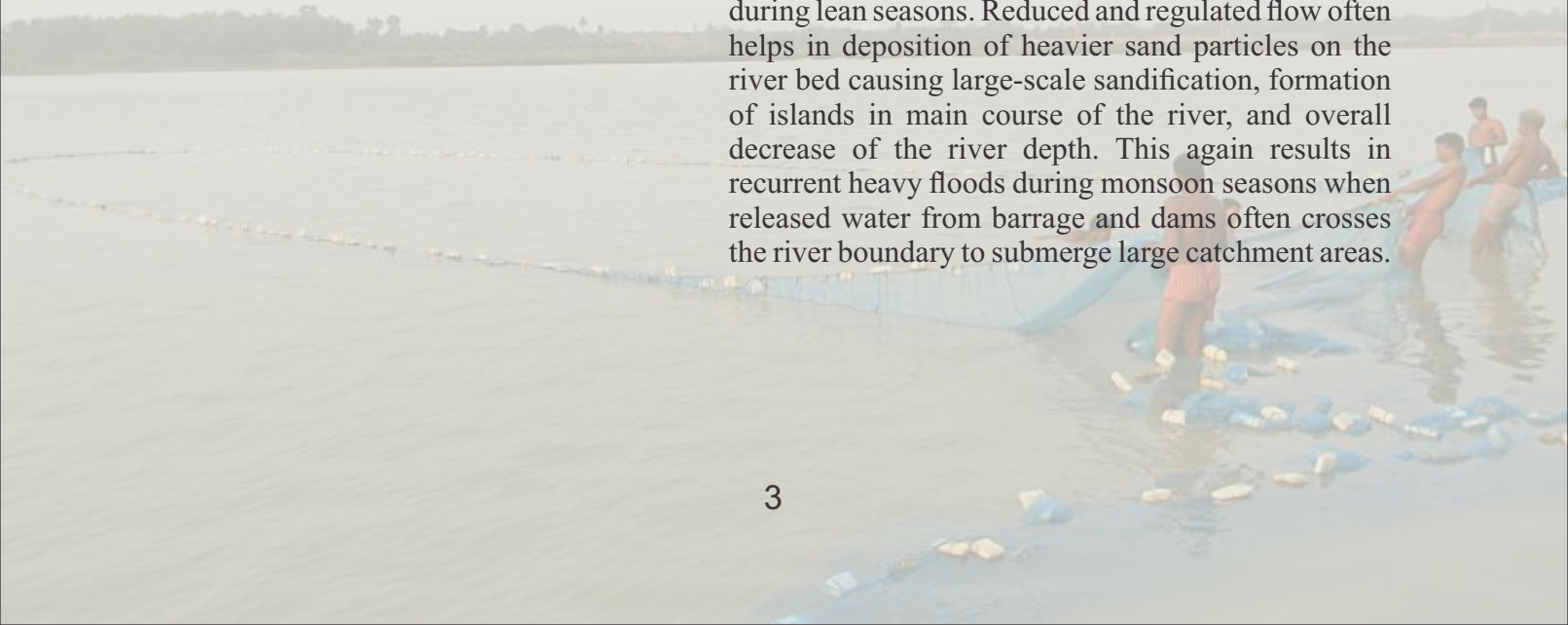
All rights reserved. Reproduction of this material in any form
is prohibited without the permission of the publisher.

ISBN: 8185482349

Introduction

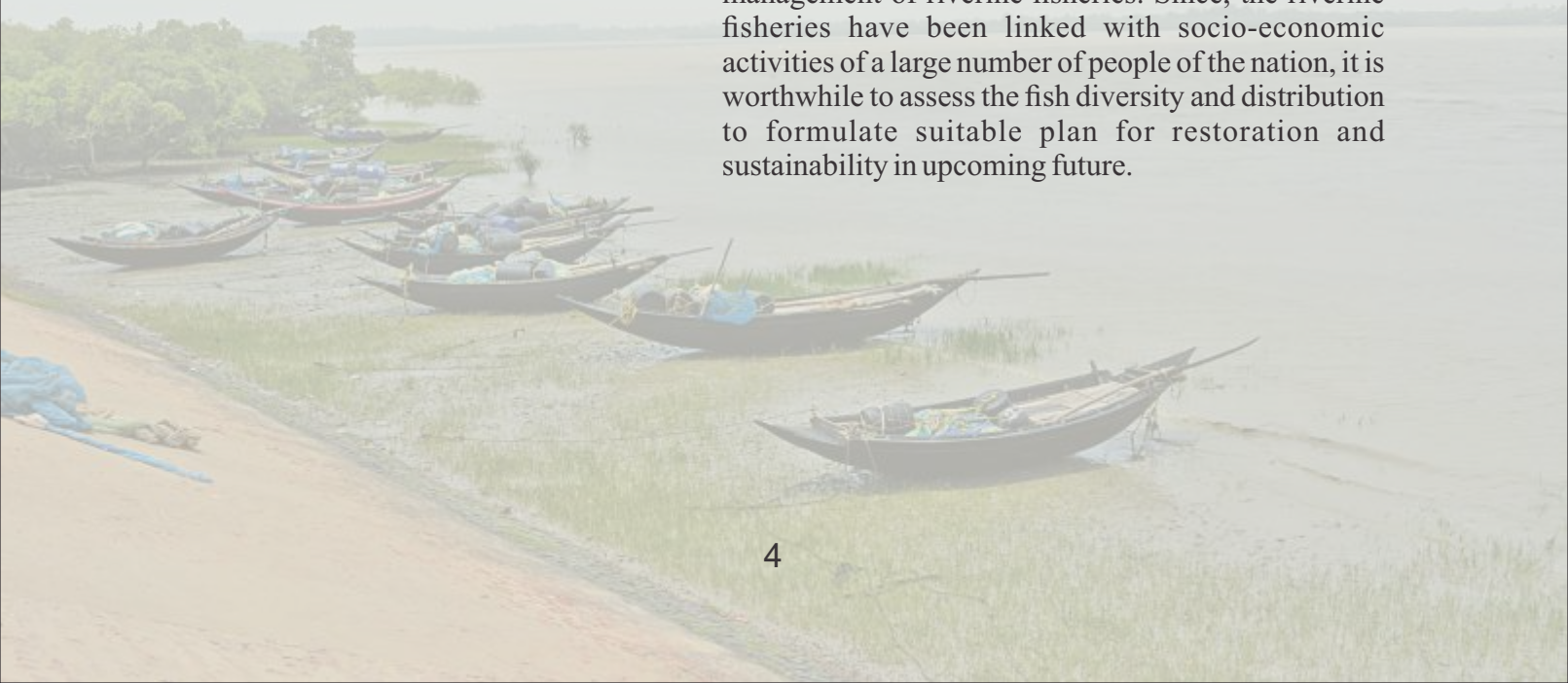


River Ganga extending from 22°18'6.43" N to 31°02'49.31" N and 77°58'47.44" E to 88°30'37.89" E flows through northern part of India covering states like Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. It is the largest river system of the country and fifth largest in the world. Emerging from Gangotri glacier in the Himalayas, the river traverses a long course of about 2,525 kilometers before emptying into the east coast of the country in Bay of Bengal. In estuarine zone, after taking its name as Hooghly, the river enters to its own delta, formed by its distributaries, and finally merges into the combined delta of the Ganges, Brahmaputra and Meghna rivers before draining into the sea. The drainage area of river Ganga in India is 8,62,729 Km² which is nearly 26% of the total geographical area of the country. During its long course of flow, the river navigates through a number of cities with populations more than a million like Kanpur, Patna, Bhagalpur, Kolkata, Howrah, etc and also many small cities and towns with populations more than a lakh. Some of the significant tributaries of the river are Yamuna, Ramganga, Gomti, Ghaghara, Gandak, Kosi and Son. The river along with its tributaries supports a rich diversity of fish fauna including major carps on which thousands of people are dependent for their livelihood. However, during last few decades, severe ecological perturbations were noticed in the river caused by various anthropogenic interferences. Man-made hindrances through number of dams and barrages constructed over the main channel as well as almost all the major tributaries of the river created highly regulated river flow in place of the natural one. Abstraction of water from those dams and barrages for various uses like generation of hydro electricity, agriculture, industrial and urban uses, etc reduced riverine water discharge to a large extent especially during lean seasons. Reduced and regulated flow often helps in deposition of heavier sand particles on the river bed causing large-scale sandification, formation of islands in main course of the river, and overall decrease of the river depth. This again results in recurrent heavy floods during monsoon seasons when released water from barrage and dams often crosses the river boundary to submerge large catchment areas.





During lean seasons, organic pollution loading from point and non-point sources like discharges from drains of cities and towns, run-off with low water quality from tributaries further deteriorate the river water quality. Man-made obstructions in the main channel deprive migratory fishes like Mahseer, Hilsa, freshwater eel, giant river prawn, etc to access their desired habitat. This type of ecological degradation of the river caused by anthropogenic loading and man-made hindrances resulted in noticeable decline in overall fish diversity, total fish production as well as productivity of the river in the recent past. Impact is more visible on indigenous fish fauna of the river like Indian Major Carps, Catfishes, Featherbacks, etc, stock of which have been reduced to a large extent. Deteriorated and modified river often helps exotic fishes like Common carp, Tilapia, etc which have already established in middle and lower stretch of river Ganga and are contributing significantly in the total catch. Therefore, it is a need of the hour to conserve and restore the Gangetic ecosystem in judicious manner which will support the biotic components as a whole especially the indigenous one. National Mission for Clean Ganga (NMCG) under the Ministry of Jal Shakti through its Department of River Development and Ganga Rejuvenation is presently engaged in improving the ecological condition of the Ganga river system in different states of the country. In this regard, NMCG has entrusted ICAR-CIFRI to assess the status of fish diversity and distribution in the river as well as to restore the original Gangetic carps in depleted river stretches. Observations on riverine fish diversity made under the project have been analyzed and presented in GIS format in this book to create a knowledge base which can be fruitfully utilized for management of riverine fisheries. Since, the riverine fisheries have been linked with socio-economic activities of a large number of people of the nation, it is worthwhile to assess the fish diversity and distribution to formulate suitable plan for restoration and sustainability in upcoming future.



Preface

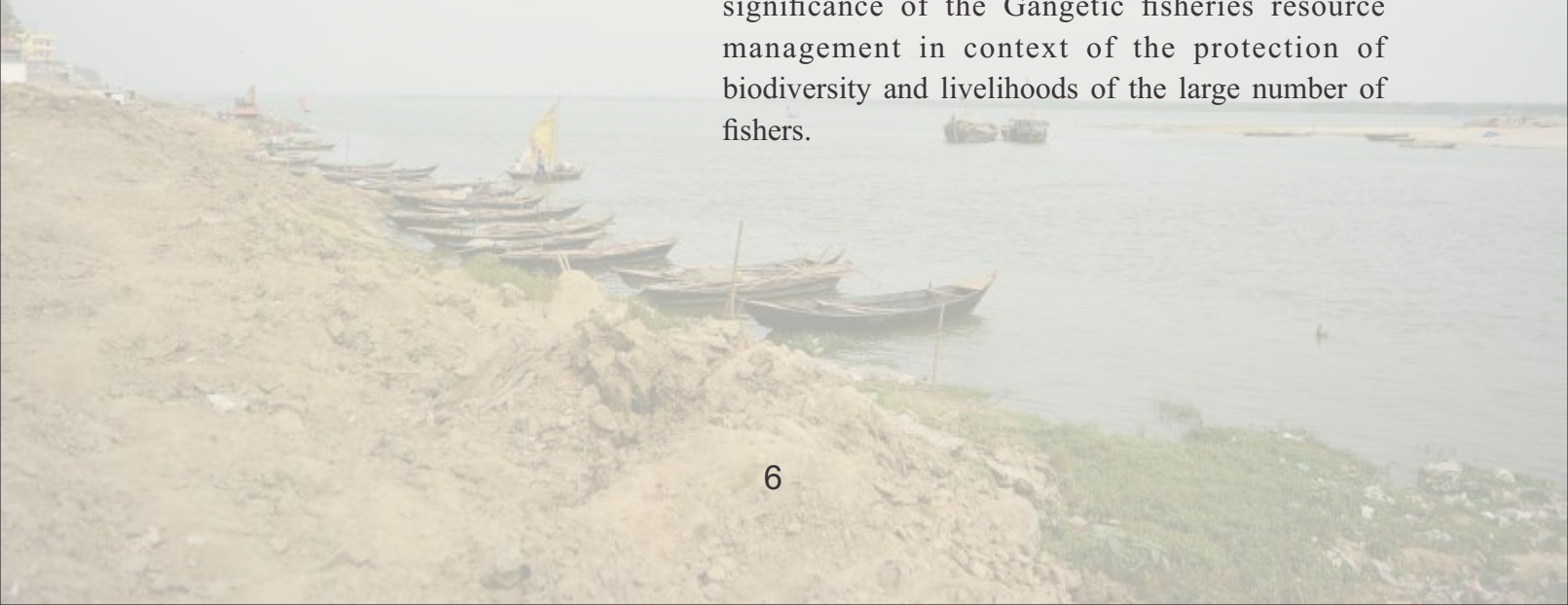


River Ganga, the largest river in India is the abode of wide diversity of aquatic germplasms including varied indigenous fish fauna. Beside, providing water for irrigation transport and power generation it supports rich ecological wealth sprawling over vast Indian plains. The river basin itself covers about one fourth of the Indian sub-continent. Ecologically, the river endorses fish species over varied aquatic habitat combining both freshwater and brackishwater. The river emerges out to be cool in the uplands and warm during its course of flow in the plains, joins with a number of tributaries and finally enters into its own delta which is the largest in the world. Periodical assessments of fish fauna was done way back in 1822 by Francis Hamilton and subsequently by several workers like Hora (1932), Menon (1974), Sinha (1998), and Sarkar et. al (2012). The study in 2012 revealed a total of 143 fish species. It could not extend its studies to the extreme deltaic region of the river. To conduct more detailed study on the fish and fisheries of the Ganga river system, the Ministry of Jal Shakti (erstwhile Water Resources, River Development and Ganga Rejuvenation) has financially supported a five-year long term initiative with ICAR-Central Inland Fisheries Research Institute, Barrackpore. The project was formally initiated on 7th July, 2016 in a launching workshop held at ICAR-CIFRI, Barrackpore, West Bengal and its Regional Centre at Allahabad, Uttar Pradesh. In the present study, a total of 186 fish species belonging to 19 orders, 137 genera and 62 families were revealed from all across the stretch of river Ganga. The fish biodiversity information from various stretches has been arranged in Geographical Information System (GIS) platform. The combination of such attributes will surely add to the fish faunal diversity module of the country and it is anticipated that the knowledge base created in this publication will become a seminal reference for future.

Background



River Ganga has tremendous impact on the social, cultural and religious background of the Indian population. The Ganga river basin sustains more than 300 million people in India, Nepal and Bangladesh. From fisheries point of view, the river is a natural abode to several economically important fishes including major and minor carps, large and small catfishes, several indigenous ornamental and SIF's. All these fishes are key biodiversity treasure of the river. The river Ganga is continuing as the vital source for prized carp and catfish spawns during peak monsoon period. However, from past few decades the river is now experiencing major setbacks in terms of hydrological characteristics. Owing to changes in water quality, the availability of prized fishes such as major carps have become less abundant in comparison to the other fish species. Apart from these, increasing intervention of exotic species has been an additional concern in recent past in some stretches. Intense anthropogenic activities and changes in water quality has resulted in shifting of several fish species as mentioned by several workers. In this context, this present book deals with the current status of fish faunal diversity of river Ganga in a GIS platform. The information generated will certainly help policy makers in river impact assessment. Data generated will further be useful in undertaking studies on migratory pattern of few Gangetic fish species based on their habitat. The study has described in details the presence and absence data of a particular fish species along with its abundance. The study also highlights the significance of the Gangetic fisheries resource management in context of the protection of biodiversity and livelihoods of the large number of fishers.



राजीव रंजन मिश्रा, भा.प्र.से.
महानिदेशक
राष्ट्रीय स्वच्छ गंगा मिशन
Rajiv Ranjan Mishra, IAS
DIRECTOR GENERAL
NATIONAL MISSION FOR CLEAN GANGA



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,
नदी विकास और गंगा संरक्षण विभाग
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION



FOREWORD

The river Ganga is 2,525 km long, originated in the Western Himalayas, flows into the eastward directions and empties into the Bay of Bengal. The sole importance of the versatile Ganga basin stems from its geographical, historical, socio-cultural, environmental and economic value. The Ganga basin is dwelling place for more than 450 million people. Fishing along the river generates livelihood to fishers, strengthen economic base nutritional support. However, pollution is a great menace to the ecosystem. Over the past century, city populations along the Ganga have grown at a tremendous rate, resulting water pollution, heavy introduction of exotic species etc. Damming and alteration of hydrology have further aggravated the situation. Although study of fish diversity of the river has long been of great interest to researchers and substantial amount of literature on this aspect exist on the subject, bringing out a comprehensive document on the list of fish species by the ICAR-Central Inland Fisheries Research Institute through the project “*Assessment of fish and fisheries of the Ganga River system for developing suitable conservation and restoration plan*” funded by the Government of India under “Namami Gange mission” would be very useful.

The book “*Fish mapping of the river Ganga: A GIS perspective*” provides taxonomical accounts, habitat information, distribution, conservation status, fisheries and economic importance of fish species of river Ganga. I am sure the information in this book will be of immense help to those involved in studies on fish diversity and also help those interested in fisheries. I congratulate the authors and the project team for bringing out this valuable document.

Rajiv Ranjan Mishra

राष्ट्रीय स्वच्छ गंगा मिशन
प्रथम तल, मेजर ध्यान चन्द नेशनल स्टेडियम, इन्डिया गेट, नई दिल्ली-110002
NATIONAL MISSION FOR CLEAN GANGA
1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi-110002
Ph.: 011-23049528, Fax : 23049566, E-mail : dg@nmcg.nic.in



डॉ. जे.के. जेना

उप महानिदेशक (मत्स्य विज्ञान)

Dr. J.K. Jena

Deputy Director General (Fisheries Science)

भारतीय कृषि अनुसंधान परिषद

कृषि अनुसंधान भवन-II, नई दिल्ली-110 012

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

KRISHI ANUSANDHAN BHAVAN-II, PUSA, NEW DELHI-110012

Ph.: 91-11-25846738 (O), Fax: 91-11-25841955

Email : ddgfs.icar@gov.in



FOREWORD

The River Ganga originating from the Gangotri glacier of Western Himalayas is not only the largest river in India, but also serving as the lifeline for several million people residing along its basin over centuries. It is also known to be a highly diverse ecosystem and has been supporting rich fishery. However, like other river systems, the river Ganga is also facing serious threat due to discharge of domestic sewages, industrial effluents and other pollutants on account of rapid urbanization, industrialization and agricultural growth. Therefore, assessing the ecosystem of Ganga River is much important and is a subject of great challenge. In recent years, novel facts arising out of vigorous investigation of several inland fisheries reformed the systematics of some of the Indian fishes. There is urgent need of scientific community to undertake intensive fish faunal surveys through field collections for adequate documentations. The book on “*Fish Mapping of the River Ganga: A GIS Perspective*” prepared by the ICAR-Central Inland Fisheries Research Institute through the project on “Assessment of fish and fisheries of the Ganga River system for developing suitable conservation and restoration plan” is a concerted effort to document the fishes of river Ganga which also contains the associated aspects of taxonomy, environment, distribution and abundance in eco-region, food and feeding, and conservation status of fish species. The authors and the project team deserve all appreciation for bringing out this important publication. I sincerely believe that this publication will be an indispensable reference for the students, researchers and resource managers associated with the riverine fish diversity studies.


(J.K. Jena)



डा. बसंत कुमार दास, नदेशक
Dr. Basanta Kumar Das, Director

भाकृअनुप-केन्द्रीय अंतर्स्थलीय मात्स्यिकी अनुसंधान संस्थान
आई एस ओ 9000 : 2015 प्रमाणित संगठन
(भारतीय कृषि अनुसंधान परिषद्)
बैरकपुर, कोलकाता - 700 120, पश्चिम बंगाल

ICAR-Central Inland Fisheries Research Institute
AN ISO 9000 : 2015 Certified Organisation
(Indian Council of Agricultural Research)
Barrackpore, Kolkata - 700120 West Bengal



FOREWORD



Dr. B. K. Das
Director
ICAR-CIFRI, Barrackpore

The River Ganga is the most gifted resource and it attains a high place among all the rivers of the country owing to its cultural, social and religious background. From fisheries point of view, the river is a rich reservoir of resources. It supports a large number of fisher folks for their daily livelihood. However, over the year's massive exploitation of fishery resources, introduction of manmade barrages resulting in water abstraction, low water velocity and pollution, the riverine fish catch and its biodiversity has faced a tremendous challenge. These became the subject of serious deliberations among planners, scientists and environmentalists. Considering the eventualities, ICAR-CIFRI has initiated biodiversity assessment of the river through an esteemed NMCG project from 2015 onwards under the project entitled "Assessment of fish and fisheries of the Ganga River system for developing suitable conservation and restoration plan". This study has described present status of fish biodiversity of river Ganga and with the GIS module in retrospect. The study has also identified a score of relative abundance of a particular fish species in a region. It is anticipated that the information generated under this exploratory survey program, will prove a guiding tool for the planners, researchers and policy makers.

I feel obliged and convey sincere thanks to the Ministry of Jal Shakti (erstwhile Department of Water Resources, River Development and Ganga Rejuvenation) Government of India for extending desired help and support.

Basanta Kumar Das

Phone : (033) 2592 0177 (Director), 2593 5288 (AO), 2593 3081 (SF&AO), Fax : : (033)2592 0388, EPBX 2592 1190/91 Ext.

Email : director.cifri@icar.gov.in; director.cifri@gmail.com; Website : www.cifri.res.in

AN ISO 9000 : 2008 Organisation

Acknowledgement

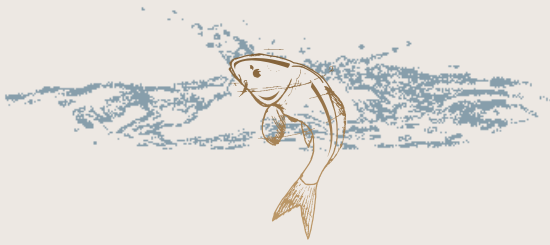
The authors duly acknowledge the funding support through National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India (No: T-17 /2014-15/526/NMCG-Fish and Fisheries Dated 13/07/2015) to ICAR- Central Inland Fisheries Research Institute (CIFRI), Barrackpore, Kolkata, West Bengal for the project entitled “Assessment of fish and fisheries of the Ganga River system for developing suitable conservation and restoration plan”. Technical and on field support received from various personnel of ICAR-CIFRI, namely Shri Samir Kumar Paul, Shri Lokenath Chakraborty, Shri Subhendu Mondal and Shri Asish Roychowdhury is highly acknowledged. The authors also extend their gratitude towards CIFRI team of NMCG project of its Regional Centre at Allahabad, Uttar Pradesh for their continuous efforts. Field support rendered by Shri Uma Shankar Ram and Shri Amarnath Prasad (SSS) are also acknowledged. Authors also acknowledge sincere gratitude towards the fishermen for providing useful information associated with the fisheries of the River Ganga during the course of the study period.

AUTHORS

Table of Content



Introduction	3
Preface	5
Background	6
Foreword	7
Acknowledgement	10
<i>Angulliformes</i>	19
<i>Anguilla bengalensis</i> (Gray,1831)	20
<i>Pisodonophis boro</i> (Hamilton, 1822)	22
<i>Cyprinodontiformes</i>	25
<i>Aplocheilus panchax</i> (Hamilton,1822)	26
<i>Aulopiformes</i>	29
<i>Harpadon nehereus</i> (Hamilton, 1822)	30
<i>Beloniformes</i>	33
<i>Hyporhamphus limbatus</i> (Valenciennes, 1847)	34
<i>Xenentodon cancila</i> (Hamilton, 1822)	36
<i>Gadiformes</i>	39
<i>Bregmaceros mccllelandi</i> Thompson, 1840	40
<i>Carcharhiniformes</i>	43
<i>Scoliodon laticaudus</i> Müller & Henle, 1838	44
<i>Clupeiformes</i>	47
<i>Anodontostoma chacunda</i> (Hamilton,1822)	48
<i>Chirocentrus dorab</i> (Fabricius, 1775)	50
<i>Coilia dussumieri</i> Valenciennes, 1848	52
<i>Coilia reynaldi</i> Valenciennes, 1848	54
<i>Corica soborna</i> Hamilton, 1822	56
<i>Escualosa thoracata</i> (Valenciennes, 1847)	58



Gonialosa manmina
(Hamilton, 1822)

60

Gudusia chapra
(Hamilton, 1822)

62

Ilisha elongata
(Anonymous, 1830)

64

Ilisha megaloptera
(Swainson, 1839)

66

Pellona ditchela
Valenciennes, 1847

68

Raconda russeliana
Gray, 1831

70

Sardinella gibbosa
(Bleeker, 1849)

72

Setipinna brevifilis
(Valenciennes, 1848)

74

Setipinna phasa
(Hamilton, 1822)

76

Setipinna taty
(Valenciennes, 1848)

78

Setipinna tenuifilis
(Valenciennes, 1848)

80

Stolephorus bagnansis
(Hardenberg, 1933)

82

Tenuialosa ilisha
(Hamilton, 1822)

84

Cypriniformes

87

Aborichthys elongatus
Hora, 1921

88

Amblypharyngodon mola
(Hamilton, 1822)

90

Bangana dero
(Hamilton, 1822)

92

Barilius barila
Hamilton, 1822

94

Bengala elanga
(Hamilton, 1822)

96

Barilius vagra
(Hamilton, 1822)

98

Botia dario
(Hamilton, 1822)

100

Botia lohachata
Chaudhuri, 1912

102

Botia rostrata
Gunther, 1868

104

Cabdio morar
(Hamilton, 1822)

106

Chagunius chagunio
(Hamilton, 1822)

108

Cirrhinus mrigala
(Hamilton, 1822)

110

Cirrhinus reba
(Hamilton, 1822)

112

Devario devario
(Hamilton, 1822)

114

Esomus danrica
(Hamilton, 1822)

116

Garra gotyla
Gray, 1830

118

Labeo catla
(Hamilton, 1822)

120

Labeo angra
(Hamilton, 1822)

122

Labeo bata
(Hamilton, 1822)

124

Labeo boga
(Hamilton, 1822)

126

Labeo calbasu
(Hamilton, 1822)

128

Labeo dyocheilus
(McClelland, 1839)

130

Labeo gonius
(Hamilton, 1822)

132

Labeo rohita
(Hamilton, 1822)

134

Laubuka laubuca
(Hamilton, 1822)

136

Lepidocephalichthys guntea
(Hamilton, 1822)

138

Opsarius barna
(Hamilton, 1822)

140



Opsarius bendelisis
(Hamilton, 1807)

142

Opsarius tileo
(Hamilton, 1822)

144

Oreochthys cosuatis
(Hamilton, 1822)

146

Osteobrama cotio
(Hamilton, 1822)

148

Pangio pangia
(Hamilton, 1822)

150

Paracanthocobitis botia
(Hamilton, 1822)

152

Pethia conchoniis
(Hamilton, 1822)

154

Pethia gelius
(Hamilton, 1822)

156

Pethia phutunio
(Hamilton, 1822)

158

Puntius chola
(Hamilton, 1822)

160

Puntius sophore
(Hamilton, 1822)

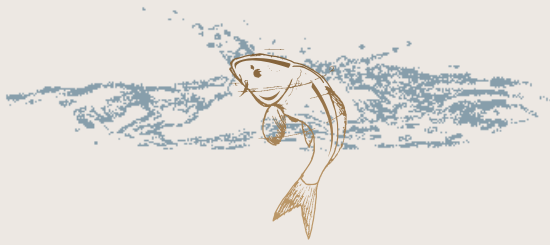
162

Pethia ticto
(Hamilton, 1822)

164

Raiamas bola
(Hamilton, 1822)

166



Rasbora daniconius
(Hamilton, 1822)

168

Salmostoma acinaces
(Valenciennes, 1844)

170

Salmostoma bacaila
(Hamilton, 1822)

172

Salmostoma phulo
(Hamilton, 1822)

174

Schizothorax richardsonii
(Gray, 1832)

176

Securicula gora
(Hamilton, 1822)

178

Systemus sarana
(Hamilton, 1822)

180

Tariqilabeo latius
(Hamilton, 1822)

182

Tor putitora
(Hamilton, 1822)

184

Mugiliformes

187

Chelon parsia
(Hamilton, 1822)

188

Planiliza tade
(Forsskål, 1775)

190

Rhinomugil corsula
(Hamilton, 1822)

192

Sicamugil cascasia
(Hamilton, 1822)

194

Myliobatiformes

197

Brevitrygon walga
(Müller & Henle, 1841)

198

Osteoglossiformes

201

Chitala chitala
(Hamilton, 1822)

202

Notopterus notopterus
(Pallas, 1769)

204

Perciformes

207

Anabas testudineus
(Bloch, 1792)

208

Apocryptes bato
(Hamilton, 1822)

210

Atropus atropus
(Bloch & Schneider, 1801)

212

Badis badis
(Hamilton, 1822)

214

Boleophthalmus boddarti
(Pallas, 1770)

216

Brachygobius nusus
(Hamilton, 1822)

218

Chanda nama
(Hamilton, 1822)

220

Channa gachua
(Hamilton, 1822)

222

Channa marulius
(Hamilton, 1822)

224

Channa punctata
(Bloch, 1793)

226

Channa striata
(Bloch, 1793)

228

Drepane punctata
(Linnaeus, 1758)

230

Eleotris fusca
(Forster, 1801)

232

Eleutheronema tetradactylum
(Shaw, 1804)

234

Epinephelus coioides
(Hamilton, 1822)

236

Gerres filamentosus
Cuvier, 1829

238

Gerres oyena
(Fabricius, 1775)

240

Glossogobius giuris
(Hamilton, 1822)

242

Johnius coitor
(Hamilton, 1822)

244

Johnius gangeticus
(Talwar, 1991)

246

Nuchequula blochii
(Valenciennes, 1835)

248

Lobotes surinamensis
(Bloch, 1790)

250



Megalaspis cordyla
(Linnaeus, 1758)

252

Nandus nandus
(Hamilton, 1822)

254

Odontamblyopus rubicundus
(Hamilton, 1822)

256

Pama pama
(Hamilton, 1822)

258

Pampus chinensis
(Euphrasen, 1788)

260

Panna microdon
(Bleeker, 1849)

262

Parambassis baculis
(Hamilton, 1822)

264

Parambassis ranga
(Hamilton, 1822)

266

Pseudapocryptes elongatus
(Cuvier, 1816)

268

Polynemus paradiseus
(Linnaeus 1758)

270

Parambassis lala
(Hamilton, 1822)

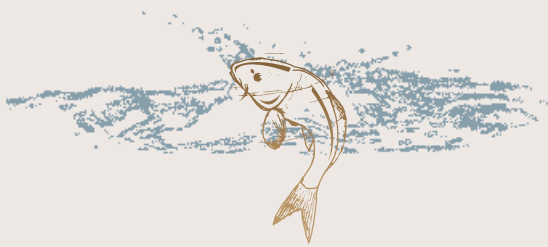
272

Scatophagus argus
(Linnaeus, 1766)

274

Deveximentum insidiator
(Bloch, 1787)

276



<i>Siganus javus</i> (Linnaeus, 1766) 278
<i>Sillaginopsis domina</i> (Cuvier, 1816) 280
<i>Sillago sihama</i> (Fabricius, 1775) 282
<i>Terapon jarbua</i> (Fabricius, 1775) 284
<i>Eupleurogrammus muticus</i> (Gray, 1831) 286
<i>Trichiurus lepturus</i> (Linnaeus, 1758) 288
<i>Trichogaster chuna</i> (Hamilton, 1822) 290
<i>Trichogaster fasciata</i> (Bloch & Schneider, 1801) 292
<i>Trichogaster lalius</i> (Hamilton, 1822) 294
<i>Lates calcarifer</i> (Bloch, 1790) 296
<i>Pleuronectiformes</i> 299
<i>Brachirus pan</i> (Hamilton, 1822) 300
<i>Cynoglossus arel</i> (Bloch & Schneider, 1801) 302

<i>Cynoglossus cynoglossus</i> (Hamilton, 1822) 304
<i>Cynoglossus lingua</i> (Hamilton, 1822) 306
<i>Scorpaeniformes</i> 309
<i>Platycephalus indicus</i> (Linnaeus, 1758) 310
<i>Siluriformes</i> 313
<i>Ailia coila</i> (Hamilton, 1822) 314
<i>Ailiichthys punctata</i> Day, 1872 316
<i>Amblyceps mangois</i> (Hamilton, 1822) 318
<i>Arius arius</i> (Hamilton, 1822) 320
<i>Arius gadora</i> (Hamilton, 1822) 322
<i>Bagarius bagarius</i> (Hamilton, 1822) 324
<i>Bagarius yarrelli</i> (Sykes, 1839) 326
<i>Batasio batasio</i> (Hamilton, 1822) 328
<i>Chaca chaca</i> (Hamilton, 1822) 330
<i>Clarias magur</i> (Linnaeus, 1758) 332

Clupisoma garua
(Hamilton, 1822)

334

Hara hara
(Hamilton, 1822)

336

Eutropiichthys murius
(Hamilton, 1822)

338

Eutropiichthys vacha
(Hamilton, 1822)

340

Gagata cenia
(Hamilton, 1822)

342

Gagata gagata
(Hamilton, 1822)

344

Glyptothorax cavia
(Hamilton, 1822)

346

Glyptothorax garhwali
Tilak, 1969

348

Gogangra viridescens
(Hamilton, 1822)

350

Heteropneustes fossilis
(Bloch, 1794)

352

Mystus bleekeri
(Day, 1877)

354

Mystus cavasius
(Hamilton, 1822)

356

Mystus gulio
(Hamilton, 1822)

358

Hemibagrus menoda
(Hamilton, 1822)

360



Mystus tengara
(Hamilton, 1822)

362

Mystus vittatus
(Bloch, 1794)

364

Nemapteryx caelata
(Valenciennes, 1840)

366

Pachypterus atherinoides
(Bloch, 1794)

368

Ompok bimaculatus
(Bloch, 1794)

370

Ompok pabda
(Hamilton, 1822)

372

Ompok pabo
(Hamilton, 1822)

374

Osteogeneiosus militaris
(Linnaeus, 1758)

376

Pangasius pangasius
(Hamilton, 1822)

378

Rita rita
(Hamilton, 1822)

380

Silonia silondia
(Hamilton, 1822)

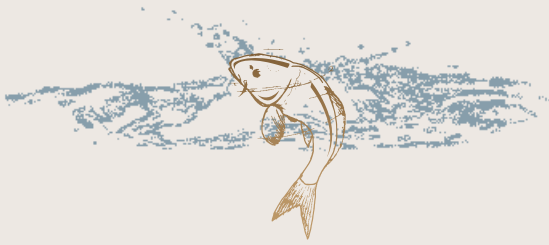
382

Sisor rabdophorus
(Hamilton 1822)

384

Sperata aor
(Hamilton, 1822)

386



<i>Sperata seenghala</i> (Sykes, 1839) 388
<i>Wallago attu</i> (Bloch & Schneider, 1801) 390
<i>Synbranchiformes</i> 393
<i>Monopterus cuchia</i> (Hamilton, 1822) 394
<i>Macrognathus aral</i> (Bloch & Schneider, 1801) 396
<i>Macrognathus pancalus</i> (Hamilton, 1822) 398
<i>Mastacembelus armatus</i> (Lacepède, 1800) 400
<i>Sygnathiformes</i> 403
<i>Microphis cuncalus</i> (Hamilton, 1822) 404
<i>Tetraodontiformes</i> 407
<i>Leiodon cutcutia</i> (Hamilton, 1822) 408

<i>Lagocephalus lunaris</i> (Bloch & Schneider, 1801) 410
<i>EXOTICS</i> 413
<i>Ctenopharyngodon idella</i> (Valenciennes, 1844) 414
<i>Cyprinus carpio</i> Linnaeus, 1758 416
<i>Oreochromis niloticus</i> (Linnaeus, 1758) 418
<i>Pterygoplichthys disjunctivus</i> (Weber, 1991) 420
<i>Hypophthalmichthys nobilis</i> (Richardson, 1845) 422
<i>Hypophthalmichthys molitrix</i> (Valenciennes, 1844) 424
<i>Clarias gariepinus</i> (Linnaeus, 1758) 426
<i>Glossary</i> 429
References 439
Index 445



Angulliformes

Anguilla bengalensis (Gray, 1831)

Systematic classification:

Class : Actinopterygii
Order : Anguilliformes
Family : Anguillidae
Genus : *Anguilla*
Species : *bengalensis*



Vernacular name: Letur (Uttar Pradesh), Bam (West Bengal)

Common English name: Indian longfin eel

Synonyms: *Muraena bengalensis*, *Anguilla bengalensis bengalensis*

Salient identifying characteristics:

- ◆ Elongated body structure, along with conical shaped flattened head
- ◆ Mouth is terminal
- ◆ Dorsal fin is present near the anus
- ◆ Yellowish to olive-brown, smeared with dark brown colouration
- ◆ Dorsal soft rays: total 250 - 305; Anal soft rays: 220 - 250

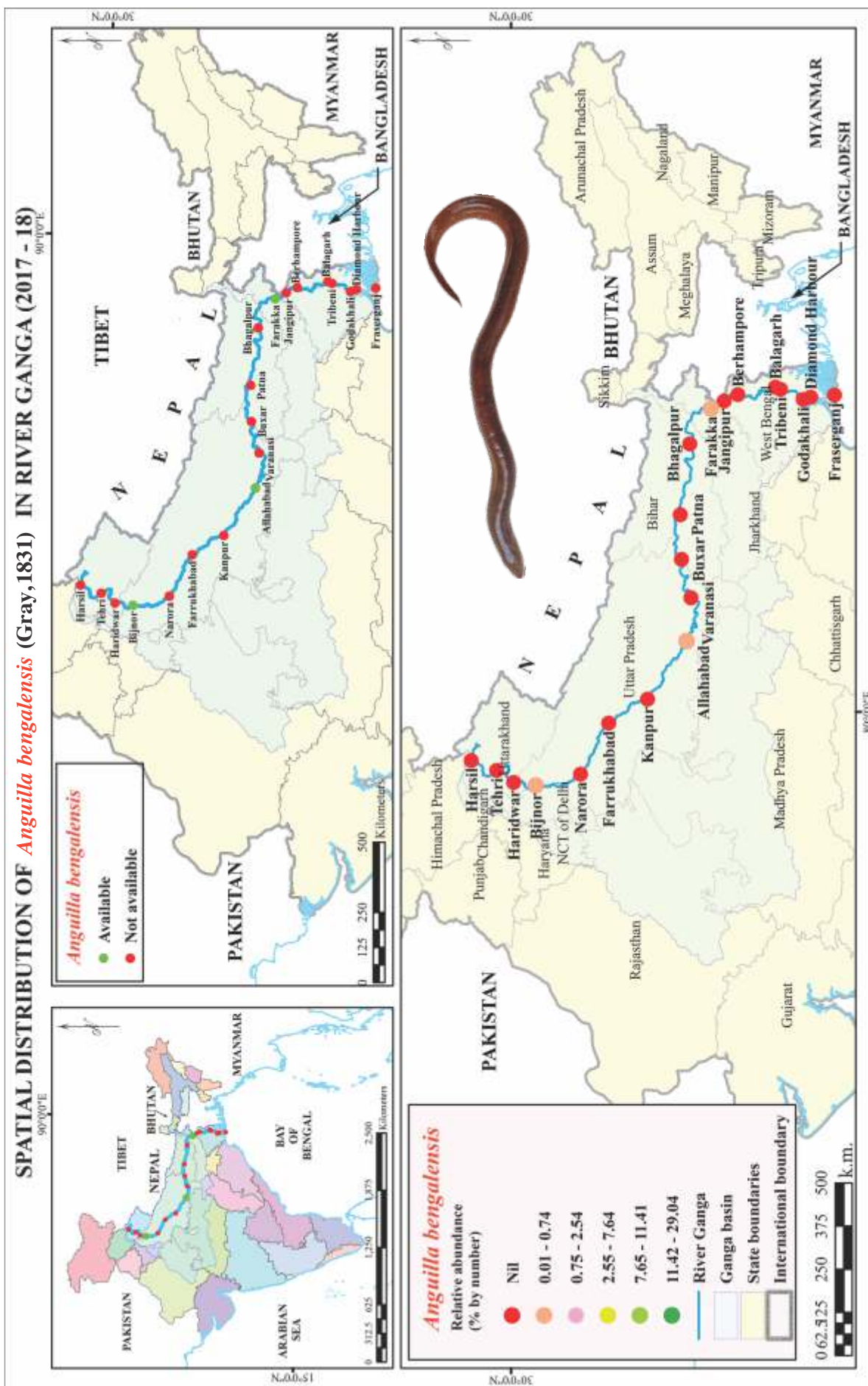
Habitat: Freshwater, Brackishwater and Marinewater

Maximum size (TL): 200 cm

Food and feeding: Feeds on macrophytic vegetation, shrimps and fish fry

Conservation status (IUCN Red list): Near Threatened

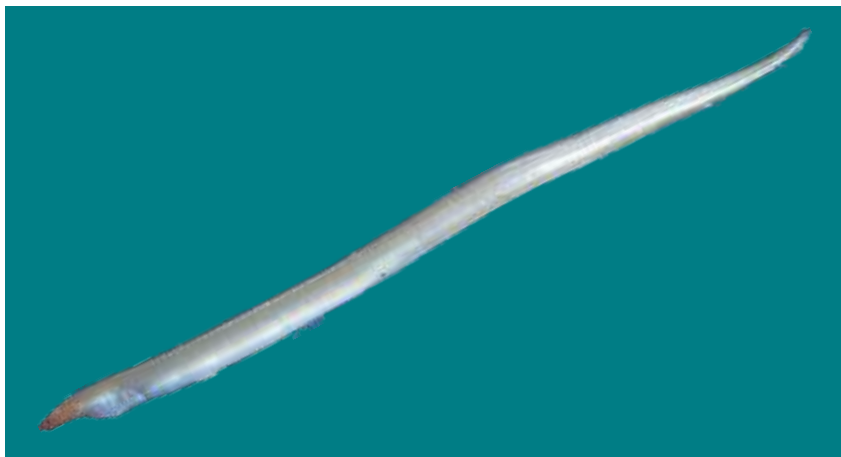
Commercial value: Used as food and game fish



Pisodonophis boro (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Anguiliiformes
Family	: Opichthidae
Genus	: <i>Pisodonophis</i>
Species	: <i>boro</i>



Vernacular name: Bero (West Bengal)

Common English name: Rice paddy eel

Synonyms: *Ophichthys boro*, *Ophisurus boro*

Salient identifying characteristics:

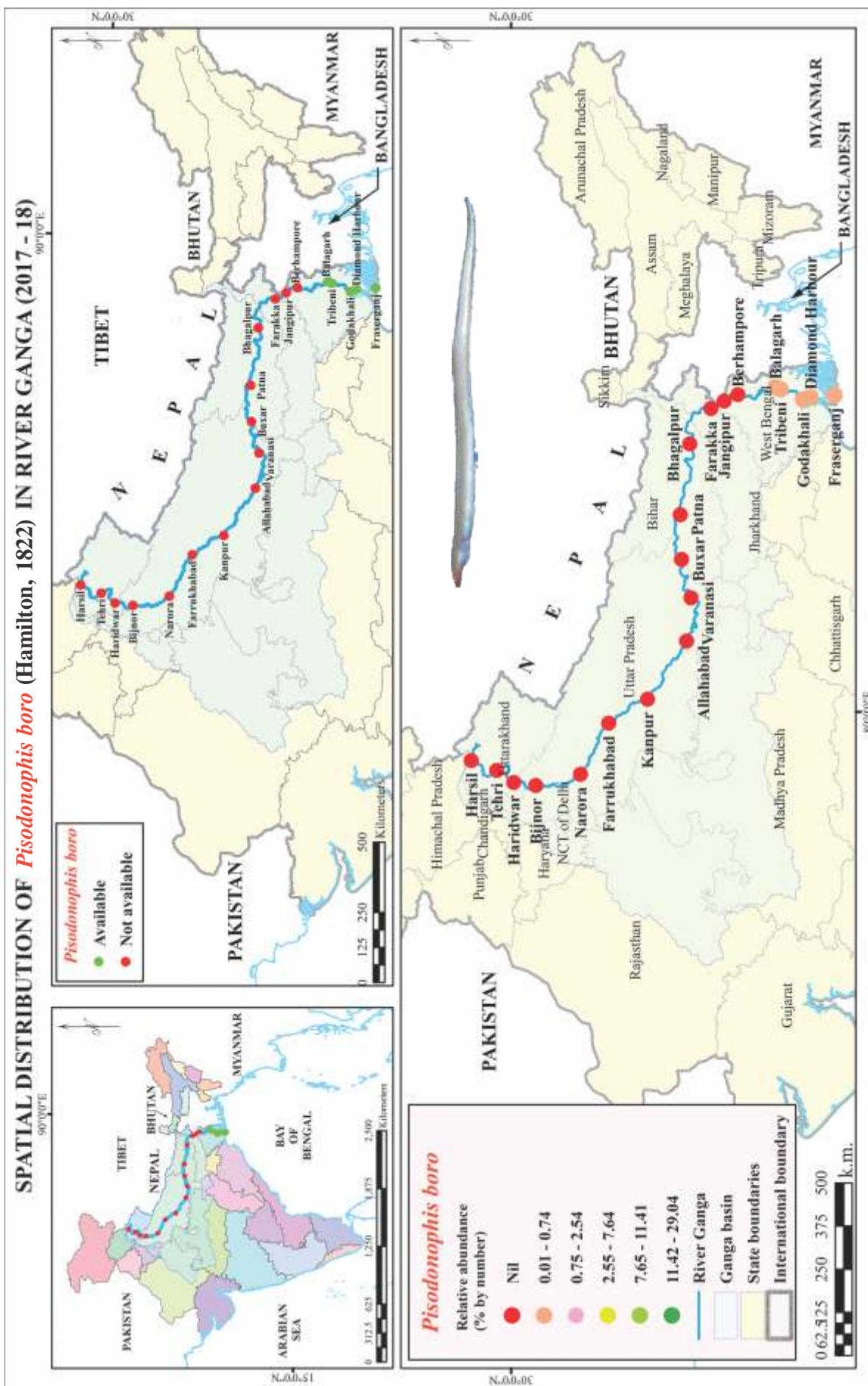
- ◆ Snakelike and cylindrical body and compressed only at extreme tail tip
- ◆ Gill opening small; branchial region and throat swollen with free branchiostegal rays
- ◆ Anterior nostril tubular and posterior nostril along lower edge of lip
- ◆ Dorsal fin origin about a pectoral fin length behind tips of pectoral fins; lateral line unnoticeable
- ◆ Extreme part of tail stiff and finless

Habitat: Freshwater, Brackishwater and Marinewater

Maximum Length (TL): 100 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern







Cyprinodontiformes

Aplocheilus panchax (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cyprinodontiformes
Family : Aplocheilidae
Genus : *Aplocheilus*
Species : *panchax*



Vernacular name: Techokha, Panchoke (West Bengal), Dendula (Bihar)

Common English name: Blue panchax

Synonyms: *Esox panchax*, *Haplochilus panchax*

Salient identifying characteristics:

- ◆ Body is elongated and compressed posteriorly
- ◆ Presence of large eyes and terminal mouth with villiform teeth
- ◆ Caudal fin round in shape
- ◆ Yellowish fins while dorsal fin is having a big black blotch at the base

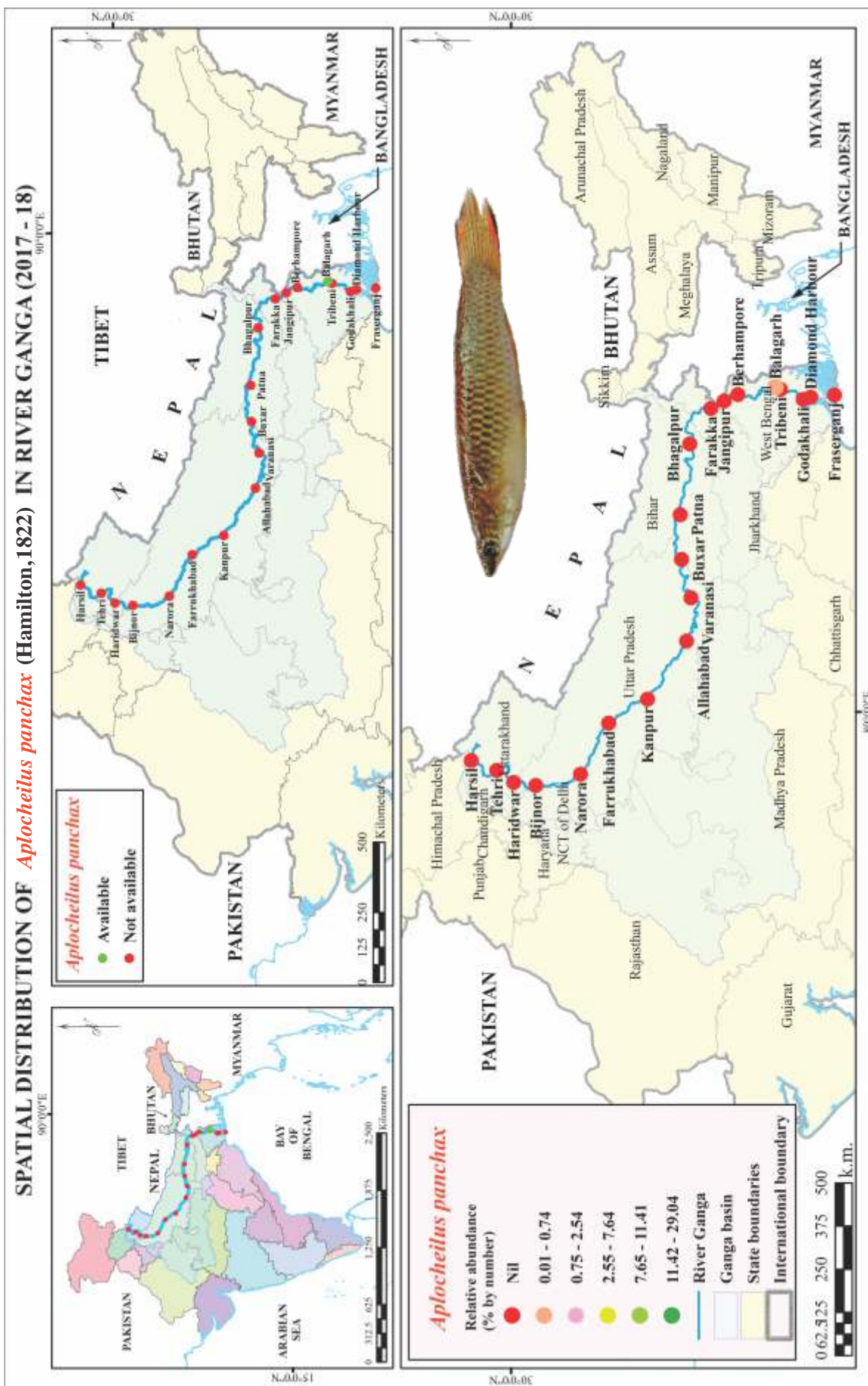
Habitat: Freshwater

Maximum size (TL): 9 cm

Food and feeding: Feeds on insects and benthic organisms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish







Aulopiformes

Harpadon nehereus (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Aulopiformes
Family : Synodontidae
Genus : *Harpadon*
Species : *nehereus*



Vernacular name: Loita mach, Lote (West Bengal)

Common English name: Bombay-duck

Synonyms: *Osmerus nehereus*

Salient identifying characteristics:

- ◆ Body elongated and compressed, small eyes, covered by adipose membrane
- ◆ Mouth wide with depressible teeth
- ◆ Both pectoral and pelvic fins long
- ◆ Light grey in colour and fins dark

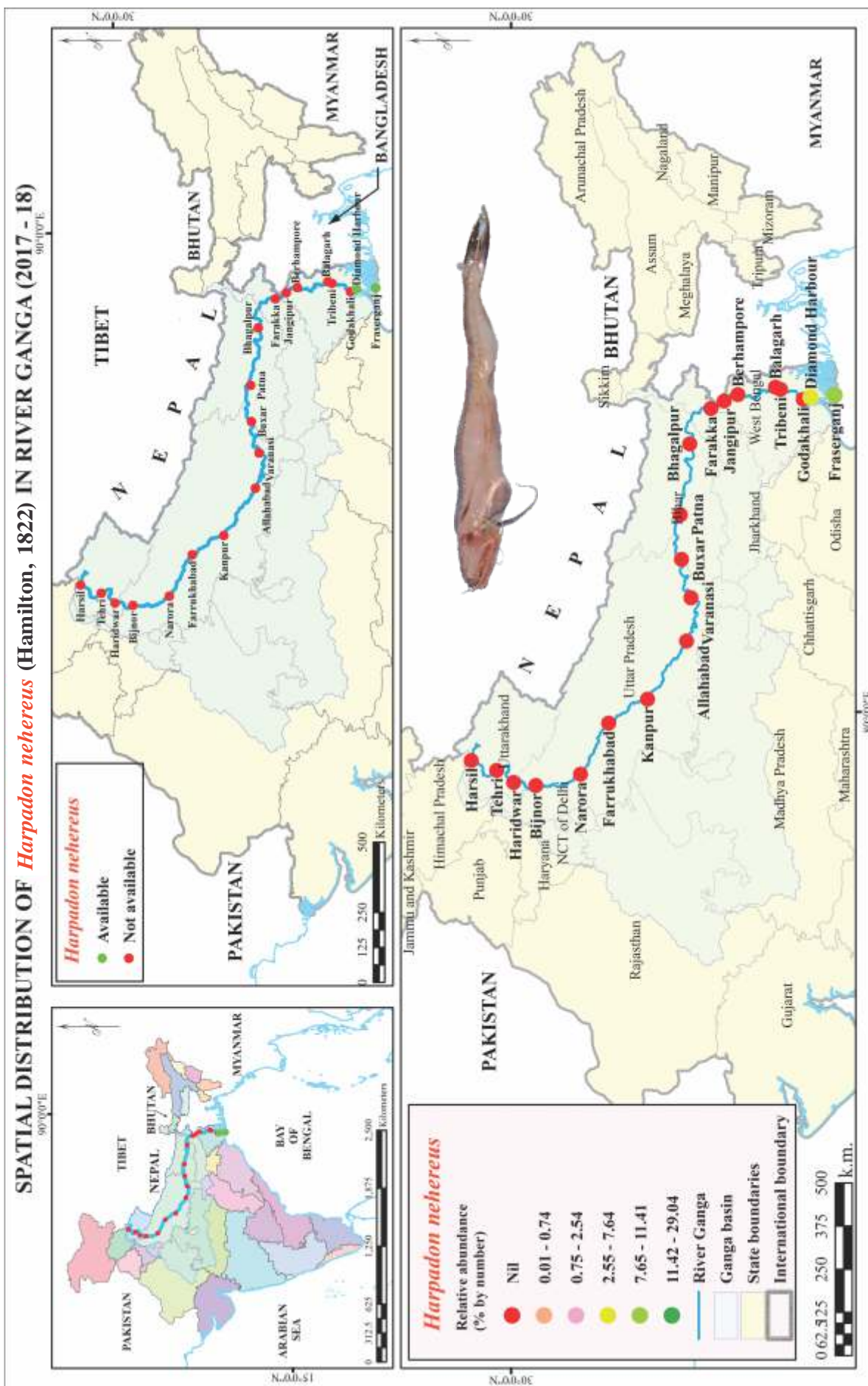
Habitat: Marinewater and Brackishwater

Maximum size (TL): 40 cm

Food and feeding: Feeds on zooplanktivores and piscivores

Conservation status (IUCN Red list): Near threatened

Commercial value: Used as a food fish







Beloniformes

Hyporhamphus limbatus (Valenciennes, 1847)

Systematic classification:

Class : Actinopterygii
Order : Beloniformes
Family : Hemiramphidae
Genus : *Hyporhamphus*
Species : *limbatus*



Vernacular name: Der thunto (West Bengal)

Common English name: Congaturi halfbeak

Synonyms: *Hemirhamphus gaimardi*

Salient identifying characteristics:

- ◆ Body elongated and prolonged with little compressed
- ◆ Upper jaw short and triangular, lower jaw beak-like shaped
- ◆ Presence of reddish color fleshy tip of beak
- ◆ Caudal fin emarginated, not fairly forked
- ◆ Greenish color above, with a silvery lateral stripe widening at posterior, vertical portion white and fins hyaline in nature

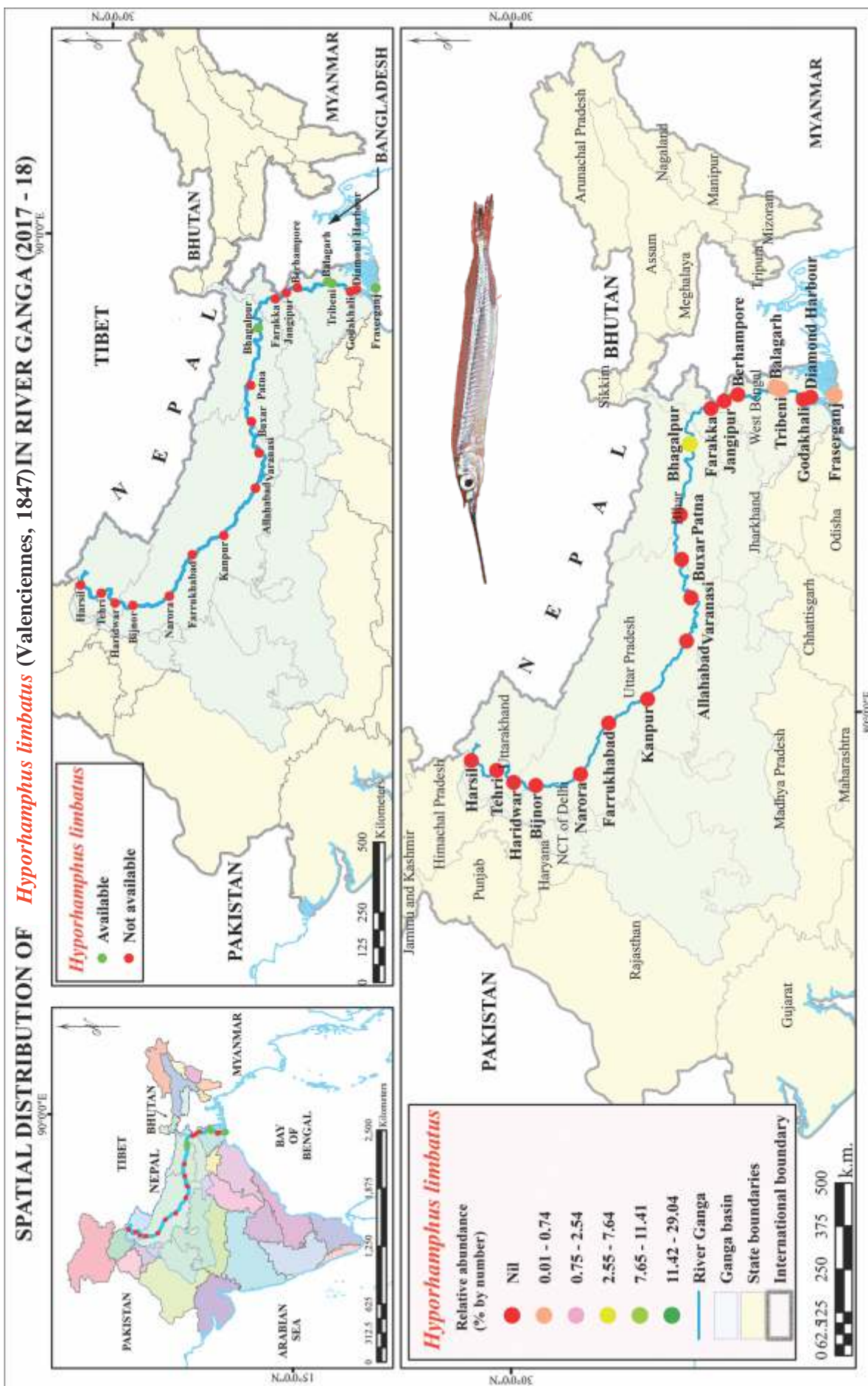
Habitat: Brackishwater and Freshwater

Maximum size (TL): 35 cm

Food and feeding: Feed mainly on insects

Conservation status (IUCN Red list): Least Concern

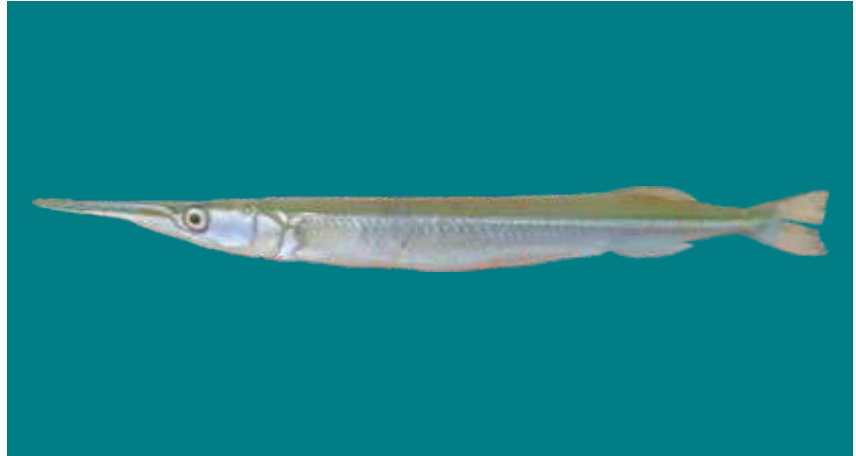
Commercial value: Used as a food fish



Xenentodon cancila (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Beloniformes
Family : Belonidae
Genus : *Xenentodon*
Species : *cancila*



Vernacular name: Kakila, Kankle (West Bengal), Suaa, Nauwa, Alwali (Uttar Pradesh, Bihar)

Common English name: Freshwater garfish

Synonyms: *Esox cancila*, *Esox hindostonicus*, *Belone cancila*

Salient identifying characteristics:

- ◆ Body elongated and compressed
- ◆ Dorsal fin originates usually anterior to a vertical through the origin of the anal fin
- ◆ Greenish silvery in colour on dorsal side of body and gradually whitish on ventral side

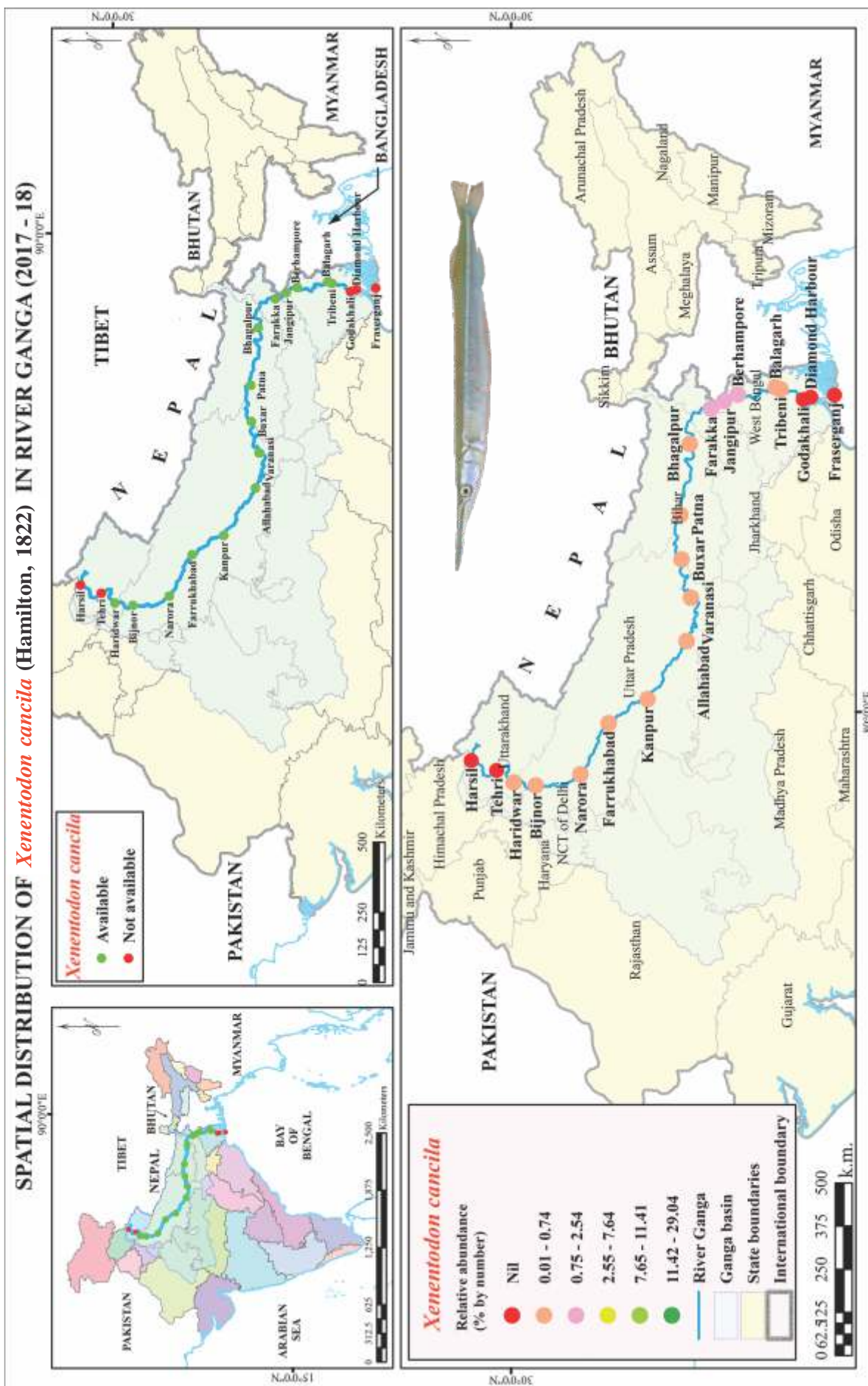
Habitat: Freshwater

Maximum size (TL): 40 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food and ornamental fish







Gadiformes

Bregmaceros mccllelandi Thompson, 1840

Systematic classification:

Class : Actinopterygii
Order : Gadiformes
Family : Bregmacerotidae
Genus : *Bregmaceros*
Species : *mccllelandi*



Vernacular name: Luti (West Bengal)

Common English name: Unicorn cod

Synonyms: *Bregmaceros mccllelandi*

Salient identifying characteristics:

- ◆ Body is elongated with brownish speckled silvery abdomen
- ◆ Cheek and lower head silver in color
- ◆ Jugular pelvic fins present
- ◆ Dorsal fin consists of 57-66 soft rays while anal fin consists of 58-69 soft rays
- ◆ Pelvic fin with 5 rays of which the outer 3 rays long and thick

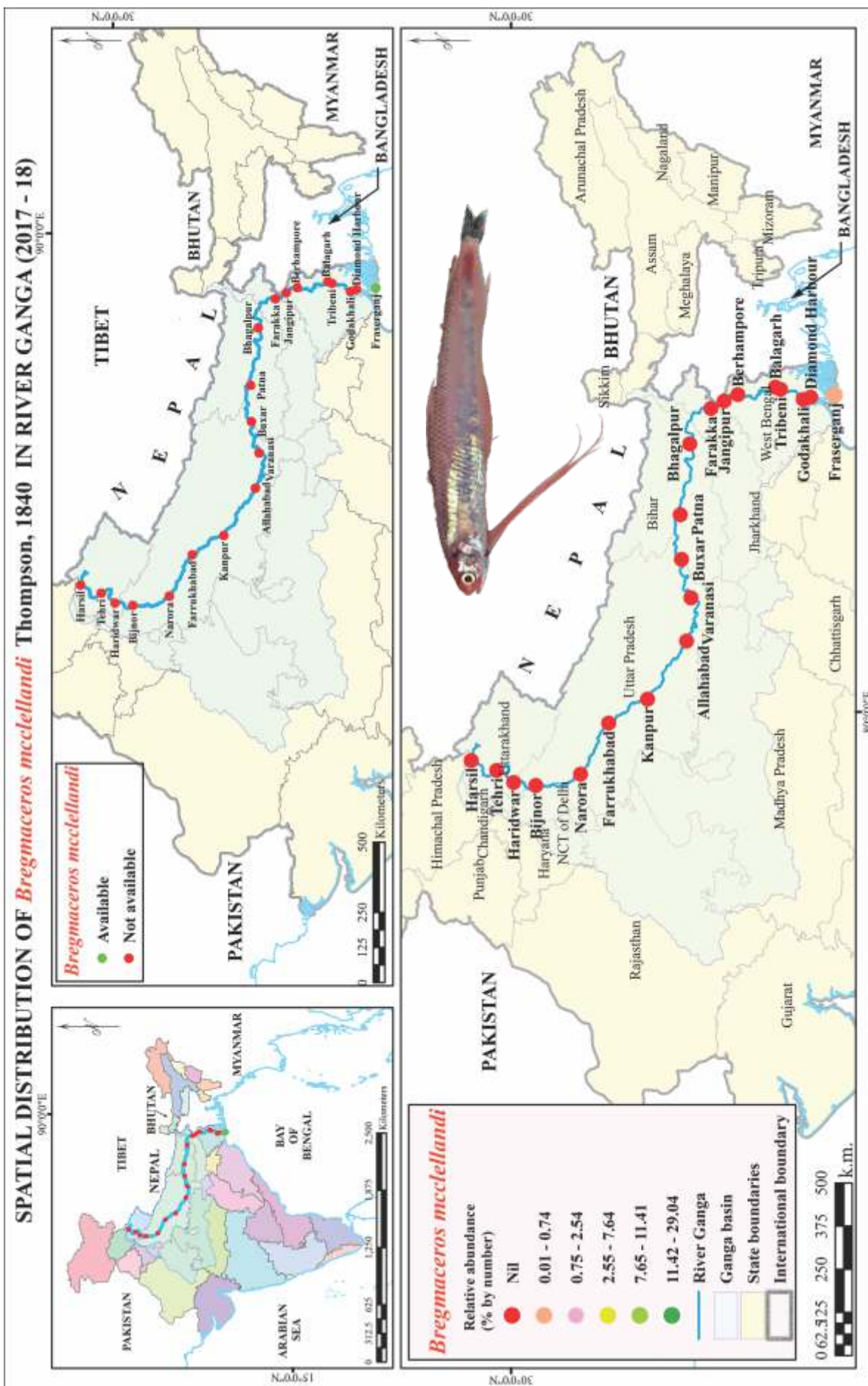
Habitat: Marinewater and Brackishwater

Maximum size (TL): 9.6 cm

Food and feeding: Feeds on planktonic crustaceans

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as a food fish



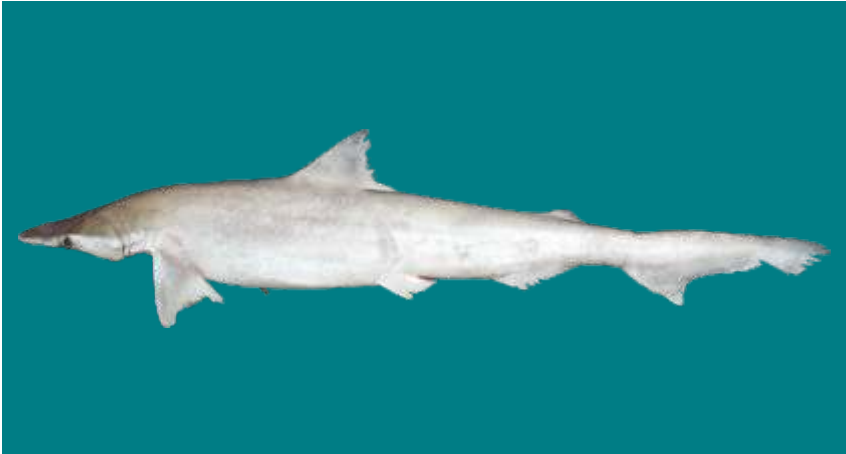




Carcharhiniformes

Scoliodon laticaudus Müller & Henle, 1838

Systematic classification:	
Class	: Elasmobranchii
Order	: Carcharhiniformes
Family	: Carcharhinidae
Genus	: <i>Scoliodon</i>
Species	: <i>laticaudus</i>



Vernacular name: Mera (West Bengal)

Common English name: Indian dog shark

Synonyms: *Carcharias laticaudus*, *Carcharias mulleri*

Salient identifying characteristics:

- ◆ Body slender and fusiform
- ◆ Head depressed and eyes small
- ◆ Anal fin originated anterior to second dorsal fin origin
- ◆ Caudal fin with its postventral margin only moderately concave
- ◆ Above part bronzy grey in colour and lower part white in colour, fins generally darker than body

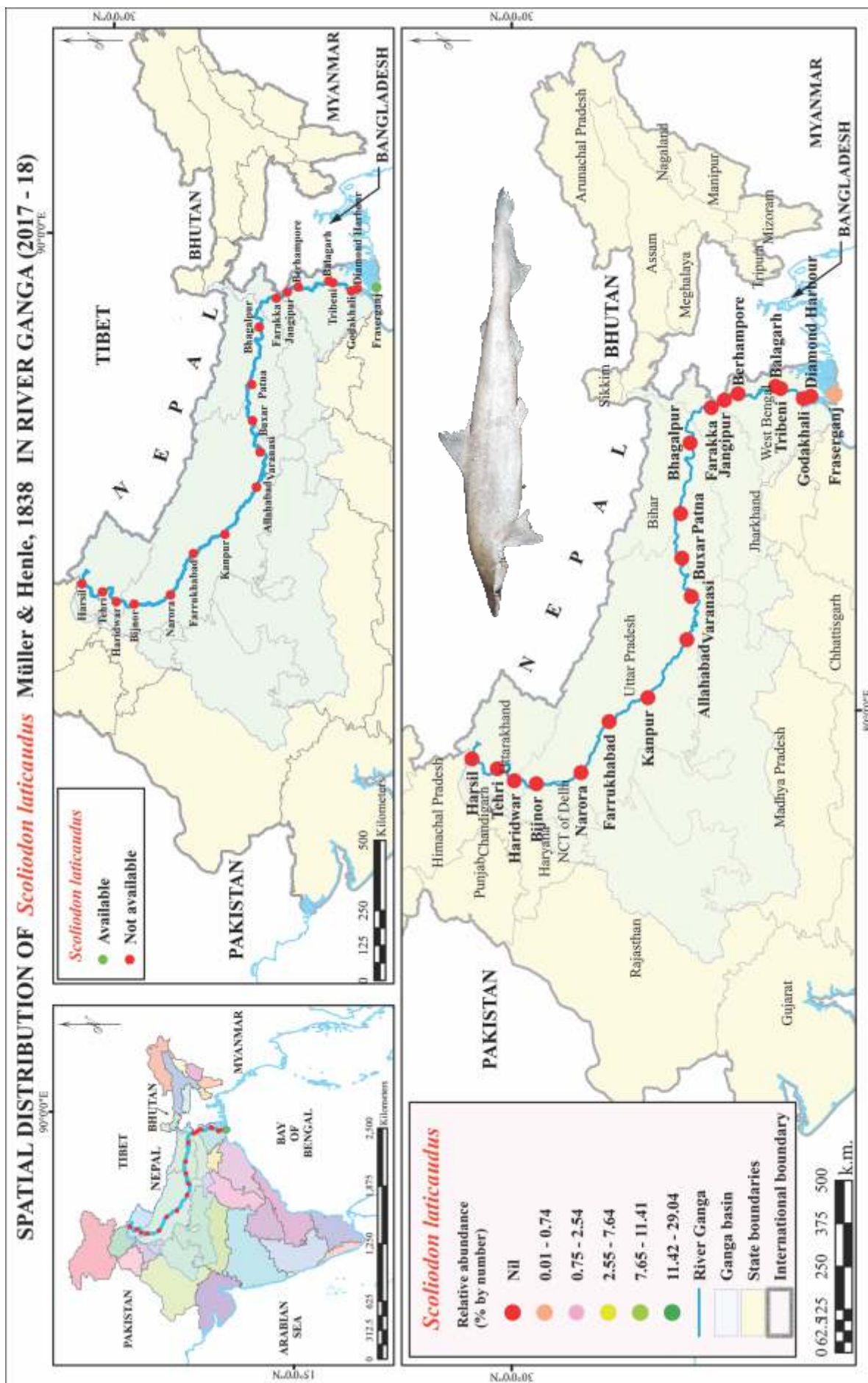
Habitat: Marinewater and Brackishwater

Maximum size (TL): 100 cm

Food and feeding: Feeds on small bony fishes, shrimps and cuttlefish

Conservation status (IUCN Red list): Near Threatened

Commercial value: Used as fish meal







Clupeiformes

Anodontostoma chacunda (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Anodontostoma*
Species : *chacunda*



Vernacular name: Nona Khoira (West Bengal)

Common English name: Chacunda gizzard shad

Synonyms: *Chatoessus chacunda*, *Clupanodon chanpole*

Salient identifying characteristics:

- ◆ Body is very deep and elongated with conical shaped flattened head
- ◆ Body is silvery pigmented alongwith a black blotch beyond the gill openings
- ◆ Belly almost rounded with scutes

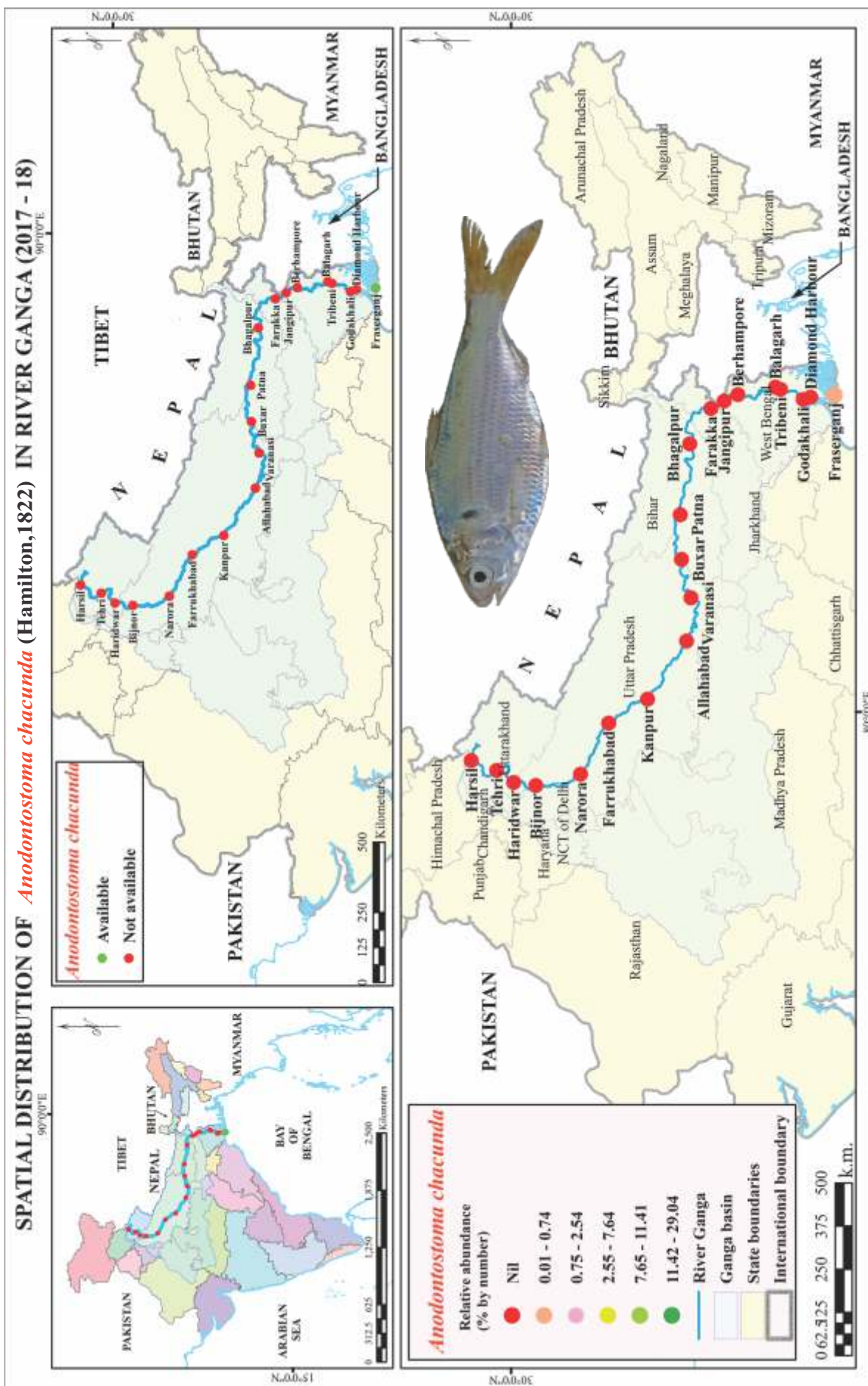
Habitat: Marinewater and Brackishwater

Maximum size (TL): 22 cm

Food and feeding: Feeds on diatoms, radiolarians, mollusks, copepods, and crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Chirocentrus dorab (Fabricius, 1775)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Chirocentridae
Genus : *Chirocentridae*
Species : *dorab*



Vernacular name: Samudrik chela (West Bengal)

Common English name: Dorab wolf-herring

Synonyms: *Clupea dorab*

Salient identifying characteristics:

- ◆ Body elongated and strongly compressed
- ◆ Belly sharp-edged but without scute
- ◆ Mouth upturned, lower-jaw projecting beyond the upper
- ◆ Canine teeth on both jaws; one pair of long, sharp teeth exist near the centre of the premaxillaries
- ◆ Dorsal fin originates almost at the last 1/3rd part of the body with 16-19 rays. Anal fin originates almost parallel to the dorsal origin
- ◆ Caudal fin bifurcated and bluish in colour

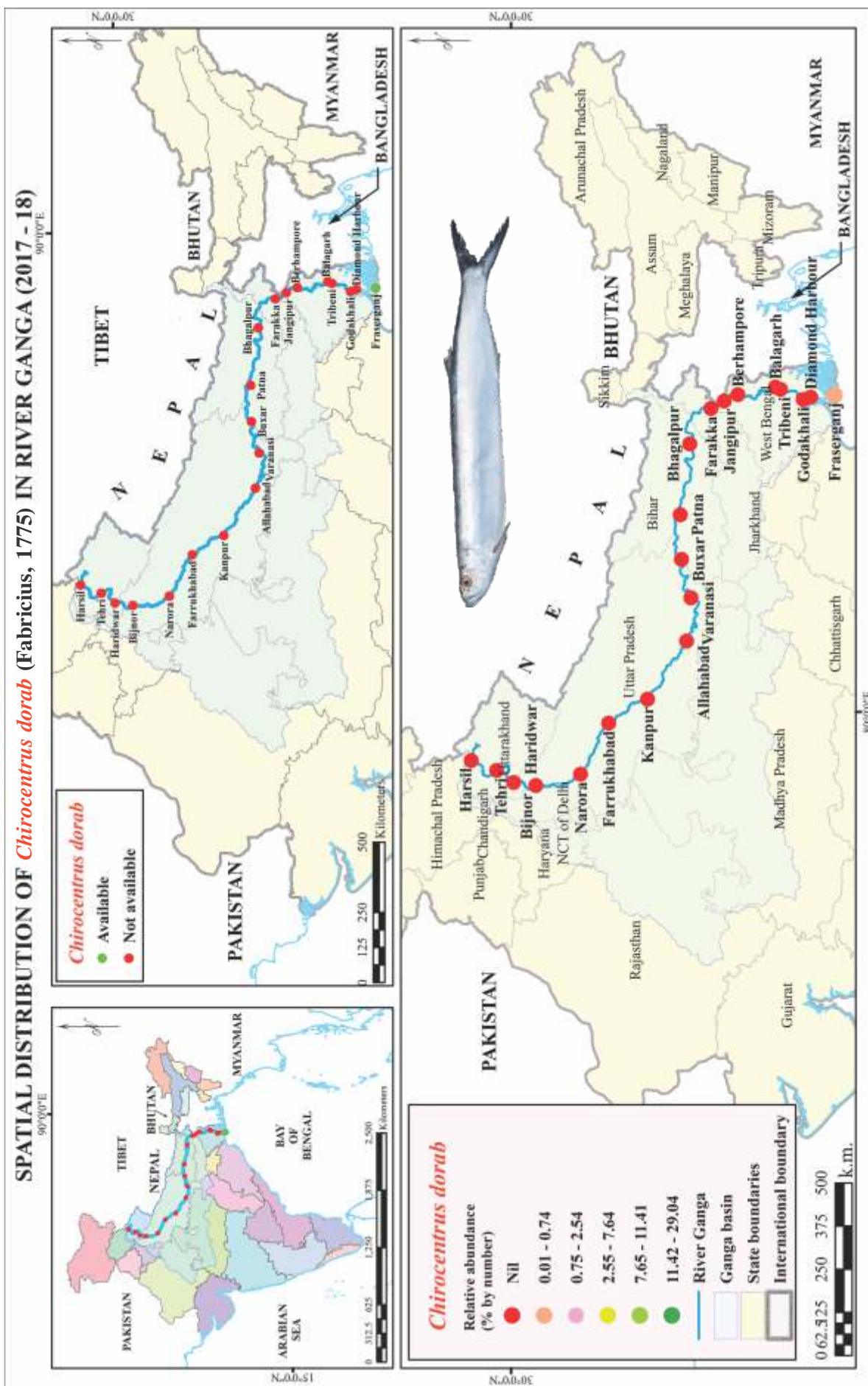
Habitat: Marinewater and Brackishwater

Maximum size (TL): 100 cm

Food and feeding: Feeds on small fish but mainly crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Coilia dussumieri Valenciennes, 1848

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Coilia*
Species : *dussumieri*



Vernacular name: Amadi (West Bengal)

Common English name: Goldspotted grenadier anchovy

Synonyms: *Coilia quadrifilis*

Salient identifying characteristics:

- ◆ Body elongated and compressed with long tapering slender tail and rounded belly
- ◆ Presence of 7 to 9 post pelvic scutes
- ◆ Pectoral fin comprise of 6 long filaments
- ◆ Scales are minute and deciduous
- ◆ Backside light brown with silvery rows and golden spots on the body

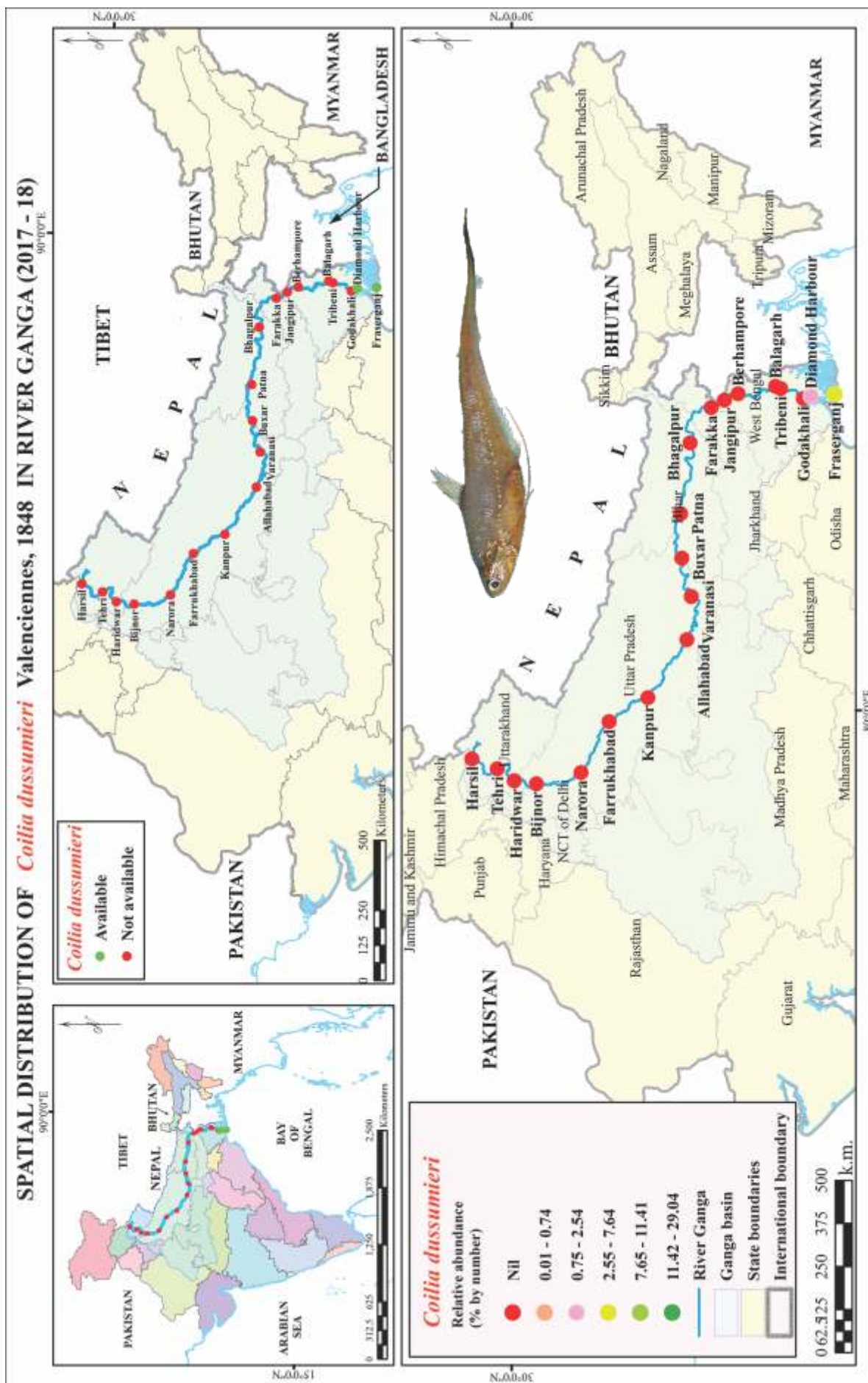
Habitat: Marinewater and Brackishwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on copepods, prawn and fish larvae, various crustaceans and cypris, also stomatopod larvae, mysids, polychaete larvae, isopods and *Sagitta*

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Coilia reynaldi Valenciennes, 1848

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Coilia*
Species : *reynaldi*



Vernacular name: Amadi (West Bengal)

Common English name: Reynald's grenadier anchovy

Synonyms: *Coilia borneensis*, *Coilia korua*

Salient identifying characteristics:

- ◆ Body is flattened and compressed with slender caudal fin end
- ◆ Maxilla is short reaching to the edge of operculum
- ◆ Fins are hyaline with darker dorsal fin rays
- ◆ Abdomen is pale yellow in colour
- ◆ 10-13 long filaments present on the pectoral fin

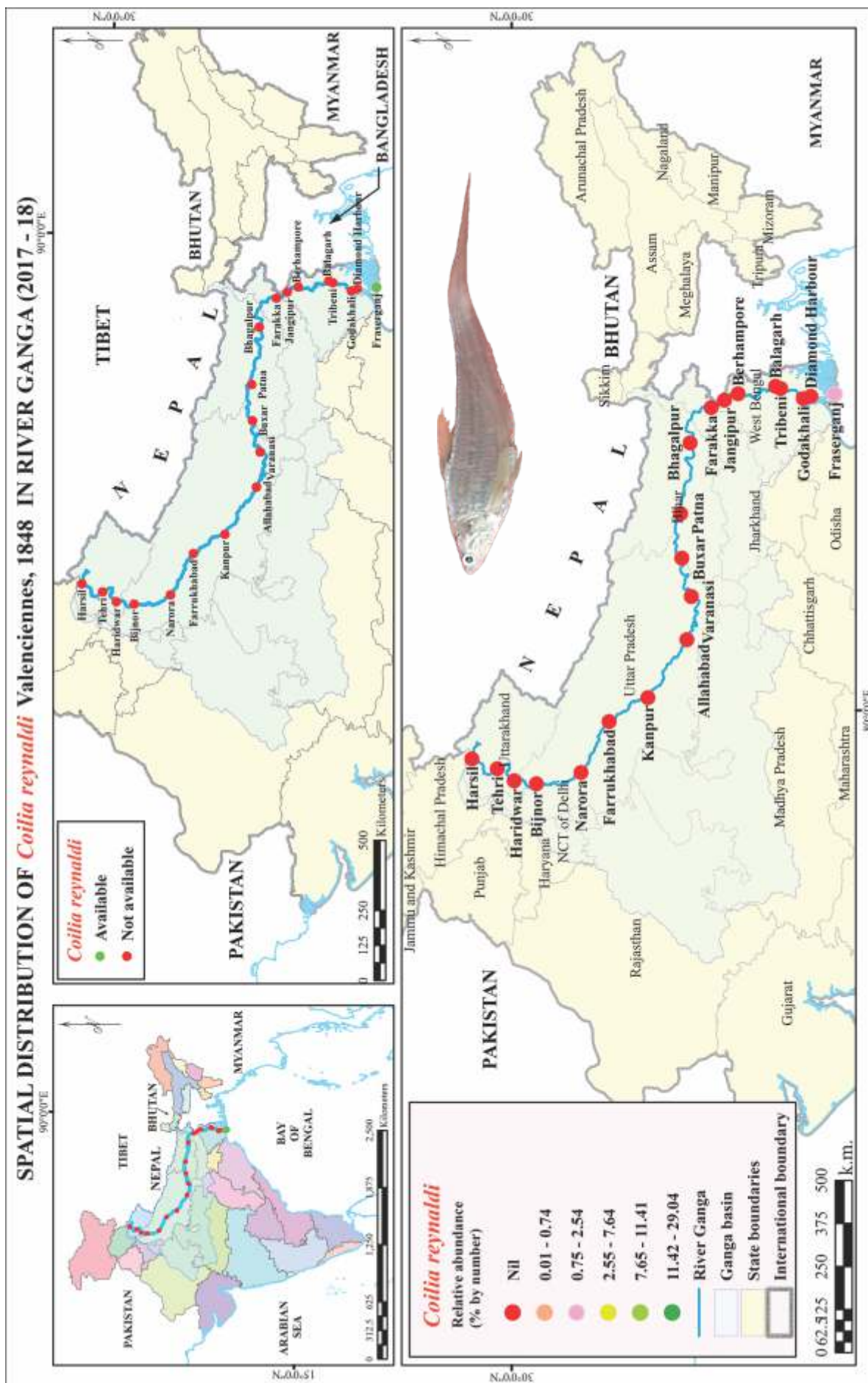
Habitat: Marinewater and Brackishwater

Maximum size (TL): 15 cm

Food and feeding: Feeds on prawns, copepods larval decapods and other crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Corica soborna Hamilton, 1822

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Corica*
Species : *soborna*



Vernacular name: Ghiya, Maya (Uttar Pradesh, Bihar), Sona korke (West Bengal)

Common English name: Ganges river sprat

Synonyms: Not Known

Salient identifying characteristics:

- ◆ Body is fairly elongated with keeled belly
- ◆ Minute teeth on the jaw or may be absent
- ◆ Abdomen keeled with 10 or 11 pre and 7 or 8 post pelvic scutes
- ◆ Last two anal fin rays separated from rest of fin forming a distinct finlet

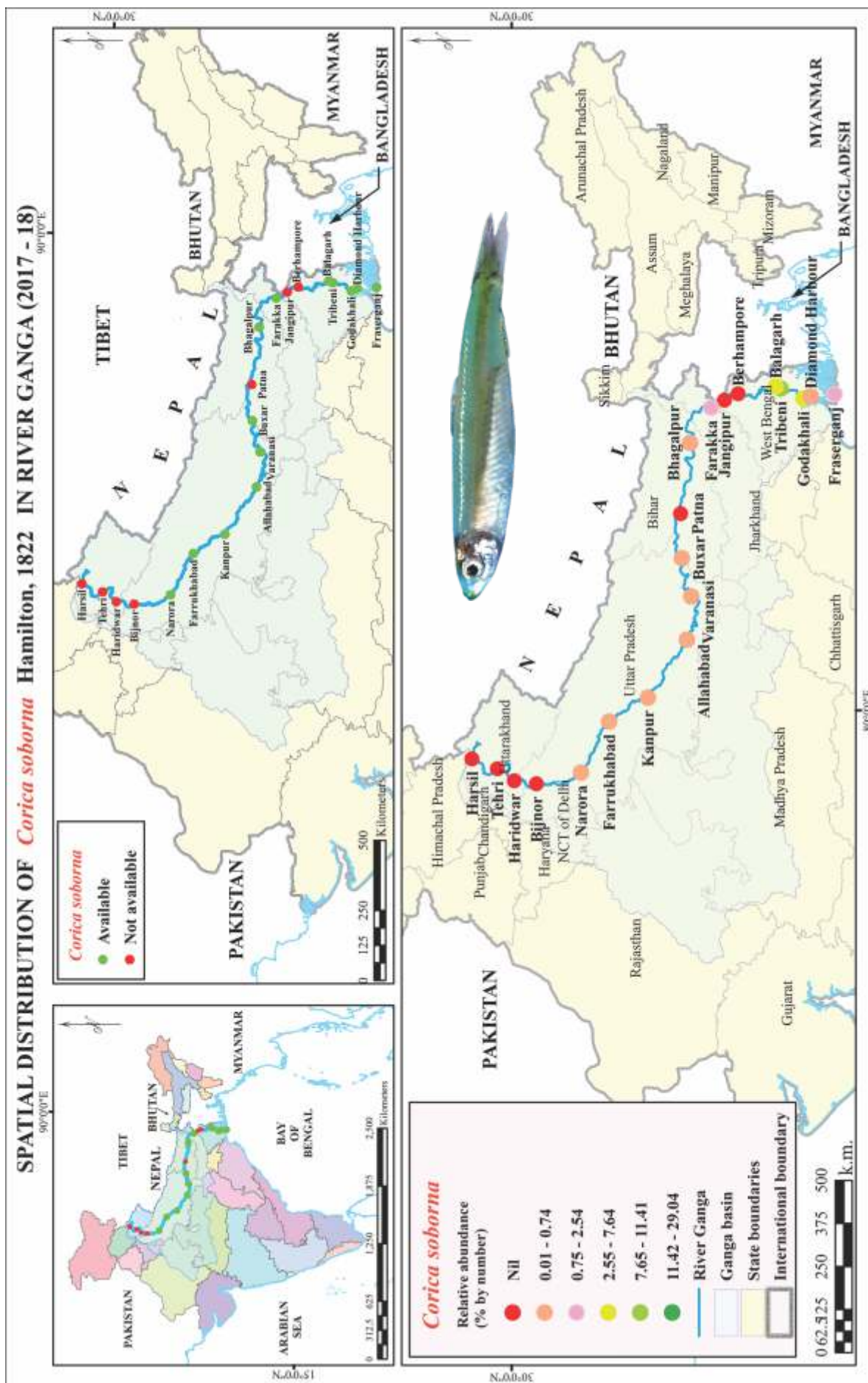
Habitat: Freshwater and Brackishwater

Maximum size (TL): 5.3 cm

Food and feeding: Zooplanktivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Escualosa thoracata (Valenciennes, 1847)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Escualosa*
Species : *thoracata*



Vernacular name: Gang mouti (West Bengal)

Common English name: White sardine

Synonyms: *Kowala thoracata*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Abdomen serrated extending upto thoracic region
- ◆ Belly is strongly keeled
- ◆ Maxilla extending up to the first, third or middle of the eye
- ◆ Colour of body greenish dorsally with tipped caudal fin

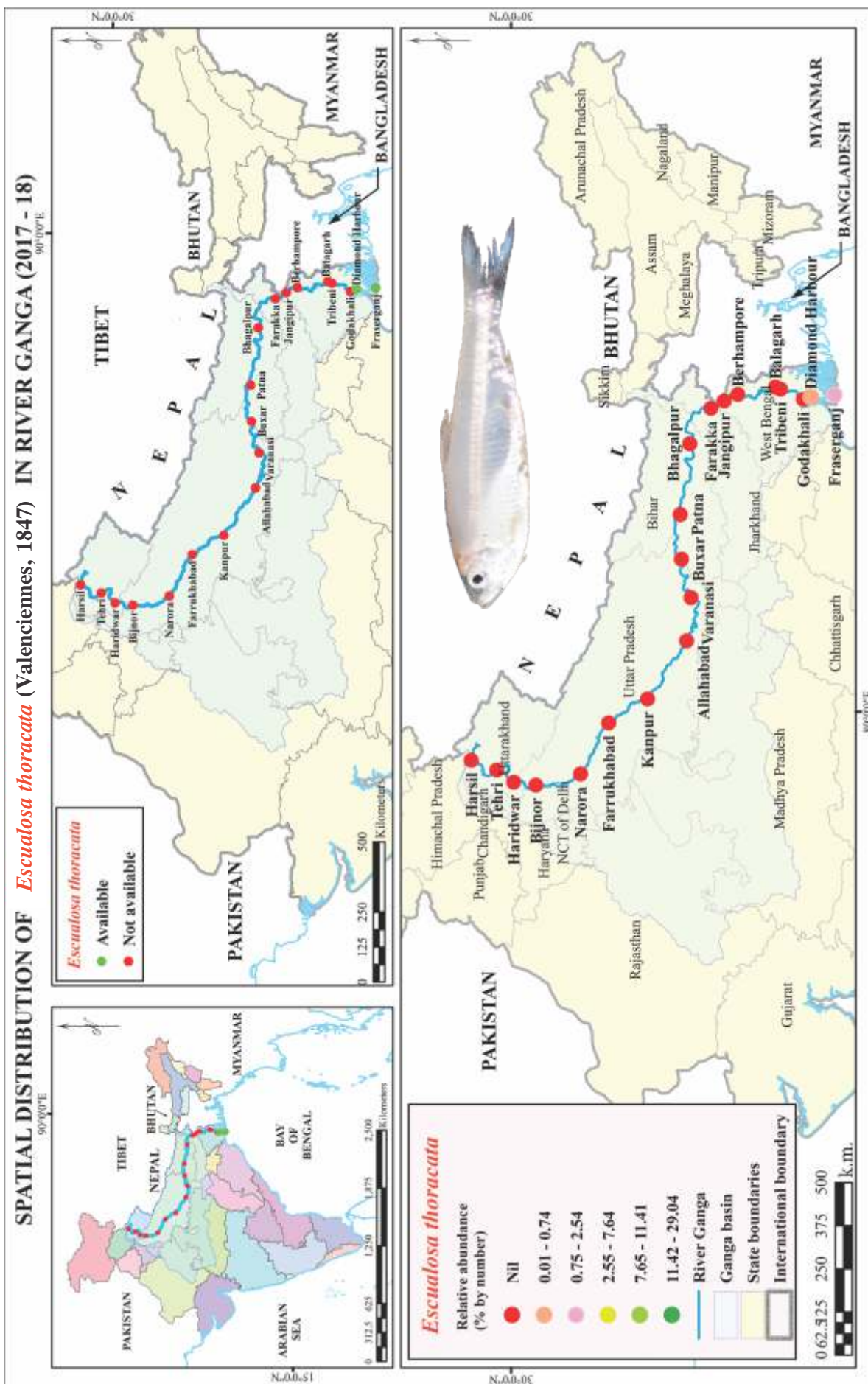
Habitat: Marinewater and Brackishwater

Maximum size (TL): 10 cm

Food and feeding: Feeds on zooplankton viz. copepods, crab zoea, larvae of bivalves and fish eggs and phytoplankton

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a popular food fish



Gonialosa manmina (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Gonialosa*
Species : *manmina*



Vernacular name: Suia, Folia (Uttar Pradesh, Bihar), Chapra, Korti (West Bengal)

Common English name: Ganges River gizzard shad

Synonyms: *Clupanodon manmina*, *Chatoessus manmina*

Salient identifying characteristics:

- ◆ Body deep and compressed
- ◆ Inferior mouth with slender upper jaw at tip
- ◆ Small scales, lateral line with 51 to 71 scales
- ◆ Gold color with silvery shot and a dark spot behind gill opening

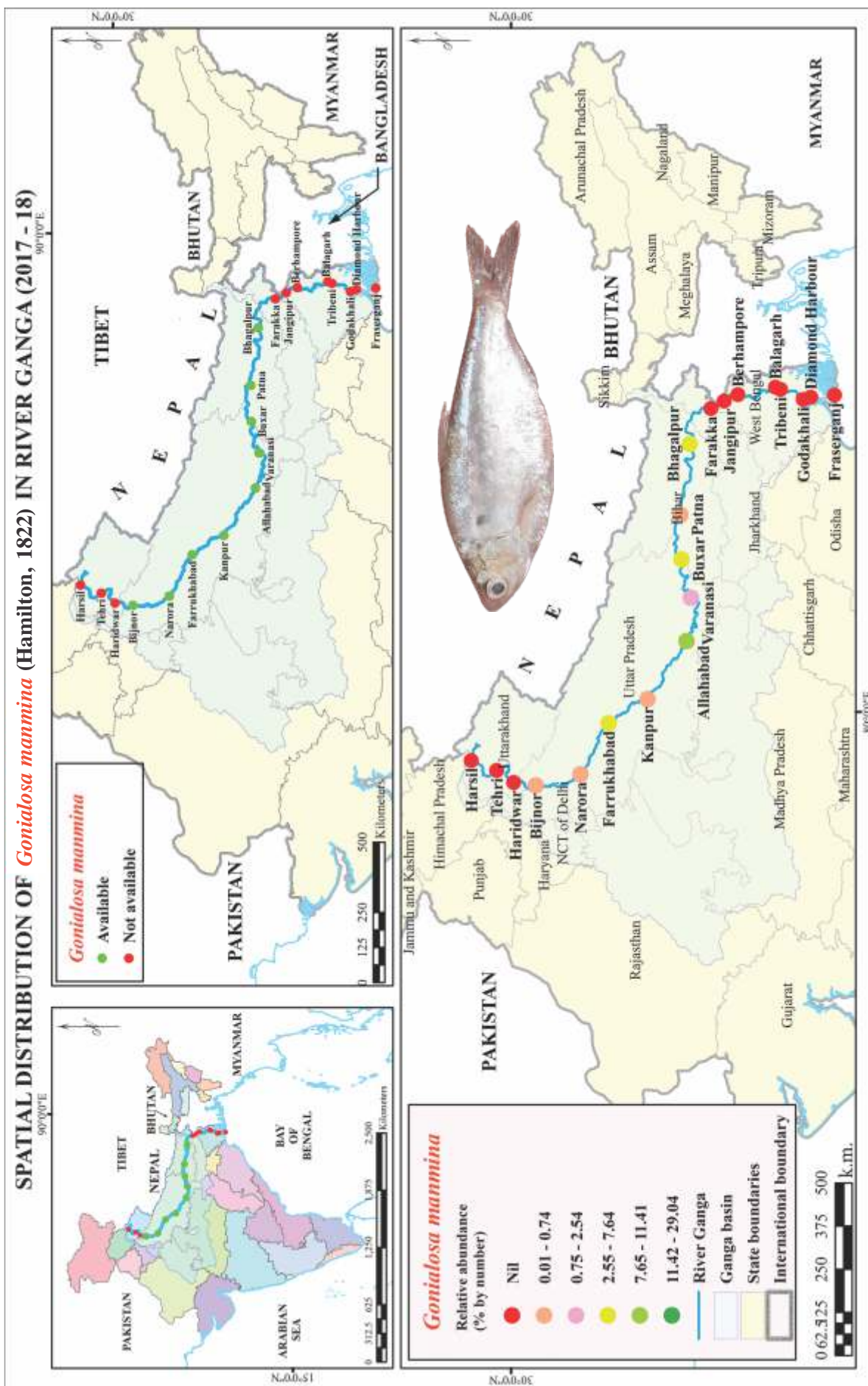
Habitat: Freshwater

Maximum size (TL): 14.1 cm

Food and feeding: Feeds on green algae, diatom and desmids

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Gudusia chapra (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Clupeiformes
Family	: Clupeidae
Genus	: <i>Gudusia</i>
Species	: <i>chapra</i>



Vernacular name: Suia, (Uttar Pradesh, Bihar), Khaira, Chapra, Korti (West Bengal)

Common English name: Indian River shad

Synonyms: *Clupea chapra*, *Clupea suhia*

Salient identifying characteristics:

- ◆ Deep body, with 26 to 29 belly scutes
- ◆ Dorsal fin originated more or less equidistant between tip of snout and caudal fin base
- ◆ Gill rakers fine and numerous
- ◆ Lateral series with 77 to 91 scales
- ◆ Black brown colour, flanks silvery or golden, dark blotch behind gill opening

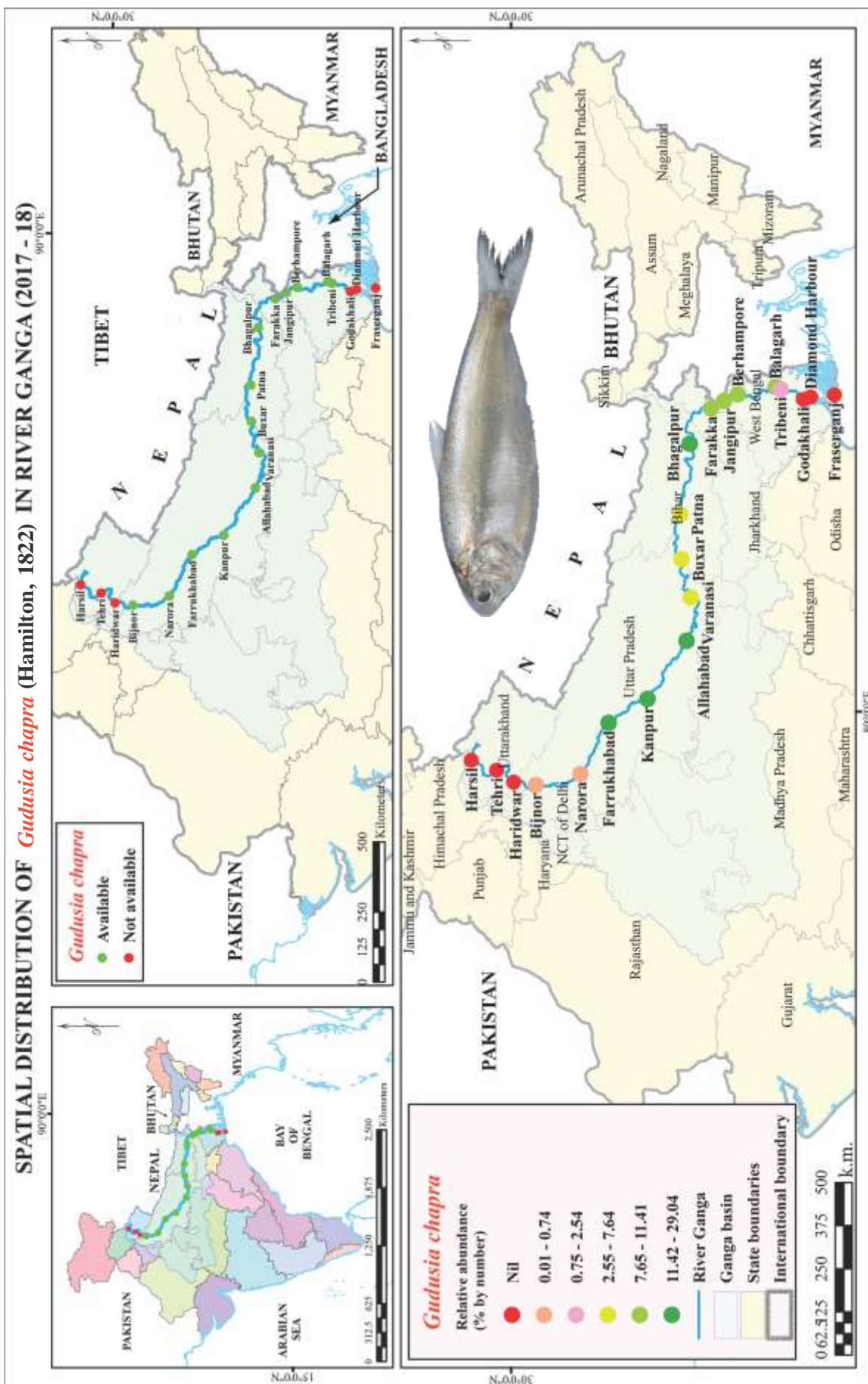
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on phytoplankton, zooplankton and detritus

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Ilisha elongata (Anonymous, 1830)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Pristigasteridae
Genus : *Ilisha*
Species : *elongata*



Vernacular name: Dhela (West Bengal)

Common English name: Elongate ilisha

Synonyms: *Pellona elongata*

Salient identifying characteristics:

- ◆ Slender body, usually 24 to 25 + 10 to 15, total 34 to 42 scutes along with belly
- ◆ Large eyes, No dorsal and anal spine present
- ◆ Dorsal fin inserted midway of body or a little behind, anal fin originated fairly behind dorsal fin base

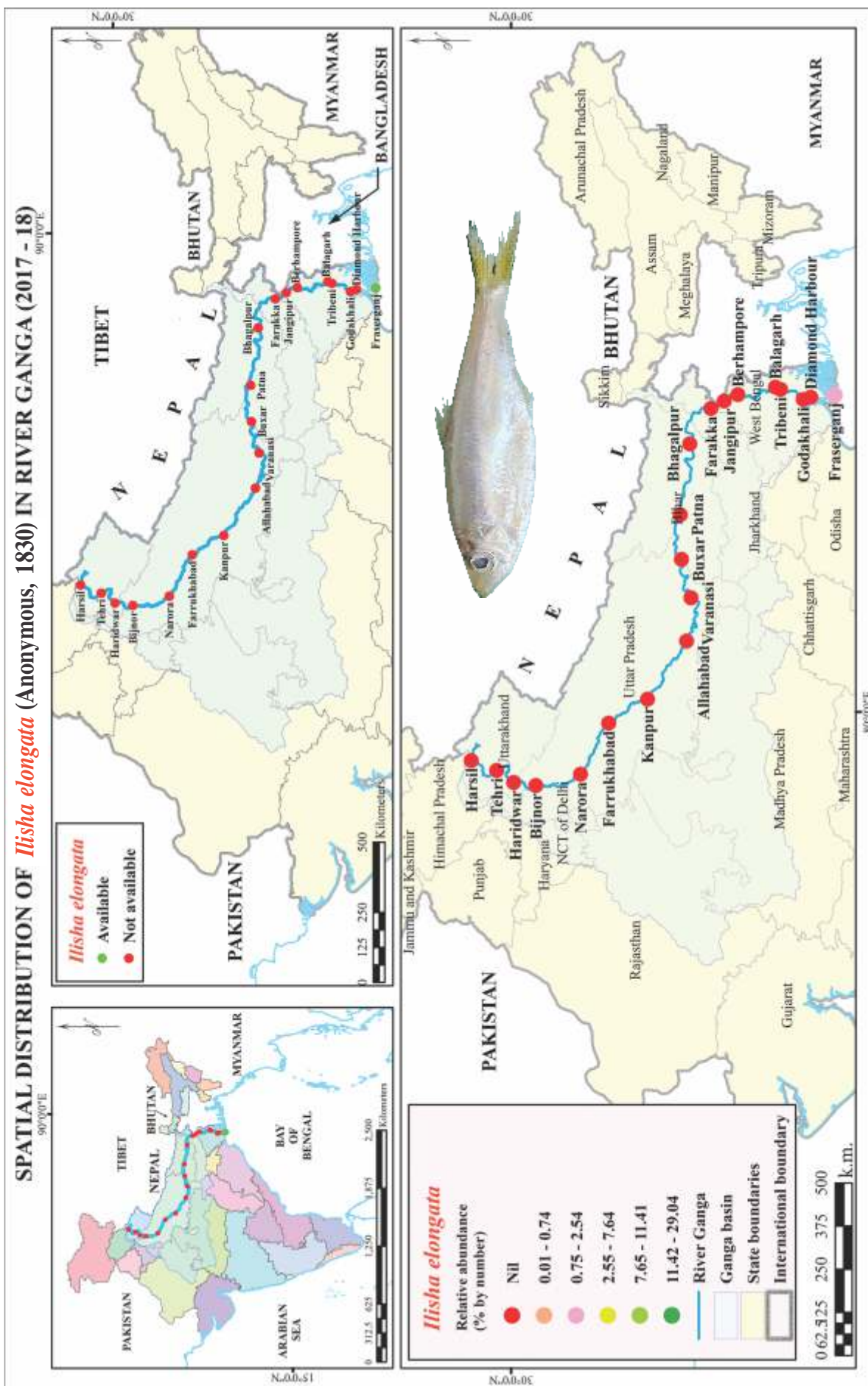
Habitat: Marinewater and Brackishwater

Maximum size (TL): 35 cm

Food and feeding: Feeds on fishes, crustaceans, amphipods with parts of algae

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Ilisha megaloptera (Swainson, 1839)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Pristigasteridae
Genus : *Ilisha*
Species : *megaloptera*



Vernacular name: Dhela (West Bengal)

Common English name: Bigeye ilisha

Synonyms: *Pellona megaloptera*

Salient identifying characteristics:

- ◆ Body fusiform and fairly deep
- ◆ Dorsal fin originated near middle of body
- ◆ Anal fin inserted below hind part of dorsal fin base
- ◆ Pectoral ray unbranched, uniformly tipped with black spots and the first eight or nine fin rays with dark pigmentation towards their tip, remaining rays hyaline

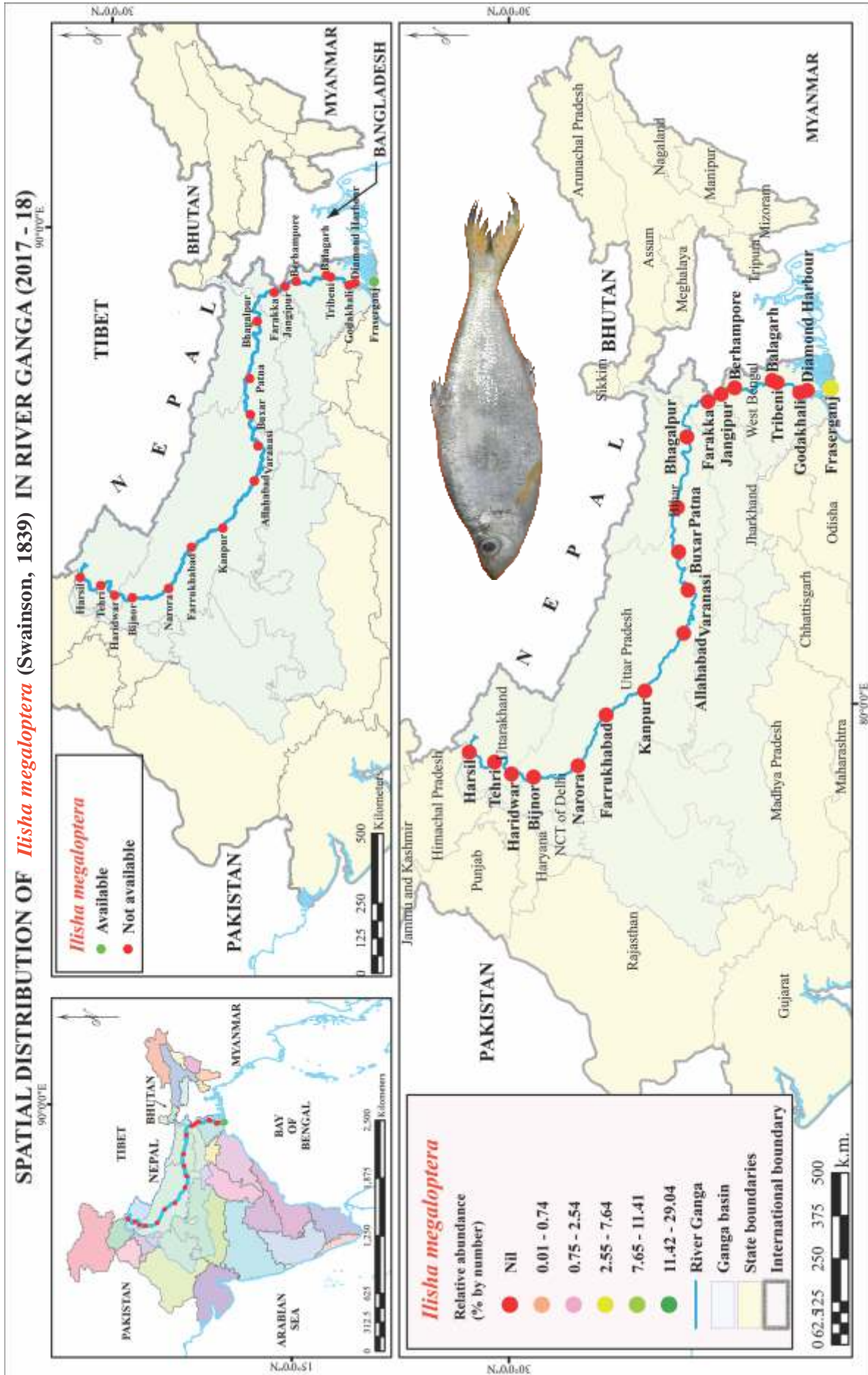
Habitat: Marinewater and Brackishwater

Maximum size (TL): 36.5 cm

Food and feeding: Feeds on fishes, crustaceans, amphipods, occasionally polychaetes, tunicates and small amounts of algae and diatoms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Pellona ditchela Valenciennes 1847

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Pristigasteridae
Genus : *Pellona*
Species : *ditchela*



Vernacular name: Dhela (West Bengal)

Common English name: Indian pellona

Synonyms: *Pellona ditcheli*

Salient identifying characteristics:

- ◆ Slightly deep and compressed body
- ◆ Eyes large. Belly with strongly keeled scutes
- ◆ Dorsal fin originates near the midpoint of body
- ◆ Pelvic fin present. Anal fin contains 34-42 fin rays
- ◆ The upper and lower vertical striae of scales a little bit overlap each other at center of scales

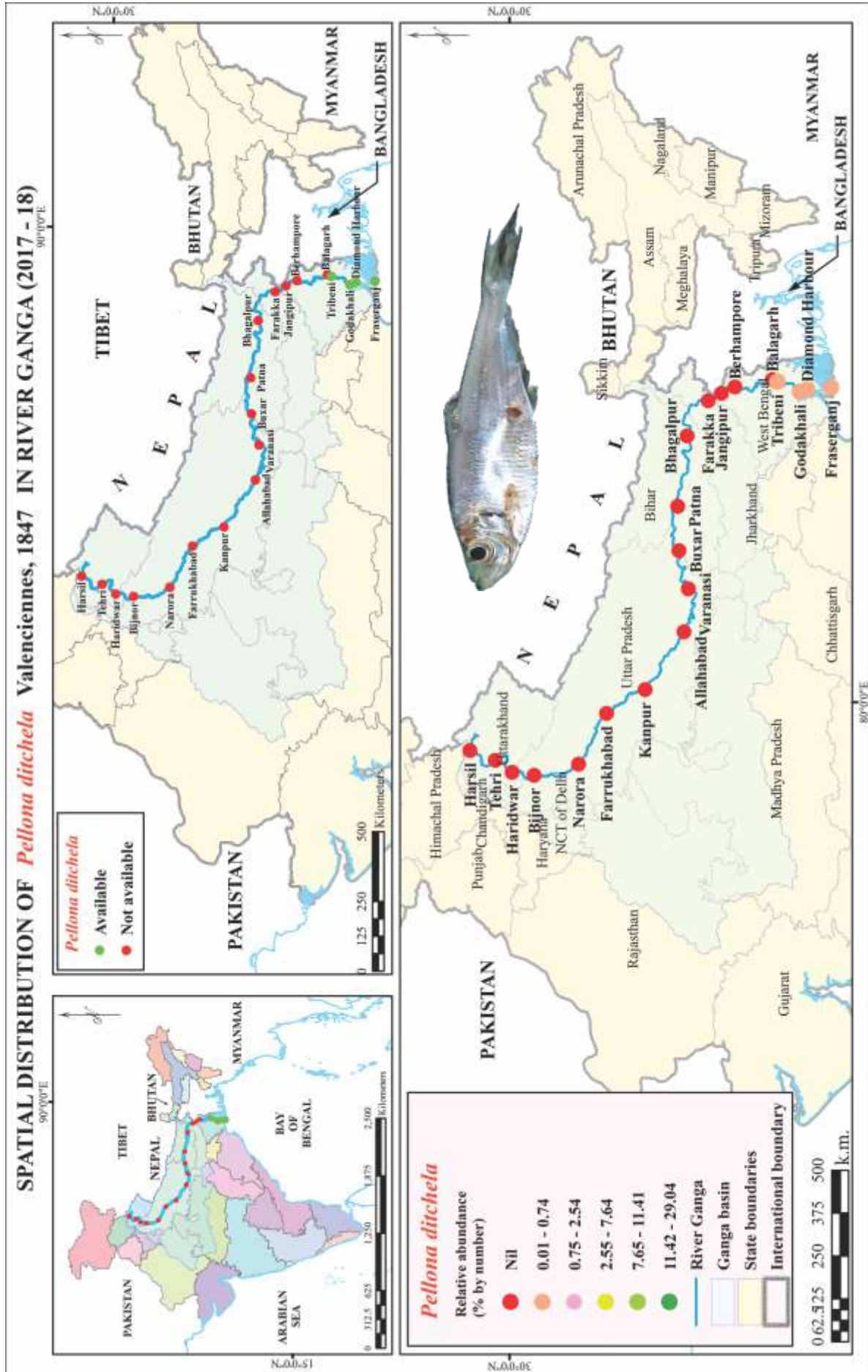
Habitat: Marinewater, Brackishwater and Freshwater

Maximum Length (TL): 8.0 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as a food fish



Raconda russeliana Gray 1831

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Pristigasteridae
Genus : *Raconda*
Species : *russeliana*



Vernacular name: Rusila (West Bengal)

Common English name: Raconda

Synonyms: *Apterygia ramcarate*

Salient identifying characteristics:

- ◆ Body elongated with convex lower profile with a sharp keel of 33 to 38 scutes
- ◆ Mouth pointing obliquely upward
- ◆ Dorsal fin and pelvic fin absent
- ◆ Anal fin long and it originate before midpoint of body

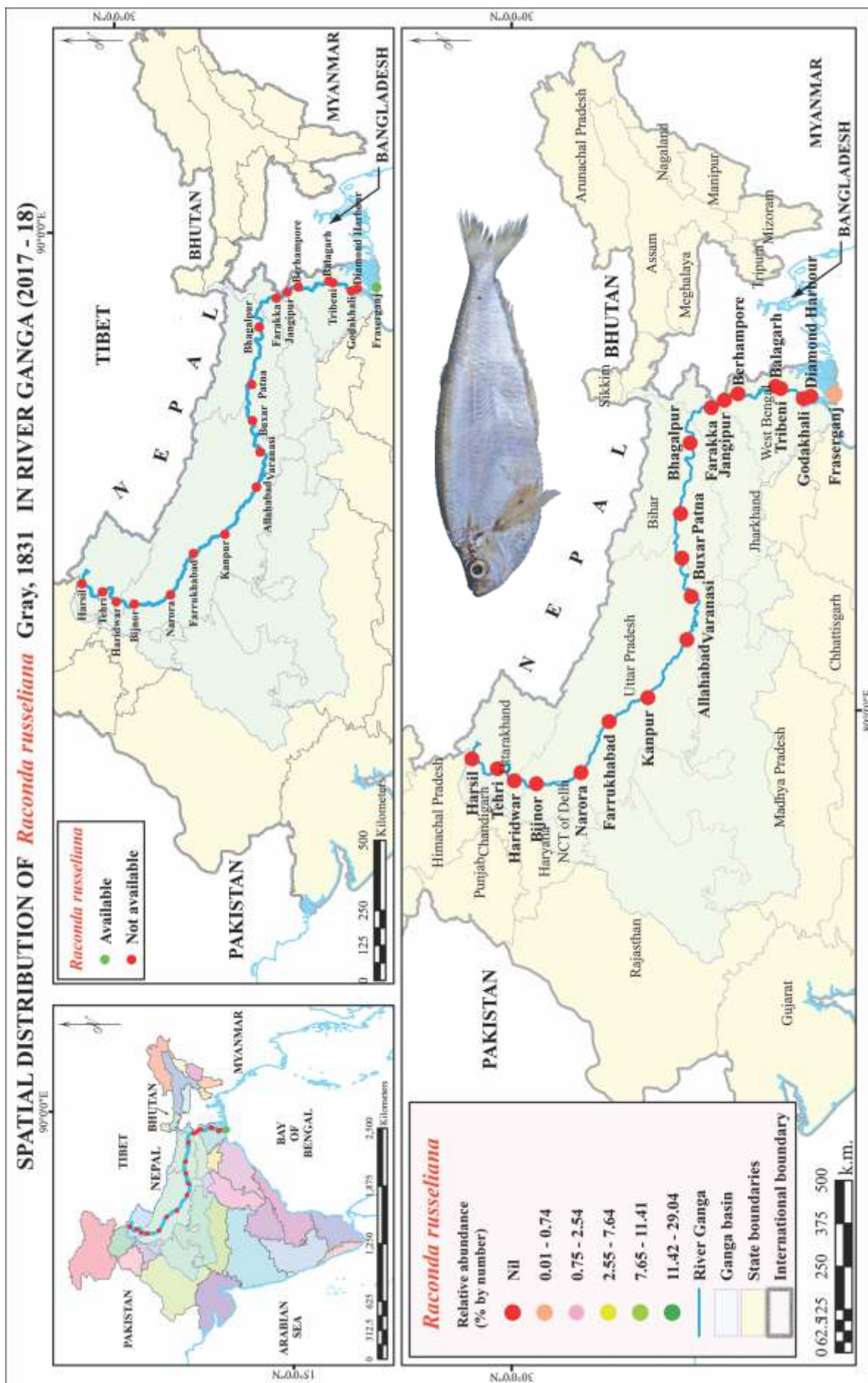
Habitat: Marinewater and Brackishwater

Maximum size (TL): 19 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Sardinella gibbosa (Bleeker, 1849)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Sardinella*
Species : *gibbosa*



Vernacular name: Kokila (West Bengal)

Common English name: Goldstripe sardinella

Synonyms: *Clupea gibbosa*

Salient identifying characteristics:

- Vertical striae on scales not meeting at center, on hind part of scale several small perforations present
- A golden mid lateral line down flank; dorsal and caudal fin margins dusky; a dark spot at dorsal fin origin

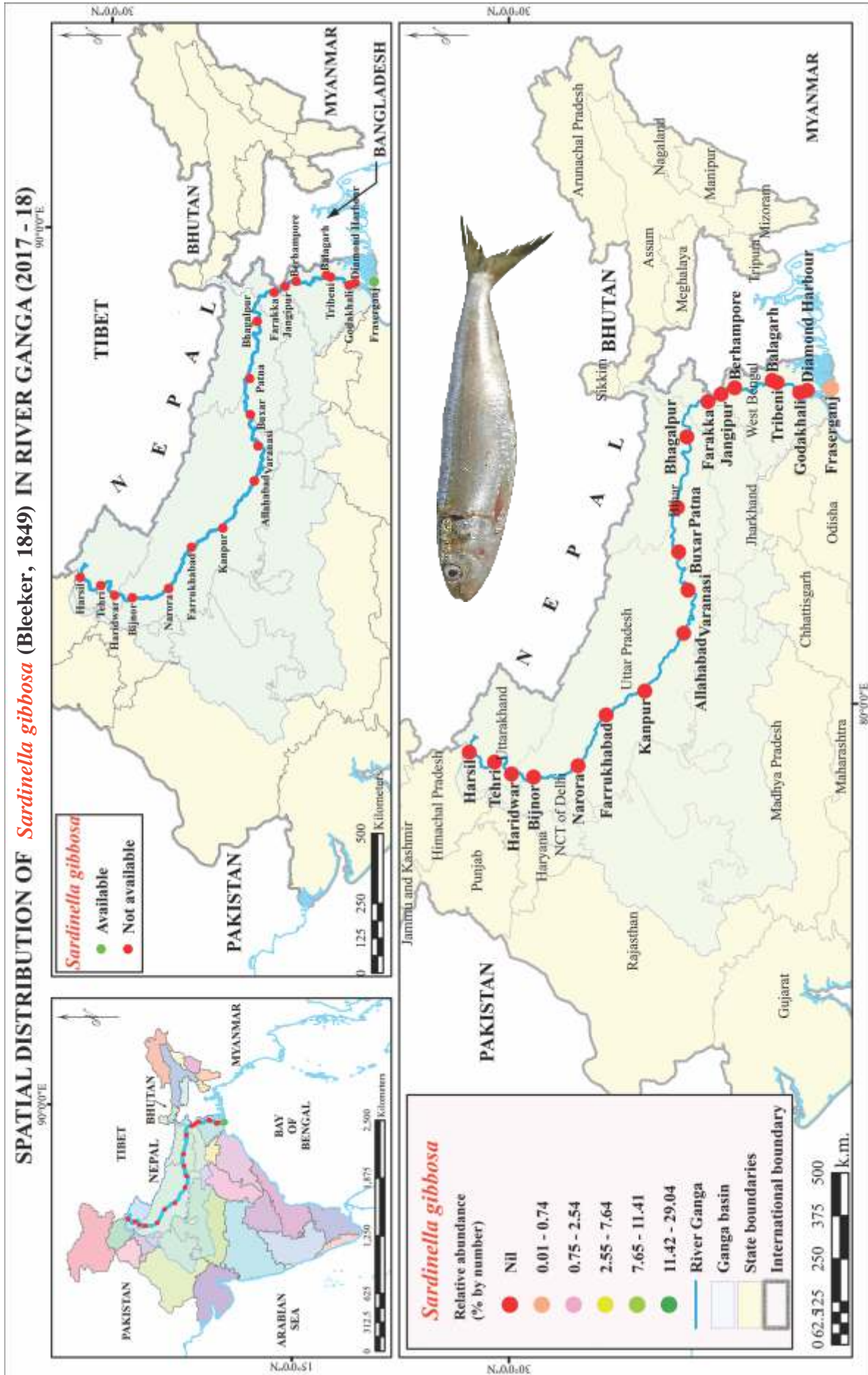
Habitat: Marinewater and Brackishwater

Maximum size (TL): 29.6 cm

Food and feeding: Adults feed on phytoplankton and zooplankton (crustacean and molluscan larvae). Juveniles like crustaceans

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as a food fish



Setipinna brevifilis (Valenciennes, 1848)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Setipinna*
Species : *brevifilis*



Vernacular name: Phasa, Phesha, Kalayi (West Bengal)

Common English name: Short hairfin anchovy

Synonyms: *Engraulis brevifilis*

Salient identifying characteristics:

- ◆ Body fusiform, strongly compressed; belly sharply keeled, with 15 to 17 + 6 or 7 (total 22 or 23) scutes
- ◆ Head length is about 5 to 5.5 times in standard length
- ◆ Mouth slightly oblique
- ◆ Short Pectoral filament reach to base of 1st to 15th anal fin ray. Caudal fin forked, its upper lobe truncated, shorter than lower

Habitat: Freshwater

Maximum size (TL): 26 cm

Food and feeding: Feed mainly small prawns, juveniles and copepods

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as a food fish

Setipinna phasa (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Clupeiformes
Family	: Engraulidae
Genus	: <i>Setipinna</i>
Species	: <i>phasa</i>



Vernacular name: Phasua, Phasia (Uttar Pradesh, Bihar), Phasa (West Bengal)

Common English name: Gangetic hairfin anchovy

Synonyms: *Clupea phasa*, *Clupea telara*

Salient identifying characteristics:

- ◆ Body fusiform and strongly compressed; belly strongly keeled, with 15 + 6 or 7 scutes
- ◆ Long pectoral filament reaching to base of 15th to 39th anal fin ray
- ◆ Caudal fin forked and its upper lobe truncated, shorter than lower

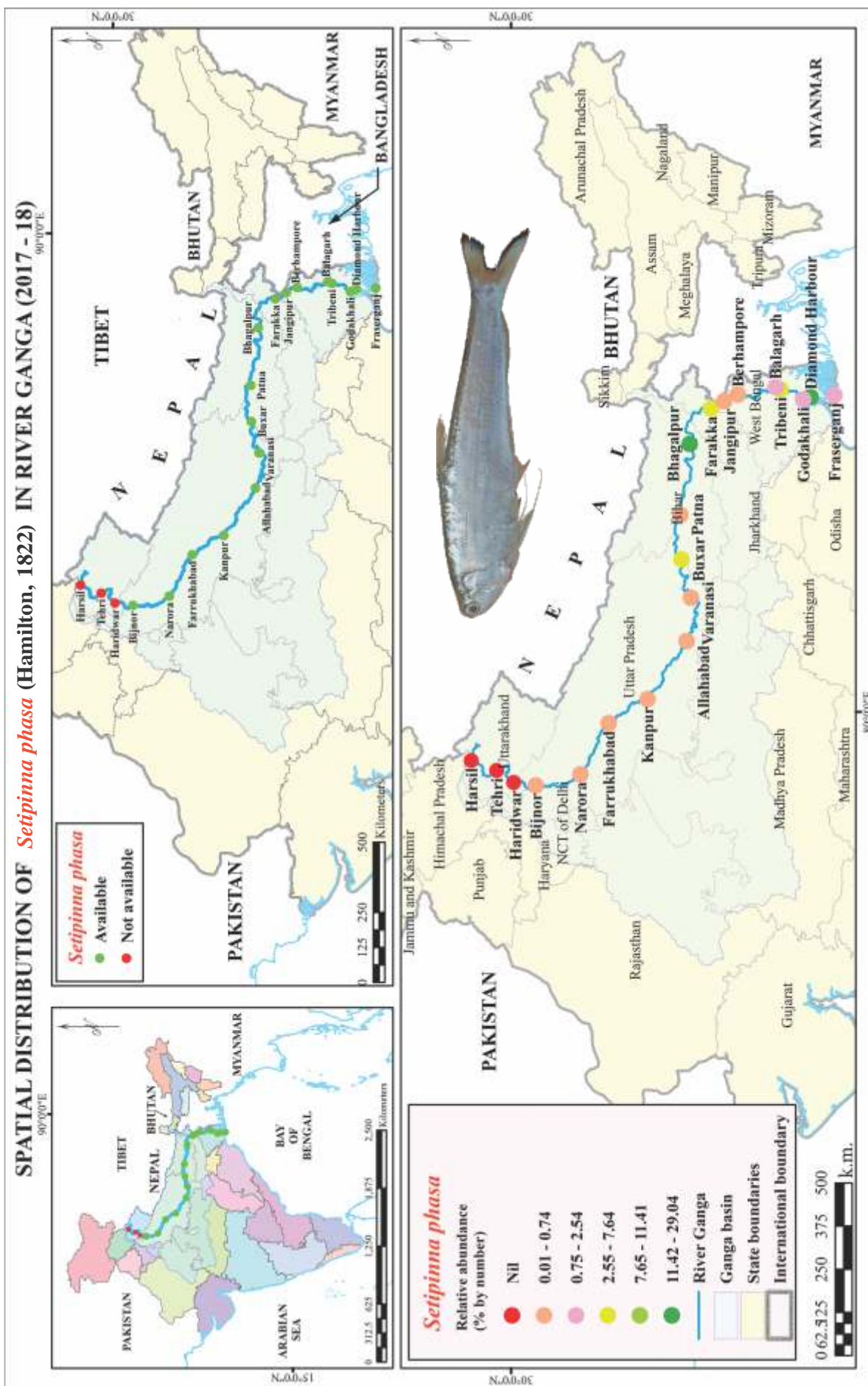
Habitat: Brackishwater and Freshwater

Maximum size (TL): 40 cm

Food and feeding: Feed mainly small prawns, juveniles and copepods

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Setipinna taty (Valenciennes, 1848)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Setipinna*
Species : *taty*



Vernacular name: Phasa, Pata mach (West Bengal)

Common English name: Scaly hairfin anchovy

Synonyms: *Engraulis taty*, *Stolephorus taty*

Salient identifying characteristics:

- ◆ Belly with $20 \text{ to } 29 + 9 \text{ to } 14 = 32 \text{ to } 40$ keeled scutes from isthmus to anus
- ◆ Long pectoral filament, reach up to base of 23rd to last anal fin ray
- ◆ Dorsal and anal fins bear scale

Habitat: Marinewater and Brackishwater

Maximum size (TL): 15.3 cm

Food and feeding: Zooplanktivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish

Setipinna tenuifilis (Valenciennes, 1848)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Setipinna*
Species : *tenuifilis*



Vernacular name: Phasa, Phesha (West Bengal)

Common English name: Common hairfin anchovy

Synonyms: *Engraulis tenuifilis*

Salient identifying characteristics:

- ◆ Body fusiform and strongly compressed body; belly sharply keeled, with 18 to 20 + 7 scutes
- ◆ Mouth slightly oblique
- ◆ Moderate pectoral filament, extending back to base of 9th to 21st anal fin ray
- ◆ Caudal fin forked, its lobes equal
- ◆ Greenish-black on back side, silvery dashed with gold on flanks

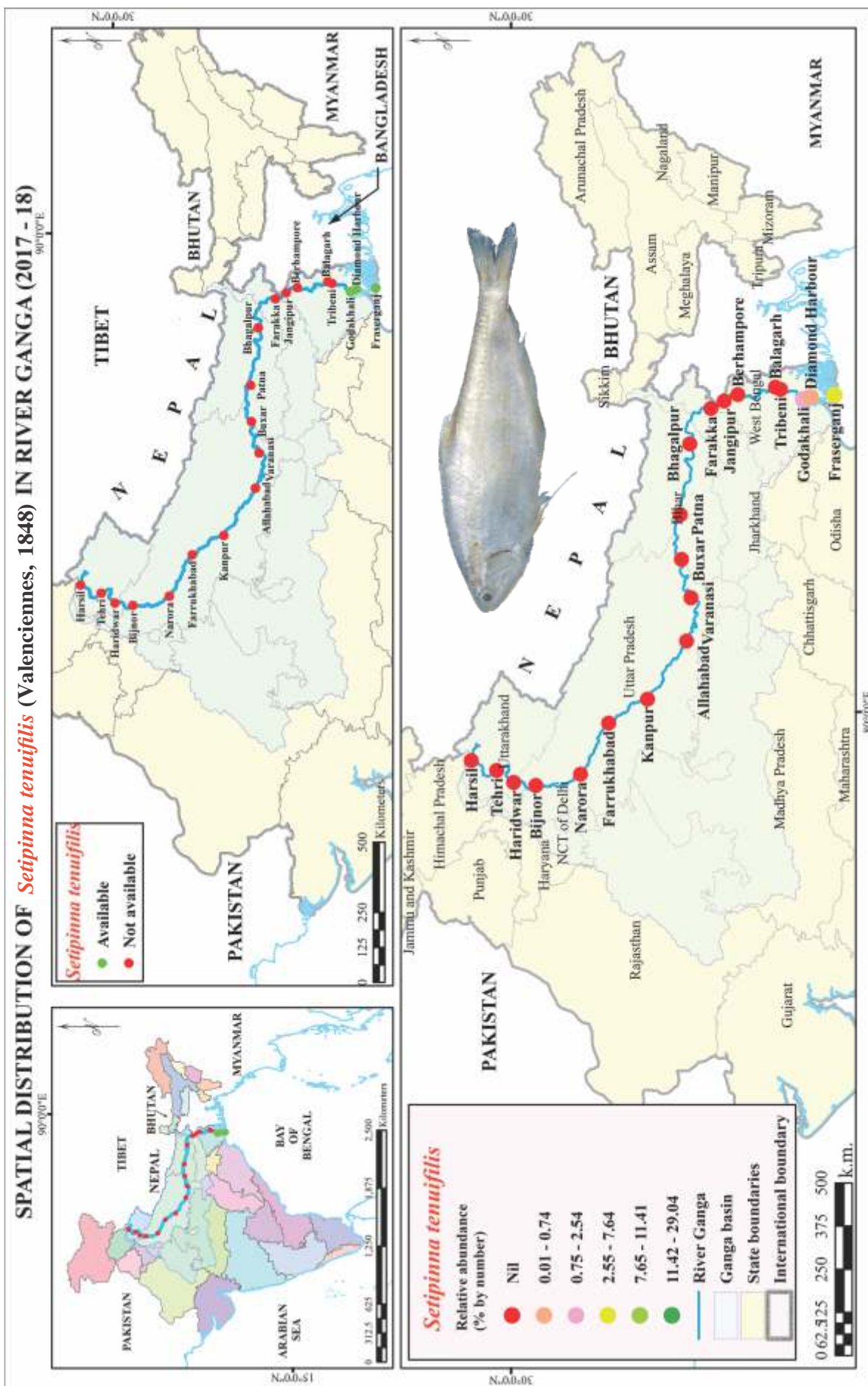
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 22 cm

Food and feeding: Zooplanktivorous

Conservation status (IUCN Red list): Data deficient

Commercial value: Used as a food fish



Stolephorus baganensis (Hardenberg, 1933)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Engraulidae
Genus : *Stolephorus*
Species : *baganensis*



Vernacular name: Mouti (West Bengal)

Common English name: Bagan Anchovy

Synonyms: *Anchoviella baganensis*

Salient identifying characteristics:

- ◆ Body elongate with convex dorsal profile.
- ◆ Prominent snout and overhanging mouth with small head.
- ◆ Dorsal fin inserted midway between snout and origin of anal fin.
- ◆ One short maxillary barbell and pectoral fin shorter than head.

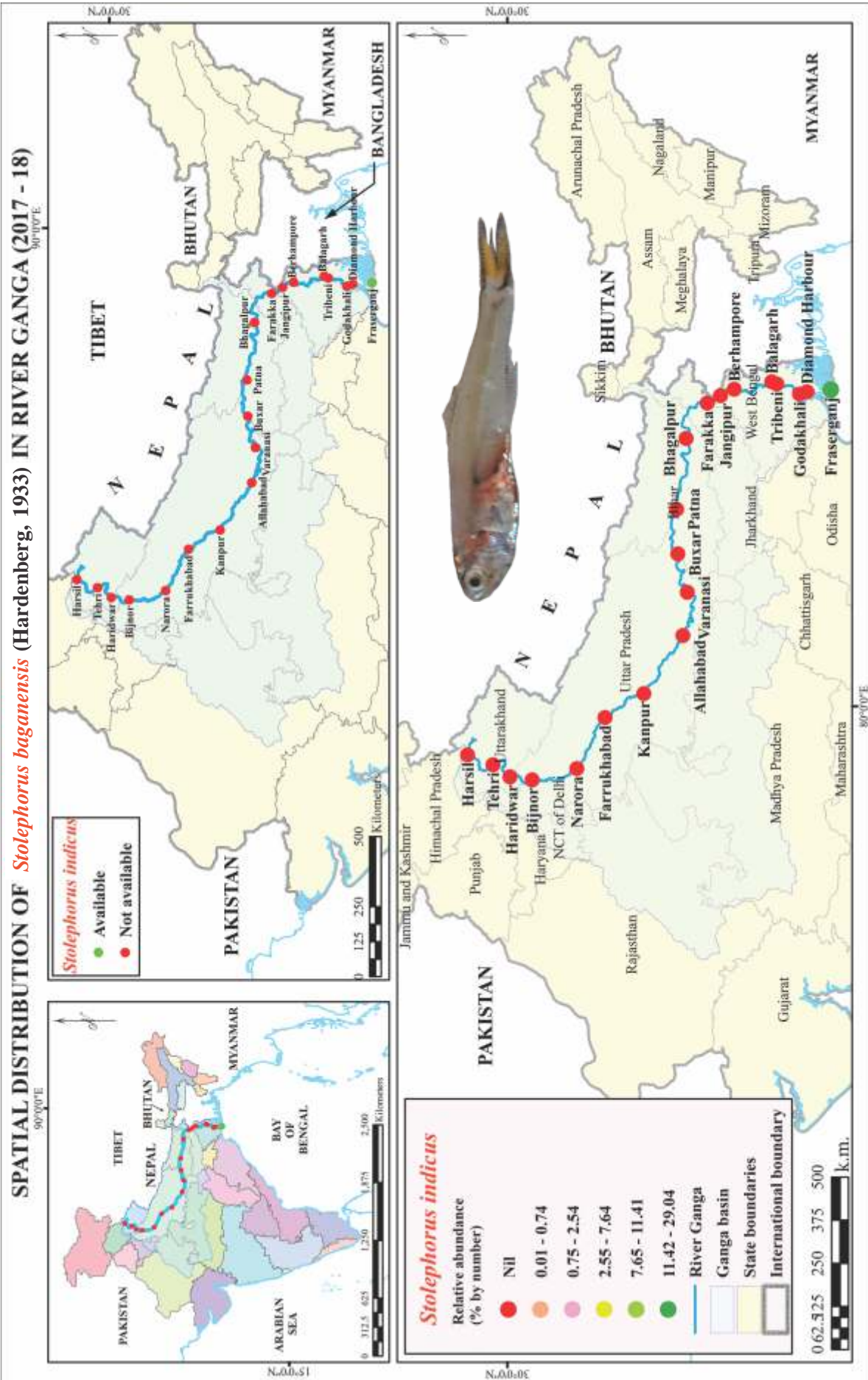
Habitat: Freshwater

Maximum size (TL): 10 cm

Food and feeding: Herbivore

Conservation status (IUCN Red list): Least Concern

SPATIAL DISTRIBUTION OF *Stolephorus baganensis* (Hardenberg, 1933) IN RIVER GANGA (2017 - 18)



Tenualosa ilisha (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Clupeiformes
Family : Clupeidae
Genus : *Tenualosa*
Species : *ilisha*



Vernacular name: Ilish (West Bengal)

Common English name: Hilsa shad

Synonyms: *Hilsa ilisha*, *Clupea ilisha*

Salient identifying characteristics:

- ◆ Body fusiform, deep and compressed, about 30 to 33 scutes present on belly
- ◆ Head length 3.3 to 3.6 times in standard lengths
- ◆ Caudal fin moderate in size
- ◆ Silvery shot with gold and purple in colour

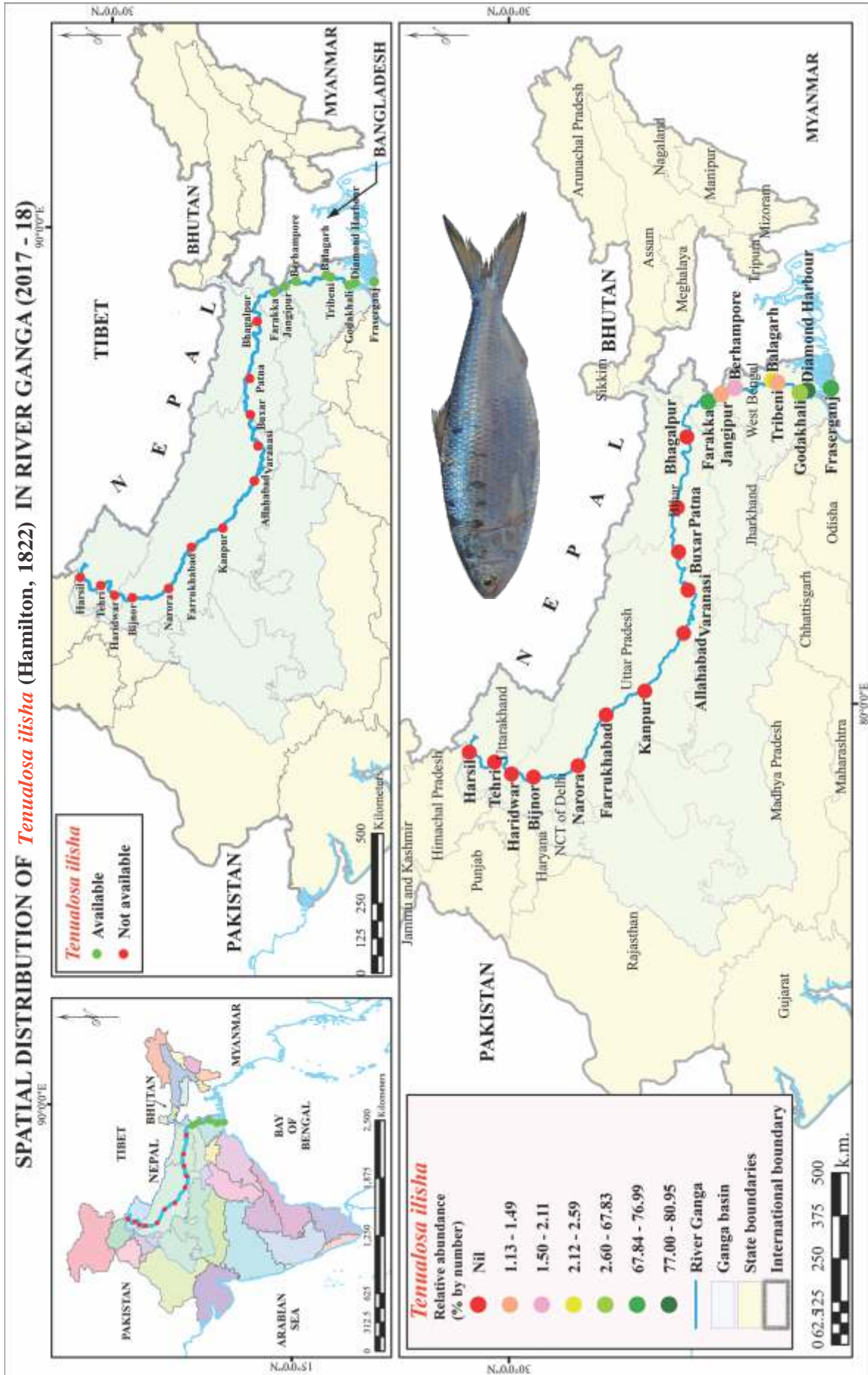
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 60 cm

Food and feeding: Feeds on plankton, mainly by filtering

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a popular food fish







Cypriniformes

Aborichthys elongatus Hora, 1921

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Nemacheilidae
Genus : *Aborichthys*
Species : *elongatus*



Vernacular name: Rampyari (Uttar Pradesh)

Common English name: Loach

Synonyms: *Noemacheilus elongatus*

Salient identifying characteristics:

- ◆ Body is generally elongated and compressed
- ◆ Mouth is semicircular with fleshy lips. Presence of three pairs of barbels which extends till the eye
- ◆ Dorsal fin is at equidistant from the tip of the snout and caudal fin base. Scales are minute in nature
- ◆ Presence of a dark ocellus blotch on base of caudal fin

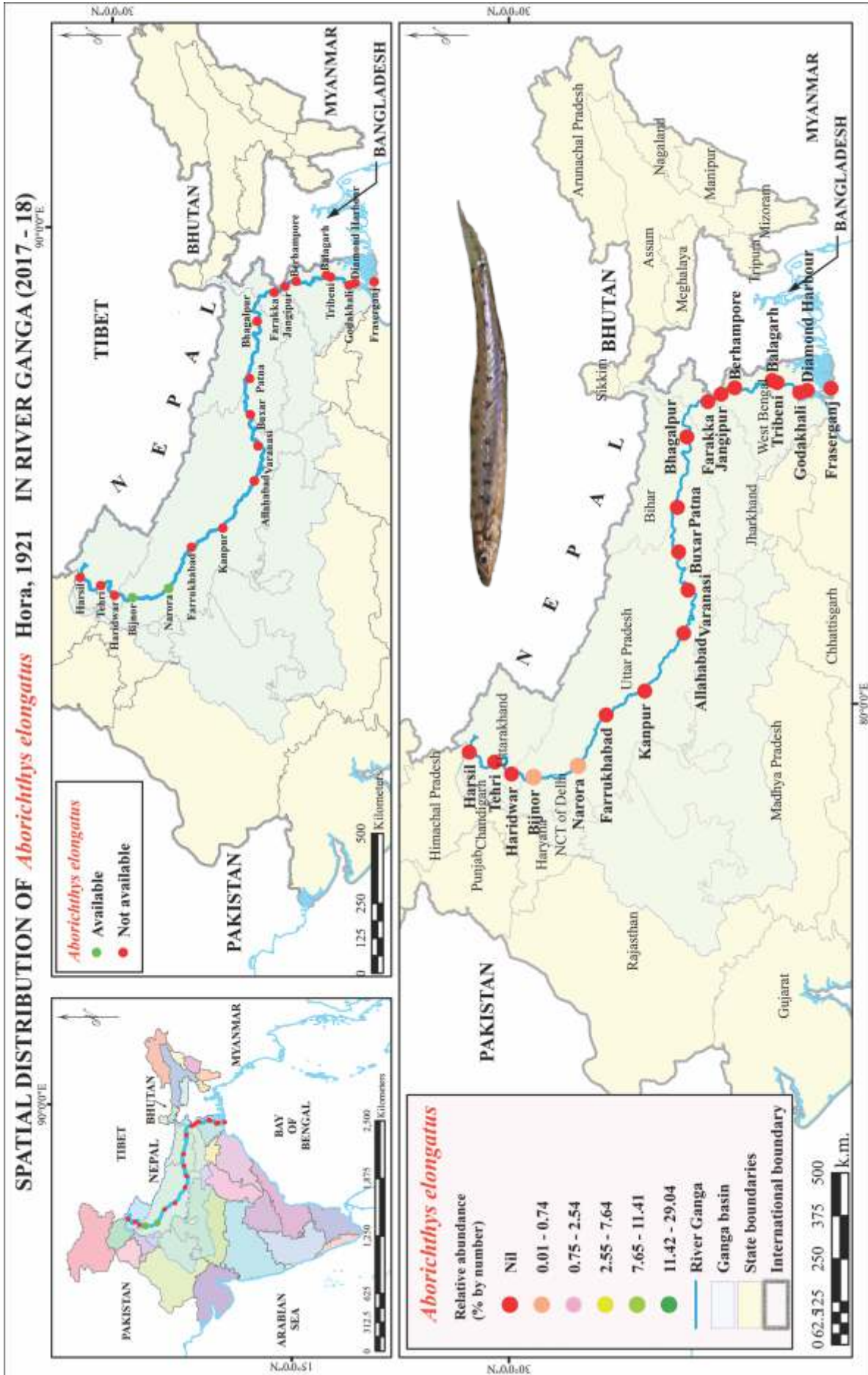
Habitat: Freshwater

Maximum size (TL): 7.4 cm

Food and feeding: Feeds on insect larvae and other zooplankton

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Amblypharyngodon mola (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Amblypharyngodon*
Species : *mola*



Vernacular name: Dawai (Uttar Pradesh, Bihar), Mourala (West Bengal)

Common English name: Mola carplet

Synonyms: *Cyprinus mola*

Salient identifying characteristics:

- ◆ Body is elongated
- ◆ Presence of large eyes
- ◆ Small scales with incomplete lateral line which ceases after 9 to 18 scale, 65 to 91 scales along the lateral line
- ◆ Presence of 9-10 scale rows between lateral line and pelvic fin base
- ◆ Dark distinct marking on the dorsal, anal and caudal fins while pectoral and pelvic are hyaline

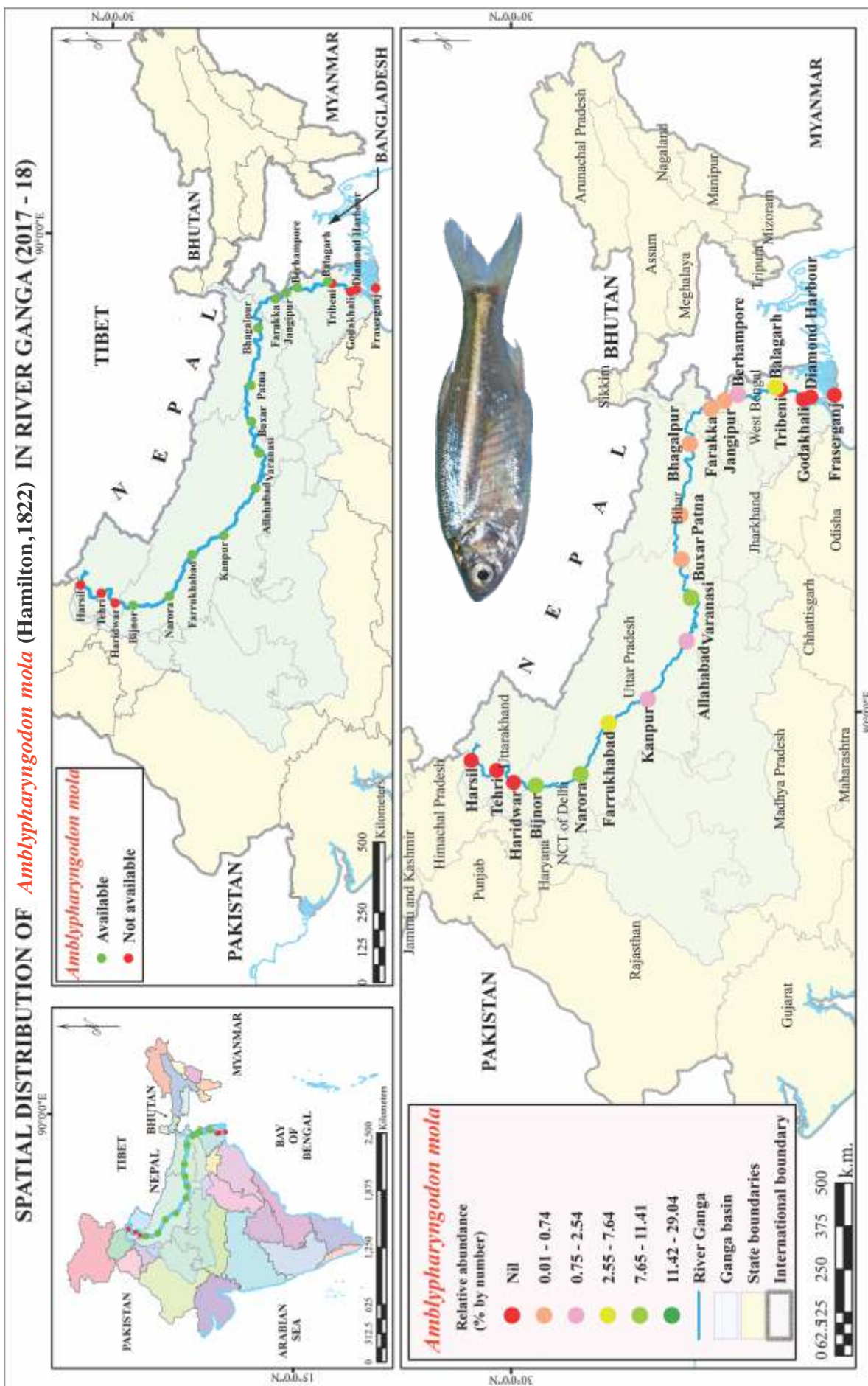
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on unicellular algae to crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Food fish



Bangana dero (Hamilton, 1822)

Systematic position:

Class : Actinopterygii

Order : Cypriniformes

Family : Cyprinidae

Genus : *Bangana*

Species : *dero*



Vernacular name: Bangan (Uttarakhand)

Common English name: Kalabans

Synonyms: *Cyprinus dero*

Salient identifying characteristics:

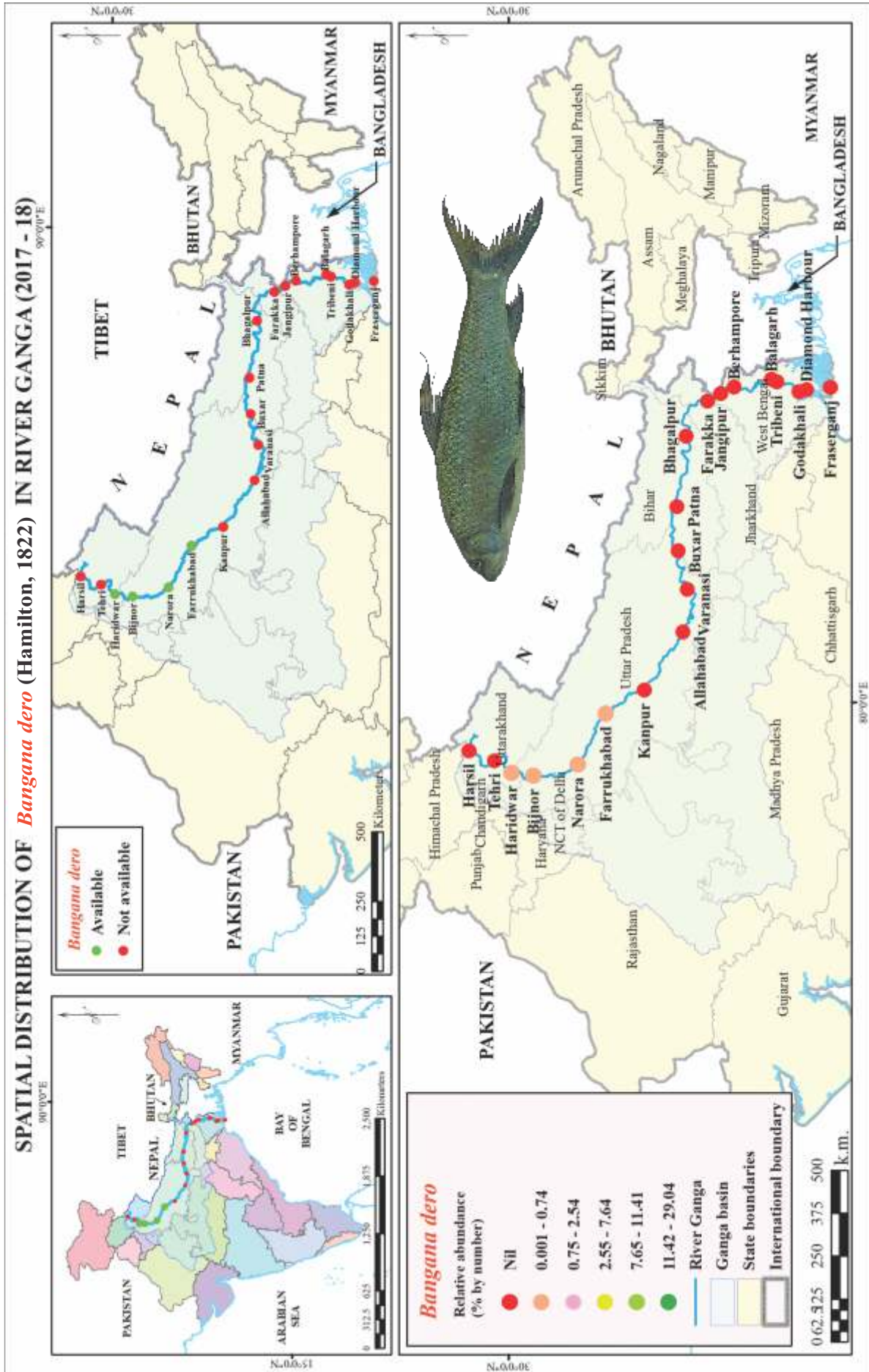
- ◆ Body elongate with convex dorsal profile.
- ◆ Prominent snout and overhanging mouth with small head.
- ◆ Dorsal fin inserted midway between snout and origin of anal fin.
- ◆ One short maxillary barbell and pectoral fin shorter than head.

Habitat: Freshwater

Maximum Length (TL): 75 cm

Food and feeding: Herbivore

Threat status (IUCN red list): Least Concern



Barilius barila (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Danionidae
Genus	: <i>Barilius</i>
Species	: <i>barila</i>



Vernacular name: Chelwa, Chedra (Uttar Pradesh)

Common English name: Barred baril

Synonyms: *Cyprinus barila*, *Barilius bonarensis*

Salient identifying characteristics:

- ◆ Body is shallow in nature
- ◆ Moderate mouth with long extended jaws, tubercles present on snout
- ◆ Dorsal fin is situated prior to the anal fin base
- ◆ Presence of radii in moderate type of scales, lateral line consists of 43-46 scales
- ◆ Compressed ventral region with scarcely developed scales
- ◆ Olive green coloration of the body with 14 to 15 horizontal blue bands with pinkish fins

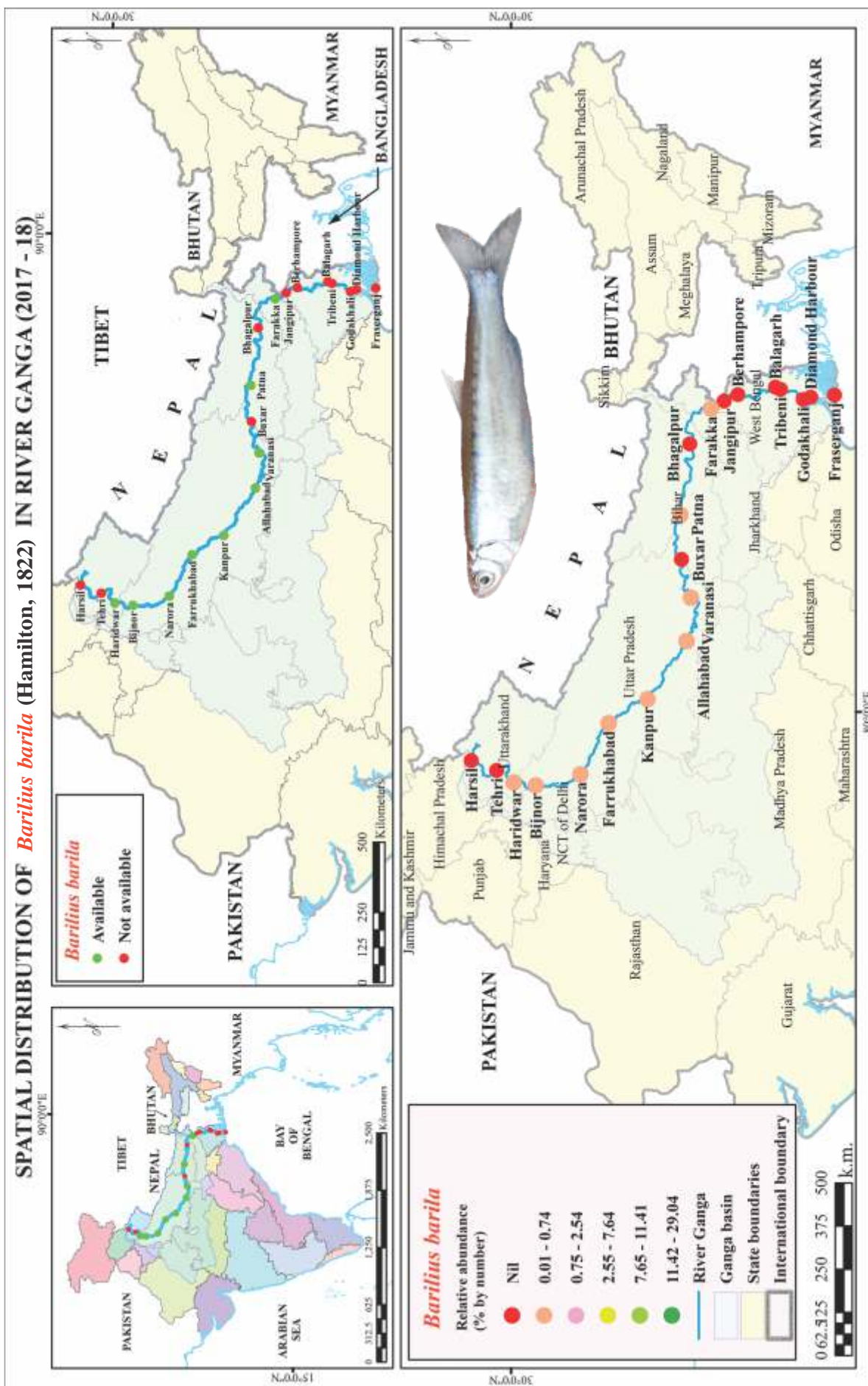
Habitat: Freshwater

Maximum size (TL): 10 cm

Food and feeding: Feeds on soft aquatic plants to micro crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Bengala elanga (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Bengala*
Species : *elanga*



Vernacular name: Anga, Chelwa (Uttarakhand, Uttar Pradesh)

Common English name: Bengala Barb

Synonyms: *Bengala elanga*, *Cyprinus elanga*

Salient identifying characteristics:

- ◆ Body elongated and slender
- ◆ Mouth small; barbels a short rostral pair only
- ◆ Pectoral fin long as head
- ◆ Lateral line with 40-44 scales

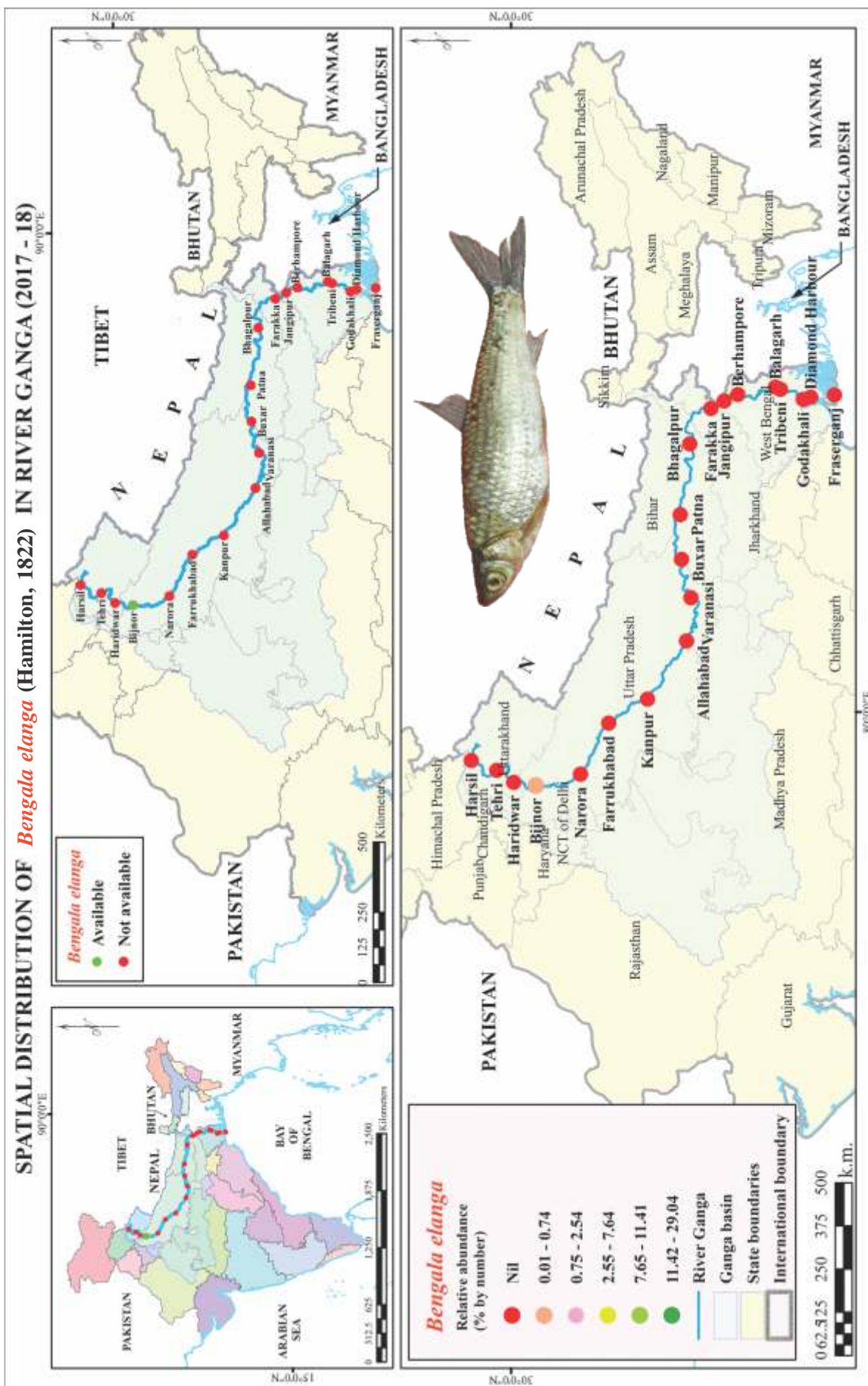
Habitat: Freshwater

Maximum size (TL): 21 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Barilius vagra (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Barilius*
Species : *vagra*



Vernacular name: Ral (Uttar Pradesh)

Common English name: Vagra Baril

Synonyms: *Cyprinus vagra*

Salient identifying characteristics:

- ◆ Body is shallow
- ◆ Mouth is moderate with long jaws and two pairs of barbels, maxillary pair is very short compared to other barbels
- ◆ Tubercles are short, poorly developed on snout and lower jaw
- ◆ Scales moderate with radii
- ◆ Dorsal fin is inserted anterior to the anal fin
- ◆ Caudal fin is forked with two equal lobes

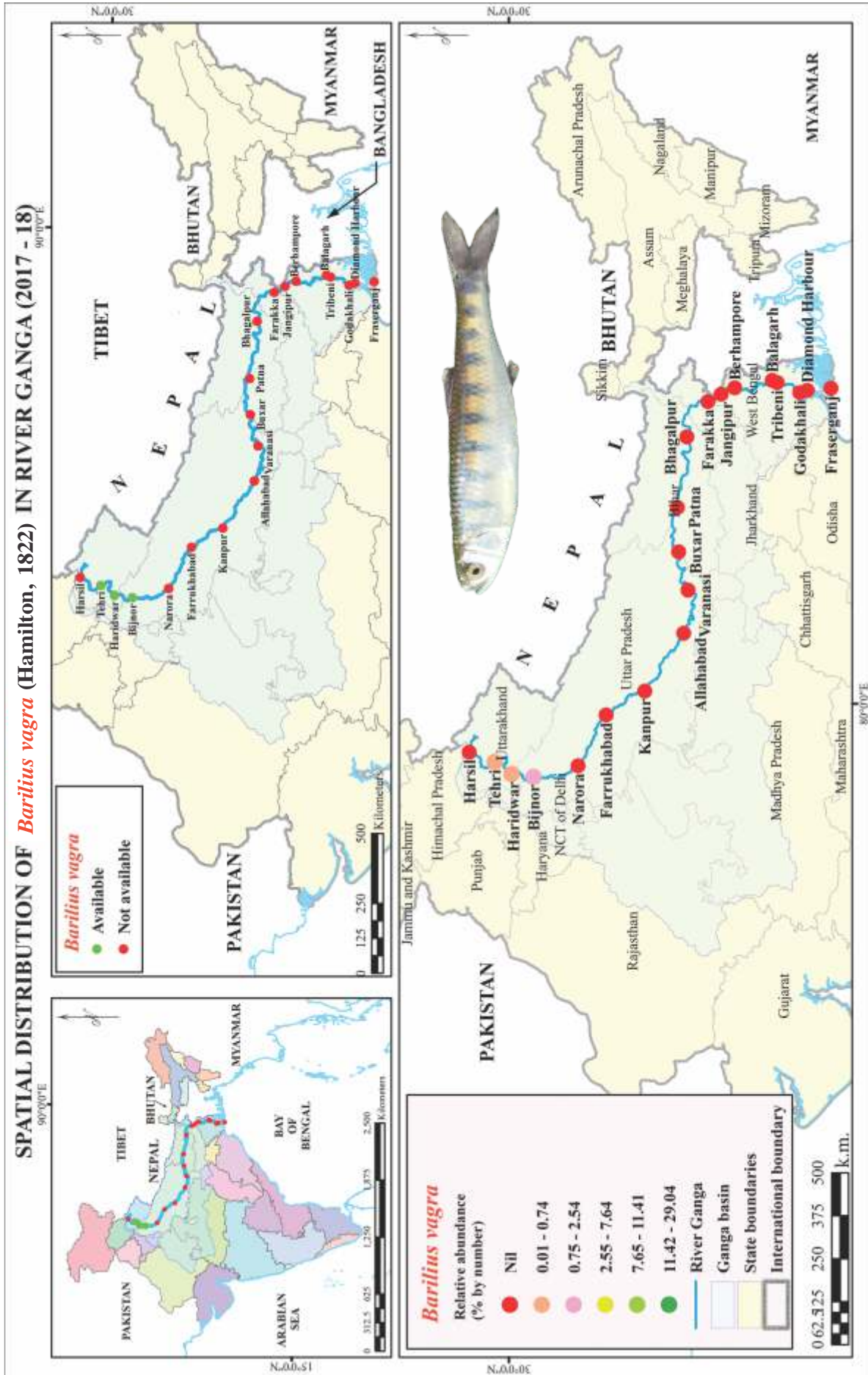
Habitat: Freshwater

Maximum size (TL): 15.6 cm

Food and feeding: Feeds on soft aquatic plants to micro crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as both bait and food fish



Botia dario (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Cypriniformes
Family	: Botiidae
Genus	: <i>Botia</i>
Species	: <i>dario</i>



Vernacular name: Chitora (Uttar Pradesh, Bihar) Puia, Bagha (West Bengal)

Common English name: Bengal loach

Synonyms: *Cobitis dario*, *Cobitis geto*, *Botia geto*

Salient identifying characteristics:

- ◆ Body is elongated and laterally compressed
- ◆ Large eyes situated on posterior part of the head
- ◆ Mouth is small with four pairs of barbells
- ◆ Dorsal fin is located exactly at equidistance from the tip of the snout to the caudal fin base
- ◆ Caudal fin with two to three black bars
- ◆ Seven to eight inclined greyish coloured band descending from dorsal side to ventral side

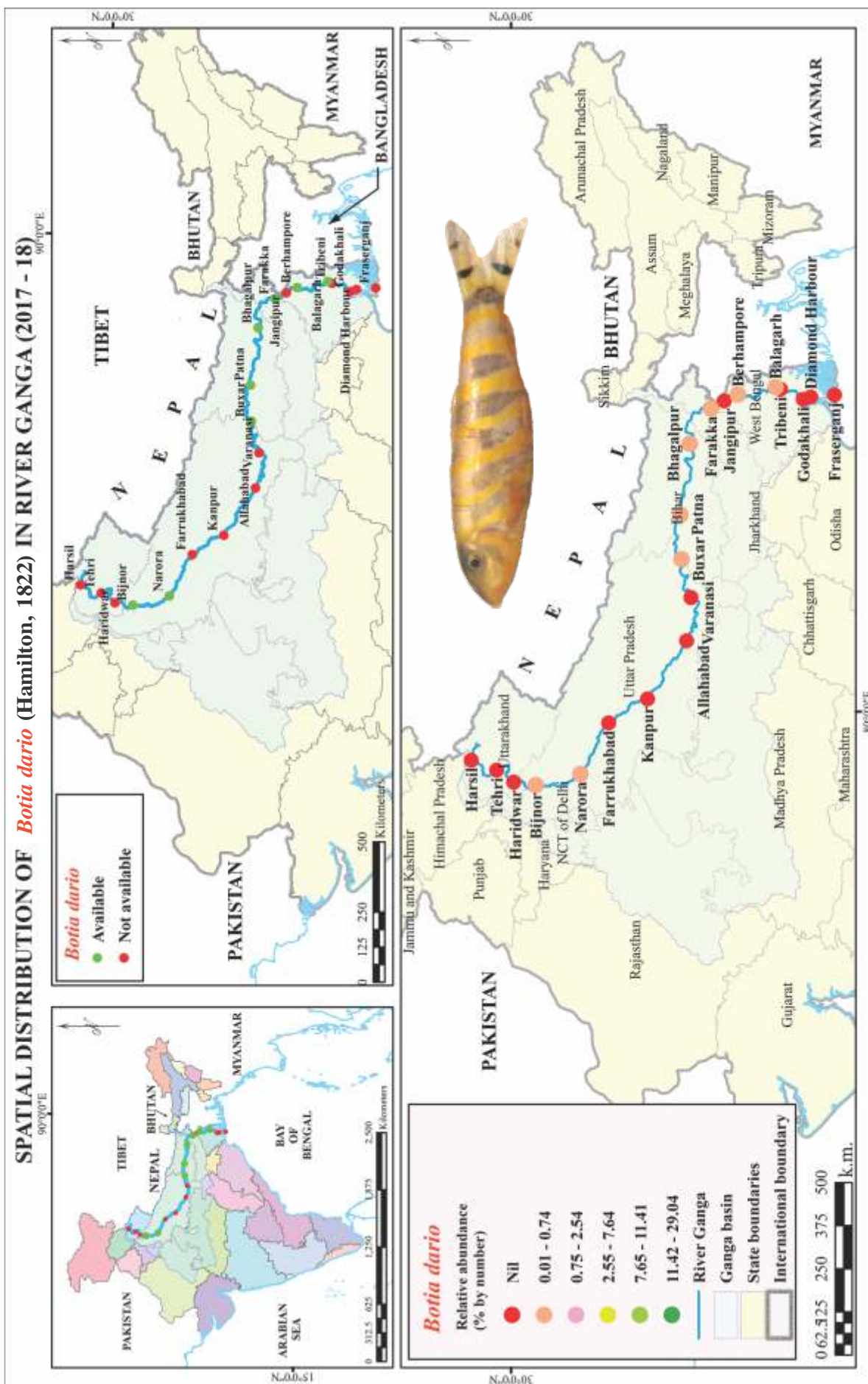
Habitat: Freshwater

Maximum size (TL): 15.1 cm

Food and feeding: Feeds on carnivorous organisms and often including soft-leaved aquatic plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as ornamental fish



Botia lohachata Chaudhuri, 1912

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Botiidae
Genus : *Botia*
Species : *lohachata*



Vernacular name: Chitora, Nacta (Uttar Pradesh, Bihar), Puia, Bagha (West Bengal)

Common English name: Reticulate loach

Synonyms: *Botia lohachata*

Salient identifying characteristics:

- ◆ Body is elongated and laterally compressed
- ◆ Mouth small with four pairs of barbells
- ◆ Dorsal fin is situated in between the snout tip and caudal fin base
- ◆ Scales very small. Caudal fin moderately forked
- ◆ Body is dark gray earthy coloured with O-shaped and Y-shaped distinct marks

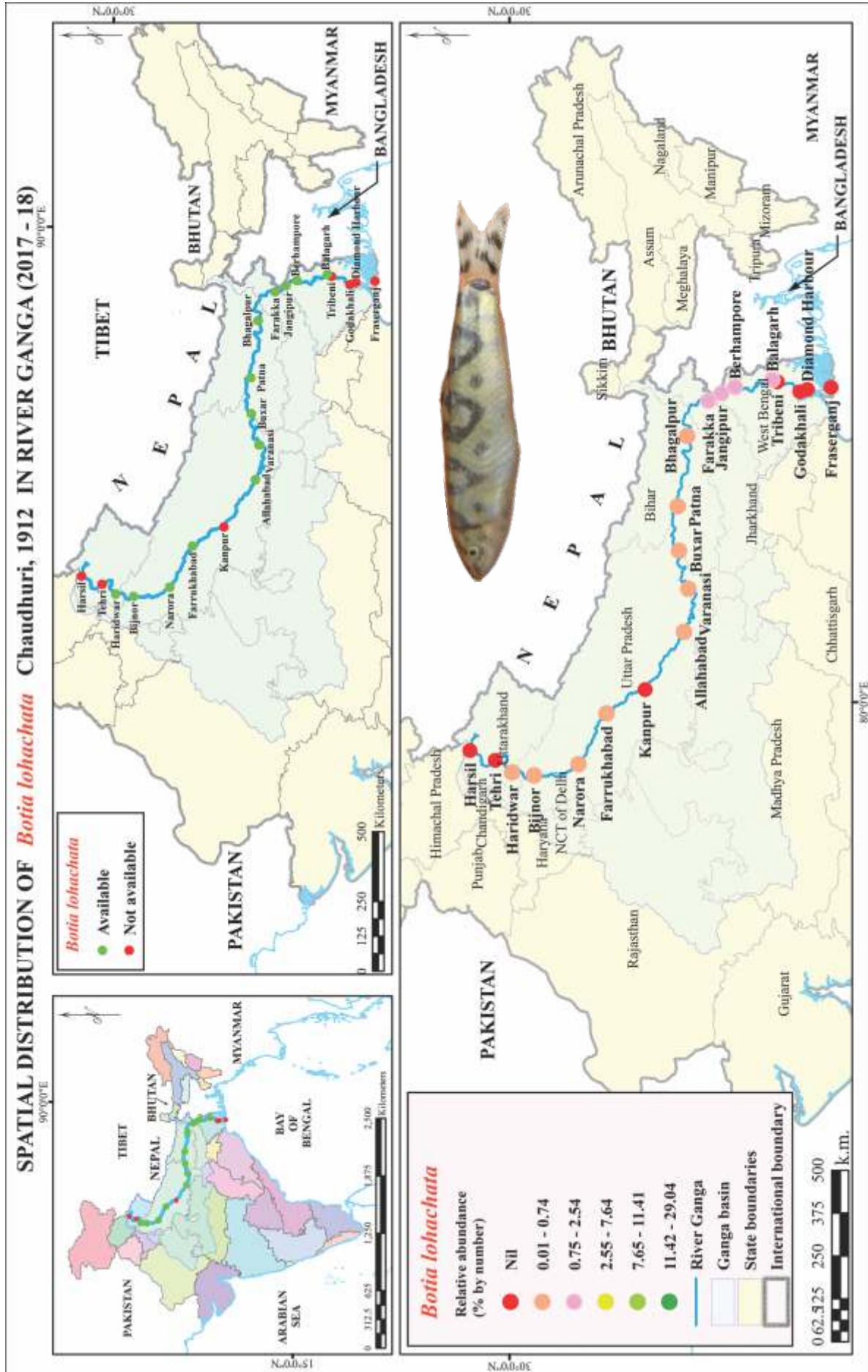
Habitat: Freshwater

Maximum Length (TL): 15.4 cm

Food and feeding: Feeds on chiefly carnivorous organisms and often including soft-leaved aquatic plants

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as ornamental fish



Botia rostrata Günther, 1868

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Botiidae
Genus : *Botia*
Species : *rostrata*



Vernacular name: Puia, Bagha (West Bengal)

Common English name: Hora loach

Synonyms: *Botia geto*

Salient identifying characteristics:

- ◆ Body is elongated and flattened
- ◆ Eyes placed in the rear half of the long slender head
- ◆ Dorsal fin is in the mid region from the snout tip to the caudal fin but often closer to the caudal fin
- ◆ Fins with two or three black bands
- ◆ Presence of minute scales
- ◆ Caudal fin is alike a box and deeply forked
- ◆ Head and body is reticulated with dark brown stripes

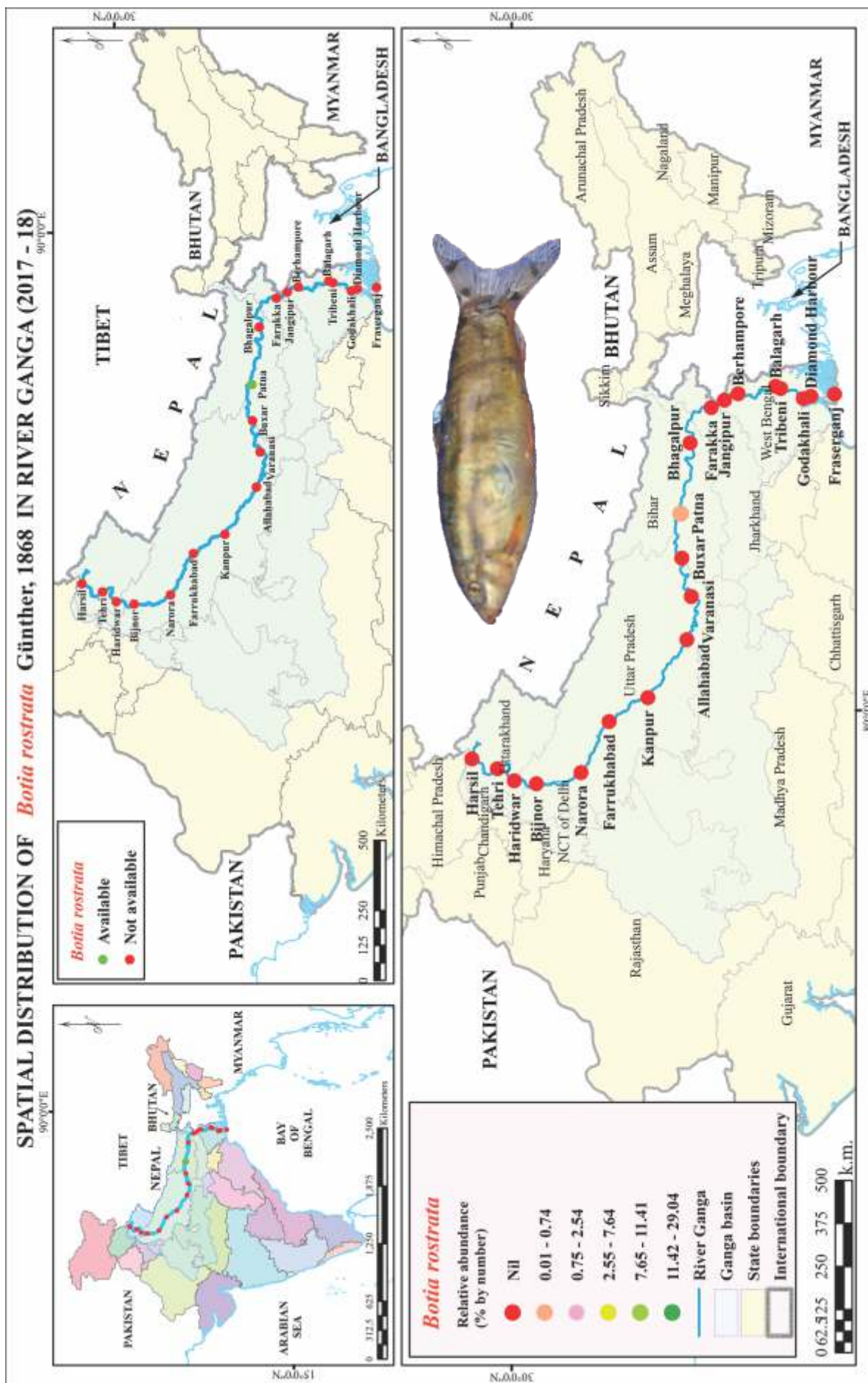
Habitat: Freshwater

Maximum size (TL): 25 cm

Food and feeding: Chiefly carnivorous organisms and often including soft-leaved aquatic plants

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as ornamental fish



Cabdio morar (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Cabdio*
Species : *morar*



Vernacular name: Harda, Chalwa (Uttar Pradesh, Bihar), Piyali (West Bengal)

Common English name: Morari

Synonyms: *Aspidoparia morar*, *Cyprinus morar*

Salient identifying characteristics:

- ◆ Elongated and barrel shaped
- ◆ Mouth is inferior with short jaws
- ◆ Dorsal fin is present behind the pelvic fin base
- ◆ Lateral line is marked with 38 to 42 scales
- ◆ Bright silvery body colour with dark yellow fins

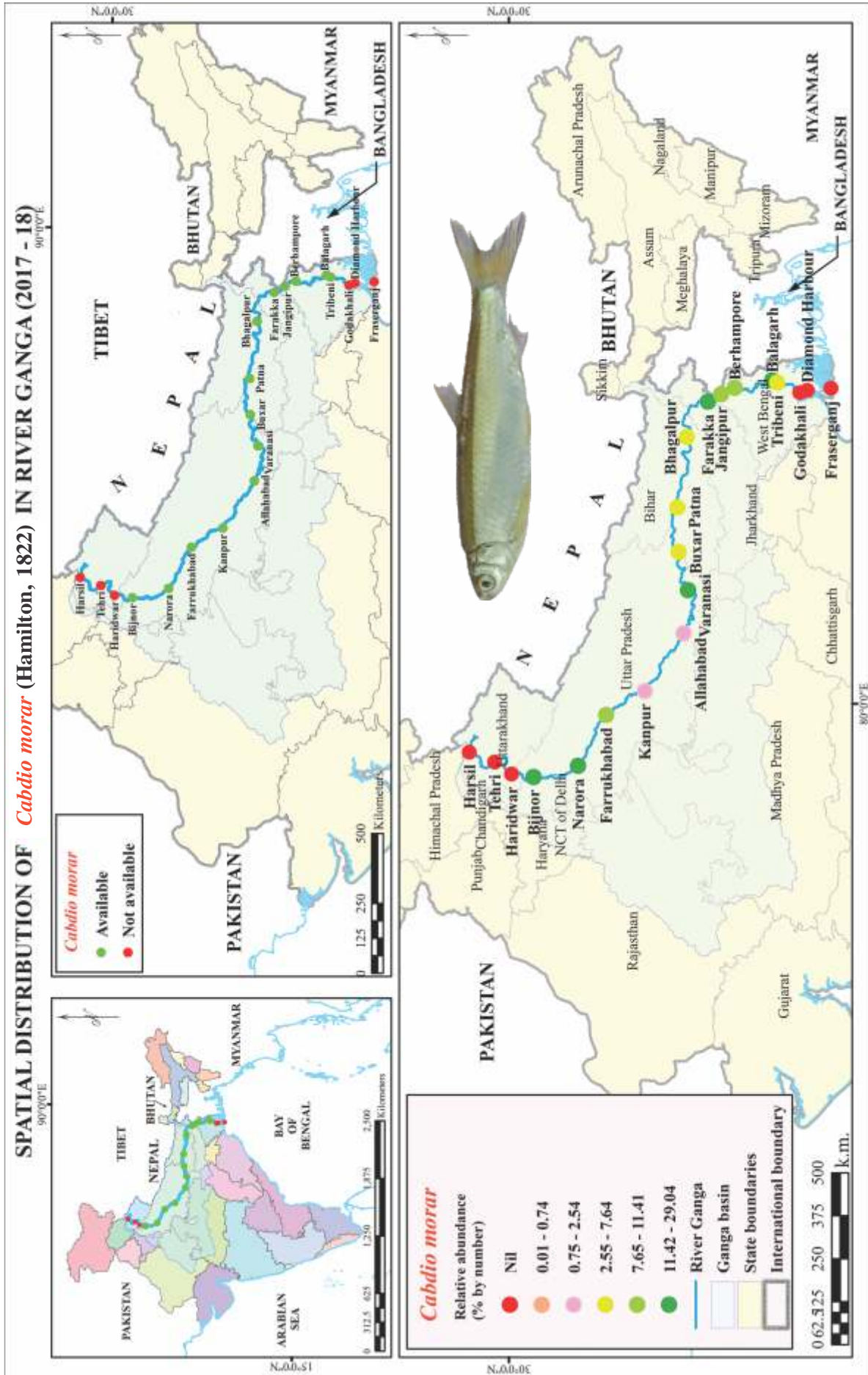
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on phytoplankton and zooplankton

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Chagunius chagunio (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Chagunius*
Species : *chagunio*



Vernacular name: Chhuman, Galheri, Utta, Sivla (Uttar Pradesh, Bihar)

Common English name: Chaguni

Synonyms: *Barbus chagunio*

Salient identifying characteristics:

- ◆ Body is elongated and deep
- ◆ Narrow subterminal mouth with 2 pairs of barbels extending beyond the orbit
- ◆ Strong and serrated dorsal spine present
- ◆ Scales are smaller in size
- ◆ Tubercles present on snout and cheeks of females smaller than male
- ◆ Fins are reddish in colour

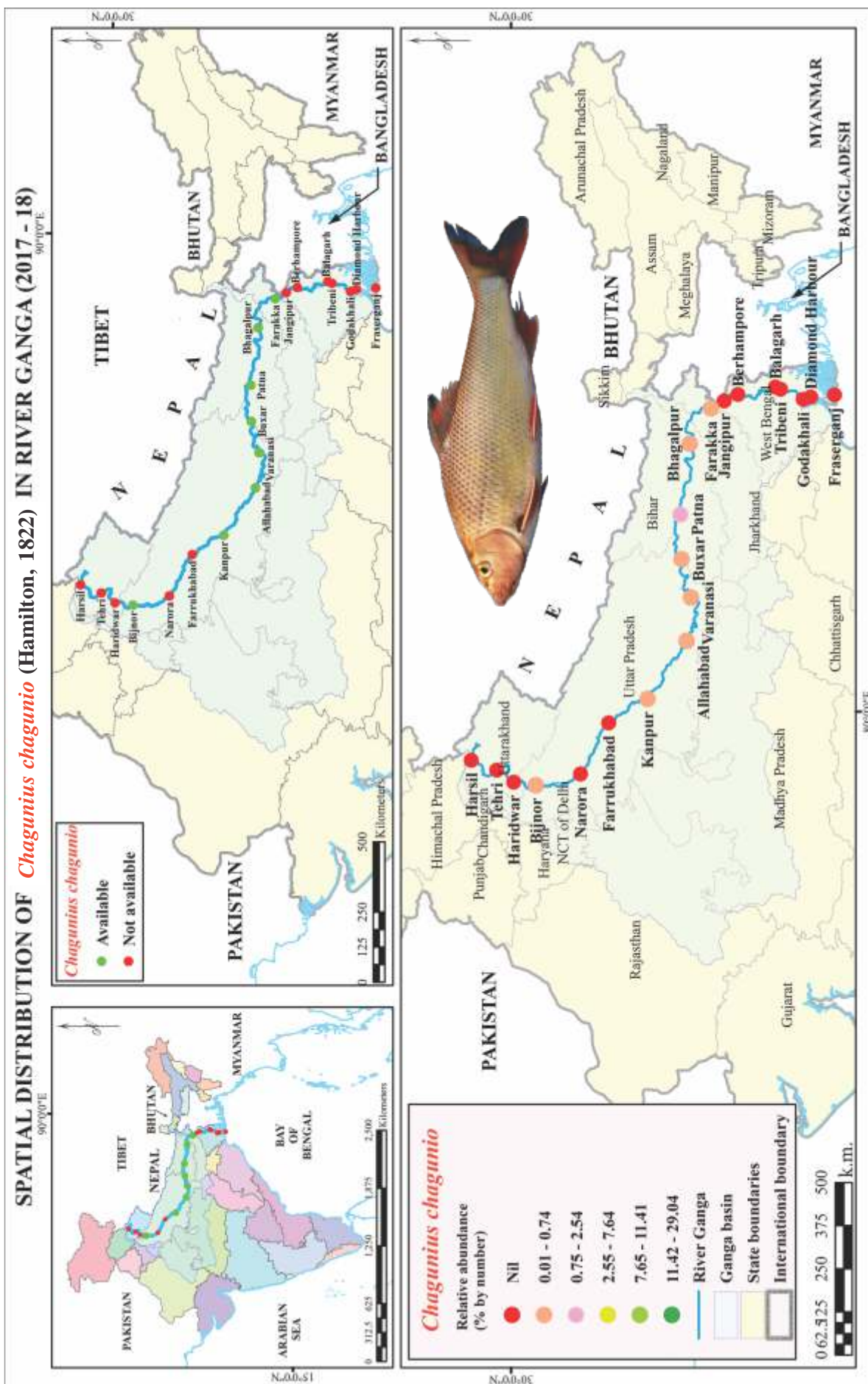
Habitat: Freshwater

Maximum size (TL): 50 cm

Food and feeding: Feeds on bloodworm, daphnia and artemia

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Cirrhinus mrigala (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Cirrhinus*
Species : *mrigala*



Vernacular name: Nain (Uttar Pradesh, Bihar), Mrigel (West Bengal)

Common English name: Mrigal

Synonyms: *Cirrhina mrigala*, *Cirrhinus mrigala mrigala*

Salient identifying characteristics:

- ◆ Body is elongated and highly compressed
- ◆ Presence of single pair of rostral barbell
- ◆ Mouth broad, upper lip entire, lower lip sharply defined
- ◆ Lateral line with 40 to 50 scales
- ◆ Pectoral fins shorter than head
- ◆ Pelvic and anal fins are orange tipped with dusky caudal fin

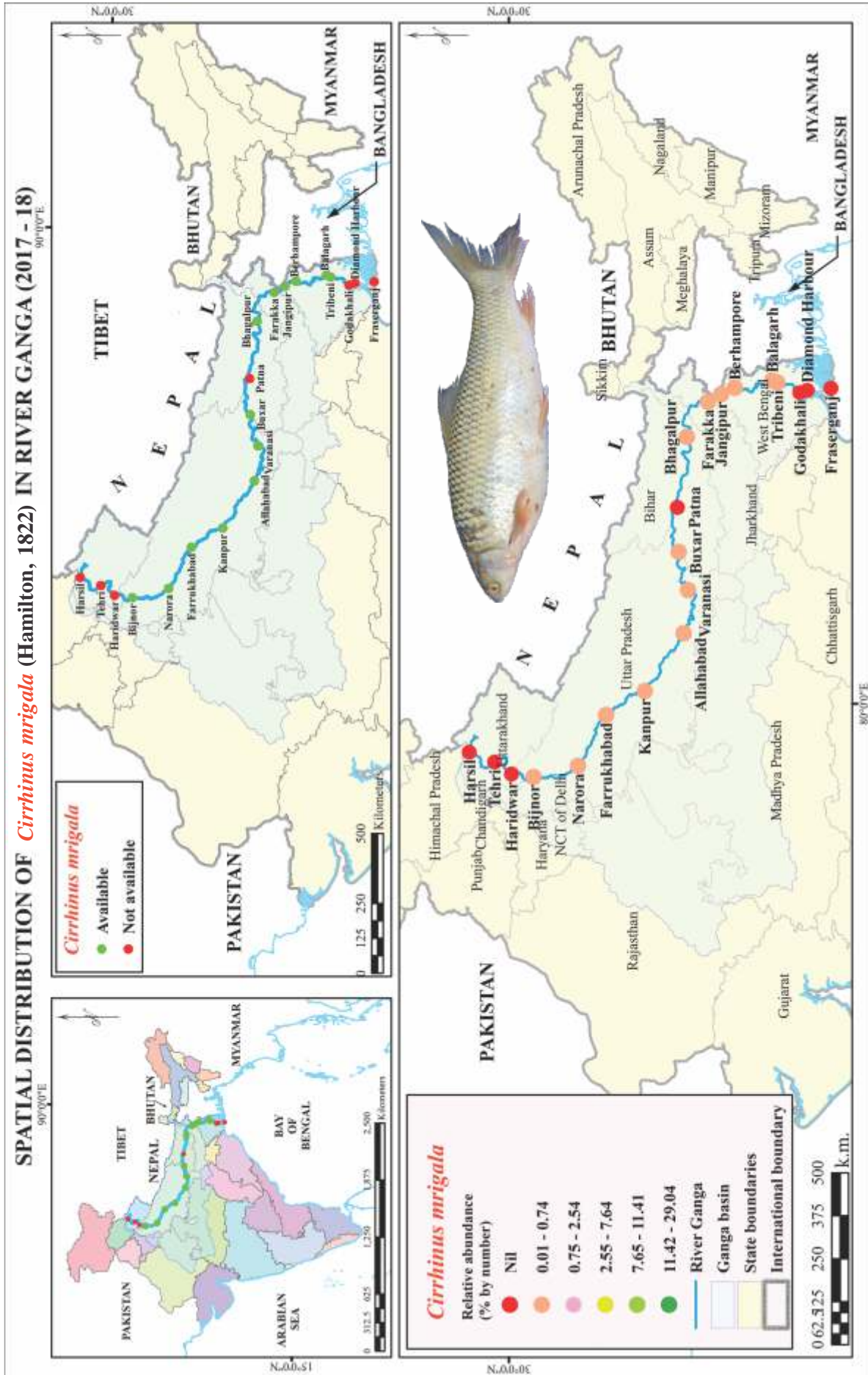
Habitat: Freshwater

Maximum size (TL): 99 cm

Food and feeding: Feeds on debris and detritus

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a major food fish



Cirrhinus reba (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Cirrhinus*
Species : *reba*



Vernacular name: Rayia, Rewah (Uttar Pradesh, Bihar), Reba bata, Rai bata (West Bengal)

Common English name: Reba carp

Synonyms: *Cyprinus reba*, *Cirrhina reba*

Salient identifying characteristics:

- ◆ Body is elongated and highly compressed
- ◆ Mouth is widened with fringed upper lips
- ◆ Single paired barbel
- ◆ Caudal fin deeply forked
- ◆ Pectoral fins as long as head
- ◆ Scales are moderate and hexagonal shaped
- ◆ Anal and pelvic fins are orange tipped

Habitat: Freshwater

Maximum size (TL): 30 cm

Food and feeding: Primarily feed on plankton and detritus but may also take up mud, insects, crustaceans and vegetables

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a major food fish

Devario devario (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Devario*
Species : *devario*



Vernacular name: Dhawai, Chawra (Uttar Pradesh, Bihar), Dhebri puti (West Bengal)

Common English name: Sind danio

Synonyms: *Danio devario*, *Cyprinus devario*

Salient identifying characteristics:

- ◆ Body is compressed and rhomboidal
- ◆ Mouth small and barbells absent
- ◆ Dorsal fin inserted before the anal fin
- ◆ Caudal fin is emarginated to lunate
- ◆ Bluish lines divided from each other by narrow vertical yellow bands
- ◆ Blue marks are present at the base of the caudal fin

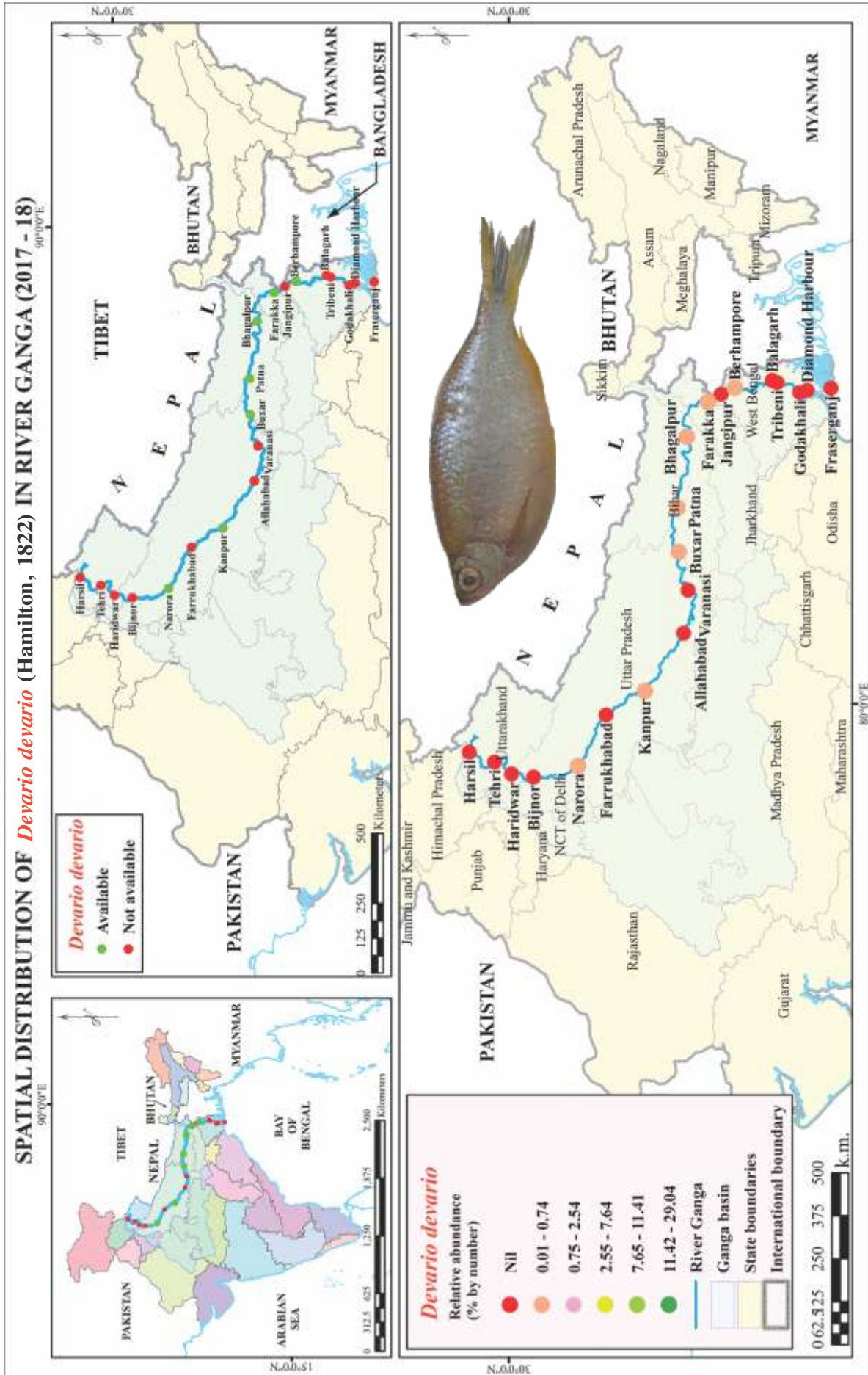
Habitat: Freshwater

Maximum size (TL): 10 cm

Food and feeding: Feeds on worms, small crustaceans and insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a good food and ornamental fish



Esomus danrica (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Esomus*
Species : *danrica*



Vernacular name: Chelwa (Uttar Pradesh), Darkina (West Bengal)

Common English name: Flying barb

Synonyms: *Cyprinus danrica*, *Esomus malabaricus*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Mouth is narrow with two pairs of barbells, maxillary pair extending to the middle of the body, rostral barbells short and fleshy
- ◆ Lateral line incomplete, scales in vertical series are 27-30 in number and on caudal peduncle 14
- ◆ Belly is silvery white coloured and dark broad bands on caudal peduncle. Pelvic fins are reddish in colour

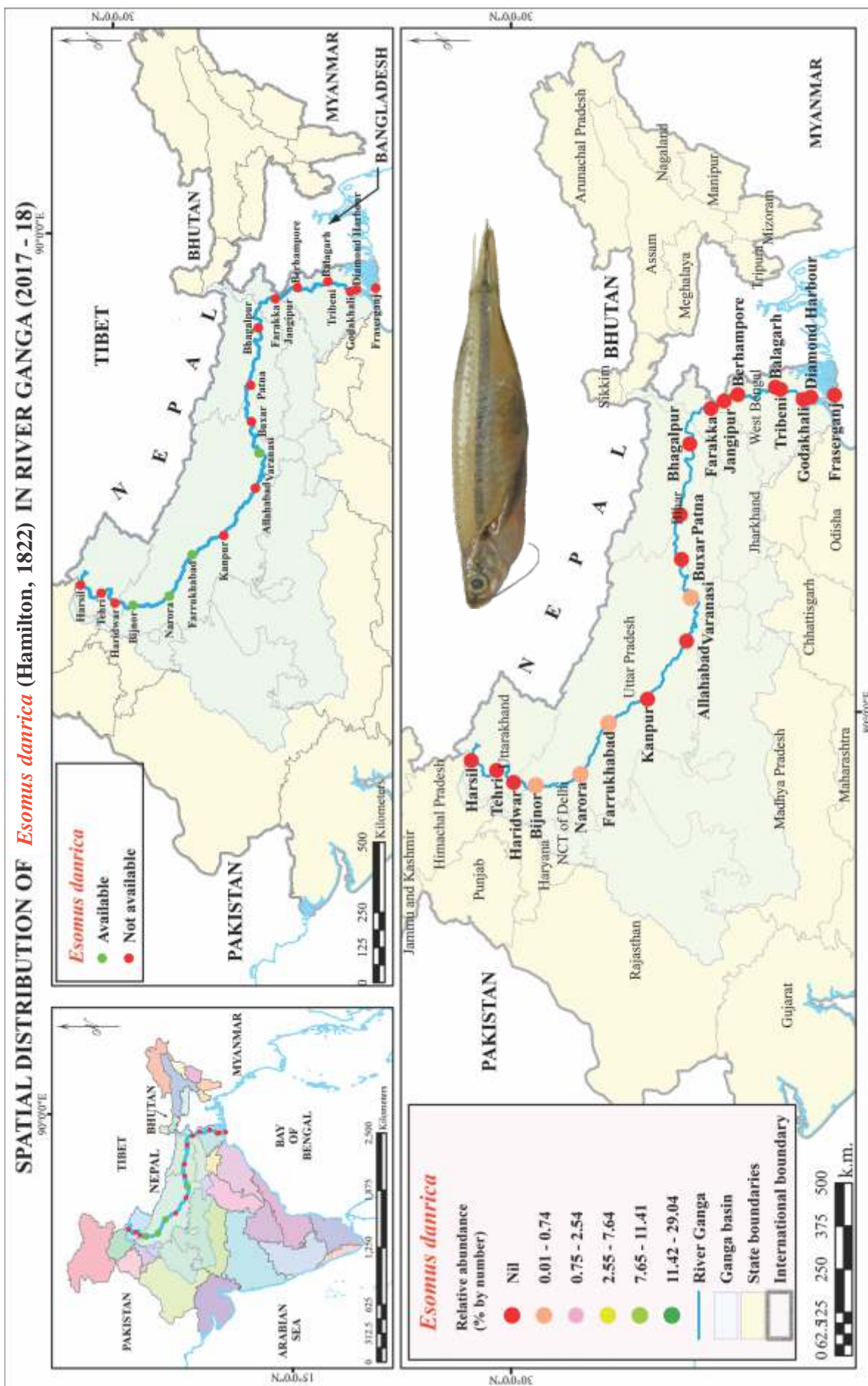
Habitat: Freshwater

Maximum size (TL): 13 cm

Food and feeding: Feeds on aquatic invertebrates and their larvae

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Garra gotyla (Gray, 1830)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Garra*
Species : *gotyla*



Vernacular name: Patharchatta

Common English name: Sucker head

Synonyms: *Gara gotyla gotyla*, *Cyprinus gotyla*

Salient identifying characteristics:

- ◆ Body is elongated
- ◆ Mouth is crescent shaped
- ◆ Snout with a well-developed median proboscis with a transverse lobe at tip
- ◆ Barbells are double paired shorter than the diameter of the eye
- ◆ Scales are moderate sized and lateral line consists of 32-35 scales
- ◆ Dark brown on dorsal side and light pink on ventral side, a dusky spot behind gill opening

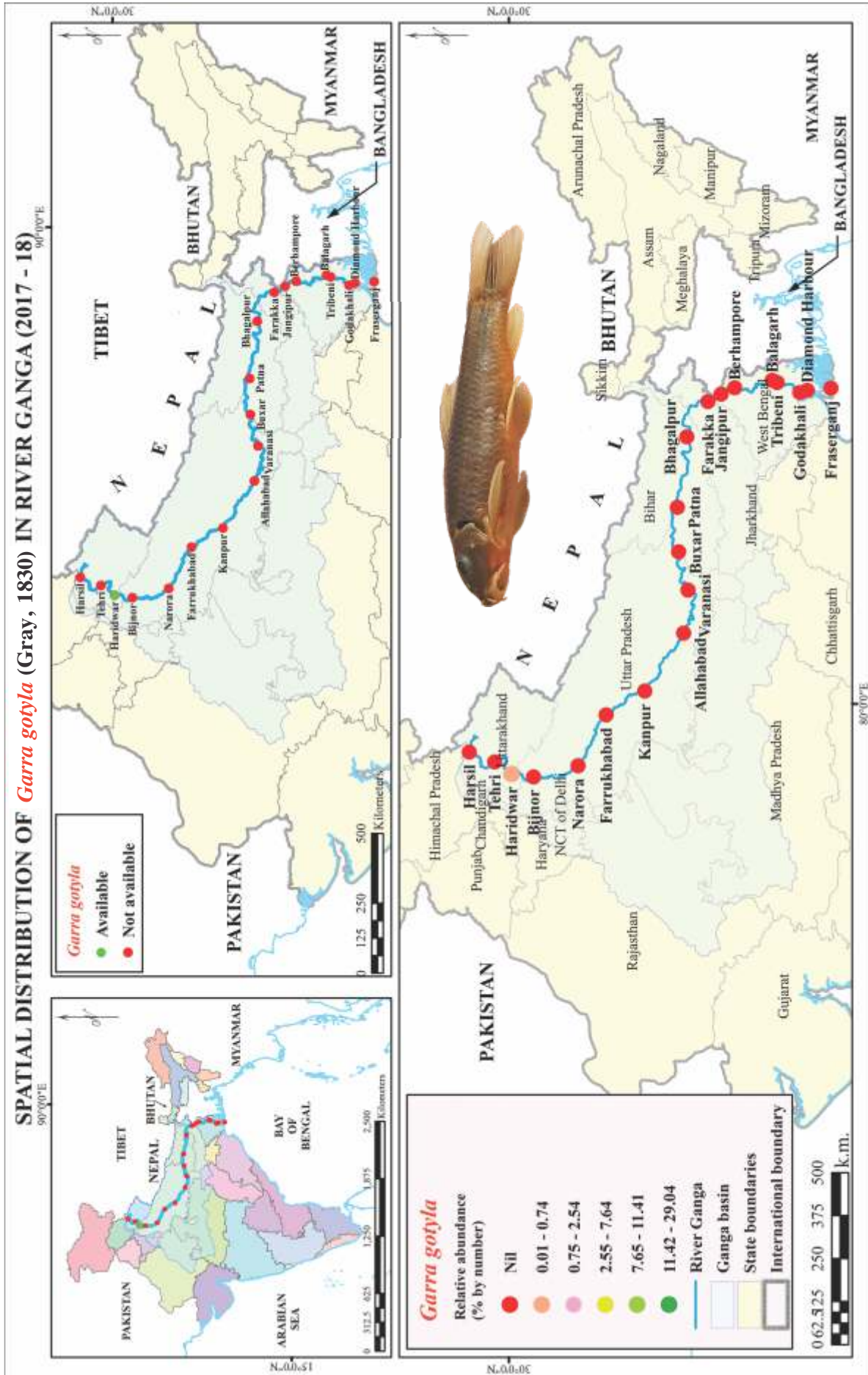
Habitat: Freshwater

Maximum size (TL): 20.8 cm

Food and feeding: Feeds on algae, detritus and plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Labeo catla (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Labeo*
Species : *catla*



Vernacular name: Bhakur (Uttar Pradesh, Bihar), Katla (West Bengal)

Common English name: Catla

Synonyms: *Catla catla*, *Cyprinous catla*, *Catla buchanani*

Salient identifying characteristics:

- ◆ Body fairly deep with large head, mouth widely upturned with protruding lower jaw
- ◆ Long pectoral fins which extend up to pelvic fins
- ◆ Large scales, 40 to 43 scales in lateral line
- ◆ Body greyish in colour, often silvery white in lower portion with dusky fins

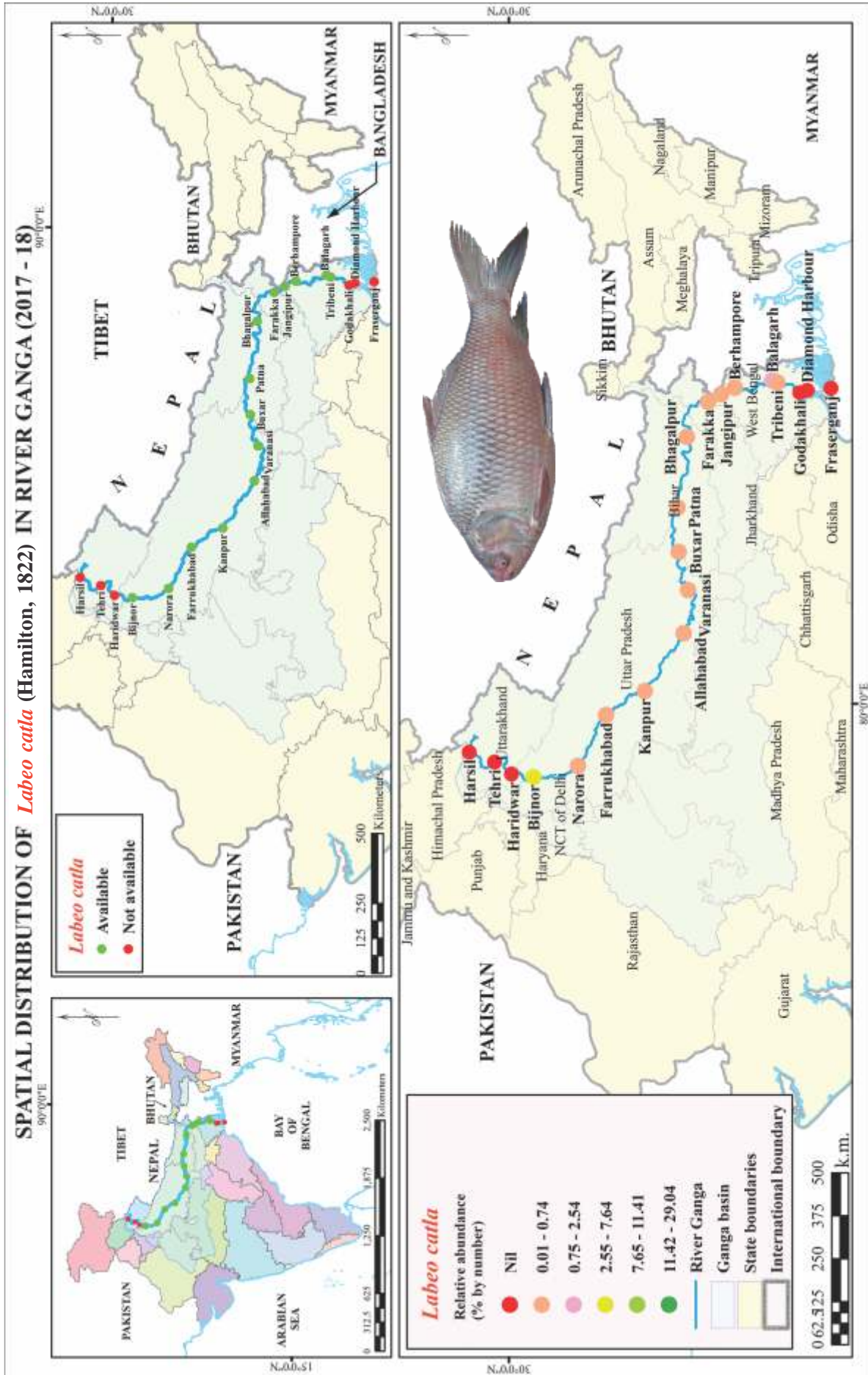
Habitat: Freshwater

Maximum size (TL): 182 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as popular food fish



Labeo angra (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Labeo*
Species : *angra*



Vernacular name: Lohan, Kharsa (Uttar Pradesh)

Common English name: Angra Labeo

Synonyms: *Cyprinus angra*

Salient identifying characteristics:

- ◆ Body elongate, ventral profile less curved outwards than dorsal profile
- ◆ Small eyes with sub inferior mouth
- ◆ Dorsal fin originated a little bit posterior to tip of pectoral fins
- ◆ Caudal fin deeply forked
- ◆ Scales moderate, lateral line with 38 scales
- ◆ Leaden grey above with silvery flanks and abdomen

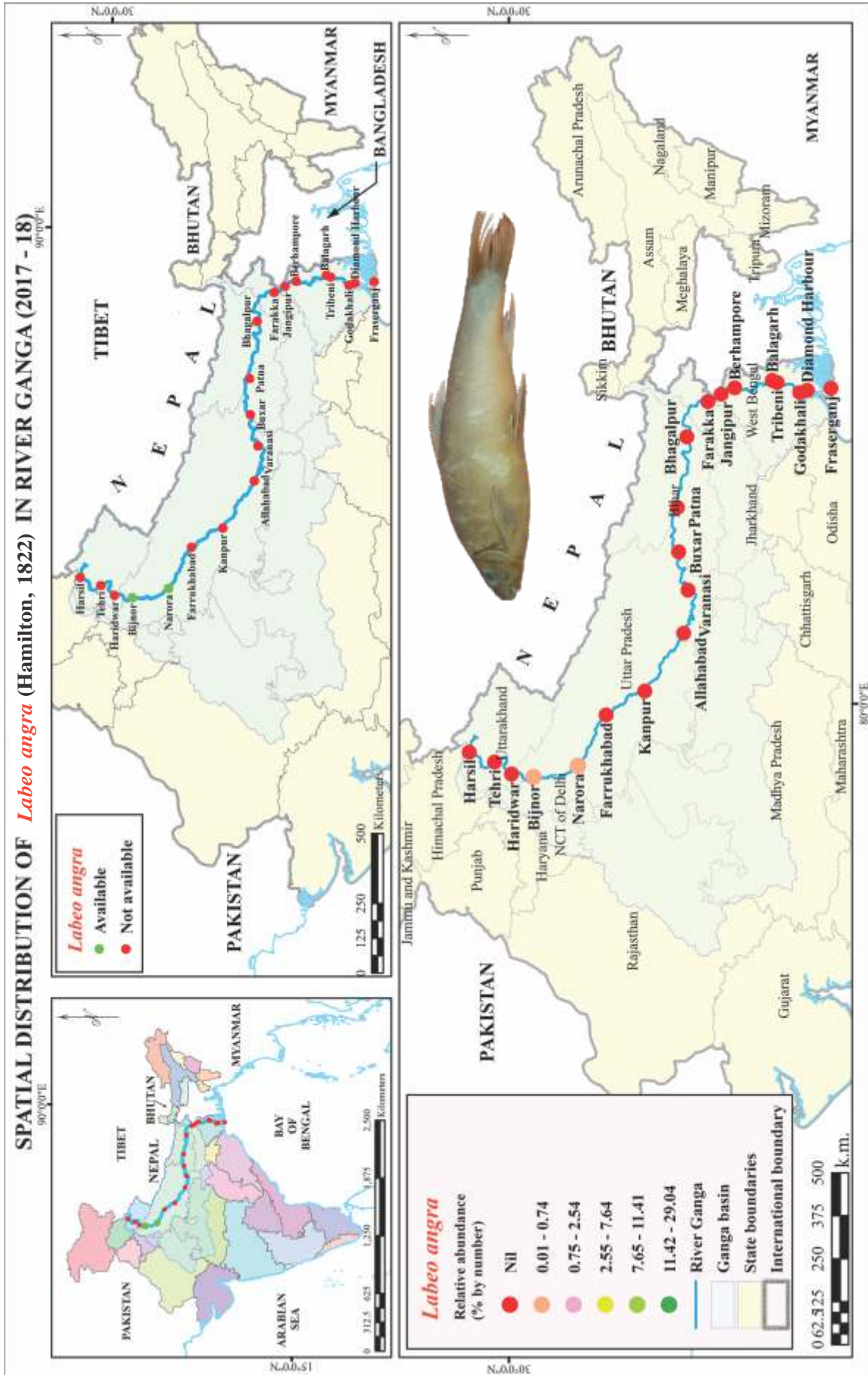
Habitat: Freshwater

Maximum size (TL): 22 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Labeo bata (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Cypriniformes

Family : Cyprinidae

Genus : *Labeo*

Species : *bata*



Vernacular name: Bata, Bhanga (Uttar Pradesh, Bihar, West Bengal)

Common English name: Bata

Synonyms: *Cyprinus bata*

Salient identifying characteristics:

- ◆ Body elongate, ventral profile quite less convex than dorsal profile
- ◆ Eyes large and mouth inferior
- ◆ Dorsal fin originated nearby snout-tip
- ◆ Pectoral fins as long as head, extending to pelvic fins
- ◆ Scales moderate, lateral line with 37 to 40 scales

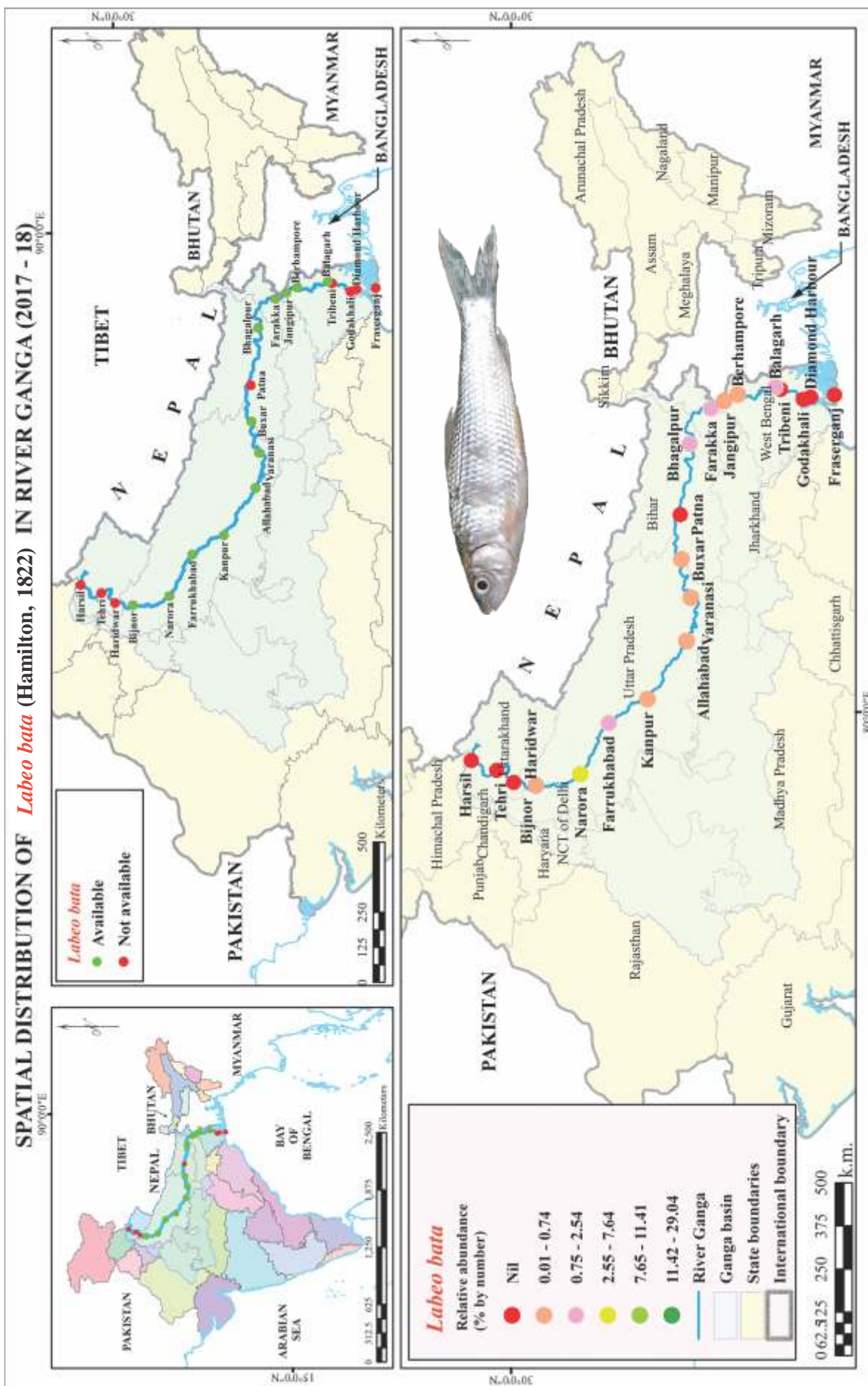
Habitat: Freshwater

Maximum size (TL): 61 cm

Food and feeding: Feeds on algae, plant parts, protozoans, crustaceans, insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Labeo boga (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cyprinidae
Genus	: <i>Labeo</i>
Species	: <i>boga</i>



Vernacular name: Boga bata (West Bengal)

Common English name: Bata

Synonyms: *Cyprinus boga*

Salient identifying characteristics:

- ◆ Body elongate, dorsal profile more convex than the ventral
- ◆ Mouth narrow with thick lips, lower lip joined with isthmus by a bridge
- ◆ Dorsal fin originated near to snout-tip than base of caudal fin
- ◆ Pectoral fins do not extend to pelvic fins. Caudal fin forked
- ◆ Scales moderate, lateral line with 37 to 39 scales

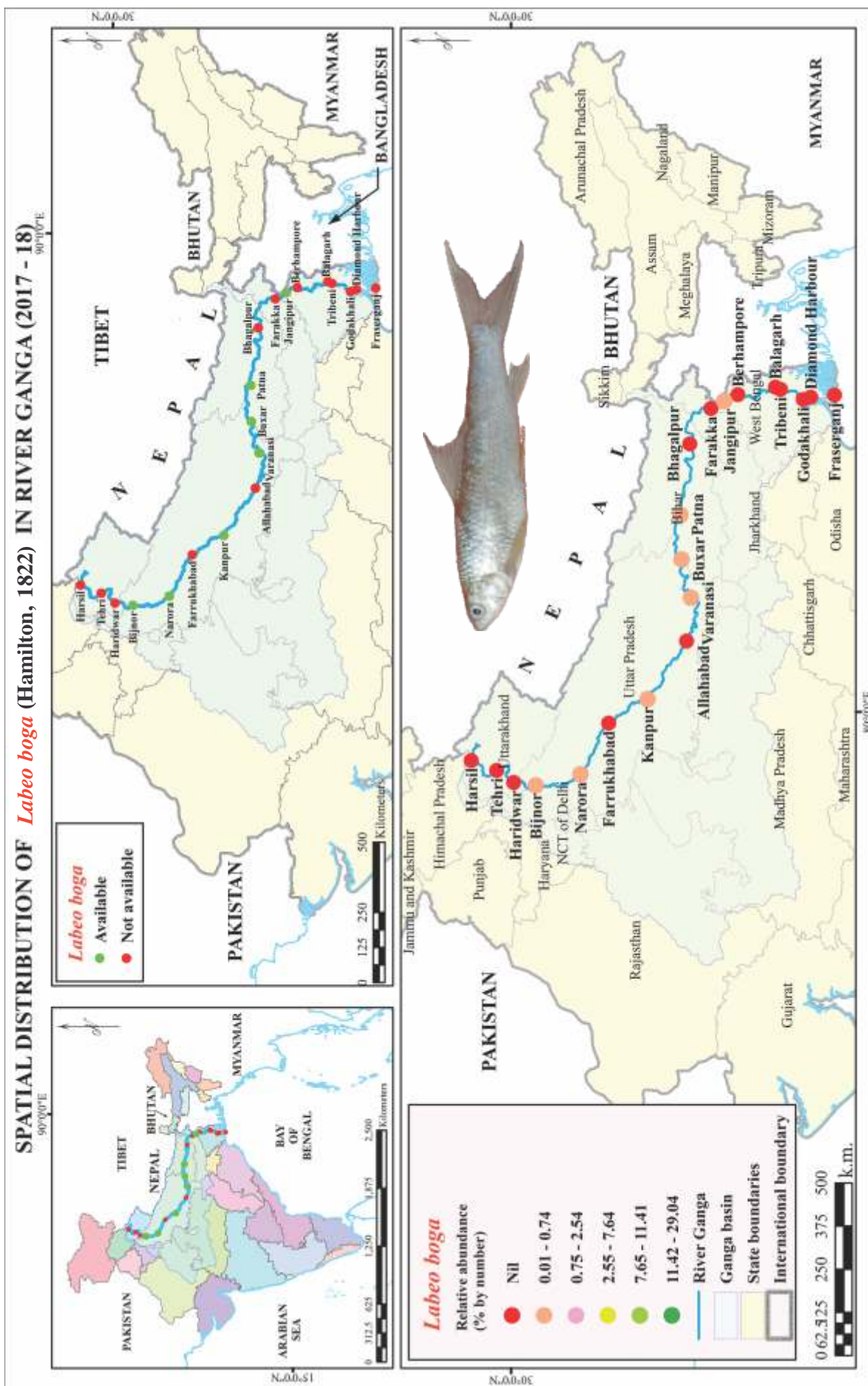
Habitat: Freshwater

Maximum size (TL): 30 cm

Food and feeding: Feeds on crustaceans, insects and detritivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Labeo calbasu (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Labeo*
Species : *calbasu*



Vernacular name: Keronchi (Uttar Pradesh, Bihar), Kalbose (West Bengal)

Common English name: Orangefin labeo

Synonyms: *Cyprinus calbasu*

Salient identifying characteristics:

- ◆ Body strongly thick and fairly deep
- ◆ Barbels two pairs, eyes moderate
- ◆ Dorsal fin with a quite long base, originated midpoint between snout-tip and base of caudal fin
- ◆ Caudal fin deeply forked, scales moderate; 40 to 44 scales in lateral line
- ◆ Blackish-green color but lighter below, fins black, upper lobe of caudal fin tipped with white

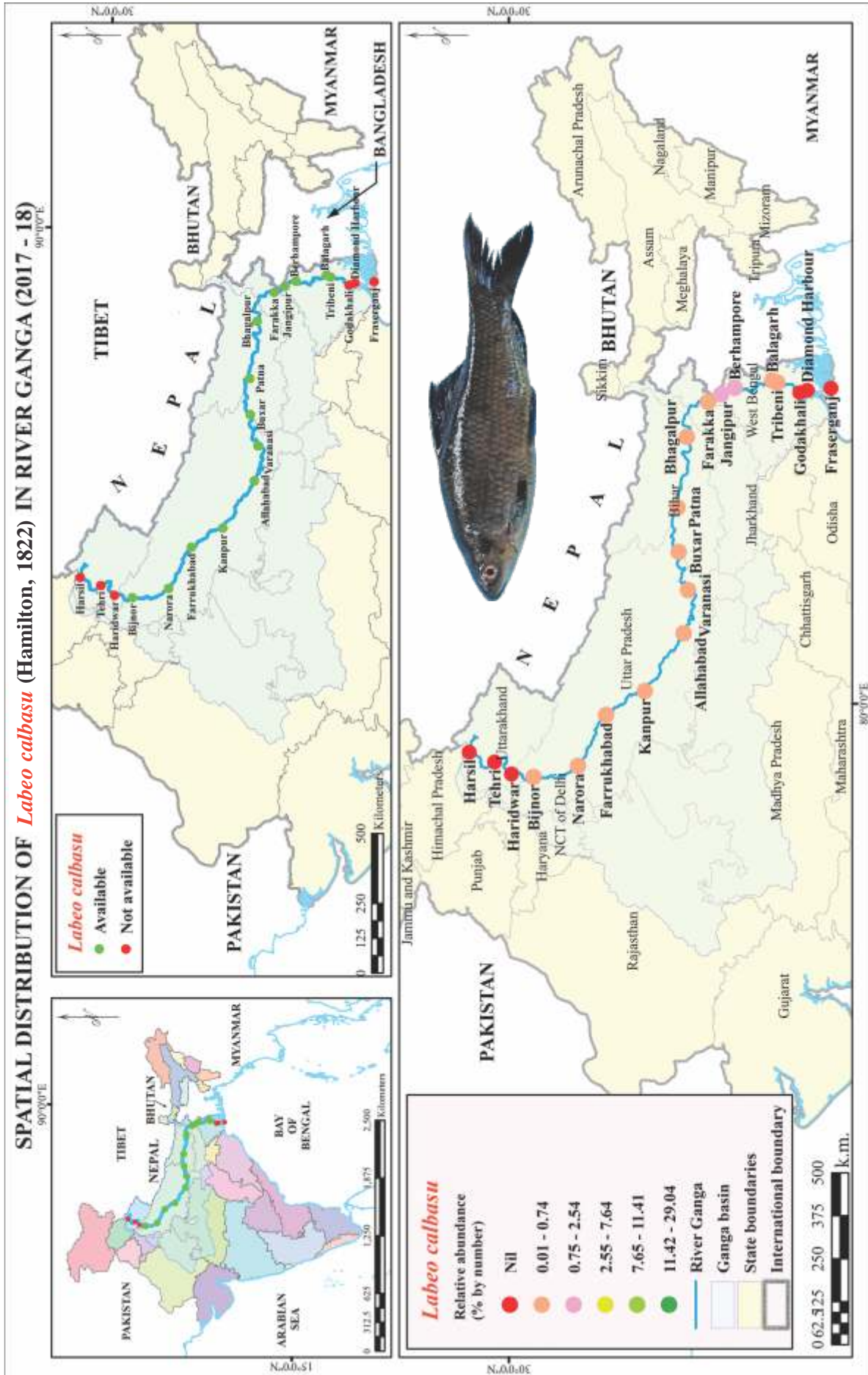
Habitat: Freshwater

Maximum size (TL): 90 cm

Food and feeding: Feeds on plant, filamentous algae and diatoms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as popular food fish



Labeo dyocheilus (McClelland, 1839)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Labeo*
Species : *dyocheilus*



Vernacular name: Khrat, Noliya (Uttar Pradesh)

Common English name: Brahmaputra Labeo

Synonyms: *Labeo dyocheilus*

Salient identifying characteristics:

- ◆ Body elongate with conical snout, projecting beyond mouth, with a distinct lateral lobe
- ◆ Small eyes, nearly invisible from underside of head
- ◆ Mouth wide and inferior
- ◆ Dorsal fin originated midway between snout-tip and base of caudal fin. Scales moderate with 43 scales in lateral line
- ◆ Caudal fin deeply forked

Habitat: Freshwater

Maximum size (TL): 90 cm

Food and feeding: Feeds on crustaceans, insects and detritivorous

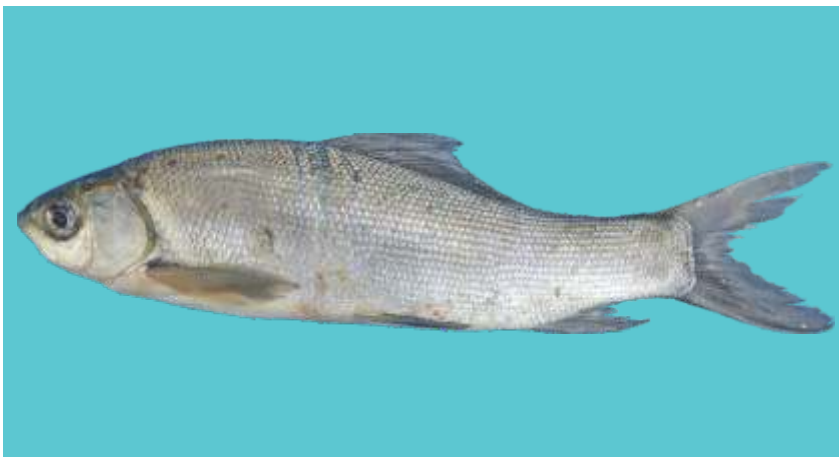
Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

Labeo gonius (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cyprinidae
Genus	: <i>Labeo</i>
Species	: <i>gonius</i>



Vernacular name: Kursa, Kail (Uttar Pradesh), Batki (West Bengal)

Common English name: Kuria labeo

Synonyms: *Cyprinus gonius*

Salient identifying characteristics:

- ◆ Body elongate, dorsal more curved outward than ventral profile
- ◆ Mouth narrow and sub inferior with thick and fringed lips
- ◆ Two pairs of small barbells
- ◆ Dorsal fin originated nearer to snout tip than to base of caudal fin
- ◆ Caudal fin deeply forked along with pointed lobes
- ◆ Scales small; 71 to 84 scales in lateral line
- ◆ Greenish-black on black, dull white on flanks and belly

Habitat: Freshwater

Maximum size (TL): 150 cm

Food and feeding: Feeds on green algae, diatoms and decayed organic matter

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

Labeo rohita (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Labeo*
Species : *rohita*



Vernacular name: Rehu (Uttar Pradesh, Bihar), Rui (West Bengal)

Common English name: Roho labeo

Synonyms: *Cyprinus rohita*

Salient identifying characteristics:

- ◆ Body moderately elongate, ventral profile more arched than dorsal profile
- ◆ Mouth small and inferior, thick and fringed lips with a distinct inner fold to each lip
- ◆ Dorsal fin originated midpoint between snout-tip and base of caudal fin
- ◆ Pectoral fins shorter than head. Caudal fin deeply forked
- ◆ Scales moderate, lateral line with 40 to 44 scale

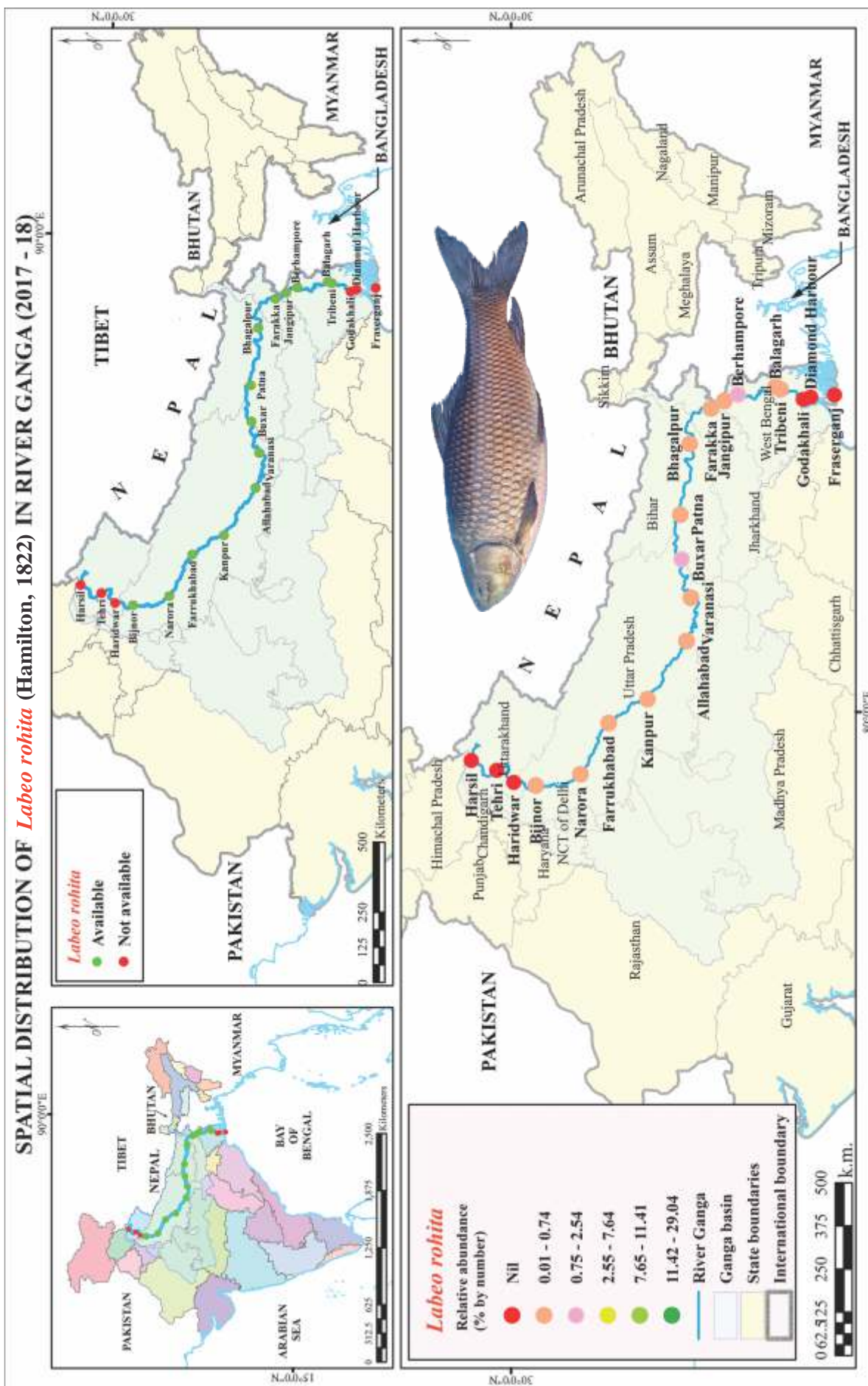
Habitat: Freshwater

Maximum Length (TL): 200 cm

Food and feeding: Feeds on plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as popular food fish



Laubuka laubuca (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Laubuka*
Species : *laubuca*



Vernacular name: Kotari (Uttar Pradesh, Bihar), Darkin (West Bengal)

Common English name: Indian glass barb

Synonyms: *Chela laubuca*, *Cyprinus laubuca*

Salient identifying characteristics:

- ◆ Body deep and fairly compressed
- ◆ Mouth rather oblique
- ◆ Pectoral fins large and wing like, outer pelvic fin ray strongly produced
- ◆ Lateral line completes with 31 to 37 scales

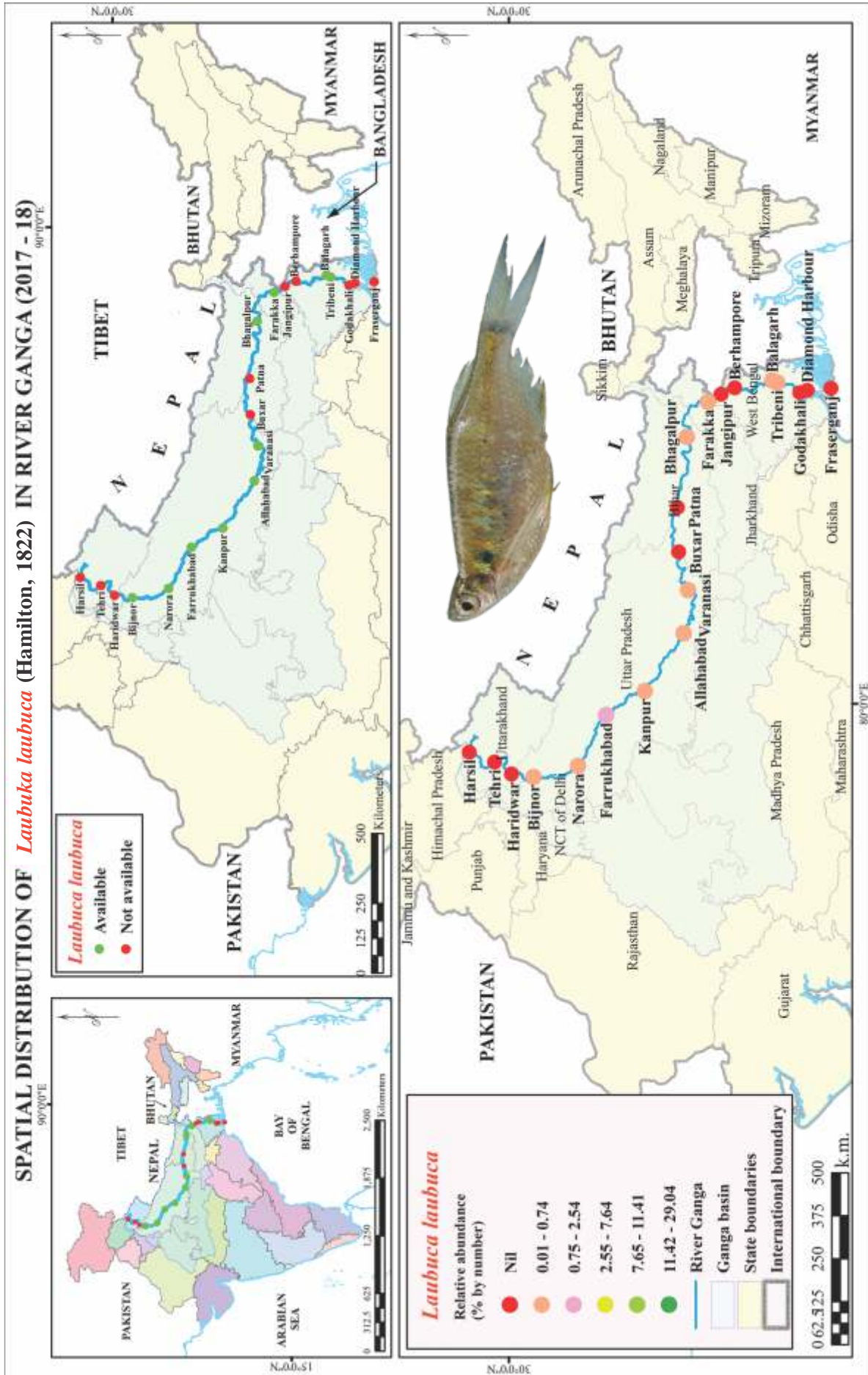
Habitat: Freshwater

Maximum size (TL): 10.5 cm

Food and feeding: Feeds mainly on insects, but also takes plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Lepidocephalichthys guntea (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cobitidae
Genus	: <i>Lepidocephalichthys</i>
Species	: <i>guntea</i>



Vernacular name: Simaniya (Uttar Pradesh), Gunte, Gutum (West Bengal)

Common English name: Guntea loach

Synonyms: *Cobitis guntea*

Salient identifying characteristics:

- ◆ Body elongated, low, moderately compressed anterior side and strongly posterior side
- ◆ Inferior mouth with three pairs barbells
- ◆ Dorsal fin originated slightly behind level of origin of pelvic fins, nearer to caudal fin base than to snout-tip, Scales very small and imbricate
- ◆ Spots on body grow in size and tend to fuse with one another, forming a continuous dark lateral band with age

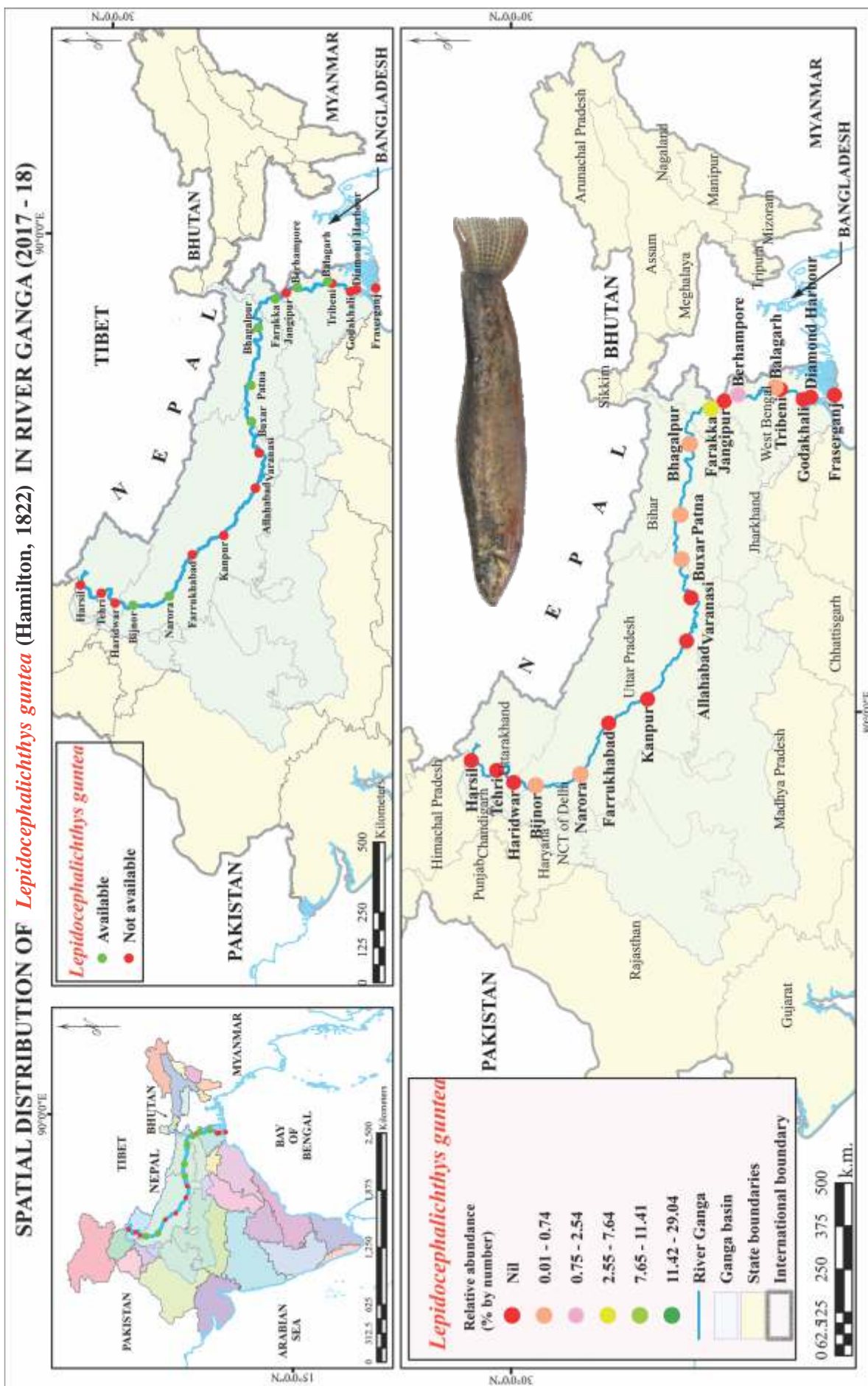
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Feeds on insect larvae and small crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Opsarius barna (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Opsarius*
Species : *barna*



Vernacular name: Chal (Uttarakhand)

Common English name: Barna Baril

Synonyms: *Barilius barna*, *Cyprinus barna*

Salient identifying characteristics:

- ◆ Body is fairly deep
- ◆ Mouth moderate with short jaws
- ◆ Dorsal fin is present before anal fin
- ◆ The last fin ray extends upto the base of the caudal fin
- ◆ 39-42 scales are present in the lateral line
- ◆ Presence of large tubercles on the snout and lower jaw

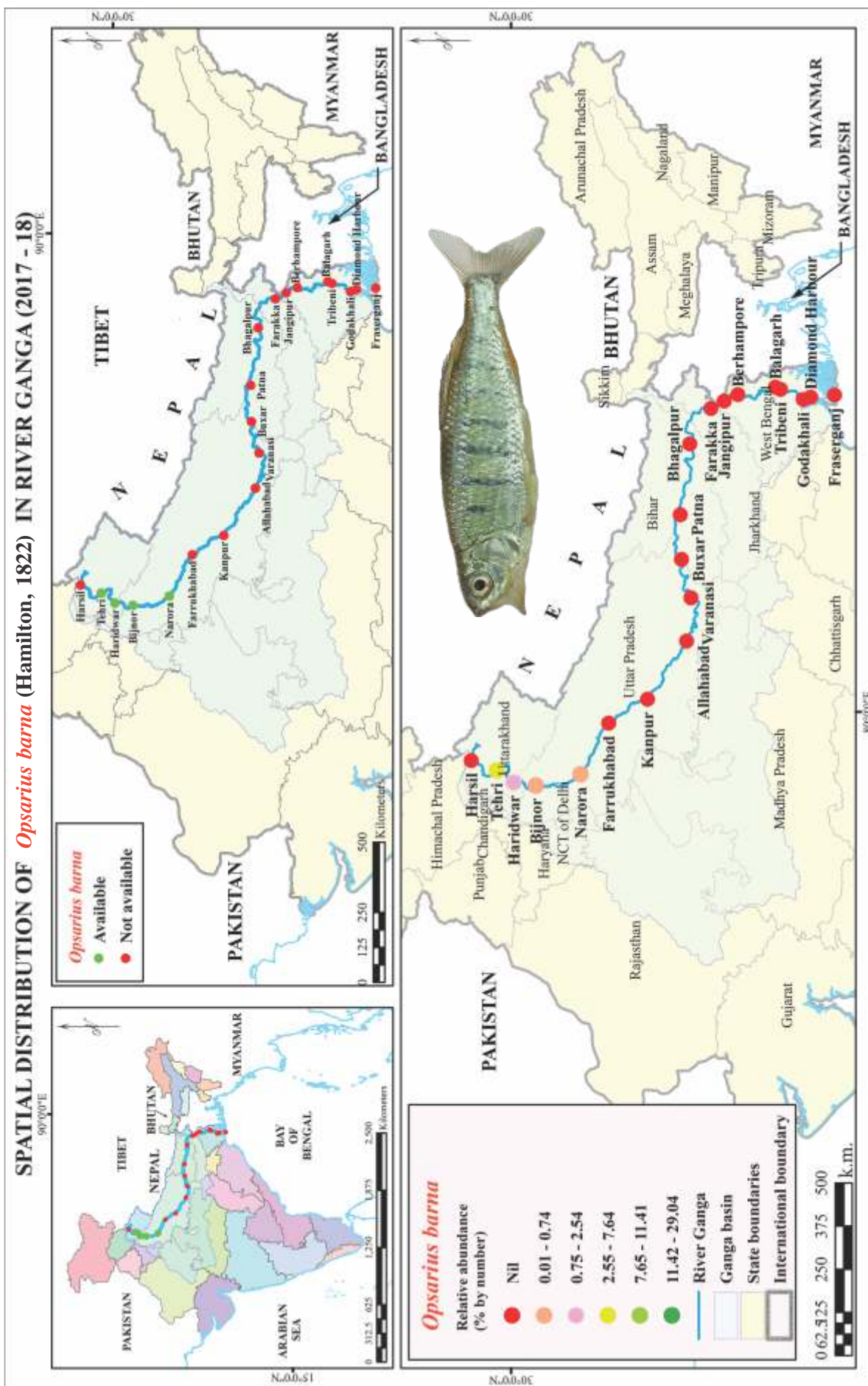
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Opsarius bendelisis (Hamilton, 1807)

Systematic classification:

Class	: Actinopterygii
Order	: Cypriniformes
Family	: Danionidae
Genus	: <i>Opsarius</i>
Species	: <i>bendelisis</i>



Vernacular name: Ral (Uttar Pradesh)

Common English name: Hamilton's Barila

Synonyms: *Cyprinus bendelisis*

Salient identifying characteristics:

- ◆ Body is shallow
- ◆ Dorsal fin is inserted in advanced to the anal fin
- ◆ Moderate size scales, lateral line consists of 40 to 45 scales
- ◆ Presence of small tubercles on the snout and lower jaws
- ◆ Silver greyish colour of the body with 8 to 12 backbands proceeds down towards the lateral line
- ◆ Fins are yellowish in colour, with a spread of orange tinge. Caudal fin lobe is dusky in color

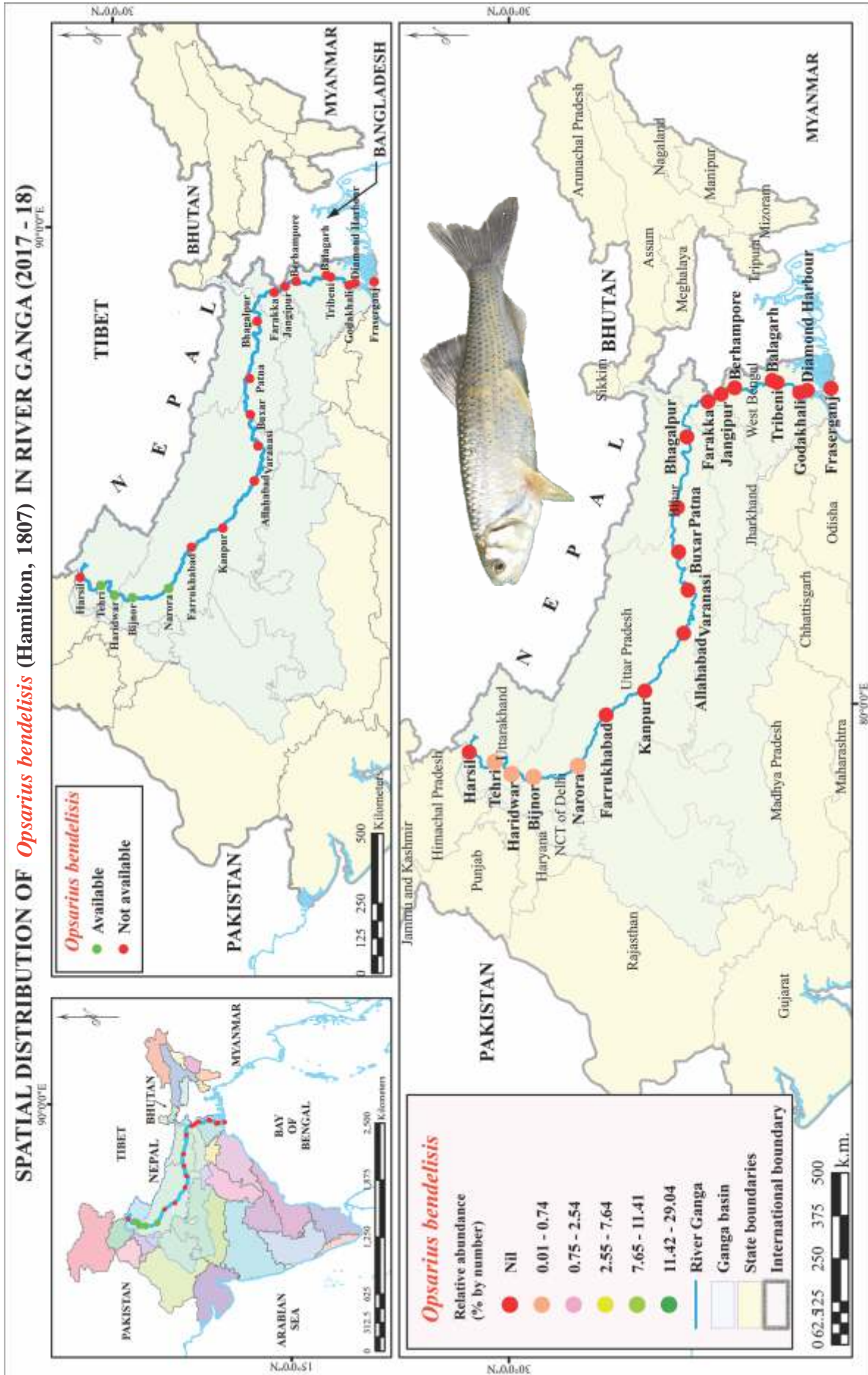
Habitat: Freshwater

Maximum size (TL): 22.7 cm

Food and feeding: Feeds on soft aquatic plants to micro crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Opsarius tileo (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Opsarius*
Species : *tileo*



Vernacular name: Chal (Uttar Pradesh)

Common English name: Tileo Baril

Synonyms: *Barilius tileo*, *Cyprinus tileo*

Salient identifying characteristics:

- ◆ Rudimentary pairs of barbels or even entirely absent
- ◆ Dorsal fin is situated in advance to the anal fin
- ◆ Scales are small in size with 65-75 in numbers along the lateral line
- ◆ Well-developed tubercles along the snout and lower jaw
- ◆ 2-3 blue spots along the side of the body

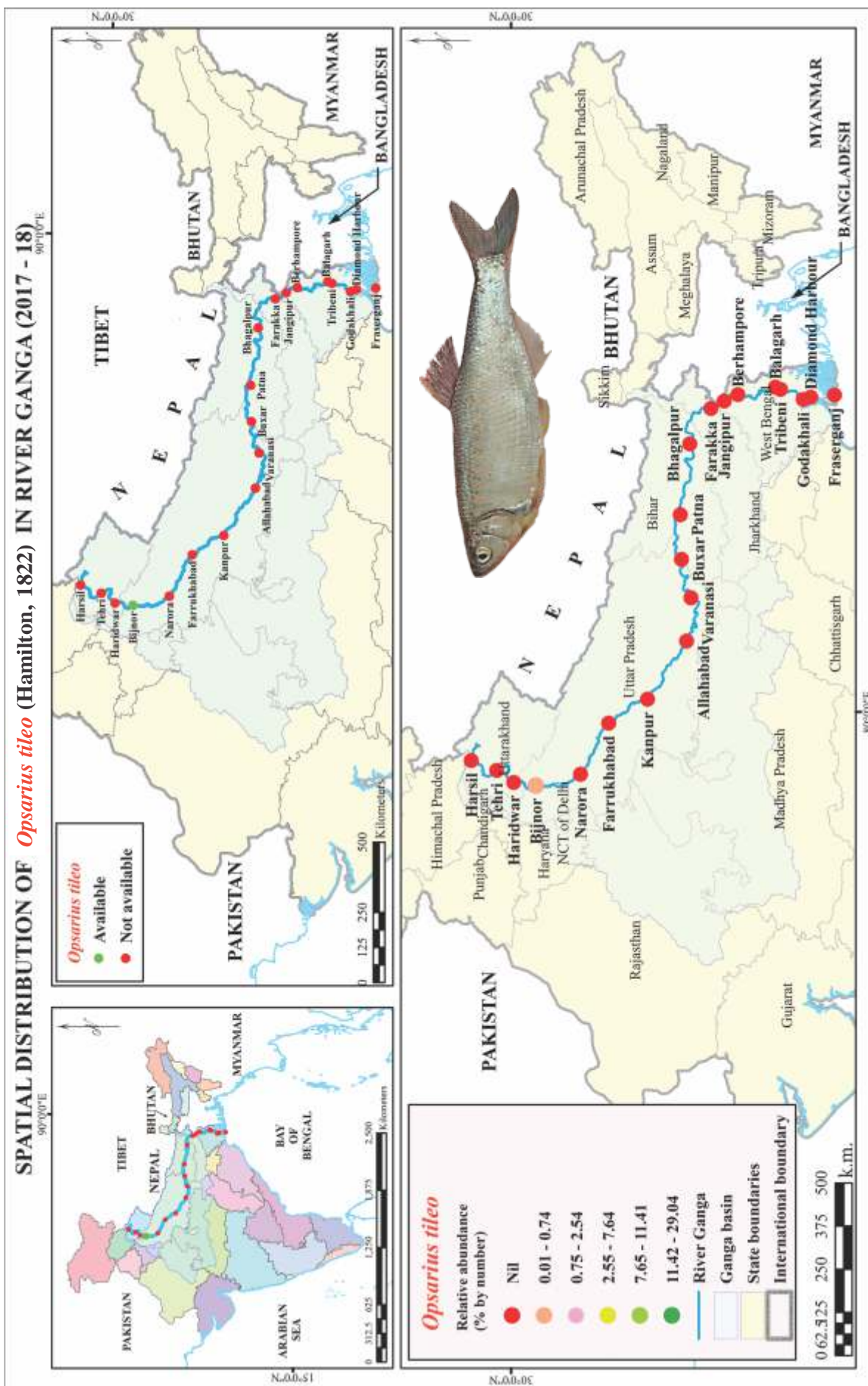
Habitat: Freshwater

Maximum size (TL): 30.5 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Oreichthys cosuatis (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Oreichthys*
Species : *cosuatis*



Vernacular name: Phafiya (Uttar Pradesh)

Common English name: Cosuatis

Synonyms: *Barbus cosuatis*, *Cyprinus cosuatis*

Salient identifying characteristics:

- ◆ Presence of bright yellow dorsal fin with a large blotch mark on dorsal fin
- ◆ Ventral red fins with a distinct black bar on the tip of the dorsal fin
- ◆ Presence of black spot on the anal fin

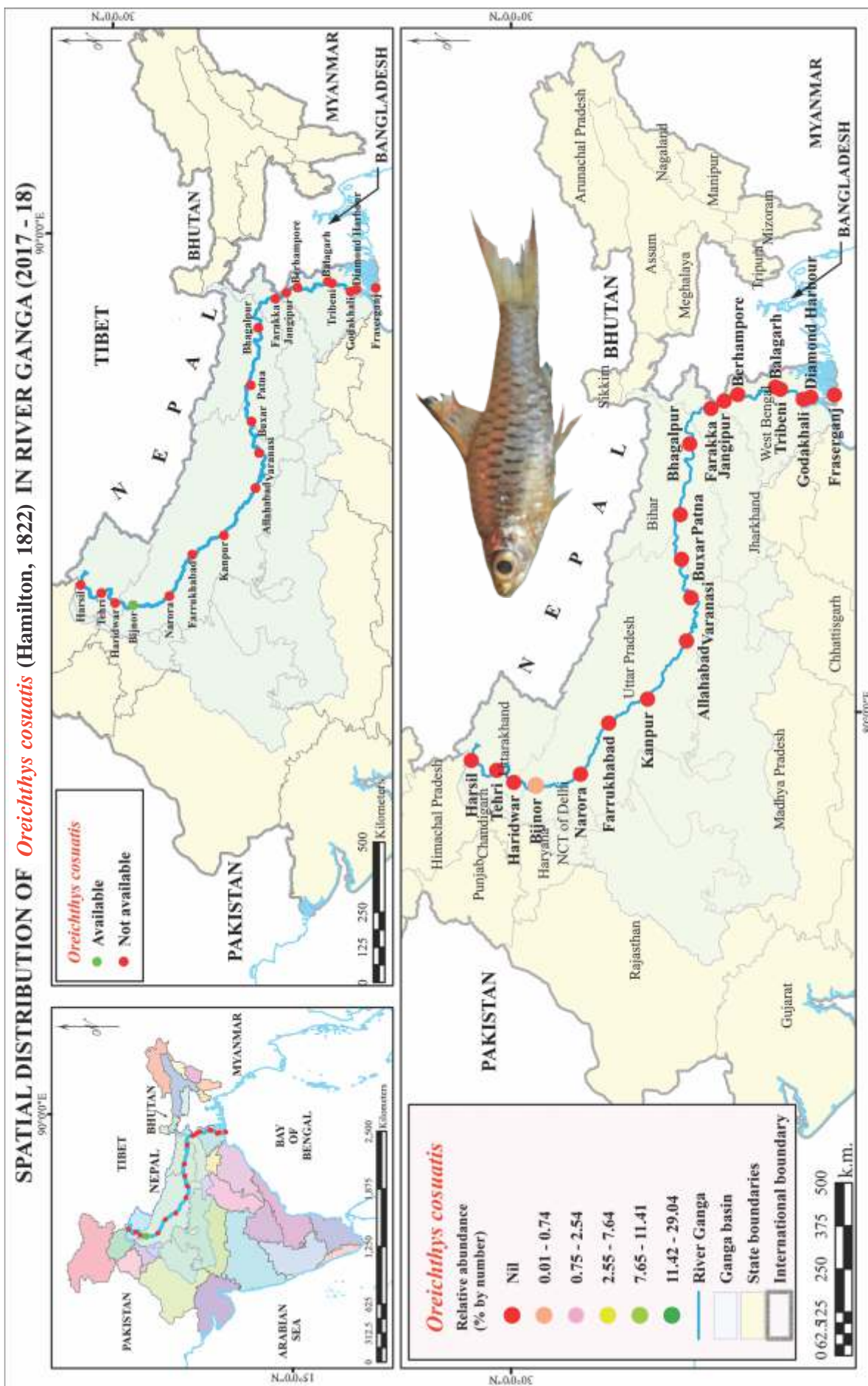
Habitat: Freshwater

Maximum size (TL): 8 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Osteobrama cotio (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Osteobrama*
Species : *cotio*



Vernacular name: Gurdi, Gurdha (Uttar Pradesh, Bihar), Koti (West Bengal)

Common English name: Cotio

Synonyms: *Cyprinus cotio*, *Leuciscus cotio*, *Osteobrama cotio cotio*

Salient identifying characteristics:

- ◆ Trapezoid and compressed body
- ◆ Mouth small; Barbels absent
- ◆ Dorsal spine is weak and serrated
- ◆ Small scales along the lateral line of about 65 in number, along with 24 predorsal scale
- ◆ Dorsal side consists of silvery scattered pigmentations while nape contains a distinct dark blotch

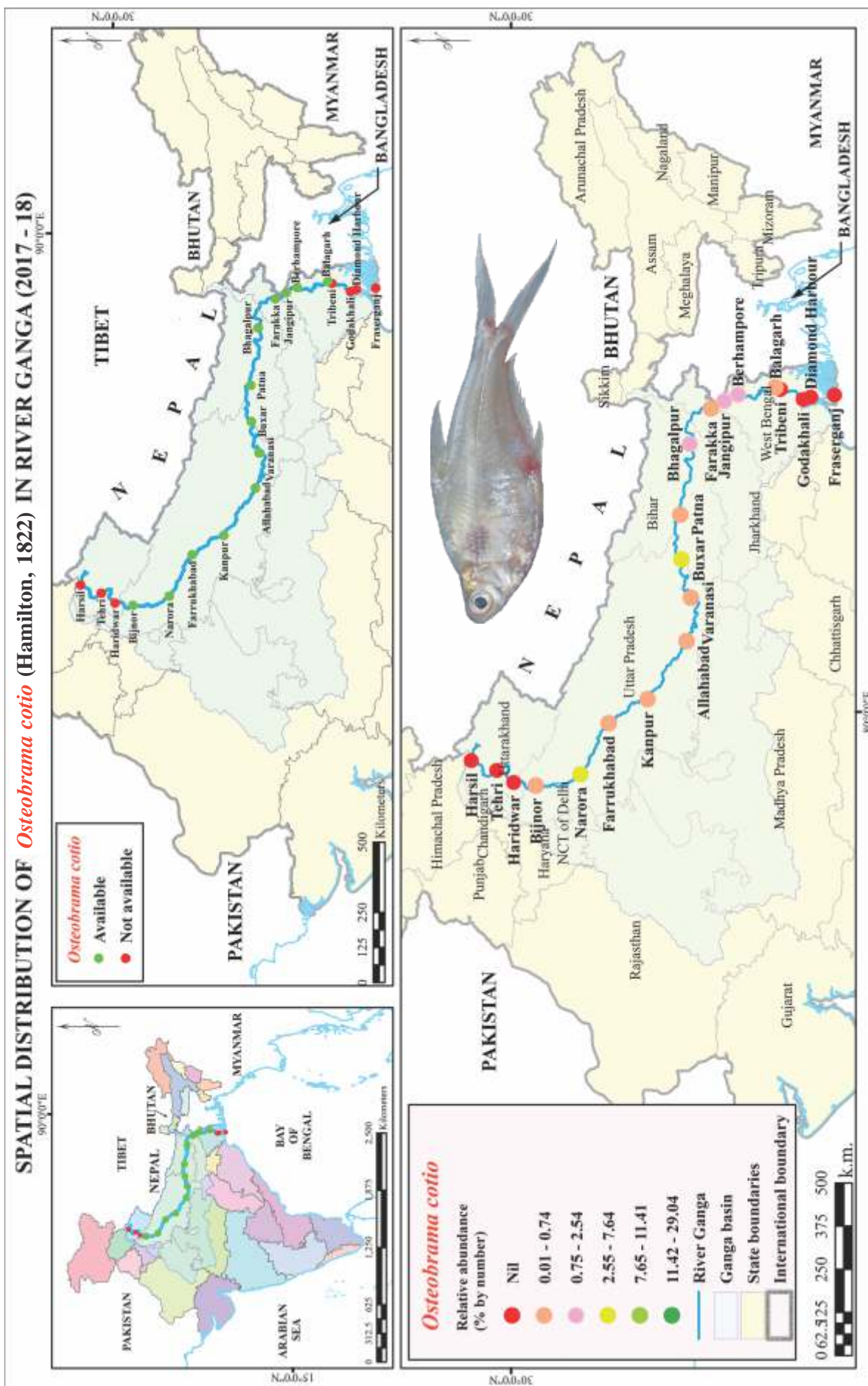
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Pangio pangia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cobitidae
Genus : *Pangio*
Species : *pangia*



Vernacular name: Lalmati (Uttar Pradesh)

Common English name: Pangia Coolie Loach

Synonyms: *Pangio pangio*, *Cobitis pangia*, *Acanthophthalmus pangia*

Salient identifying characteristics:

- ◆ Body elongated and compressed
- ◆ Eyes small. Small and inferior mouth, thick lips
- ◆ Presence of three pairs barbels
- ◆ Small dorsal fin and truncate caudal fin present
- ◆ Small depth of caudal peduncle
- ◆ Small scales attached in skin

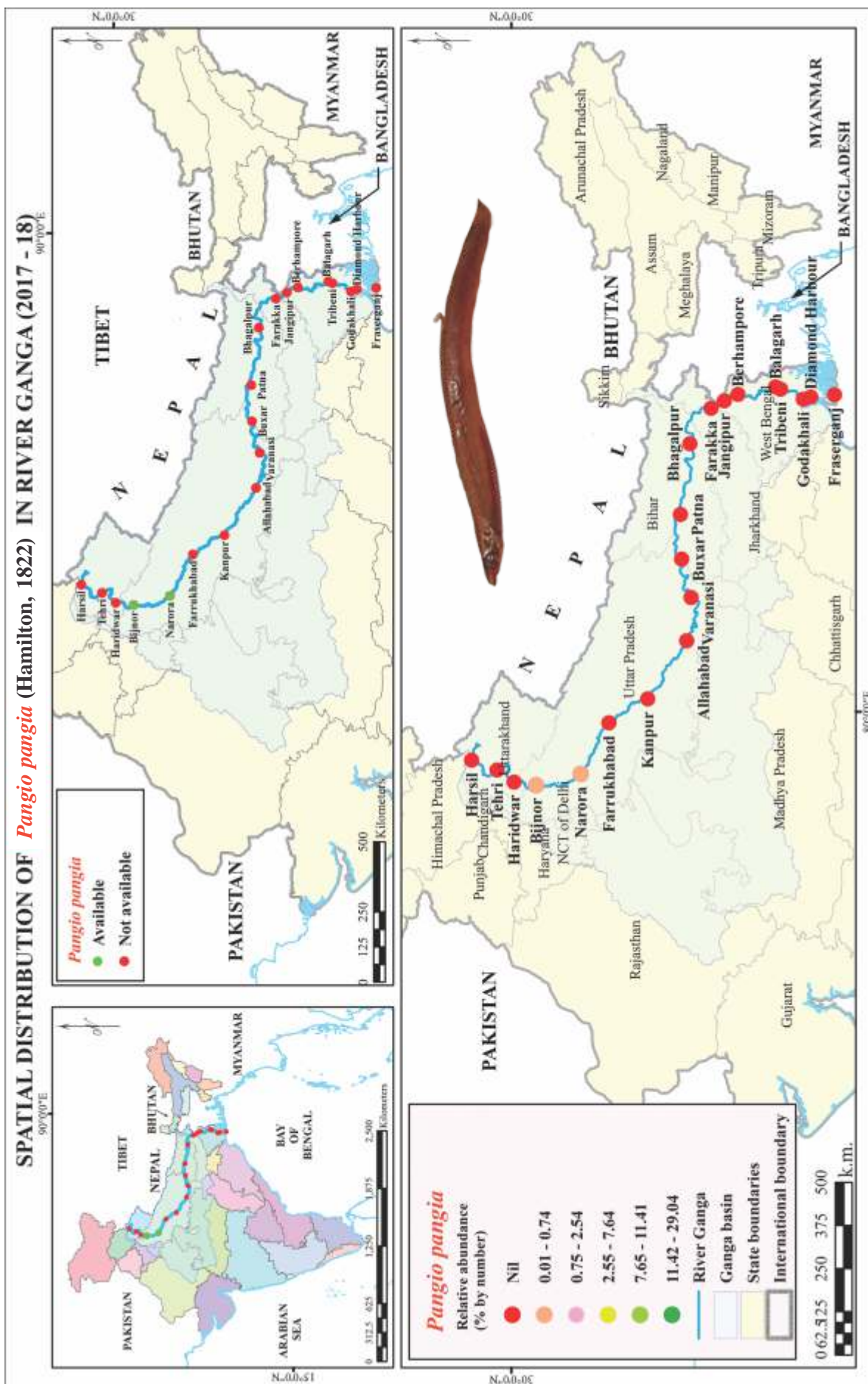
Habitat: Freshwater

Maximum size (TL): 6.5 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Paracanthocobitis botia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Nemacheilidae
Genus : *Paracanthocobitis*
Species : *botia*



Vernacular name: Larai (Uttar Pradesh, Bihar), Puia (West Bengal)

Common English name: Mottled loach

Synonyms: *Nemacheilus botia*, *Cobitis botia*

Salient identifying characteristics:

- ◆ Body slender. Eyes moderate invisible from underside of head
- ◆ Barbels well developed. Nasal barbels short
- ◆ Dorsal fin fixed nearer to snout tip
- ◆ Caudal fin emarginated
- ◆ Lateral line usually complete and often ending far away from base of anal fin

Habitat: Freshwater

Maximum size (TL): 14.9 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish

Pethia conchoni (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Pethia*
Species : *conchoni*



Vernacular name: Moni Puti (West Bengal)

Common English name: Rosy barb

Synonyms: *Puntius conchoni*, *Barbus conchoni*, *Cyprinus conchoni*

Salient identifying characteristics:

- ◆ Body deep and compressed
- ◆ Mouth small and barbels absent
- ◆ Dorsal fin placed in equidistant between tip of snout and base of caudal fin
- ◆ Lateral line incomplete which ceases after 10th to 13th scale

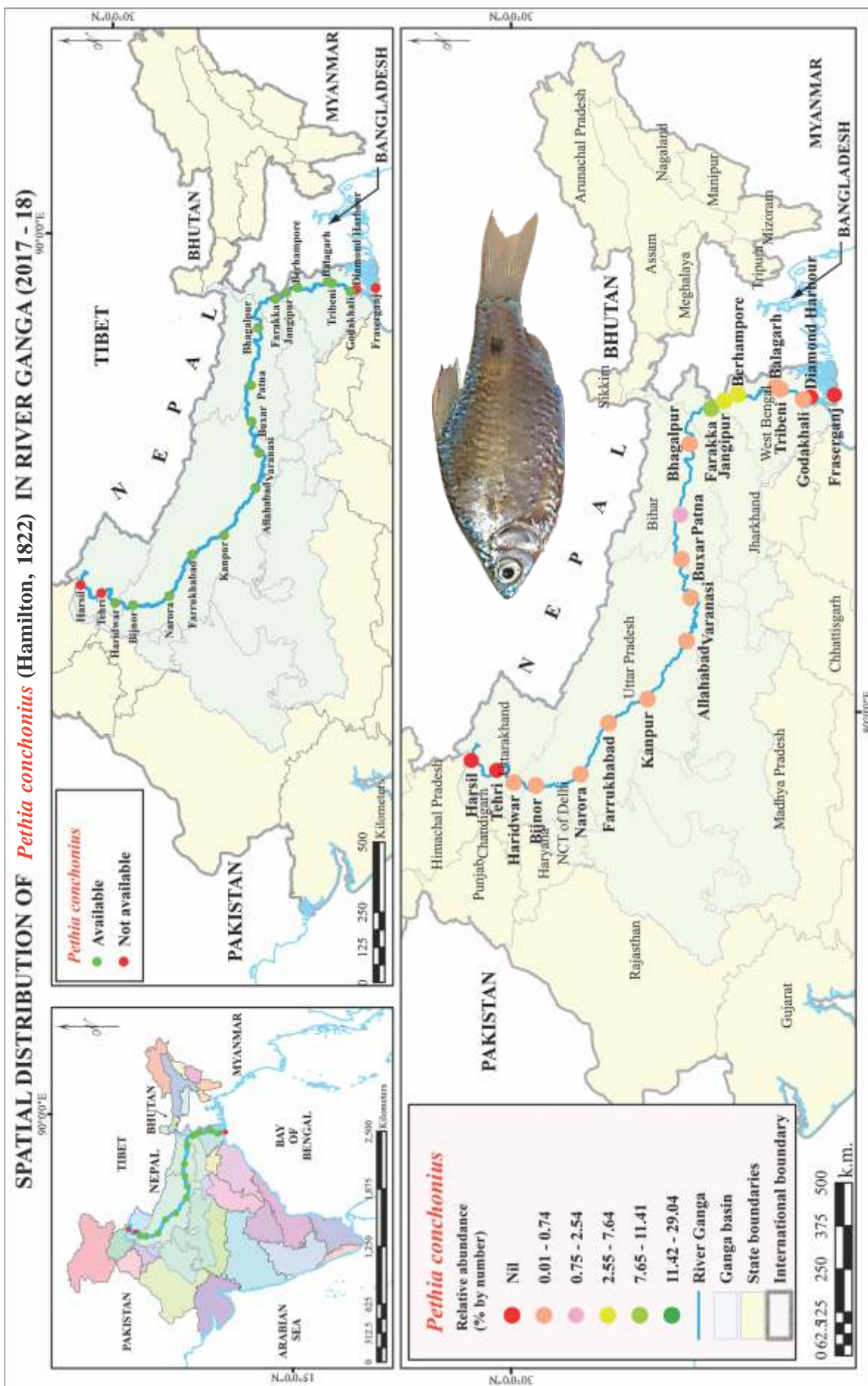
Habitat: Freshwater

Maximum size (TL): 14 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Pethia gelius (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cyprinidae
Genus	: <i>Pethia</i>
Species	: <i>gelius</i>



Vernacular name: Phafiya (Uttar Pradesh), Titputi (West Bengal)

Common English name: Golden barb

Synonyms: *Puntius gelius*, *Barbus gelius*, *Cyprinus gelius*

Salient identifying characteristics:

- ◆ Last serrated dorsal fin ray is unbranched and osseous
- ◆ Lateral line fuses after 05 to 06 scales. 23-24 scales longitudinally
- ◆ No barbels. A broad black band covered around the caudal peduncle
- ◆ Three diffuse black blotches present on body at base and origin of dorsal, anal and pelvic fins

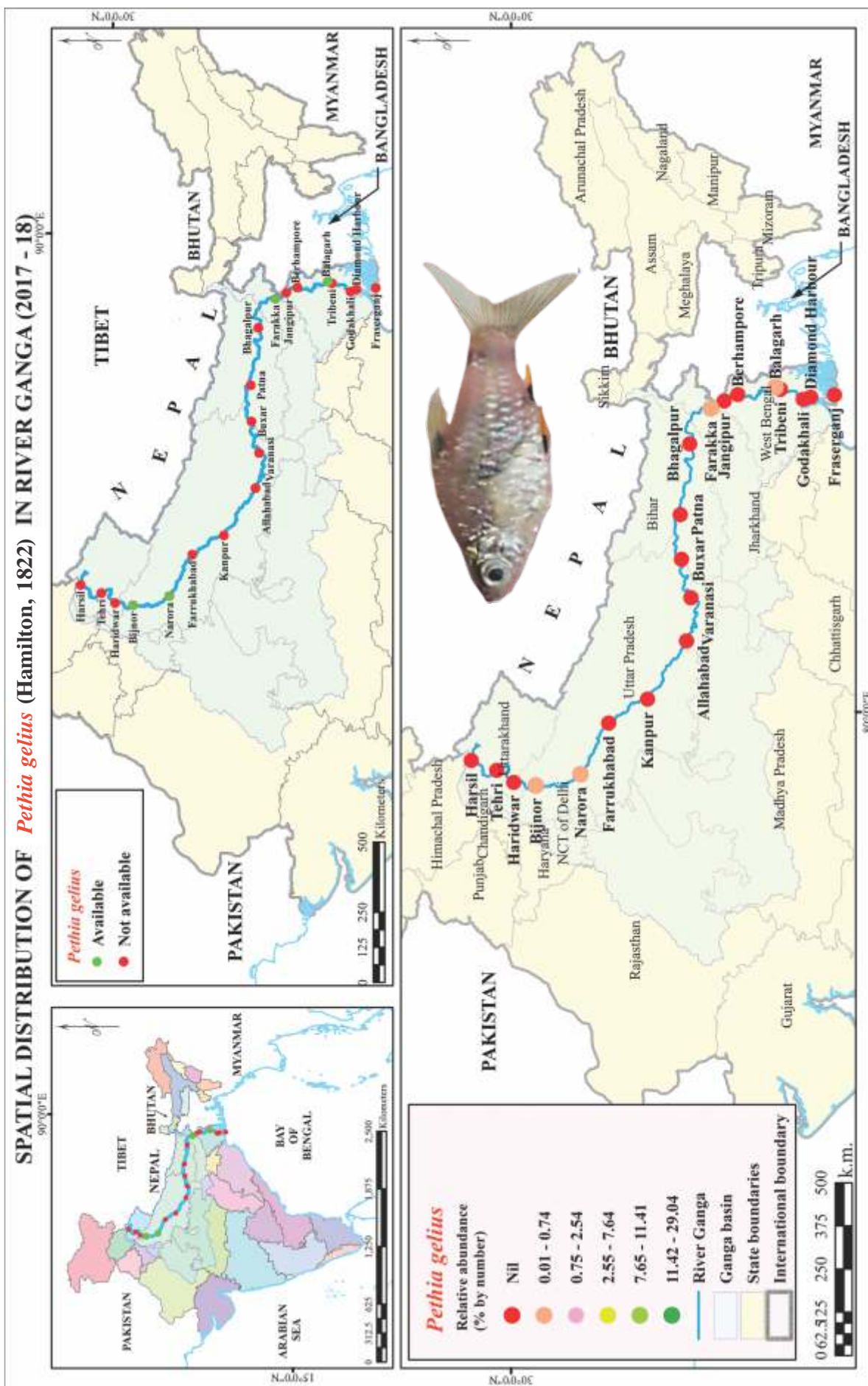
Habitat: Freshwater

Maximum size (TL): 14 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Pethia phutunio (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cyprinidae
Genus	: <i>Pethia</i>
Species	: <i>phutunio</i>



Vernacular name: Puti (West Bengal)

Common English name: Spotted sail barb

Synonyms: *Puntius phutonio*, *Barbus phutonio*, *Cyprinus phutonio*

Salient identifying characteristics:

- ◆ Body deep in shape. Mouth small and barbel absent
- ◆ Eyes large and diameter about 2.5 times in head
- ◆ Large scales, lateral line incomplete that ceases after 3 to 4 scales
- ◆ Longitudinal scales 20 to 23

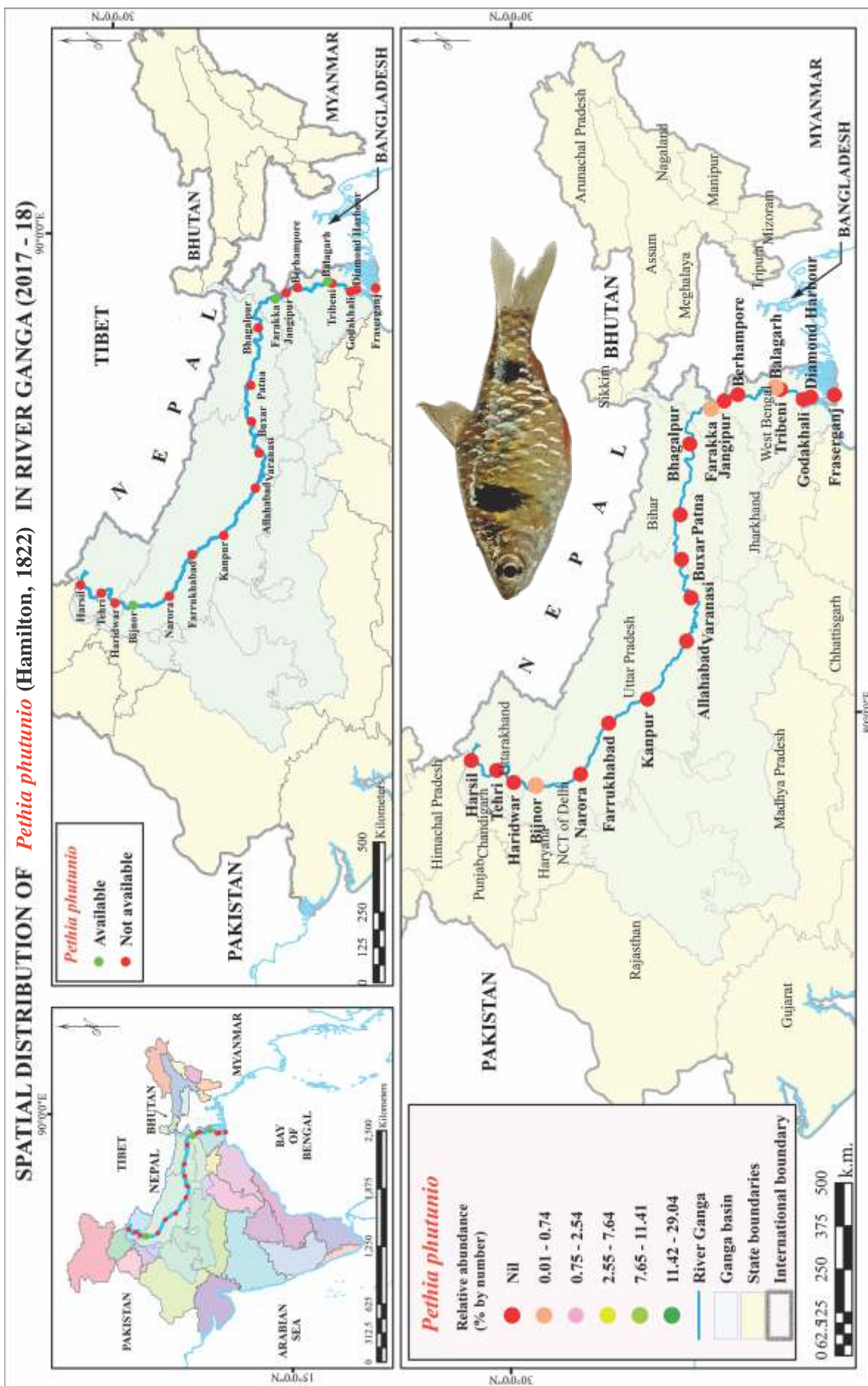
Habitat: Freshwater

Maximum size (TL): 3.9 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food and ornamental fish



Puntius chola (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Puntius*
Species : *chola*



Vernacular name: Puti (West Bengal)

Common English name: Swamp barb

Synonyms: *Cyprinus chola*, *Barbus chola*

Salient identifying characteristics:

- ◆ Body deep and compressed
- ◆ Mouth moderate; Barbels one short maxillary pair
- ◆ Small scales; complete lateral line having 26 to 28 scales
- ◆ Predorsal scales 10 to 12 number

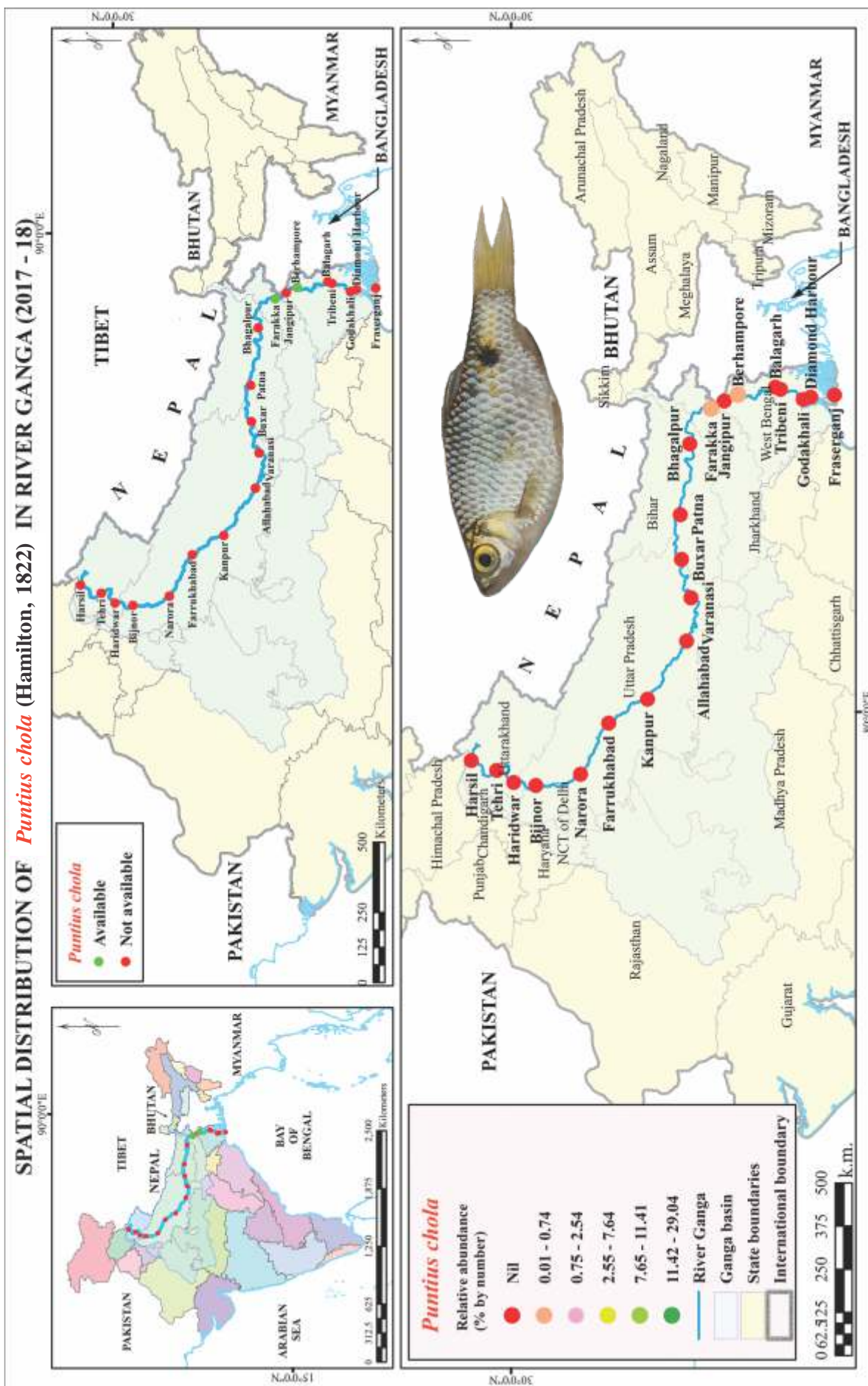
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Feeds on worms, crustaceans, insects and plant matter

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Puntius sophore (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Puntius*
Species : *sophore*



Vernacular name: Bhur (Uttar Pradesh), Lal Puti (West Bengal)

Common English name: Pool barb

Synonyms: *Cyprinus chola*, *Barbus chola*

Salient identifying characteristics:

- ◆ Body relatively deep, the ventral portion less convex than dorsal portion
- ◆ Head short. Mouth terminal and barbels absent
- ◆ Dorsal fin present equidistant between tip of snout and base of caudal fin, its last ray is unbranches, osseous and smooth
- ◆ Scales medium, lateral line incomplete, with 22 to 27 scales; lateral transverse scale-rows 4-5/3; 8 to 10 predorsal scales

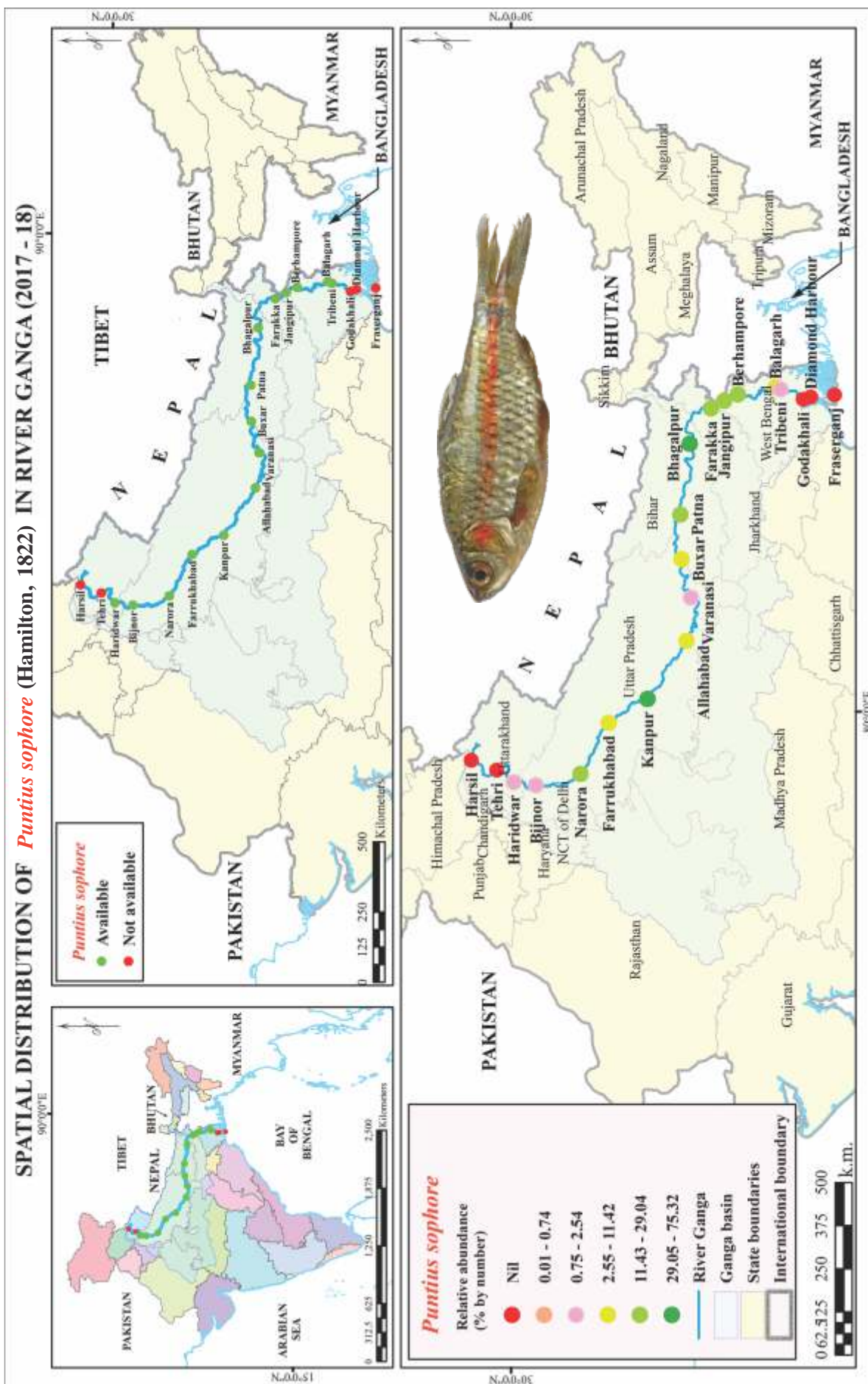
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Pethia ticto (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Pethia*
Species : *ticto*



Vernacular name: Puti, Mona Puti (West Bengal)

Common English name: Ticto barb

Synonyms: *Puntius ticto*, *Cyprinus chola*, *Barbus chola*

Salient identifying characteristics:

- ◆ Mouth terminal and small; barbels absent
- ◆ Posterior to pelvic fin origin dorsal fin fixed, last ray is unbranched, osseous, strong and serrated
- ◆ Scales medium; lateral line usually complete, often ceases after six to eight scales
- ◆ 23 to 25 scales in longitudinal series; predorsal scales 9 to 11

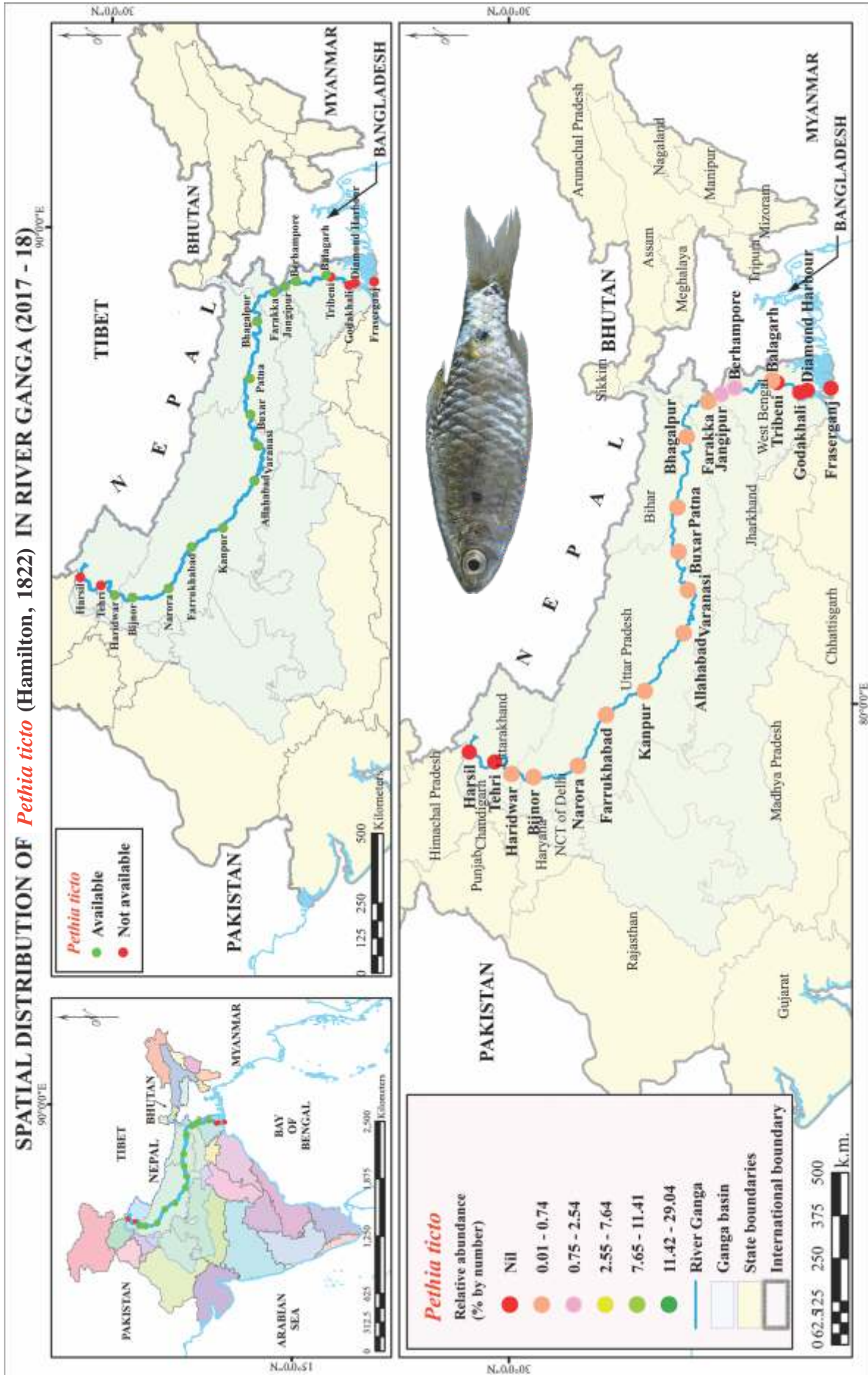
Habitat: Freshwater

Maximum size (TL): 12.5 cm

Food and feeding: Feeds on crustaceans, insects and plankton

Conservation status (IUCN Red list): Least Concern

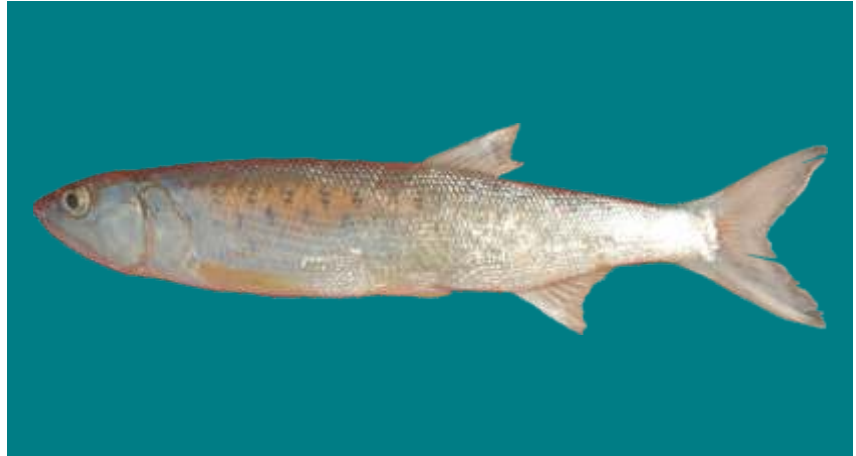
Commercial value: Used as food fish



Raiamas bola (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Raiamas*
Species : *bola*



Vernacular name: Gulaba (Uttar Pradesh)

Common English name: Trout Barb

Synonyms: *Barilius bola*, *Cyprinus bola*, *Bola bola*

Salient identifying characteristics:

- ◆ Body slender and compressed
- ◆ Head sharply pointed bearing a fairly elongated snout
- ◆ Mouth wide. Barbels absent in adults and rudimentary maxillary pair in juveniles
- ◆ Scales very small; lateral line complete (in adults), bearing 85 to 95 scales
- ◆ 15 or 17 greenish blue spots on sides of body

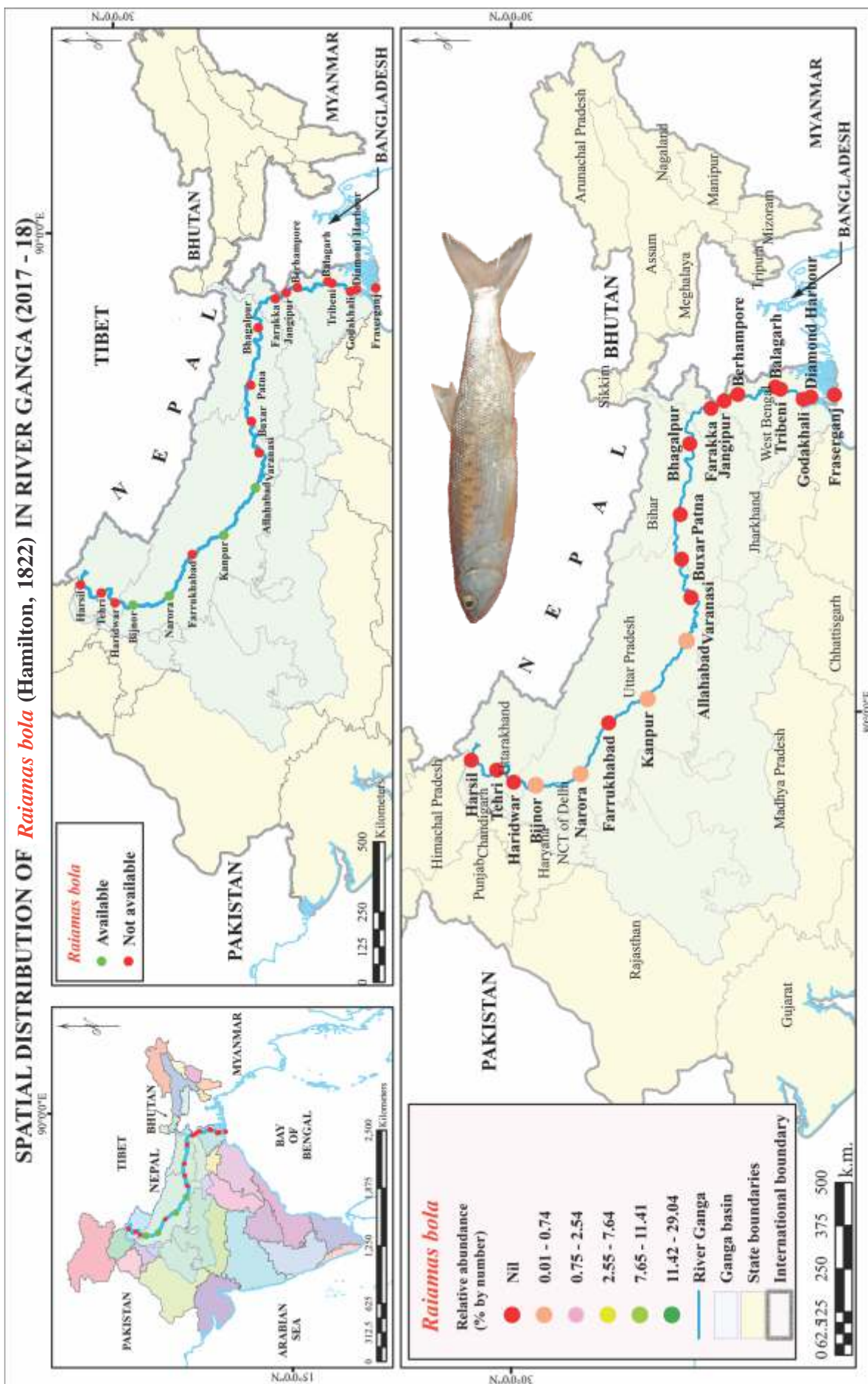
Habitat: Freshwater

Maximum Length (TL): 35 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Rasbora daniconius (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Rasbora*
Species : *daniconius*



Vernacular name: Darki (West Bengal)

Common English name: Slender rasbora

Synonyms: *Opsarius daniconius*, *Cyprinus daniconius*

Salient identifying characteristics:

- ◆ Body elongate, mouth obliquely directed upwards
- ◆ Dorsal fin inserted behind origin of pelvic fins
- ◆ Lateral line completes with 26 to 29 scales
- ◆ Black lateral stripe present between eye to caudal fin

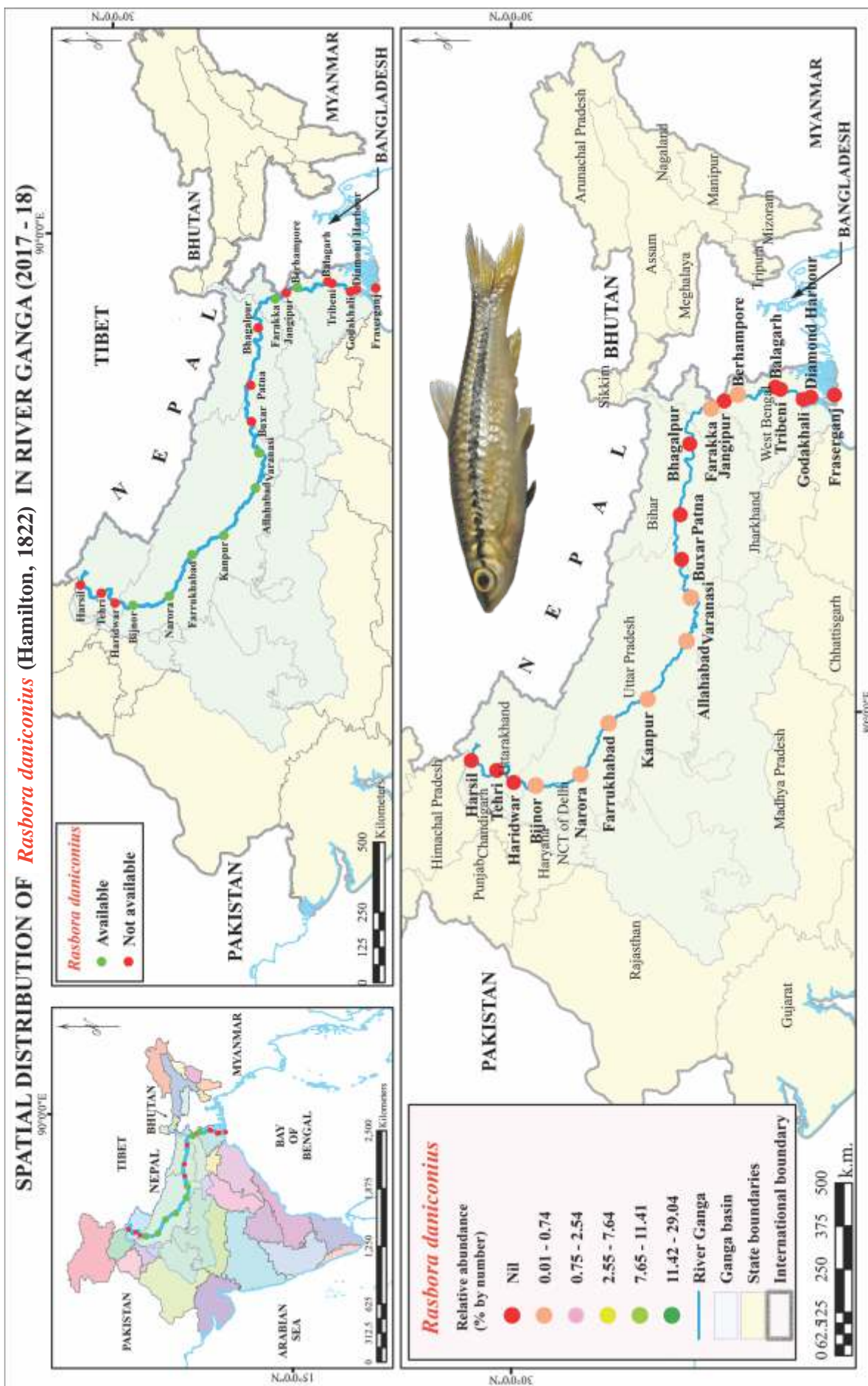
Habitat: Freshwater

Maximum size (TL): 13 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Salmostoma acinaces (Valenciennes, 1844)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Salmostoma*
Species : *acinaces*



Vernacular name: Pocha (Uttar Pradesh), Chelwa (West Bengal)

Common English name: Silver razorbelly minnow

Synonyms: *Leuciscus acinaces*

Salient identifying characteristics:

- ◆ Elongated and compressed body, its dorsal profile less convex than ventral profile
- ◆ Mouth oblique. Dorsal fin fixed above or slightly behind origin of anal fin
- ◆ Large scales, slightly curved lateral line bearing 42 to 46 scales, 6:7/3 rows of scale in lateral transverse side
- ◆ Anal and caudal fin edged black

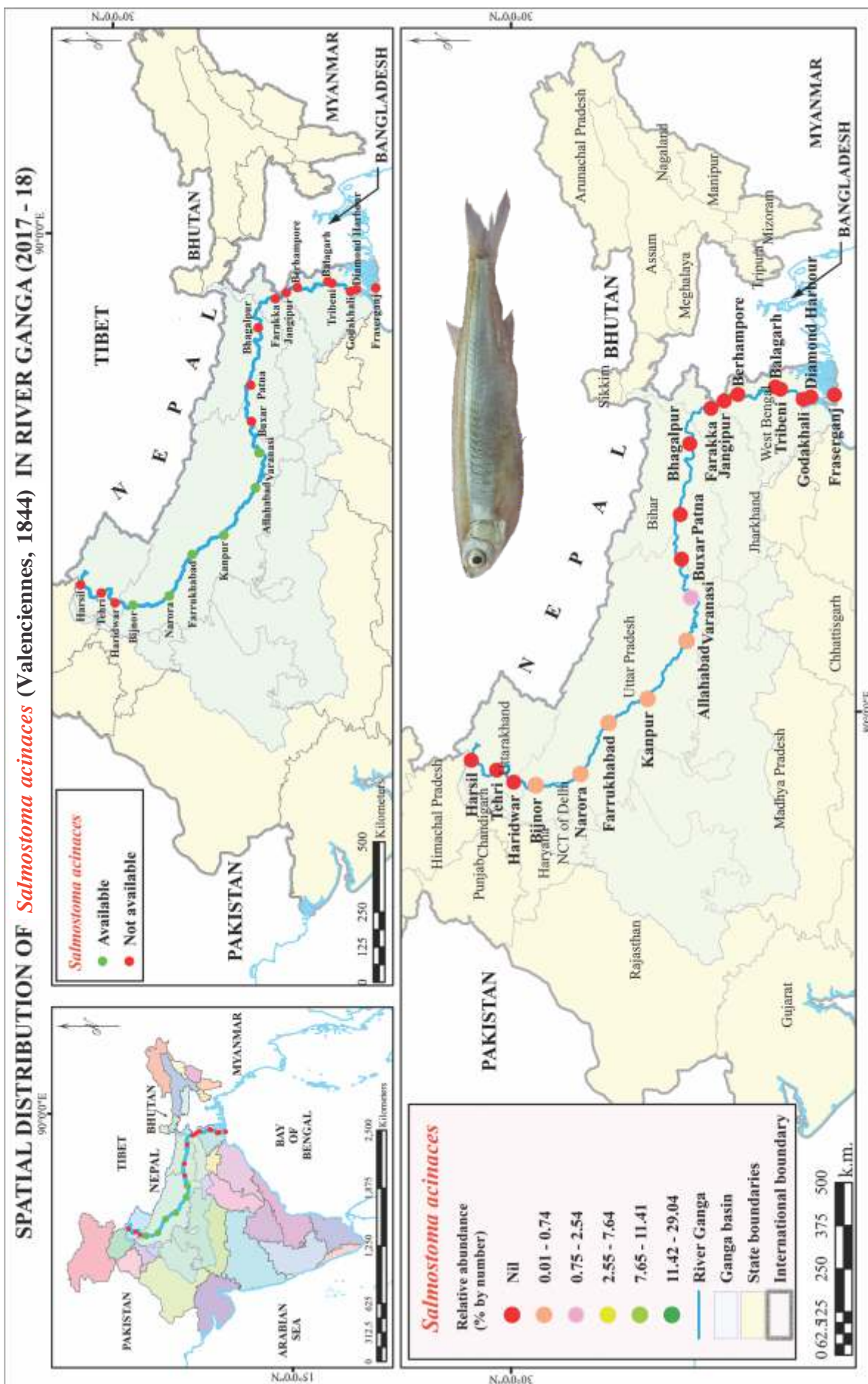
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Salmostoma bacaila (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Salmostoma*
Species : *bacaila*



Vernacular name: Pocha, Chelwa (Uttar Pradesh, Bihar), Chela (West Bengal)

Common English name: Large razorbelly minnow

Synonyms: *Leuciscus bacaila*, *Chela bacaila*, *Cyprinus bacaila*

Salient identifying characteristics:

- ◆ Strongly compressed and elongated body. Mouth oblique
- ◆ Dorsal fin attached well in advance of anal fin
- ◆ Small scales, bearing 86 to 110 scales, 17-19/4-6 rows of scales in lateral transverse side
- ◆ Grey-green on upper side. A broad gleaming white-green band along flank

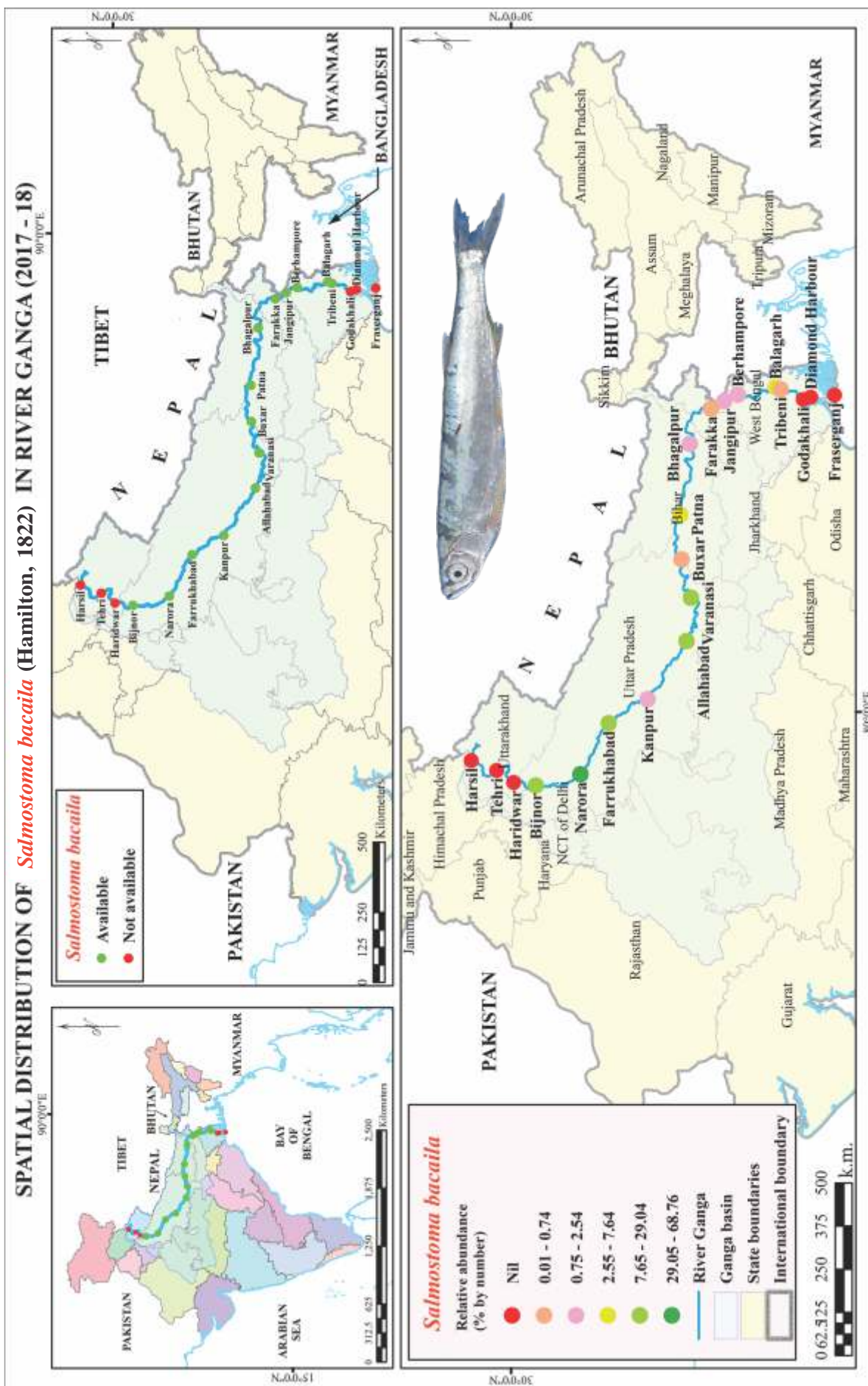
Habitat: Freshwater

Maximum size (TL): 18 cm

Food and feeding: Feeds on larvae and adults of insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Salmostoma phulo (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Salmostoma*
Species : *phulo*



Vernacular name: Pocha, Chelwa (Uttar Pradesh, Bihar), Chela (West Bengal)

Common English name: Finescale razorbelly minnow

Synonyms: *Chela phulo*, *Cyprinus phulo*

Salient identifying characteristics:

- ◆ Body elongated and compressed
- ◆ Mouth oblique in nature
- ◆ Dorsal fin attached to opposite to origin of anal fin
- ◆ The length of pectoral fin is about 3.5 times in standard length
- ◆ Small scales, lateral line curves gently downwards, having 99 to 112 scales; lateral transverse scalerows 12-15/6

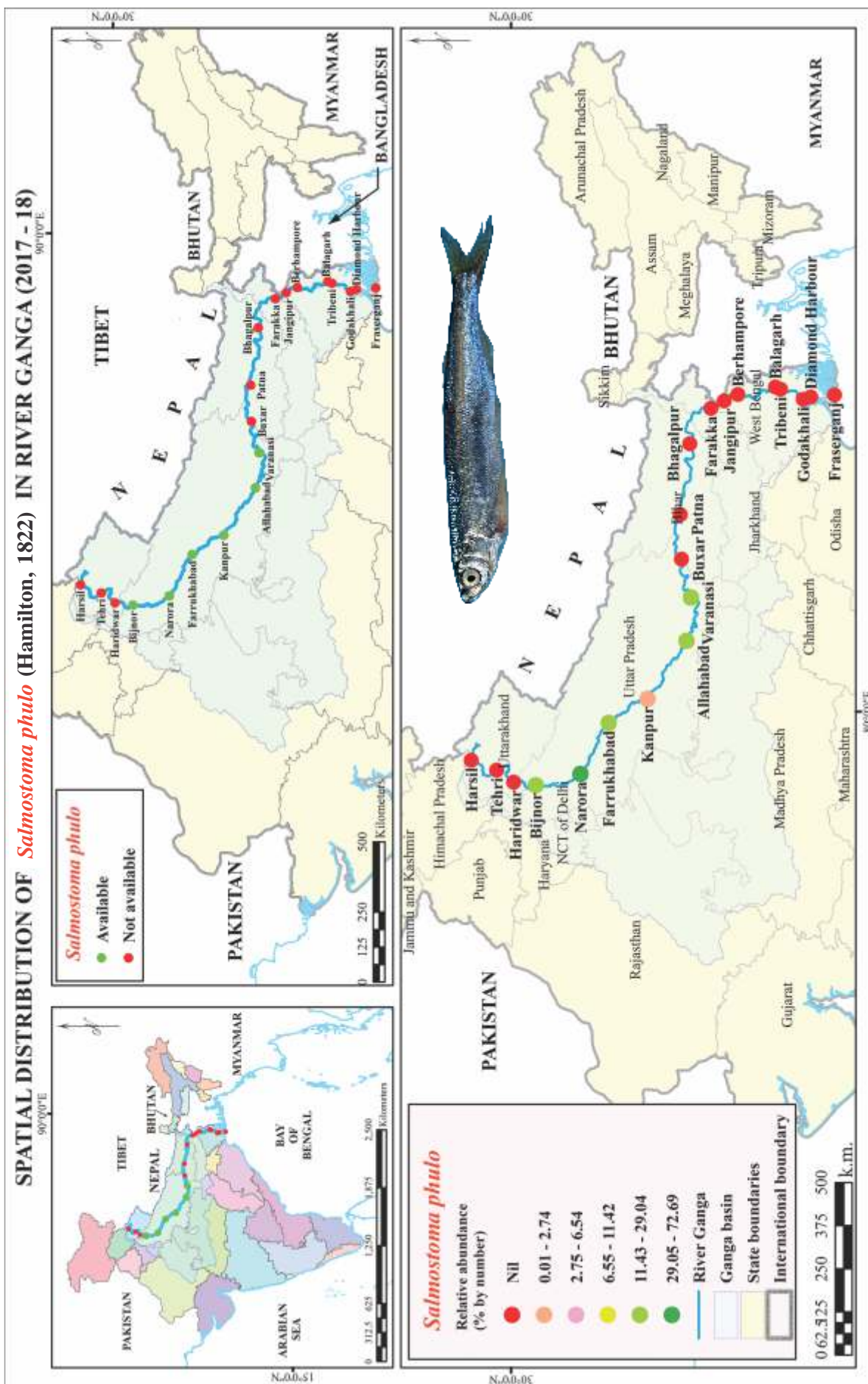
Habitat: Freshwater

Maximum size (TL): 12 cm

Food and feeding: Feeds on larvae and adults of insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Schizothorax richardsonii (Gray, 1832)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Schizothorax*
Species : *richardsonii*



Vernacular name: Asela (Uttarakhand)

Common English name: Snowtrout

Synonyms: *Cyprinus richardsonii*, *Oreinus richardsonii*

Salient identifying characteristics:

- ◆ Streamlined body. Length of head is about 4 to 5 times in standard length
- ◆ Eye diameter is about 4.1 to 4.5 times in head length
- ◆ Mouth inferior, transverse and slightly arched
- ◆ Barbells two pairs (maxillary and rostral) shorter than eye diameter
- ◆ Dorsal fin attached nearly halfway between snout tip and base of caudal fin; strong dorsal spine serrated behind
- ◆ Scales very small, with 85 to 110 in lateral line

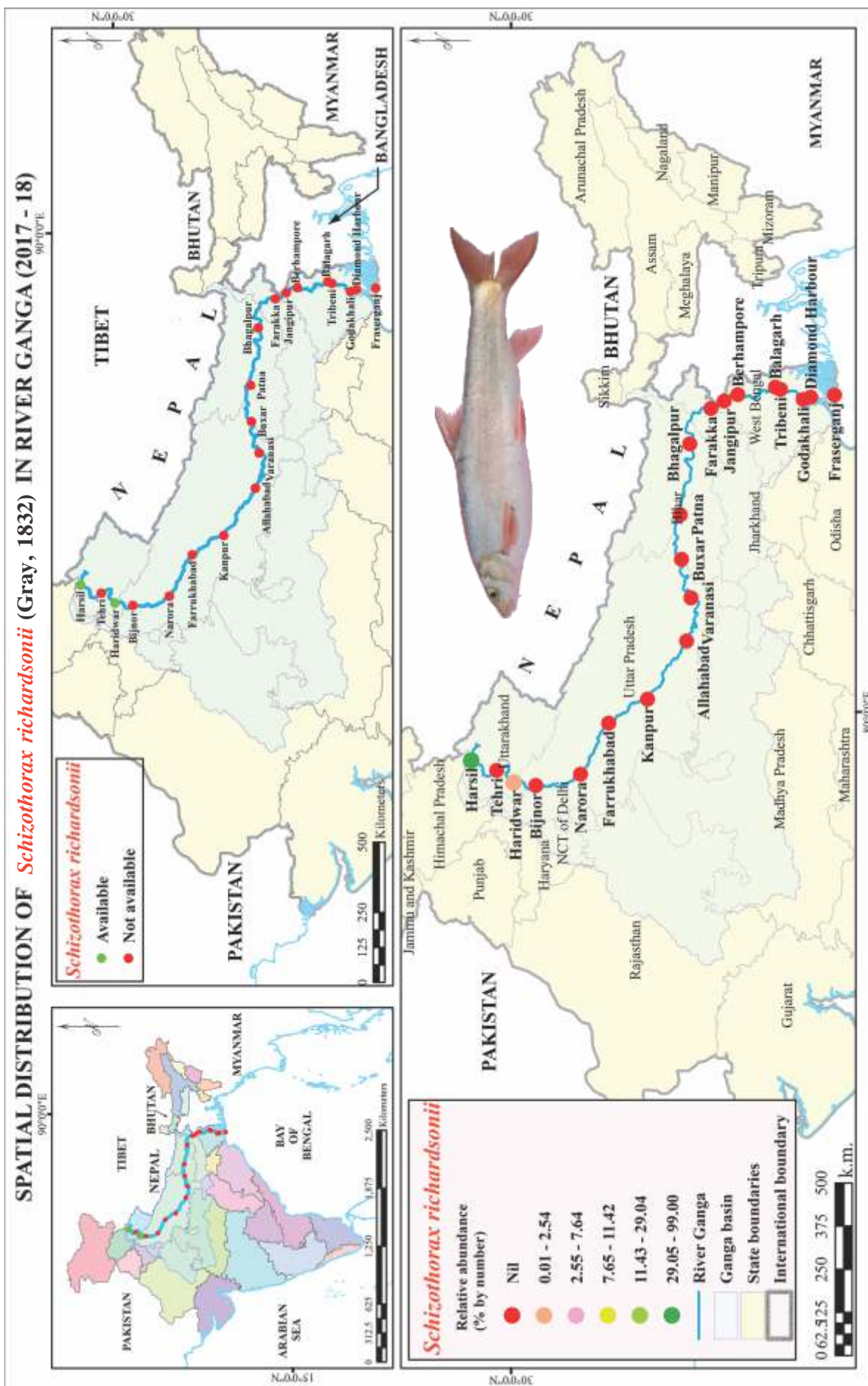
Habitat: Freshwater

Maximum size (TL): 60 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Vulnerable

Commercial value: Used as food and game fish



Securicula gora (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Danionidae
Genus : *Securicula*
Species : *gora*



Vernacular name: Pharaga, Bari chal (Uttar Pradesh)

Common English name: Gora-chela

Synonyms: *Cyprinus gora*, *Chela gora*, *Oxygaster gora*

Salient identifying characteristics:

- ◆ Fairly elongated and compressed body
- ◆ Mouth oblique
- ◆ Short dorsal fin, attached slightly in advance of origin of anal fin
- ◆ Long pectoral fin
- ◆ Very small scales; 120 to 160 scales in lateral line
- ◆ Bright silvery in appearance

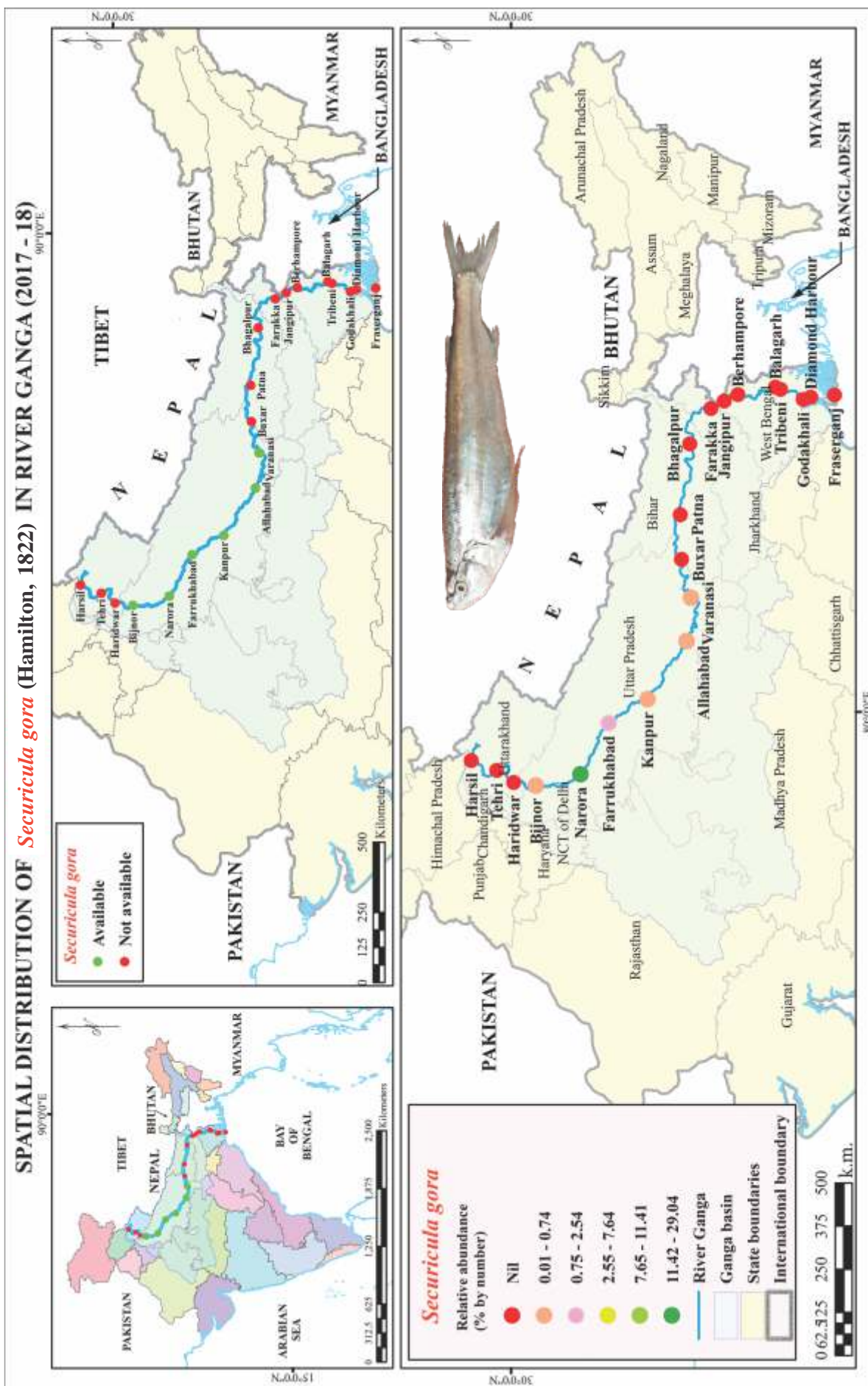
Habitat: Freshwater

Maximum size (TL): 24.5 cm

Food and feeding: Feeds at the surface on insects, insect larvae and crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Systemus sarana (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Systemus*
Species : *sarana*



Vernacular name: Trai (Uttar Pradesh, Bihar), Sorputih (West Bengal)

Common English name: Olive barb

Synonyms: *Puntius sarana*, *Barbus sarana*, *Cyprinus sarana*

Salient identifying characteristics:

- ◆ Body oblong and fairly deep
- ◆ Small head. Eyes and mouth moderate, two pairs barbels
- ◆ Dorsal fin nearer to tip of snout than base of caudal fin, its last ray unbranched, osseous, strong and serrated at posterior side
- ◆ Scale moderate, lateral line complete bearing 30-33 scales

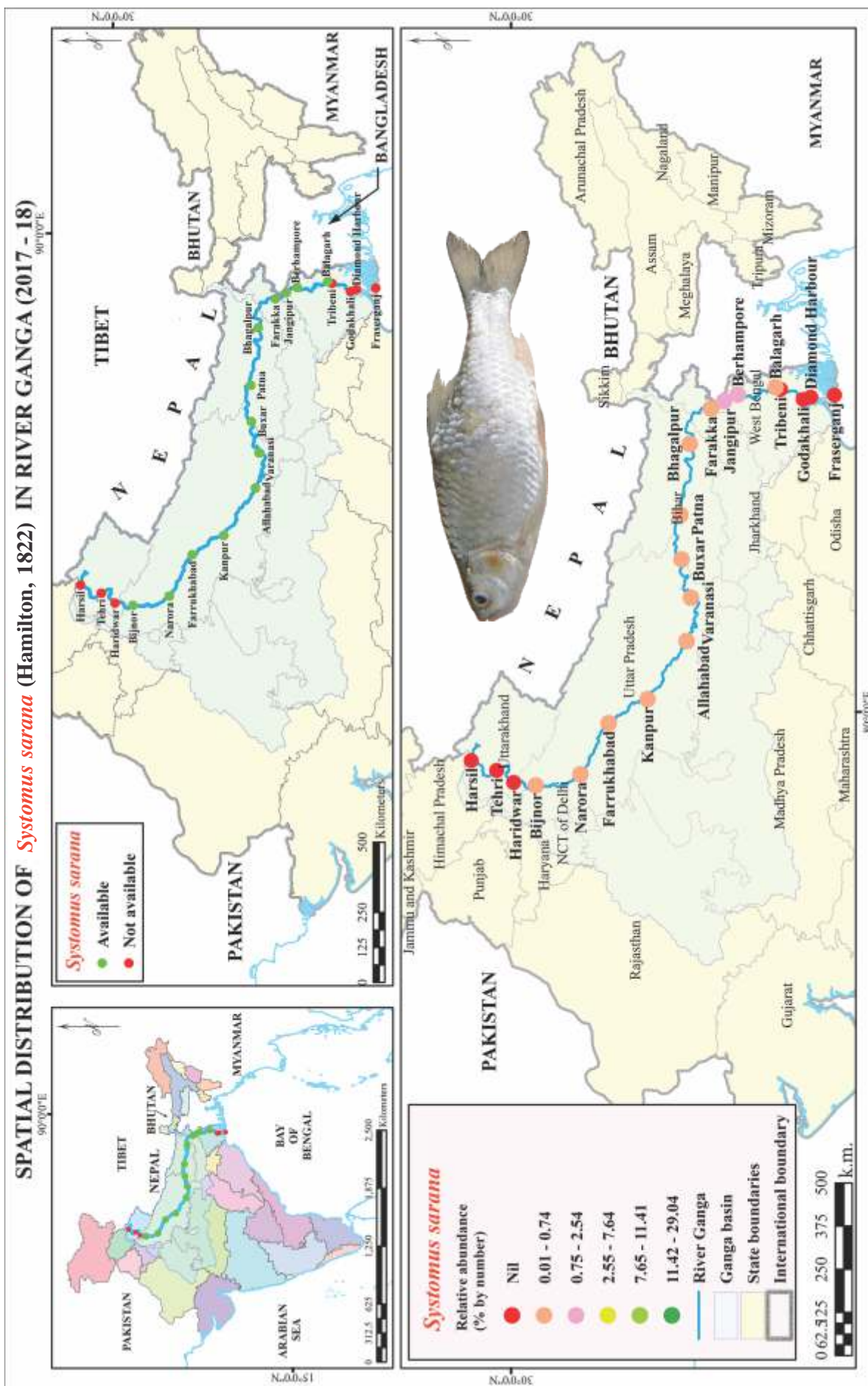
Habitat: Freshwater

Maximum size (TL): 42 cm

Food and feeding: Feeds on aquatic insects, fish, algae and shrimps

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Tariqilabeo latius (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Tariqilabeo*
Species : *latius*



Vernacular name: Sehri, Baryain (Uttar Pradesh, Bihar), Bata (West Bengal)

Common English name: Stone roller

Synonyms: *Crossocheilus latius latius*, *Cyprinus latius*

Salient identifying characteristics:

- ◆ Body elongated
- ◆ Flat and compressed head
- ◆ Thick and fleshy upper and lower lip
- ◆ Mouth inferior, two pairs barbells, rostral barbels small and primitive
- ◆ Scales moderate; 32-36 scales in lateral line

Habitat: Freshwater

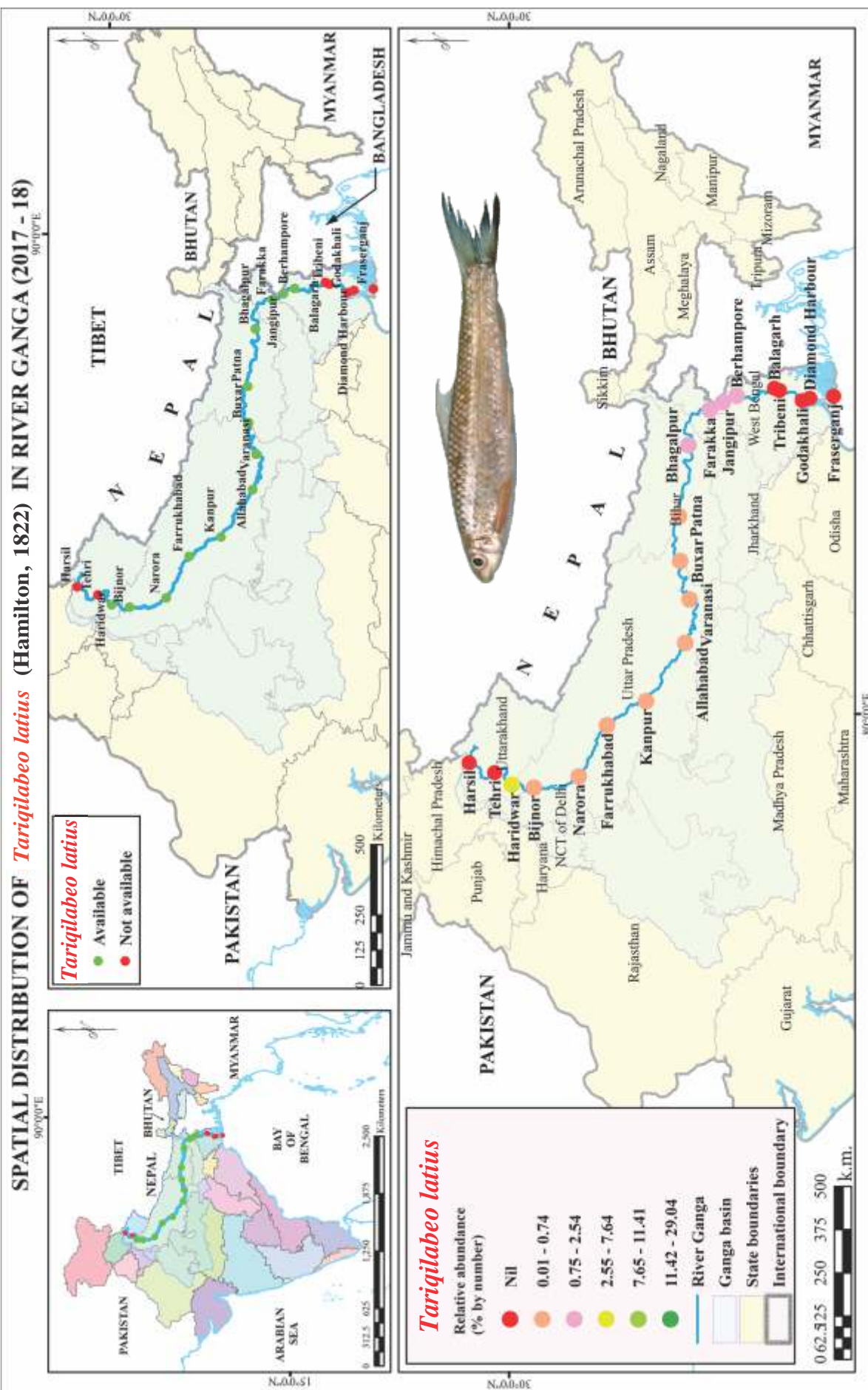
Maximum size (TL): 17.9 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Tarqilabeo latus* (Hamilton, 1822) IN RIVER GANGA (2017 - 18)



Tor putitora (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Cypriniformes

Family : Cyprinidae

Genus : *Tor*

Species : *putitora*



Vernacular name: Mahseer (Uttar Pradesh, Uttarakhand)

Common English name: Putitor mahseer

Synonyms: *Barbus putitora*, *Cyprinus putitora*

Salient identifying characteristics:

- ◆ Streamlined, oblong and compressed body having an arched on ventral and dorsal side
- ◆ Pointed head. Eyes invisible from underside of head. Mouth small
- ◆ Large scales, 25 to 28 scales in lateral line, 4.5 to 2.5 rows of scales in lateral transverse line

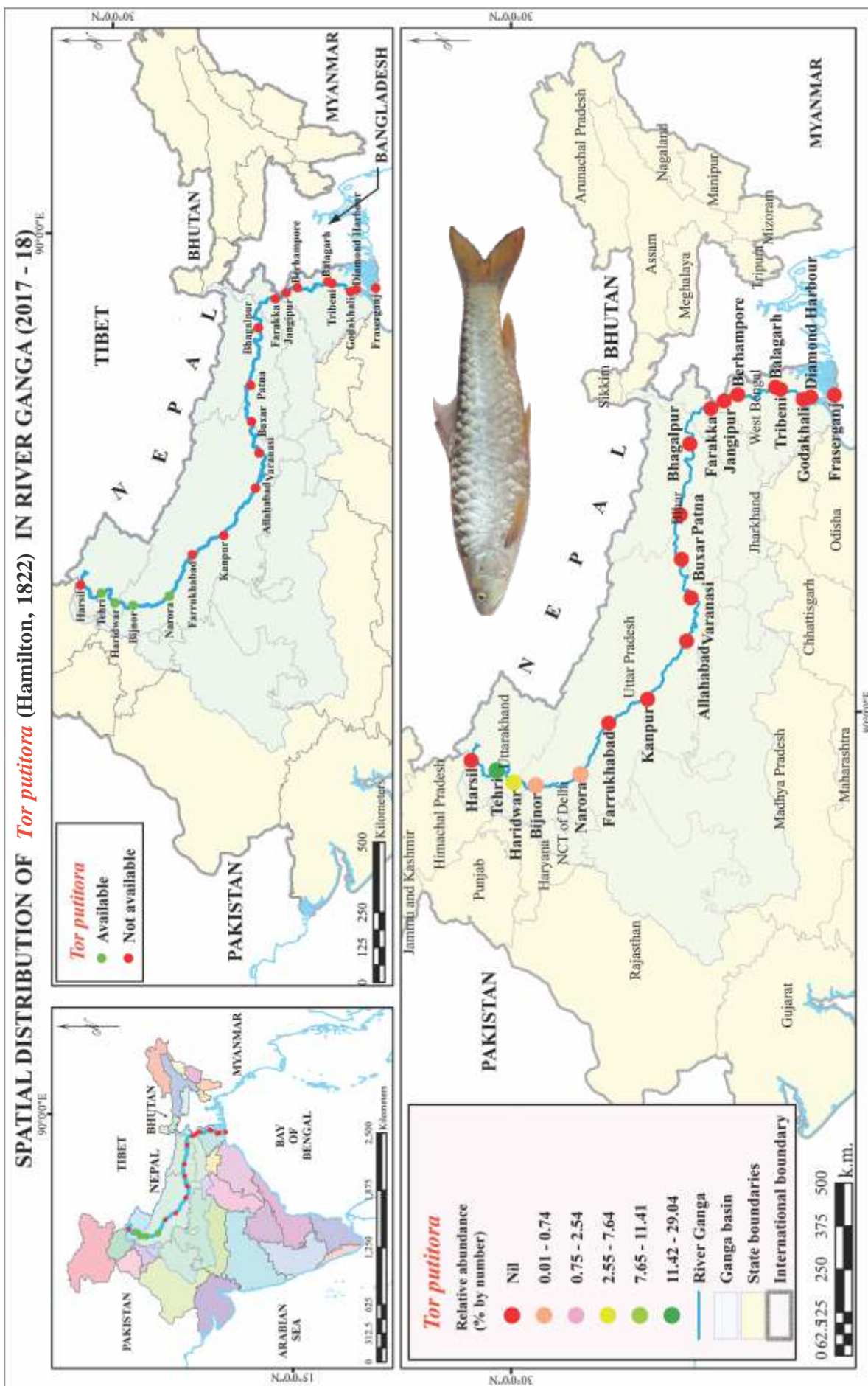
Habitat: Freshwater

Maximum size (TL): 275 cm

Food and feeding: Omnivorous, feeds on fish, zooplankton, dipteran larvae and plant matter

Conservation status (IUCN Red list): Endangered

Commercial value: Used as food fish







Mugiliformes

Chelon parsia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Mugiliformes

Family : Mugilidae

Genus : *Chelon*

Species : *parsia*



Vernacular name: Parshe (West Bengal)

Common English name: Goldspot mullet

Synonyms: *Liza parsia*, *Mugil parsia*, *Mugil olivaceus*

Salient identifying characteristics:

- ◆ Body compressed
- ◆ 1st dorsal fin inserted near the snout tip
- ◆ A golden spot on the upper operculum
- ◆ Caudal and anal fin base are yellowish in colour, other fins off-white with dusky margins

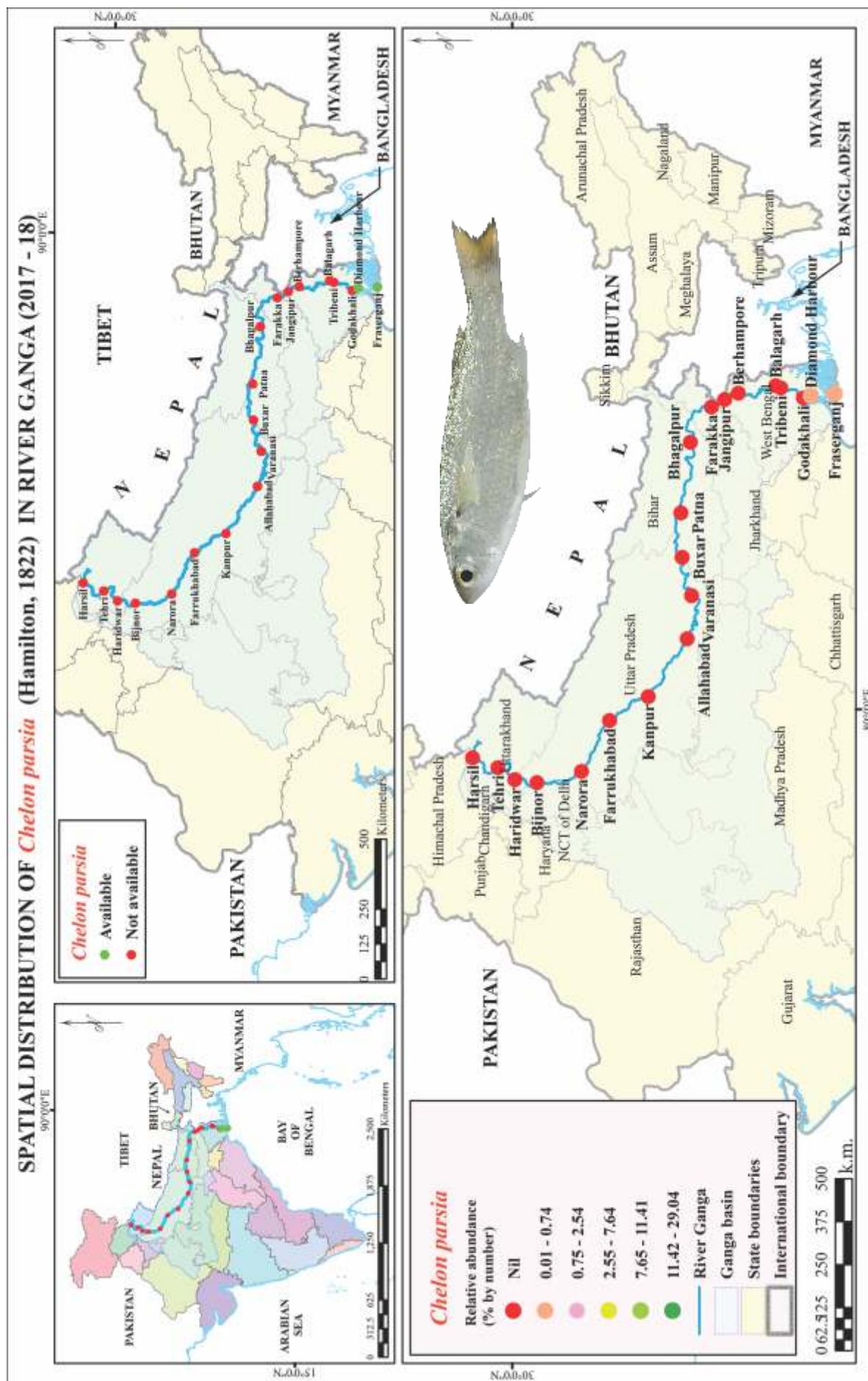
Habitat: Brackishwater

Maximum size (TL): 16 cm

Food and feeding: Feeds on small algae, diatoms, and other organic debris

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Planiliza tade (Forsskal, 1775)

Systematic classification:

Class : Actinopterygii
Order : Mugiliformes
Family : Mugilidae
Genus : *Planiliza*
Species : *tade*



Vernacular name: Bhangon (West Bengal)

Common English name: Tade grey mullet

Synonyms: *Liza tade*, *Mugil planiceps*, *Mugil tade*

Salient identifying characteristics:

- ◆ Body compressed
- ◆ 1st dorsal fin inserted near the snout tip
- ◆ A golden spot on the upper operculum
- ◆ Caudal fin forked
- ◆ Longitudinal scales 20 to 23

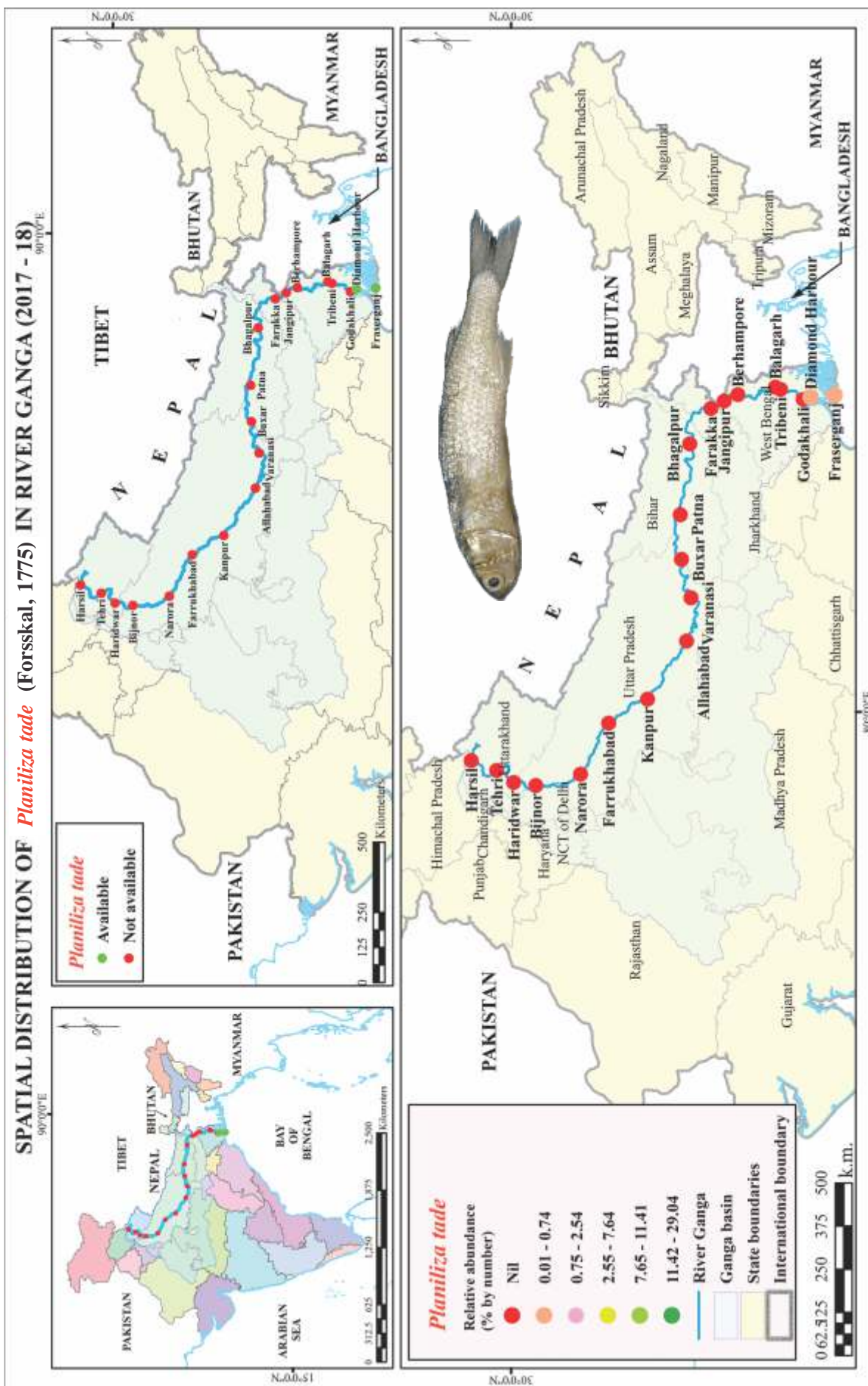
Habitat: Brackishwater

Maximum size (TL): 70 cm

Food and feeding: Feeds on diatoms, organic matter both living and detritus and small algae

Conservation status (IUCN Red list): Data deficient

Commercial value: Used as food fish



Rhinomugil corsula (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Mugiliformes
Family : Mugilidae
Genus : *Rhinomugil*
Species : *corsula*



Vernacular name: Aduar (Uttar Pradesh, Bihar), Korshula (West Bengal)

Common English name: Corsula

Synonyms: *Mugil corsula*, *Liza corsula*

Salient identifying characteristics:

- ◆ Body stout with head small and concave between eyes
- ◆ First dorsal fin inserted nearer to caudal fin base than to snout
- ◆ Caudal fin slightly emarginated
- ◆ In lateral series contain 48 to 52 numbers of scale

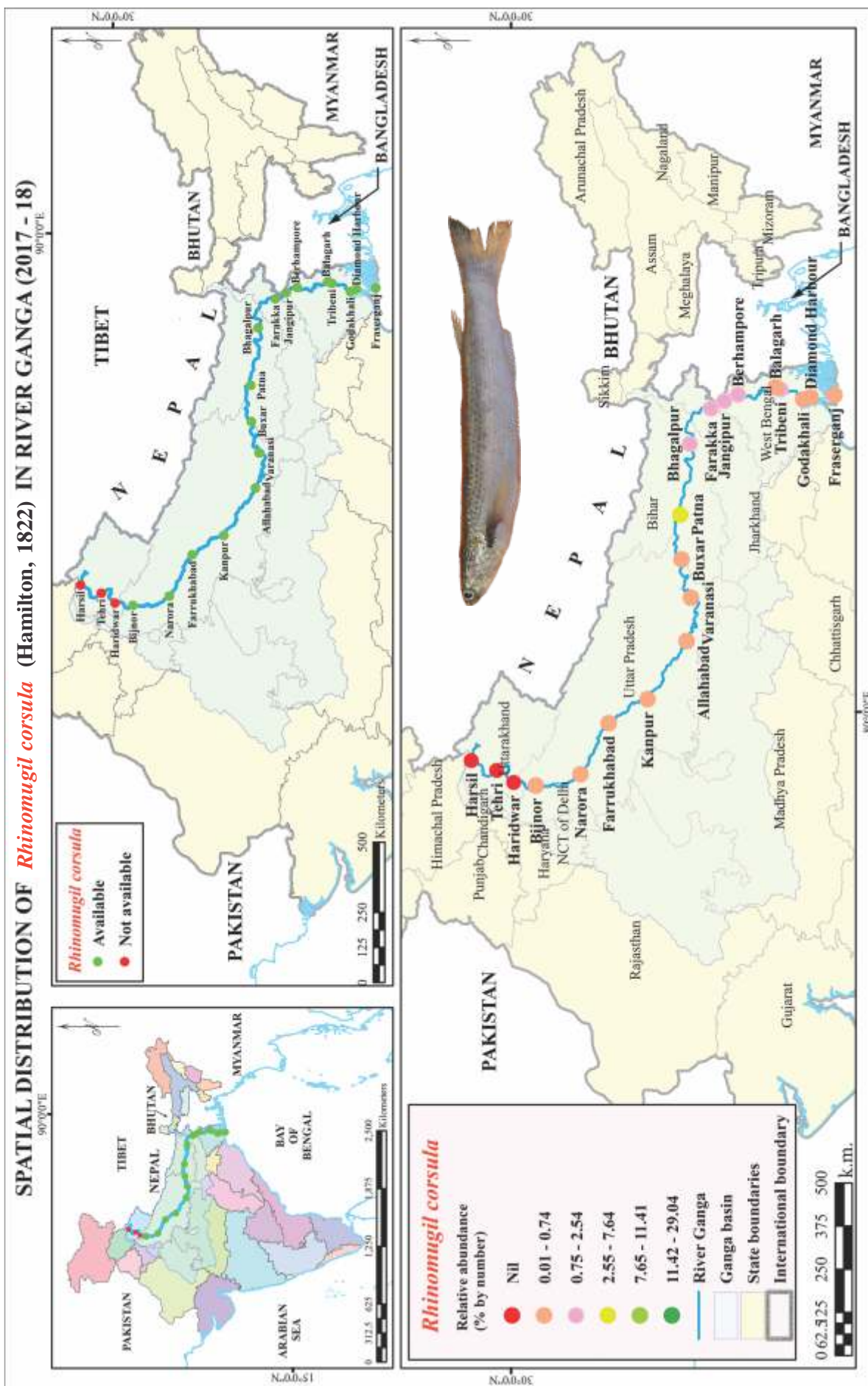
Habitat: Freshwater and Brackishwater

Maximum size (TL): 45 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Sicamugil cascasia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Mugiliformes
Family : Mugilidae
Genus : *Sicamugil*
Species : *cascasia*



Vernacular name: Banna, Pateta, Arorri (Uttar Pradesh, Bihar), Kachki (West Bengal)

Common English name: Yellowtail mullet

Synonyms: *Mugil cascasia*, *Liza cascasia*

Salient identifying characteristics:

- ◆ Body moderately strong. Head wide, dorsally flattened
- ◆ Dorsal fin attached more nearer to tip of snout than to caudal fin base
- ◆ The origin of anal fin is opposite to second dorsal fin origin
- ◆ Caudal fin forked. In longitudinal series 36 to 39 scales present

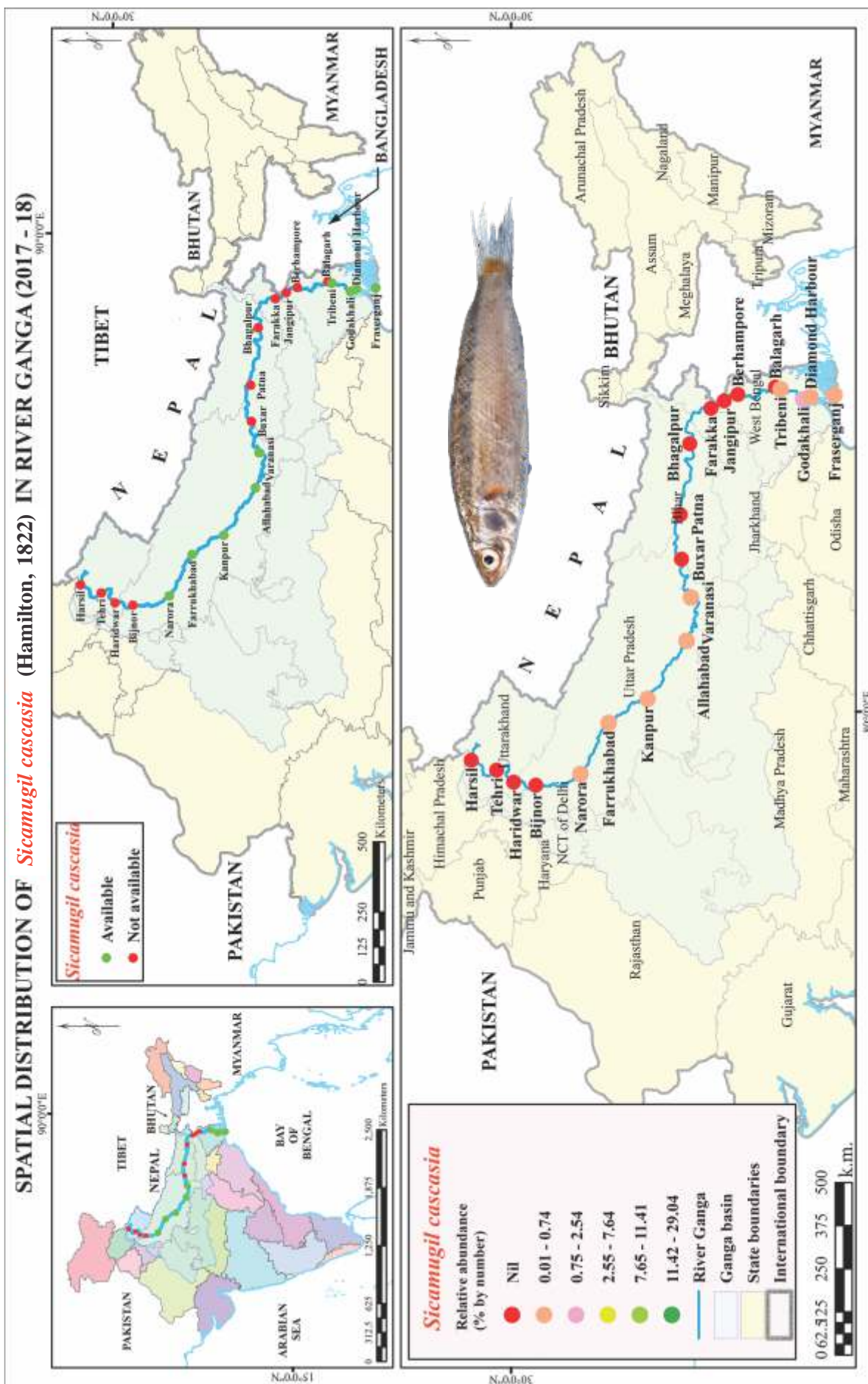
Habitat: Freshwater

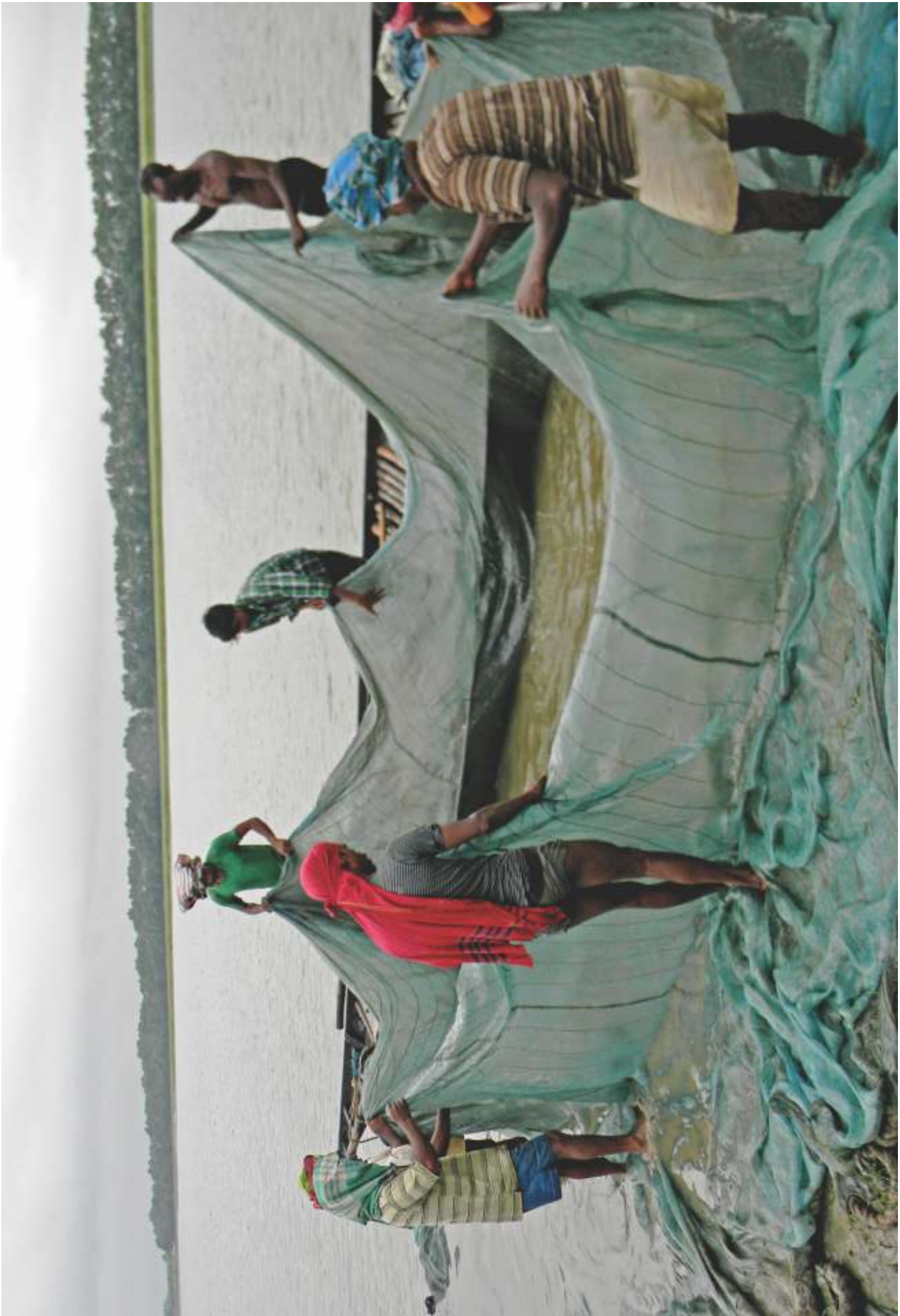
Maximum size (TL): 10 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish







Myliobatiformes

Brevitrygon walga (Müller & Henle, 1841)

Systematic classification:

Class	: Chondrichthyes
Order	: Myliobatiformes
Family	: Dasyatidae
Genus	: <i>Brevitrygon</i>
Species	: <i>walga</i>



Vernacular name: Shankar (West Bengal)

Common English name: Scaly whipray

Synonyms: *Himantura walga*, *Dasyatis walga*

Salient identifying characteristics:

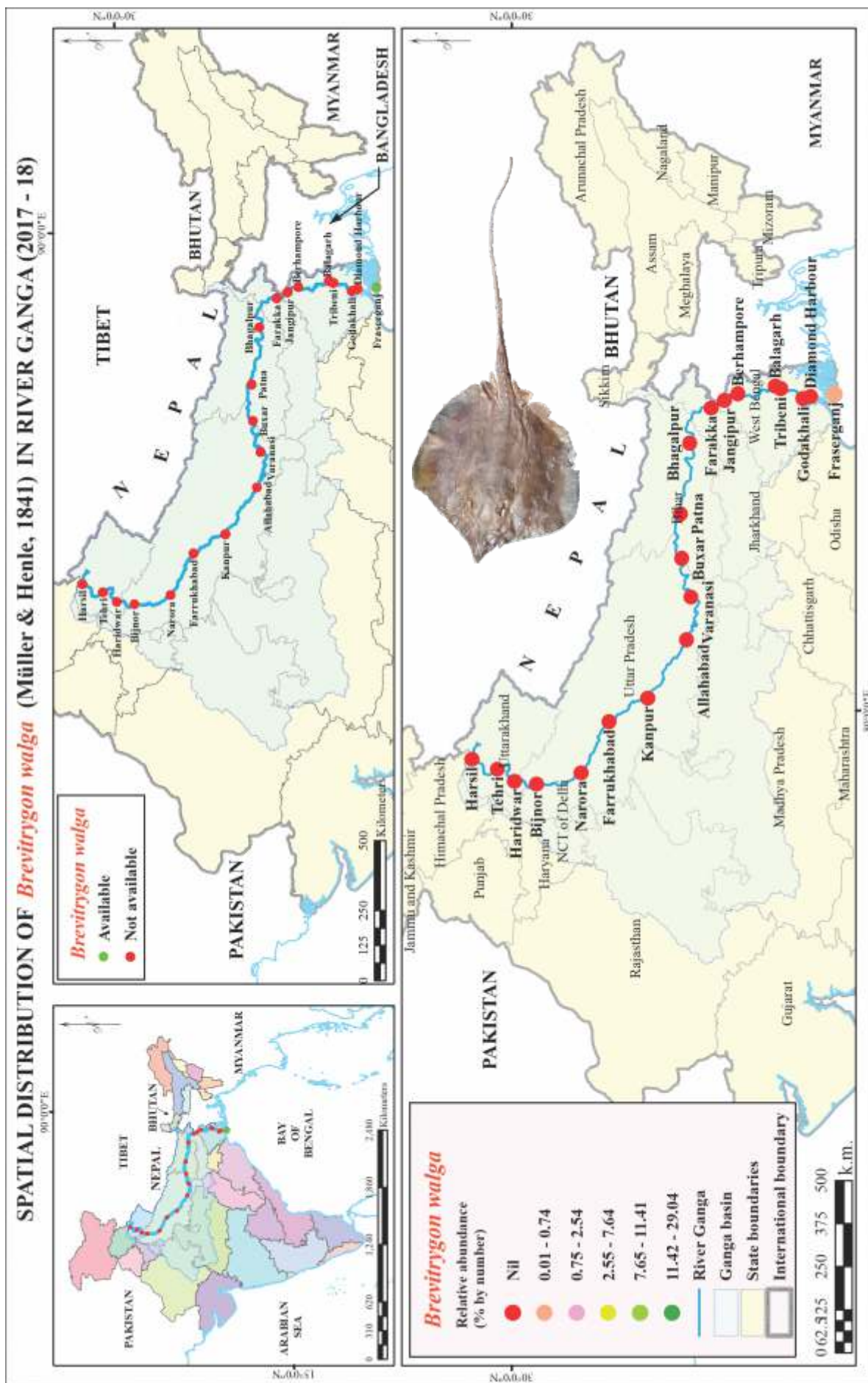
- ◆ Acutely pointed and projecting snout.
- ◆ Spiracles nearly equal to eyes.
- ◆ Whip like tail slightly longer than disc length.
- ◆ Series of small spines between root of tail and caudal spine.

Habitat: Marinewater and Brackishwater

Maximum size: 40.5 cm

Food and feeding: Feeds on teleost fishes and crustaceans

Conservation status (IUCN red list): Near Threatened







Osteoglossiformes

Chitala chitala (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Osteoglossiformes
Family	: Notopteridae
Genus	: <i>Chitala</i>
Species	: <i>chitala</i>



Vernacular name: Moi (Uttar Pradesh, Bihar), Chital (West Bengal)

Common English name: Clown knifefish

Synonyms: *Notopterus chitala*

Salient identifying characteristics:

- ◆ Body oblong and highly compressed
- ◆ Mouth is broad and maxilla extends beyond the eye
- ◆ Moderate pectoral fin with stretched anal fin. Dorsal fin inserted near base of caudal fin
- ◆ Presence of minute scales on the operculum while equal size scales on the body
- ◆ Fins are dark coloured

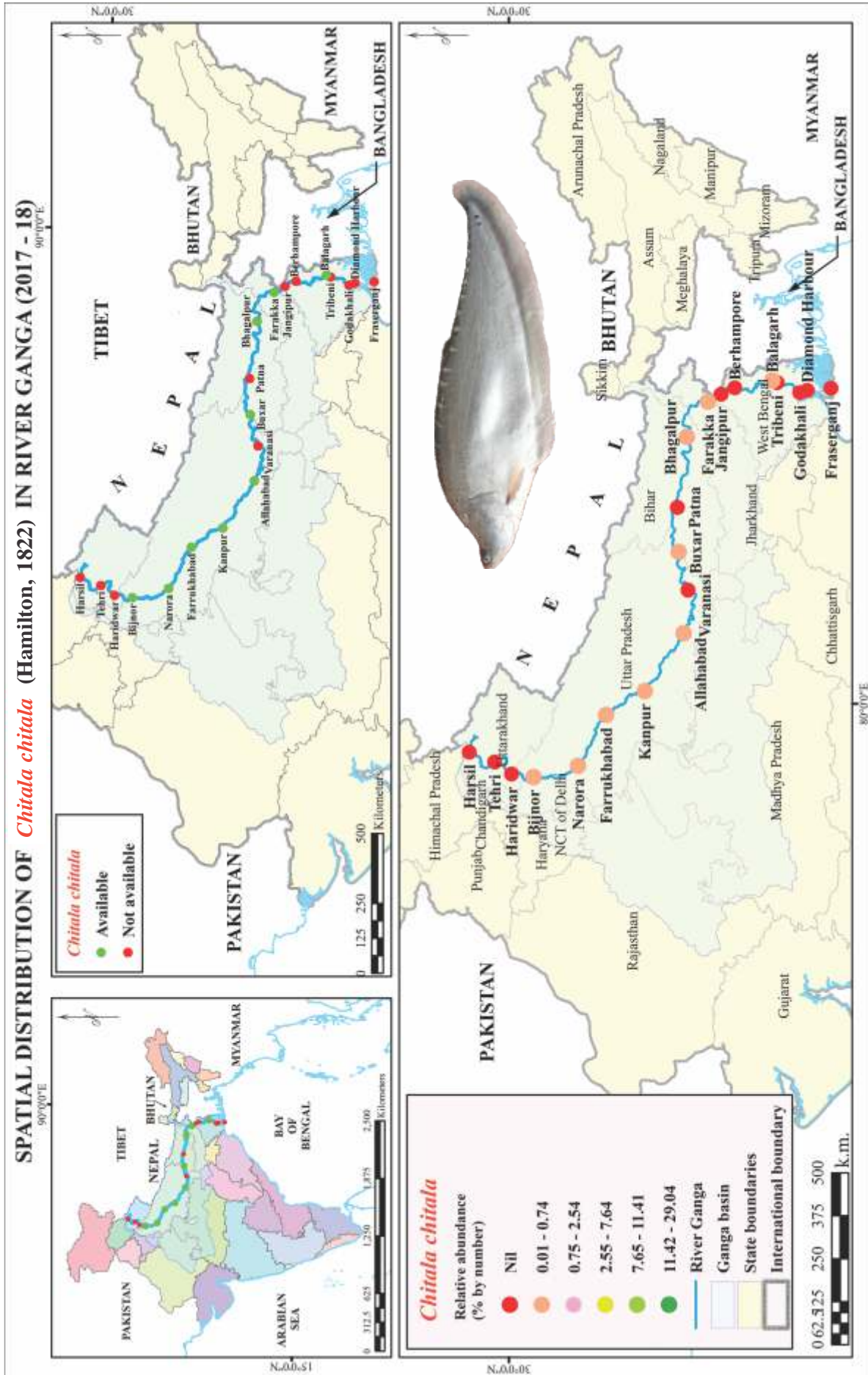
Habitat: Freshwater

Maximum size (TL): 122 cm

Food and feeding: Feed on aquatic insects, mollusks, shrimps and small fishes

Conservation status (IUCN Red list): Near Threatened

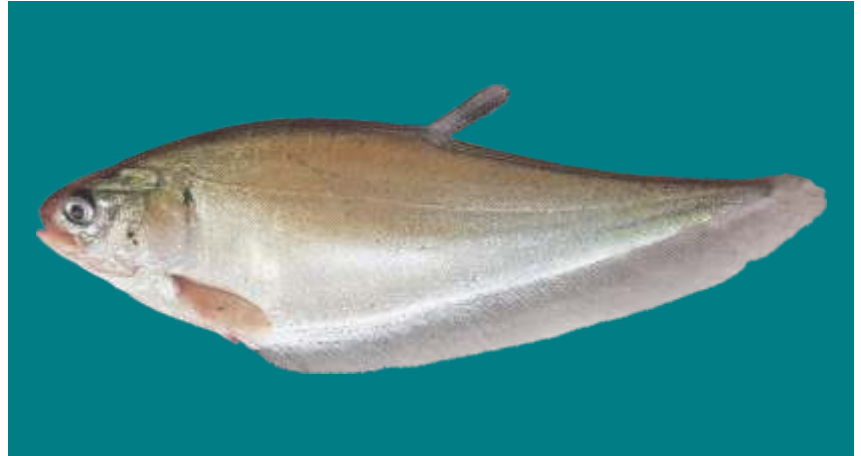
Commercial value: Used as food fish



Notopterus notopterus (Pallas, 1769)

Systematic classification:

Class	: Actinopterygii
Order	: Osteoglossiformes
Family	: Notopteridae
Genus	: <i>Notopterus</i>
Species	: <i>notopterus</i>



Vernacular name: Dhutaa, Patra, Moi (Uttar Pradesh, Bihar), Folui (West Bengal)

Common English name: Bronze featherback

Synonyms: *Gymnotus notopterus*

Salient identifying characteristics:

- ◆ Body is oblong and slightly compressed. Head compressed and mouth moderate
- ◆ Dorsal fin starts near the snout tip and ends at the base of caudal fin
- ◆ Pectoral fins moderate and moves far away from anal fin origin
- ◆ Scales are larger on opercles than on body

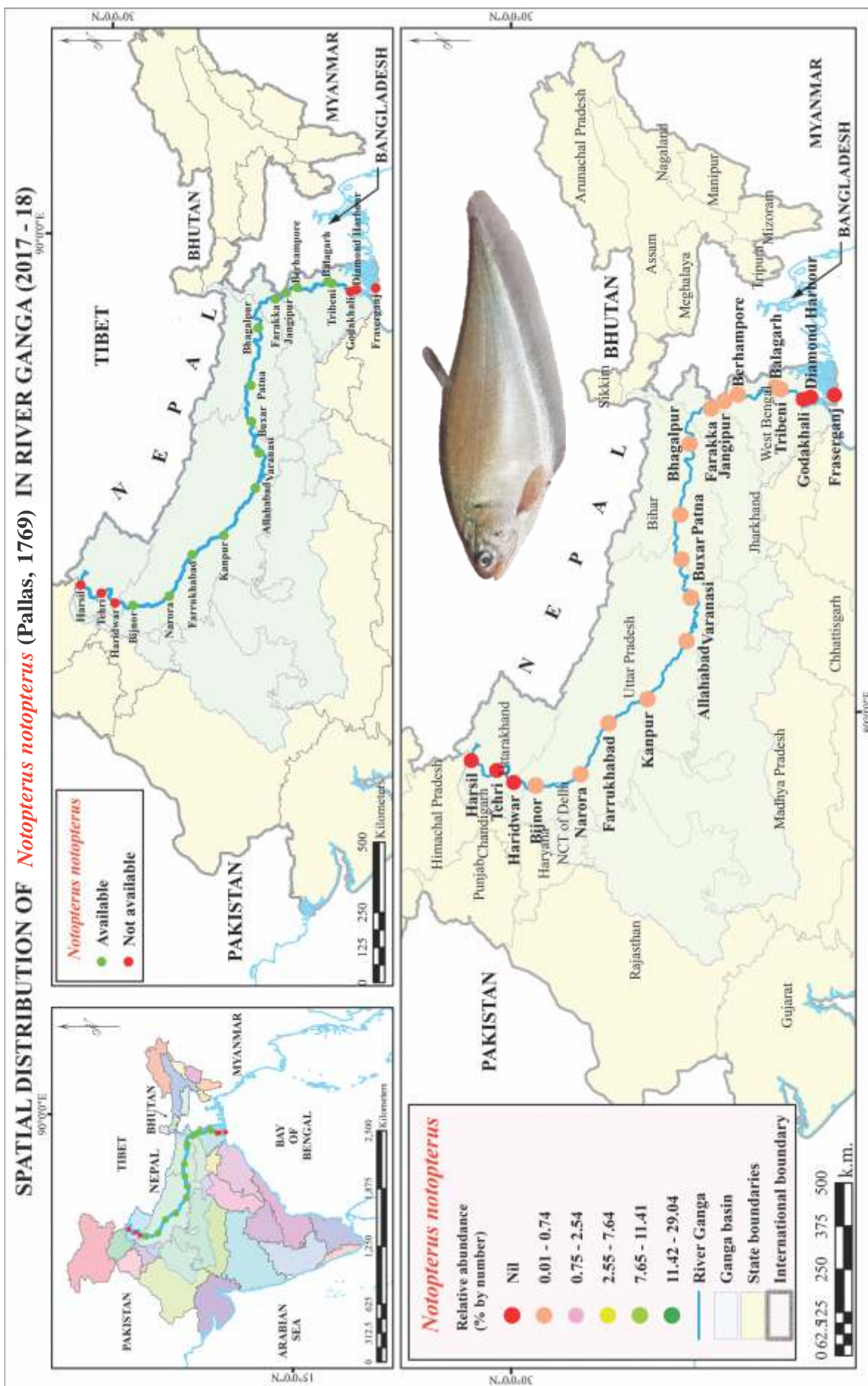
Habitat: Freshwater

Maximum size (TL): 60 cm

Food and feeding: Feeds on insects, fish crustaceans and some young roots of aquatic plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish







Perciformes

Anabas testudineus (Bloch, 1792)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Anabantidae
Genus : *Anabas*
Species : *testudineus*



Vernacular name: Kawai (Uttar Pradesh, Bihar), Koi (West Bengal)

Common English name: Climbing perch

Synonyms: *Anthias testudineus*, *Anabas scandens*

Salient identifying characteristics:

- ◆ Body is moderately deep and elongated
- ◆ Mouth is fairly large with villiform teeth
- ◆ Large scales, 21 to 29 present on the lateral series
- ◆ Greenish to dark grey coloration on the dorsal side which fades near the belly giving a yellow colour
- ◆ Dorsal and caudal fins are dark grey, pectoral and anal fins are pale yellow and pelvic fins are pale orange

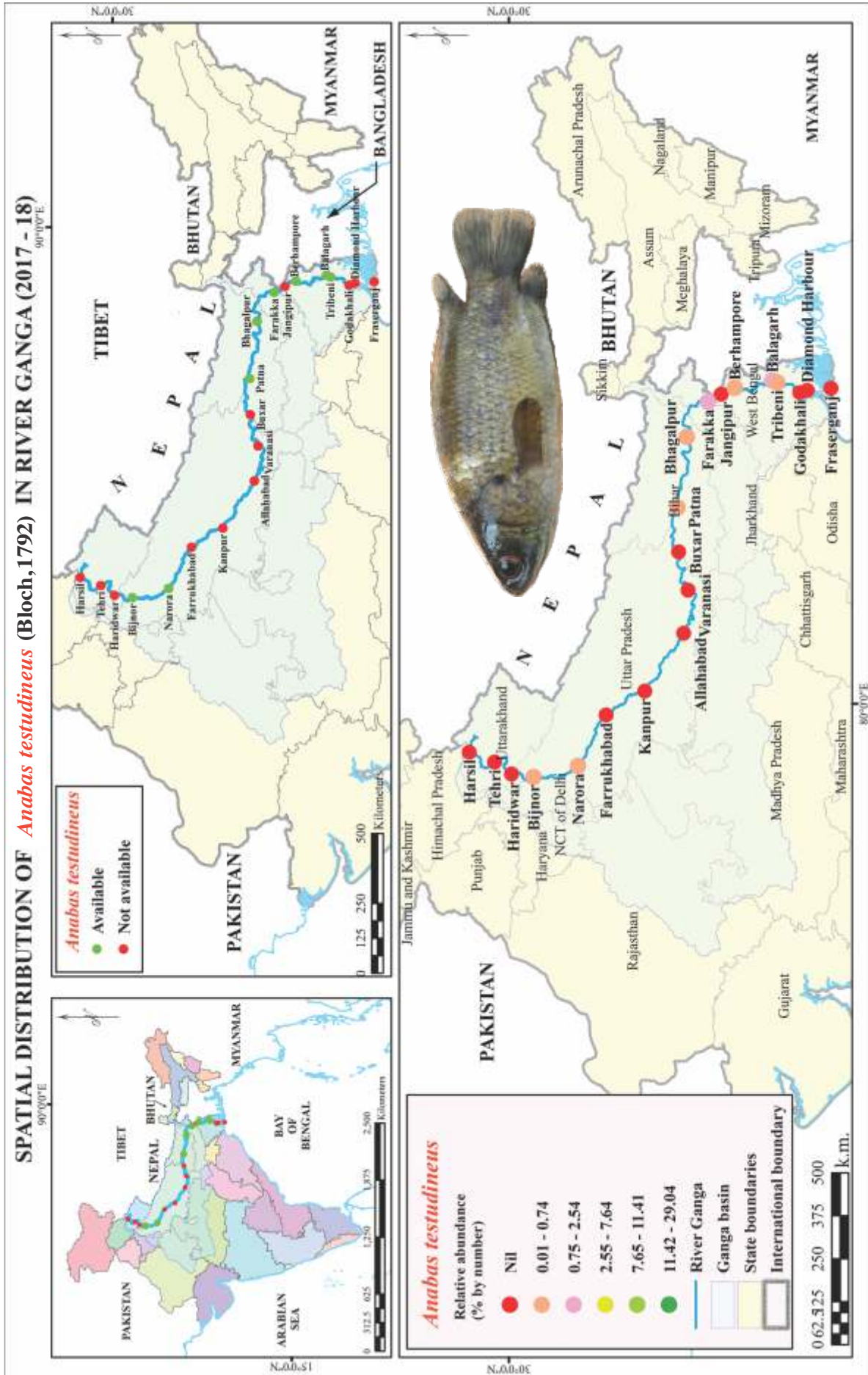
Habitat: Freshwater

Maximum size (TL): 25 cm

Food and feeding: Feeds on macrophytic vegetation, shrimps and fish fry

Conservation status (IUCN Red list): Data Deficient

Commercial value: Food fish



| *Apocryptes bato* (Hamilton, 1822) |

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Gobiidae

Genus : *Apocryptes*

Species : *bato*



Vernacular name: Pituli bele (West Bengal)

Common English name: Mudskipper

Synonyms: *Gobius bato*

Salient identifying characteristics:

- ◆ Body elongated and compressed
- ◆ Presence of Cycloid scales about 100 in the horizontal base
- ◆ Presence of hyaline fins with small greenish blotches and a dark brown band at the base of the pectoral fin

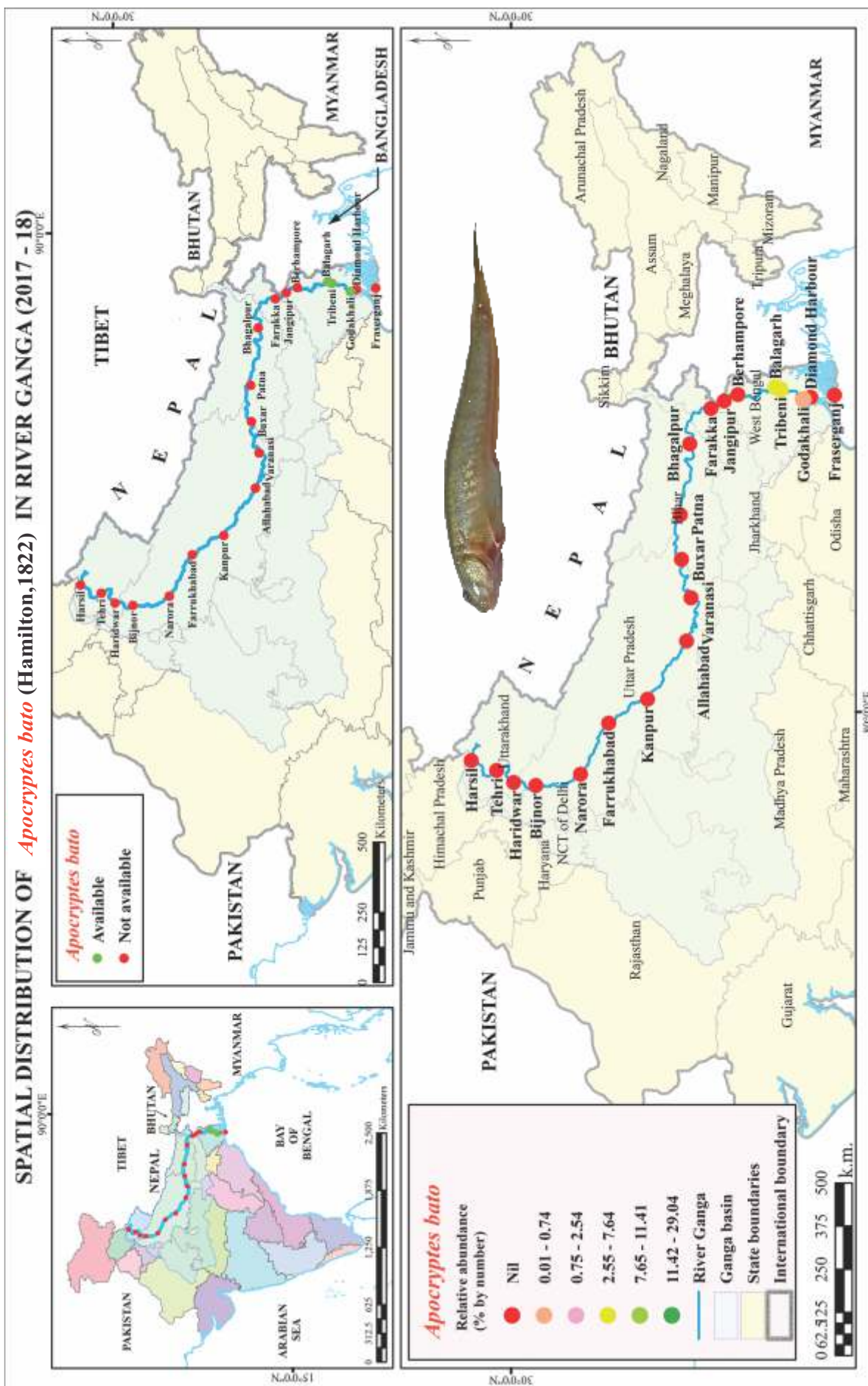
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 26 cm

Food and feeding: Feeds on shrimps and non-shrimp crustaceans mainly

Conservation status (IUCN Red list): Least Concern

Commercial value: Food fish



Atropus atropus (Bloch & Schneider, 1801)

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Carangidae

Genus : *Atropus*

Species : *atropus*



Vernacular name: Chanda (West Bengal)

Common English name: Cleftbelly trevally

Synonyms: *Caranx atropus*, *Brama atropus*

Salient identifying characteristics:

- ◆ Presence of distinct long pelvic fin
- ◆ Presence of scutes along the lateral line
- ◆ Scutes are present on lateral line

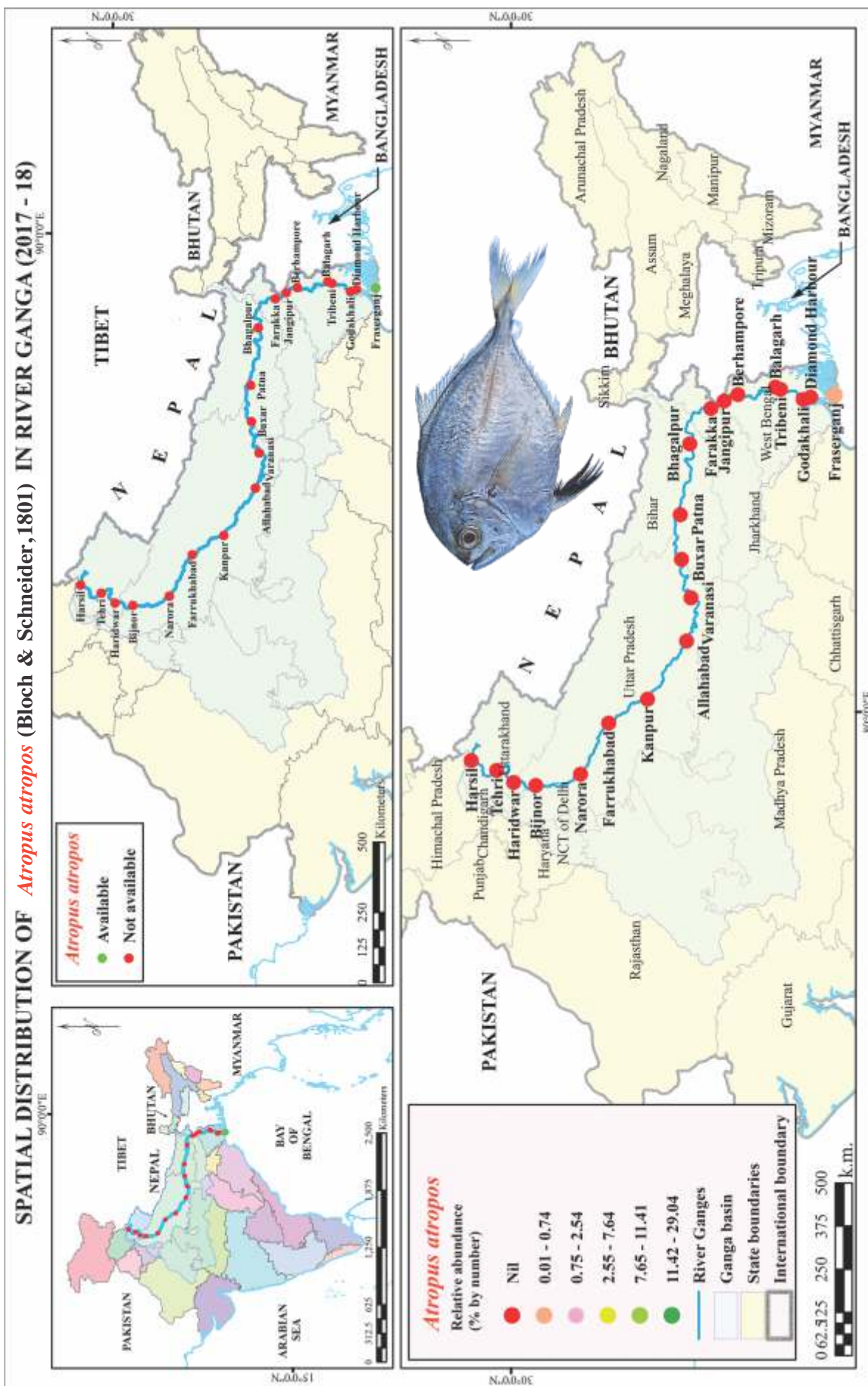
Habitat: Marinewater and Brackishwater

Maximum size (TL): 26.5 cm

Food and feeding: Shrimps, copepods, decapod crustaceans and small fish are the primary source of diet for the fish

Conservation status (IUCN Red list): Least Concern

Commercial value: Food fish (minor commercial importance)



Badis badis (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Badidae
Genus : *Badis*
Species : *badis*



Vernacular name: Botkoi (West Bengal)

Common English name: Badis

Synonyms: *Labrus badis*, *Badis buchanan*, *Badis dario*

Salient identifying characteristics:

- ◆ Body somewhat elongated and tightly compressed
- ◆ Presence of large eyes, small mouth with villiform teeth on jaws
- ◆ Lateral line is interrupted, short anal fin with rounded caudal fin
- ◆ Presence of ctenoid scales but scarce along 26 to 30 scales in horizontal direction
- ◆ Yellowish-green, bluish or dark blue; a row of dark spots on the dorsal fin base

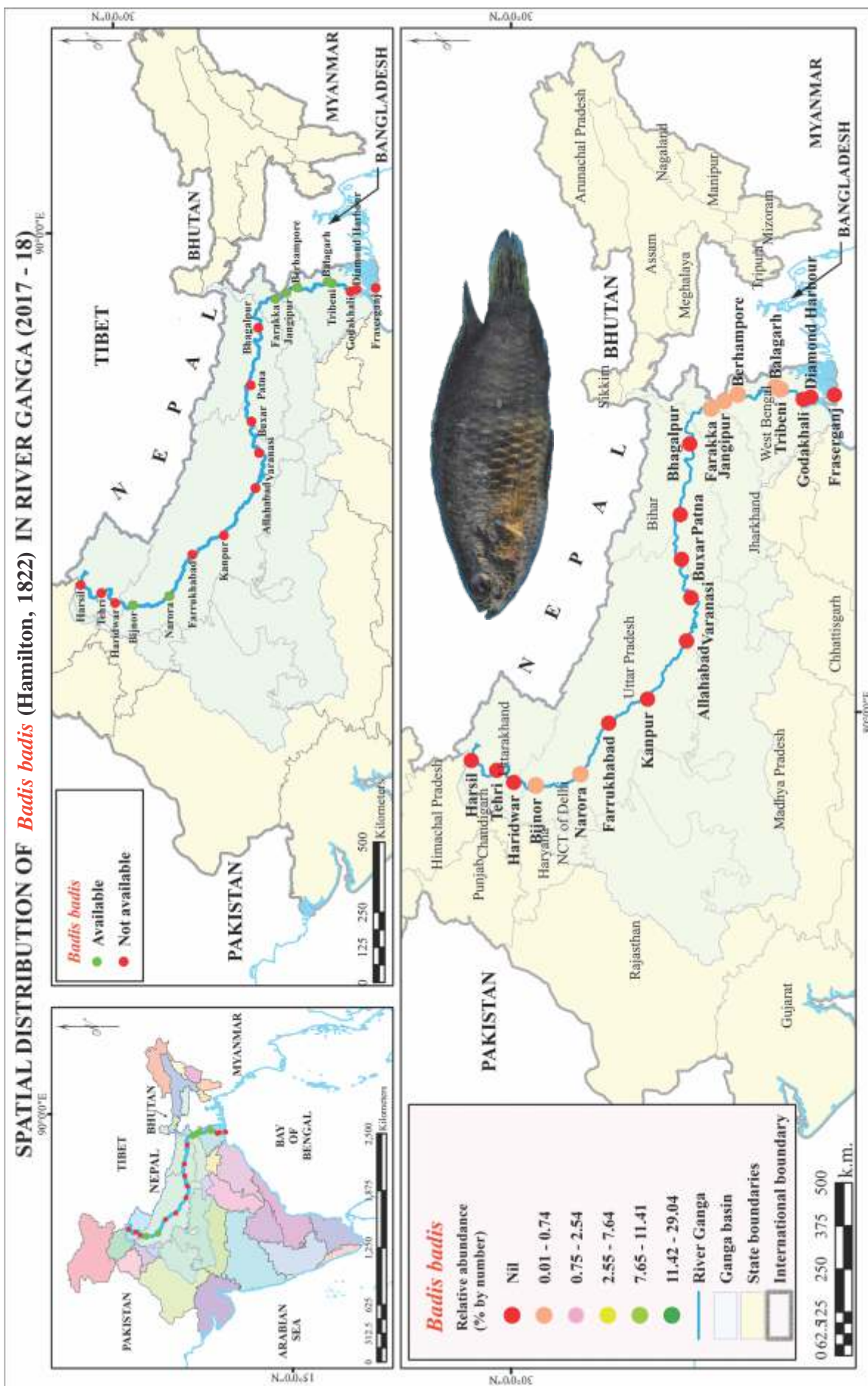
Habitat: Freshwater

Maximum size (TL): 7.1 cm

Food and feeding: Diet consists of worm, crustaceans and insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Food and Ornamental



Boleophthalmus boddarti (Pallas, 1770)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Gobiidae
Genus : *Boleophthalmus*
Species : *boddarti*



Vernacular name: Dahuk (West Bengal)

Common English name: Boddart's goggle-eyed goby

Synonyms: *Gobius boddarti*

Salient identifying characteristics:

- ◆ Body is elongated
- ◆ Moderate eyes present
- ◆ Scales are very small 75 to 100 vertically present
- ◆ Lower jaw is marked with an incision
- ◆ Greenish blue in color with 6 to 8 dark spots on longitudinal bands and head is imprinted with brownish spots
- ◆ First dorsal fin is blotched with bluish white color while second dorsal fin constitute of irregular rows of bluish spots

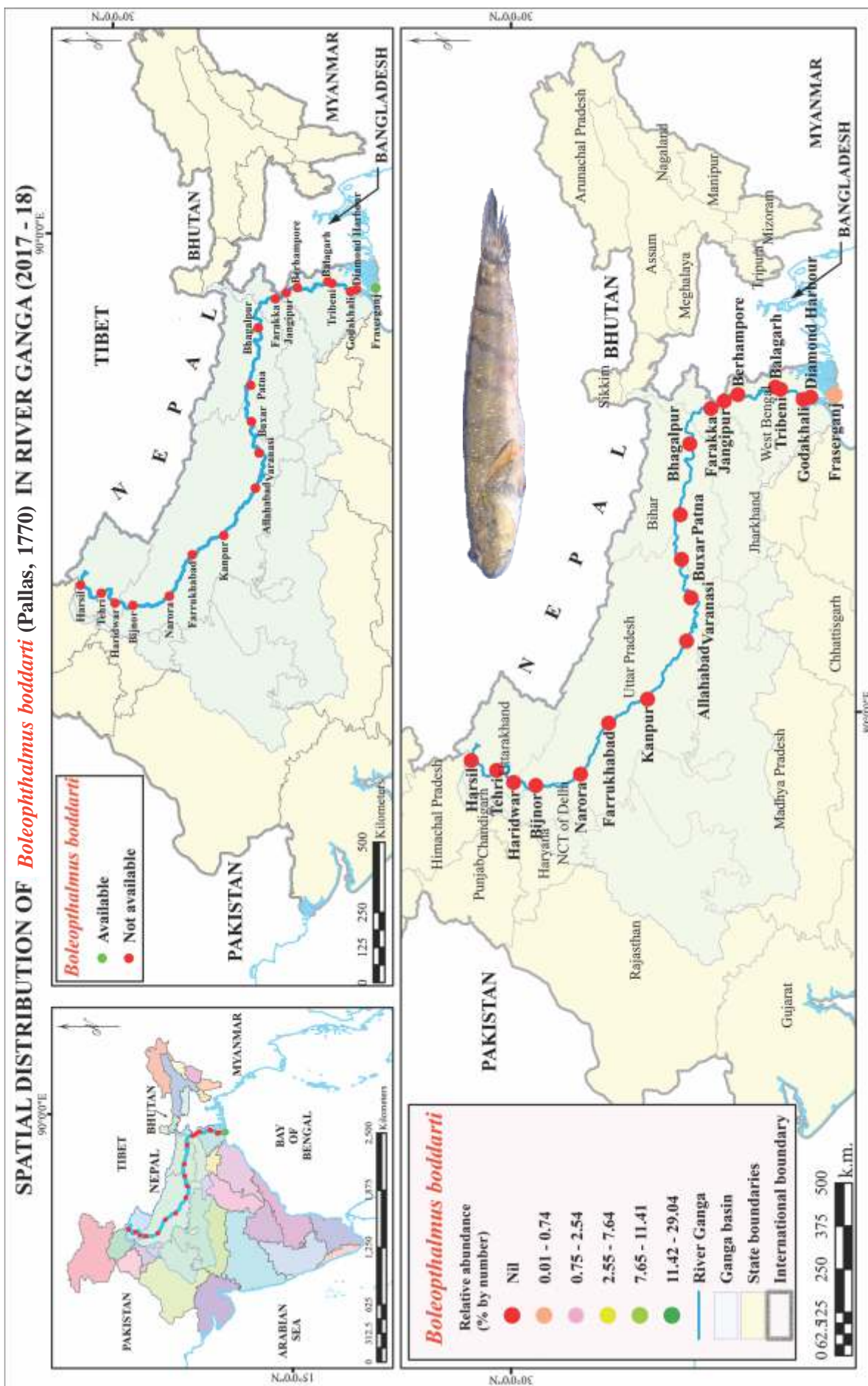
Habitat: Marinewater and Brackishwater

Maximum size (TL): 22 cm

Food and feeding: Feeds on harpacticoids and algae

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as bait, aquarium and food fishes



Brachygobius nunus (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Gobiidae
Genus : *Brachygobius*
Species : *nunus*



Vernacular name: Nona bele (West Bengal)

Common English name: Bumblebee goby

Synonyms: *Gobius nunus*

Salient identifying characteristics:

- ◆ Elongated body with fairly compressed structure
- ◆ Eyes are comparatively larger
- ◆ Mouth oblique with prominent lower jaw
- ◆ Presence of 24-27 large scales on the longitudinal section
- ◆ Reddish brown colouration with 6 conspicuous longitudinal blackish yellow stripes

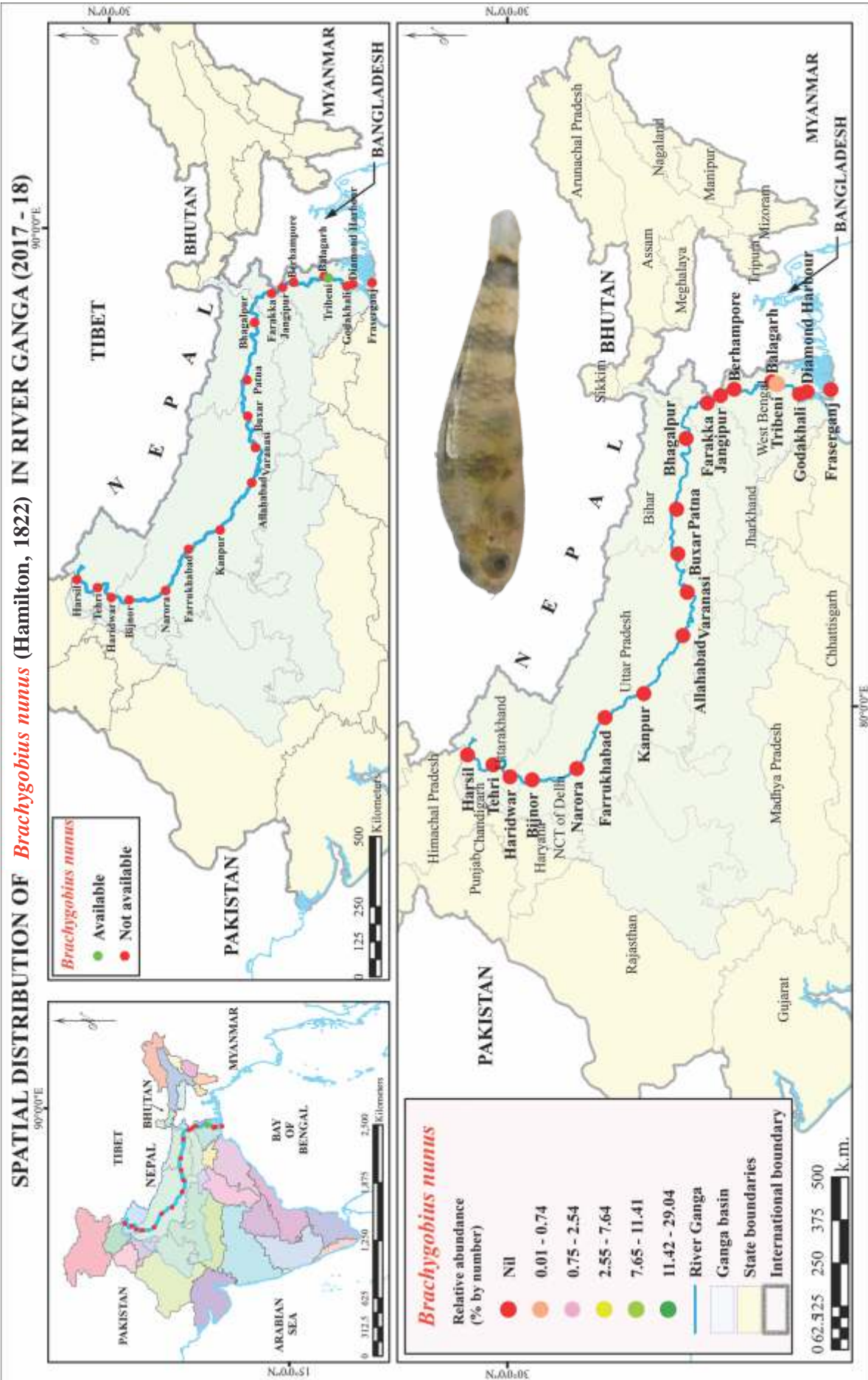
Habitat: Freshwater and Brackishwater

Maximum size (TL): 2.5 cm

Food and feeding: Feeds on small live foods such as Artemia, Daphnia and benthic organisms

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Minor commercial value in lower estuarine areas of the river



Chanda nama (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Ambassidae
Genus : *Chanda*
Species : *nama*



Vernacular name: Channe (Uttar Pradesh, Bihar), Chanda (West Bengal)

Common English name: Elongate glass-perchlet

Synonyms: *Ambassis nama*

Salient identifying characteristics:

- ◆ Body is oval shaped and highly flattened
- ◆ Mouth is large with visible lower jaw and villiform teeth on the jaws
- ◆ Small scales irregularly arranged with lateral line having 100-107 scales
- ◆ Transparent silvery-yellowish coloration with minute black spots on the body
- ◆ Caudal fin with dusky orange coloration with pale colored border

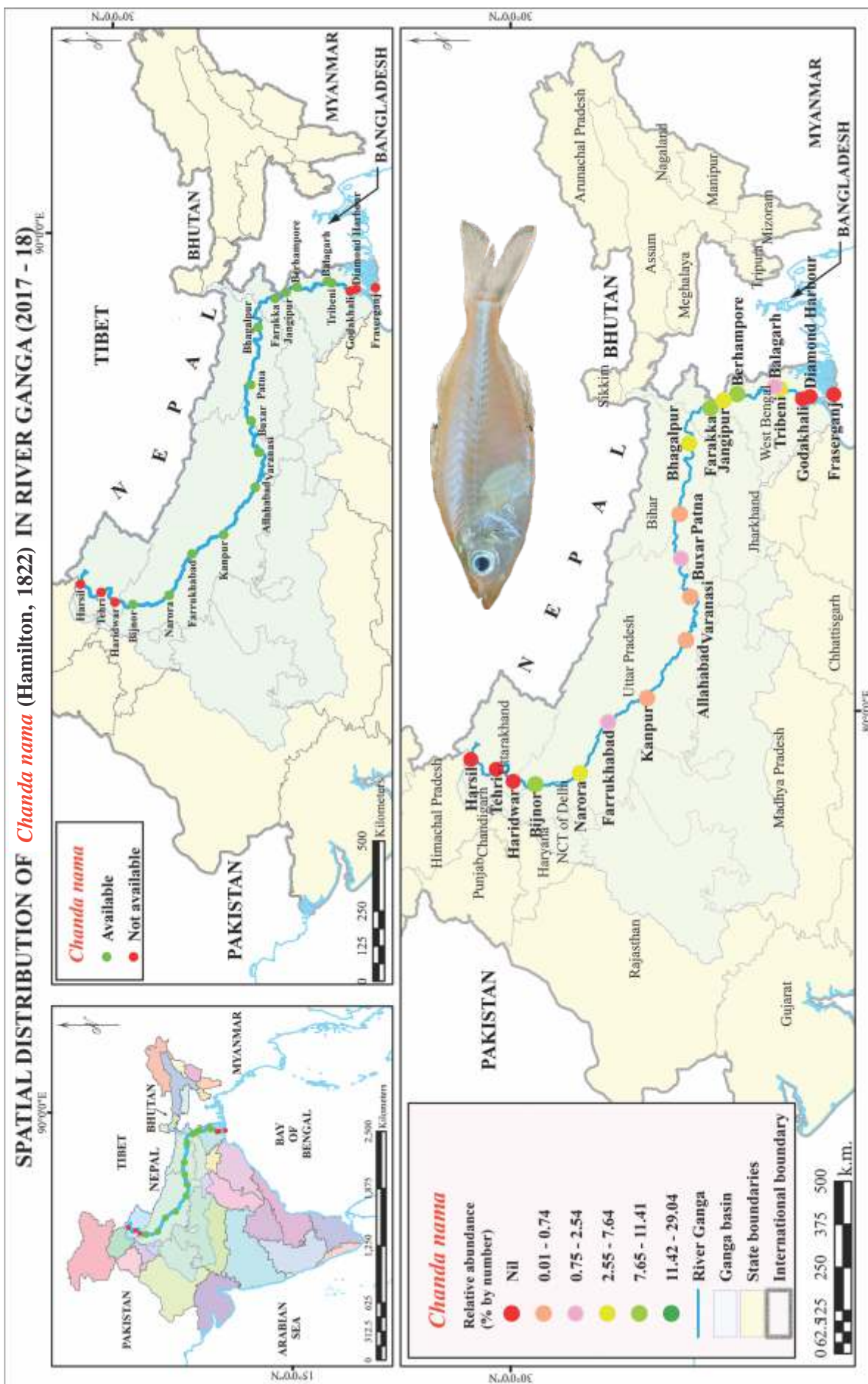
Habitat: Freshwater

Maximum size (TL): 11 cm

Food and feeding: Feeds on mainly on the minute entomostracans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Channa gachua (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Channidae

Genus : *Channa*

Species : *gachua*



Vernacular name: Changa (Uttar Pradesh)

Common English name: Asiatic Snake Head

Synonyms: *Ophiocephalus gachua*

Salient identifying characteristics:

- ◆ Body is oval shaped and highly flattened
- ◆ Dorsal, anal and caudal margins white; 3-3 + 1/2 scales between the lateral line and the base of the anterior dorsal rays; relatively small size

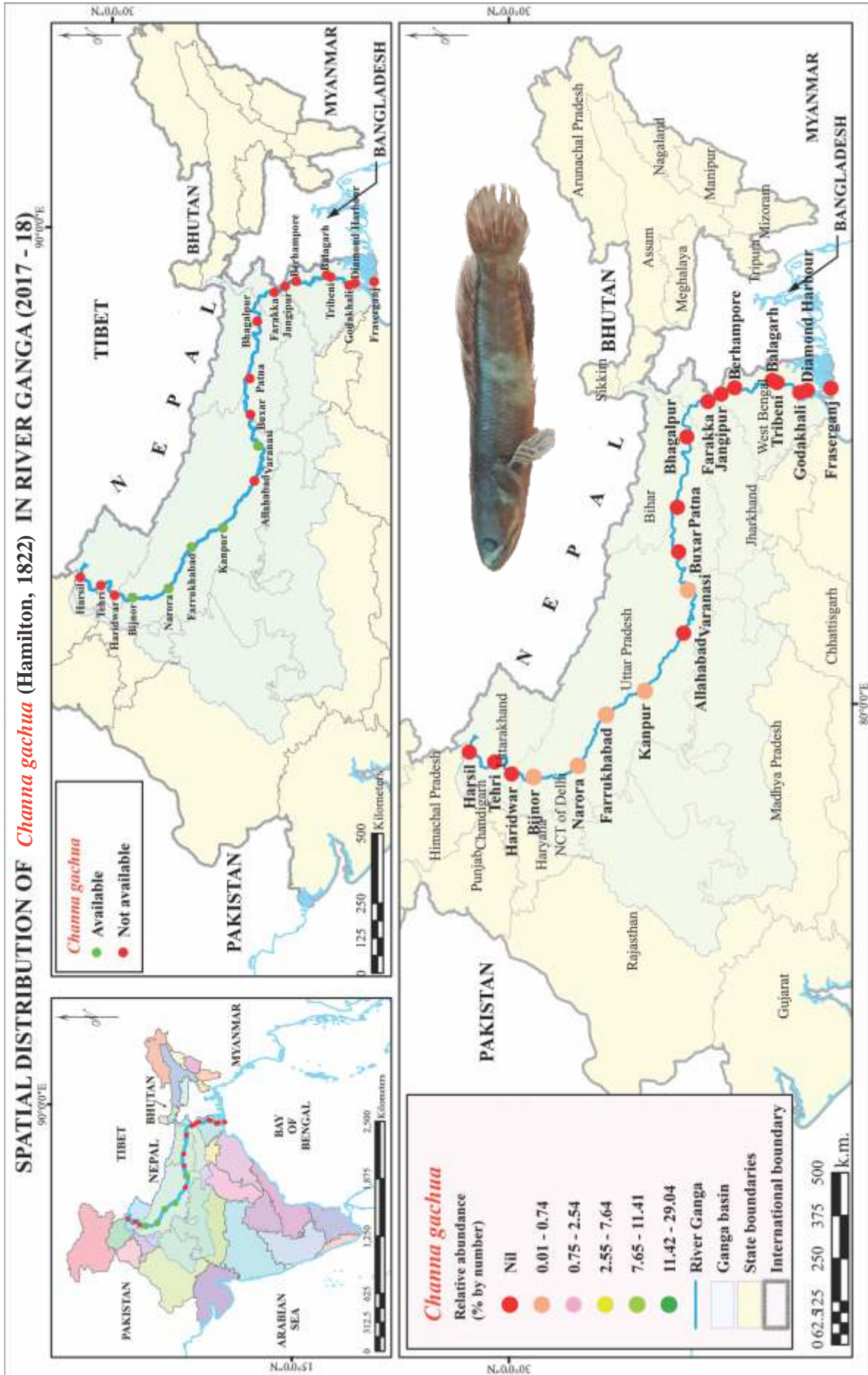
Habitat: Freshwater

Maximum size (TL): 28.8 cm

Food and feeding: Feeds on insects and snail

Conservation status (IUCN Red list): Least concern

Commercial value: Used as food fish



Channa marulius (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Channidae
Genus	: <i>Channa</i>
Species	: <i>marulius</i>



Vernacular name: Saur (Uttar Pradesh, Bihar), Gojal, Sal (West Bengal)

Common English name: Great snakehead

Synonyms: *Ophicephalus marulius*, *Channa marulia*

Salient identifying characteristics:

- ◆ Body is extended and cylindrical in shaped
- ◆ Eyes are moderate
- ◆ Mouth is broad with 7 to 18 canine villiform teeth
- ◆ Caudal fin rounded with a distinct pale edge ocellus at the base of the caudal fin towards upper side
- ◆ Presence of prominent scales on the head
- ◆ White blotch present on the dorsal and anal fin

Habitat: Freshwater

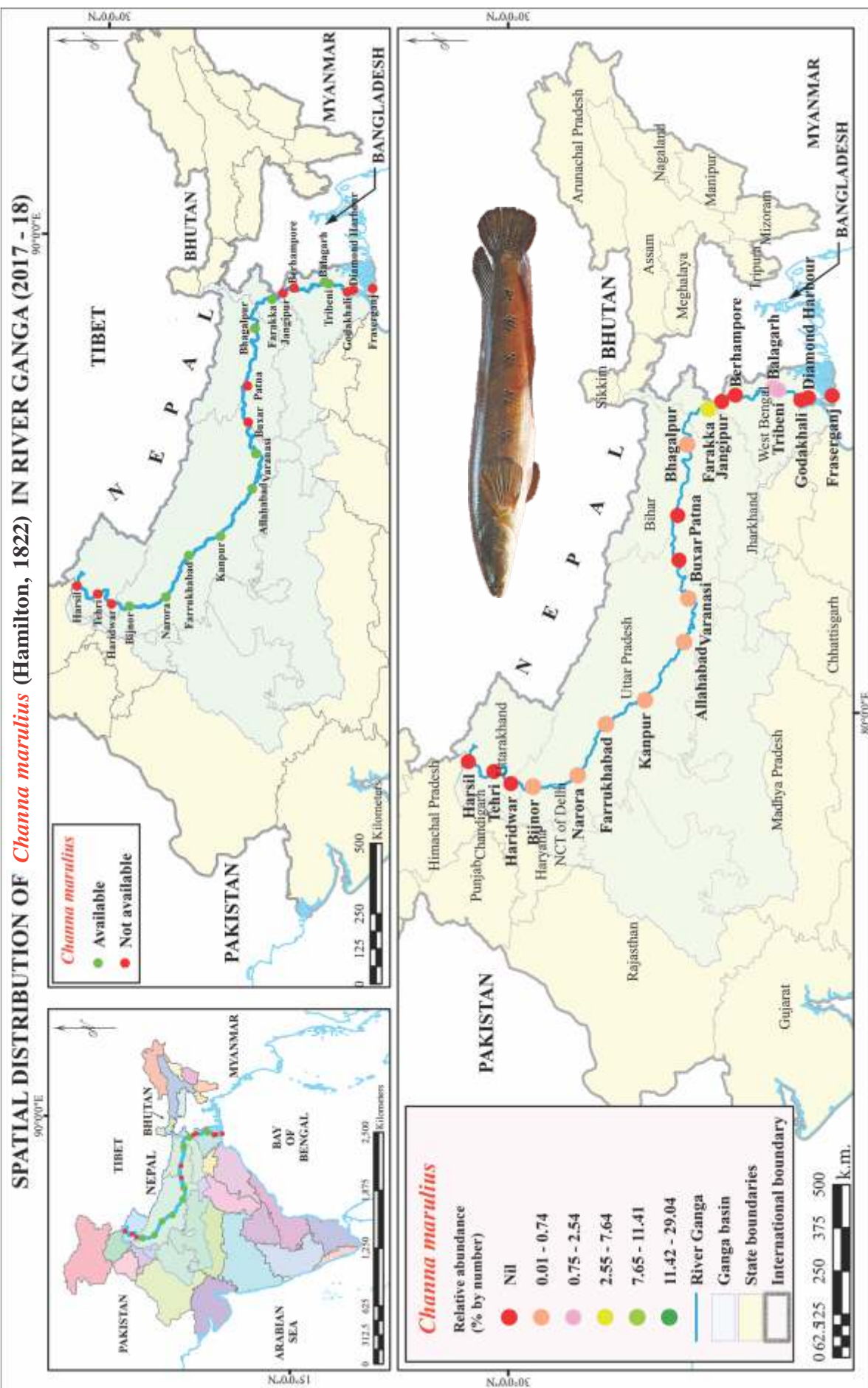
Maximum size (TL): 183 cm

Food and feeding: Carnivorous and sustain on frog, tadpole, fish, snake, insect and earthworm

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Channa marulius* (Hamilton, 1822) IN RIVER GANGA (2017 - 18)



Channa punctata (Bloch, 1793)

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Channidae

Genus : *Channa*

Species : *punctata*



Vernacular name: Sauri (Uttar Pradesh, Bihar), Lata (West Bengal)

Common English name: Spotted snakehead

Synonyms: *Ophiocephalus punctata*

Salient identifying characteristics:

- ◆ Body is elongated and fairly rounded
- ◆ Mouth is large with 3-6 canine teeth
- ◆ Caudal fin rounded
- ◆ Scales are larger on head
- ◆ Colour varies from black to light green
- ◆ Anal and caudal fins are dark grey in colour
- ◆ Body colour black to light green with numerous black spots

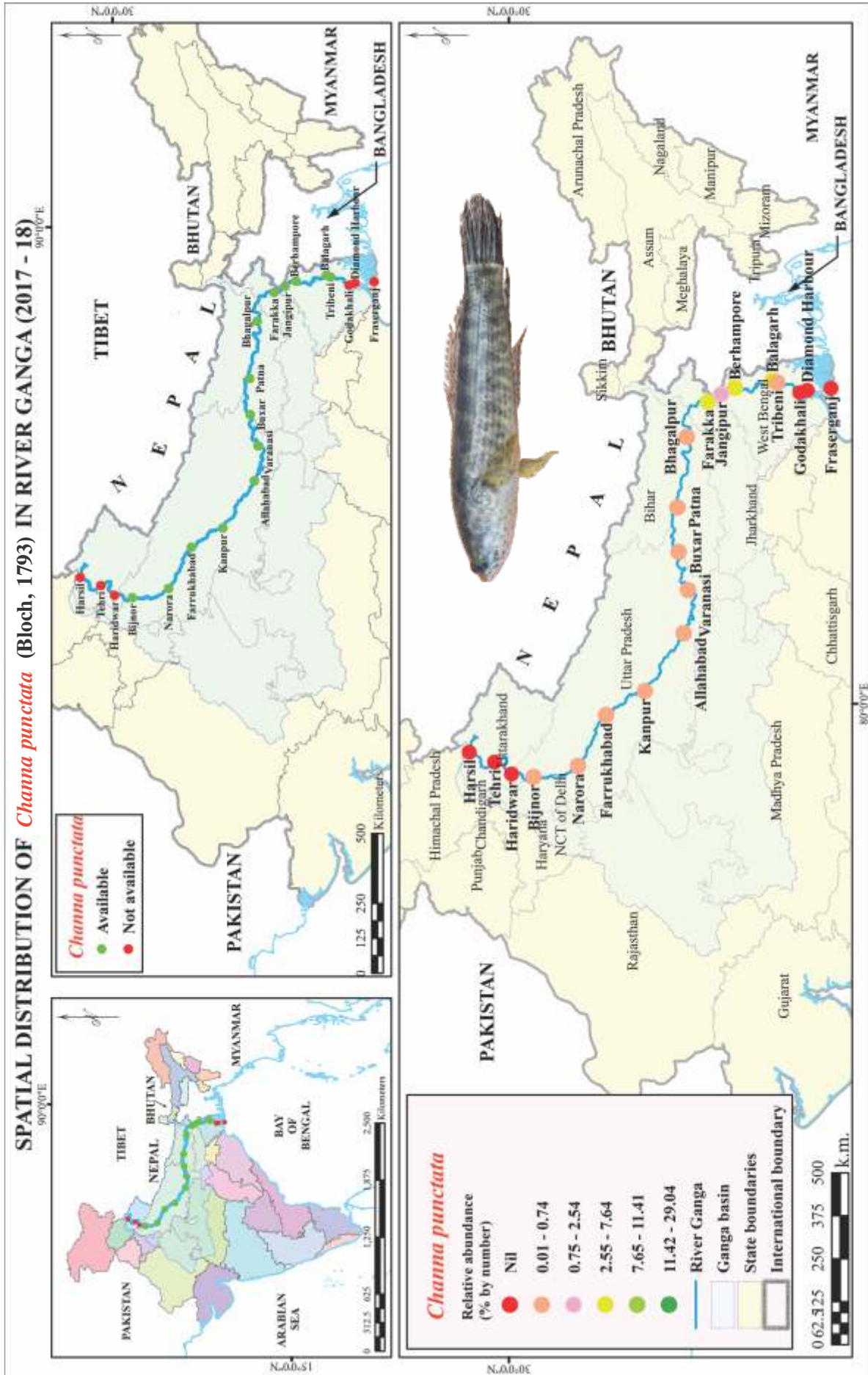
Habitat: Freshwater

Maximum size (TL): 31 cm

Food and feeding: Feeds on small fish, worms and insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Channa striata (Bloch, 1793)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Channidae
Genus : *Channa*
Species : *striata*



Vernacular name: Saura (Uttar Pradesh, Bihar), Shol, Morrul (West Bengal)

Common English name: Striped snakehead

Synonyms: *Ophiocephalus striata*, *Channa striatus*

Salient identifying characteristics:

- ◆ Body is elongated and fairly rounded
- ◆ Mouth is broad with 4-7 canine teeth
- ◆ Caudal fin is rounded with dark colouration
- ◆ Large scales present on the head
- ◆ Dark bands run obliquely upward from snout to edge of gill cover

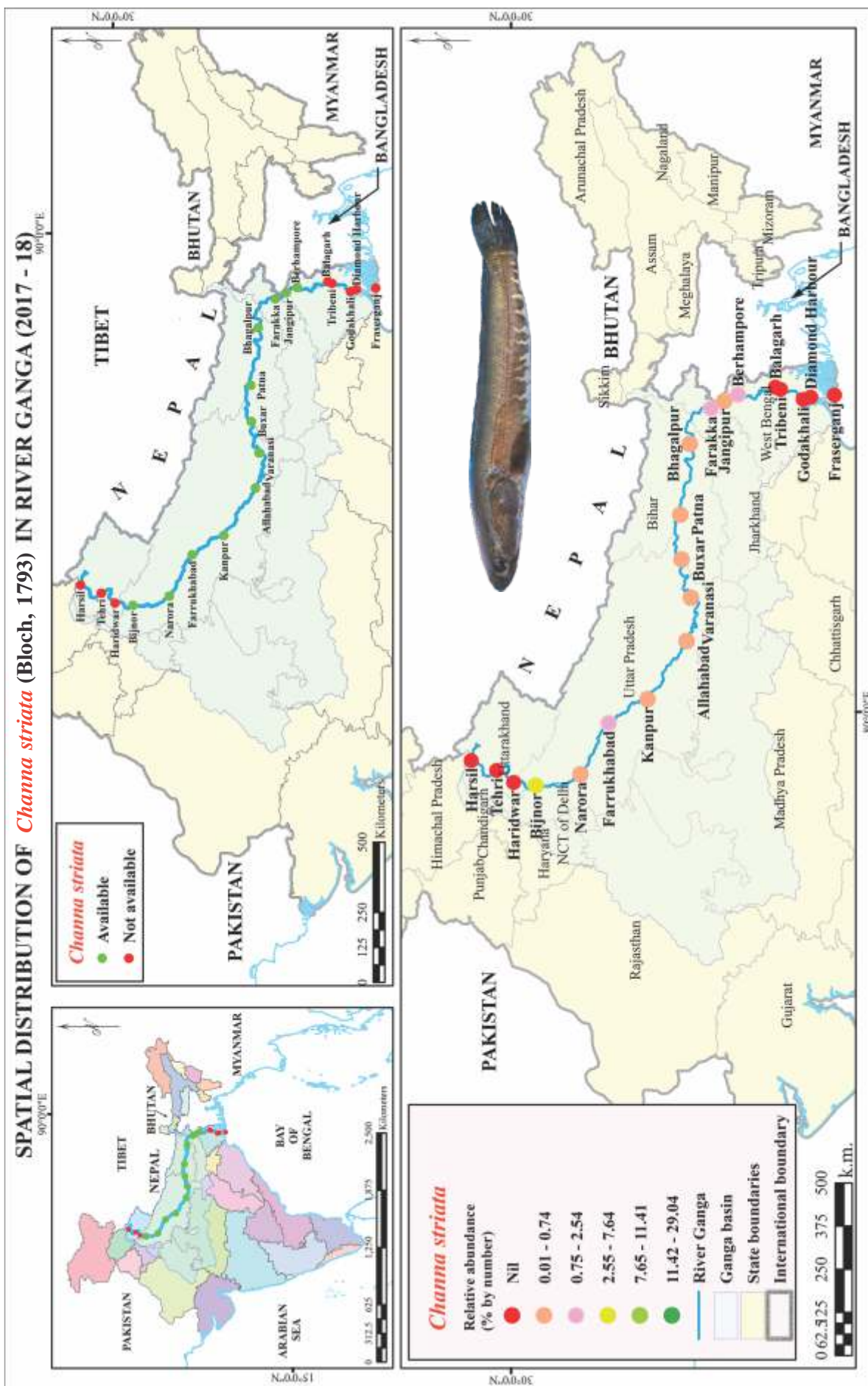
Habitat: Freshwater

Maximum size (TL): 100 cm

Food and feeding: Feeds on fish, frogs, snakes, insects, earthworms, tadpoles and crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Drepane punctata (Linnaeus, 1758)

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Drepaneidae

Genus : *Drepane*

Species : *punctata*



Vernacular name: Not Known

Common English name: Spotted sicklefish

Synonyms: *Chaetodon punctatus*

Salient identifying characteristics:

- ◆ Head and body deep, highly compressed
- ◆ Mouth protrusible
- ◆ Pectoral fins are long and pointed extending till the base of the caudal fin
- ◆ Margin of the dorsal, anal, caudal and pelvic fins are grayish-black
- ◆ 4 to 11 vertical bars of small block dots on the upper half of the body

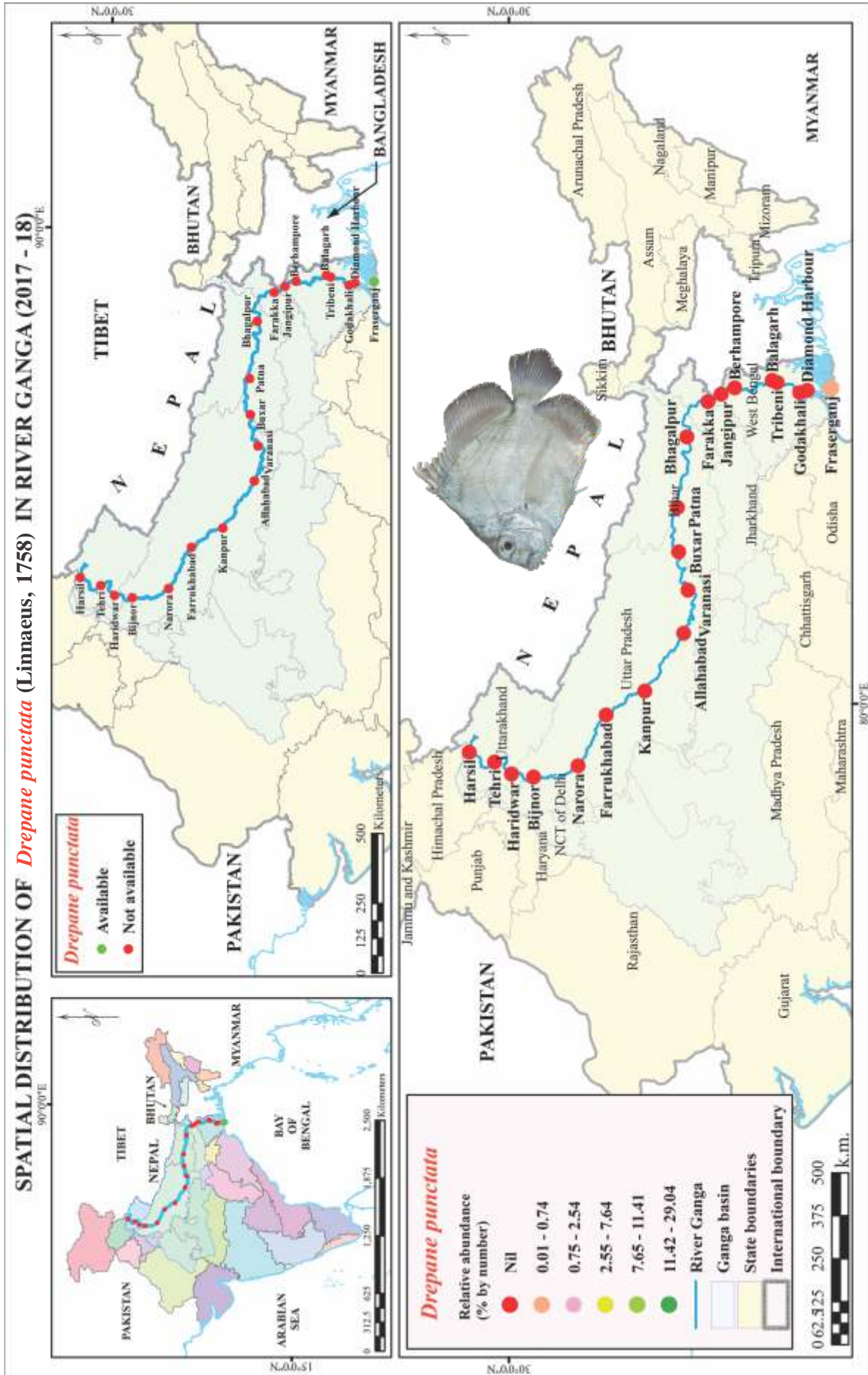
Habitat: Marinewater and Brackishwater

Maximum size (TL): 50 cm

Food and feeding: Feeds on invertebrates and benthic fish

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Forms an esteemed food fish in lower section of river



Eleotris fusca (Forster, 1801)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Eleotridae
Genus : *Eleotris*
Species : *fusca*



Vernacular name: Kalo bele (West Bengal)

Common English name: Dusky Sleeper

Synonyms: *Poecilia fusca*, *Eleotris cavifrons*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Mouth oblique and moderate eyes
- ◆ Numerous short papillae between main vertical cheek row
- ◆ Hyaline yellowish fins
- ◆ Presence ctenoid scales on the hinder side and cycloid scales on fore side

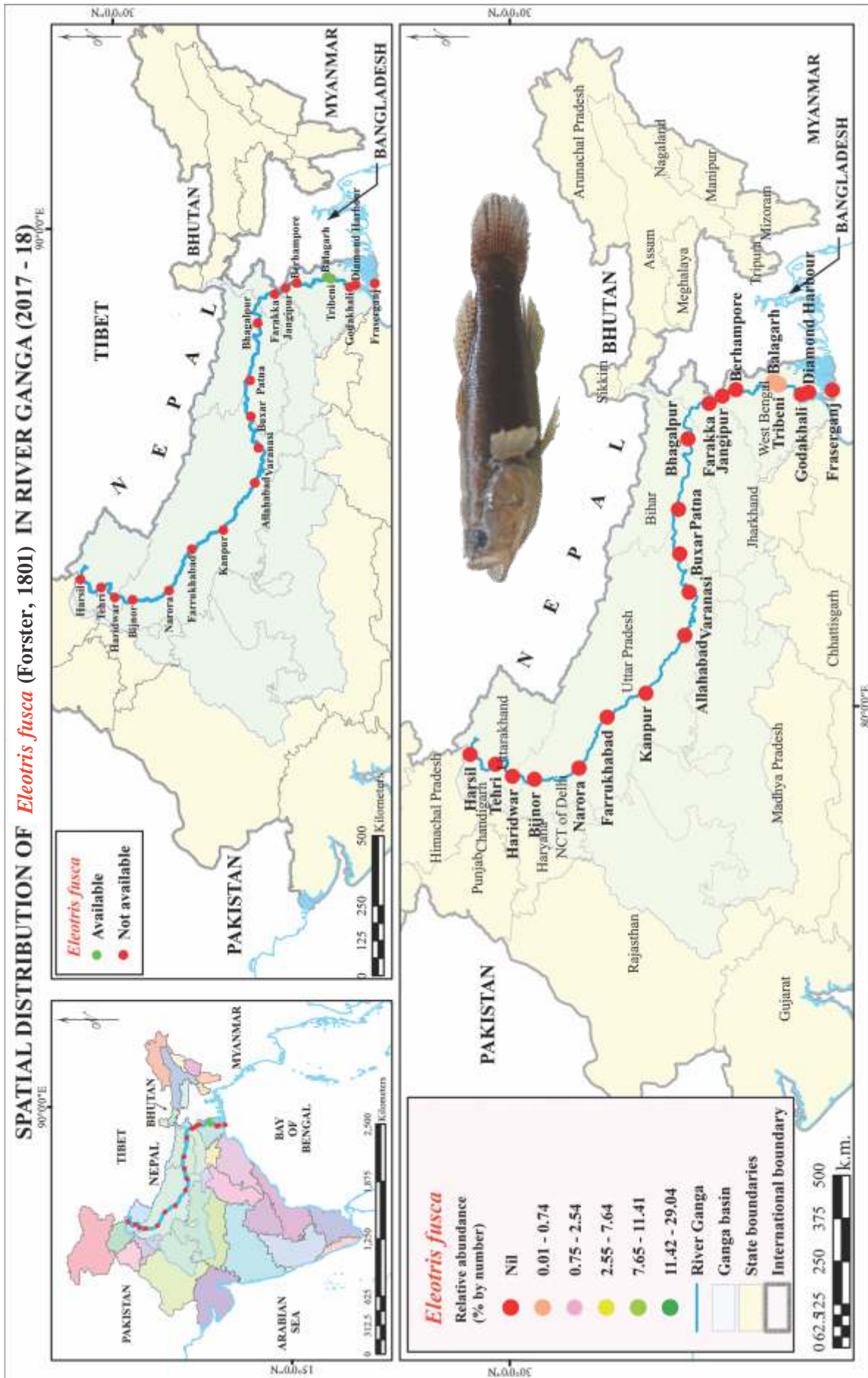
Habitat: Freshwater and Brackishwater

Maximum size (TL): 26 cm

Food and feeding: Highly carnivorous in nature

Conservation status (IUCN Red list): Least Concern

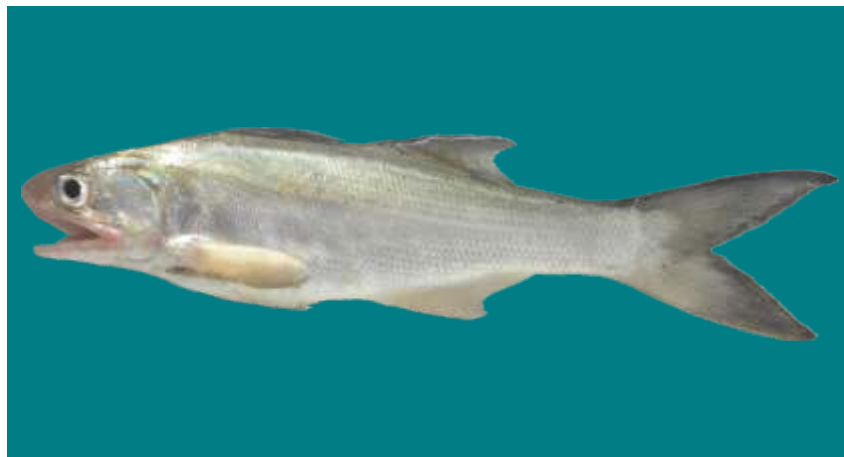
Commercial value: Used as ornamental fish



Eleutheronema tetradactylum (Shaw, 1804)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Polynemidae
Genus	: <i>Eleutheronema</i>
Species	: <i>tetradactylum</i>



Vernacular name: Chakle, Gurjali (West Bengal)

Common English name: Fourfinger threadfin

Synonyms: *Polynemus tetradactylus*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Snout is protruding and distinct
- ◆ Caudal fin deeply forked with equal lobes
- ◆ Dorsal and caudal fins are dusky with silvery whitish body colour

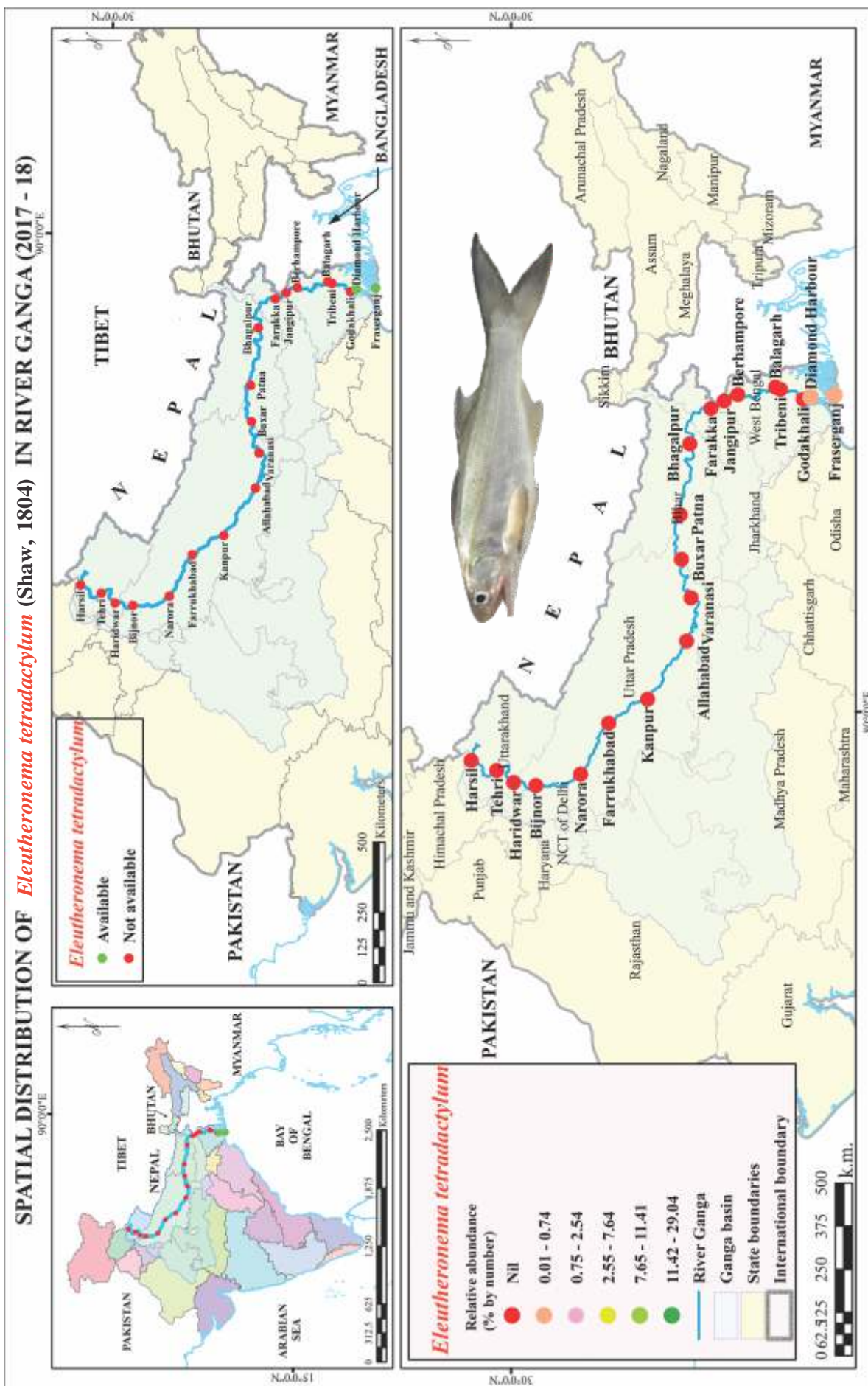
Habitat: Marinewater and Brackishwater

Maximum size (TL): 200 cm

Food and feeding: Feeds on prawns, fish and polychaetes but feeding habit differs with the change of season

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Forms as relished food fish in West Bengal



Epinephelus coioides (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Serranidae
Genus	: <i>Epinephelus</i>
Species	: <i>coioides</i>



Vernacular name: Kath Bhola (West Bengal)

Common English name: Orange-spotted grouper

Synonyms: *Bola coioides*, *Serranus nebulosus*

Salient identifying characteristics:

- ◆ Body is broad and thick
- ◆ Mouth is large and widened
- ◆ Body scales are cycloid in nature
- ◆ Body head and fins are pale grayish in colour with 5 pale dull orange to red and red to brown spots
- ◆ Large blackish blotch present at the base of last four dorsal spine

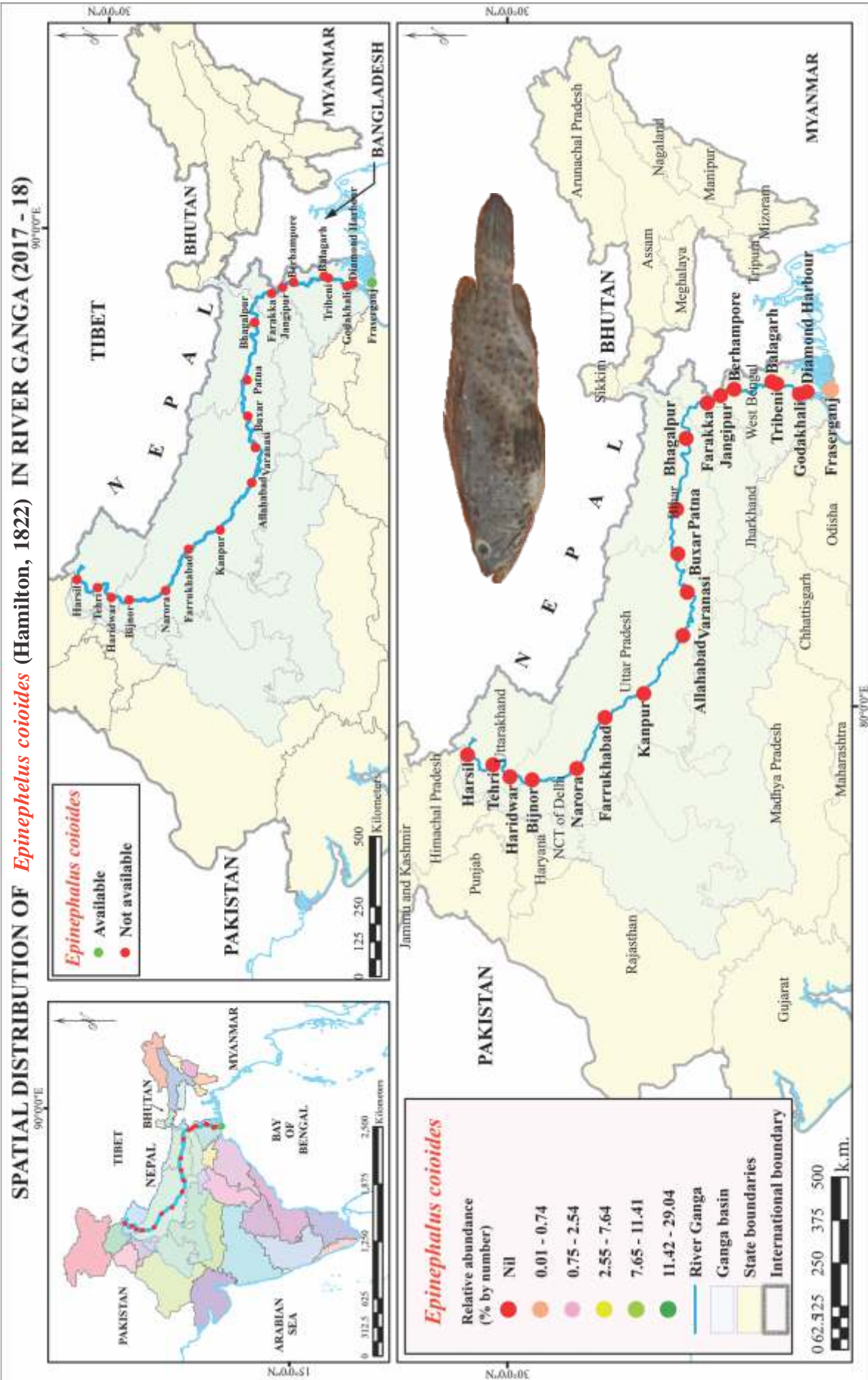
Habitat: Marinewater and Brackishwater

Maximum size (TL): 100 cm

Food and feeding: Feeds on fish (holocentrids, mullids and pomacentrids) and rarely on crustaceans

Conservation status (IUCN Red list): Least concern

Commercial value: Forms as food fish in coastal areas of West Bengal



Gerres filamentosus Cuvier, 1829

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Gerreidae
Genus : *Gerres*
Species : *filamentosus*



Vernacular name: Tak chanda (West Bengal)

Common English name: Whipfin silver-biddy

Synonyms: *Gerres punctatus*

Salient identifying characteristics:

- ◆ Body deep and compressed
- ◆ Second dorsal spine compressed laterally, produced into a filament whose tip extends past level of first anal spine
- ◆ Scales moderate; lateral line with 44 to 47 scales
- ◆ Pectoral, pelvic, caudal and anal fins dusky, dorsal fin hyaline, except filamentous spine which is black

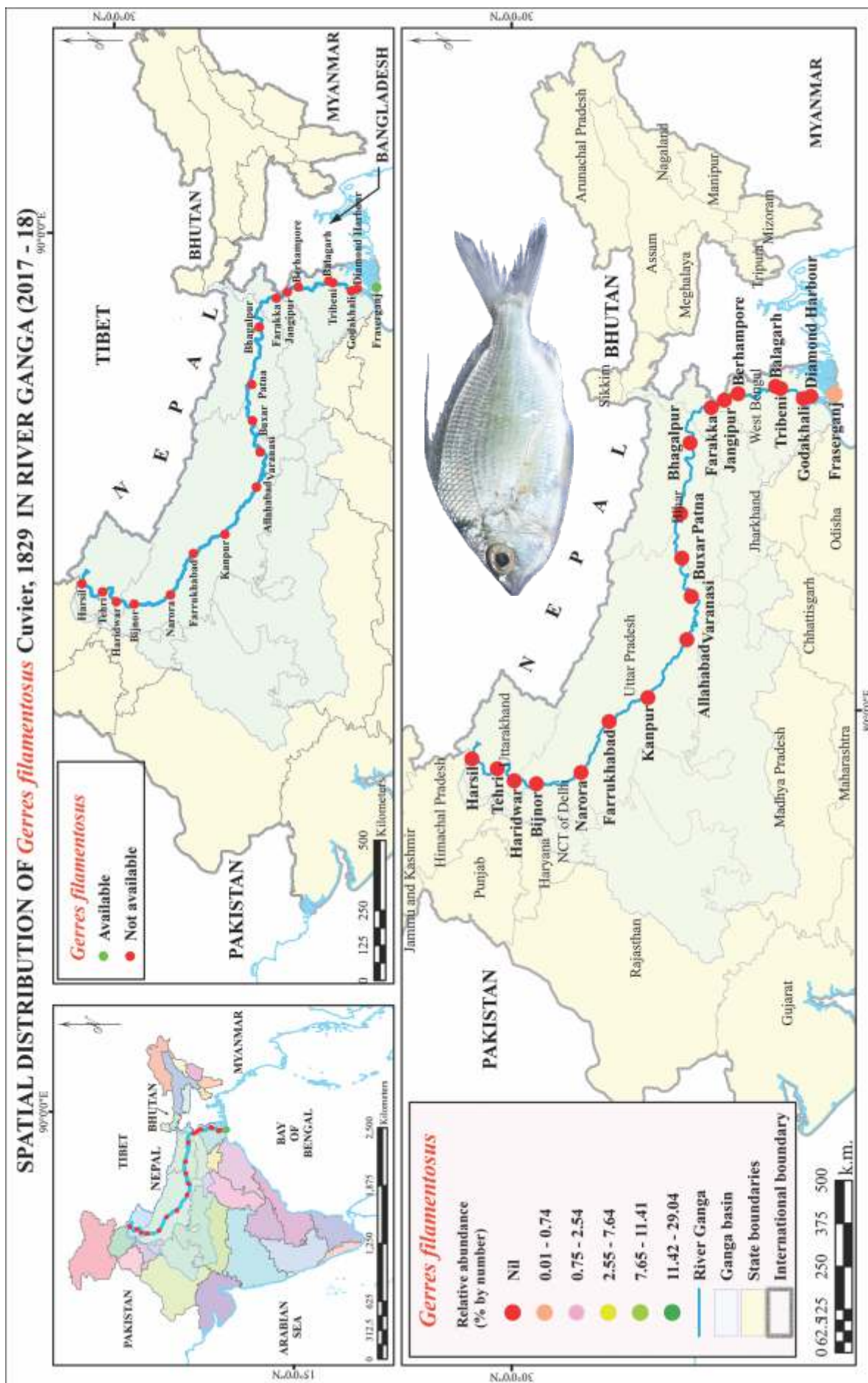
Habitat: Marinewater and Brackishwater

Maximum size (TL): 39 cm

Food and feeding: Feeds on small crustaceans, polychaetes, worms and insect larvae

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



| *Gerres oyena* (Forsskål, 1775) |

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Gerreidae
Genus : *Gerres*
Species : *oyena*



Vernacular name: Tak chanda (West Bengal)

Common English name: Common silver-biddy

Synonyms: *Labrus oyena*

Salient identifying characteristics:

- ◆ Body slender
- ◆ Second dorsal spine shorter than head but second anal spine slender and short, equal to or shorter than eye-diameter
- ◆ Scales are moderate, lateral line consist of 35 to 39 scales
- ◆ Prominent black tip on spinous part of dorsal fin

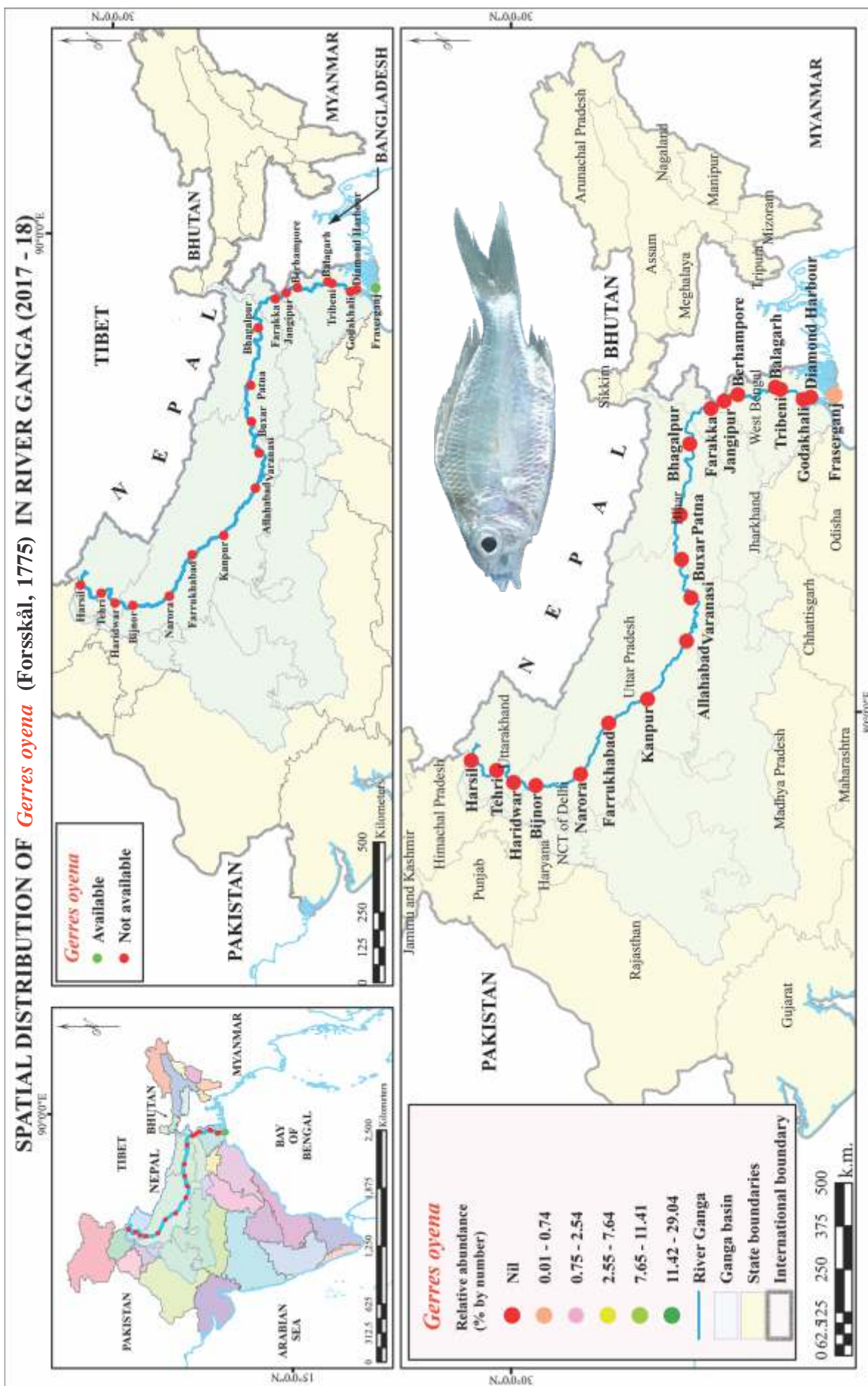
Habitat: Marinewater and Brackishwater

Maximum size (TL): 30 cm

Food and feeding: Feeds on small organisms living on sandy bottoms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Glossogobius giuris (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Gobiidae
Genus : *Glossogobius*
Species : *giuris*



Vernacular name: Bulla, Golua (Uttar Pradesh, Bihar), Aash Bele, Kalo Bele (West Bengal)

Common English name: Tank goby

Synonyms: *Gobius gutum*, *Glossogobius giuris*

Salient identifying characteristics:

- ◆ Body elongated and compressed with flattened head
- ◆ Small eyes, iris without process of pupil
- ◆ Yellowish-brown in colour with five dark blotches on flank, sides of head with irregular violet spot
- ◆ Dorsal, pectoral and caudal fins with dark spots

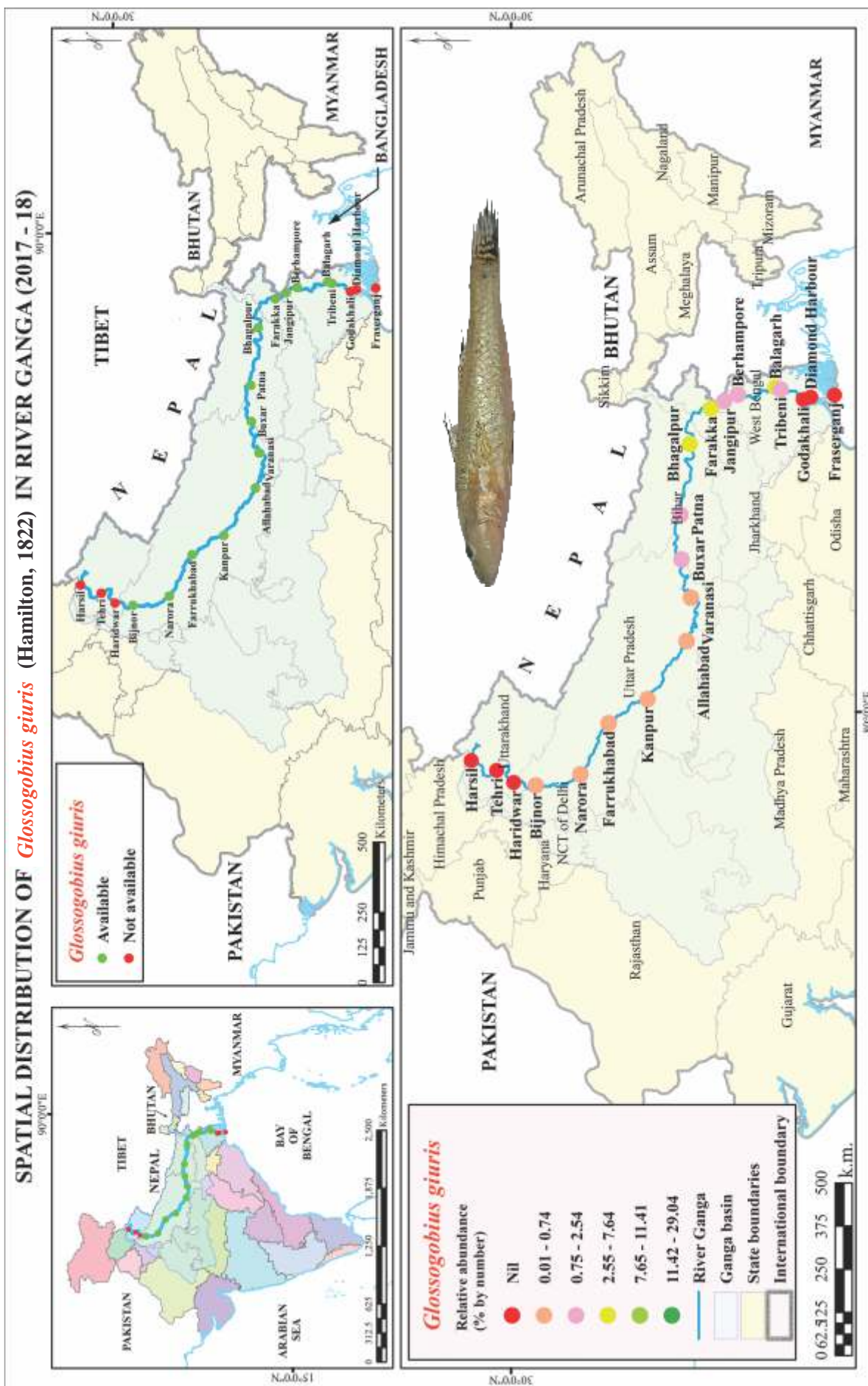
Habitat: Freshwater

Maximum size (TL): 50 cm

Food and feeding: Feeds on small insects, crustaceans and small fish

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Johnius coitor (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Sciaenidae
Genus : *Johnius*
Species : *coitor*



Vernacular name: Pathri, Phala, Poa (Uttar Pradesh, Bihar), Bhola (West Bengal)

Common English name: Coitor croaker

Synonyms: *Bola coitor*, *Sciaena coitor*

Salient identifying characteristics:

- ◆ Body elongated, prominent and projecting snout with inferior mouth
- ◆ Dorsal fin deeply notched and 1st dorsal fin with 10 spines
- ◆ Ctenoid scales on top of head and body, lateral line scales 48- 51
- ◆ Cycloid scales on snout, behind eyes and on anterior part of breast

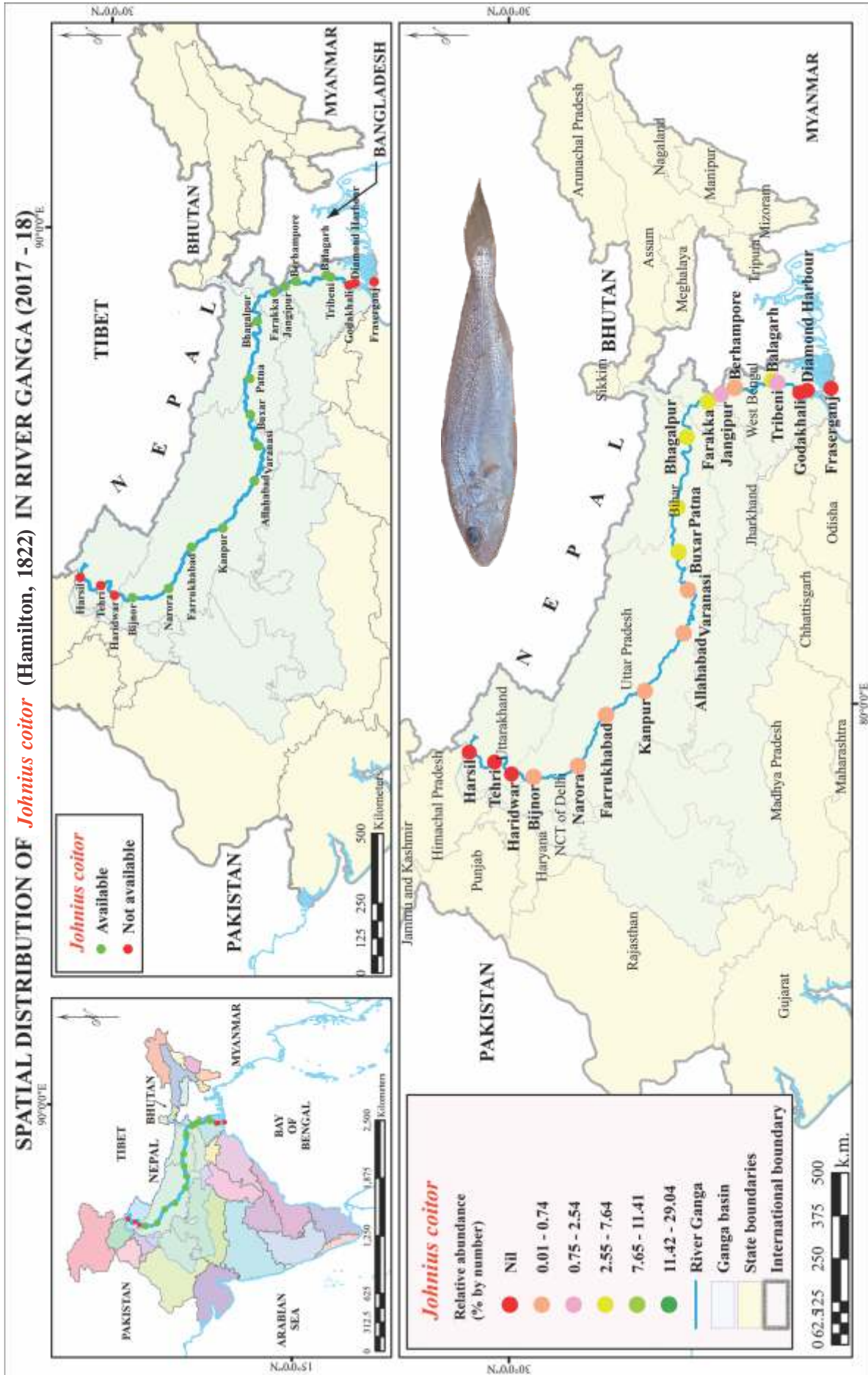
Habitat: Freshwater

Maximum size (TL): 16 cm

Food and feeding: Feeds on prawns, acetes and fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Johnius gangeticus (Talwar, 1991)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Sciaenidae
Genus : *Johnius*
Species : *gangeticus*



Vernacular name: Bhola (West Bengal)

Common English name: Gangetic Bola

Synonyms: *Johnius gangeticus*

Salient identifying characteristics:

- ◆ Body slender, snout rounded and swollen
- ◆ Mouth narrow and inferior
- ◆ Dorsal fin slightly notched, dorsal spines quite weak; second anal spine strong. Caudal fin rhomboid in structure
- ◆ Cycloid scales on snout, behind eyes and on anterior part of breast

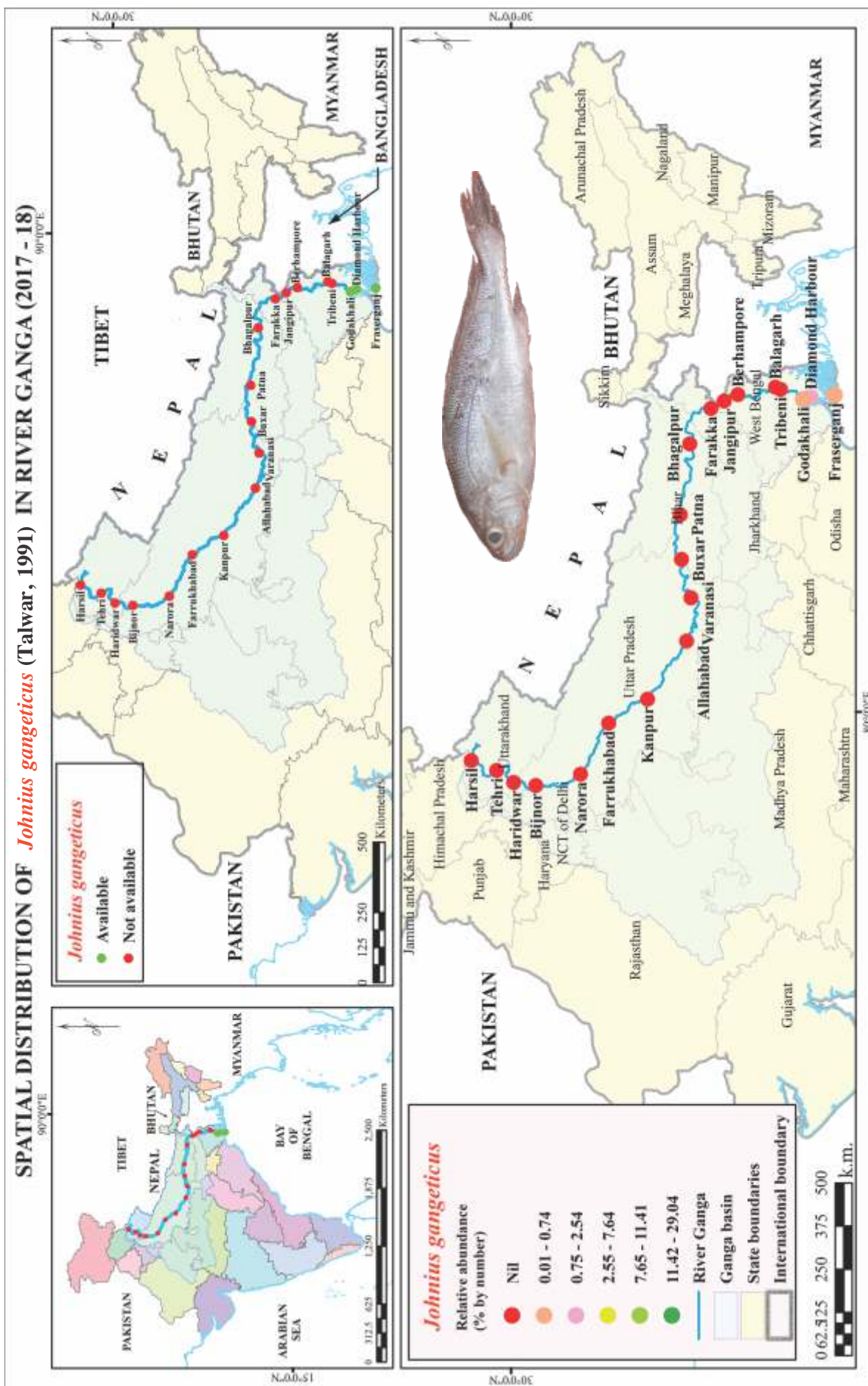
Habitat: Brackishwater and Freshwater

Maximum size (TL): 12 cm

Food and feeding: Feeds on prawns, acetes and fishes

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Nuchequula blochii (Valenciennes, 1835)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Leiognathidae
Genus : *Nuchequula*
Species : *blochii*



Vernacular name: Chanda (West Bengal)

Common English name: Two blotch ponyfish

Synonyms: *Leiognathus blochii*

Salient identifying characteristics:

- ◆ Body compressed oval shaped
- ◆ Small protrusible mouth pointing downward
- ◆ Scales minute on body but prominent on breast
- ◆ Silvery color with upper half irregular brown blotches
- ◆ Spinous dorsal fin, a jet black blotch between upper half of 3rd and 6th spine

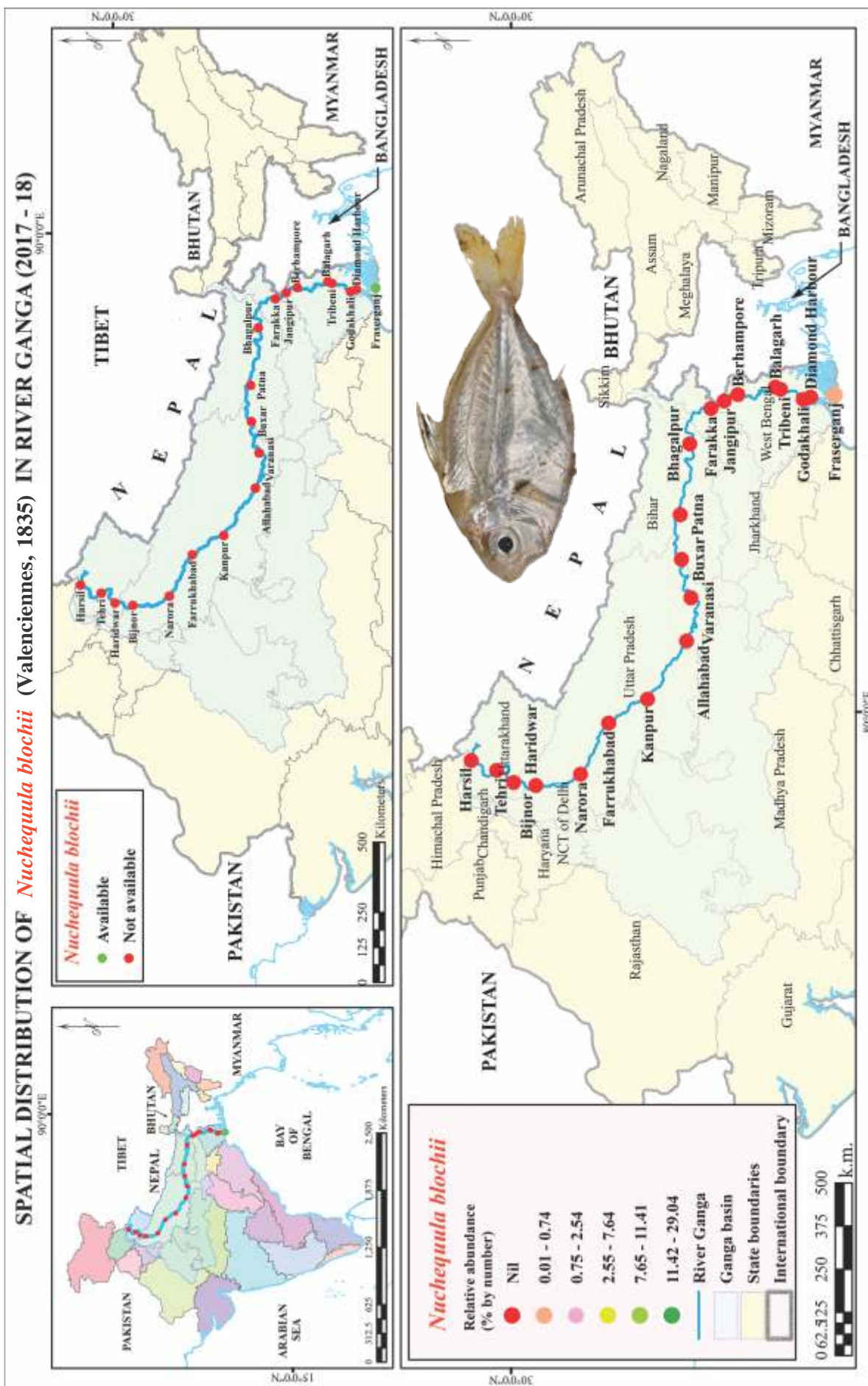
Habitat: Marinewater and Brackishwater

Maximum size (TL): 10 cm

Food and feeding: Feeds on small crustaceans, foraminiferans and nematodes

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Lobotes surinamensis (Bloch, 1790)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Lobotidae
Genus	: <i>Lobotes</i>
Species	: <i>surinamensis</i>



Vernacular name: Kalo Bhetki (West Bengal)

Common English name: Tripletail

Synonyms: *Holocentrus surinamensis*

Salient identifying characteristics:

- ◆ Body deep and a little bit compressed
- ◆ Large mouth with slightly protrusible upper jaw
- ◆ Both Soft dorsal and anal fins large and broadly rounded
- ◆ Weakly ctenoid small scales, 42 to 45 scales in lateral line
- ◆ Olive to dark brown, mottled with dark spots, silvery-grey below

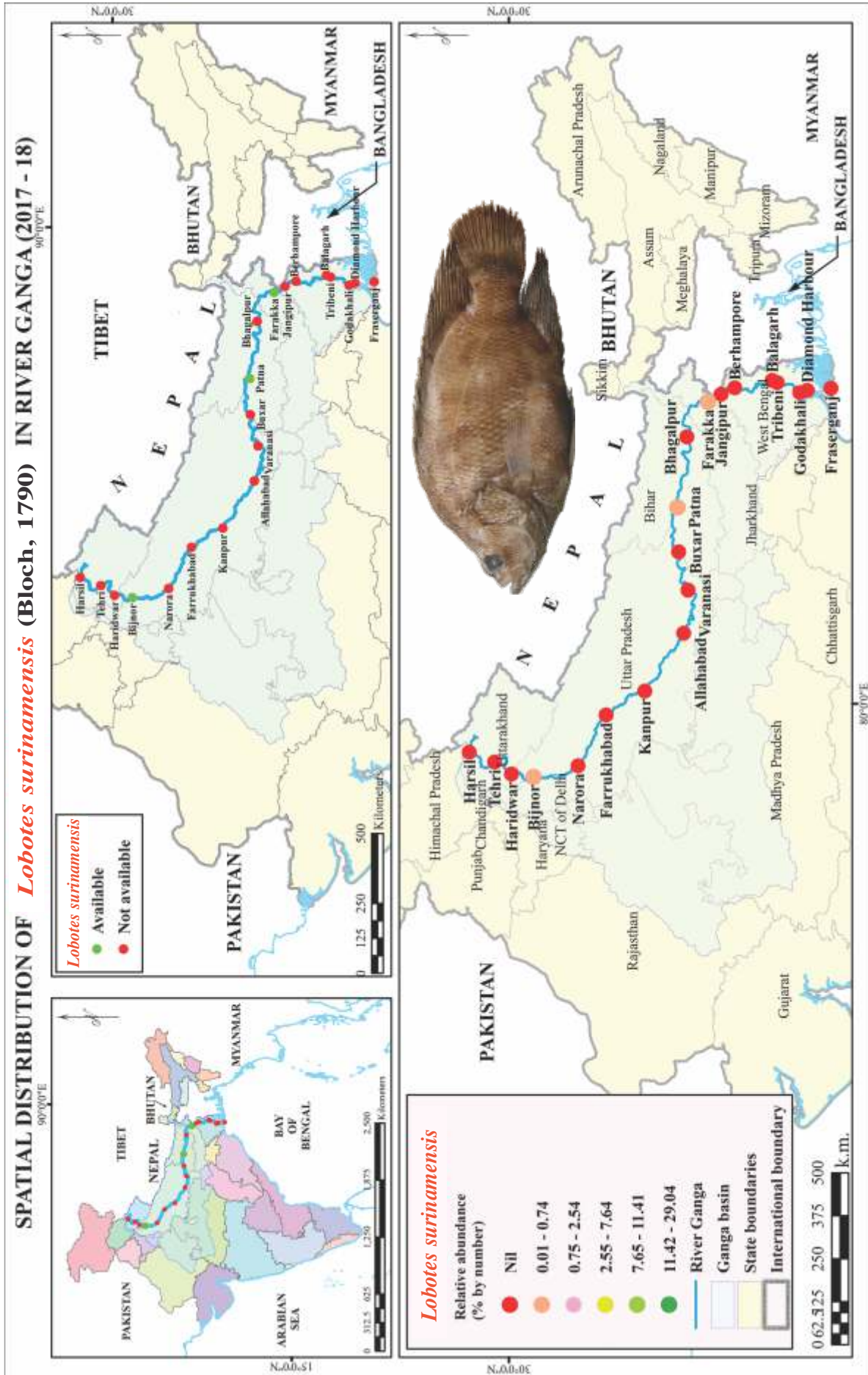
Habitat: Marinewater and Brackishwater

Maximum size (TL): 110 cm

Food and feeding: Feeds on benthic crustaceans and small fish

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Megalaspis cordyla (Linnaeus, 1758)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Carangidae
Genus : *Megalaspis*
Species : *cordyla*



Vernacular name: Not Known

Common English name: Torpedo scad

Synonyms: *Scomber cordyla*, *Caranx rottleri*

Salient identifying characteristics:

- ◆ Compressed caudal peduncle with series of keels
- ◆ About 8 -10 detached finlets after dorsal and anal fins
- ◆ Presence of a large black operculum spot

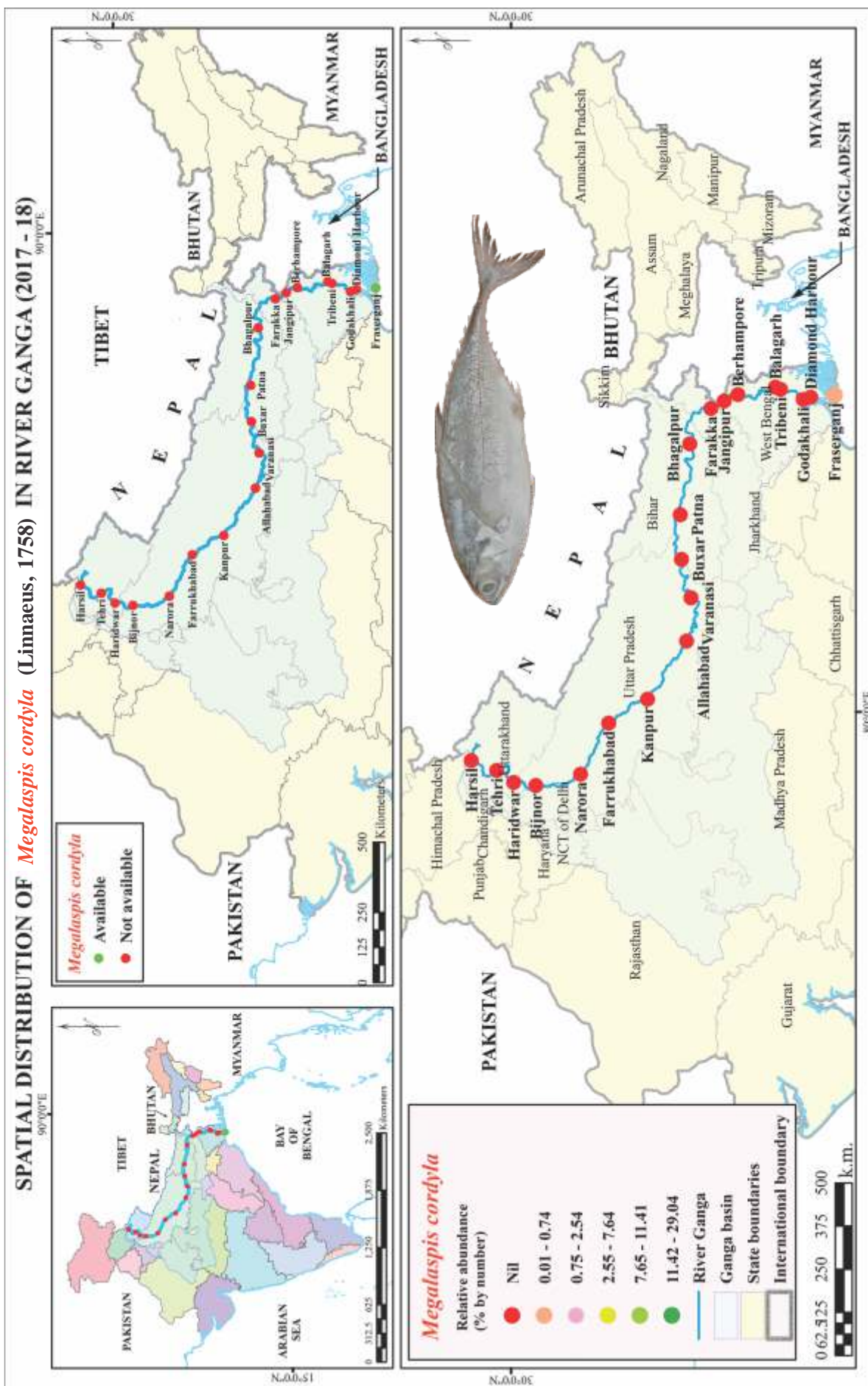
Habitat: Marinewater and Brackishwater

Maximum size (TL): 80 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a good food fish



Nandus nandus (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Nandidae
Genus	: <i>Nandus</i>
Species	: <i>nandus</i>



Vernacular name: Bheda (Uttar Pradesh, Bihar), Nadosh, Bheda (West Bengal)

Common English name: Gangetic leaf fish

Synonyms: *Coius nandus*, *Nandus marmoratus*

Salient identifying characteristics:

- ◆ Body fairly deep, compressed and oblong
- ◆ Eyes large, diameters 05 to 06 times in head length
- ◆ Mouth very large, protrusible
- ◆ Caudal fin slightly rounded
- ◆ Scales ctenoid; 46 to 57 scales in longitudinal series

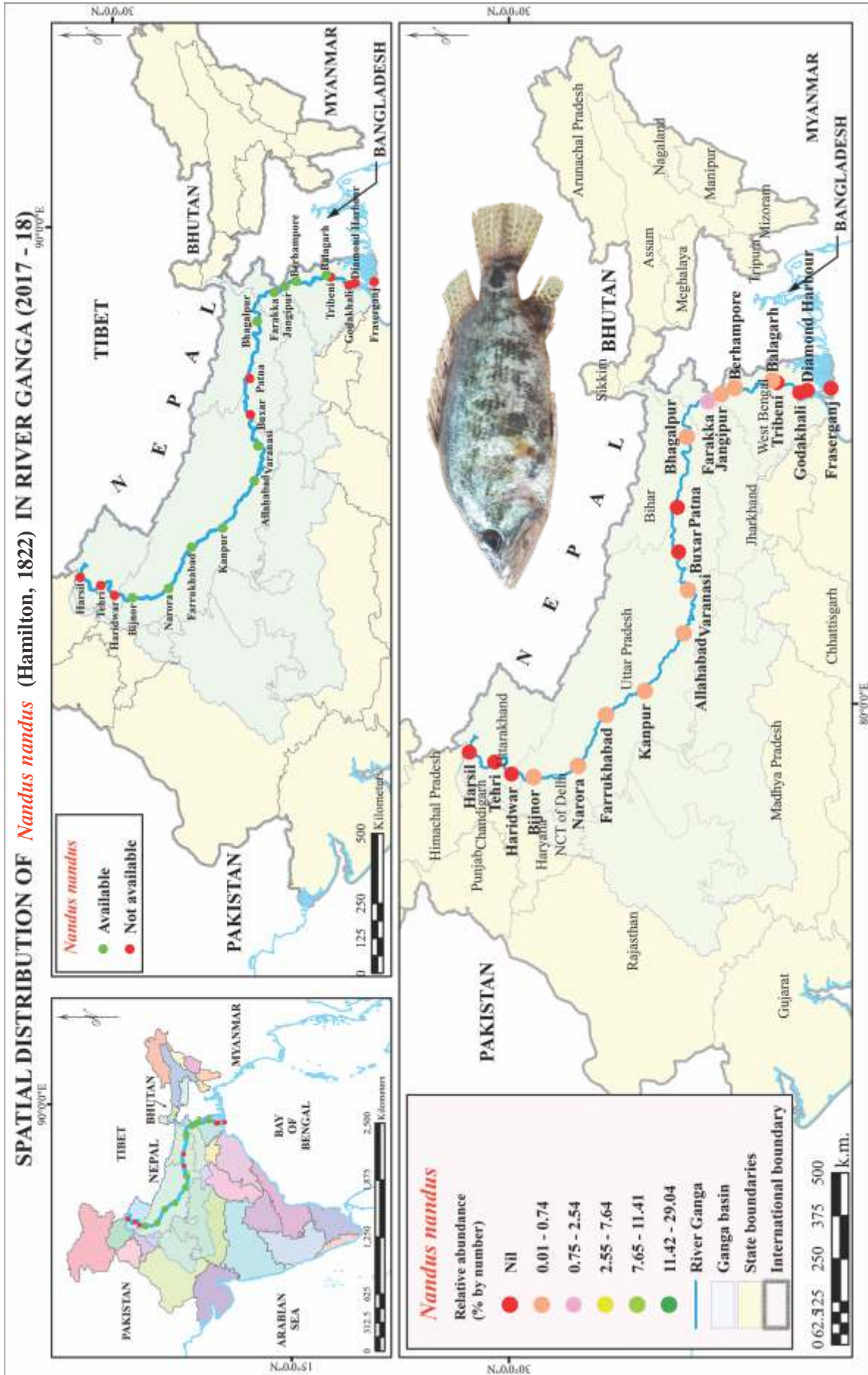
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on aquatic insects and fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Odontamblyopus rubicundus (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Gobiidae
Genus	: <i>Odontamblyopus</i>
Species	: <i>rubicundus</i>



Vernacular name: Lal chengo (West Bengal)

Common English name: Rubicundus eel goby

Synonyms: *Gobioides rubicundus*

Salient identifying characteristics:

- ◆ Eyes are rudiment but distinct
- ◆ Many barbells are present on underside of chin. Pectoral fins are free and filamentous. Number of anal fin is 3
- ◆ Head and body are covered with cycloid scales
- ◆ Mouth oblique
- ◆ Very long caudal fin present

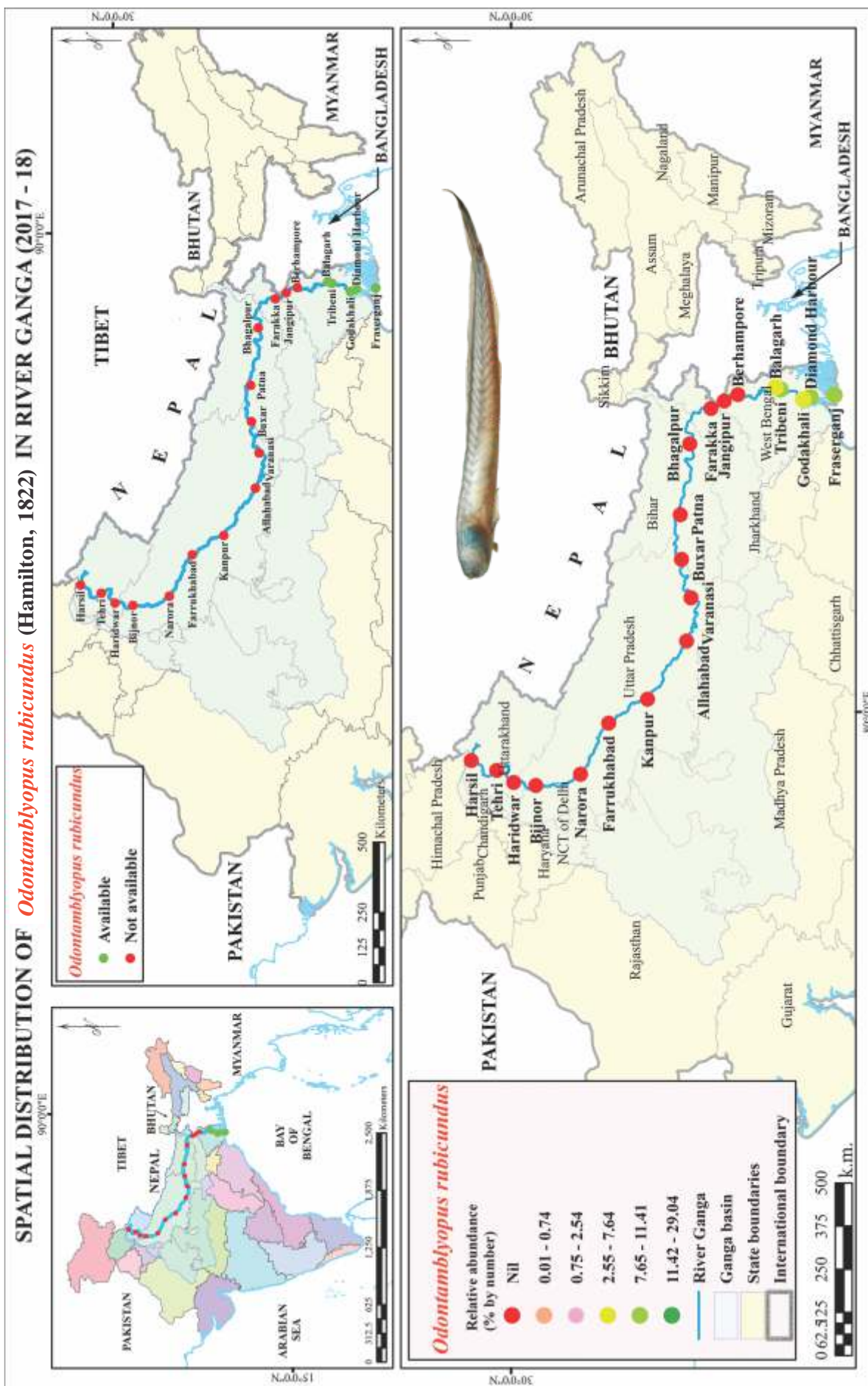
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 33.4 cm

Food and feeding: Carnivore

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Pama pama (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Sciaenidae

Genus : *Pama*

Species : *pama*



Vernacular name: Bhola (West Bengal)

Common English name: Pama croaker

Synonyms: *Bola pama*, *Sciaenoides pama*, *Pama pama*

Salient identifying characteristics:

- ◆ Slender body, with a conical snout
- ◆ Small eyes and mouth is large and terminal
- ◆ Dorsal fin weakly notched
- ◆ Pointed pectoral fin, as long as head
- ◆ Caudal fin is rhomboid long and tapering
- ◆ The number of lateral line spine is 44 to 48

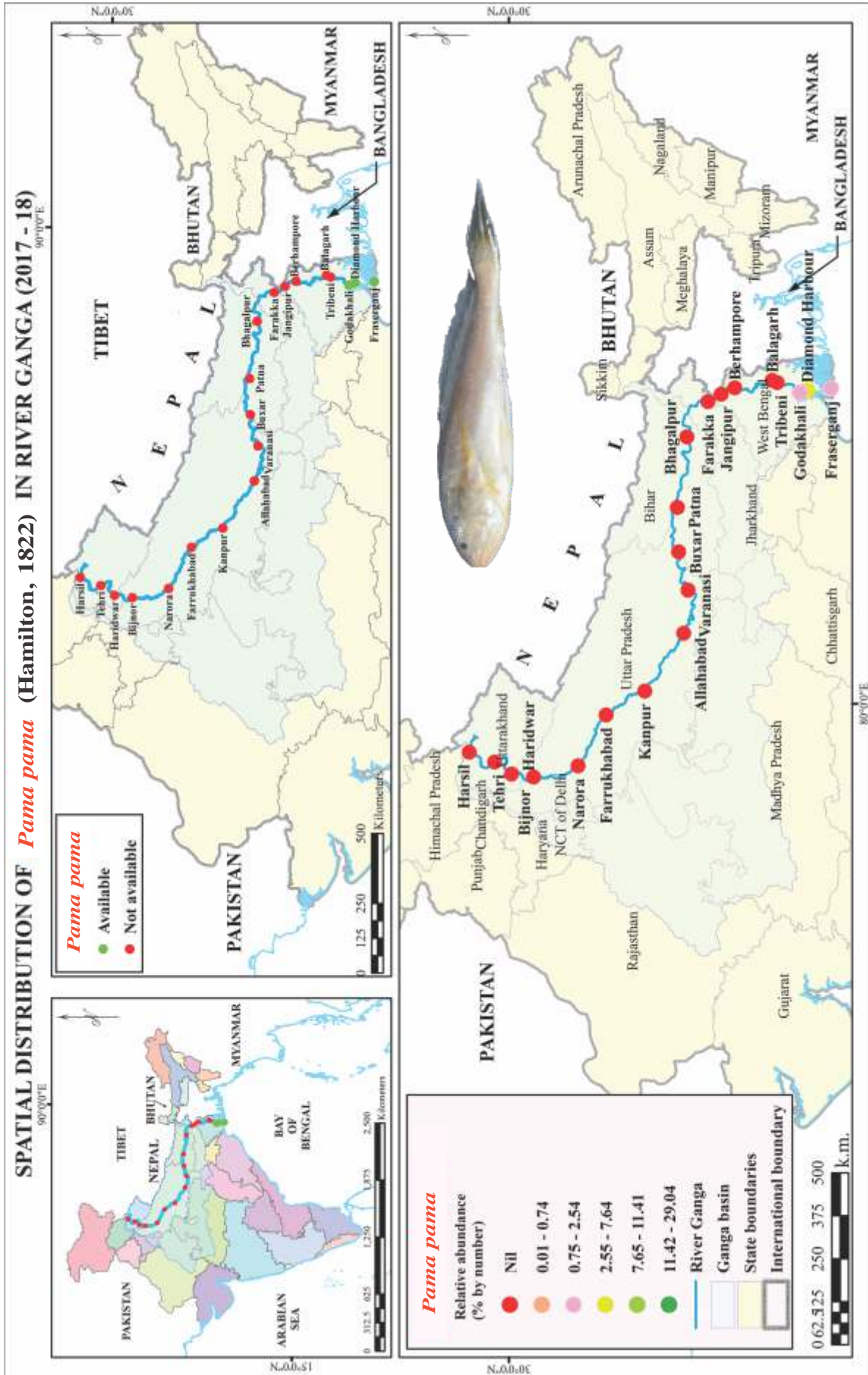
Habitat: Marinewater and Brackishwater

Maximum size (TL): 160 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Pampus chinensis (Euphrasen, 1788)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Stromatidae
Genus	: <i>Pampus</i>
Species	: <i>chinensis</i>



Vernacular name: Chinese (West Bengal)

Common English name: Chinese silver pomfret

Synonyms: *Stromateus chinensis*, *Stromateus sinensis*

Salient identifying characteristics:

- ◆ Compressed, very deep and firm body
- ◆ Compressed and short caudal peduncle
- ◆ Short and rounded snout and straight head present. Eyes small and central
- ◆ Small scales are cycloid and deciduous
- ◆ Lateral line high, following dorsal profile onto caudal peduncle

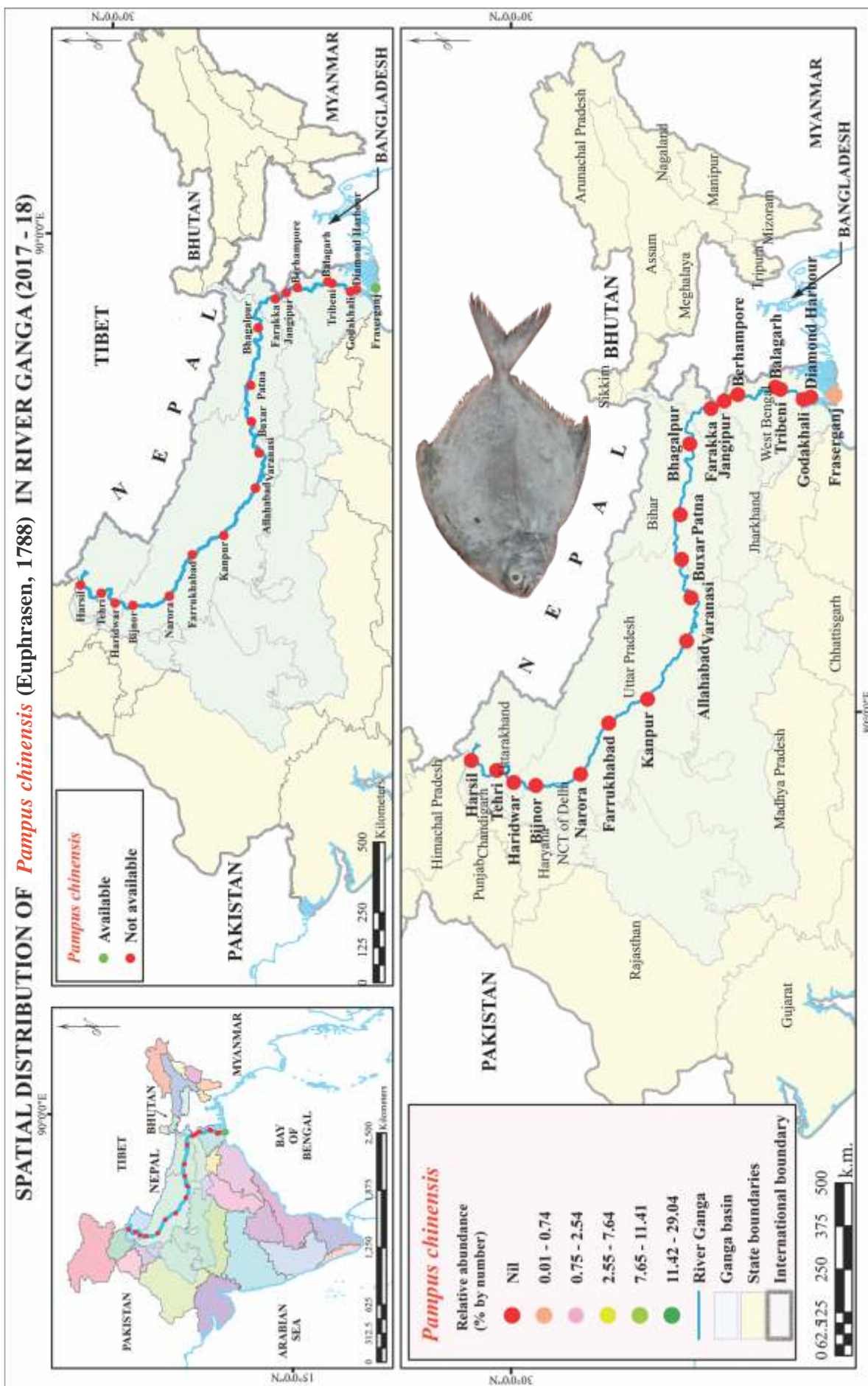
Habitat: Marinewater and Brackishwater

Maximum size (TL): 40 cm

Food and feeding: Feeds on ctenophores and other zooplankton groups but will also prey on small benthic animals

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Panna microdon (Bleeker, 1849)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Sciaenidae
Genus	: <i>Panna</i>
Species	: <i>microdon</i>



Vernacular name: Bhola (West Bengal)

Common English name: Panna croaker

Synonyms: *Sciaenoides microdon*, *Otolithoides microdon*

Salient identifying characteristics:

- ◆ Body slender. Mouth large and terminal
- ◆ Dorsal fin having a low notch and dorsal spine weak
- ◆ Scales are small and cycloid on head and breast and ctenoid on rest part of body
- ◆ Lateral line scales 92 to 95
- ◆ Fins yellow, dorsal and anal fins with darker margin

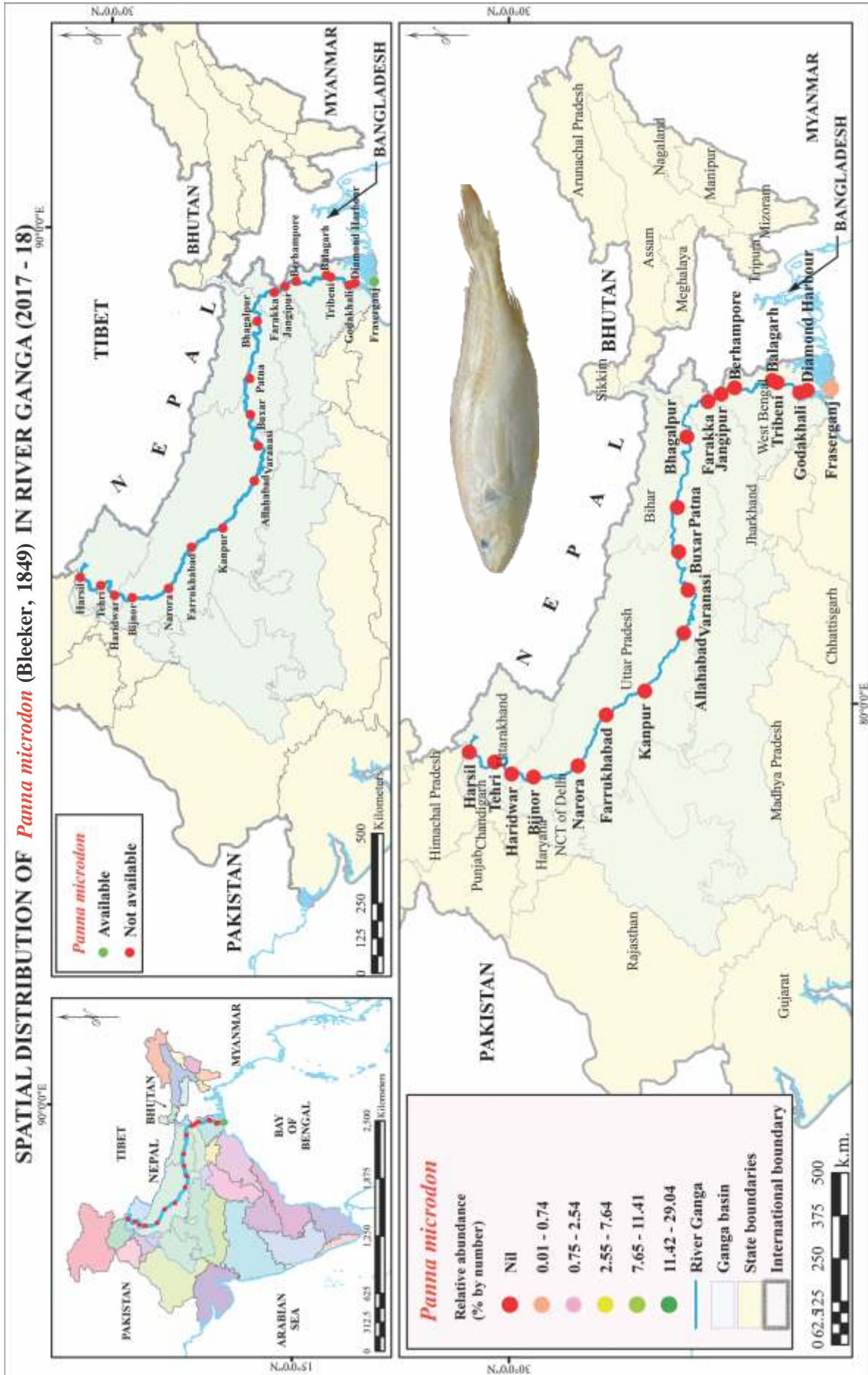
Habitat: Marinewater and Brackishwater

Maximum size (TL): 30 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Parambassis baculis (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Ambassidae
Genus : *Parambassis*
Species : *baculis*



Vernacular name: Bhakra (Uttar Pradesh), Chanda (West Bengal)

Common English name: Himalayan glassy perchlet

Synonyms: *Chanda baculis*, *Pseudambassis baculis*

Salient identifying characteristics:

- ◆ Body small and slender
- ◆ Mouth oblique
- ◆ Scales small, lateral line having about 90 scales
- ◆ Yellowish green on back side, silvery white on flanks and belly

Habitat: Freshwater

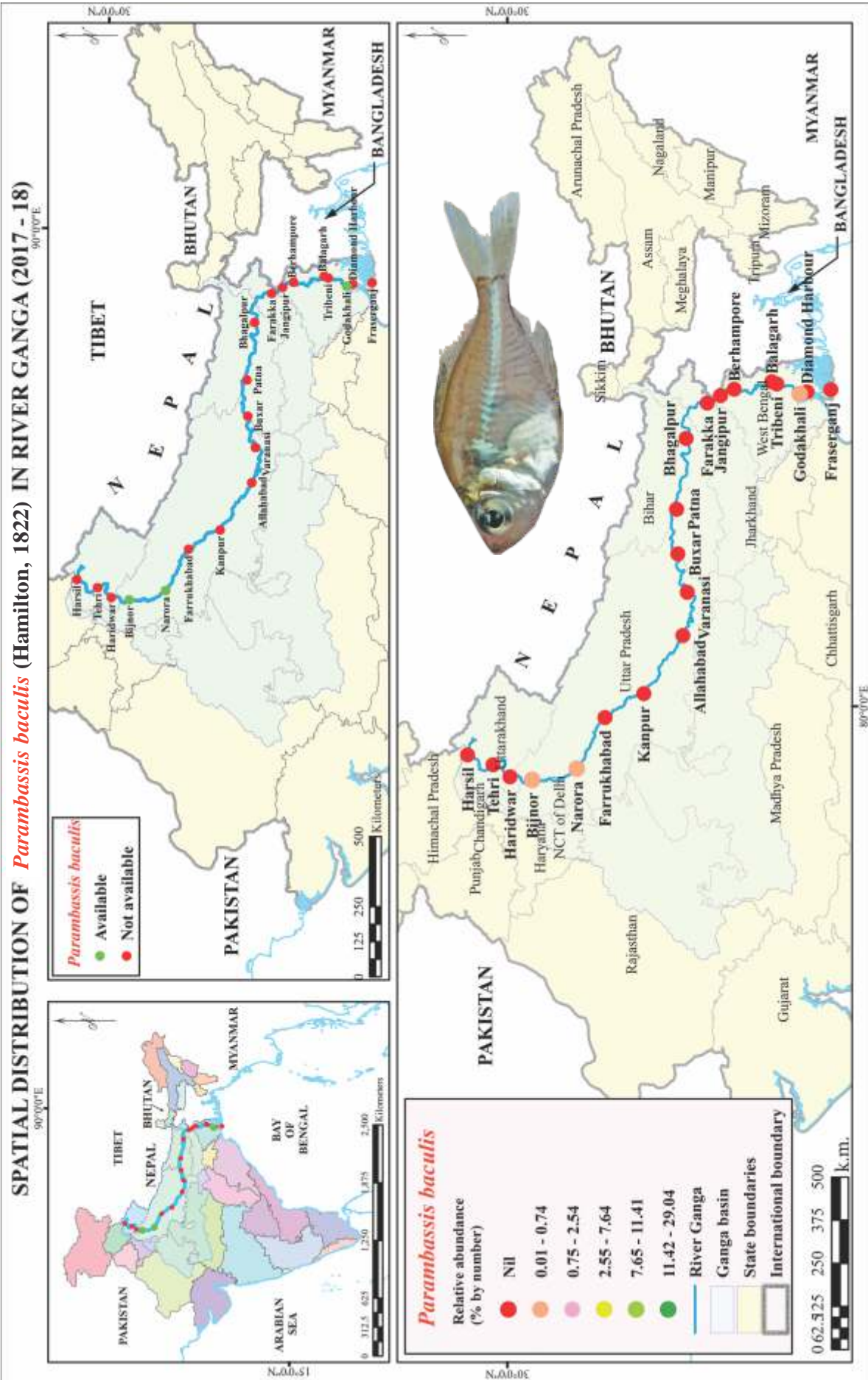
Maximum size (TL): 5.0 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Parambassis baculis* (Hamilton, 1822) IN RIVER GANGA (2017 - 18)



Parambassis ranga (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Ambassidae
Genus : *Parambassis*
Species : *ranga*



Vernacular name: Chanda (West Bengal)

Common English name: Indian glassy fish

Synonyms: *Chanda ranga*, *Pseudambassis ranga*, *Ambassis ranga*

Salient identifying characteristics:

- ◆ Body stout, deep and compressed
- ◆ Mouth oblique
- ◆ Scales small, lateral line having 47 to 63 scales
- ◆ A silvery broad lateral stripe is present on side of body

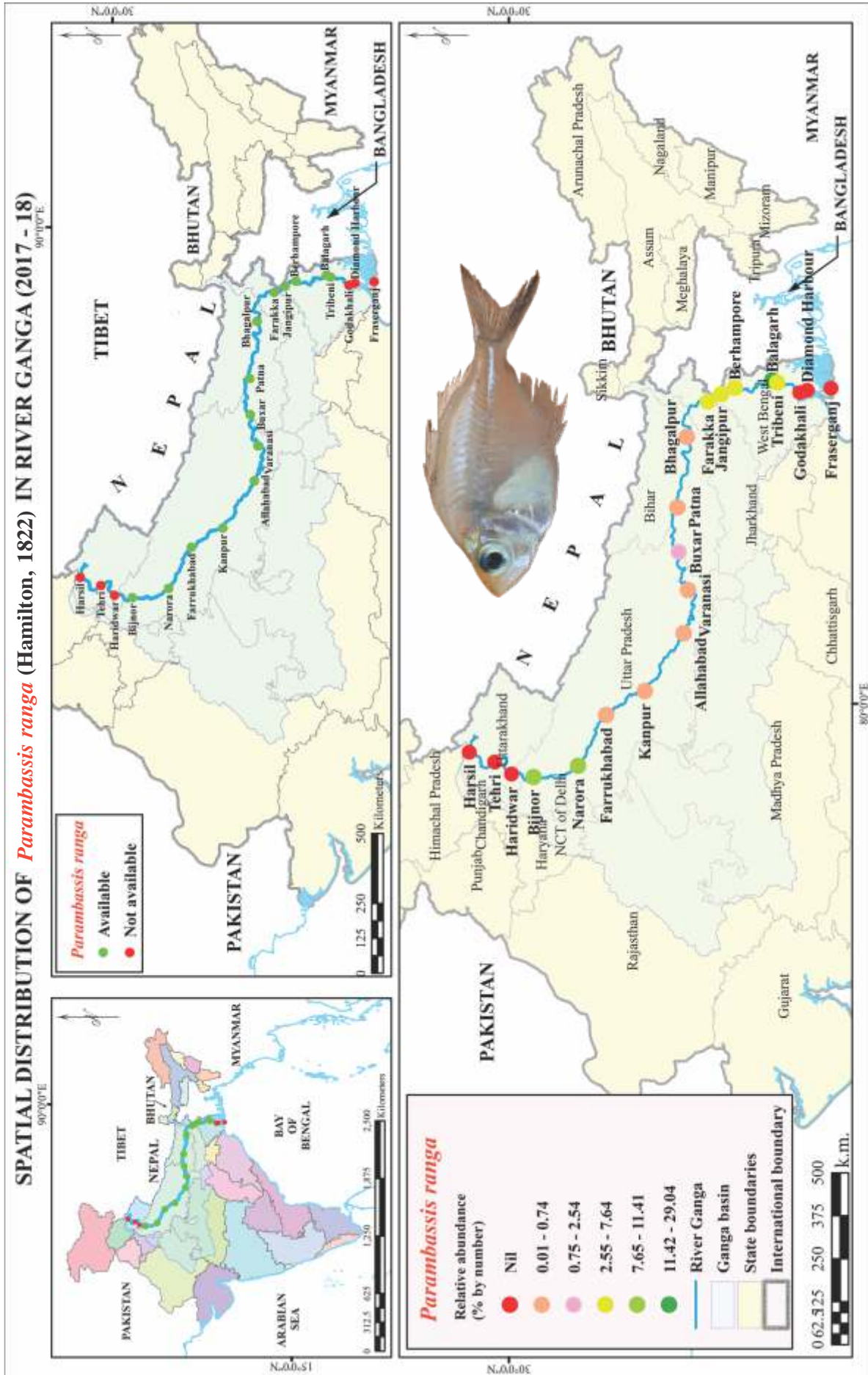
Habitat: Freshwater

Maximum size (TL): 8.0 cm

Food and feeding: Feeds on invertebrates, worms and crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Pseudapocryptes elongatus (Cuvier, 1816)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Gobiidae
Genus	: <i>Pseudapocryptes</i>
Species	: <i>elongatus</i>



Vernacular name: Sada gule (West Bengal)

Common English name: Not Available

Synonyms: *Pseudapocryptes lanceolatus*, *Apocryptes lanceolatus*

Salient identifying characteristics:

- ◆ Elongated and compressed body
- ◆ Mouth sub horizontal
- ◆ Dorsal fin very short. Caudal fin pointed and longer than head
- ◆ Scales small. In longitudinal series 200 scales are present
- ◆ Above part of body greenish and lower part lighter green in colour

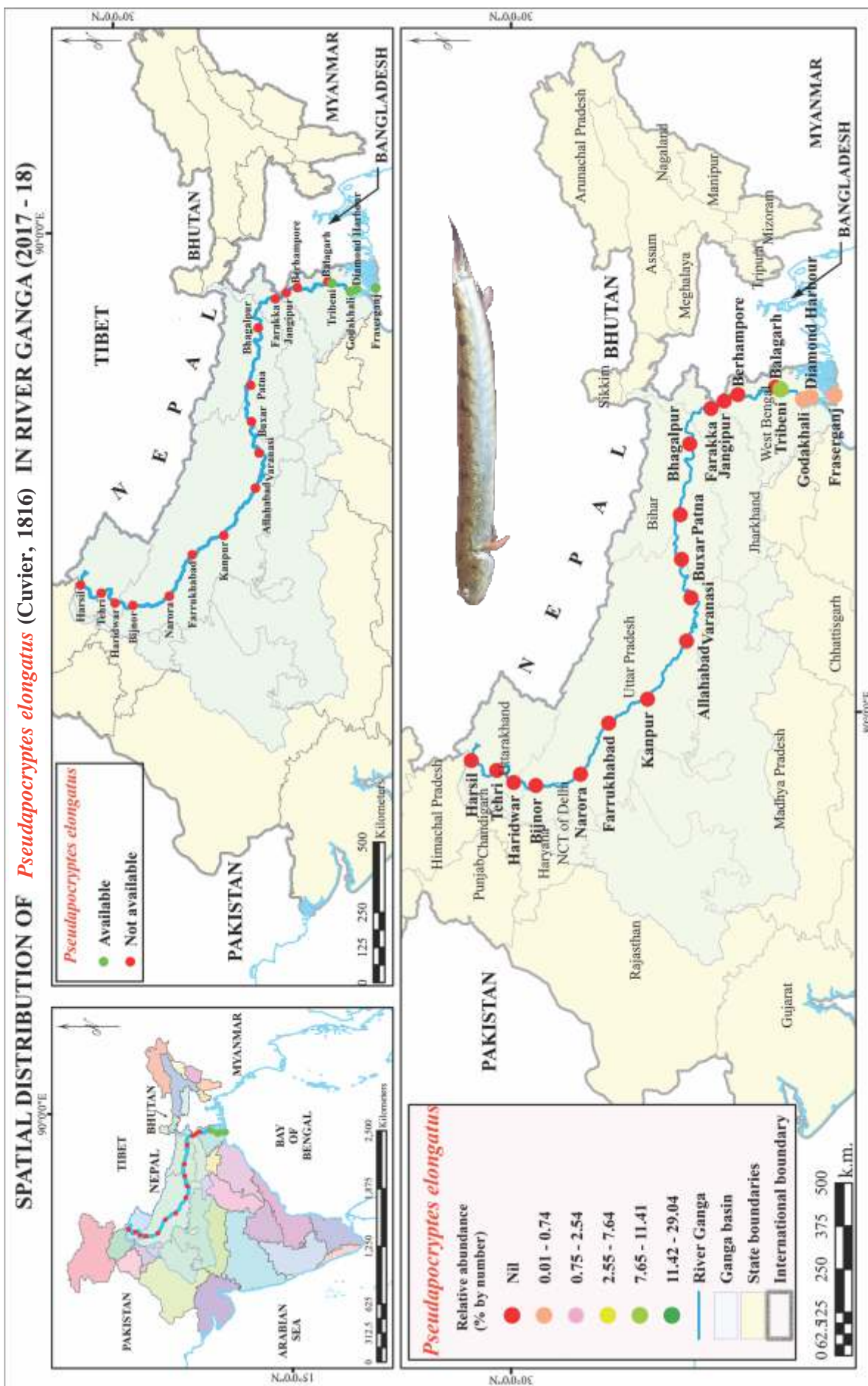
Habitat: Brackishwater and Freshwater

Maximum size (TL): 20 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

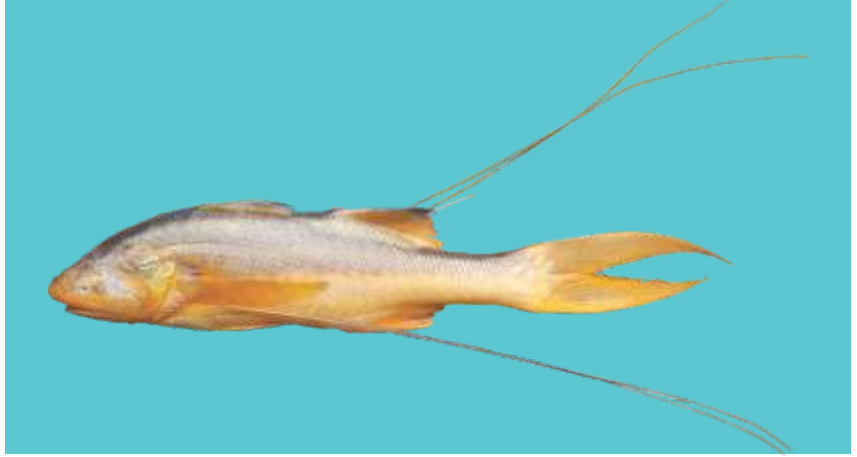
Commercial value: Used as food fish



Polynemus paradiseus (Linnaeus 1758)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Polynemidae
Genus : *Polynemus*
Species : *paradiseus*



Vernacular name: Topshe (West Bengal)

Common English name: Paradise threadfin

Synonyms: *Polynemus risua*, *Polynemus aureus*, *Polynemus toposui*

Salient identifying characteristics:

- ◆ Body elongated and slightly compressed. Eyes small
- ◆ Pectoral fin has two parts, upper part having all rays unbranched and lower part having 7 free filamentous rays, out of this upper 3 longest, moving far beyond caudal fin
- ◆ Caudal fin forked, upper lobe longer

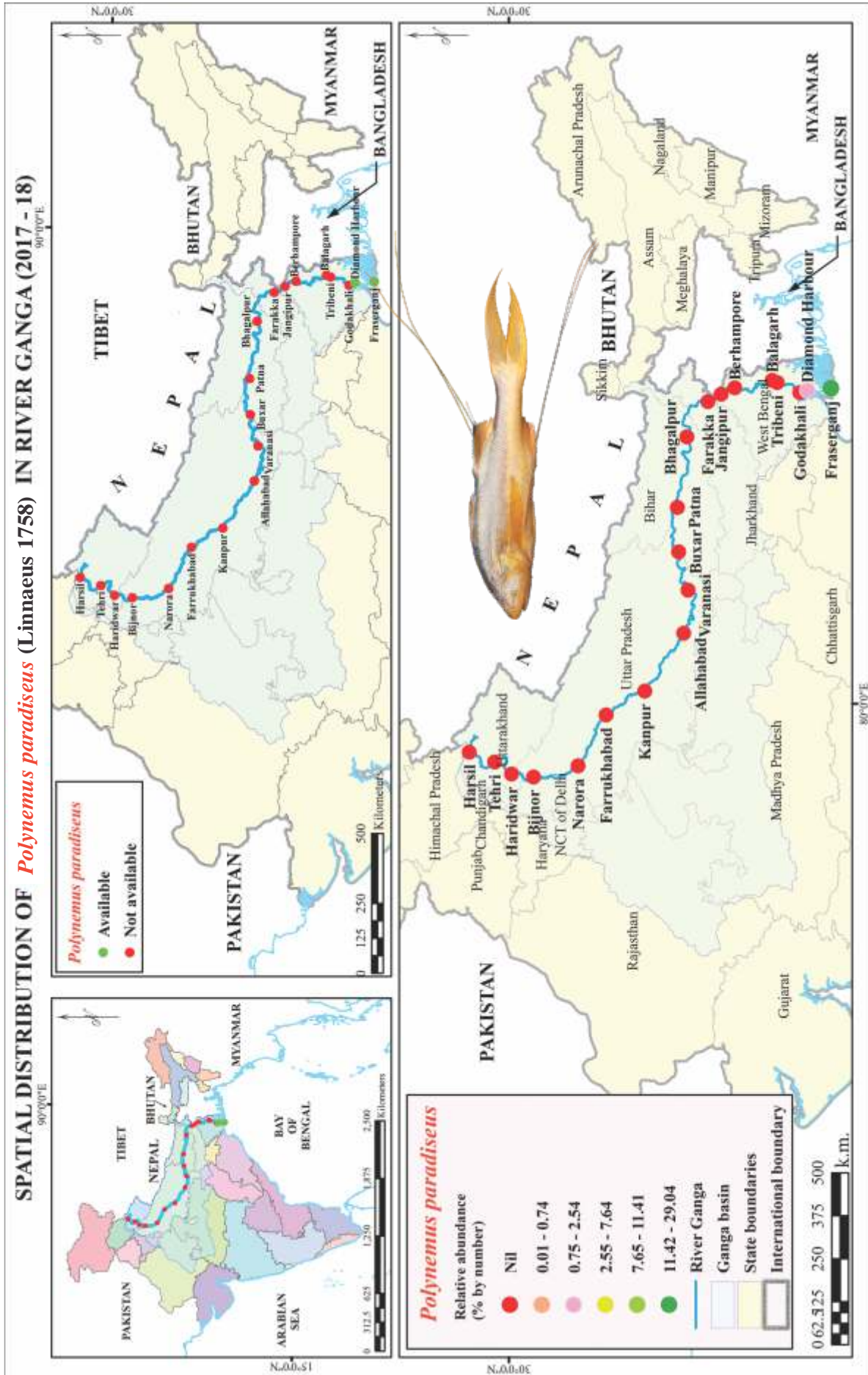
Habitat: Marinewater and Brackishwater

Maximum size (TL): 30 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Parambassis lala (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Ambassidae
Genus : *Parambassis*
Species : *lala*



Vernacular name: Kath chanda (West Bengal)

Common English name: Highfin glassy perchlet

Synonyms: *Ambassis lala*, *Chanda lala*

Salient identifying characteristics:

- ◆ Body elongate and compressed. Mouth oblique
- ◆ Second spine of dorsal fin very elongate
- ◆ Small scales, lateral line having about 90 scales
- ◆ Body with 3 longitudinal dusky bands moving dorsoventrally
- ◆ Operculum with dark stripes

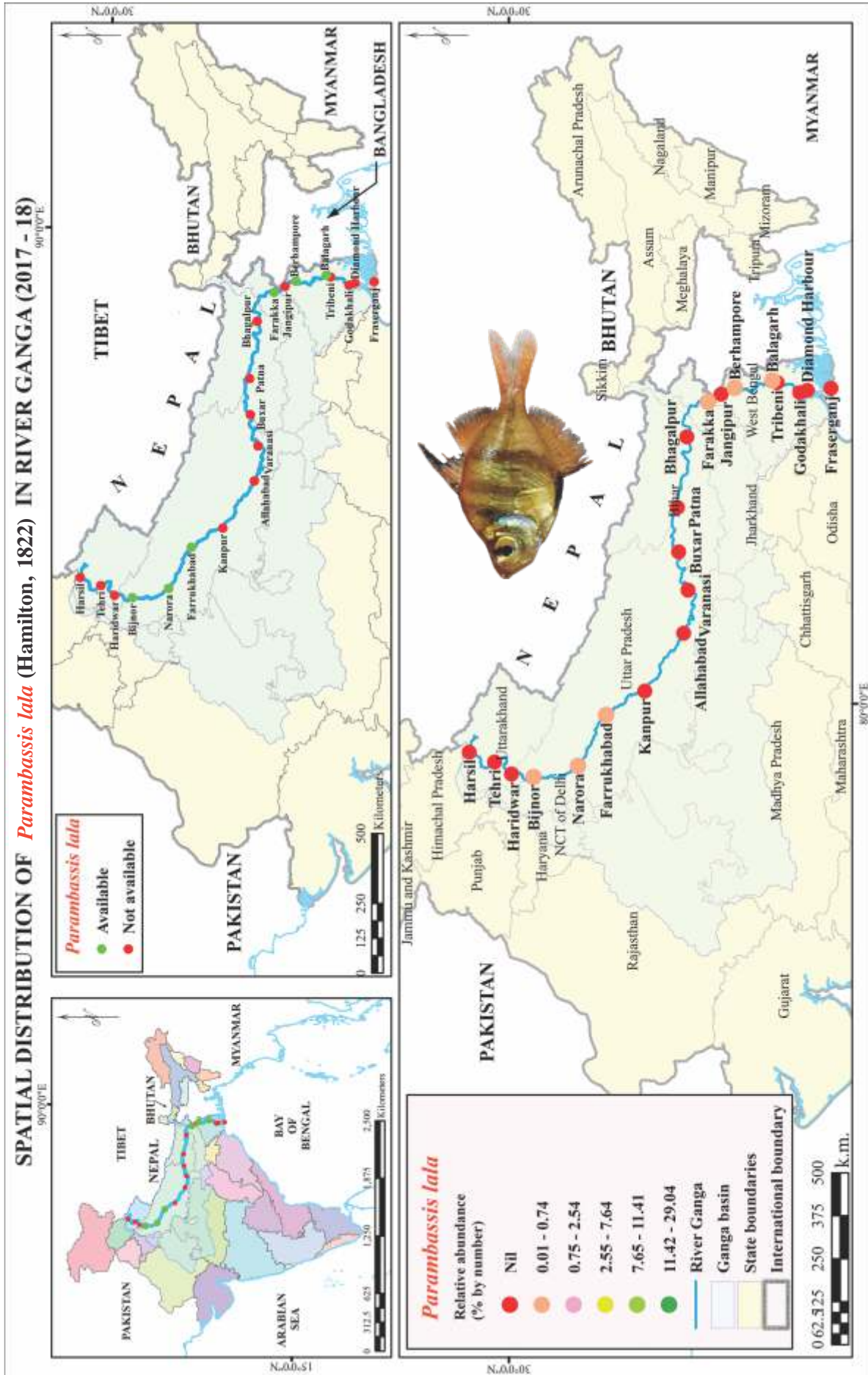
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 4 cm

Food and feeding: Herbivorous

Conservation status (IUCN Red list): Near Threatened

Commercial value: Used as food fish



Scatophagus argus (Linnaeus, 1766)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Scatophagidae
Genus : *Scatophagus*
Species : *argus*



Vernacular name: Pairachanda, Pairatoli (West Bengal)

Common English name: Spotted scat

Synonyms: *Chaetodon argus*, *Ephippus argus*

Salient identifying characteristics:

- ◆ Quadrangular and strongly compressed body
- ◆ Ground colour greenish. Juveniles with a few large roundish blotches, about size of eye, or with about 5 or 6 broad, dark, vertical bars
- ◆ Eye moderately large, Snout rounded. Mouth small, horizontal, not protractile

Habitat: Marinewater and Brackishwater

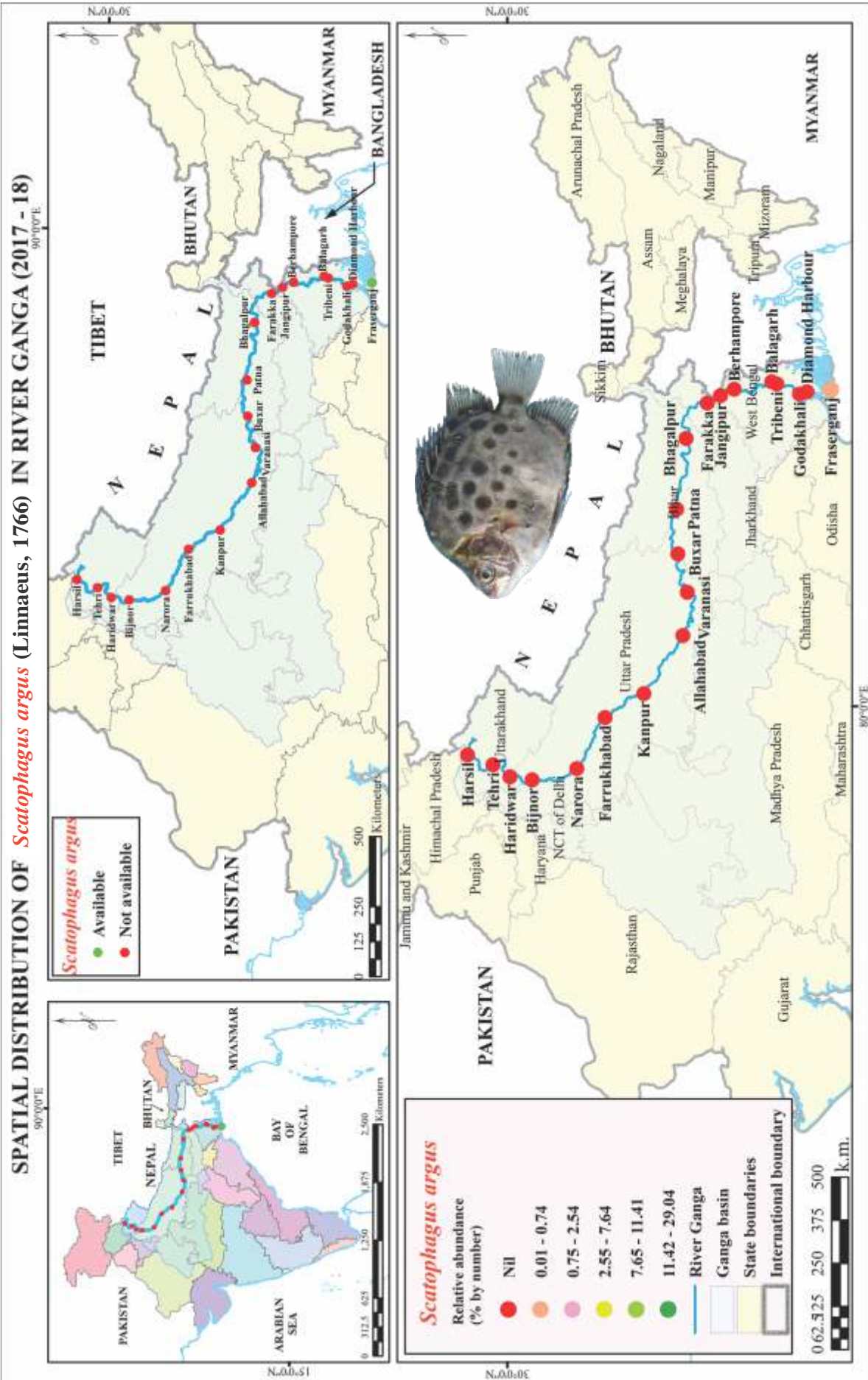
Maximum size (TL): 38 cm

Food and feeding: Feeds on worms, crustaceans, insects and plant matter

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Scatophagus argus* (Linnaeus, 1766) IN RIVER GANGA (2017 - 18)



Deveximentum insidiator (Bloch, 1787)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Leiognathidae
Genus	: <i>Deveximentum</i>
Species	: <i>insidiator</i>



Vernacular name: Taka (West Bengal)

Common English name: Deep pugnose ponyfish

Synonyms: *Secutor insidiator*, *Leiognathus insidiator*

Salient identifying characteristics:

- ◆ Body oval, very deep and compressed. Mouth small, pointing upward when protracted
- ◆ Small scales; suborbital region scaled; lateral line ends at below the middle of soft portion of dorsal fin
- ◆ Body deeper 1.6 to 2.6 times in standard length
- ◆ Belly silvery, vertical bars and spots extending below lateral line

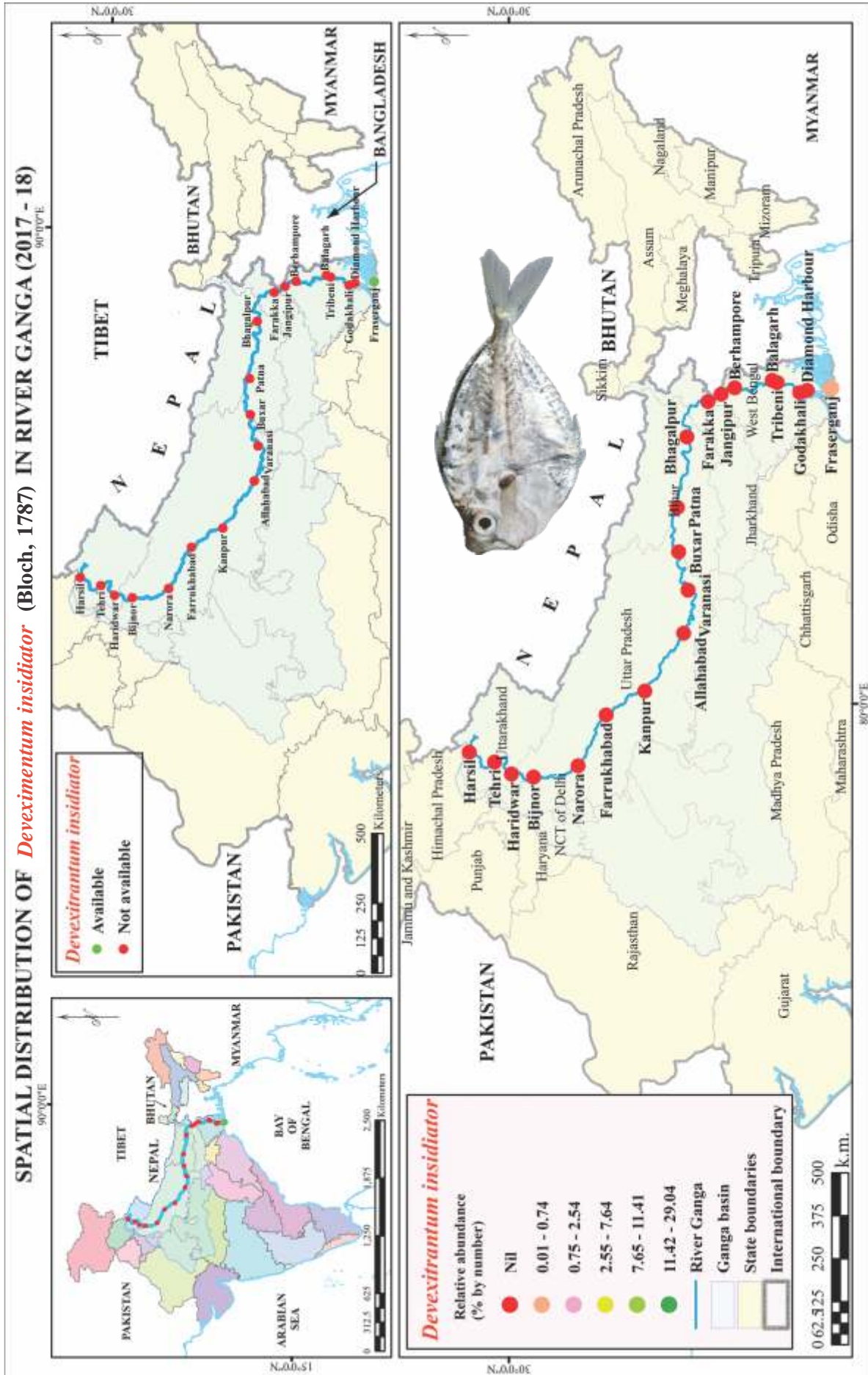
Habitat: Marinewater and Brackishwater

Maximum size (TL): 8 cm

Food and feeding: Zooplanktivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Siganus javus (Linnaeus, 1766)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Siganidae
Genus : *Siganus*
Species : *javus*



Vernacular name: Not Known

Common English name: Streaked spinefoot

Synonyms: *Teuthis javus*, *Amphacanthus javus*

Salient identifying characteristics:

- ◆ Dorsal side is bronze in colour while the ventral part is white, and irish brown coloured thorax
- ◆ Hyaline pectoral fin
- ◆ Pelvic fins are white in colour
- ◆ Spine on the dorsal side is slender with a stout anal spine

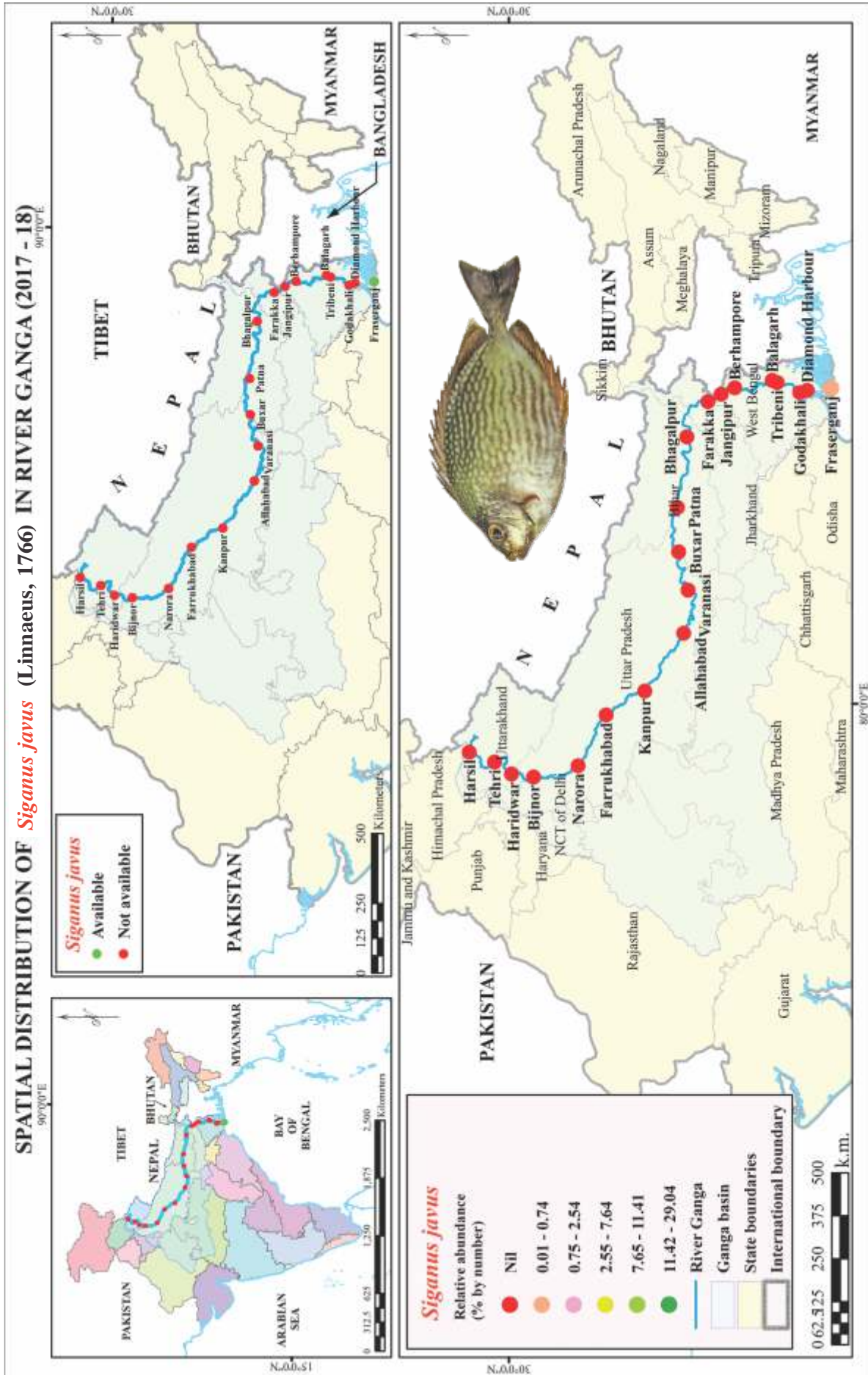
Habitat: Marinewater and Brackishwater

Maximum size (TL): 53 cm

Food and feeding: Feeds on algae attached to the substrate and on floating algal fragments

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Sillaginopsis domina (Cuvier, 1816)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Sillaginidae
Genus	: <i>Sillaginopsis</i>
Species	: <i>domina</i>



Vernacular name: Tool bele (West Bengal)

Common English name: Flathead sillago

Synonyms: *Sillago panijus*, *Cheilodipterus panijus*

Salient identifying characteristics:

- ◆ Depressed head and very small eyes.
- ◆ Second dorsal spine very elongate.
- ◆ 1st and 2nd dorsal with 10 and one spine respectively with 25-27 rays.
- ◆ Belly colour pale brown to white and fins with dusting of fine black spots.

Habitat: Brackishwater and Marinewater

Maximum Length (TL): 44 cm

Food and feeding: Feed on fish, crustaceans and algae

Threat status (IUCN red list): Not Evaluated

Commercial value: Used as food fish

Sillago sihama (Fabricius, 1775)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Sillaginidae
Genus : *Sillago*
Species : *sihama*



Vernacular name: Tool bele (West Bengal)

Common English name: Silver sillago

Synonyms: *Atherina sihama*, *Sillago sehama*

Salient identifying characteristics:

- ◆ Body elongated. Small and terminal mouth
- ◆ Scales small, cycloid, 67 to 72 scales in lateral line
- ◆ Dorsal side back light brown and lower ventral side whitish or silvery colour

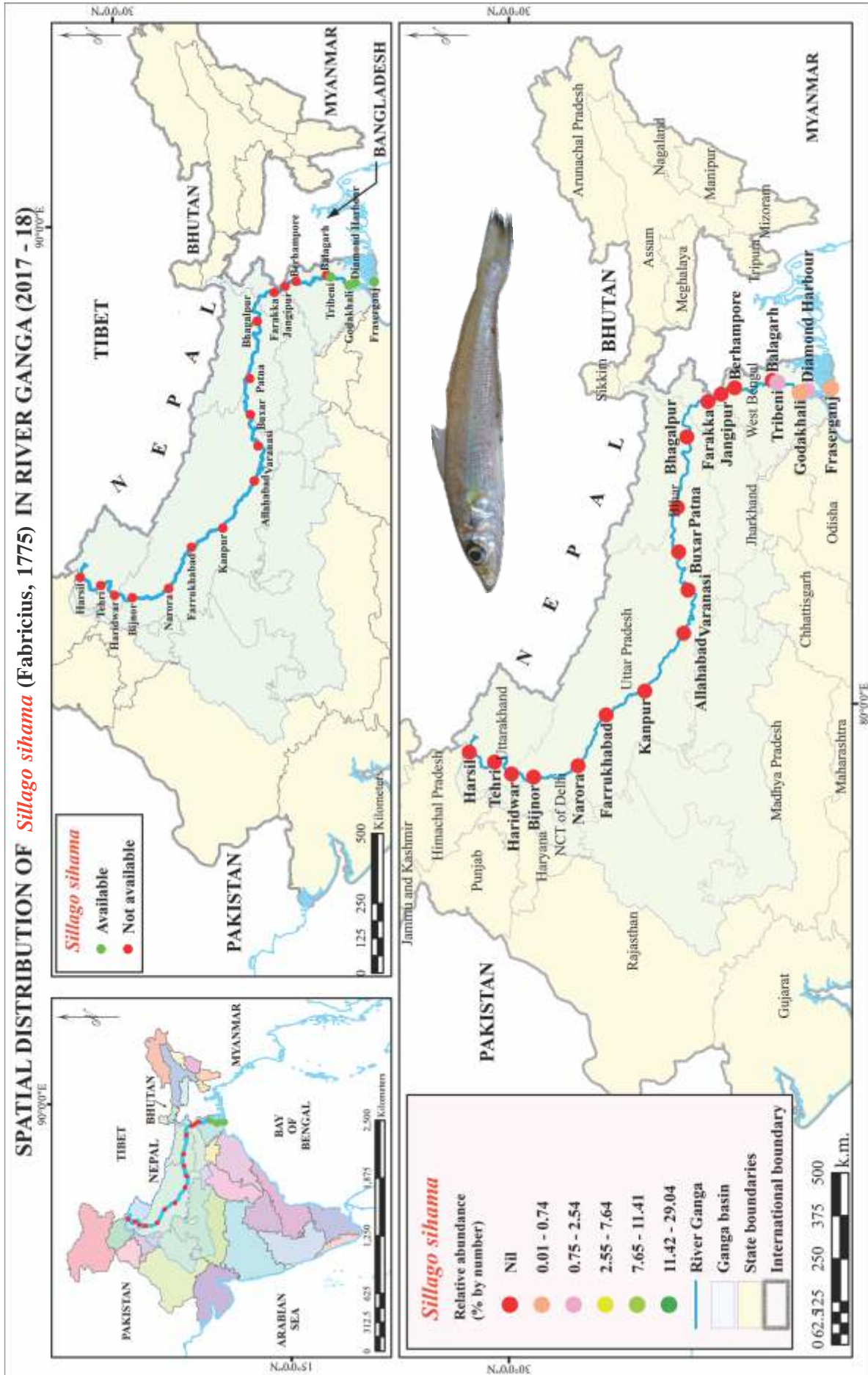
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 31 cm

Food and feeding: Feeds mainly on polychaete worms, small prawns, shrimps and amphipods

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Terapon jarbua (Fabricius, 1775)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Terapontidae
Genus : *Terapon*
Species : *jarbua*



Vernacular name: Kath koi (West Bengal)

Common English name: Jarbua terapon

Synonyms: *Therapon jarboa*, *Sciaena jarbua*

Salient identifying characteristics:

- ◆ Oblong body and slightly compressed, the ventral profile less distinct than dorsal profile
- ◆ Mouth slightly oblique
- ◆ 75 to 100 rows of scales in lateral line, 13 to 17 rows above the lateral line and 19 to 24 rows below the line
- ◆ 3 or 4 longitudinal downwardly curved black stripes

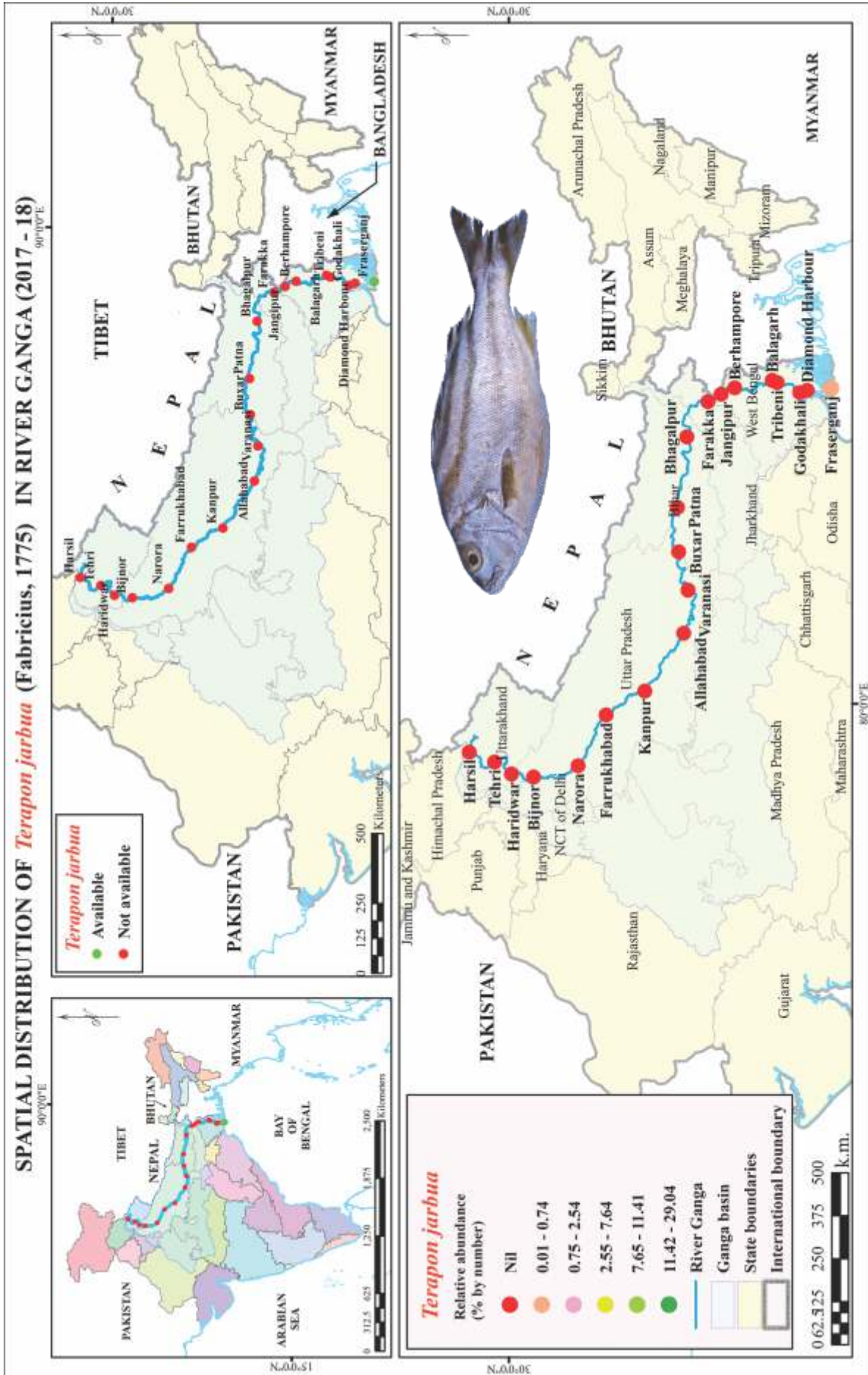
Habitat: Marinewater and Brackishwater

Maximum size (TL): 36 cm

Food and feeding: Omnivorous

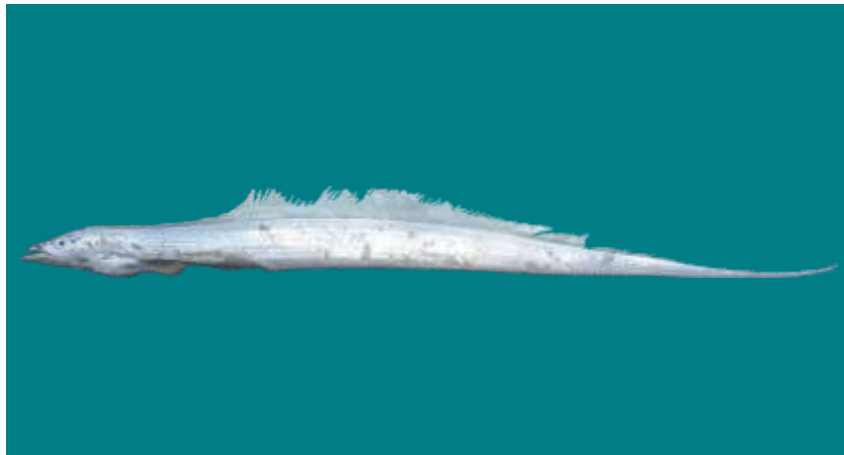
Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Eupleurogrammus muticus (Gray, 1831)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Trichiuridae
Genus	: <i>Eupleurogrammus</i>
Species	: <i>muticus</i>



Vernacular name: Fite mach, Churi (West Bengal)

Common English name: Small head hairtail

Salient identifying characteristics:

- ◆ Extremely elongated body and tapered to a point
- ◆ Anal fin reduced and caudal fin absent
- ◆ Reduced pelvic fins converted into a small scale like process

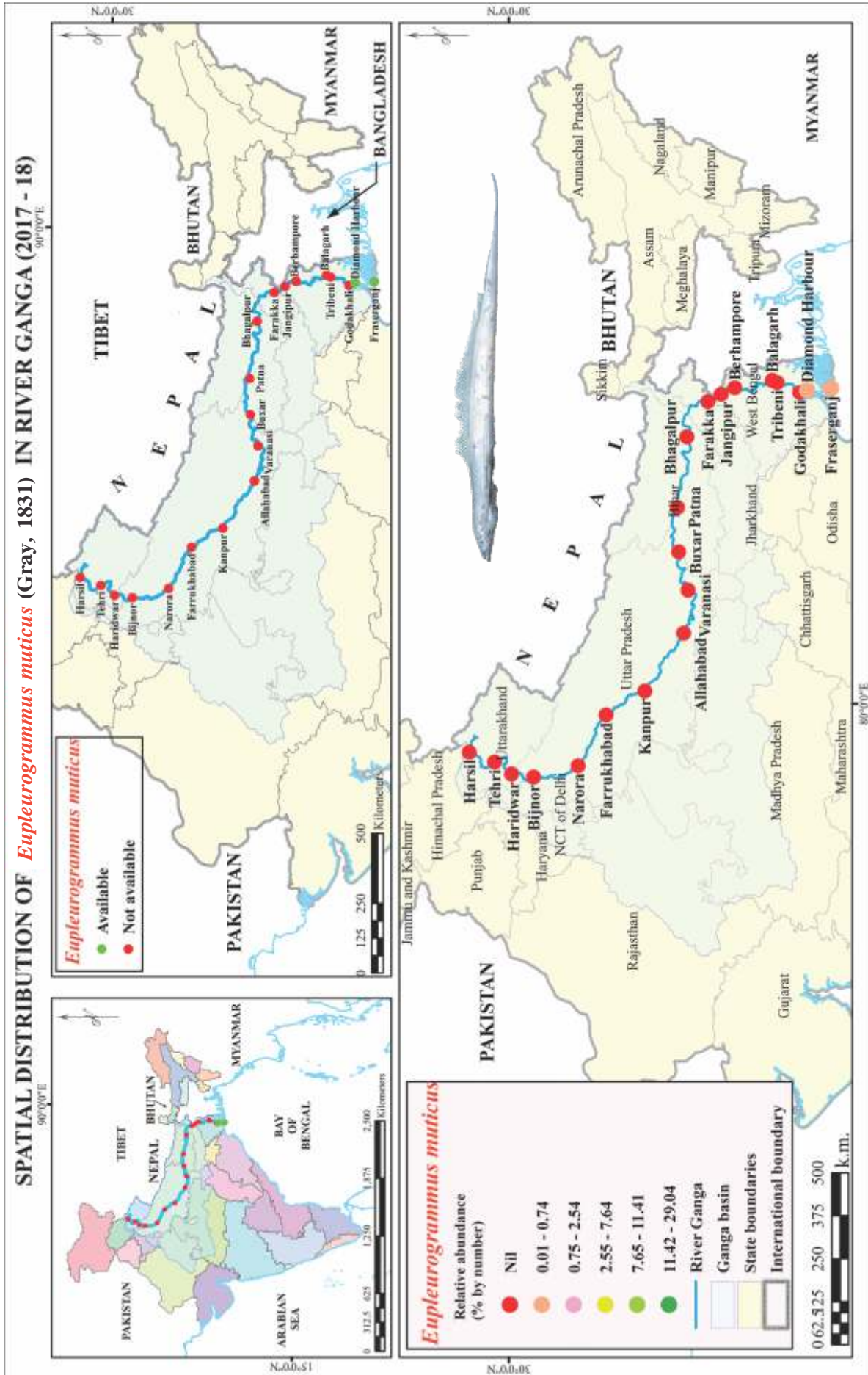
Habitat: Marinewater and Brackishwater

Maximum size (TL): 87 cm

Food and feeding: Feeds on a wide variety of small fish and crustaceans

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Trichiurus lepturus (Linnaeus, 1758)

Systematic classification:	
Class	: Actinopterygii
Order	: Perciformes
Family	: Trichiuridae
Genus	: <i>Trichiurus</i>
Species	: <i>lepturus</i>



Vernacular name: Fite mach, Churi (West Bengal)

Common English name: Largehead hairtail

Synonyms: *Trachiurus lepturus*, *Trichurus lepturus*

Salient identifying characteristics:

- ◆ Body is elongated, compressed and tapering to a point
- ◆ Pectoral spine not serrated
- ◆ Anal fin with 100 to 105 minute reduced spinules

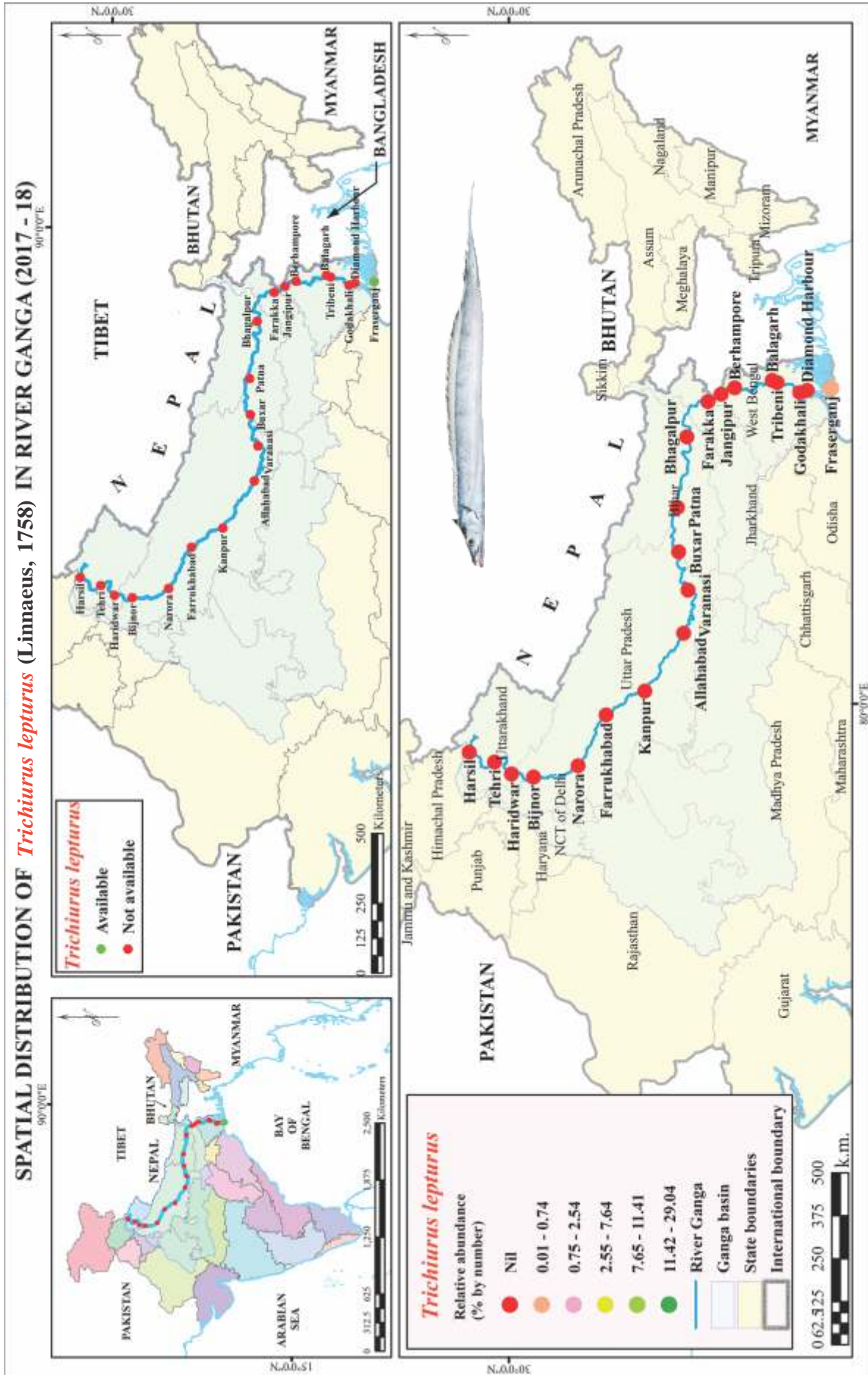
Habitat: Marinewater and Brackishwater

Maximum size (TL): 234 cm

Food and feeding: Feeds mostly on euphausiids, small pelagic planktonic crustaceans and small fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Trichogaster chuna (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Osphronemidae
Genus : *Trichogaster*
Species : *chuna*



Vernacular name: Kholisa, Khasso (Uttar Pradesh)

Common English name: Honey gourami

Synonyms: *Colisa chuna*, *Trichopodus chuna*

Salient identifying characteristics:

- ◆ Body is oblong and compressed
- ◆ Mouth small and extended
- ◆ Dorsal spine extends to last. Caudal fin slightly emarginated
- ◆ Large scale, longitudinal line with 27 to 29 scales

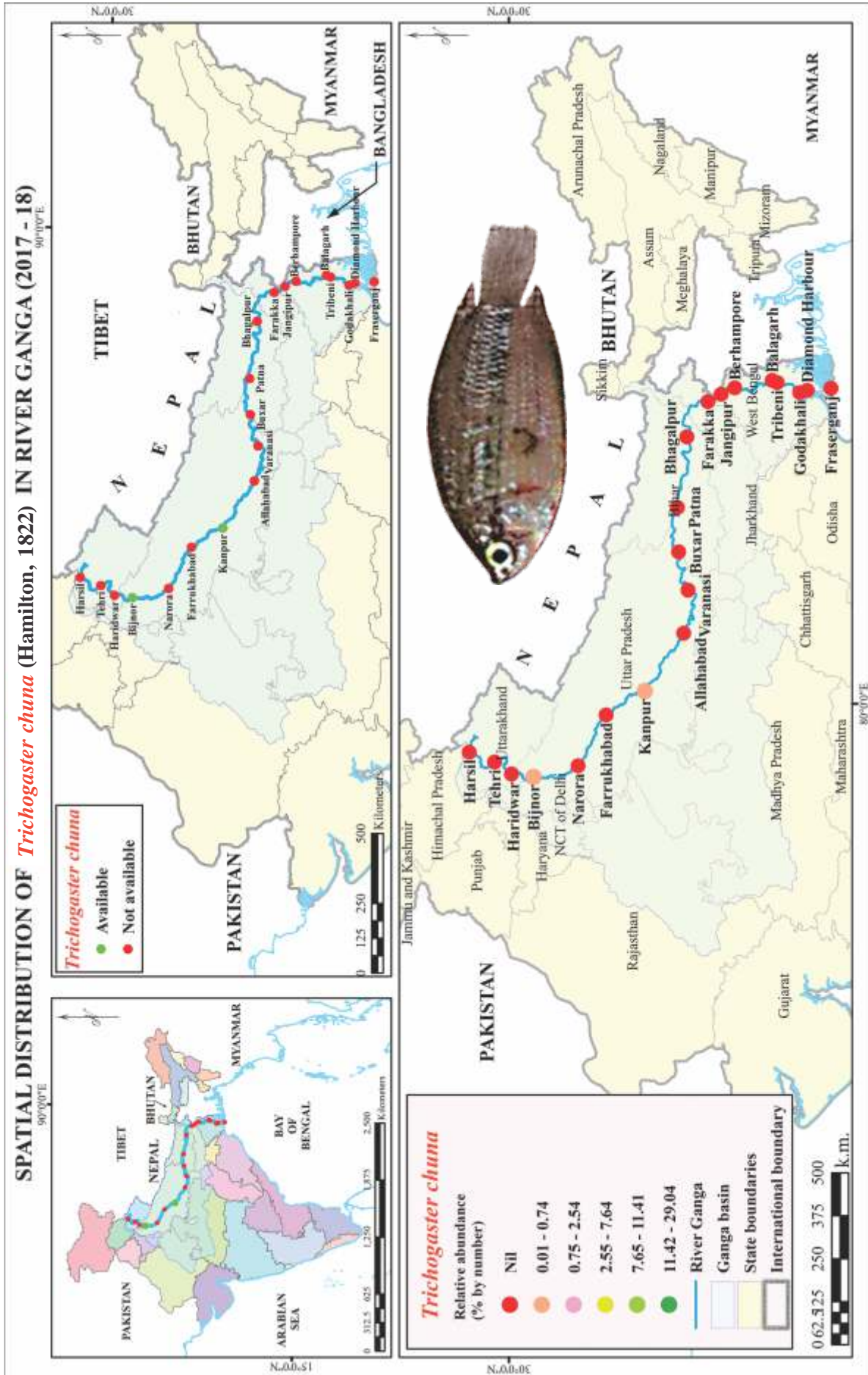
Habitat: Freshwater

Maximum size (TL): 7 cm

Food and feeding: Feeds mostly on euphausiids, small pelagic planktonic crustaceans and small fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Trichogaster fasciata Bloch & Schneider, 1801

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Osphronemidae
Genus : *Trichogaster*
Species : *fasciata*



Vernacular name: Khasso (Uttar Pradesh, Bihar), Kholshe (West Bengal)

Common English name: Banded gourami

Synonyms: *Colisa fasciatus*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Mouth small
- ◆ Pelvic fin thread like and caudal fin truncate
- ◆ Greenish with oblique orange in colour or bluish bars descending downwards and backwards from the back to the anal fin

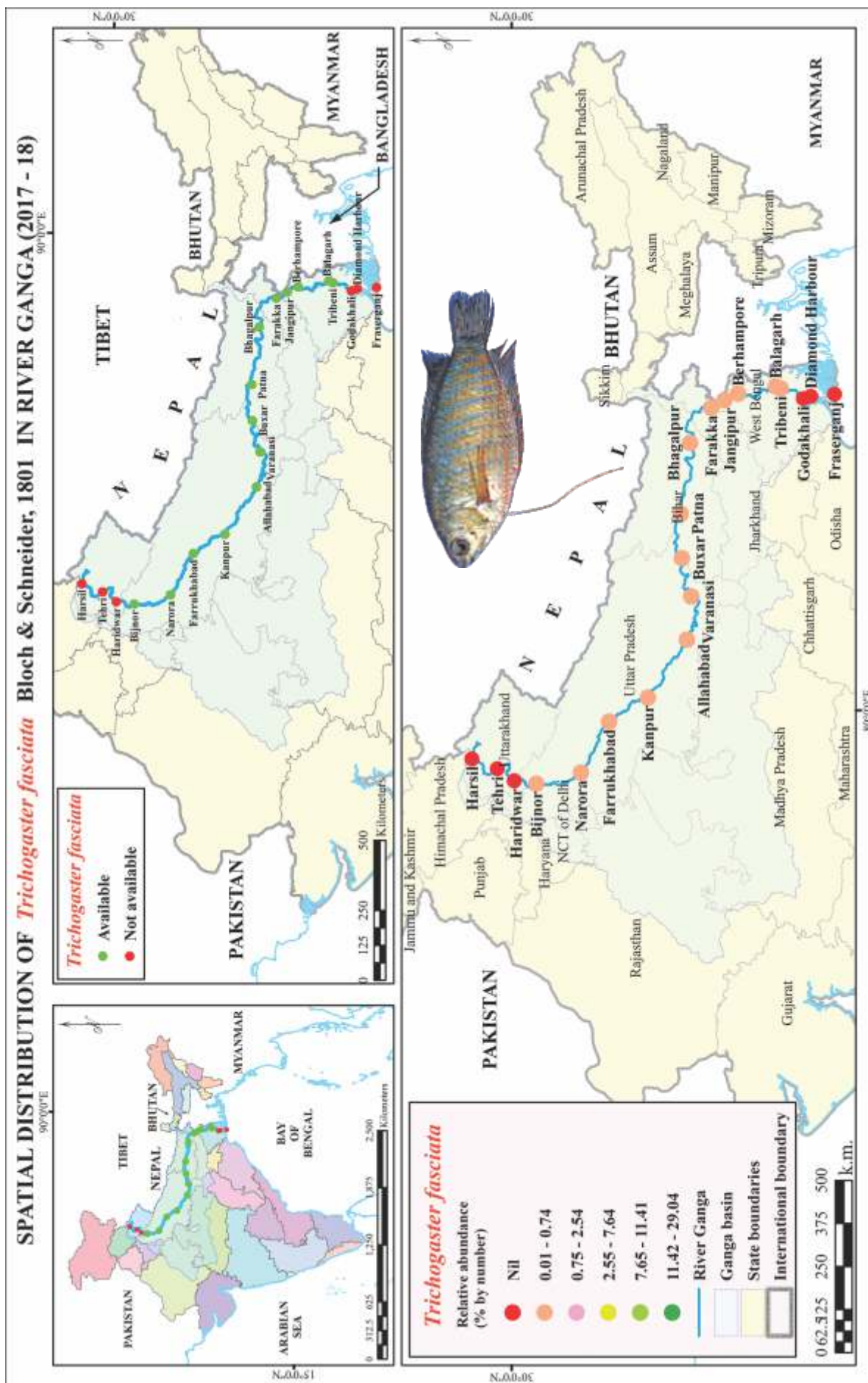
Habitat: Freshwater

Maximum size (TL): 12.5 cm

Food and feeding: Feeds mostly on euphausiids, small pelagic planktonic crustaceans and small fishes

Conservation status (IUCN Red list): Least Concern

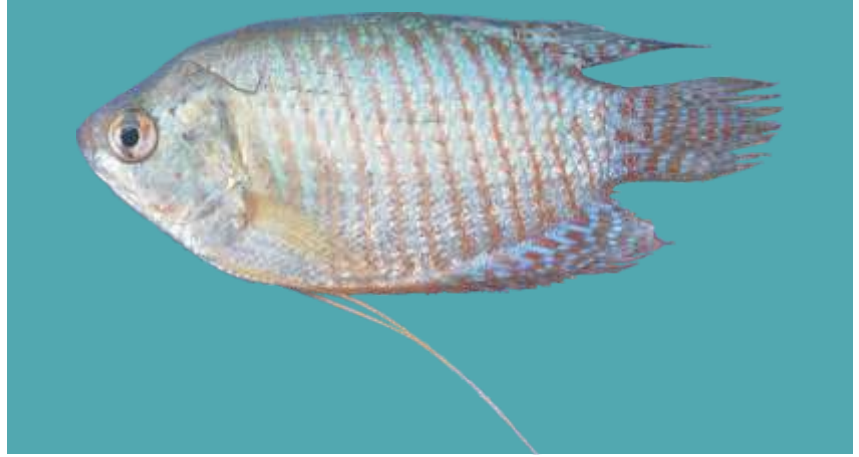
Commercial value: Used as food and ornamental fish



Trichogaster lalius (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Perciformes
Family	: Osphronemidae
Genus	: <i>Trichogaster</i>
Species	: <i>lalius</i>



Vernacular name: Kanghi, Dholayia (Uttar Pradesh, Bihar) Lal Kholshé (West Bengal)

Common English name: Dwarf gourami

Synonyms: *Colisa lalia*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Mouth small
- ◆ Scales large, 27 to 28 in longitudinal series
- ◆ Greenish with oblique orange in colour or bluish bars descending downwards and backwards from the back to the anal fin

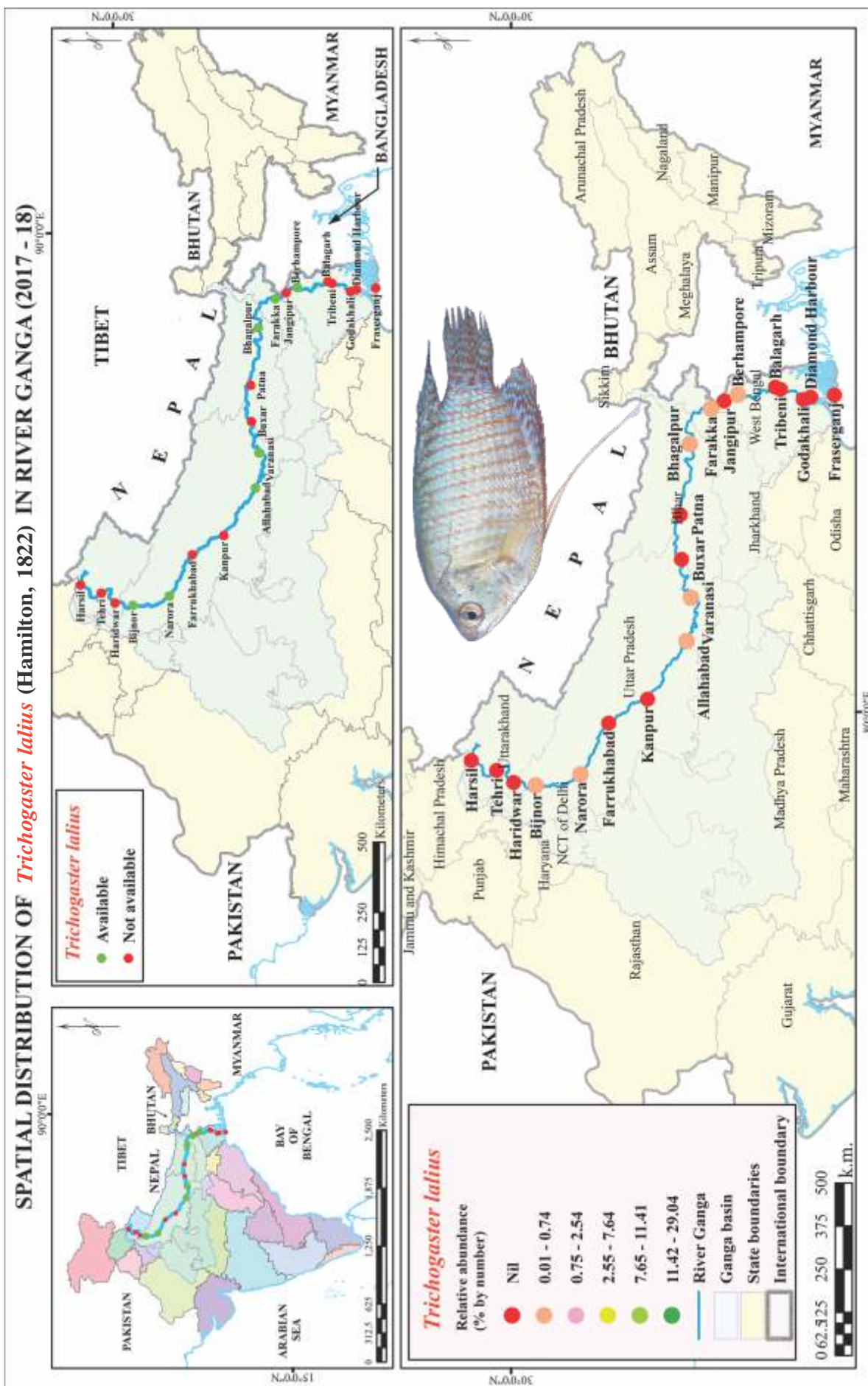
Habitat: Freshwater

Maximum size (TL): 9.5 cm

Food and feeding: Feeds mostly on euphausiids, small pelagic planktonic crustaceans and small fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



| *Lates calcarifer* (Bloch, 1790) |

Systematic classification:

Class : Actinopterygii

Order : Perciformes

Family : Latidae

Genus : *Lates*

Species : *calcarifer*



Vernacular name: Bhetki (West Bengal)

Common English name: Baramundi

Synonyms: *Holocentrus calcarifer*

Salient identifying characteristics:

- ◆ Body elongated and moderately compressed
- ◆ Ctenoid scales present
- ◆ Villiform teeth present on Jaws, some are on tongue also

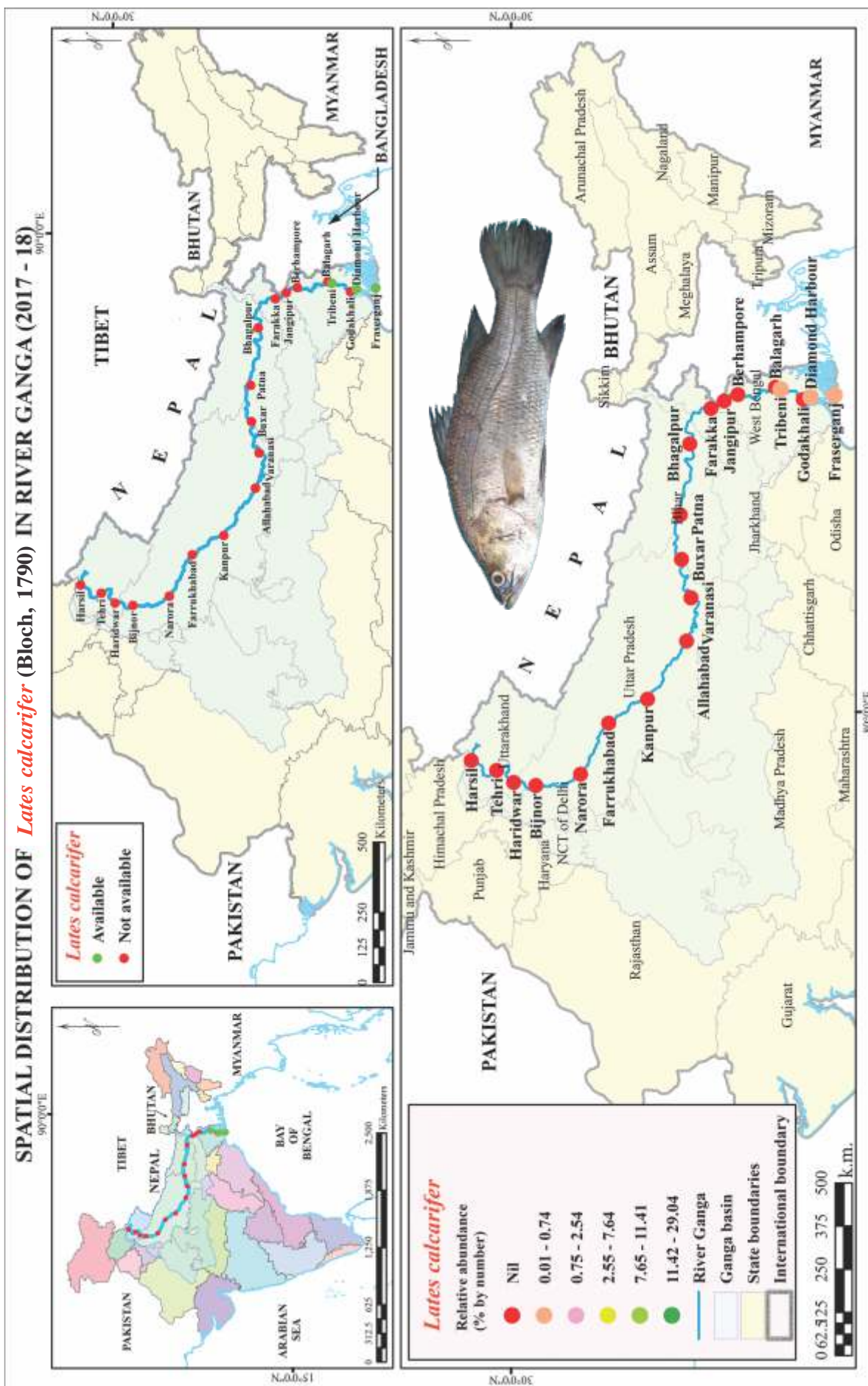
Habitat: Freshwater, Brackishwater and Marinewater

Maximum size (TL): 200 cm

Food and feeding: Feeds on fishes and crustaceans

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish







Pleuronectiformes

Brachirus pan (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Pleuronectiformes
Family : Soleidae
Genus : *Brachirus*
Species : *pan*



Vernacular name: Pan mach (West Bengal)

Common English name: Pan sole

Synonyms: *Euryglossa pan*, *Pleuronectes pan*, *Synaptura pan*

Salient identifying characteristics:

- ◆ Body is ovoid in shape with equally contoured arched body
- ◆ Fringed lower lips
- ◆ Well developed long fins
- ◆ Ctenoid scales are present on both sides of the body
- ◆ Eyes are brownish with irregular spots and blotches

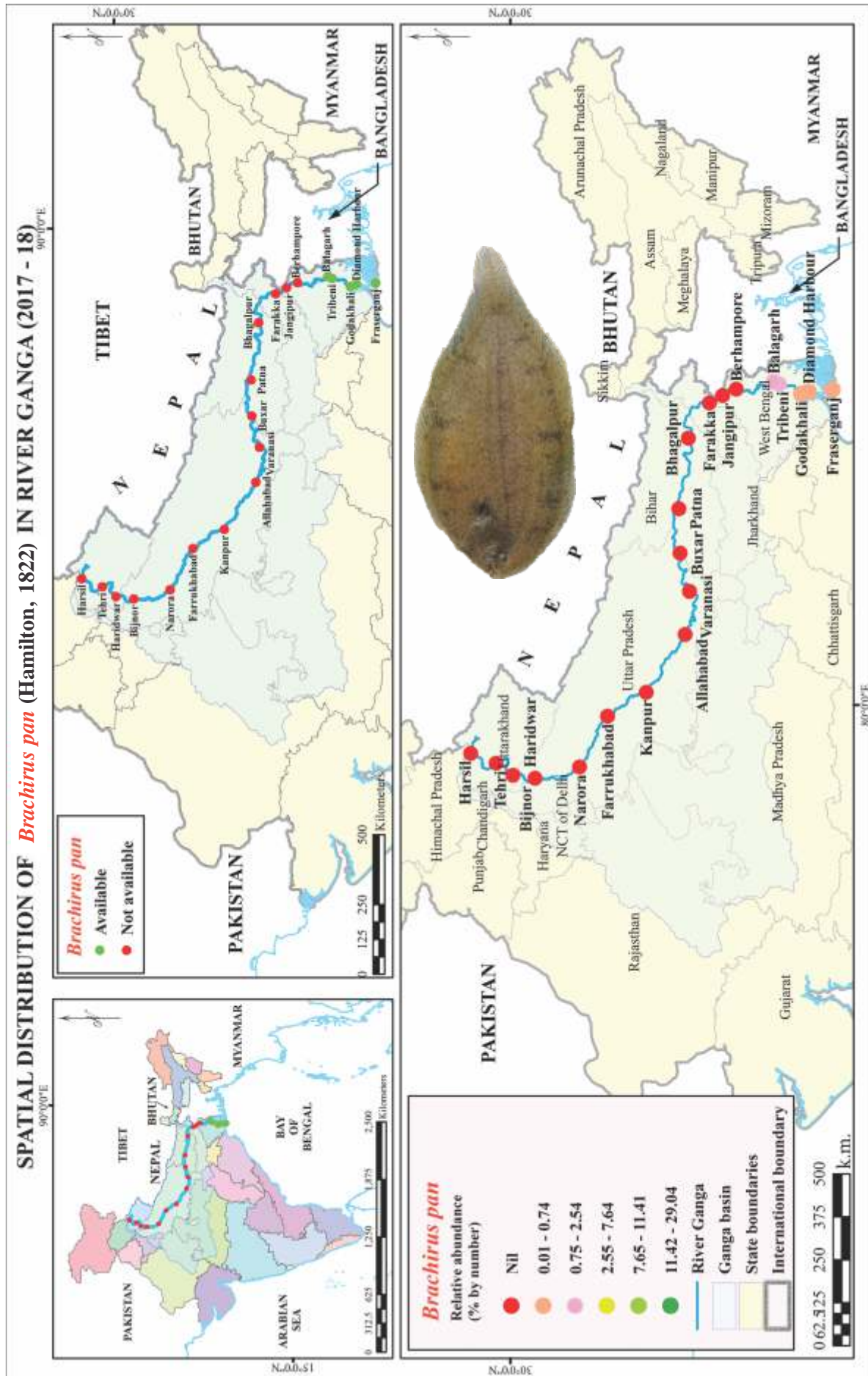
Habitat: Freshwater, Brackishwater and Marinewater

Maximum size (TL): 9 cm

Food and feeding: Feeds on brine shrimp, mysids, black worms, earthworms or bloodworms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Cynoglossus arel (Bloch & Schneider, 1801)

Systematic classification:

Class : Actinopterygii
Order : Pleuronectiformes
Family : Cynoglossidae
Genus : *Cynoglossus*
Species : *arel*



Vernacular name: Banspata (West Bengal)

Common English name: Large scale tongue sole

Synonyms: *Pleuronectes arel*

Salient identifying characteristics:

- ◆ Body is flattened and tongue shaped
- ◆ Eyes are contiguous
- ◆ Snout is obtusely pointed with short rostral hook
- ◆ Mouth is broad extending beyond the eye
- ◆ Caudal fin is pointed and consists of 10 rays
- ◆ Presence of large ctenoid scales on both side

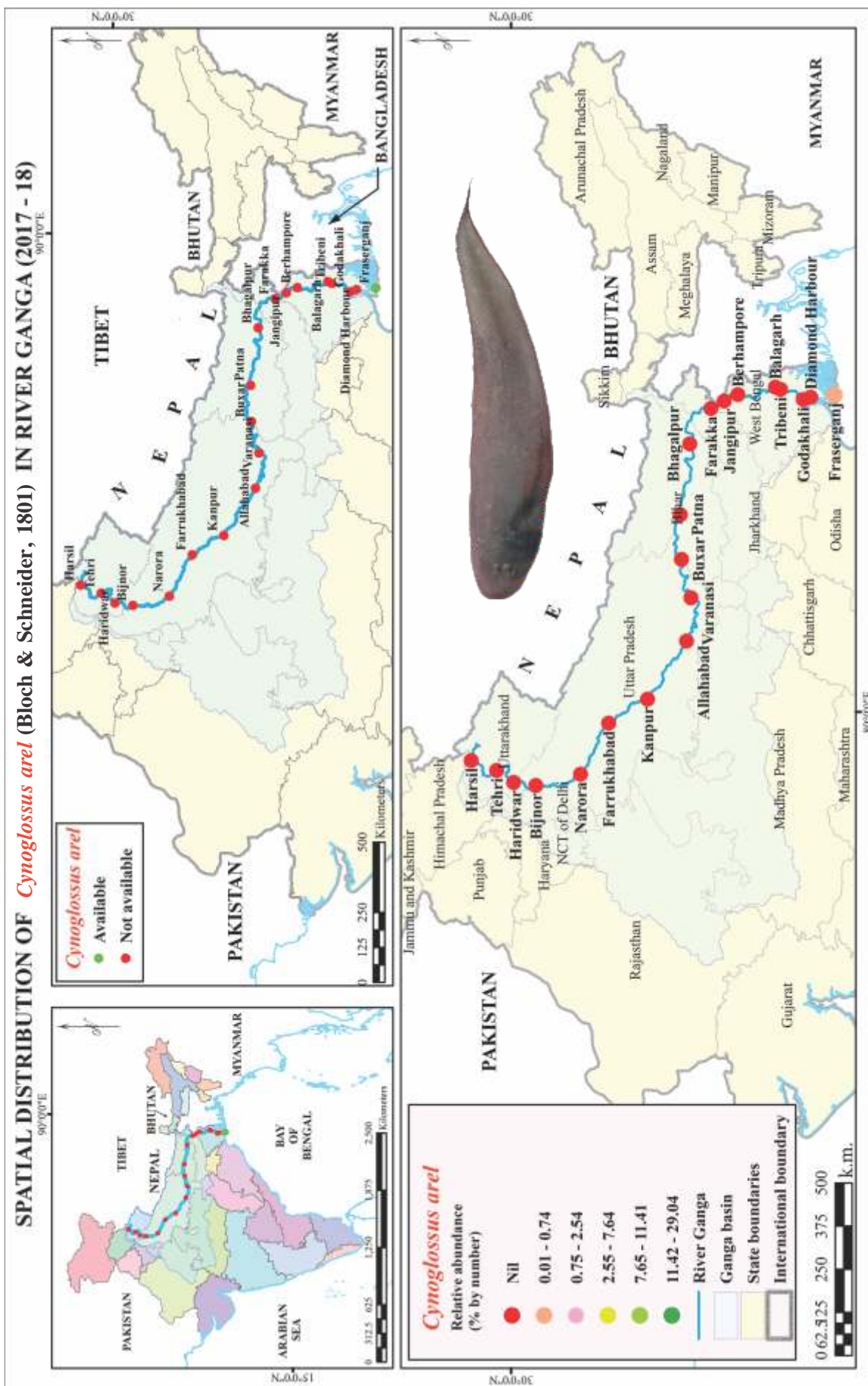
Habitat: Marinewater and Brackishwater

Maximum size (TL): 40 cm

Food and feeding: Feeds primarily on benthic invertebrates

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as a food fish in coastal stretches of the river



Cynoglossus cynoglossus (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Pleuronectiformes
Family	: Cynoglossidae
Genus	: <i>Cynoglossus</i>
Species	: <i>cynoglossus</i>



Vernacular name: Banspata (West Bengal)

Common English name: Bengal tongue sole

Synonyms: *Achirus cynoglossus*, *Icania cynoglossa*

Salient identifying characteristics:

- ◆ Body is highly depressed, tongue shaped with obtusely pointed snout
- ◆ Presence of distinct eyes
- ◆ Presence of ctenoid scales on both side of the body
- ◆ Body is marbled colored and whitish on the blind side

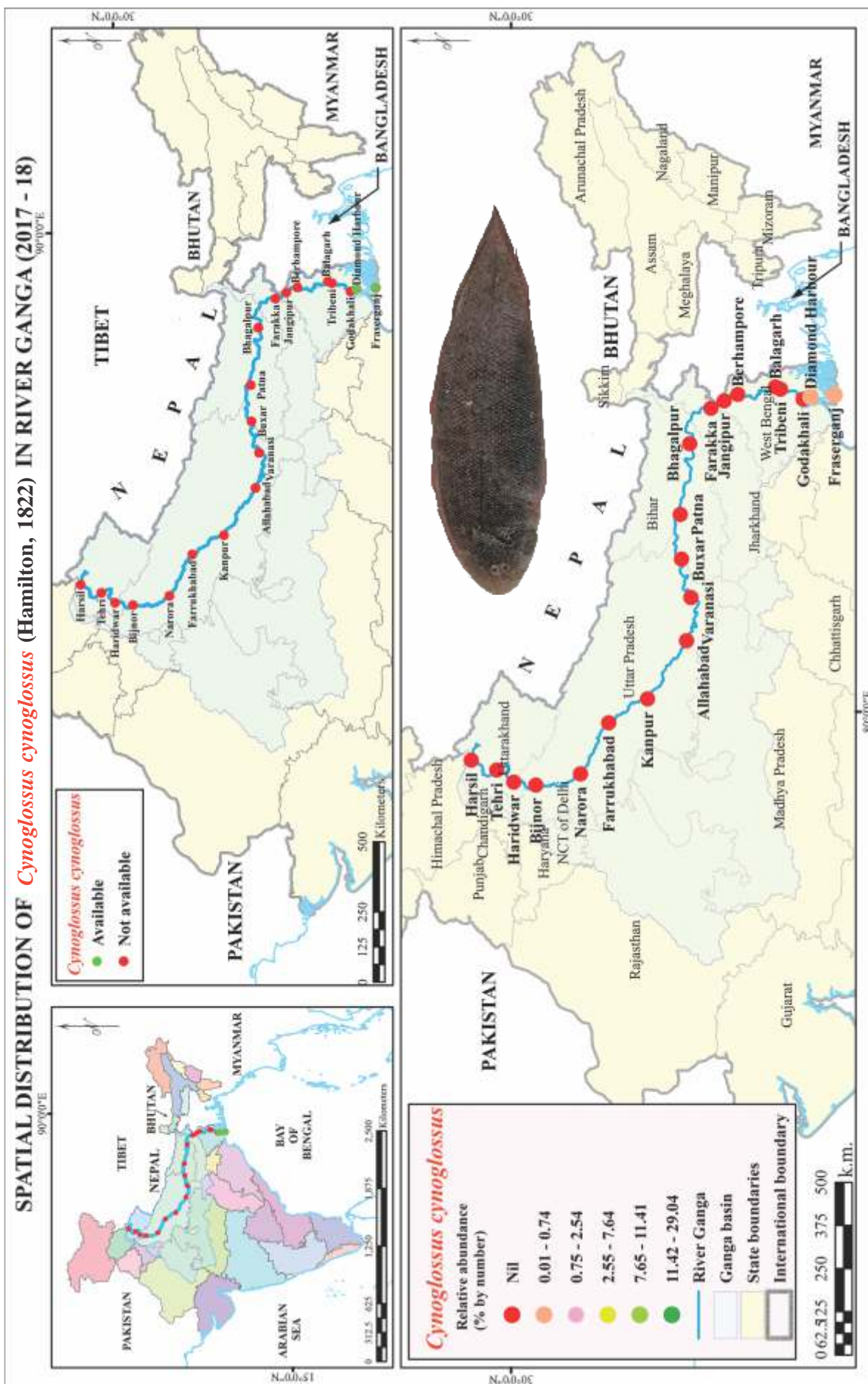
Habitat: Marinewater and Brackishwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on bottom dwelling invertebrates

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a good food fish in lower section of the river



Cynoglossus lingua (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Pleuronectiformes
Family	: Cynoglossidae
Genus	: <i>Cynoglossus</i>
Species	: <i>lingua</i>



Vernacular name: Banspata (West Bengal)

Common English name: Long tongue sole

Synonyms: *Cyanoglossus acinaces*

Salient identifying characteristics:

- ◆ Body is depressed, tongue shaped with pointed snout
- ◆ Scales are ctenoid on the ocular region and cycloid on the head and lateral line
- ◆ Cycloid scales are on the blind side of the body
- ◆ Presence of large black blotch on the opercular region

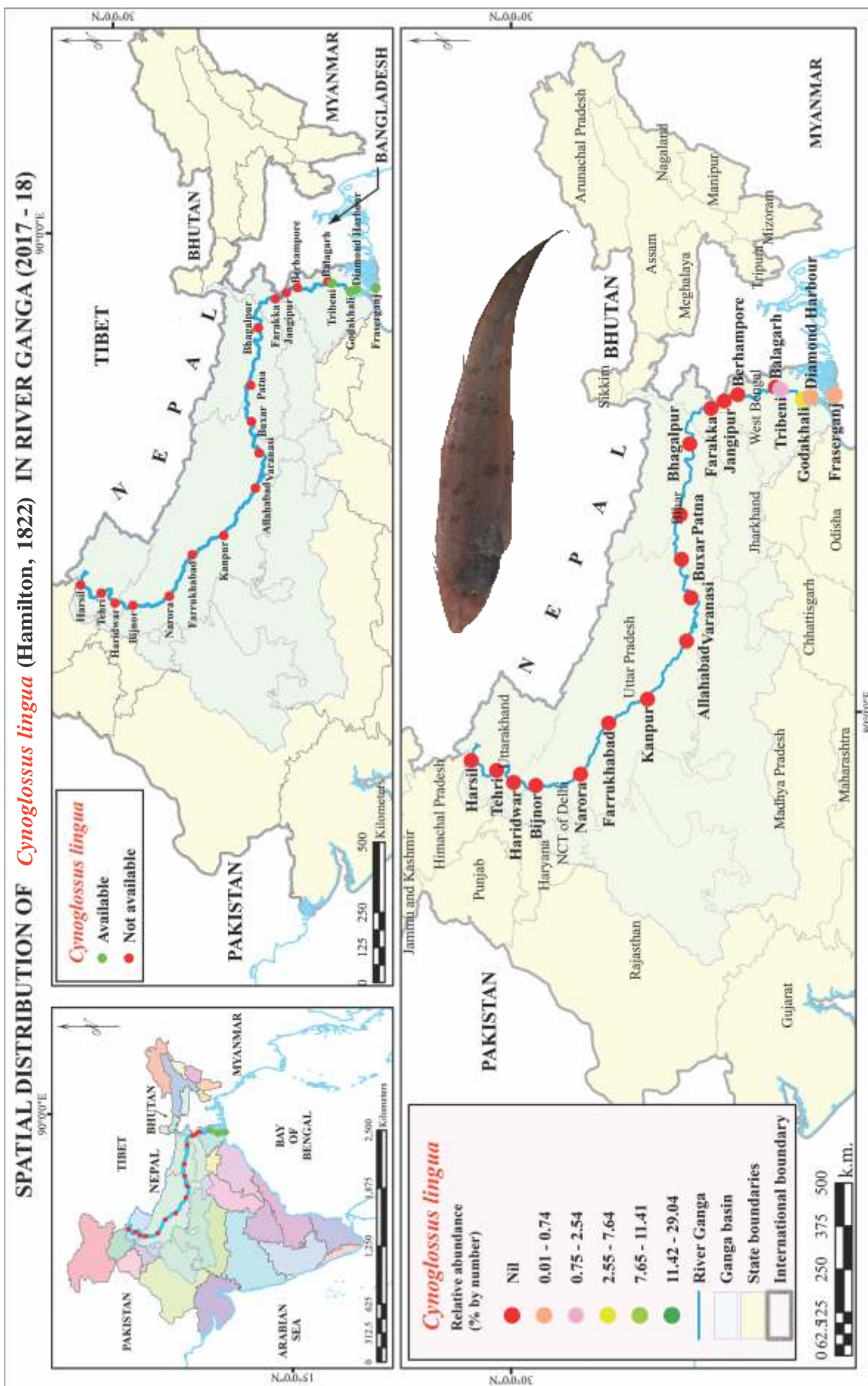
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 45 cm

Food and feeding: Feeds on the bottom dwelling organisms

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms a good food fish in lower section of the river







Scorpaeniformes

Platycephalus indicus (Linnaeus, 1758)

Systematic classification:

Class	: Actinopterygii
Order	: Scorpaeniformes
Family	: Platycephalidae
Genus	: <i>Platycephalus</i>
Species	: <i>indicus</i>



Vernacular name: Chancha Belle (West Bengal)

Common English name: Bartail flathead

Synonyms: *Callionymus indicus*, *Platycephalus insidiator*

Salient identifying characteristics:

- ◆ Elongated body and strongly depressed head
- ◆ A small preocular spine and two preopercular spines present and the lower one slightly longer than upper
- ◆ Lateral line pored and having scales 67 to 84 (usually 70 to 79)
- ◆ Above part of body brownish or grayish, lower part whitish
- ◆ 2 or 3 horizontal stripes present on caudal fin

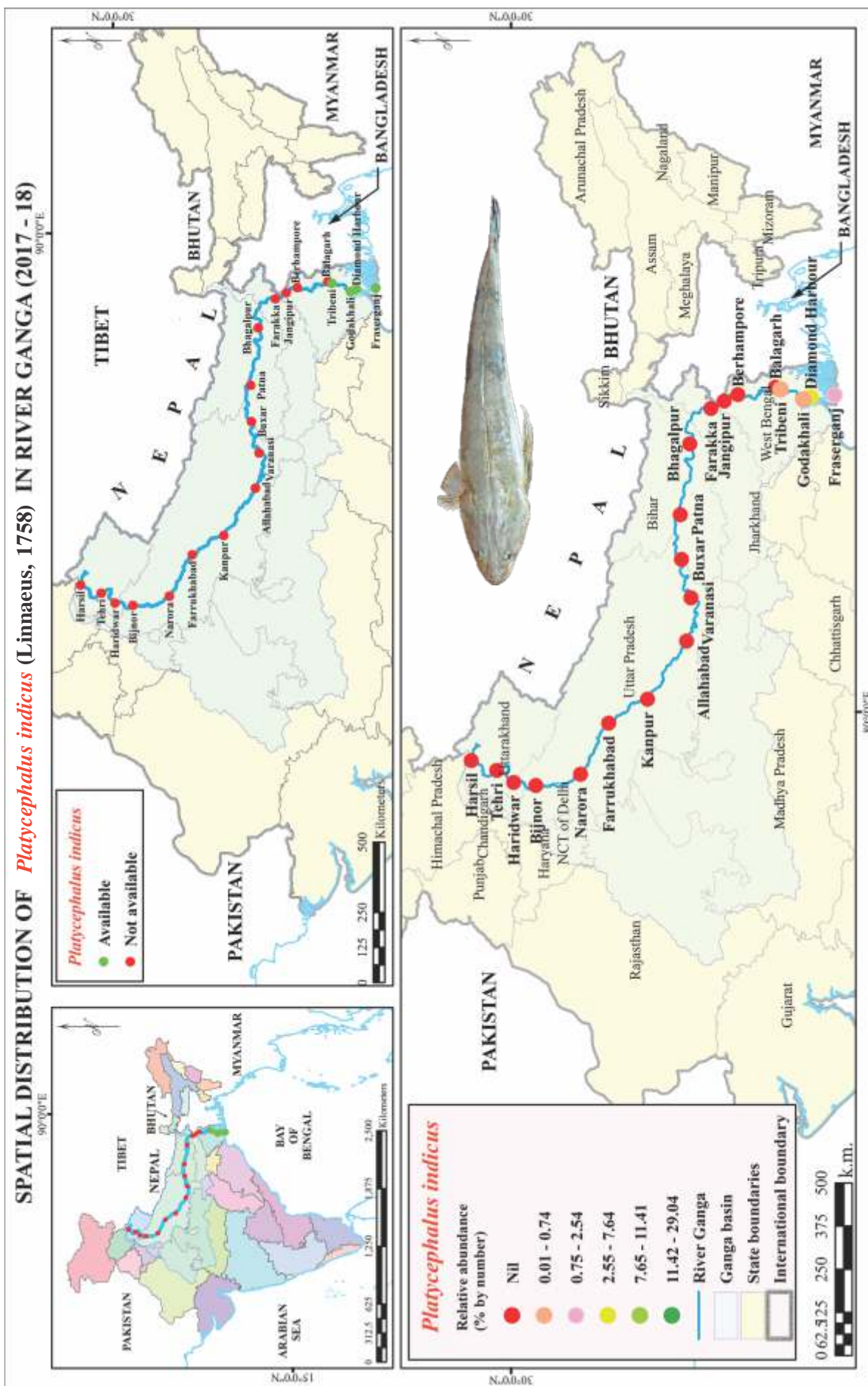
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 100 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Data Deficient

Commercial value: Used as food fish





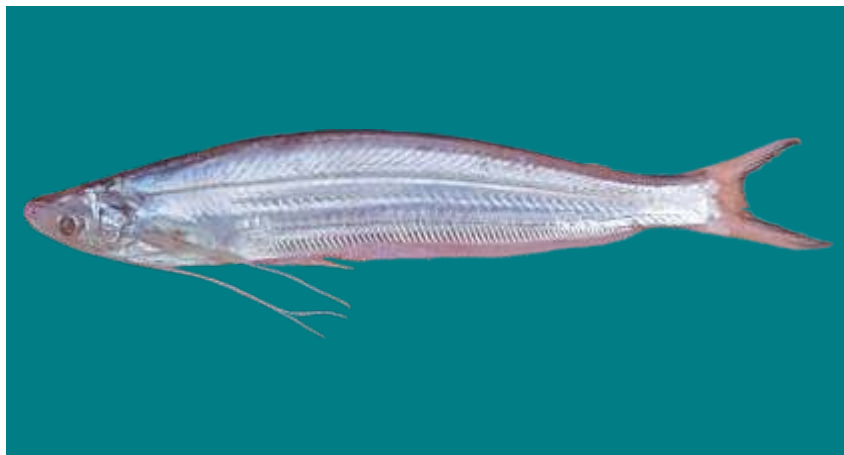


Siluriformes

| *Ailia coila* (Hamilton, 1822) |

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Aliidae
Genus : *Ailia*
Species : *coila*



Vernacular name: Sutri, Batansi (Uttar Pradesh, Bihar) Banspata, Kajri (West Bengal)

Common English name: Gangetic alia

Synonyms: *Mulapterurus coila*

Salient identifying characteristics:

- ◆ Body is elongated in nature
- ◆ Mouth sub inferior
- ◆ Four pairs of well developed barbels
- ◆ Adipose fin is short
- ◆ Pectoral spine is slender
- ◆ Silver coloration with greyish edged fins and caudal fin is black edged

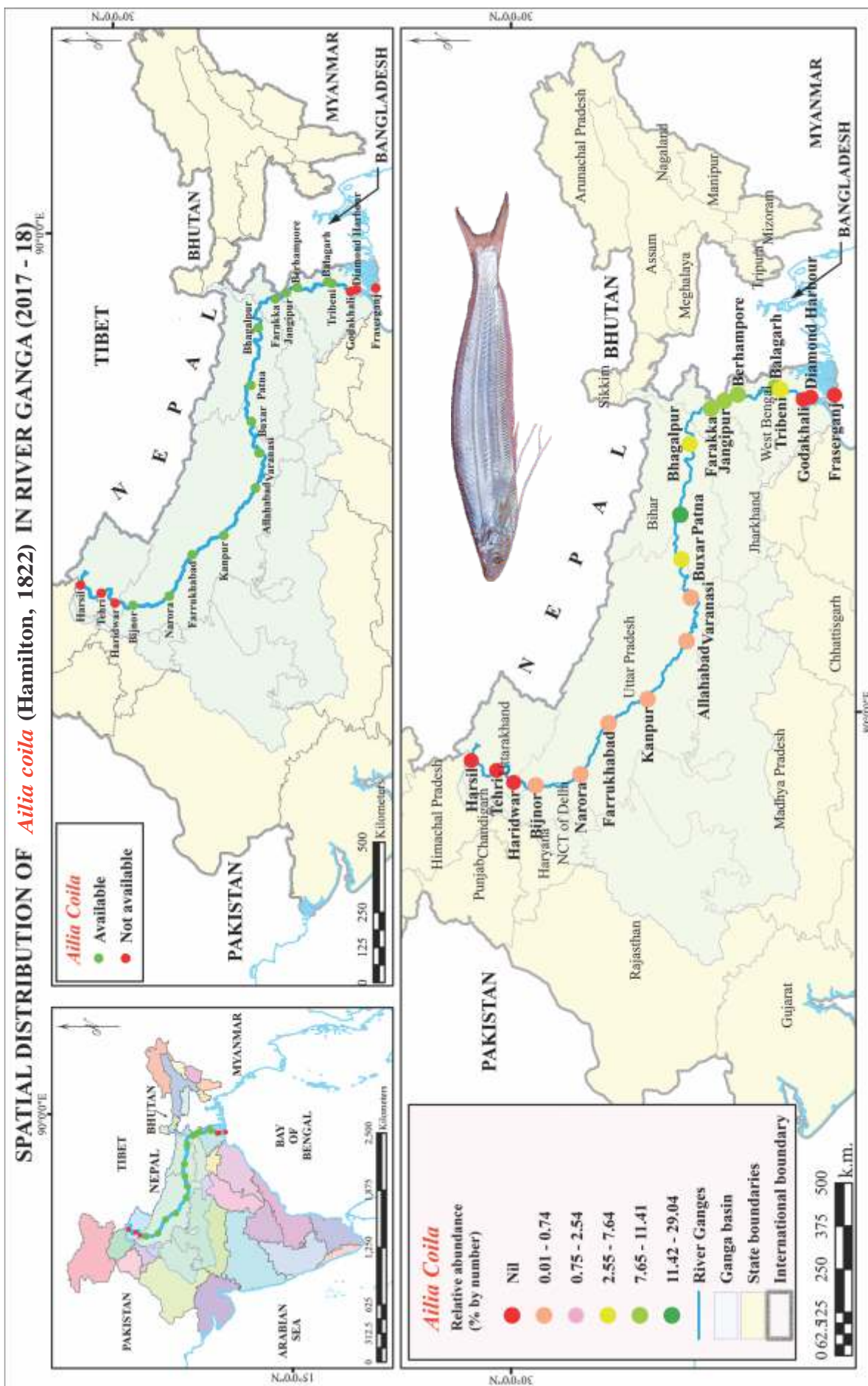
Habitat: Freshwater

Maximum size (TL): 30 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Near Threatened

Commercial value: Food fish



Ailiichthys punctata Day, 1872

Systematic classification:

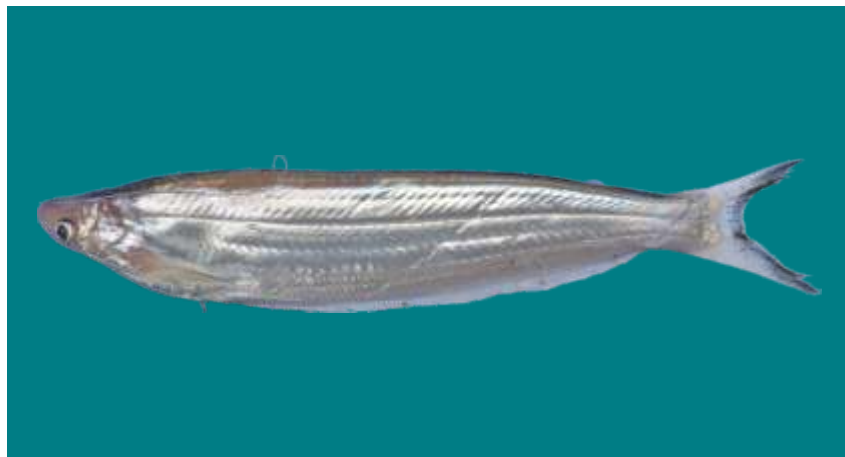
Class : Actinopterygii

Order : Siluriformes

Family : Aliidae

Genus : *Ailiichthys*

Species : *punctata*



Vernacular name: Sutri, Batansi (Uttar Pradesh, Bihar) Banspata, Kajri (West Bengal)

Common English name: Jamuna alia

Synonyms: *Ailia punctata*

Salient identifying characteristics:

- ◆ Body elongated with arched ventral profile
- ◆ Sub inferior mouth
- ◆ Well developed four pairs of barbels
- ◆ Absence of pelvic fins, minute adipose dorsal fin
- ◆ Silvery colour on the upper surface of the head
- ◆ Caudal fin comprise of a large spot

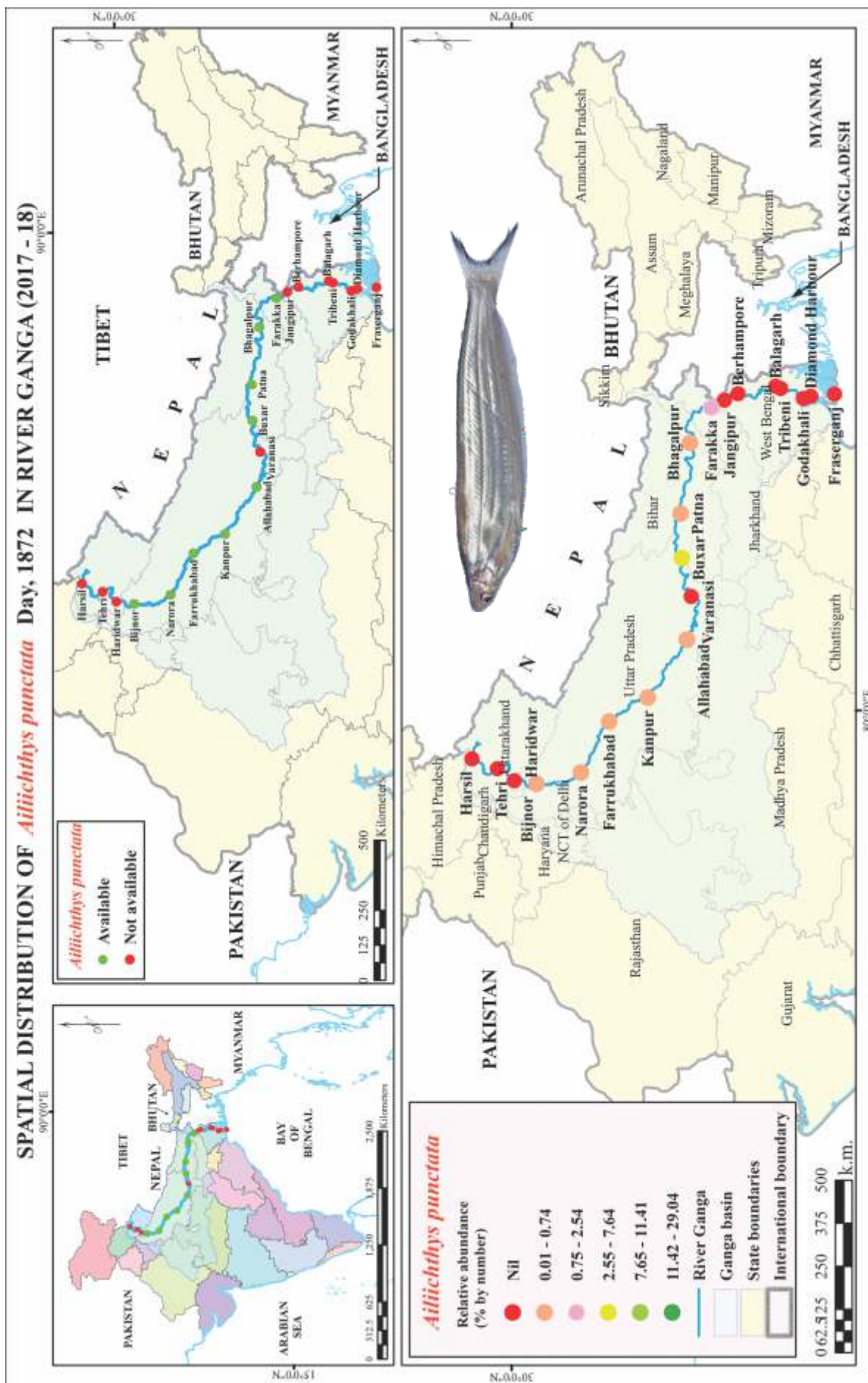
Habitat: Freshwater

Maximum size (TL): 10.1 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Near Threatened

Commercial value: Food fish



Amblyceps mangois (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Siluriformes
Family	: Ambyciptidae
Genus	: <i>Amblyceps</i>
Species	: <i>mangois</i>



Vernacular name: Not Known

Common English name: Indian torrent catfish

Synonyms: *Pimelodus mangois*, *Olyra laticeps*, *Amblyceps murray-stuarti*

Salient identifying characteristics:

- ◆ Elongated body with small depressed head covered by thick layer of skin
- ◆ Mouth is wide consisting of four pairs of barbels
- ◆ Weak and concealed dorsal spine with concealed pectoral spine
- ◆ Caudal fin is truncated or emarginated
- ◆ Olive brown in colour with dark lateral band

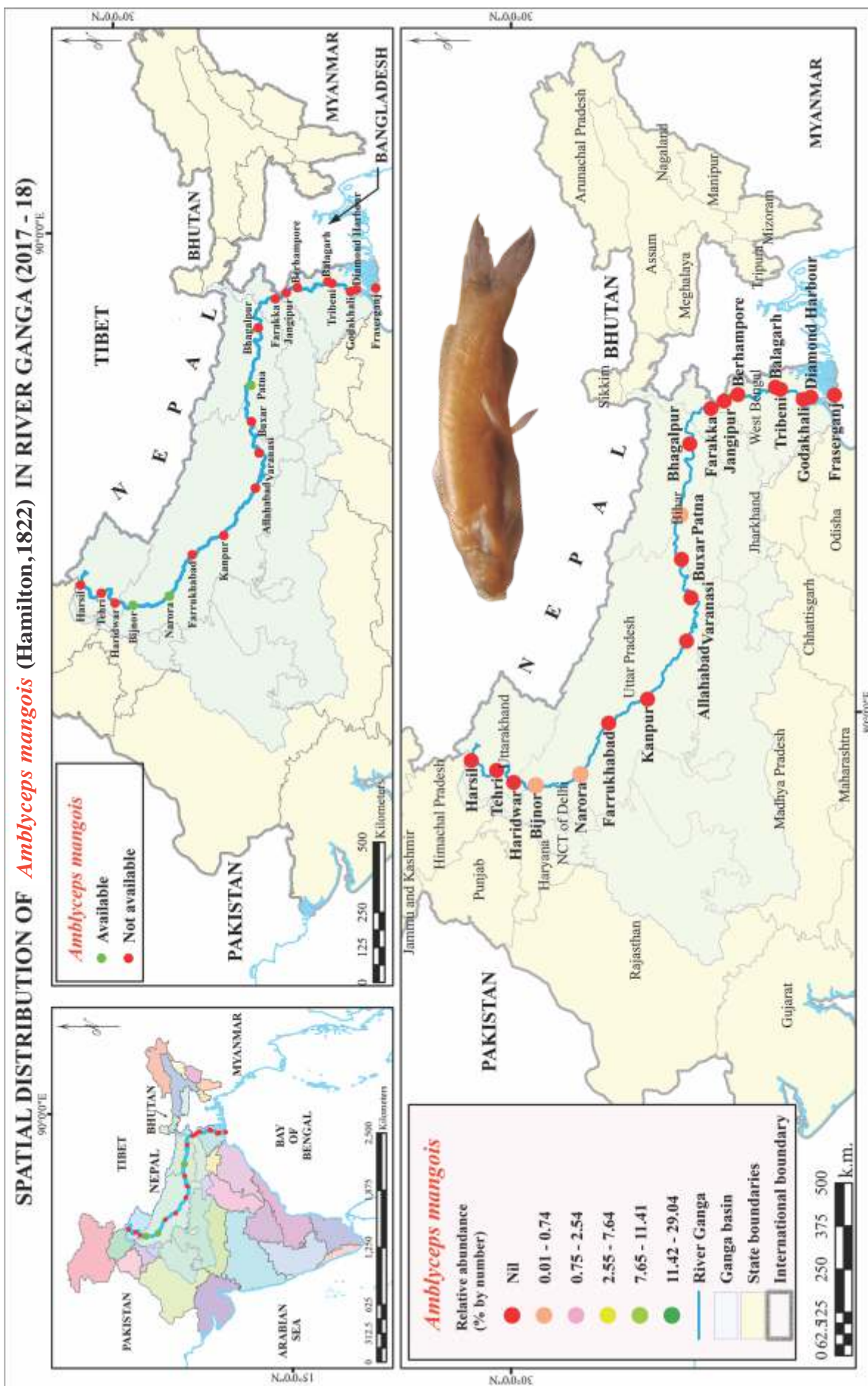
Habitat: Freshwater

Maximum size (TL): 12.5 cm

Food and feeding: Feeds on aquatic insects

Conservation status (IUCN Red list): Least Concern

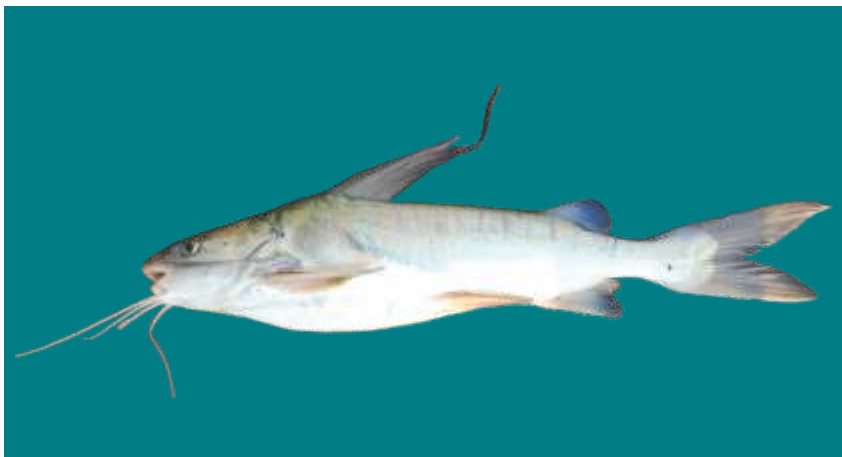
Commercial value: Food and ornamental fish



| *Arius arius* (Hamilton, 1822) |

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Ariidae
Genus : *Arius*
Species : *arius*



Vernacular name: Kata mach (West Bengal)

Common English name: Threadfin sea catfish

Synonyms: *Pimelodus arius*, *Arius buchhanani*, *Tachysurus arius*

Salient identifying characteristics:

- ◆ Body is elongated and robust in shape
- ◆ Three pairs of barbels
- ◆ Mouth is subterminal and narrow with villiform teeth
- ◆ Large black spot on the adipose fin
- ◆ Thread like filamentous structure at the tip of the dorsal fin
- ◆ Steel back with dark blue colouration

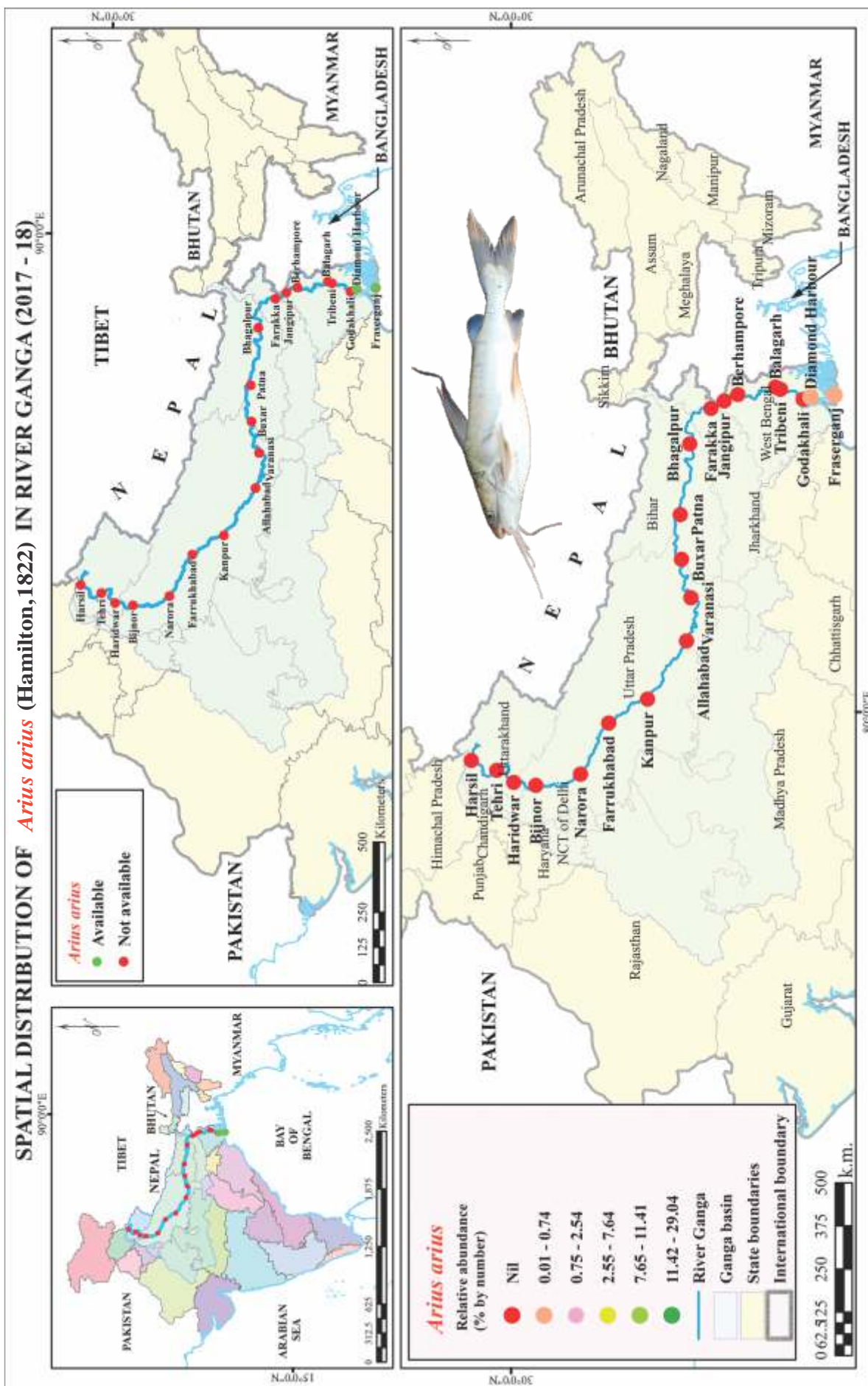
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 40 cm

Food and feeding: Feeds voraciously on invertebrates

Conservation status (IUCN Red list): Least Concern

Commercial value: Food fish



| *Arius gadora* (Hamilton, 1822) |

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Ariidae
Genus	: <i>Arius</i>
Species	: <i>gadora</i>



Vernacular name: Gagla (West Bengal)

Common English name: Gagora catfish

Synonyms: *Pimelodus gadora*, *Arius gadora*, *Tachysurus gadora*

Salient identifying characteristics:

- ◆ Body is elongated
- ◆ Mouth is sub terminal and narrow with villiform jaw teeth
- ◆ Pectoral spine length is equals to dorsal spine
- ◆ Dull colouration on the dorsal side and pale white on the ventral side
- ◆ Adipose fin consists of a blackish spot

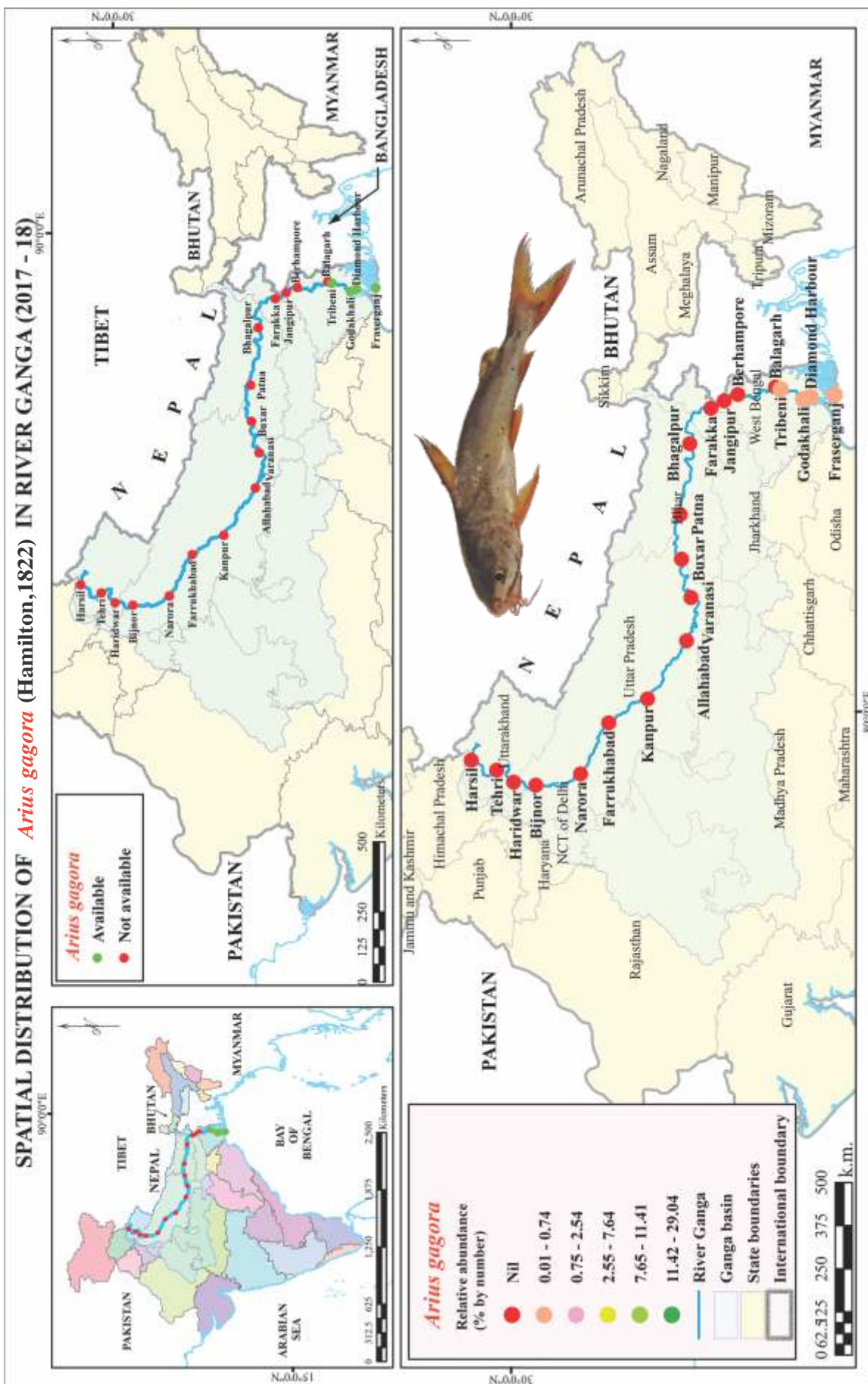
Habitat: Marinewater, Brackishwater and Freshwater

Maximum size (TL): 91.4 cm

Food and feeding: Feeds on crustaceans and other smaller fishes

Conservation status (IUCN Red list): Near Threatened

Commercial value: Food fish



Bagarius bagarius (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Sisoridae

Genus : *Bagarius*

Species : *bagarius*



Vernacular name: Gostha (Uttar Pradesh, Bihar), Bagar (West Bengal)

Common English name: Goonch

Synonyms: *Pimelodus bagarius*

Salient identifying characteristics:

- ◆ Body is elongated and deepened
- ◆ Presence of crescent shaped inferior mouth with four pairs of barbels
- ◆ Adipose fin originates from the base of the anal fin while the pelvic fin originates from the base of the dorsal fin
- ◆ Olive green colouration of the body with three dark pigmented bands
- ◆ Caudal fin is yellowish grey

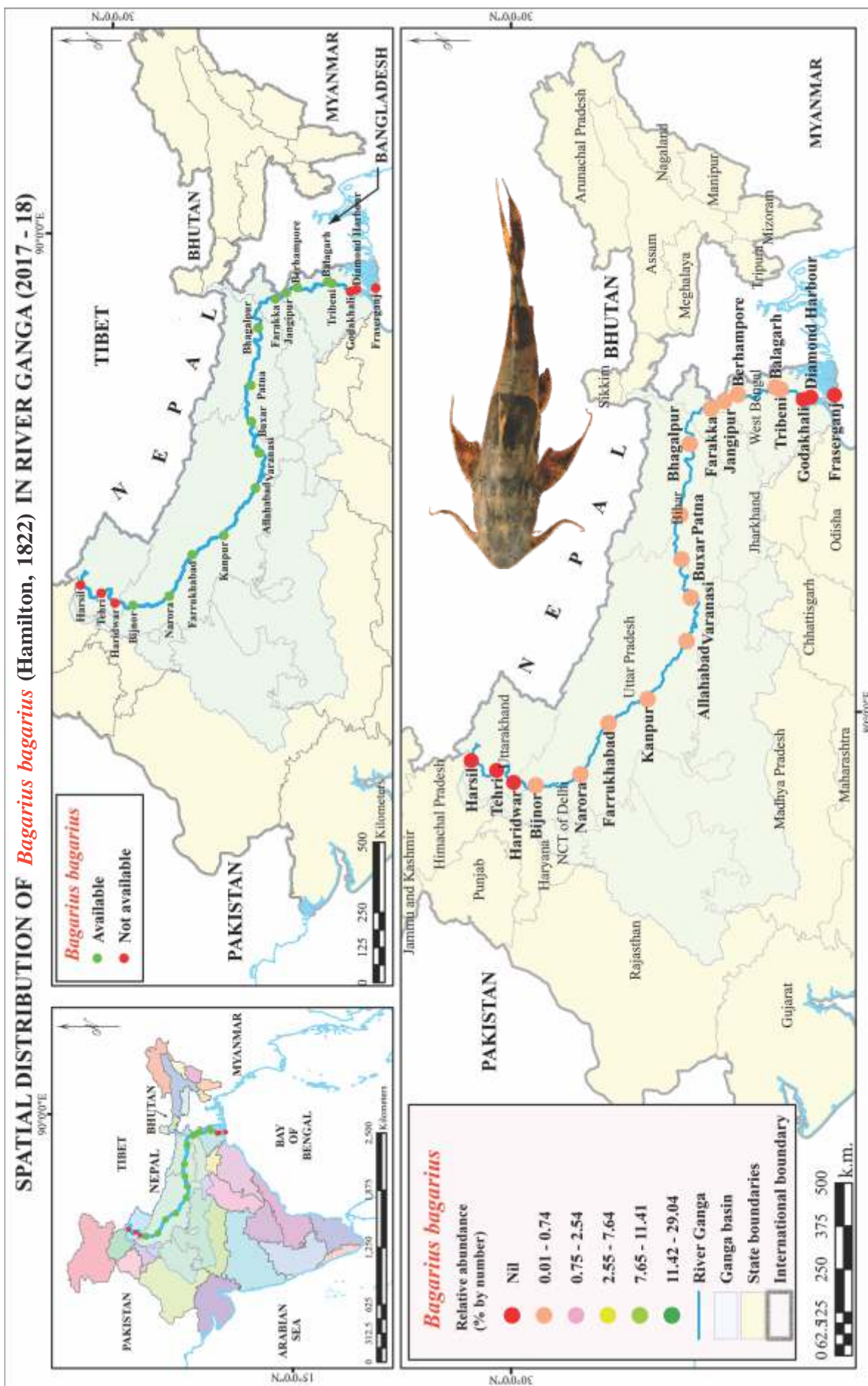
Habitat: Freshwater

Maximum size (TL): 200 cm

Food and feeding: Feeds on insect, small fish, frogs and shrimps

Conservation status (IUCN Red list): Near Threatened

Commercial value: Food fish



Bagarius yarrelli (Sykes, 1839)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Sisoridae
Genus : *Bagarius*
Species : *yarrelli*



Vernacular name: Gostha (Uttar Pradesh, Bihar), Bagar (West Bengal)

Common English name: Goonch

Synonyms: *Bagarius bagarius*

Salient identifying characteristics:

- ◆ Body is elongated with a depressed head
- ◆ Crescent shaped inferior mouth with four pairs of barbels
- ◆ Pelvic fin inserted posteriorly to the ventral line of the last dorsal fin ray
- ◆ Body is olive green in color with three dark bands, with the 1st band near the dorsal fin base, 2nd band near the adipose fin and 3rd near the caudal peduncle

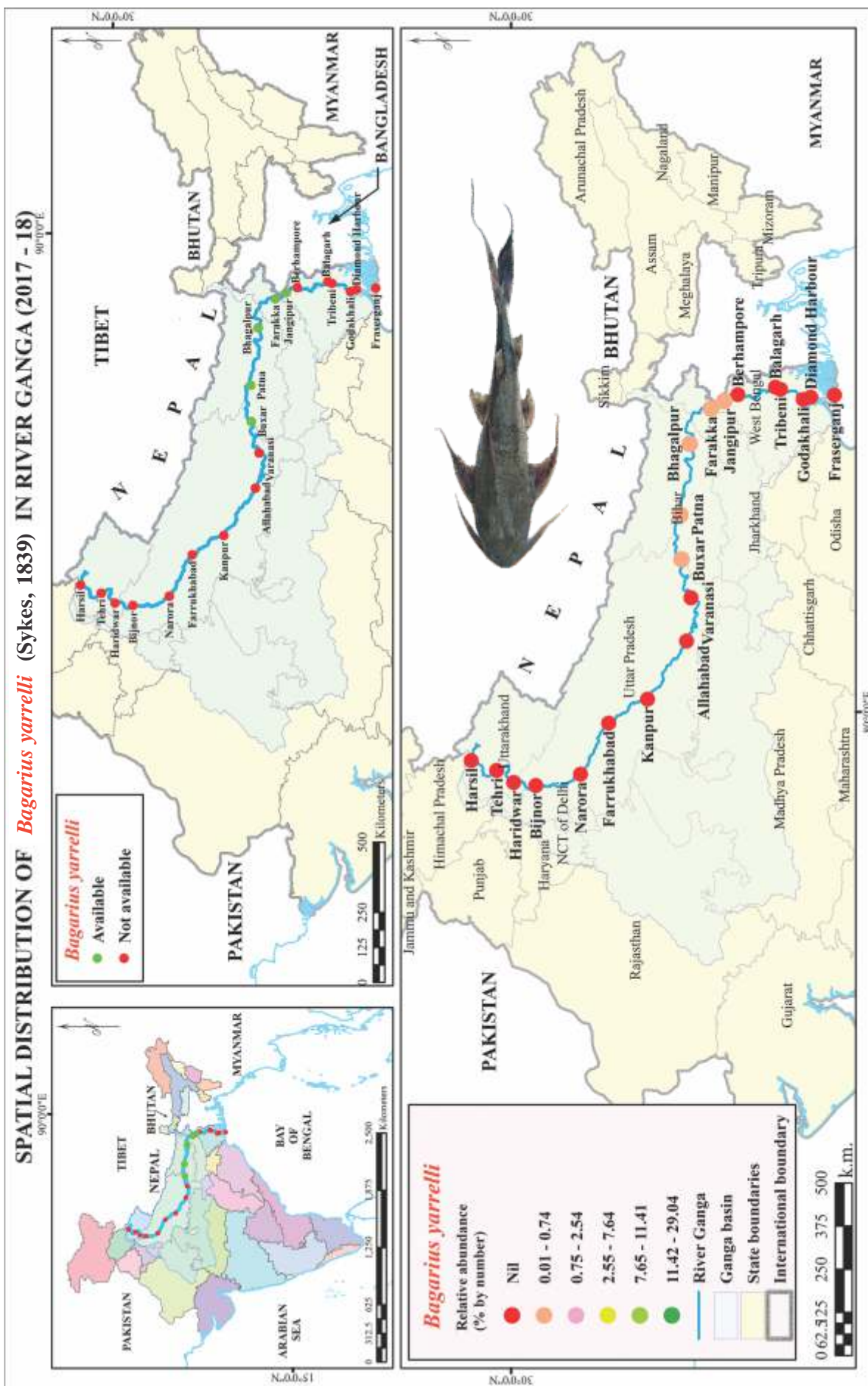
Habitat: Freshwater

Maximum size (TL): 200 cm

Food and feeding: Feeds on insect, small fish, frog and shrimp

Conservation status (IUCN Red list): Near Threatened

Commercial value: Food fish



Batasio batasio (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Bagridae
Genus : *Batasio*
Species : *batasio*



Vernacular name: Bajori (Uttar Pradesh), Batasi (West Bengal)

Common English name: Batasio

Synonyms: *Pimelodus batasio*, *Gagata batasio*

Salient identifying characteristics:

- ◆ Body is elongated and compressed with sharp head, bluntly pointed and conical
- ◆ Small inferior mouth with four pairs of barbells
- ◆ Strong dorsal spine
- ◆ Adipose fin base is longer than the anal fin base
- ◆ Caudal fin is forked
- ◆ Dark vertical bands along the lateral line system

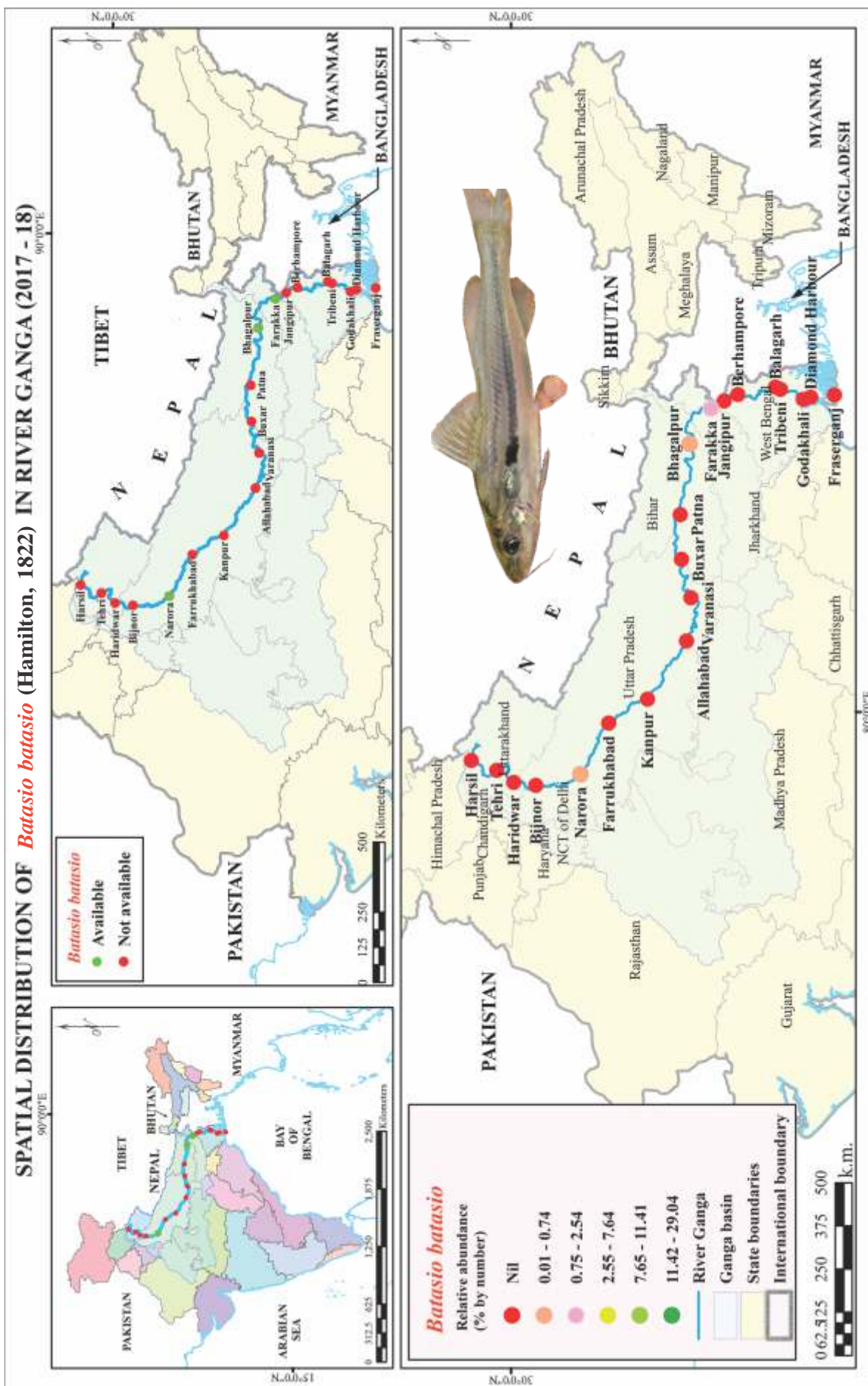
Habitat: Freshwater

Maximum size (TL): 10 cm

Food and feeding: Feeds on crustaceans and insect

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Chaca chaca (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Chacidae
Genus : *Chaca*
Species : *chaca*



Vernacular name: Chaca (West Bengal)

Common English name: Squarehead catfish

Synonyms: *Platystacus chaca*, *Chaca lophioides*

Salient identifying characteristics:

- ◆ Body is tadpole shaped with flattened anterior and compressed posterior part of the body
- ◆ Wide mouth with three pairs of barbels
- ◆ Pectoral fin constitute of 8 to 10 fridges edges along the anterior side
- ◆ Head with flattened flap of skin
- ◆ Fins are of dark blotches

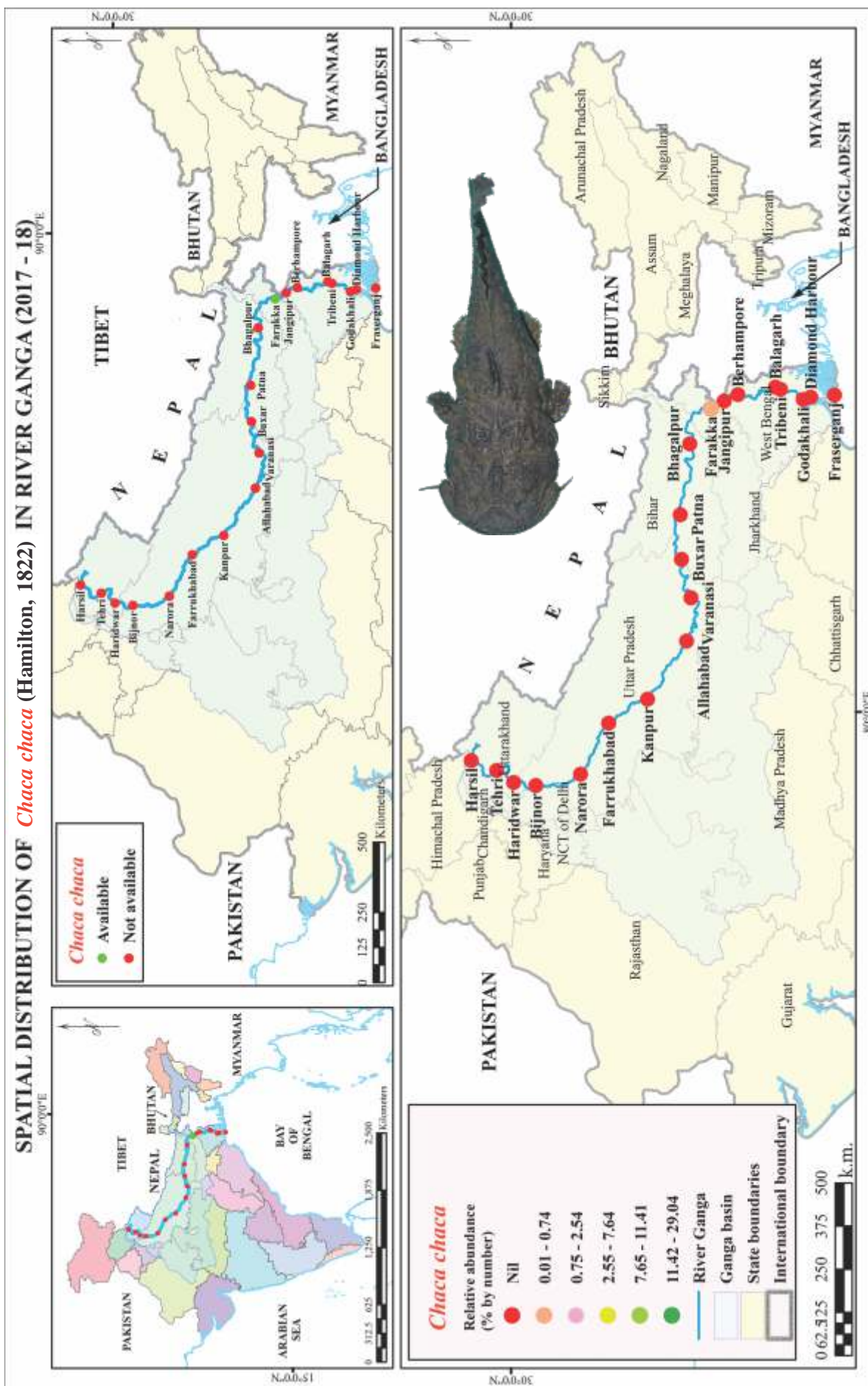
Habitat: Freshwater

Maximum size (TL): 20 cm

Food and feeding: Feeds on small fish, river shrimp and earthworms

Conservation status (IUCN Red list): Least Concern

Commercial value: Minor interest to fisheries



Clarias magur (Linnaeus, 1758)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Clariidae

Genus : *Clarias*

Species : *magur*



Vernacular name: Mangur (Uttar Pradesh, Bihar, West Bengal)

Common English name: Magur

Synonyms: *Clarias magur*

Salient identifying characteristics:

- ◆ Elongated body structure
- ◆ Mouth is terminal with villiform teeth
- ◆ Four pairs of barbels
- ◆ Dorsal fin is long with 70-77 rays
- ◆ Pectoral spine is strong
- ◆ Dorsal fin is situated slightly ahead of pectoral fin
- ◆ Dorsal and anal fins are with rigid margins

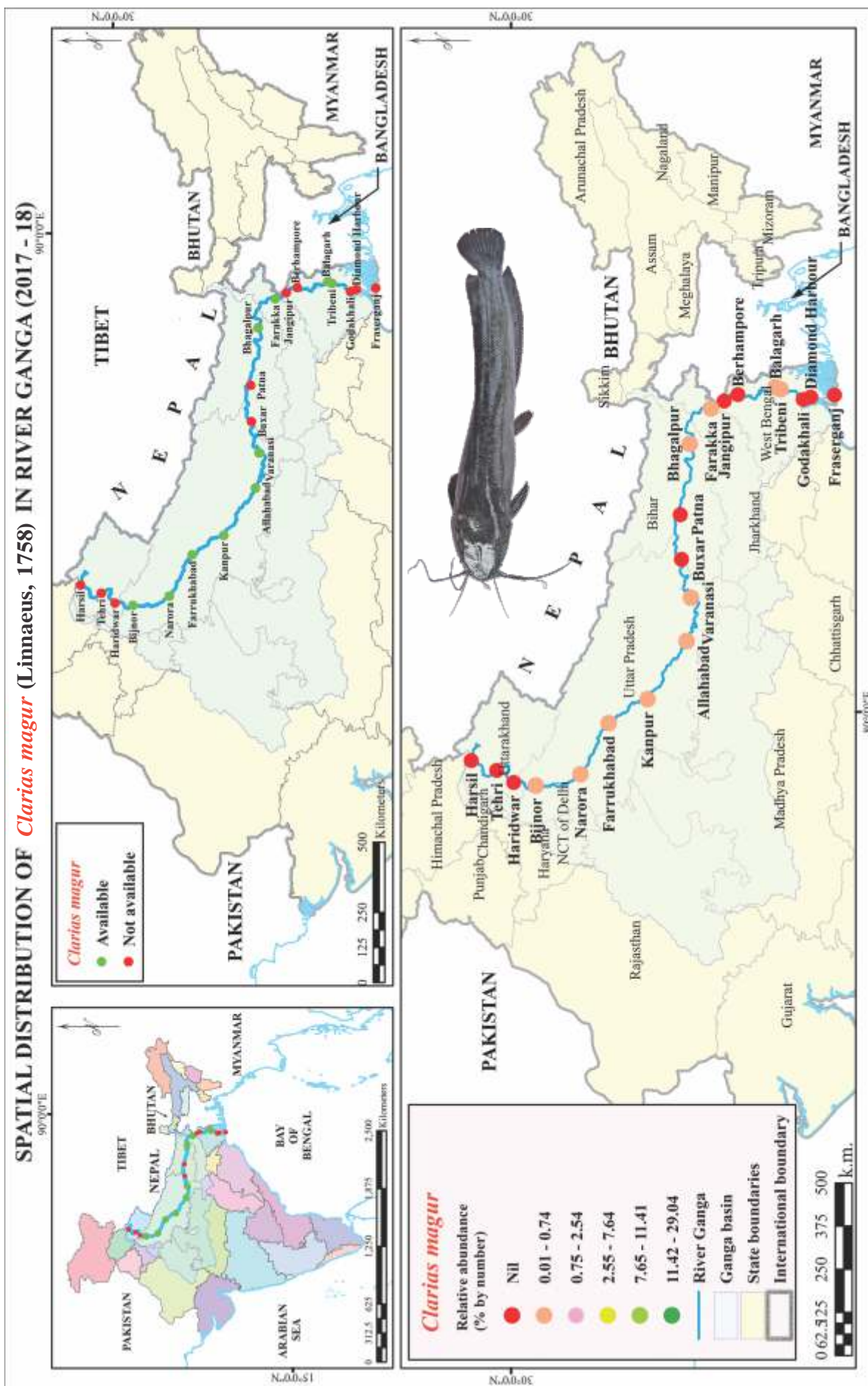
Habitat: Freshwater

Maximum size (TL): 47 cm

Food and feeding: Feeds on insect larvae, earthworms, shells, shrimps, small fish, aquatic plants and debris

Conservation status (IUCN Red list): Endangered

Commercial value: Used as a major food fish



Clupisoma garua (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Aillidae
Genus : *Clupisoma*
Species : *garua*



Vernacular name: Gharwya, Garrua, (Uttar Pradesh, Bihar), Ghero, Ghaura (West Bengal)

Common English name: Garua bachcha

Synonyms: *Silurus gaura*, *Pseudeutropius garua*

Salient identifying characteristics:

- ◆ Body elongated and compressed
- ◆ Mouth sub terminal with villiform teeth on jaws
- ◆ Four pairs of barbells, nasal barbell do not reach the eye
- ◆ Dorsal spine is slender
- ◆ Fins are hyaline and dorsal and pectoral fins with black dots
- ◆ Pale yellow coloured caudal fin

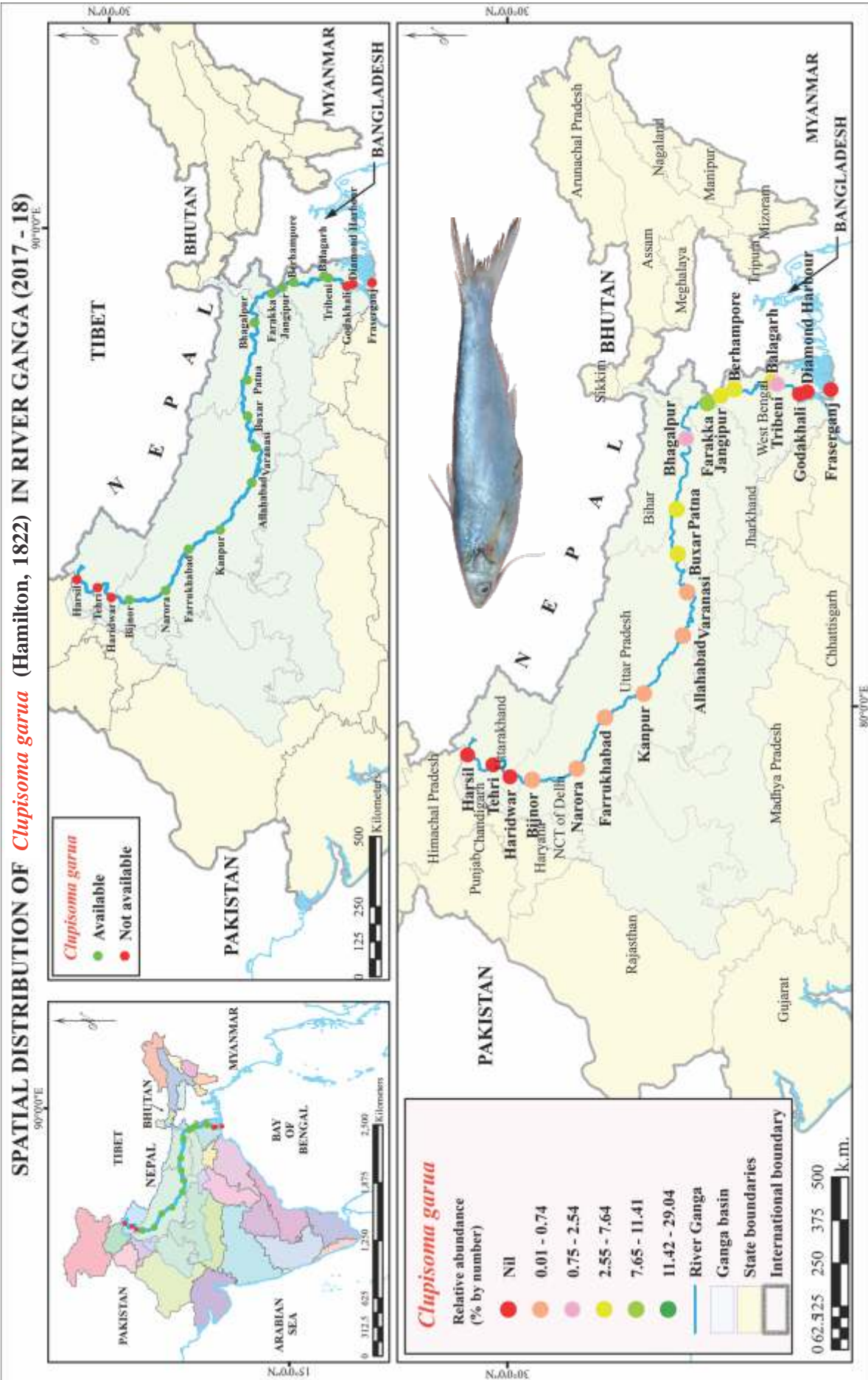
Habitat: Freshwater

Maximum size (TL): 60.9 cm

Food and feeding: Feeds on insects, shrimps, other crustaceans and small fish

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as a food fish



Hara hara (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Erethistidae
Genus : *Hara*
Species : *hara*



Vernacular name: Gagot (West Bengal)

Common English name: Kosi hara

Synonyms: *Erethistes hara*, *Pimelodus hara*

Salient identifying characteristics:

- ◆ Body is elongated and tapering at the end
- ◆ Mouth inferior with villiform teeth on jaws
- ◆ Presence of serrated dorsal spine
- ◆ Caudal fin forked with two equal lobed
- ◆ Maxillary barbell extending beyond the pectoral fin base
- ◆ Presence of adipose fin on the dorsal side

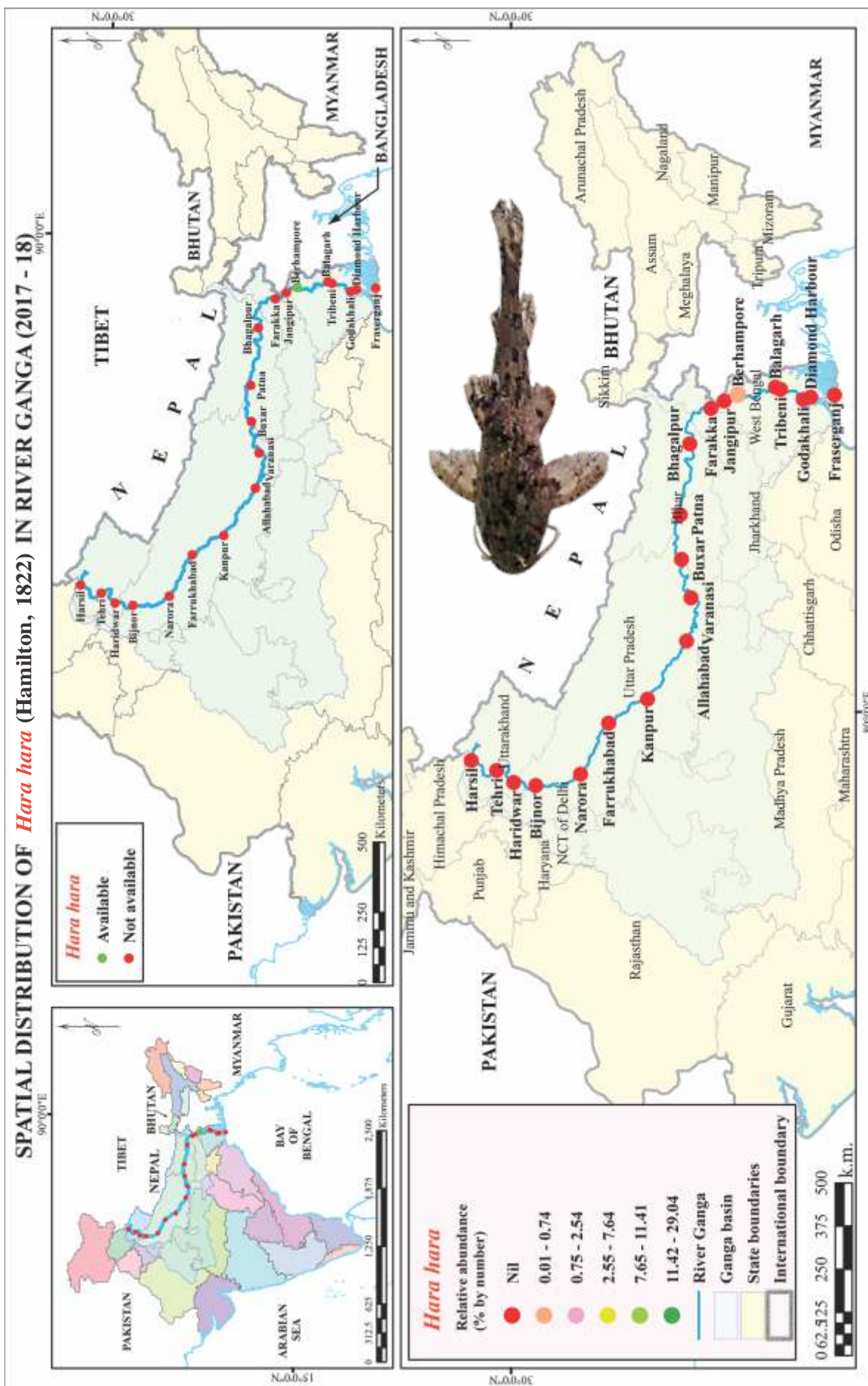
Habitat: Freshwater

Maximum size (TL): 13 cm

Food and feeding: Feeds on bloodworm and daphnia

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as ornamental fish



Eutropiichthys murius (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Aillidae
Genus : *Eutropiichthys*
Species : *murius*



Vernacular name: Bacha (West Bengal), Megni (Uttar Pradesh)

Common English name: Murius vacha

Synonyms: *Pimelodus murius*, *Pseudeutropius murius*

Salient identifying characteristics:

- ◆ Body is elongated and laterally compressed
- ◆ Mouth is broad, and cleft extending anterior to the upper jaw with villiform teeth
- ◆ Four pairs of barbells and maxillary stretching beyond base of the pectoral fin and nasal barbell beyond the eye orbit
- ◆ Short dorsal fin placed anterior to the pelvic fin
- ◆ Dorsal, pectoral and caudal fin are with dusky tips

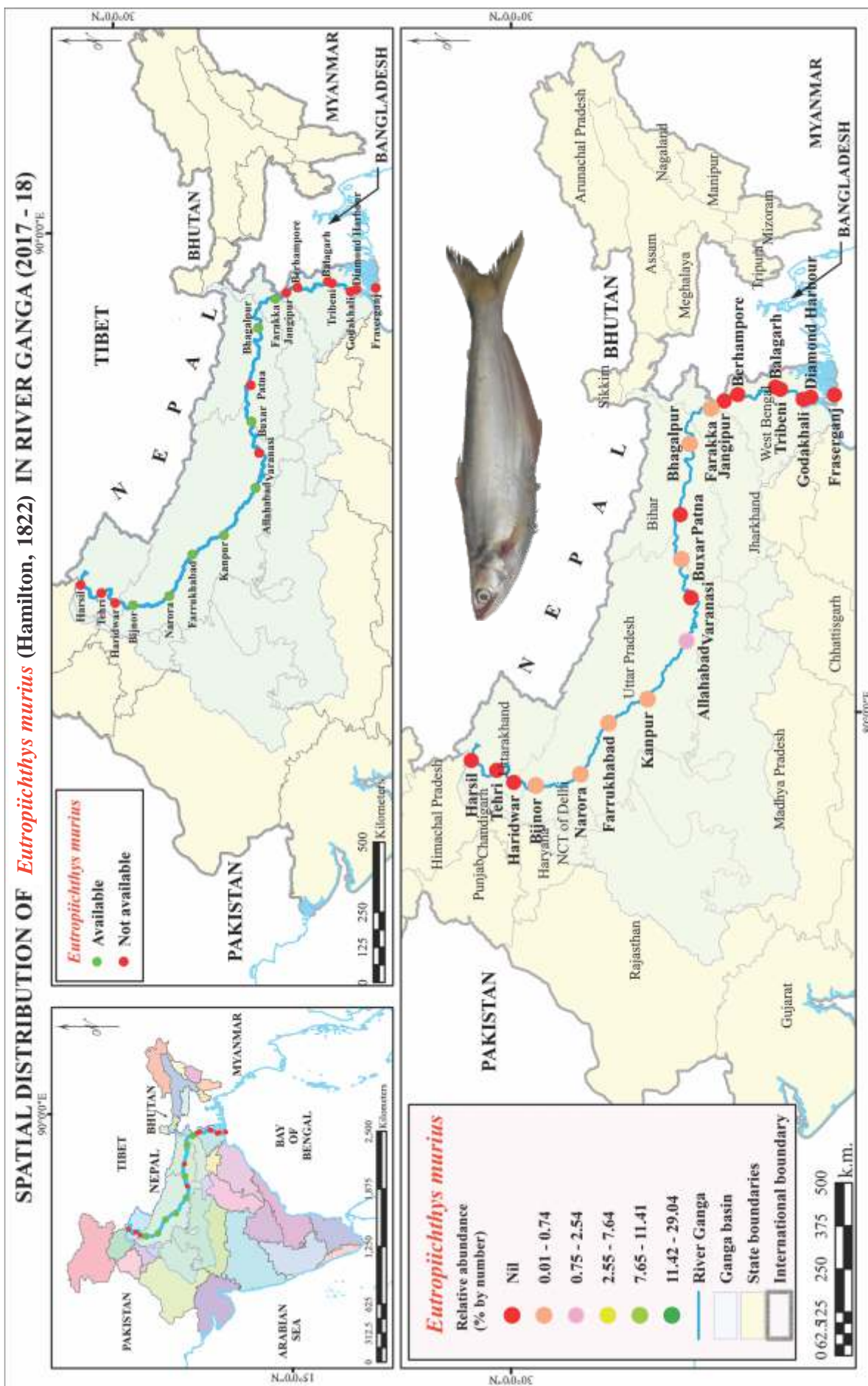
Habitat: Freshwater

Maximum size (TL): 28 cm

Food and feeding: Omnivorous, feeds mainly on insects

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as an excellent food fish in Uttar Pradesh, Bihar and West Bengal



Eutropiichthys vacha (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Aillidae
Genus : *Eutropiichthys*
Species : *vacha*



Vernacular name: Bacha (West Bengal), Bachua (Bihar, Uttar Pradesh)

Common English name: Batchwa vacha

Synonyms: *Pimelodus vacha*, *Eutropiichthys burmannicus*

Salient identifying characteristics:

- ◆ Body is enlarged and compressed
- ◆ Mouth is widened and the cleft extends beyond the eye orbit
- ◆ Four pairs of barbells, maxillary barbell exceeding the orbit and nasal barbells exceeding the posterior edge of the head
- ◆ The mandibular barbells are shorter in length
- ◆ Caudal fin is blackened at the tip

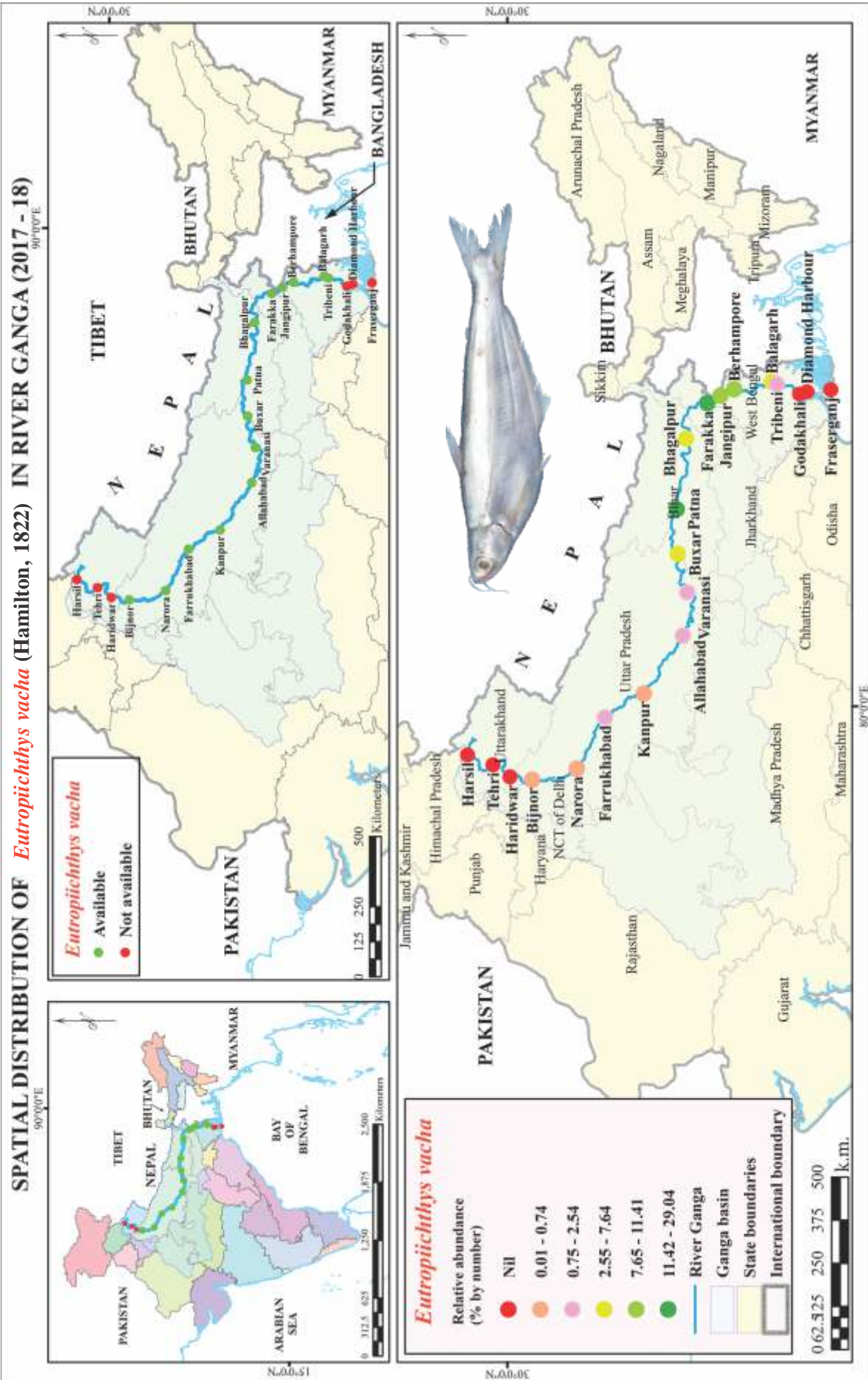
Habitat: Freshwater

Maximum size (TL): 38.2 cm

Food and feeding: Primarily feeds on small fish and insect

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as an excellent food fish in Uttar Pradesh, Bihar and West Bengal



Gagata cenia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Sisoridae

Genus : *Gagata*

Species : *cenia*



Vernacular name: Kukri (West Bengal), Baghawa, Tinkatiya (Uttar Pradesh, Bihar)

Common English name: Indian gagata

Synonyms: *Pimelodus cenia*

Salient identifying characteristics:

- ◆ Body compact and slender with constricted head
- ◆ Barbels are four paired, maxillary barbels are strong, nasal barbels very small
- ◆ Dorsal spine is tiny but stiff and minutely serrated
- ◆ Pelvic fin exceeds till the vent
- ◆ Gray coloured body with dusky pelvic fins and caudal fin with black band on each lobe

Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Feeds on crustaceans, insects & their larvae and aquatic plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

Gagata gagata (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Sisoridae

Genus : *Gagata*

Species : *gagata*



Vernacular name: Kukri (West Bengal)

Common English name: Gangetic gagata

Synonyms: *Pimelodus gagata*

Salient identifying characteristics:

- ◆ Body laterally compressed, more compressed on posteriorly
- ◆ Mouth is narrow with villiform teeth
- ◆ Four pairs of barbels, nasal pair is narrow and constricted and mandibular barbel is slightly swollen
- ◆ Dorsal spine is elongated and fairly serrated along distal-third of front edge
- ◆ Pelvic fins extend till the anal fin. Fins are dusky in colour apart from caudal fin which is whitish

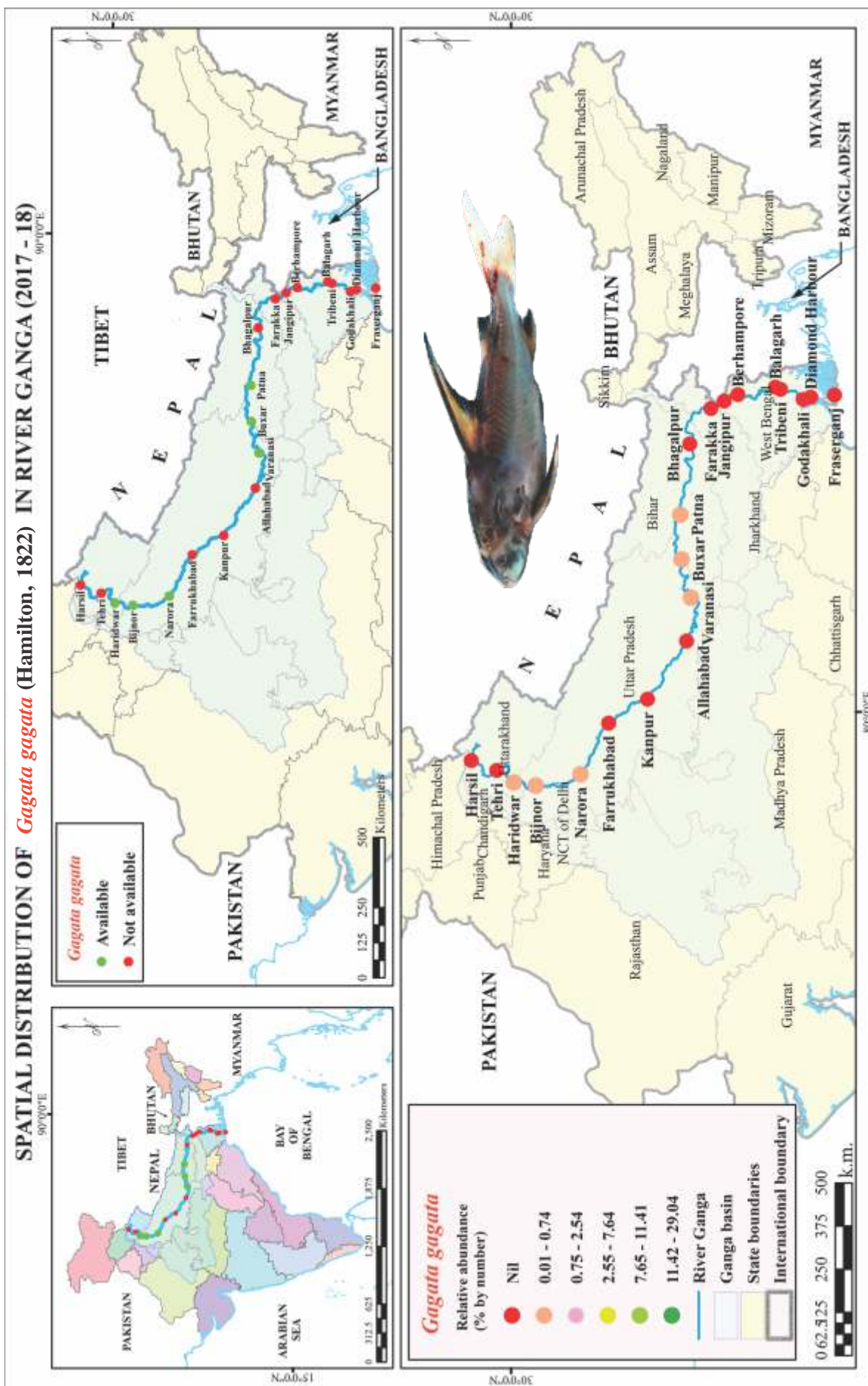
Habitat: Freshwater

Maximum size (TL): 31 cm

Food and feeding: Feeds on crustaceans, insects & their larva and aquatic plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Glyptothorax cavia (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Sisoridae
Genus : *Glyptothorax*
Species : *cavia*



Vernacular name: Patharchata (Uttarakhand, Uttar Pradesh)

Common English name: Mountain Cavia Catfish

Synonyms: *Pimelodus cavia*, *Euglyptosternum lineatum*, *Glyptosternum cavia*

Salient identifying characteristics:

- ◆ Elongated body with depressed head
- ◆ Inferior mouth with papillated lips and barbells four pairs
- ◆ Dorsal fin originated mid way between snout-tip and adipose fin; dorsal spine strong and smooth. Paired fins not plaited below
- ◆ Caudal fin forked
- ◆ Olivaceous brown color above and dirty yellowish below the flanks
- ◆ Fins with dark bands at their base

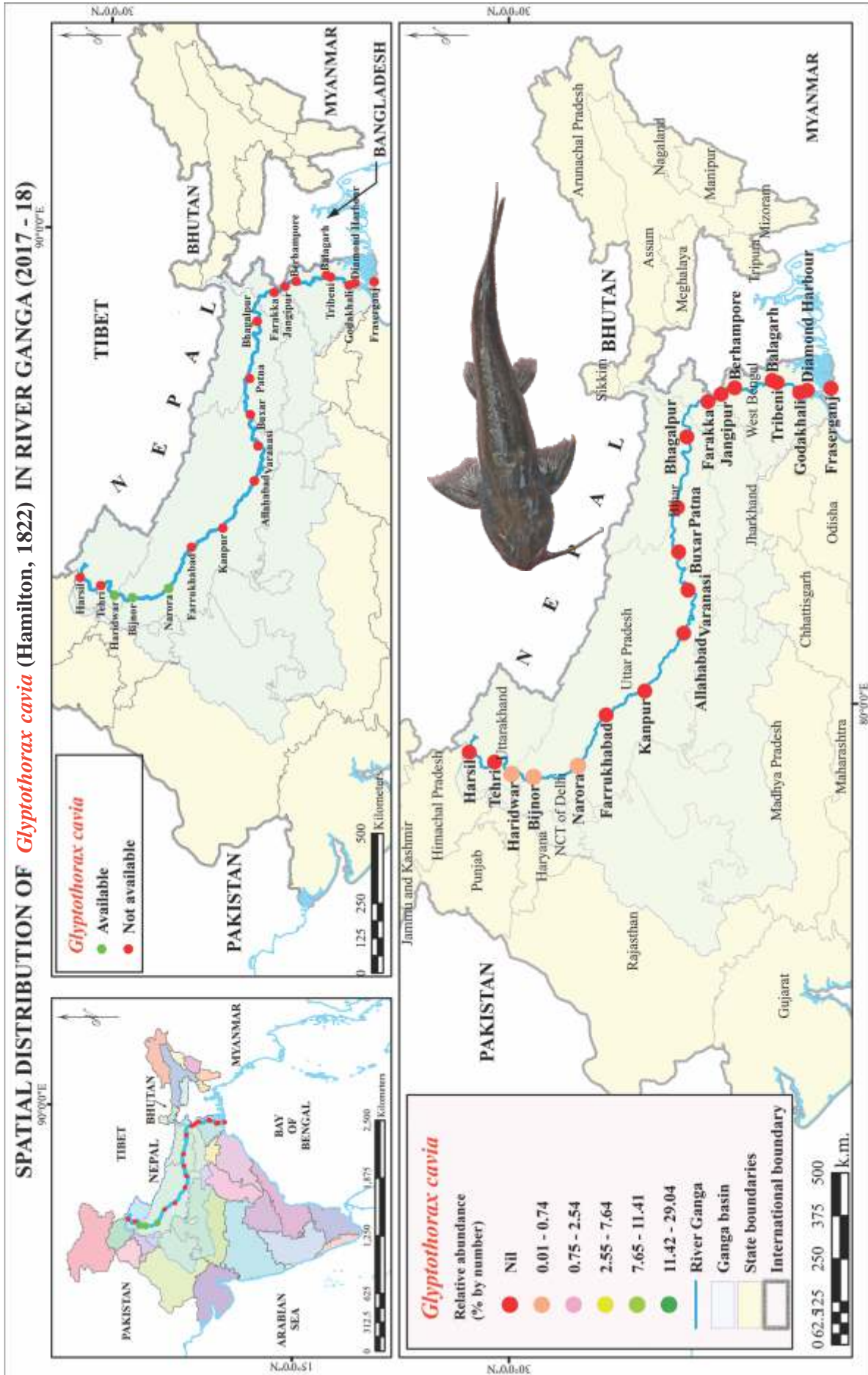
Habitat: Freshwater

Maximum size (TL): 28 cm

Food and feeding: Omnivore

Conservation status (IUCN Red list): Least Concern

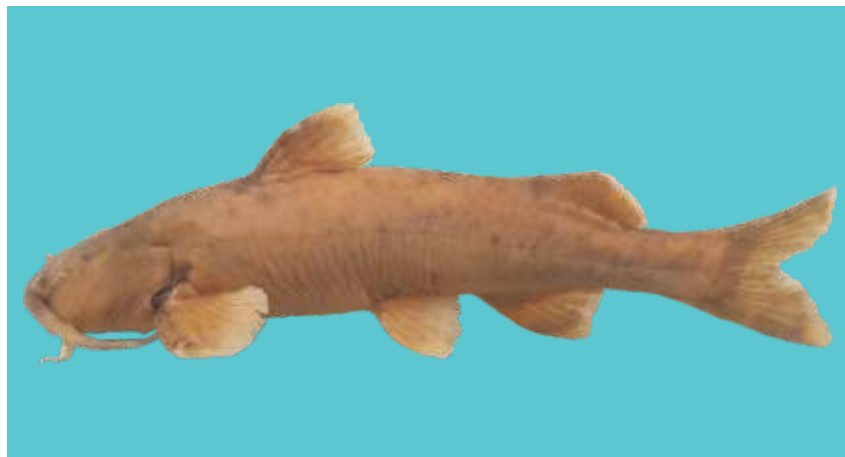
Commercial value: Used as food fish



Glyptothorax garhwali Tilak, 1969

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Sisoridae
Genus : *Glyptothorax*
Species : *garhwali*



Vernacular name: Patharchata (Uttarakhand)

Common English name: Mountain Cavia catfish

Synonyms: *Glyptothorax garhwali*

Salient identifying characteristics:

- ◆ Elongated body and depressed head
- ◆ Mouth inferior. Barbells 4 pairs
- ◆ Dorsal fin inserted nearer to adipose fin than to tip of snout
- ◆ Dorsal spine strong and smooth
- ◆ Paired fins non-plaited below
- ◆ Caudal fin forked

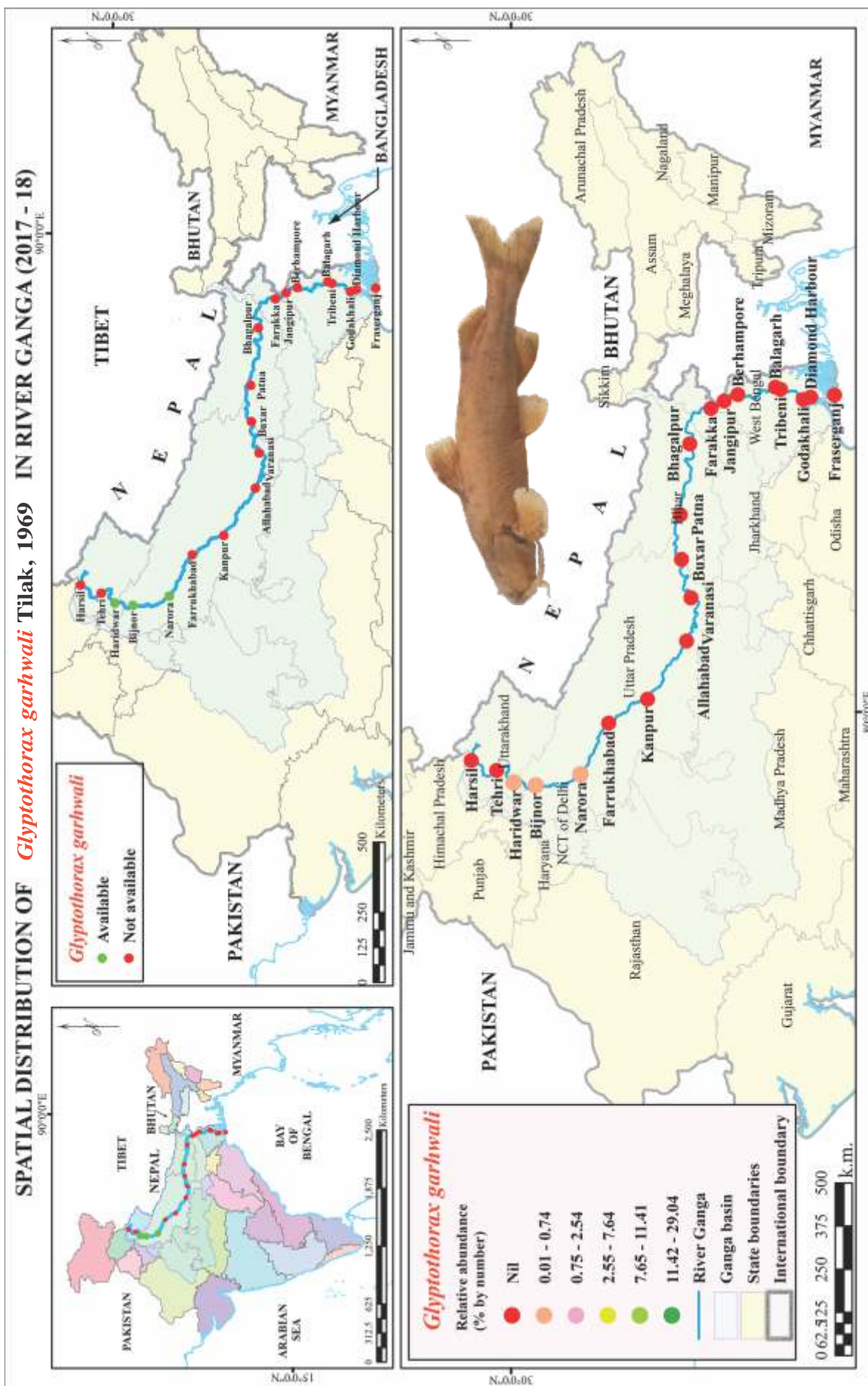
Habitat: Freshwater

Maximum size (TL): 10.9 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Gogangra viridescens (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Sisoridae
Genus	: <i>Gogangra</i>
Species	: <i>viridescens</i>



Vernacular name: Not Known

Common English name: Huddah Nangra

Synonyms: *Pimelodus viridescens*, *Nagara punctata*, *Nagara viridescens*, *Gagata viridescens*

Salient identifying characteristics:

- ◆ Elongated body and depressed head
- ◆ Barbels four pair
- ◆ Dorsal spine strong and smooth
- ◆ Well marked short adipose fin
- ◆ Pectoral spine strong, caudal fin deeply forked
- ◆ A black blotch on occiput, dorsal fin with a black band

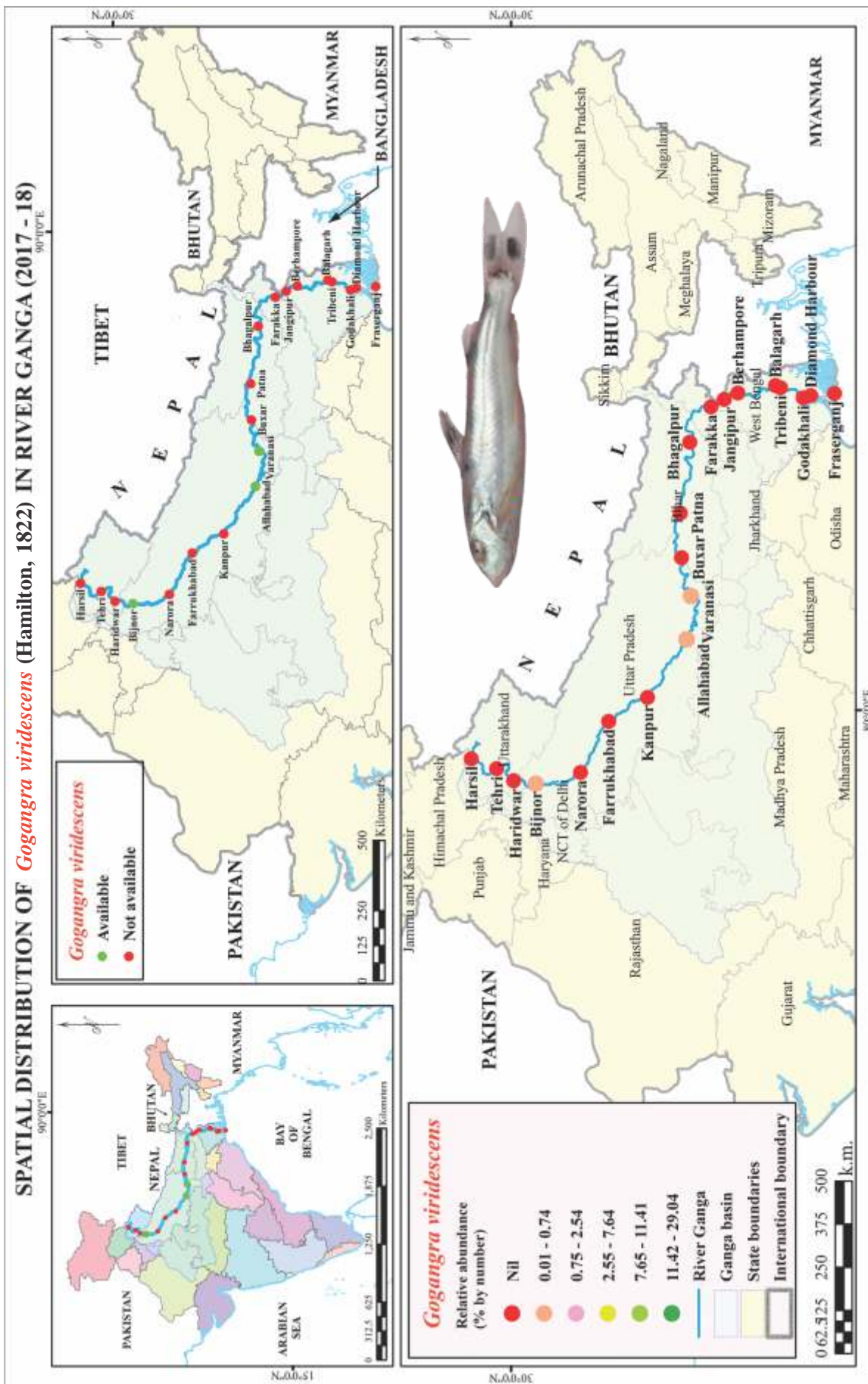
Habitat: Freshwater

Maximum size (TL): 8.5 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Heteropneustes fossilis (Bloch, 1794)

Systematic classification:

Class	: Actinopterygii
Order	: Siluriformes
Family	: Heteropneustidae
Genus	: <i>Heteropneustes</i>
Species	: <i>fossilis</i>



Vernacular name: Singhi (West Bengal)

Common English name: Stinging catfish

Synonyms: *Silurus fossilis*

Salient identifying characteristics:

- ◆ Body elongated and smooth, sub-cylindrical to pelvic fin base, compressed behind
- ◆ Depressed head
- ◆ Mouth small and terminal with villiform teeth on jaws
- ◆ Short dorsal fin, originated usually above the tip of pectoral fin
- ◆ Long anal fin, not confluent with caudal fin
- ◆ Caudal fin rounded

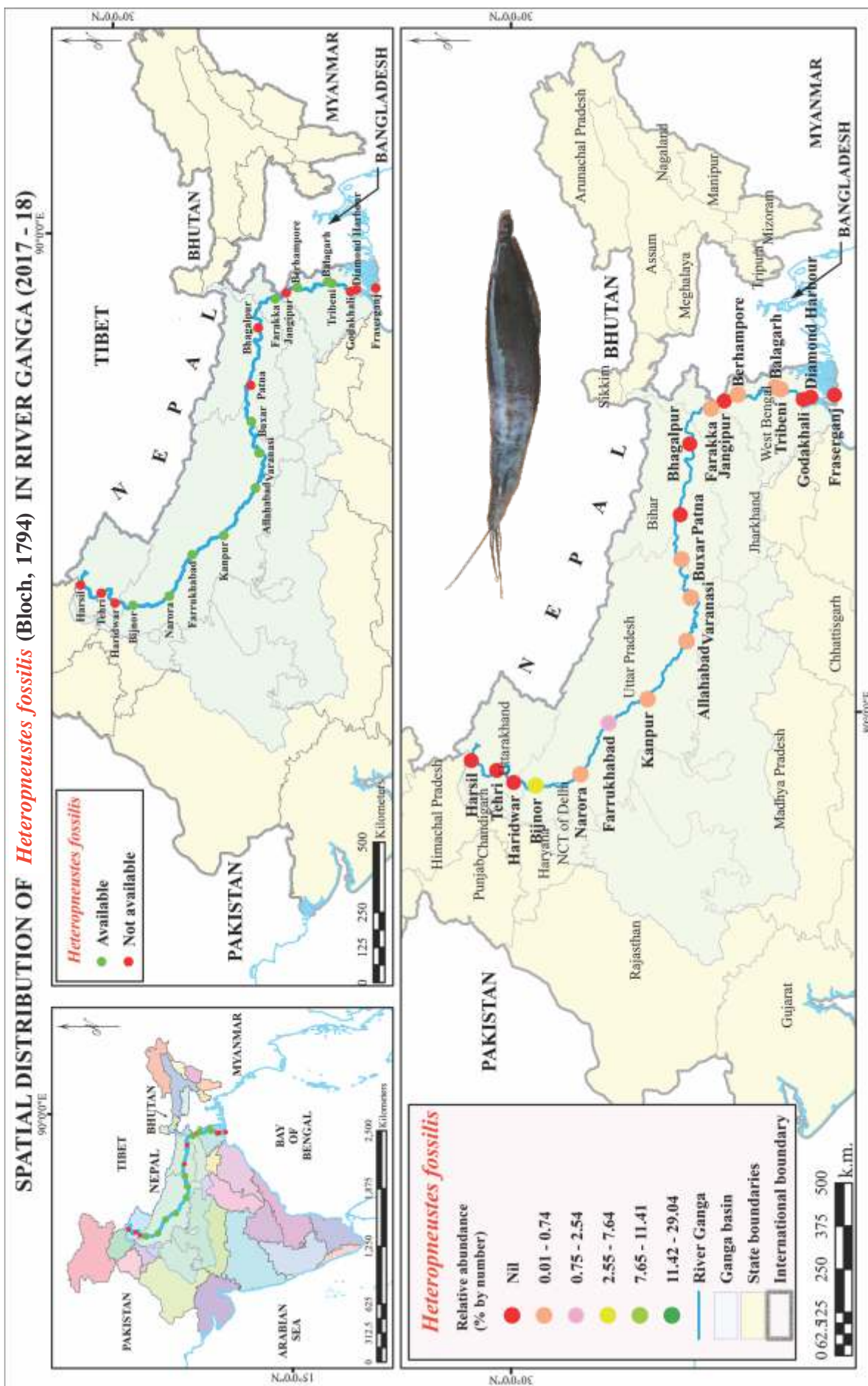
Habitat: Freshwater

Maximum size (TL): 31 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Mystus bleekeri (Day, 1877)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Bagridae
Genus : *Mystus*
Species : *bleekeri*



Vernacular name: Katinna (Uttar Pradesh), Tengra (West Bengal)

Common English name: Day's mystus

Synonyms: *Macrones bleekeri*, *Aoria bleekeri*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Mouth is terminal, eyes diameter 4 to 5 times
- ◆ Barbels 4 pairs; maxillary barbells extend to anal fin
- ◆ Dorsal spine is rarely serrated and smooth
- ◆ Just behind the rayed dorsal fin, large adipose fin is present

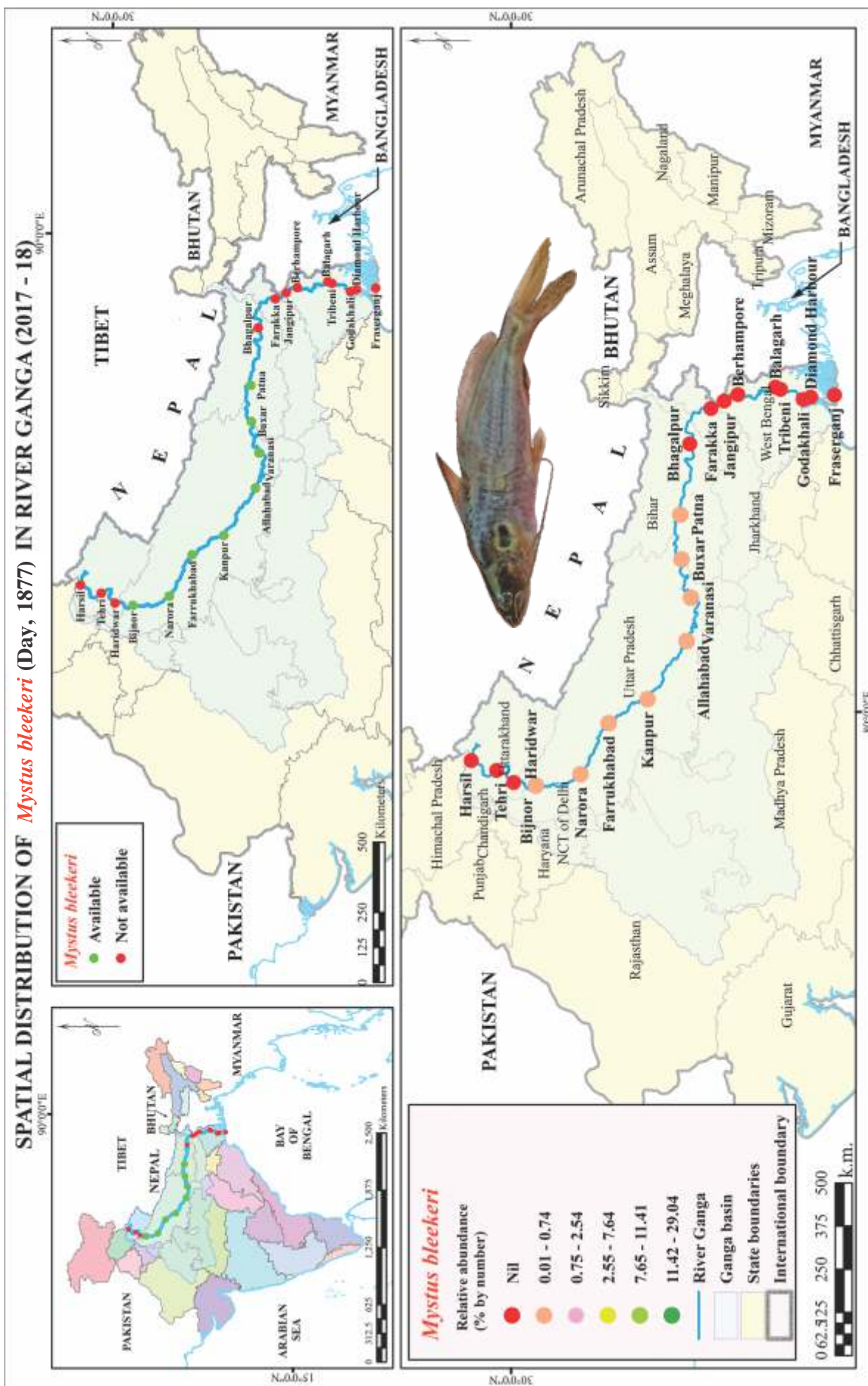
Habitat: Freshwater

Maximum size (TL): 17.7 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Mystus cavasius (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Bagridae
Genus	: <i>Mystus</i>
Species	: <i>cavasius</i>



Vernacular name: Palva, Bajha (Uttar Pradesh, Bihar), Tengra (West bengal)

Common English name: Gangetic mystus

Synonyms: *Pimelodus cavasius*, *Bagrus cavasius*, *Aoria cavasius*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Maxillary barbells extend to beyond caudal fin base in adults but not in young ones
- ◆ Dorsal spine weakly serrated
- ◆ At anterior to the first dorsal spine, a dark spot highlighted by a white or pale area along the ventral margin

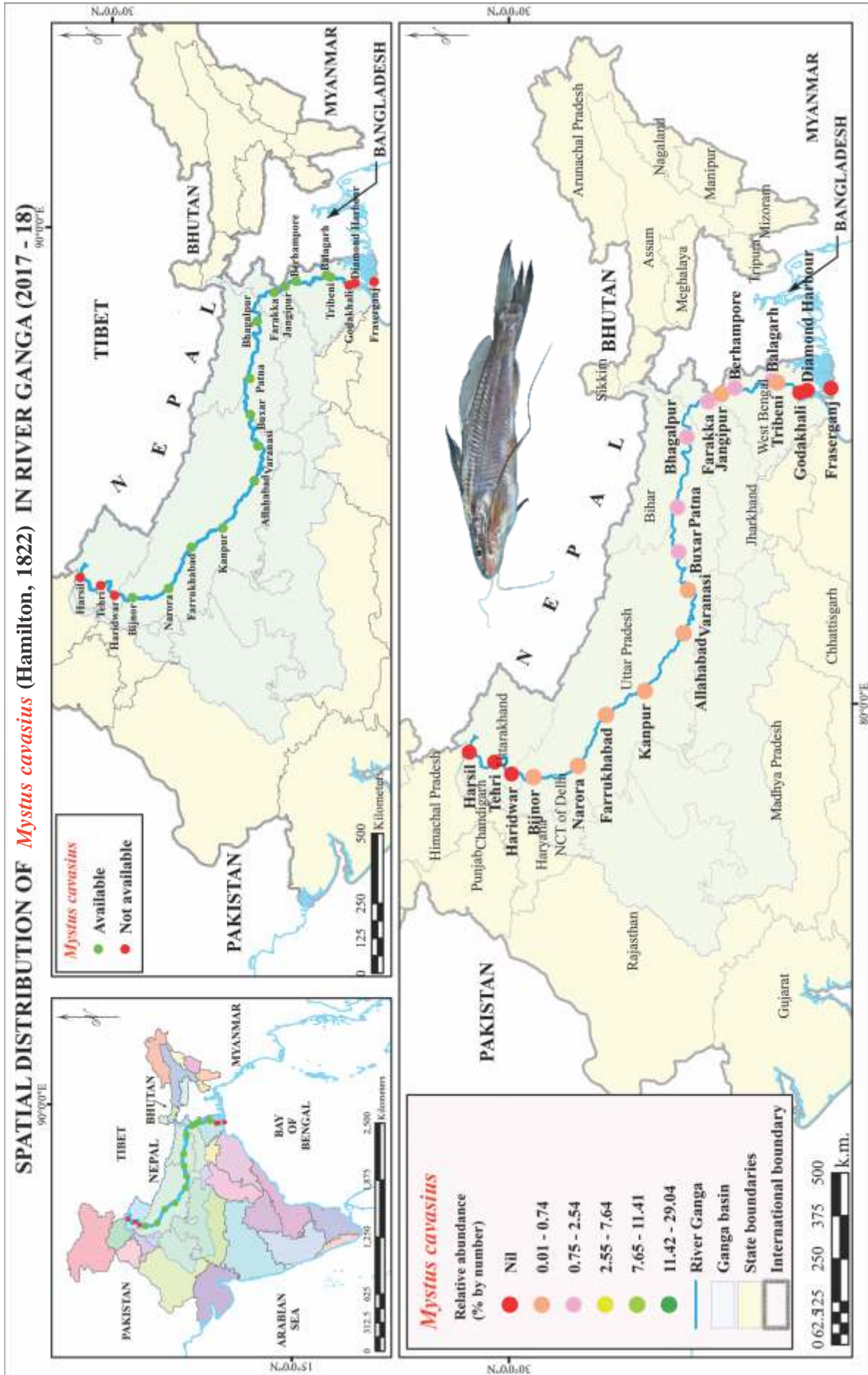
Habitat: Freshwater

Maximum size (TL): 40 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

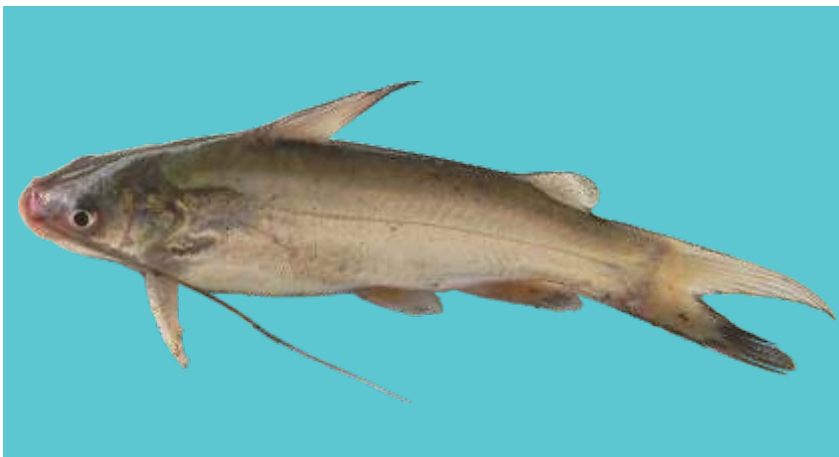
Commercial value: Used as food fish



Mystus gulio (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Siluriformes
Family	: Bagridae
Genus	: <i>Mystus</i>
Species	: <i>gulio</i>



Vernacular name: Nona tengra (West Bengal)

Common English name: Long whiskers catfish

Synonyms: *Pimelodus gulio*, *Aoria gulio*

Salient identifying characteristics:

- ◆ Body is elongate and compressed
- ◆ Head depressed & its upper surface rough and granulated
- ◆ Four pair barbel; maxillary barbels reaching middle or sometimes almost end of pelvic fin

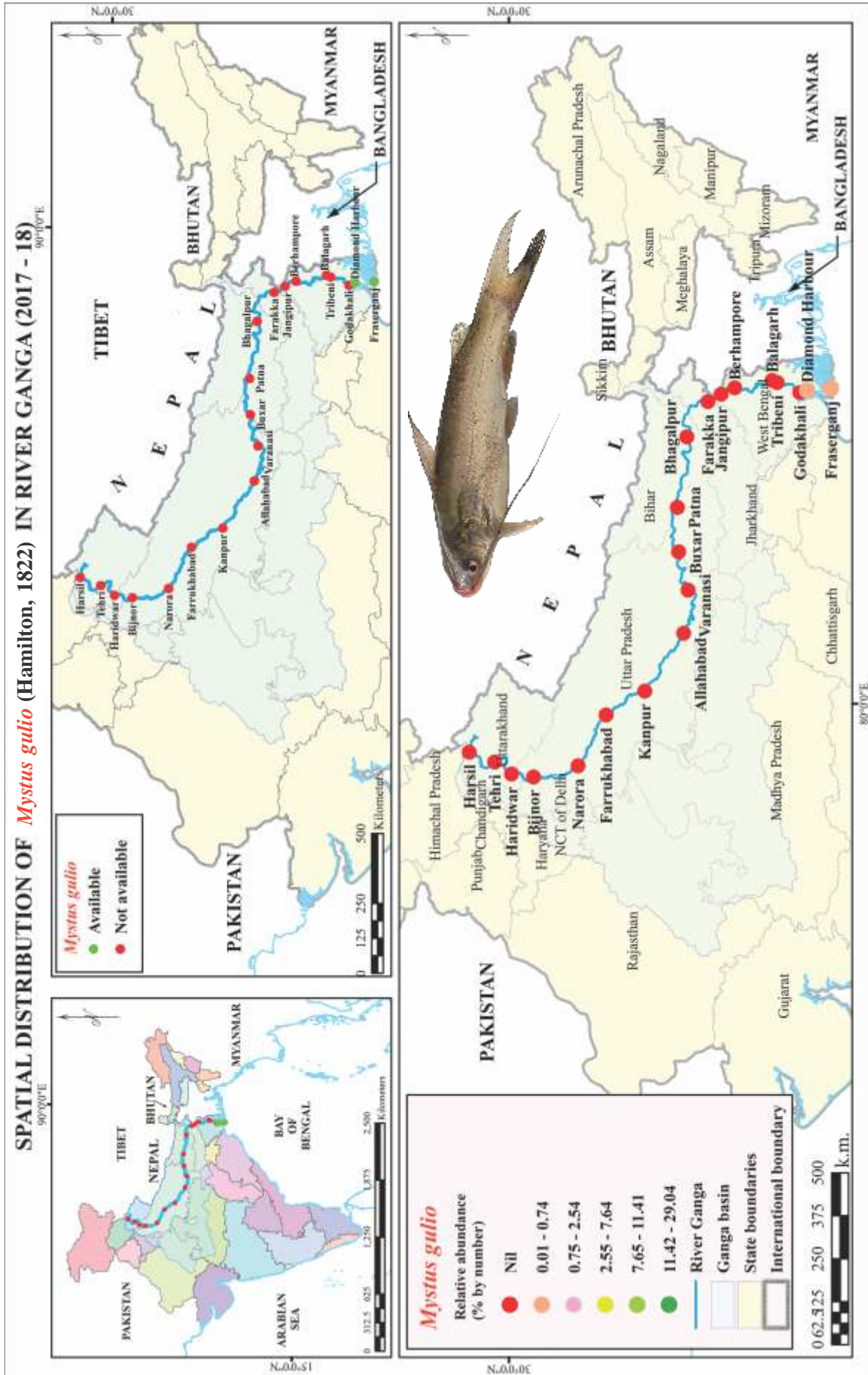
Habitat: Brackishwater and Freshwater

Maximum size (TL): 46 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Hemibagrus menoda (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Bagridae

Genus : *Hemibagrus*

Species : *menoda*



Vernacular name: Aar tengra (West Bengal)

Common English name: Menoda catfish

Synonyms: *Mystus menoda*, *Pimelodus menoda*

Salient identifying characteristics:

- ◆ Body is elongated and compressed
- ◆ Barbels are four pairs and maxillary barbels extend posteriorly to anal fin
- ◆ Rayed dorsal fin inserted above half of pectoral fin with slender spine
- ◆ Anal fin not reaching caudal fin base

Habitat: Freshwater

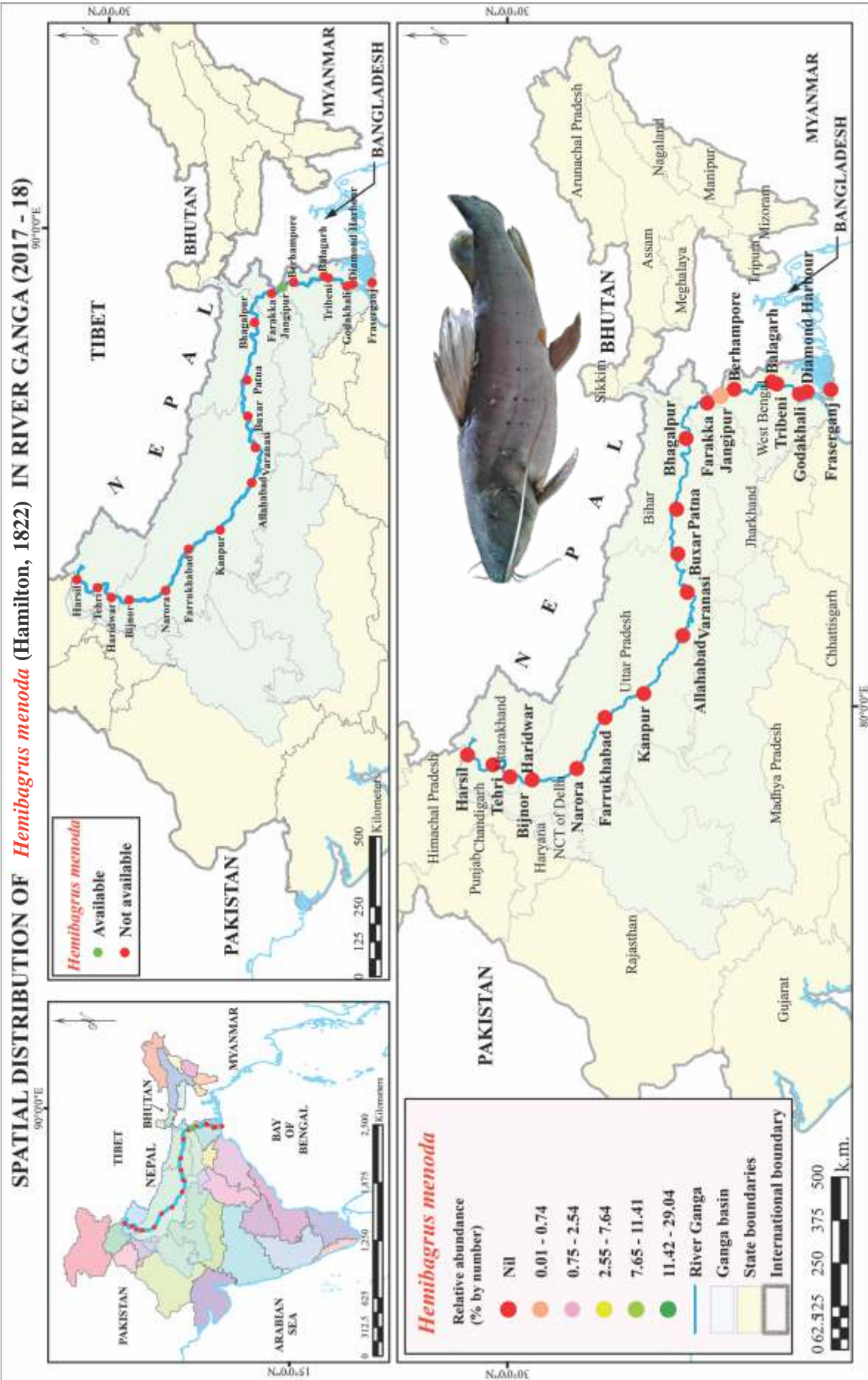
Maximum size (TL): 45 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Hemibagrus menoda* (Hamilton, 1822) IN RIVER GANGA (2017 - 18)



Mystus tengara (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Bagridae
Genus : *Mystus*
Species : *tengara*



Vernacular name: Deshi tengra (West Bengal), Biggi tengra (Bihar)

Common English name: Tengara catfish

Synonyms: *Pimelodus menoda*, *Hypselobagrus tengara*

Salient identifying characteristics:

- ◆ Rayed dorsal fin inserted above half of pectoral fin with strong spine
- ◆ Barbels four pair; maxillary pair extending to base of pelvic fin
- ◆ Adipose dorsal fin long with projecting interspace from rayed dorsal fin
- ◆ Pectoral fin not reaching to pelvic, spine strong
- ◆ Caudal fin forked, upper lobe longer than lower lobe

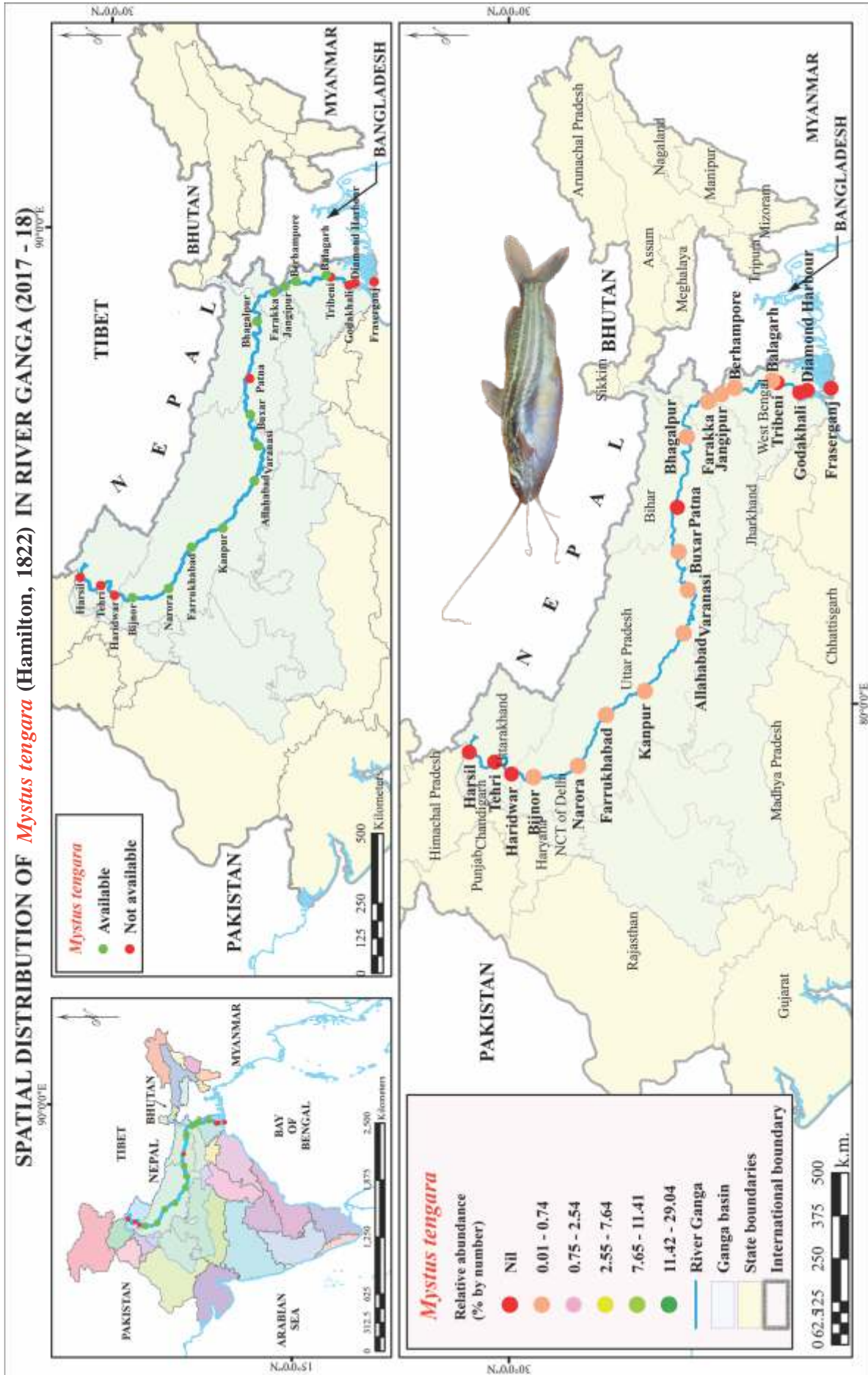
Habitat: Freshwater

Maximum size (TL): 18 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Mystus vittatus (Bloch, 1794)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Bagridae
Genus	: <i>Mystus</i>
Species	: <i>vittatus</i>



Vernacular name: Deshi tengra (West Bengal), Kater, Katinna (Uttar Pradesh, Bihar)

Common English name: Striped dwarf catfish

Synonyms: *Silurus vittatus*, *Macrones vittatus*, *Aoria vittatus*

Salient identifying characteristics:

- ◆ Rayed dorsal fin inserted above half of pectoral fin with strong spine
- ◆ Barbells four pair; maxillary pair extending to base of pelvic fin
- ◆ Adipose dorsal fin short with long interspace from rayed dorsal fin
- ◆ Pectoral fin not reaching pelvics, spine strong
- ◆ Anal fin not reaching caudal base

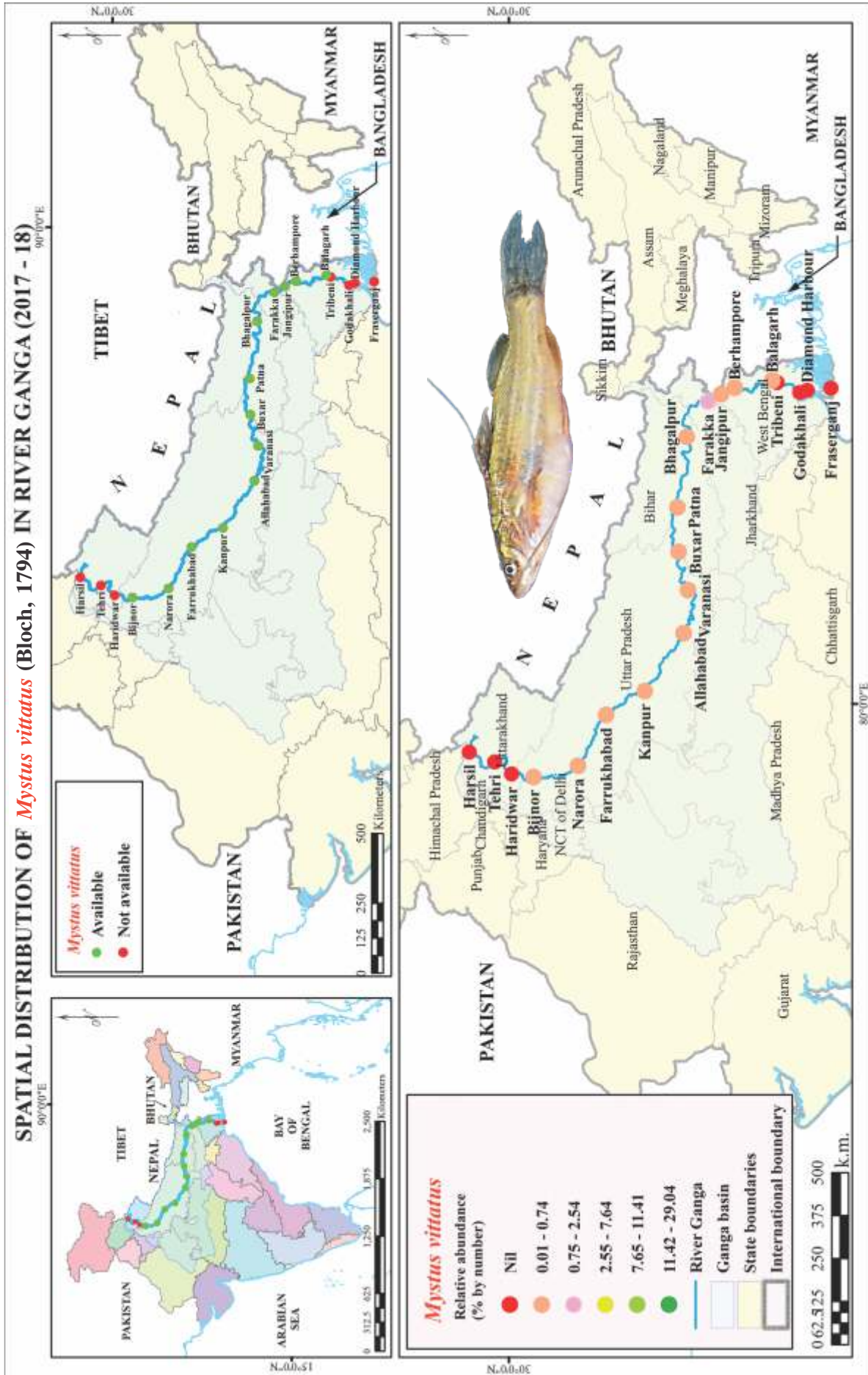
Habitat: Freshwater

Maximum size (TL): 21 cm

Food and feeding: Feeds on plants, shrimps, insects, molluscs and fish

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Nemapteryx caelata (Valenciennes, 1840)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Ariidae
Genus : *Nemapteryx*
Species : *caelata*



Vernacular name: Mochon kata (West Bengal)

Common English name: Engraved catfish

Synonyms: *Arius caelatus*, *Tachysurus caelatus*

Salient identifying characteristics:

- ◆ Body robust and elongated, mouth sub terminal
- ◆ Head is depressed, nape is concave, head-shield is rugose and granulated
- ◆ Three pairs of barbels, maxillary pair extends upto the mid region of pectoral fin
- ◆ Tip of dorsal fin elongated to a black filament
- ◆ Adipose dorsal fin black or with blackish spot, free posteriorly

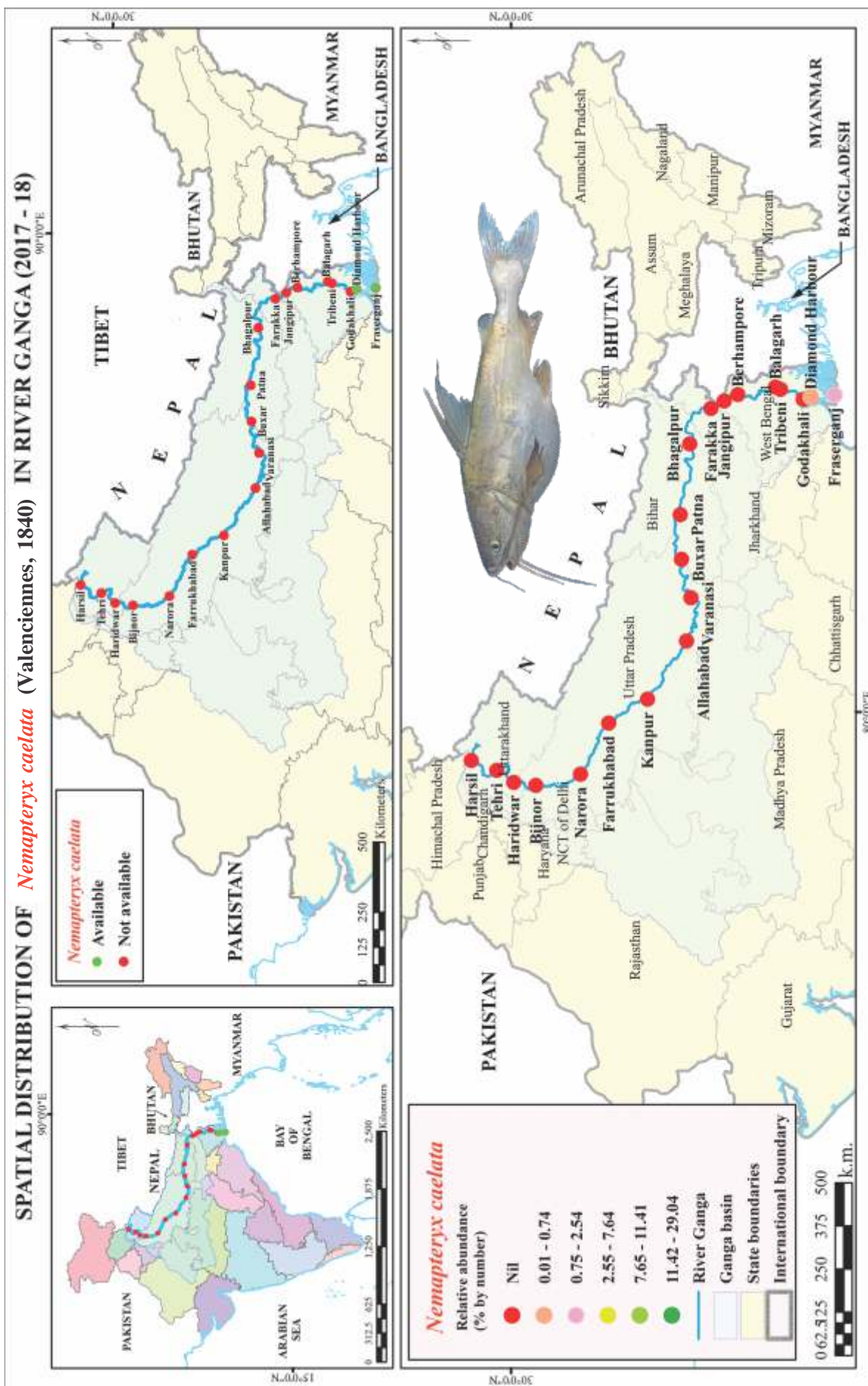
Habitat: Marinewater and Brackishwater

Maximum size (TL): 45 cm

Food and feeding: Feeds mainly on invertebrates and small fishes

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Pachypterus atherinoides (Bloch, 1794)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Horabagridae
Genus : *Pachypterus*
Species : *atherinoides*



Vernacular name: Tinkatia, Patasi (Uttar Pradesh, Bihar), Batashi (West Bengal)

Common English name: Indian potasi

Synonyms: *Pseudotropius atherinoides*, *Silurus atherinoides*

Salient identifying characteristics:

- ◆ Body is elongated and laterally compressed
- ◆ Upper jaw elongated and projecting considerably beyond the lower jaw
- ◆ 4 pairs of barbels; the maxillary pair extending upto anal fin
- ◆ Pectoral spine moves backwards far away from base of dorsal spine
- ◆ Anal fin long, not reaching caudal fin base

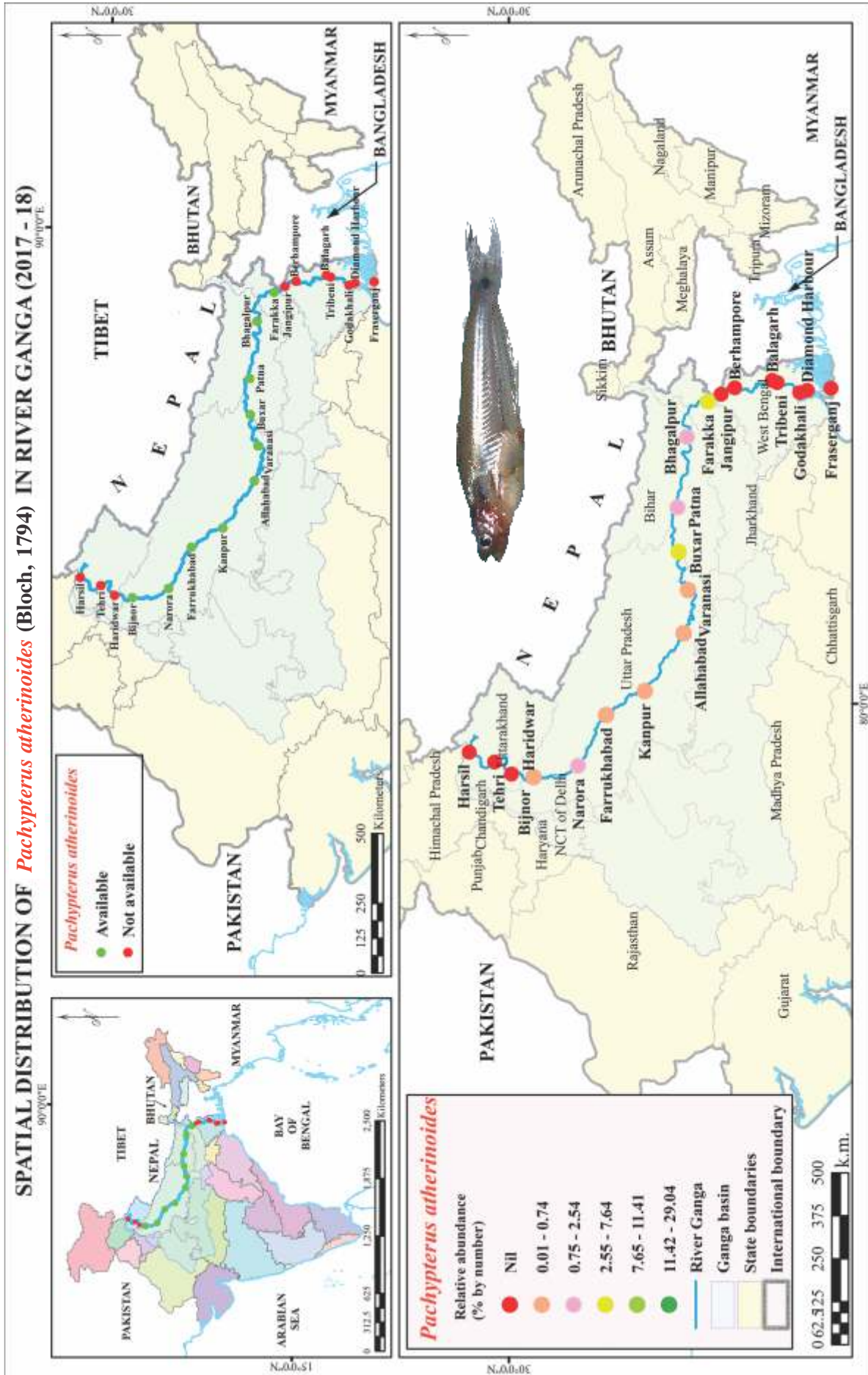
Habitat: Freshwater

Maximum size (TL): 15 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Ompok bimaculatus (Bloch, 1794)

Systematic classification:

Class	: Actinopterygii
Order	: Siluriformes
Family	: Siluridae
Genus	: <i>Ompok</i>
Species	: <i>bimaculatus</i>



Vernacular name: Pabdah (Uttar Pradesh, Bihar, West Bengal)

Common English name: Butter catfish

Synonyms: *Silurius bimaculatus*, *Callichrous bimaculatus*

Salient identifying characteristics:

- ◆ Moderate eyes. Mouth large and oblique
- ◆ Rayed dorsal fin short, no spine
- ◆ Pectoral fin surpassing pelvic fin
- ◆ Pelvic fin reaching anal fin
- ◆ Caudal fin forked, upper lobe longer than lower

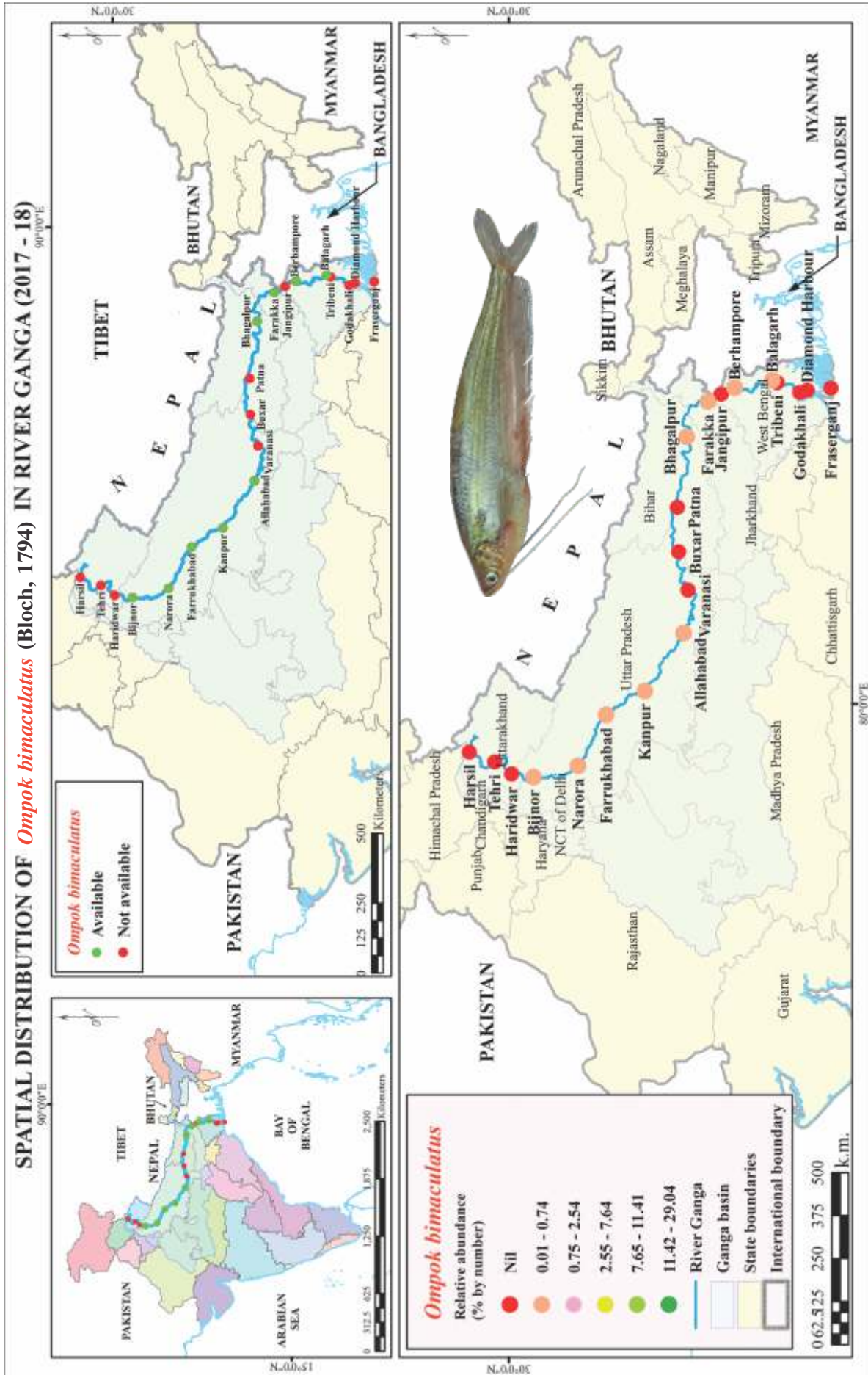
Habitat: Freshwater

Maximum size (TL): 45 cm

Food and feeding: Feeds on vegetable matter and fish

Conservation status (IUCN Red list): Near Threatened

Commercial value: Used as food fish



Ompok pabda (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Siluridae

Genus : *Ompok*

Species : *pabda*



Vernacular name: Pabdah (Uttar Pradesh, Bihar, West Bengal)

Common English name: Pabdah catfish

Synonyms: *Silurius pabda*, *Callichrous pabda*

Salient identifying characteristics:

- ◆ Moderate eyes. Mouth large and oblique
- ◆ Rayed dorsal fin short, no spine
- ◆ Maxillary pair extend usually to as far as middle of pectoral fin
- ◆ Anal fin long separated from caudal by notch
- ◆ Caudal fin forked and both lobes pointed

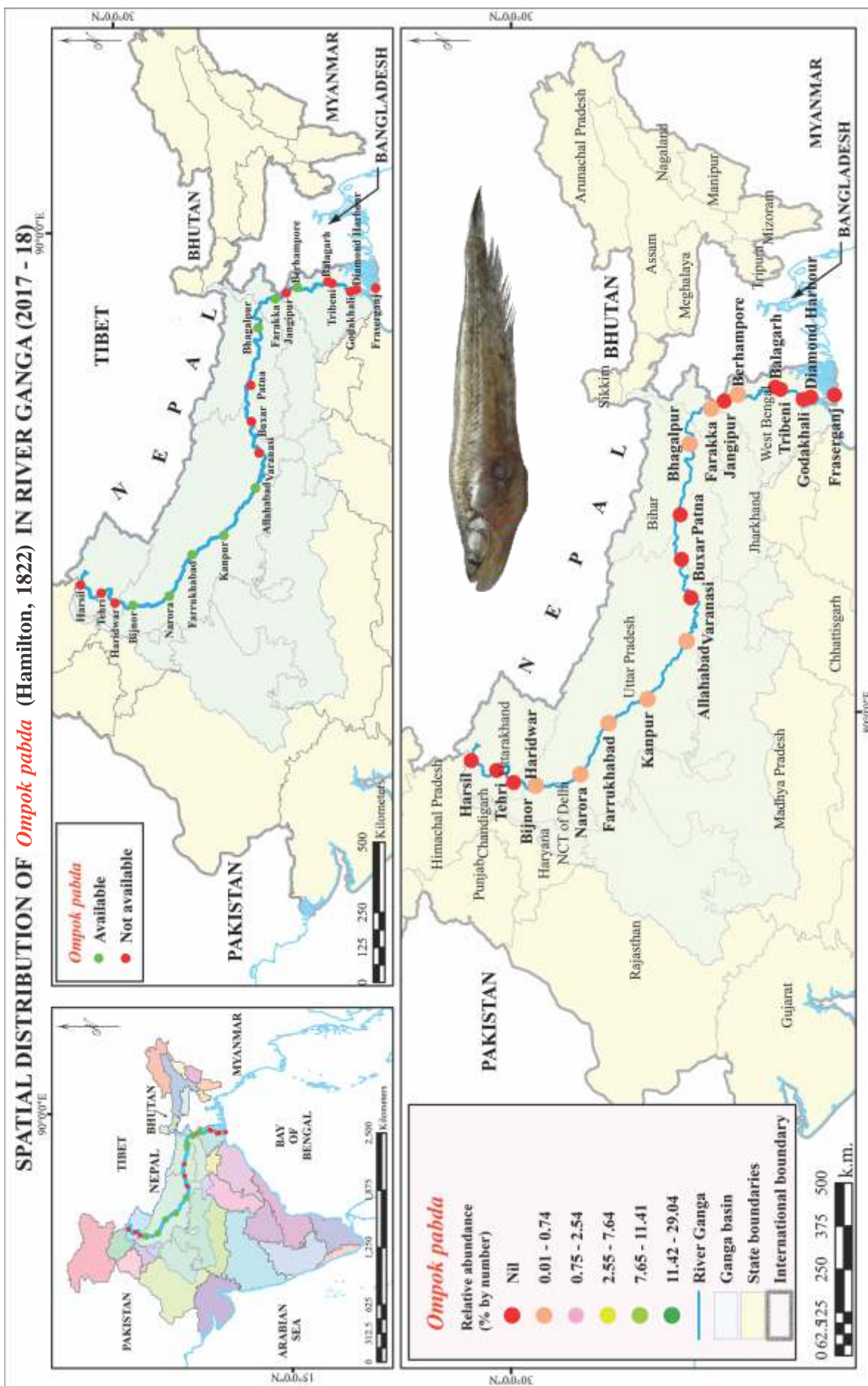
Habitat: Freshwater

Maximum size (TL): 25 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Near Threatened

Commercial value: Used as food fish



Ompok pabo (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Siluridae

Genus : *Ompok*

Species : *pabo*



Vernacular name: Pabdah (Uttar Pradesh, Bihar, West Bengal)

Common English name: Pabo catfish

Synonyms: *Silurus pabo*, *Callichrous pabo*

Salient identifying characteristics:

- ◆ Elongated and compressed body structure
- ◆ Mouth is large and oblique in nature
- ◆ Maxillary barbels shorter than head length, pelvic fin rays 9-10
- ◆ Long anal fin
- ◆ Spine on the pectoral fin is moderately strong, feebly serrated

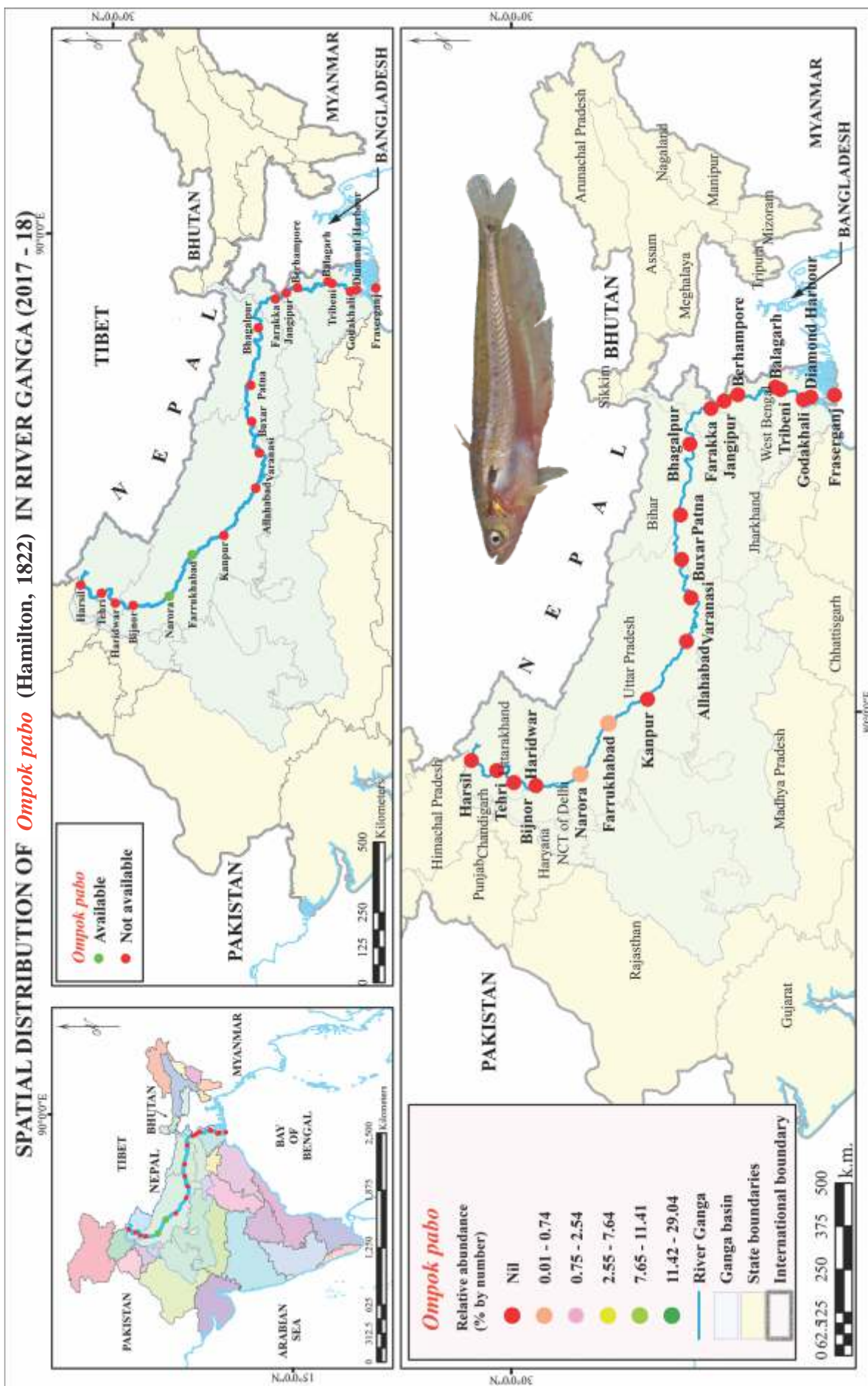
Habitat: Freshwater

Maximum size (TL): 25 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Near Threatened

Commercial value: Used as food fish



Osteogeneiosus militaris (Linnaeus, 1758)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Ariidae
Genus : *Osteogeneiosus*
Species : *militaris*



Vernacular name: Not Known

Common English name: Soldier catfish

Synonyms: *Silurus militaris*, *Arius militaris*

Salient identifying characteristics:

- ◆ Head is strongly depressed and body is elongated
- ◆ Presence of semi osseous stiff maxillary barbell
- ◆ Dorsal and pectoral spines are serrated and strong
- ◆ Adipose dorsal fin short, free
- ◆ Pectoral fin not reaching the pelvic spine

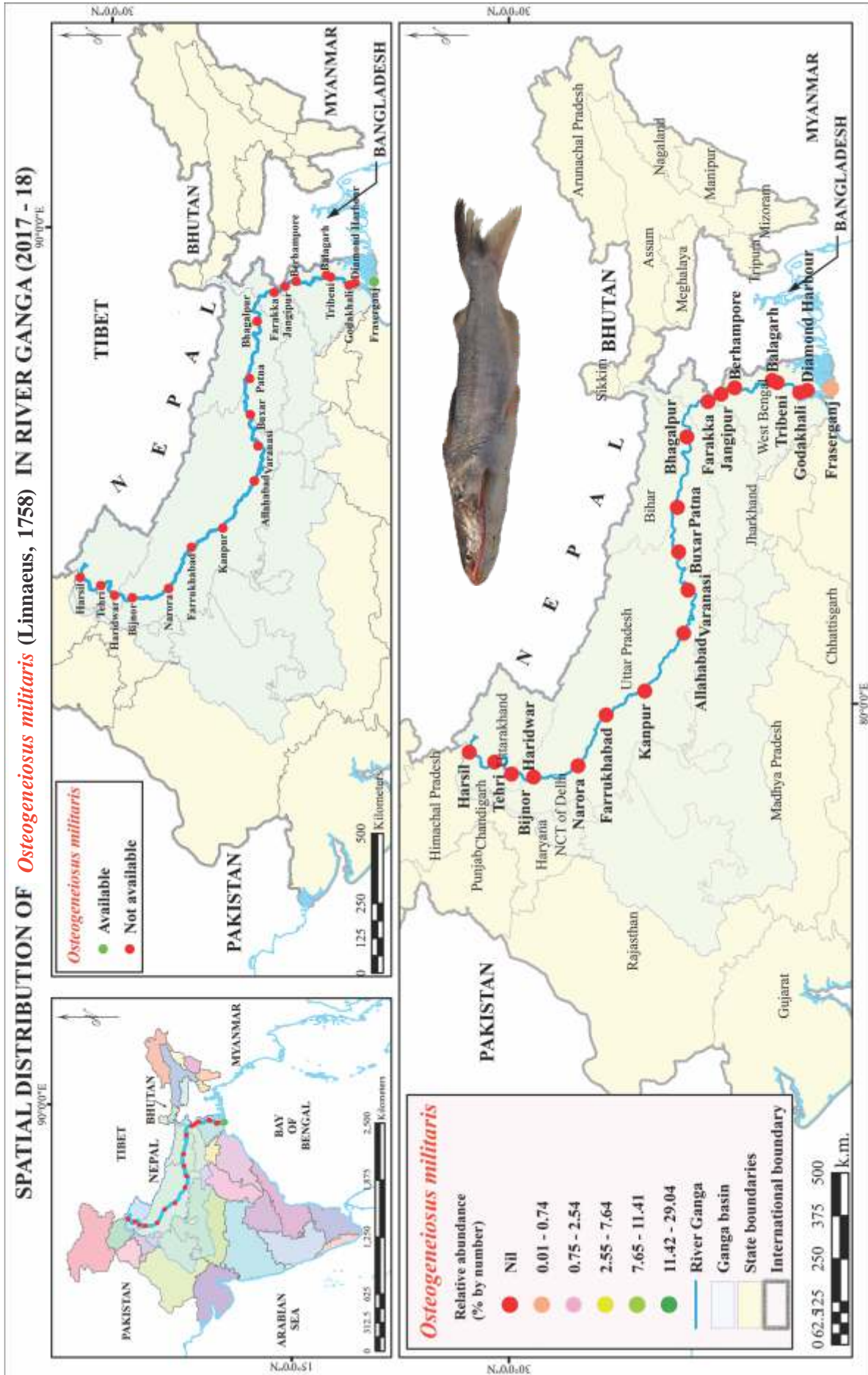
Habitat: Brackishwater

Maximum size (TL): 15 cm

Food and feeding: Feeds mainly on invertebrates and small fishes

Conservation status (IUCN Red list): Not Evaluated

Commercial value: Used as food fish



Pangasius pangasius (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Pangasidae
Genus : *Pangasius*
Species : *pangasius*



Vernacular name: Pangash (West Bengal)

Common English name: Pangas catfish

Synonyms: *Pimelodus pangasius*, *Pangasius pangasius pangasius*

Salient identifying characteristics:

- ◆ Rayed dorsal fin inserted above tip of pectoral fin, spine moderately strong
- ◆ Pectoral fin not reaching pelvics
- ◆ Pelvic fin not reaching anal
- ◆ Anal fin with 30-34 rays

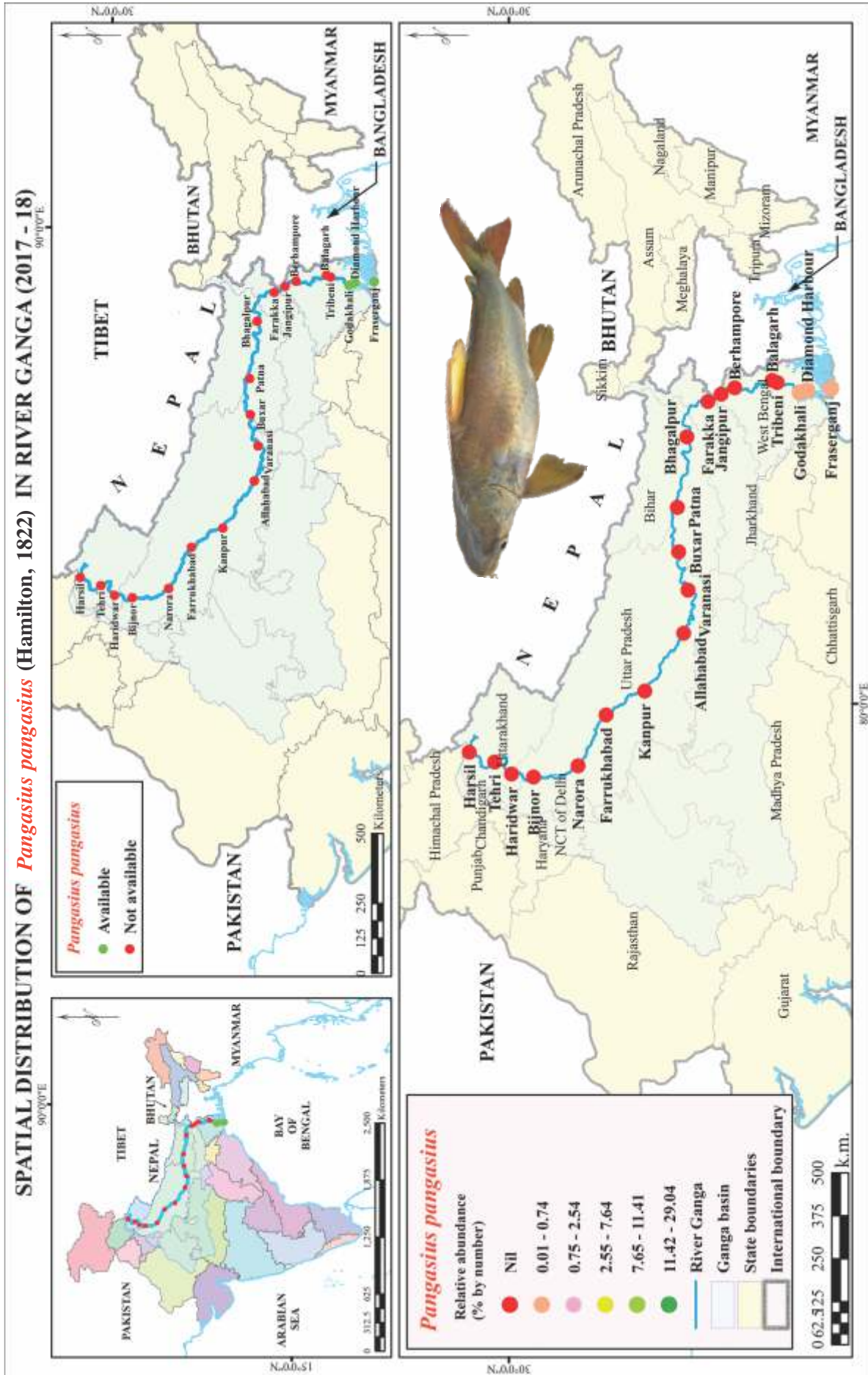
Habitat: Brackishwater and Freshwater

Maximum size (TL): 300 cm

Food and feeding: Feeds on snails, molluscs, plants

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Rita rita (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Bagridae
Genus	: <i>Rita</i>
Species	: <i>rita</i>



Vernacular name: Belgagra, Kunkuna (Uttar Pradesh, Bihar), Ritah (West Bengal, Bihar)

Common English name: Rita

Synonyms: *Pimelodus rita*

Salient identifying characteristics:

- ◆ Body elongated. head depressed
- ◆ Mouth transverse, 3 pairs of barbels; maxillary pair reaching operculum, nasal barbels very small
- ◆ Adipose dorsal fin short not reaching caudal fin base
- ◆ Strong dorsal spine serrated posteriorly in upper part only. Lateral line straight

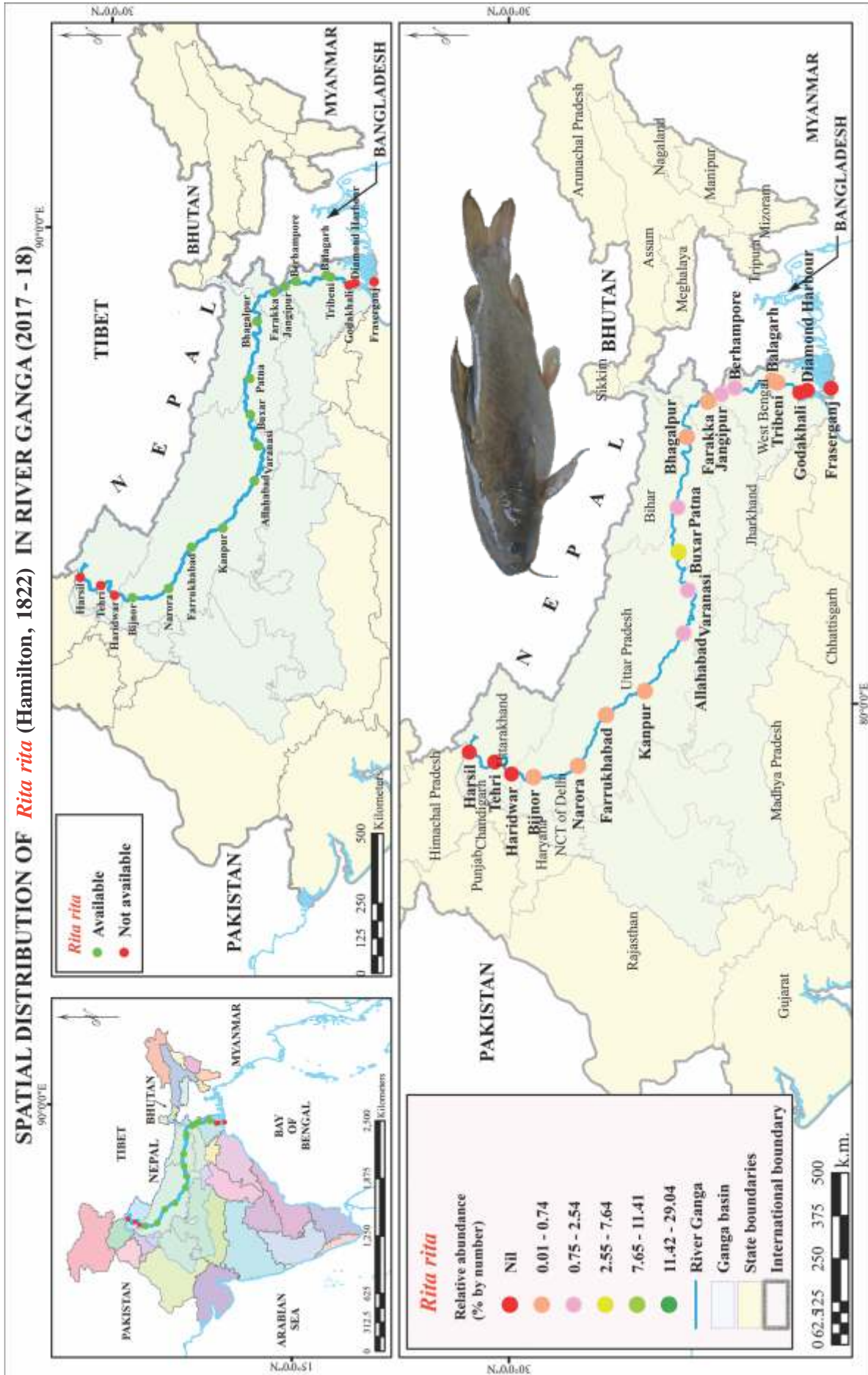
Habitat: Freshwater

Maximum size (TL): 150 cm

Food and feeding: Carnivorous and feeds on insects, molluscs, shrimps and fishes

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Silonia silondia (Hamilton, 1822)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Ailiidae
Genus	: <i>Silonia</i>
Species	: <i>silondia</i>



Vernacular name: Silon (West Bengal, Bihar), Dhain (Uttar Pradesh)

Common English name: Silond catfish

Synonyms: *Pimelodus silondia*

Salient identifying characteristics:

- ◆ Elongated and compressed body
- ◆ Mouth wide and terminal, obliquely upwards
- ◆ Two pairs of barbel, maxillary pair minute
- ◆ Dorsal fin inserted ahead of pelvic fin
- ◆ Pectoral fin not reaching pelvic fins in adults
- ◆ Caudal fin forked, lobes equal

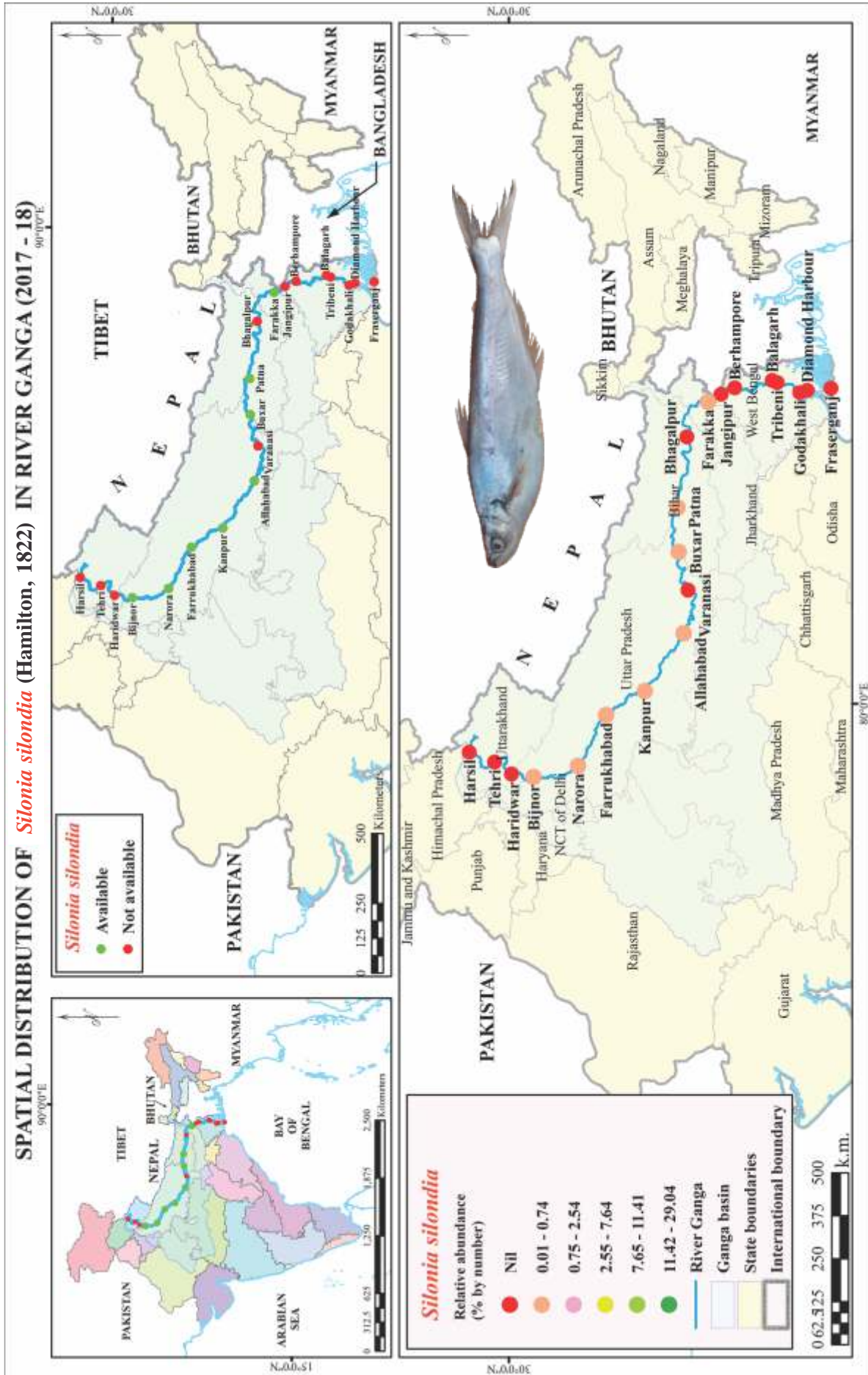
Habitat: Freshwater

Maximum size (TL): 183 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Sisor rabdophorus (Hamilton 1822)

Systematic classification:

Class : Actinopterygii

Order : Siluriformes

Family : Sisoridae

Genus : *Sisor*

Species : *rabdophorus*



Vernacular name: Panayia, Chennuah (Uttar Pradesh), Biskhopra (Bihar)

Common English name: Sisor catfish

Synonyms: Sisor rahabdophorus

Salient identifying characteristics:

- ◆ Elongated body having a long tapering tail
- ◆ Mouth small and inferior
- ◆ 6 pairs of barbels; maxillary bear one pair and mandibular bear 5 pair
- ◆ Anal fin not reaching caudal fin flexure
- ◆ Rayed dorsal fin bearing a weak spine, adipose fin in form of a spine. Horizontal pectoral fin. Caudal fin truncated

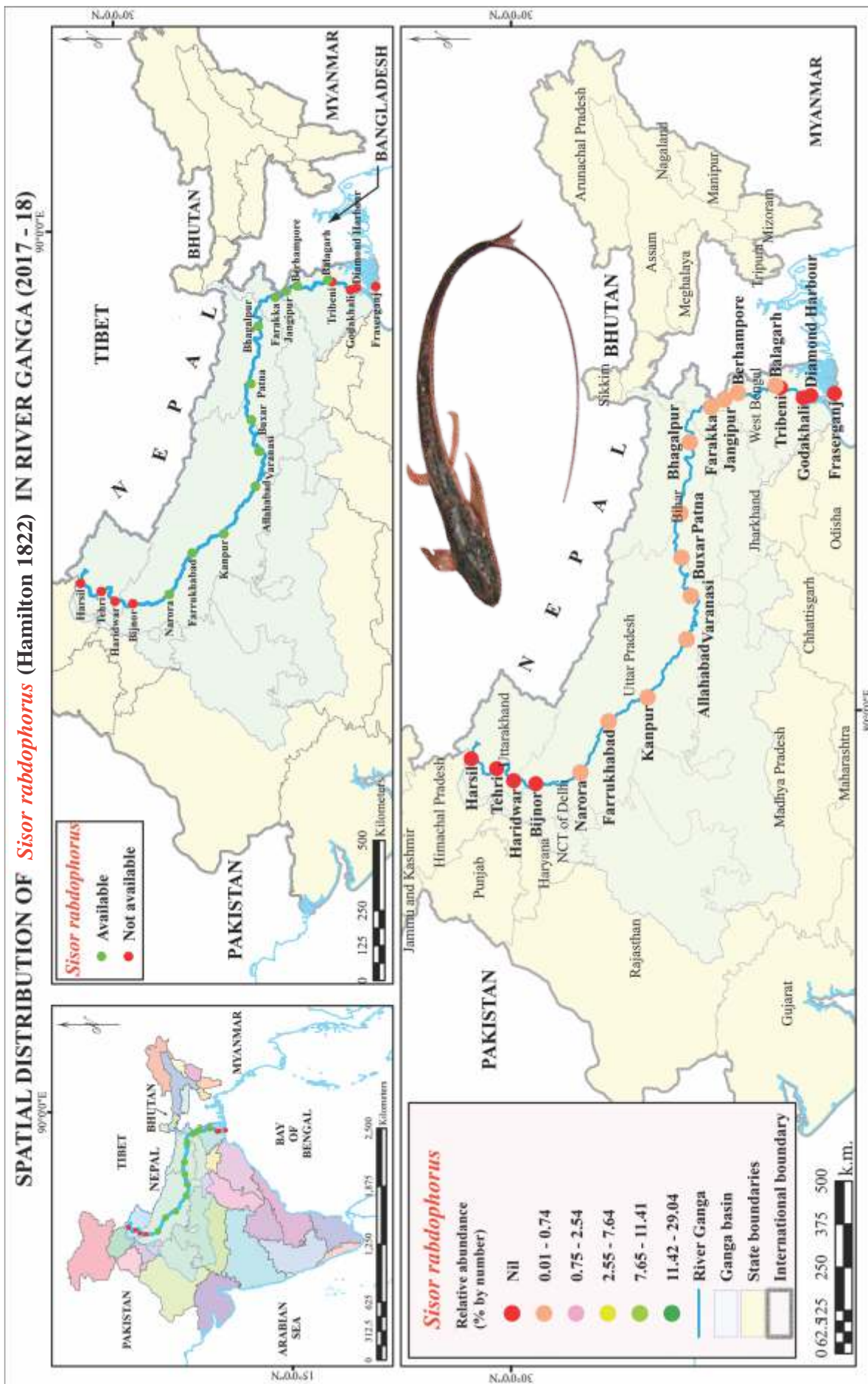
Habitat: Freshwater

Maximum size (TL): 18 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Sperata aor (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Bagridae
Genus : *Sperata*
Species : *aor*



Vernacular name: Degar, Tengra (Uttar Pradesh, Bihar), Aarh (West Bengal)

Common English name: Long whiskered catfish

Synonyms: *Aorichthys aor*, *Mystus aor*, *Aoria aor*

Salient identifying characteristics:

- ◆ Elegant body elongated and compressed
- ◆ Snout broad and rounded. Maxillary barbels extend to base of caudal fin
- ◆ Pelvic fin not reaching anal fin
- ◆ Mouth sub terminal; 4 pairs barbels
- ◆ Serration occurs on posterior edge of dorsal spine. Long adipose fin base

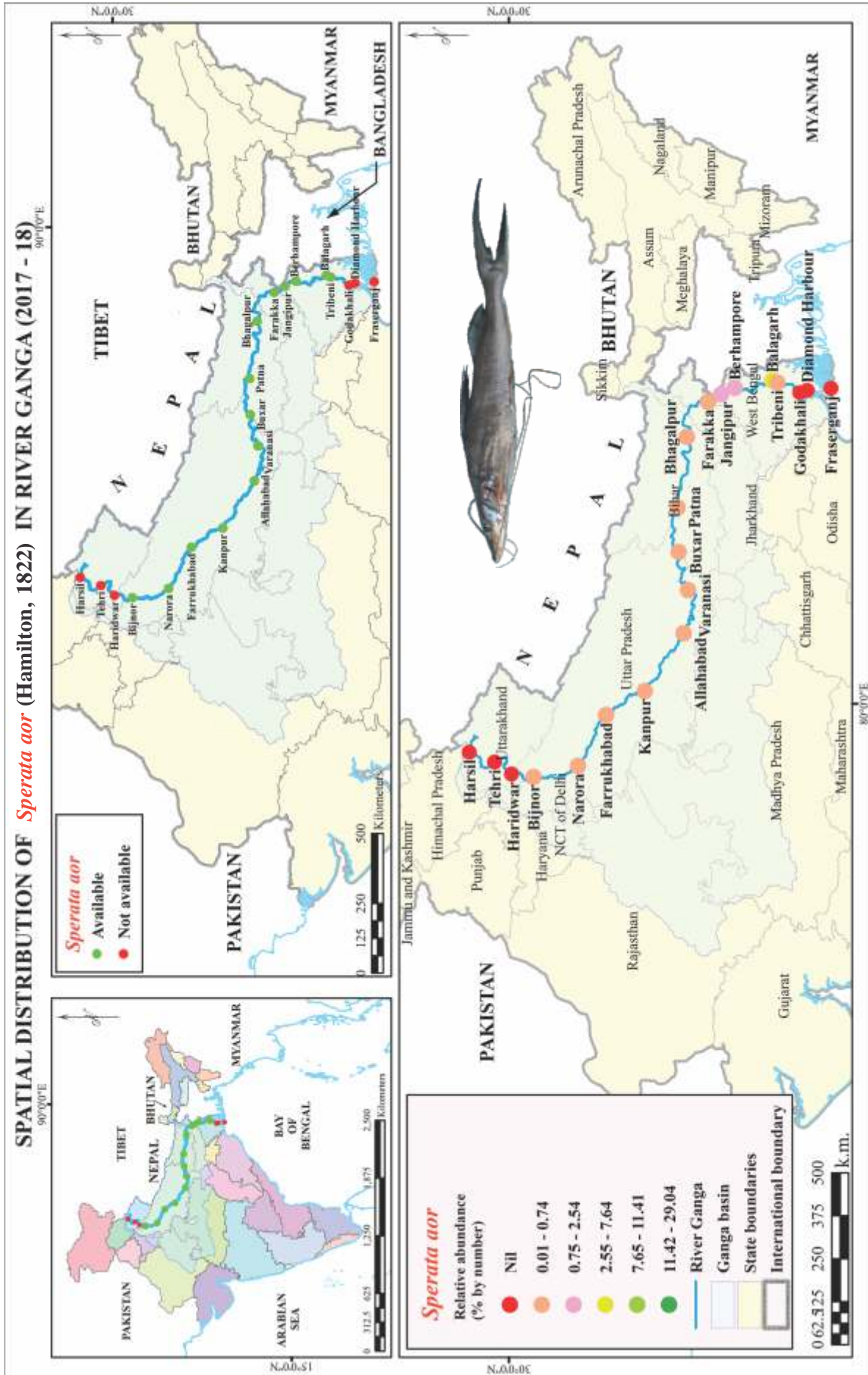
Habitat: Freshwater

Maximum size (TL): 180 cm

Food and feeding: Feeds on small fishes and worms

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Sperata seenghala (Sykes, 1839)

Systematic classification:	
Class	: Actinopterygii
Order	: Siluriformes
Family	: Bagridae
Genus	: <i>Sperata</i>
Species	: <i>seenghala</i>



Vernacular name: Aarh Tengra, Degar (Uttar Pradesh, Bihar), Aarh (West Bengal)

Common English name: Giant River catfish

Synonyms: *Aorichthys seenghala*, *Mystus seenghala*, *Aoria seenghala*

Salient identifying characteristics:

- ◆ Elegant body elongated and compressed
- ◆ Snout broad and spatulate. Maxillary barbels extend posteriorly to pelvic fins or beyond to anal fin
- ◆ Mouth sub terminal
- ◆ Anal fin not reaching caudal fin base
- ◆ Serration occurs on posterior edge of dorsal spine. Short adipose fin base

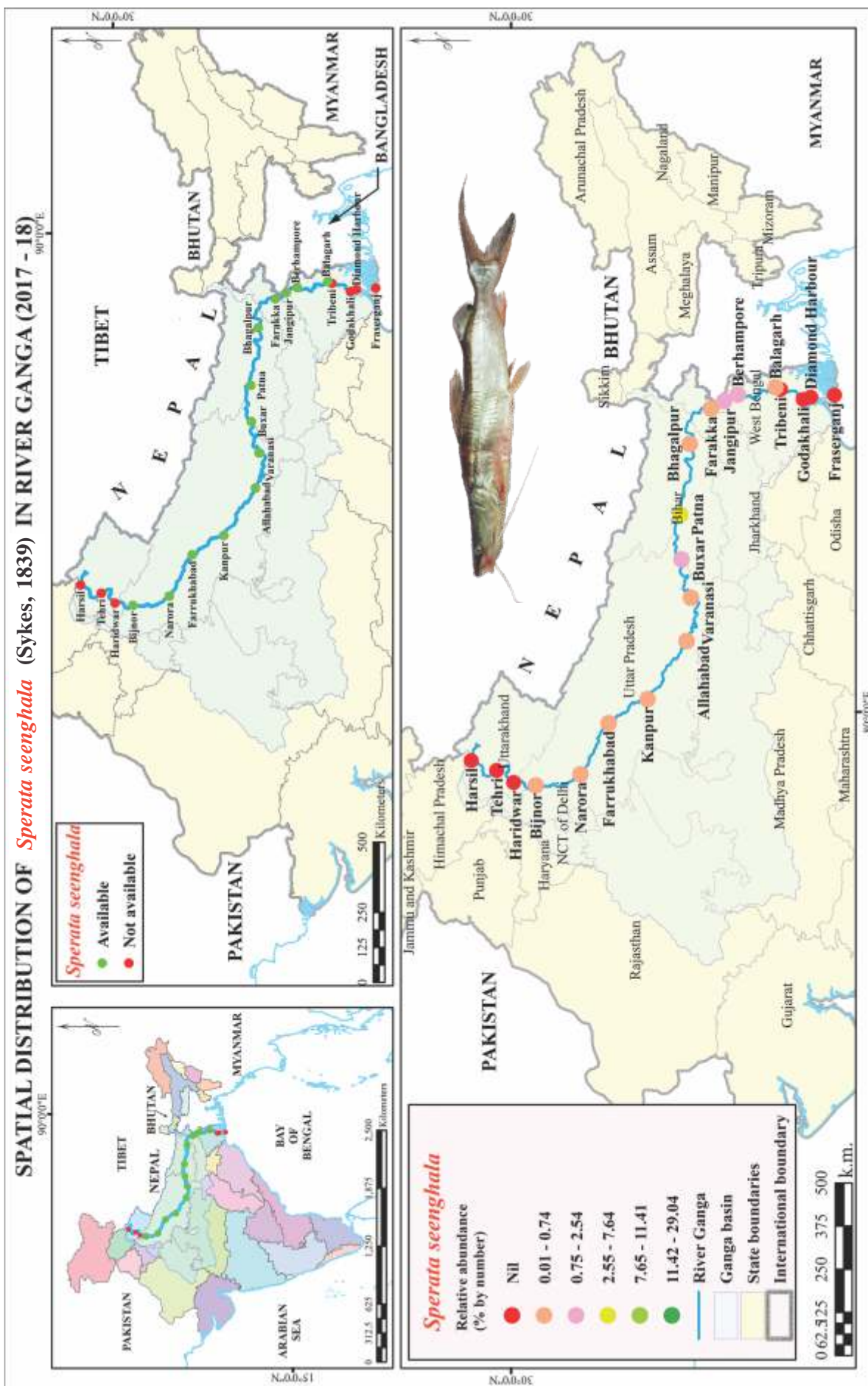
Habitat: Freshwater

Maximum size (TL): 150 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Wallago attu (Bloch & Schneider, 1801)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Siluridae
Genus : *Wallago*
Species : *attu*



Vernacular name: Barari, Lachi, Parin (Uttar Pradesh, Bihar), Boal (West Bengal)

Common English name: Wallago

Synonyms: *Silurus attu*

Salient identifying characteristics:

- ◆ Body color darker in above and lighter in lower part
- ◆ Pectoral fin extending beyond pelvic fin, Adipose fin absent
- ◆ Pelvic fin extending up to base of anal fin, caudal fin forked and rounded

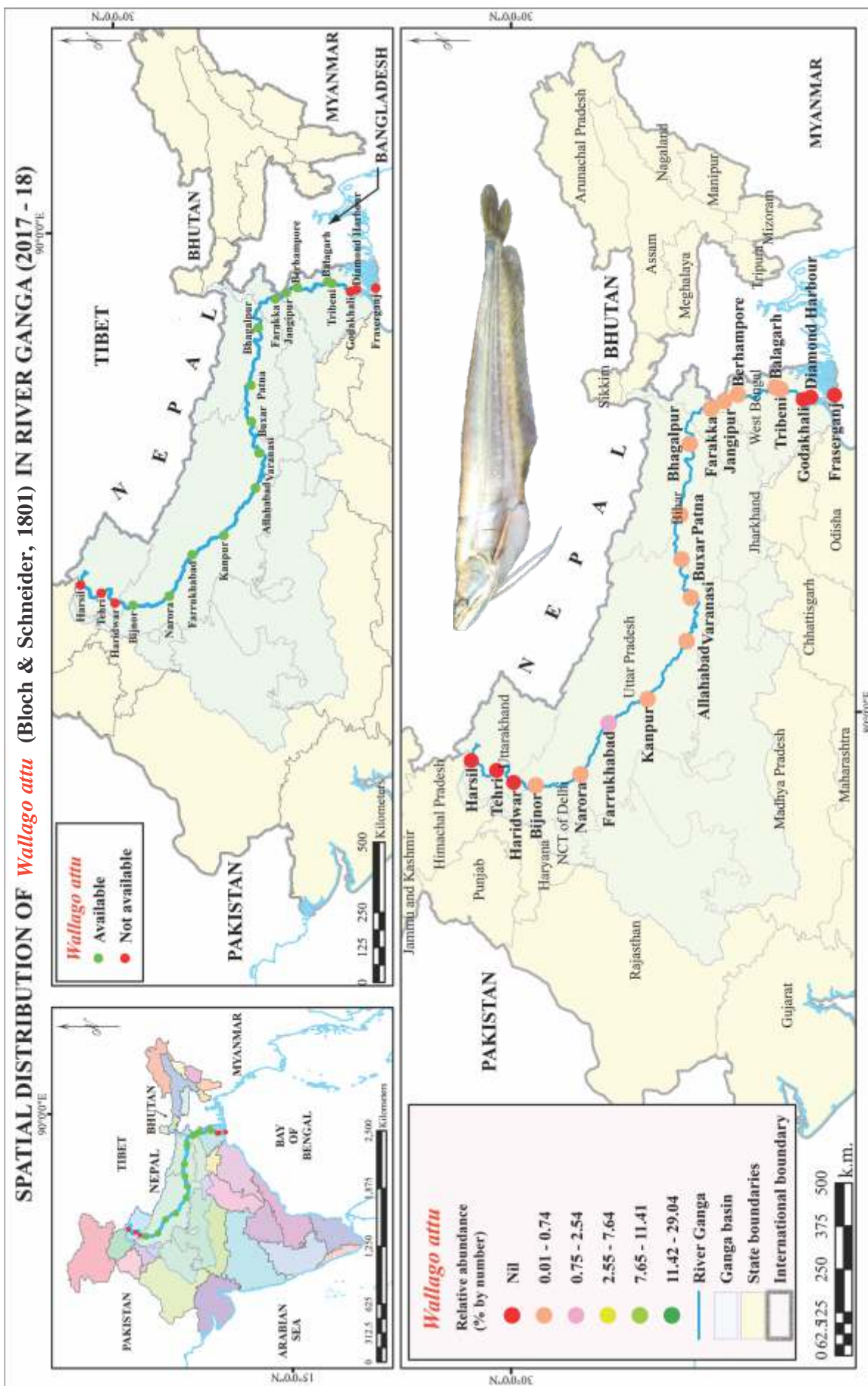
Habitat: Freshwater

Maximum size (TL): 240 cm

Food and feeding: Feeds mainly on insects; adults feed on smaller fish, crustaceans, and molluscs

Conservation status (IUCN Red list): Vulnerable

Commercial value: Used as food fish







Synbranchiformes

Monopterusuchia (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Synbranchiformes
Family	: Synbranchidae
Genus	: <i>Monopterus</i>
Species	: <i>cuchia</i>



Vernacular name: Kuche, Bamach (West bengal)

Common English name: Cuchia (Gangetic mud eel)

Synonyms: *Amphipnous cuchia*, *Unibranchapertura cuchia*

Salient identifying characteristics:

- ◆ Body similar to eel and robust
- ◆ Head not conspicuous. Eyes small, covered by skin
- ◆ Gill opening crescentic, gills greatly reduced
- ◆ Scales distinct, longitudinally arranged in posterior half of body
- ◆ Dorsal and anal 'fin fold' or ridges rudimentary

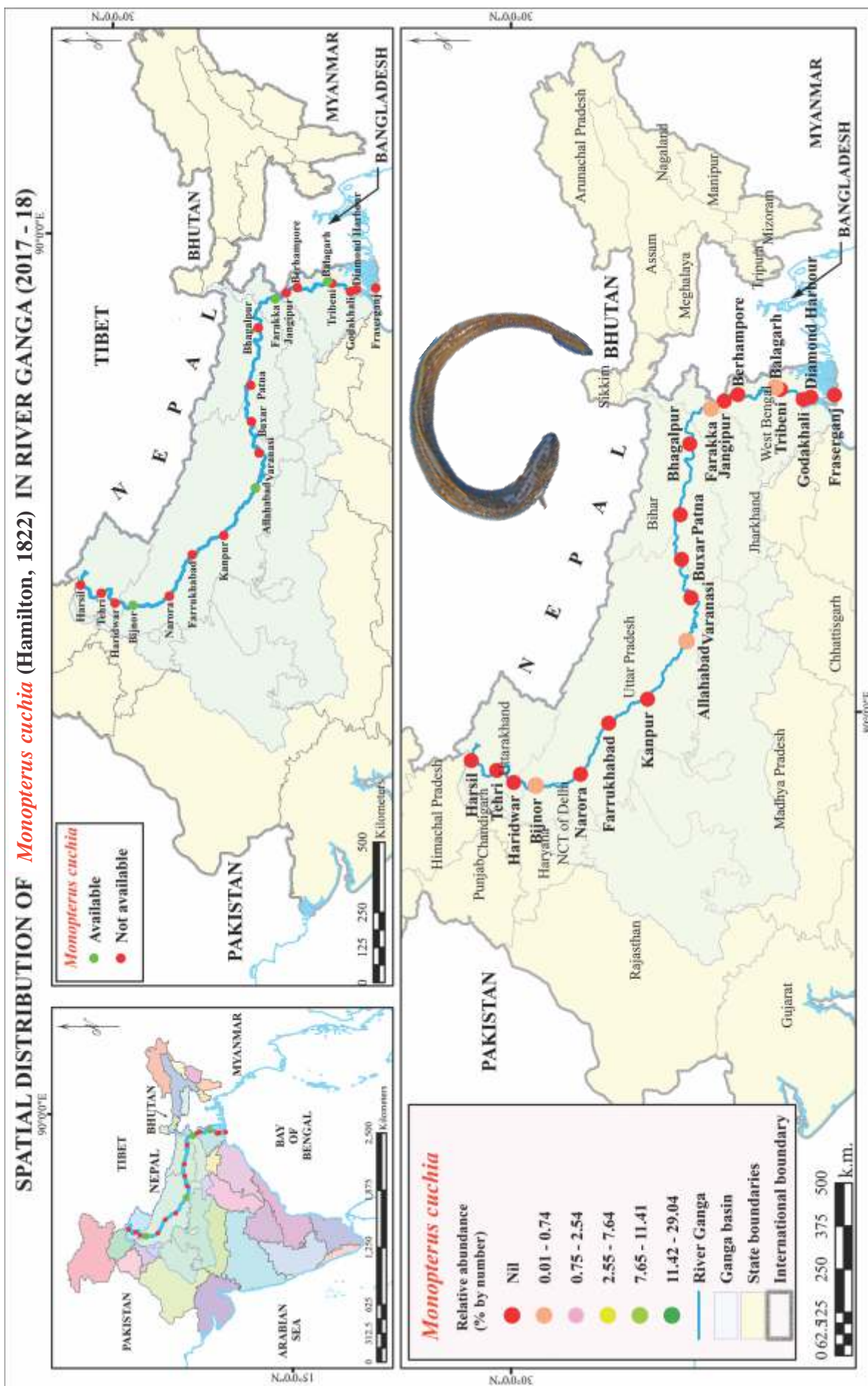
Habitat: Freshwater

Maximum size (TL): 70 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Macrognathus aral (Bloch & Schneider, 1801)

Systematic classification:

Class : Actinopterygii
Order : Synbranchiformes
Family : Mastacembelidae
Genus : *Macrognathus*
Species : *aral*



Vernacular name: Gonji, Pataya (Uttar Pradesh, Bihar), Pankal (West Bengal)

Common English name: One-stripe spiny eel

Synonyms: *Rhynchobdella aral*

Salient identifying characteristics:

- ◆ Body is elongated and compressed. Rostrum large
- ◆ Mouth very small, not extending beyond posterior nostrils
- ◆ Dorsal fin inserted far behind tip of pectoral fin, last dorsal spine small

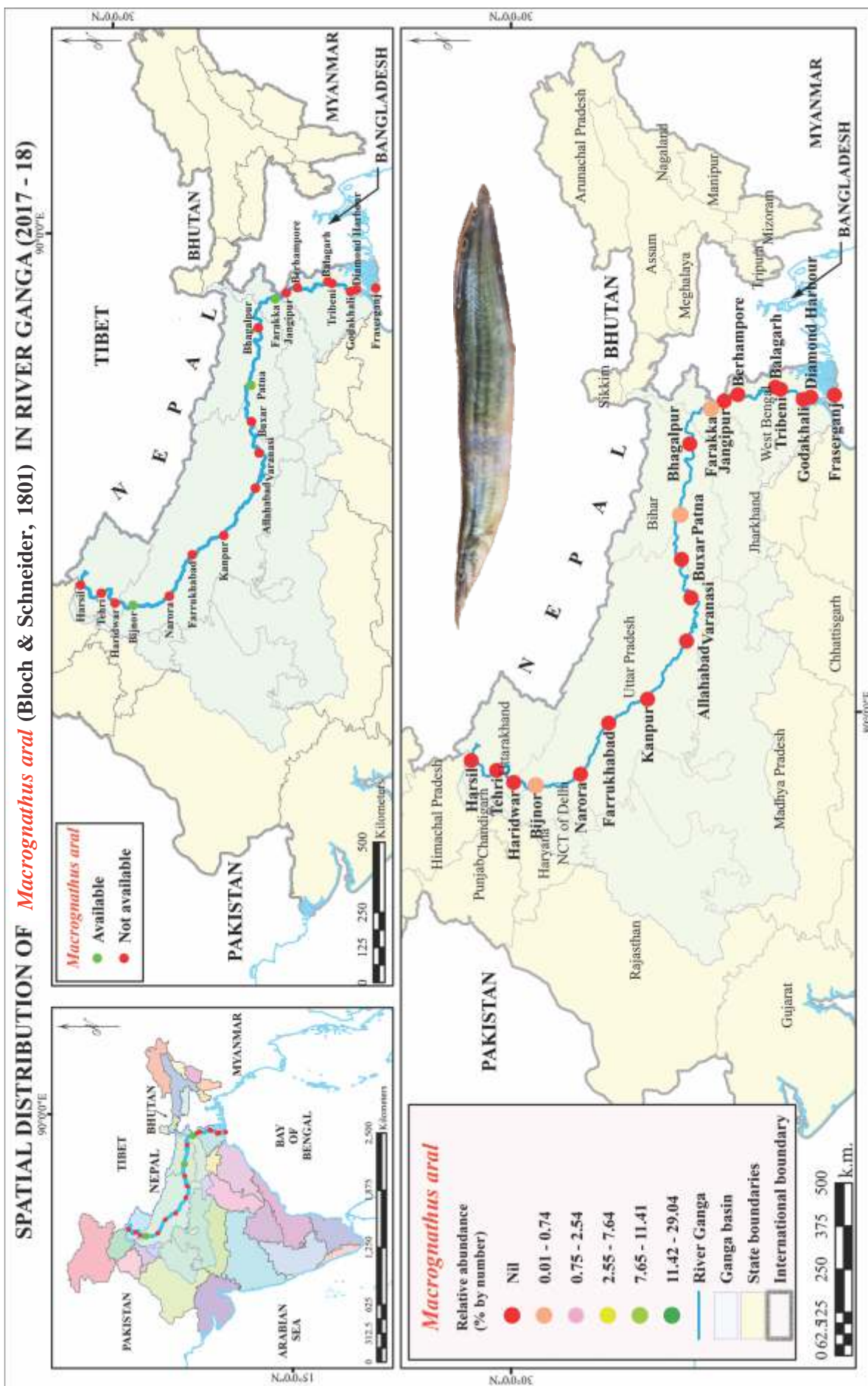
Habitat: Freshwater

Maximum size (TL): 63.5 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Macrognathus pancalus (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Synbranchiformes
Family : Mastacembelidae
Genus : *Macrognathus*
Species : *pancalus*



Vernacular name: Pankaal (West Bengal), Patgonji (Uttar Pradesh, Bihar)

Common English name: Barred spiny eel

Synonyms: *Macrognathus pancalus*, *Mastacembelus pancalus*

Salient identifying characteristics:

- ◆ Body is elongated slightly compressed. Mouth small
- ◆ Dorsal fin inserted far behind tip of pectoral fin, last dorsal spine small
- ◆ Caudal fin distinctly separated from dorsal and anal fins

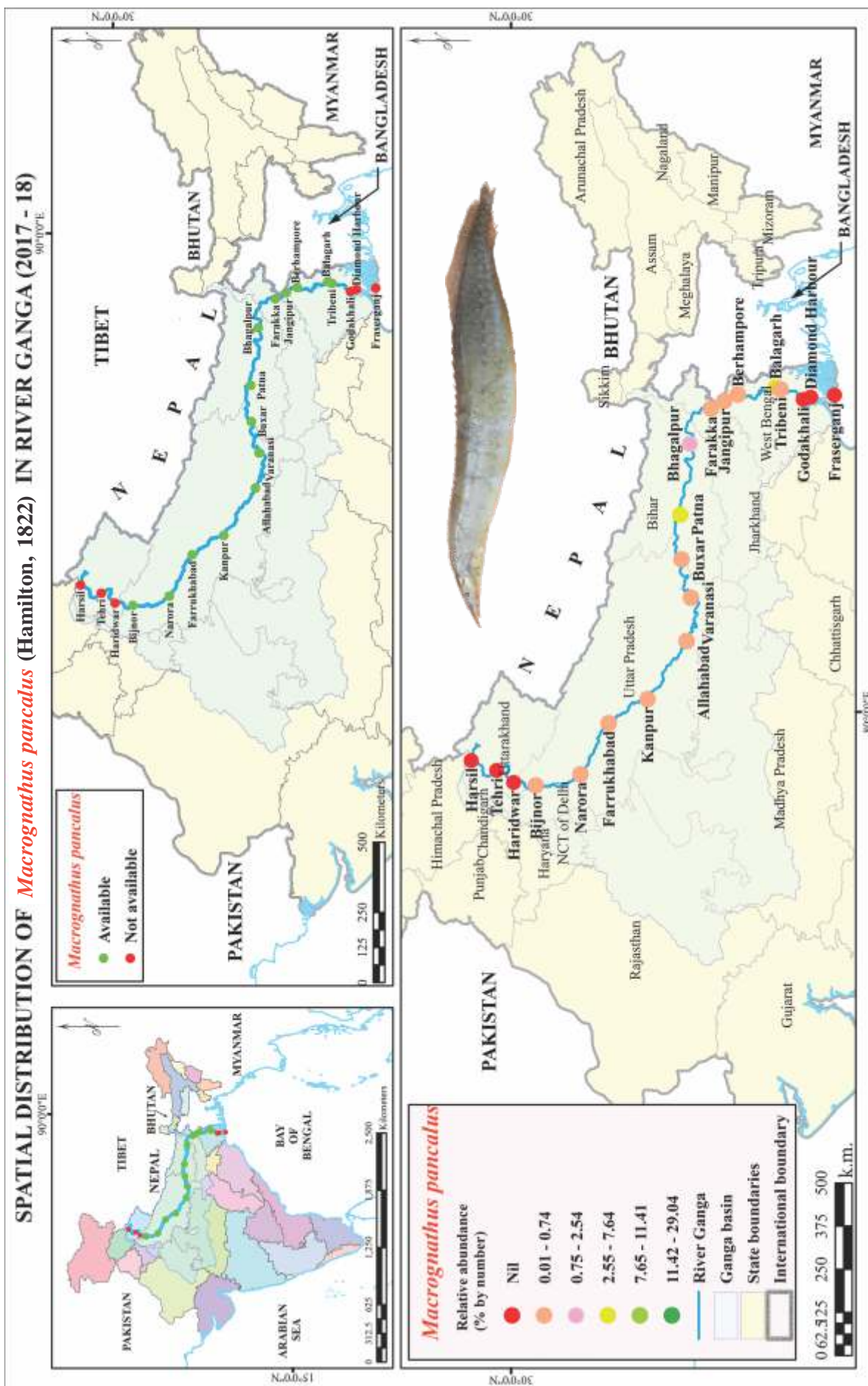
Habitat: Freshwater

Maximum size (TL): 18 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food and ornamental fish



Mastacembelus armatus (Lacepède, 1800)

Systematic classification:

Class : Actinopterygii
Order : Synbranchiformes
Family : Mastacembelidae
Genus : *Mastacembelus*
Species : *armatus*



Vernacular name: Bami, Ged (Uttar Pradesh, Bihar), Bam (West Bengal)

Common English name: Zig-zag eel

Synonyms: *Macrognathus armatus*, *Mastacembelus armatus armatus*

Salient identifying characteristics:

- ◆ Body slender. Mouth smaller than length of head
- ◆ Spinous dorsal fin inserted above middle and posterior pectoral fin, sharp teeth present on both the jaws
- ◆ Dorsal and anal fin broadly joined to become caudal fin

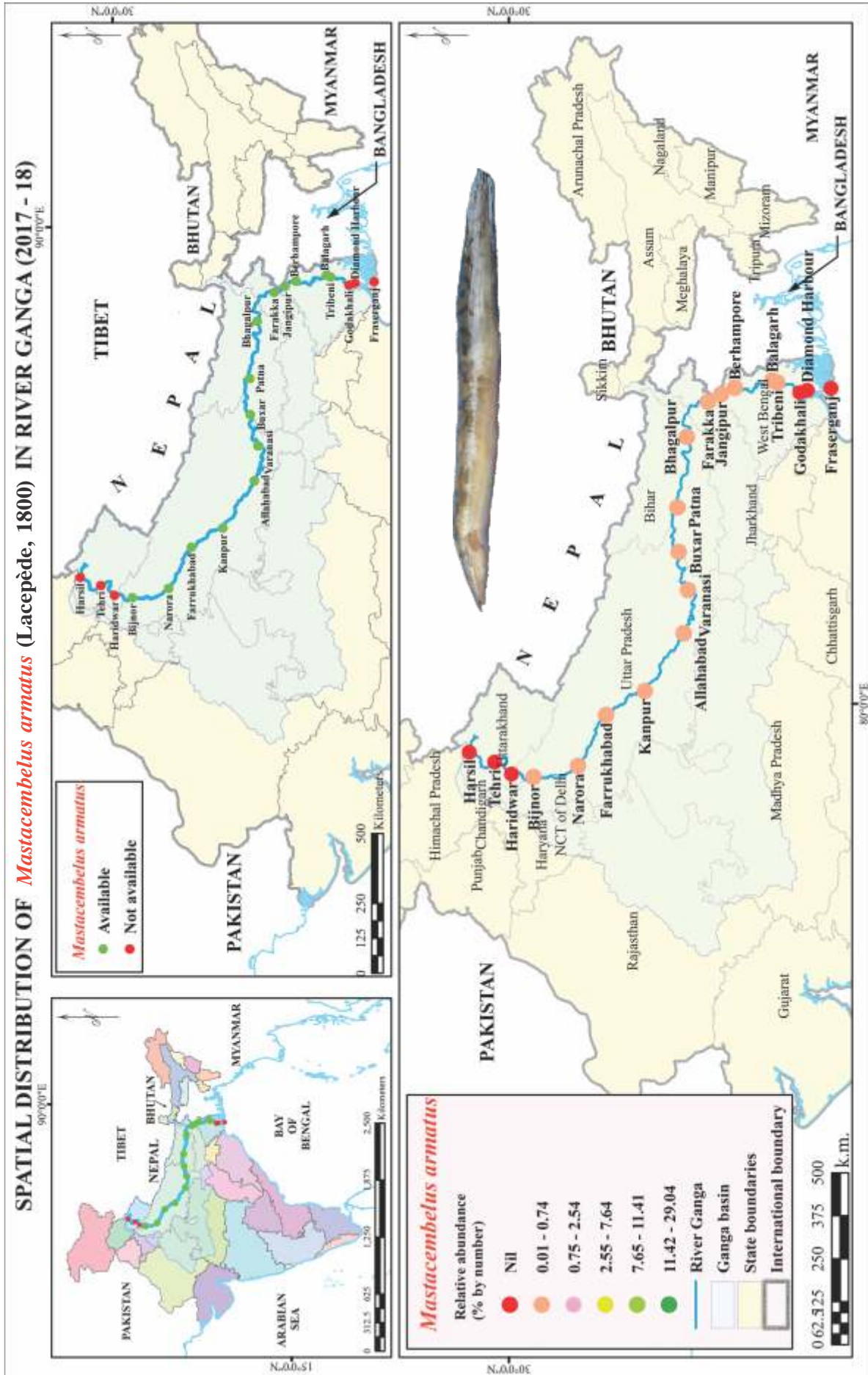
Habitat: Freshwater

Maximum size (TL): 90 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Forms an excellent food fish





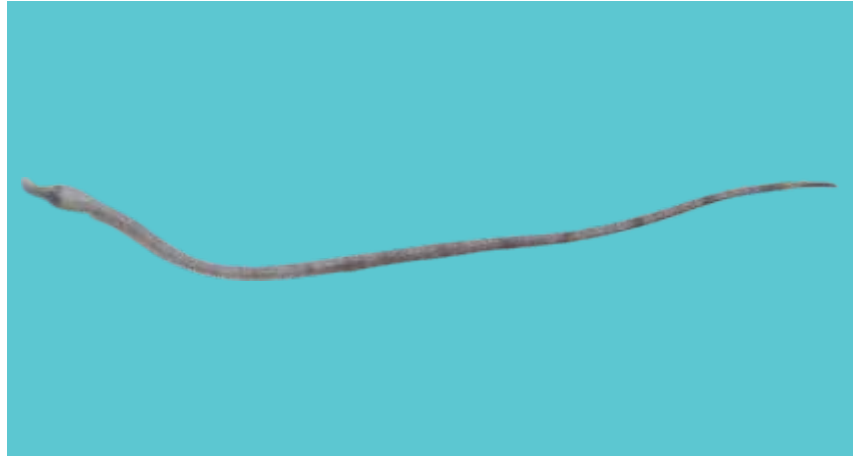


Syngnathiformes

Microphis cuncalus (Hamilton, 1822)

Systematic classification:

Class : Actinopterygii
Order : Syngnathiformes
Family : Syngnathidae
Genus : *Microphis*
Species : *cuncalus*



Vernacular name: Not Known

Common English name: Crocodile tooth pipe fish

Synonyms: *Syngnathus cuncalus*, *Doricthys cuncalus*

Salient identifying characteristics:

- ◆ Longitudinal operculum ridge distinct and complete but not elevated strongly, without supplemental operculum ridges
- ◆ Standard length is 7.3 to 8.8 times of head length
- ◆ Adults with anal fin located in a distinct groove like depression and separated from anus by a transverse septum

Habitat: Brackishwater and Freshwater

Maximum size (TL): 17.5 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as ornamental fish



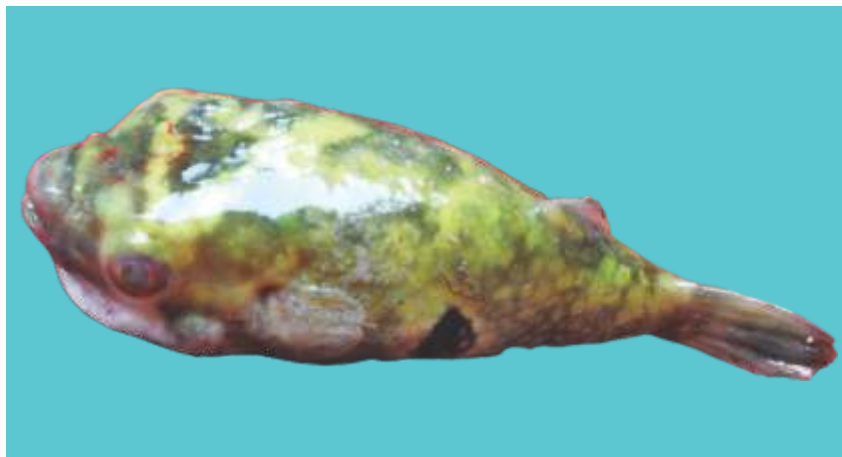


Tetraodontiformes

Leiodon cutcutia (Hamilton, 1822)

Systematic classification:

Class	: Actinopterygii
Order	: Tetraodontiformes
Family	: Tetraodontidae
Genus	: <i>Leiodon</i>
Species	: <i>cutcutia</i>



Vernacular name: Mendhak machli, Pota (Uttar Pradesh, Bihar), Tega (West Bengal)

Common English name: Ocellated pufferfish

Synonyms: *Tetraodon cutcutia*

Salient identifying characteristics:

- ◆ Body laterally compressed
- ◆ Terminal mouth directed forward or downward with no prominent chin
- ◆ Short nostril with one terminal opening
- ◆ Fins rounded. Skin leathery, without dermal spinules
- ◆ Back dark green to olive-green, flanks yellowish to pale grey, belly whitish
- ◆ Caudal fin dusky or bordered with a red band

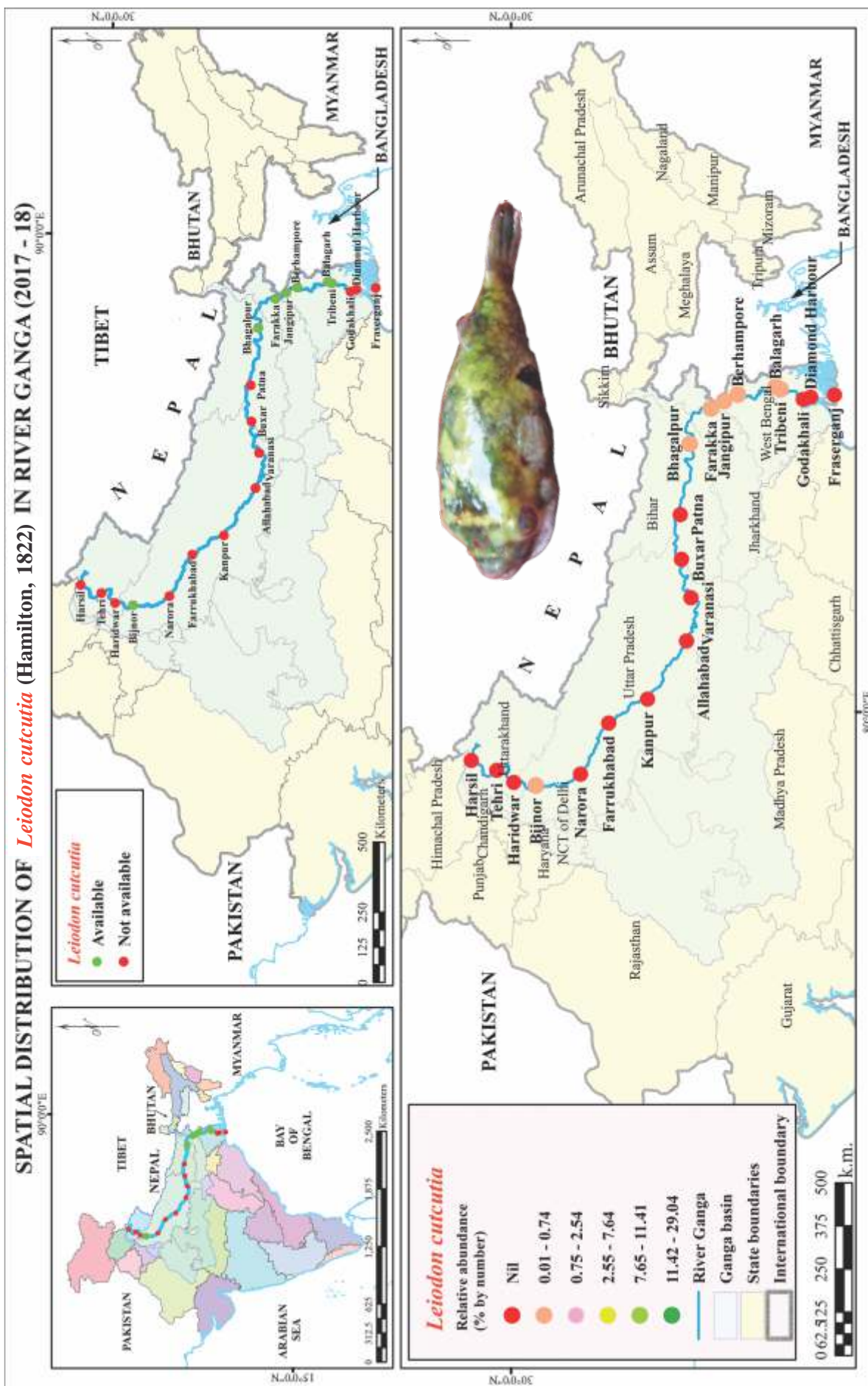
Habitat: Freshwater

Maximum size (TL): 10.5 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Lagocephalus lunaris (Bloch & Schneider, 1801)

Systematic classification:

Class	: Actinopterygii
Order	: Tetraodontiformes
Family	: Tetraodontidae
Genus	: <i>Lagocephalus</i>
Species	: <i>lunaris</i>



Vernacular name: Pota (West Bengal)

Common English name: Lunertail Puffer

Synonyms: *Tetrodon lunaris*

Salient identifying characteristics:

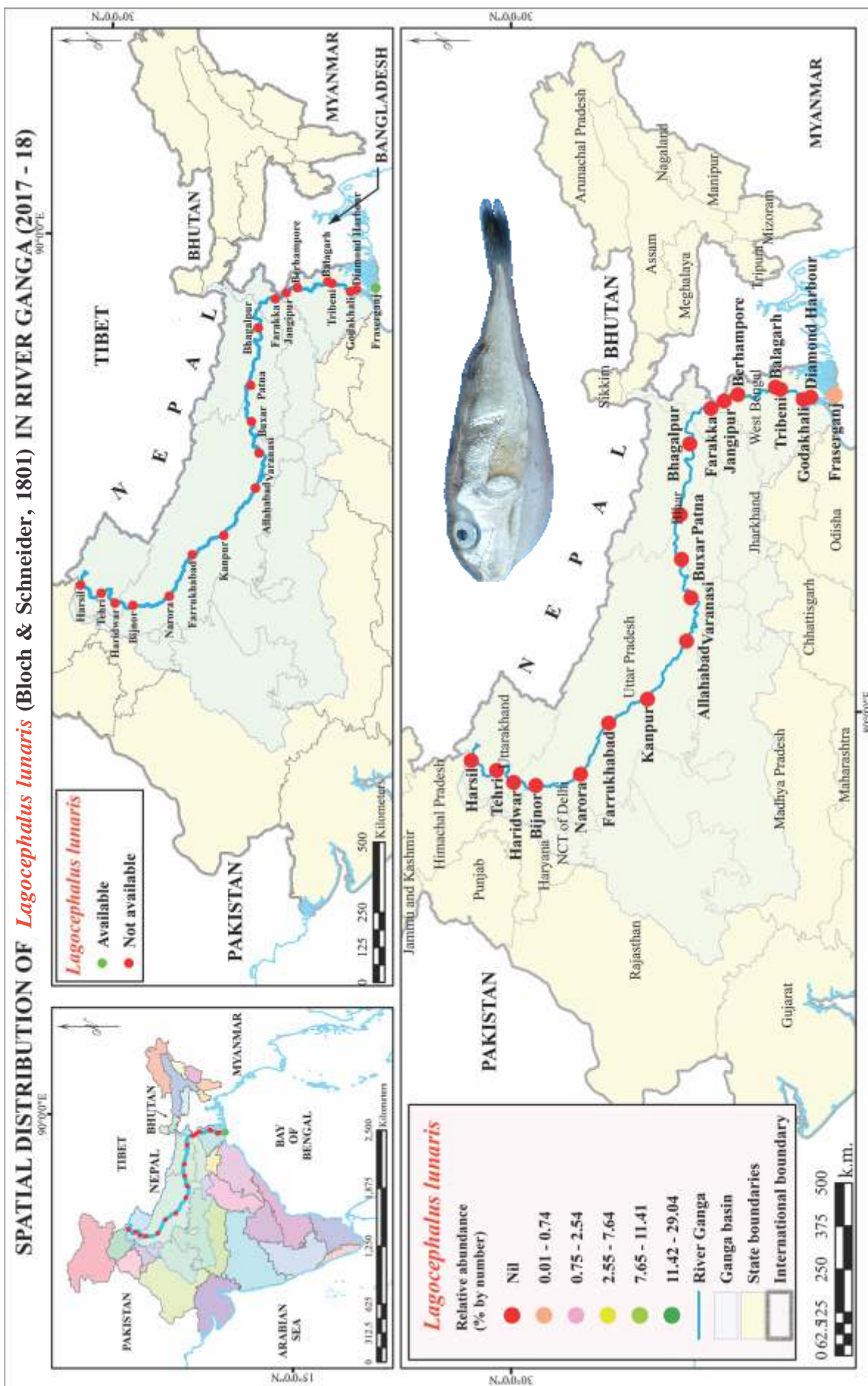
- ◆ Head broad, belly convex with spinules
- ◆ Prickles covered around the body
- ◆ Brownish on dorsal side with pale spots, yellowish white on ventral side; narrow dark bars on sides

Habitat: Marinewater and Brackishwater

Maximum size (TL): 40 cm

Food and feeding: Omnivorous

Conservation status (IUCN Red list): Least Concern







Exotics

Ctenopharyngodon idella (Valenciennes, 1844)

Systematic classification:	
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Xenocyprididae
Genus	: <i>Ctenopharyngodon</i>
Species	: <i>idella</i>



Vernacular name: Grass Carp (Uttar Pradesh, Bihar, West Bengal)

Common English name: Grass Carp

Synonyms: *Leuciscus idella*, *Ctenopharyngodon idellus*

Salient identifying characteristics:

- ◆ Body stout and elongated
- ◆ Broad head. Mouth subterminal
- ◆ Dorsal fin originated slightly nearer to snout tip than to base of caudal fin
- ◆ Pectoral fins moderately small. Caudal fin forked
- ◆ Scales moderate size; 40 to 42 scales in lateral line

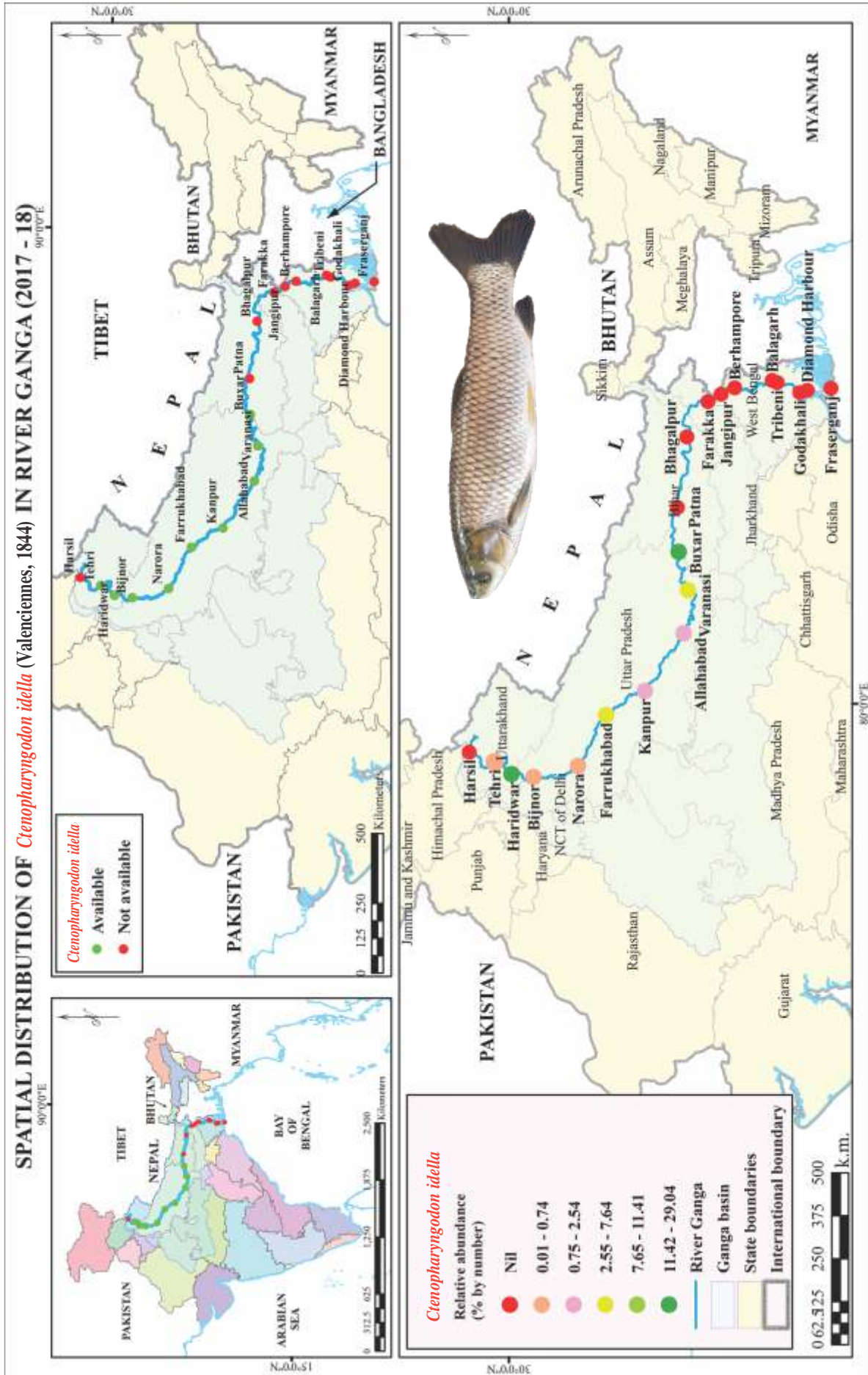
Habitat: Freshwater

Maximum size (TL): 150 cm

Food and feeding: Feeds on higher aquatic plants and submerged grasses; takes also detritus, insects and other invertebrates

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



Cyprinus carpio Linnaeus, 1758

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Cyprinus*
Species : *carpio*



Vernacular name: Chinese, China, Ladus (Uttar Pradesh, Bihar)

Common English name: Common carp

Synonyms: *Cyprinus carpio carpio*

Salient identifying characteristics:

- ◆ Body stout, slightly compressed
- ◆ Head moderate, triangular, snout obtusely rounded
- ◆ Mouth small and oblique, protrusible
- ◆ Dorsal fin inserted behind. Anal fin trapezoidal. Pectoral fins large and rounded. Caudal fin deeply emarginated
- ◆ Large scales, 30 to 40 scales in lateral line

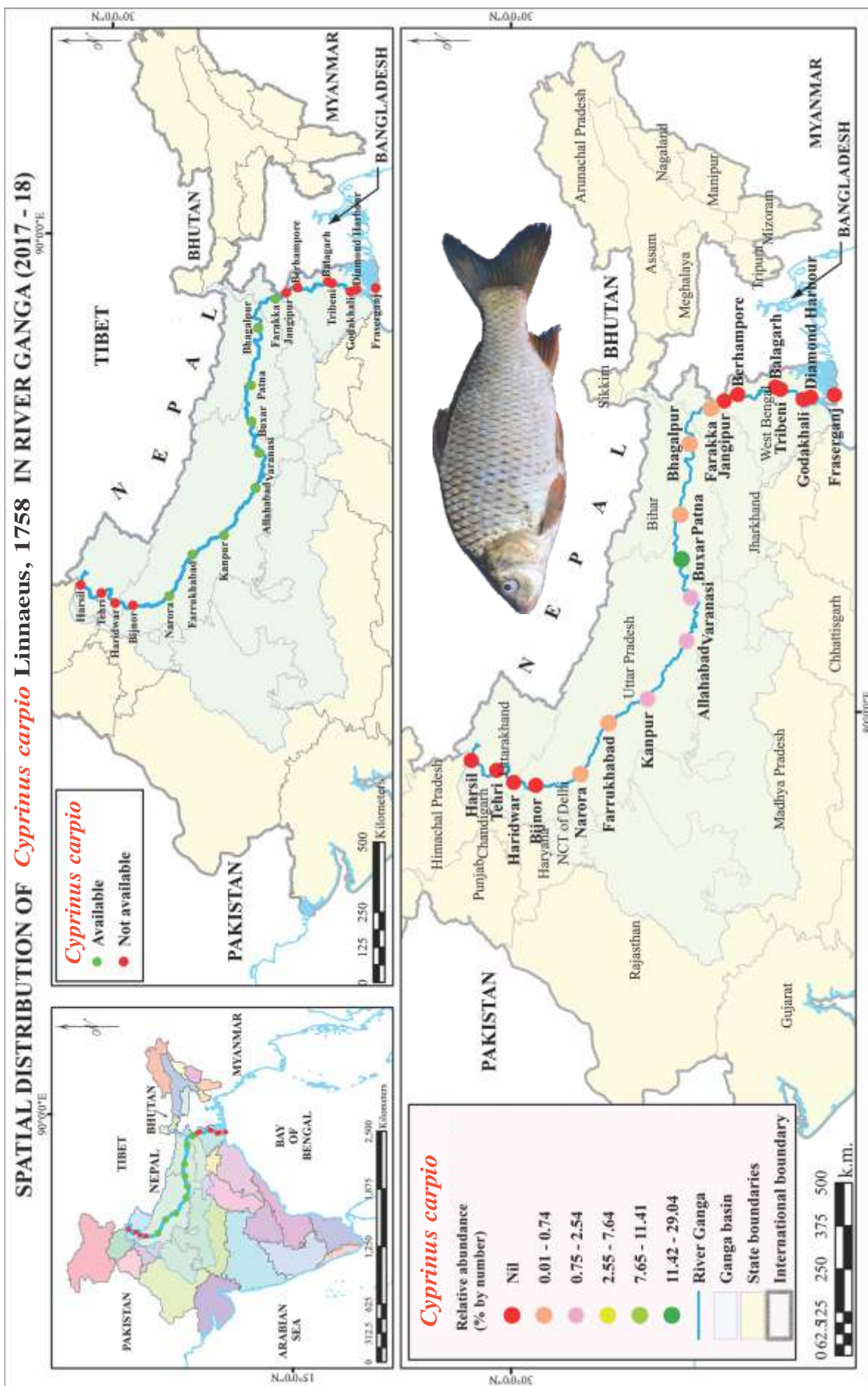
Habitat: Freshwater

Maximum size (TL): 120 cm

Food and feeding: Feeds on a variety of benthic organisms and plant material

Conservation status (IUCN Red list): Vulnerable

Commercial value: Used as food fish



Oreochromis niloticus (Linnaeus, 1758)

Systematic classification:

Class : Actinopterygii
Order : Perciformes
Family : Cichlidae
Genus : *Oreochromis*
Species : *niloticus*



Vernacular name: Tilapia (West Bengal), Telpi (Uttar Pradesh, Bihar)

Common English name: Nile tilapia

Synonyms: *Tilapia nilotica*, *Chromis nilotica*

Salient identifying characteristics:

- ◆ Body stout, slightly compressed
- ◆ Head moderate, triangular, snout obtusely rounded
- ◆ Mouth small and oblique, protrusible
- ◆ Dorsal fin inserted behind. Anal fin trapezoidal. Pectoral fins large and rounded. Caudal fin deeply emarginated
- ◆ Large scales, 30 to 40 scales in lateral line

Habitat: Freshwater

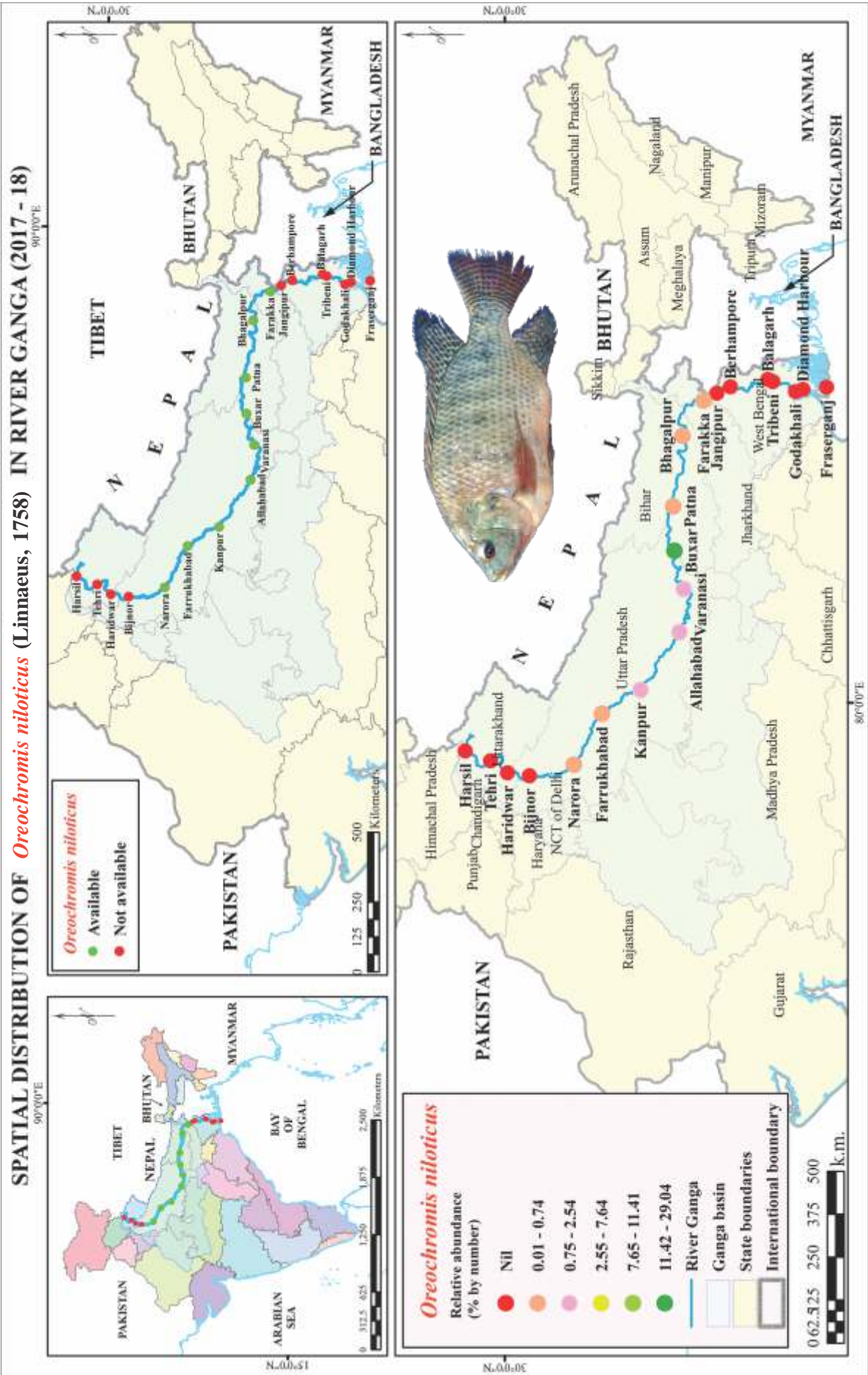
Maximum size (TL): 60 cm

Food and feeding: Feeds on a variety of benthic organisms and plant material

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish

SPATIAL DISTRIBUTION OF *Oreochromis niloticus* (Linnaeus, 1758) IN RIVER GANGA (2017 - 18)



Pterygoplichthys disjunctivus (Weber, 1991)

Systematic classification:

Class : Actinopterygii
Order : Siluriformes
Family : Loricariidae
Genus : *Pterygoplichthys*
Species : *disjunctivus*



Vernacular name: Helicopter, Crocodile (West Bengal)

Common English name: Vermiculated sailfin catfish

Synonyms: *Leuciscus nobilis*, *Aristichthys nobilis*

Salient identifying characteristics:

- ◆ Body stout, slightly compressed
- ◆ Head moderate, triangular, snout obtusely rounded
- ◆ Mouth small and oblique, protrusible
- ◆ Dorsal fin inserted behind. Anal fin trapezoidal. Pectoral fins large and rounded. Caudal fin deeply emarginated
- ◆ Large scales, 30 to 40 scales in lateral line

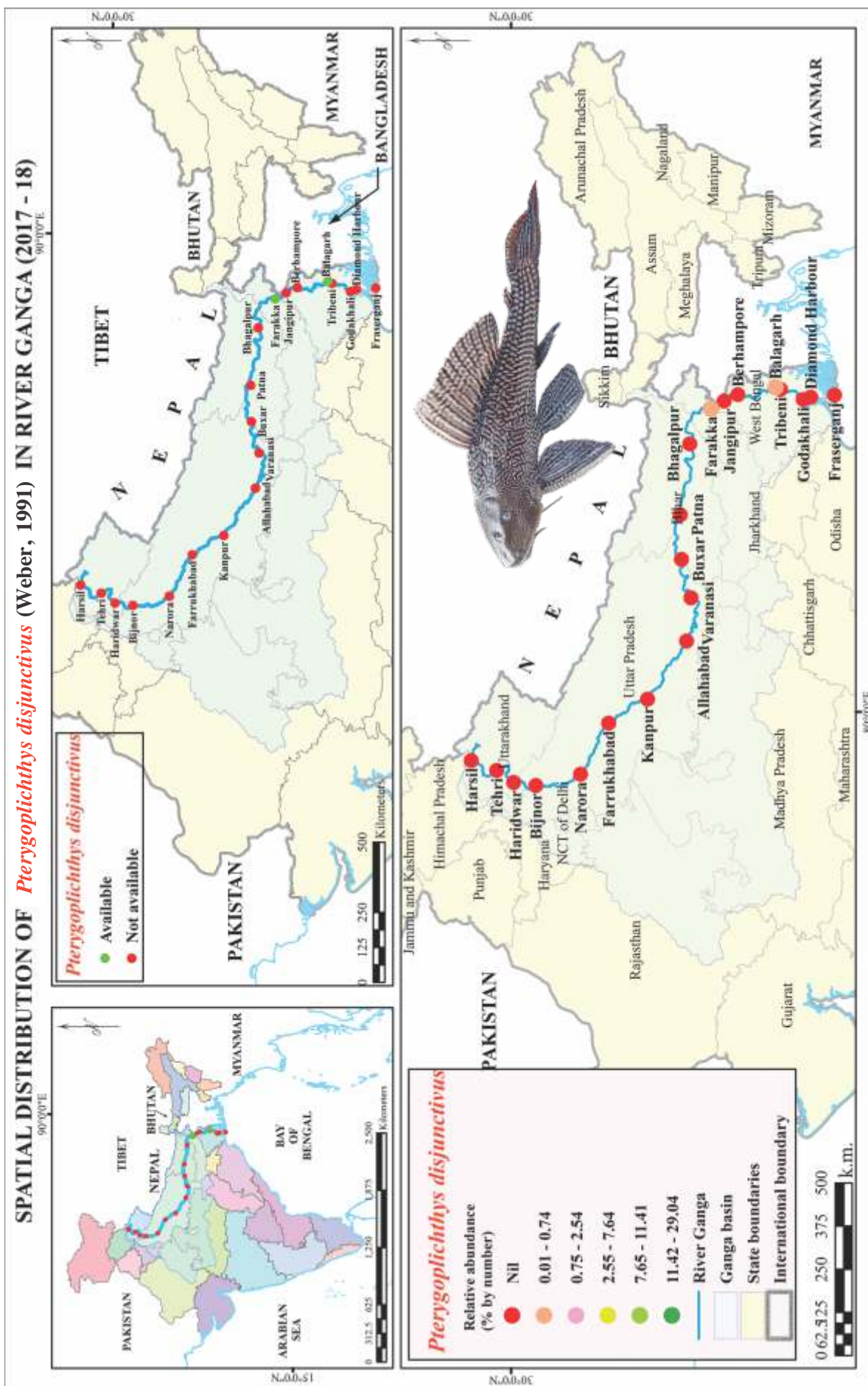
Habitat: Freshwater

Maximum size (TL): 70 cm

Food and feeding: Feeds on a variety of benthic organisms and plant material

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as ornamental fish



Hypophthalmichthys nobilis (Richardson, 1845)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Hypophthalmichthys*
Species : *nobilis*



Vernacular name: Big head, Brigade (Uttar Pradesh, Bihar, West Bengal)

Common English name: Bighead carp

Synonyms: *Leuciscus nobilis*, *Aristichthys nobilis*

Salient identifying characteristics:

- ◆ Body stout and compressed, abdomen rounded; a keel present on post ventral part
- ◆ Large head and lower jaw slightly protruding
- ◆ Short dorsal fin, originated behind origin of pelvic fins
- ◆ Scales small, about 115 scales in lateral line

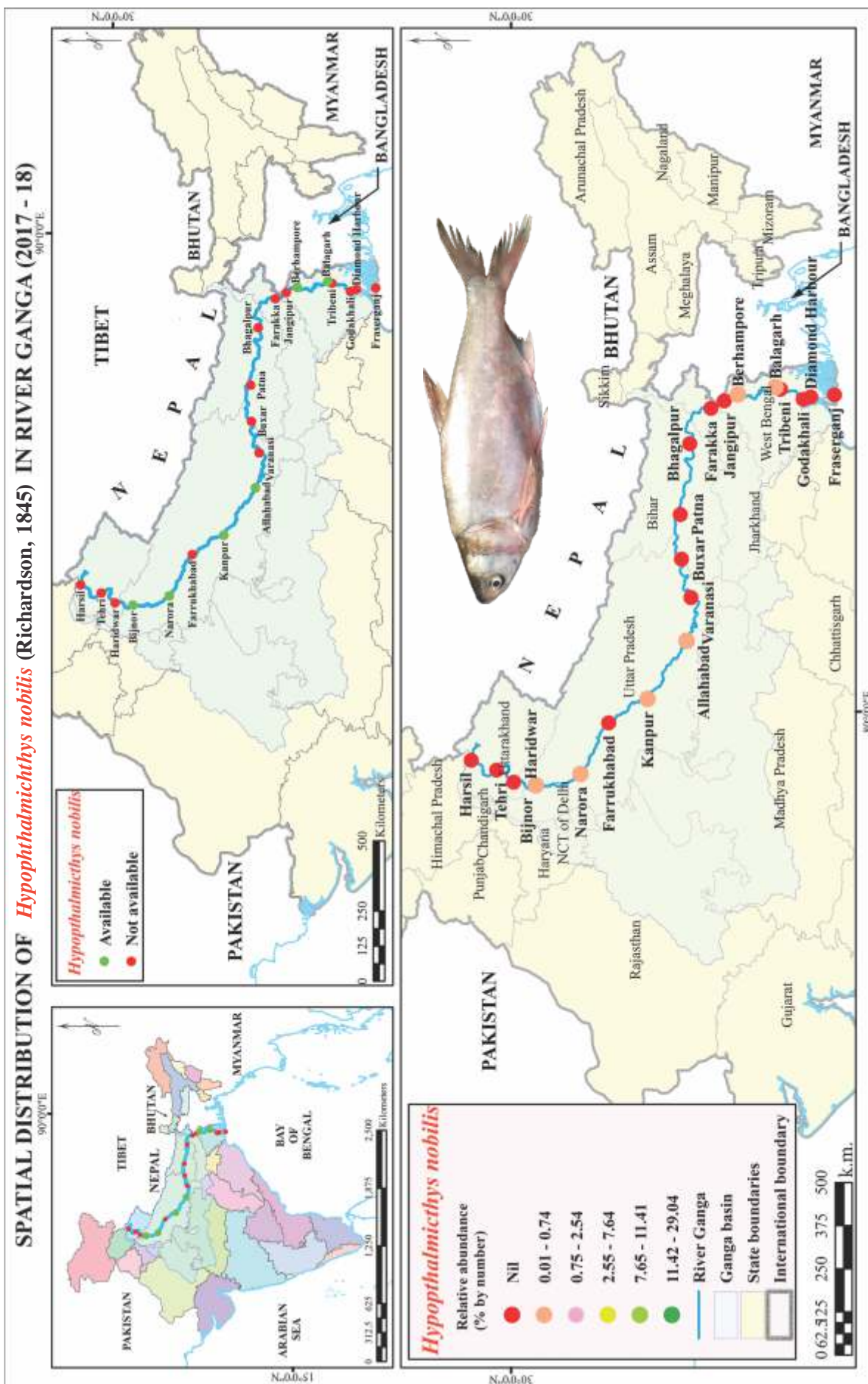
Habitat: Freshwater

Maximum size (TL): 146 cm

Food and feeding: Feeds mainly on zooplankton, but also takes algae as food

Conservation status (IUCN Red list): Data Deficient

Commercial value: Used as food fish



Hypophthalmichthys molitrix (Valenciennes, 1844)

Systematic classification:

Class : Actinopterygii
Order : Cypriniformes
Family : Cyprinidae
Genus : *Hypophthalmichthys*
Species : *molitrix*



Vernacular name: Silver (Uttar Pradesh, Bihar), Silver Carp (West Bengal)

Common English name: Silver carp

Synonyms: *Leuciscus molitrix*

Salient identifying characteristics:

- ◆ Body stout and compressed; strongly compressed abdomen, a sharp keel extends from throat to vent
- ◆ Small head. Terminal mouth and lower jaw slightly longer than upper
- ◆ Short dorsal fin, originated behind origin of pelvic fins
- ◆ Scales small, about 110-115 scales in lateral line

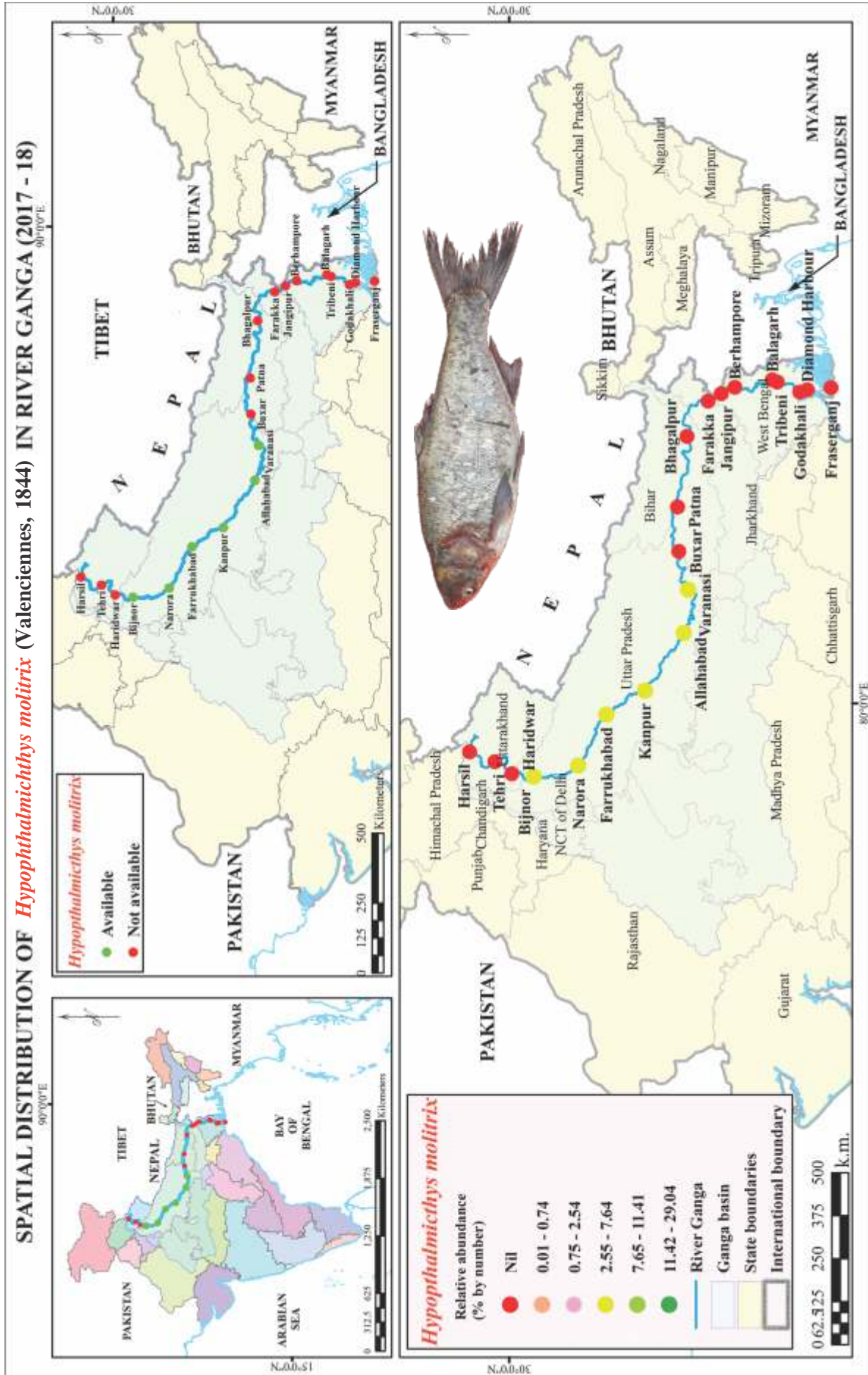
Habitat: Freshwater

Maximum size (TL): 105 cm

Food and feeding: Planktophagous

Conservation status (IUCN Red list): Data Deficient

Commercial value: Used as food fish



Clarias gariepinus (Linnaeus, 1758)

Systematic classification:

Class	: Actinopterygii
Order	: Siluriformes
Family	: Clariidae
Genus	: <i>Clarias</i>
Species	: <i>gariepinus</i>



Vernacular name: Mangur, Thai magur (Uttar Pradesh)

Common English name: North African catfish

Synonyms: *Silurus gariepinus*

Salient identifying characteristics:

- ◆ Body compressed posteriorly
- ◆ Elongated body structure, Snout broadly rounded
- ◆ Mouth is terminal with villiform teeth
- ◆ Four pairs of barbels
- ◆ Pectoral spine is strong
- ◆ Dorsal fin is situated slightly anterior ahead of pectoral fin
- ◆ Distance between occipital process and base of dorsal fin is short

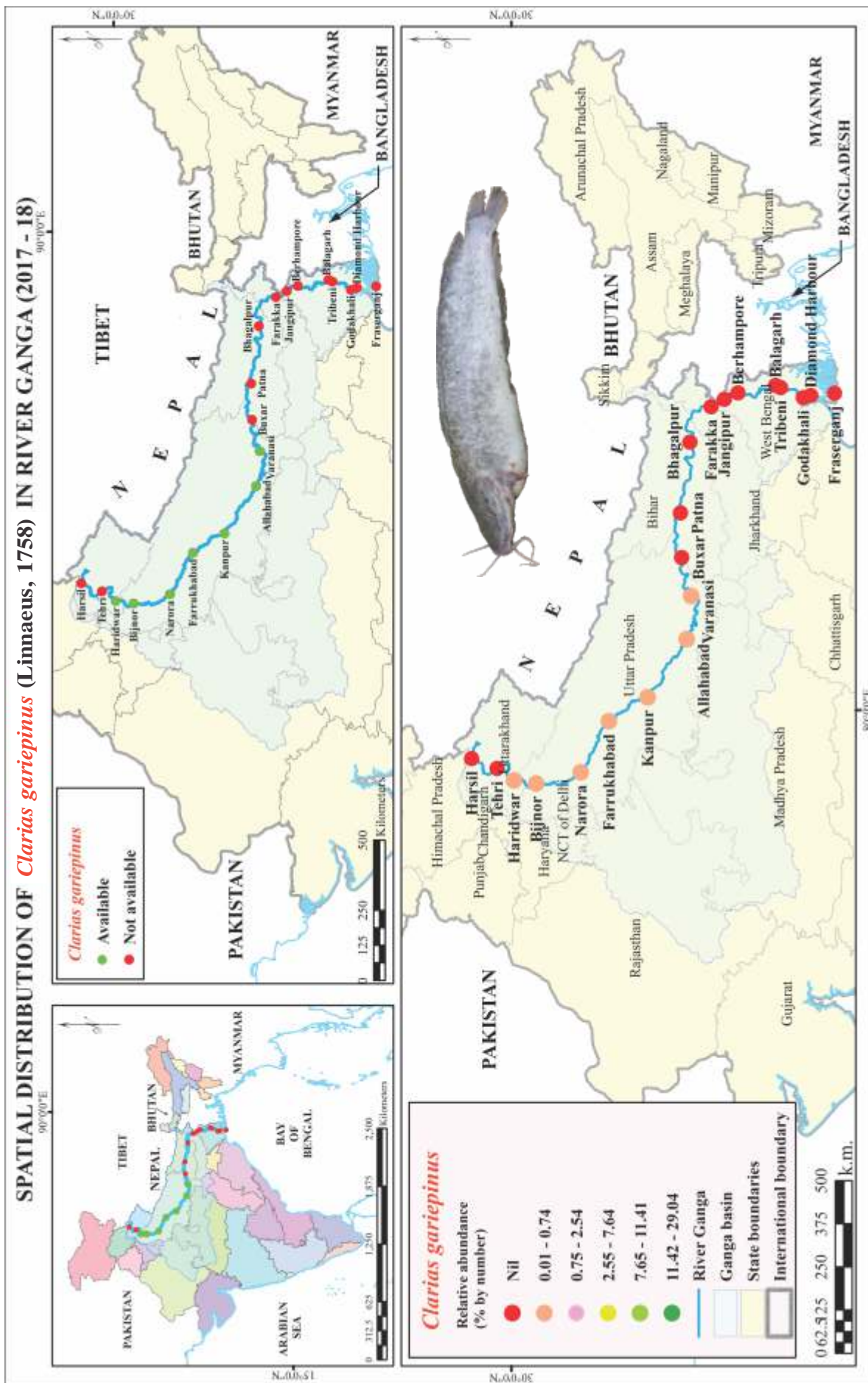
Habitat: Freshwater

Maximum size (TL): 170 cm

Food and feeding: Carnivorous

Conservation status (IUCN Red list): Least Concern

Commercial value: Used as food fish



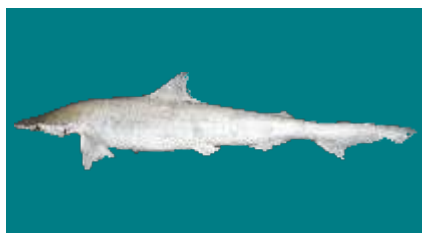




Glossary



Anguilla bengalensis



Scoliodon laticaudus



Gonialosa manmina



Pisodonophis boro



Anodontostoma chacunda



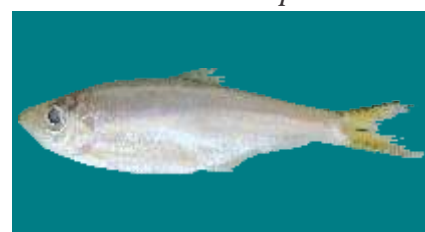
Gudusia chapra



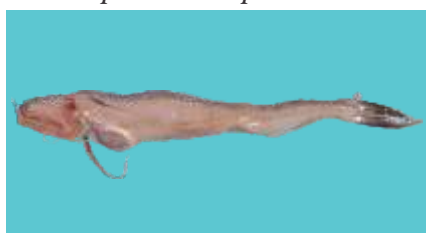
Aplocheilichthys panchax



Chirocentrus dorab



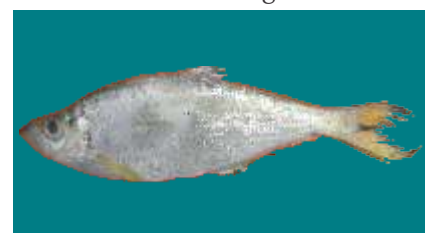
Ilisha elongata



Harpadon nehereus



Coilia dussumieri



Ilisha megaloptera



Hyporhamphus limbatus



Coilia reynaldi



Pellona ditchela



Xenentodon cancila



Corica soborna



Raconda russeliana



Bregmaceros mccllellandi



Escualosa thoracata



Sardinella gibbosa



Setipinna brevifilis



Amblypharyngodon mola



Botia rostrata



Setipinna phasa



Bangana dero



Cabdio morar



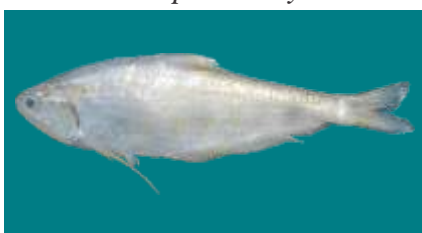
Setipinna taty



Barilius barila



Chagunius chagunio



Setipinna tenuifilis



Bengala elanga



Cirrhinus mrigala



Stolephorus baganensis



Barilius vagra



Cirrhinus reba



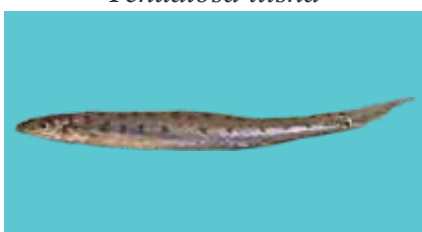
Tenualosa ilisha



Botia dario



Devario devario



Aborichthys elongatus



Botia lohachata



Esomus danrica



Garra gotyla



Labeo gonius



Oreochthys cosuatis



Labeo catla



Labeo rohita



Osteobrama cotio



Labeo angra



Laubuka laubuca



Pangio pangia



Labeo bata



Lepidocephalichthys guntea



Paracanthocobitis botia



Labeo boga



Opsarius barna



Pethia conchonius



Labeo calbasu



Opsarius bendelisis



Pethia gelius



Labeo dyocheilus



Opsarius tileo



Pethia phutunio



Puntius chola



Salmostoma phulo



Planiliza tade



Puntius sophore



Schizothorax richardsonii



Rhinomugil corsula



Pethia ticto



Securicula gora



Sicamugil cascasia



Raiamas bola



Systemus sarana



Brevitrygon walga



Rasbora daniconius



Tariqilabeo latius



Chitala chitala



Salmostoma acinaces



Tor putitora



Notopterus notopterus



Salmostoma bacaila



Chelon parsia



Anabas testudineus



Apocryptes bato



Channa marulius



Gerres filamentosus



Atropus atropos



Channa punctata



Gerres oyena



Badis badis



Channa striata



Glossogobius giuris



Boleophthalmus boddarti



Drepane punctata



Johnius coitor



Brachygnathops balaus



Eleotris fusca



Johnius gangeticus



Chanda nama



Eleutheronema tetradactylum



Nucleola bleekeri



Channa gachua



Epinephelus coioides



Lobotes surinamensis



Megalaspis cordyla



Parambassis ranga



Sillaginopsis domina



Nandus nandus



Pseudapocryptes elongatus



Sillago sihama



Odontamblyopus rubicundus



Polynemus paradiseus



Terapon jarbua



Pama pama



Parambassis lala



Eupleurogrammus muticus



Pampus chinensis



Scatophagus argus



Trichiurus lepturus



Panna microdon



Deveximentum insidiator



Trichogaster chuna



Parambassis baculis



Siganus javus



Trichogaster fasciata



Trichogaster lalius



Ailia coila



Batasio batasio



Lates calcarifer



Ailiichthys punctata



Chaca chaca



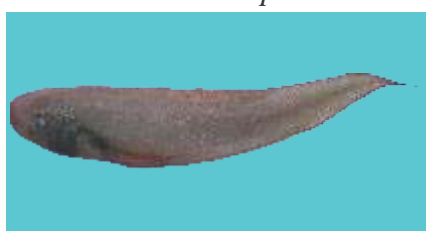
Brachirus pan



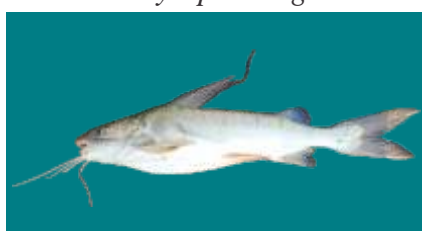
Amblyceps mangois



Clarias magur



Cynoglossus arel



Arius arius



Clupisoma garua



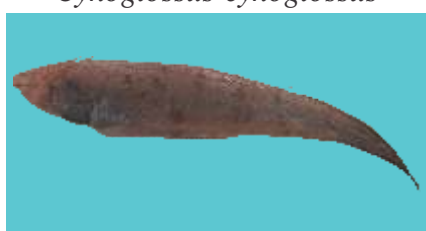
Cynoglossus cynoglossus



Arius gagora



Hara hara



Cynoglossus lingua



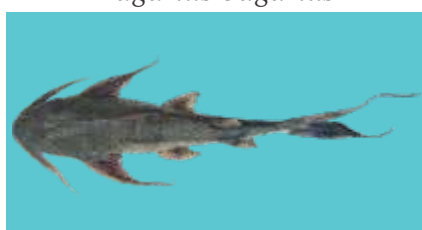
Bagarius bagarius



Eutropiichthys murius



Platycephalus indicus



Bagarius yarrelli



Eutropiichthys vacha



Gagata cenia



Mystus cavasius



Ompok bimaculatus



Gagata gagata



Mystus gulio



Ompok pabda



Glyptothorax cavia



Hemibagrus menoda



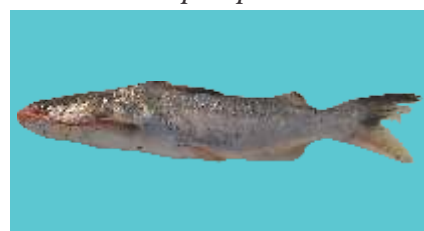
Ompok pabo



Glyptothorax garhwali



Mystus tengara



Osteogeneiosus militaris



Gogangra viridescens



Mystus vittatus



Pangasius pangasius



Heteropneustes fossilis



Nemapteryx caelata



Rita rita



Mystus bleekeri



Pachypterus atherinoides



Silonia silondia



Sisor rabdophorus



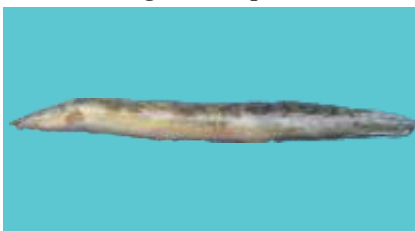
Macrornathus pancalus



Cyprinus carpio



Sperata aor



Mastacembelus armatus



Oreochromis niloticus



Sperata seenghala



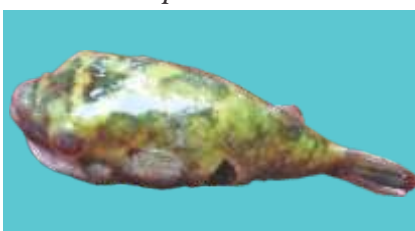
Microphis cuncalus



Pterygoplichthys disjunctivus



Wallago attu



Leiodon cutcutia



Hypophthalmichthys nobilis



Monopterus albus



Lagocephalus lunaris



Hypophthalmichthys molitrix



Macrornathus aral



Ctenopharyngodon idella



Clarias gariepinus



References

Anonymous, 1998-99. Annual Report, Central Inland Fisheries Research Institute, Barrackpore, 1998-99.

Baitha, R., Karna, S. K., Ray, A., Chanu, T. N., Swain, H. S., Ramteke, M. H., & Das, B. K. 2018. Length-weight and length-length relationships of eight fish species from river Ganga, India. *Journal of Applied Ichthyology*, 34(4), p 1052-1054.

Baitha, R., Ray, A., Karna, S. K., Chanu, T. N., Swain, H. S., Ramteke, M. H., & Das, B. K. 2018. Length-weight relationships for four fish species from lower stretch of River Ganga, India. *Journal of Applied Ichthyology*, 34(5), p 1195-1197.

Basu, A., Dutta, D., & Banerjee, S. 2012. Indigenous ornamental fishes of west Bengal. *Recent research in science and technology*, 4(11).

Chavez J. M, De La Paz R. M., Krishna Manohar S, Pagulayan R. C., Carandang J. R., New Philippine record of South American sailfin catfishes (Pisces: Loricariidae). *Zootaxa.*, 2006, 109, p 57-68

Das, M. K., Sharma, A. P., Sahu, S. K., Srivastava, P. K. & Rej, A. 2013. Impacts and vulnerability of inland fisheries to climate change in the Ganga River system in India, *Aquatic Ecosystem Health & Management*, 16:4, p 415-424.

Das, M. K., Sharma, A. P., Vass, K. K., Tyagi, R. K., Suresh, V. R., Naskar, M. & Akolkar, A. B. 2013. Fish diversity, community structure and ecological integrity of the tropical River Ganges, India, *Aquatic Ecosystem Health & Management*, 16:4, p 395-407.

Day, F. 1878. The fishes of India being a natural history of the fishes known to inhabit the seas and fresh waters of India, Burma and Ceylon. William Dowson and Sons, London.

Eschmeyer W.N, 2019. Catalog of fishes. California Academy of Sciences, San Francisco, CA

ESRI 2008. ArcGIS Desktop: Release 9.3. Redlands, CA: Environmental Systems Research Institute.

Fischer, W., & Bianchi, G. 1983. FAO species identification sheets for fishery purposes (Cutlassfishes, hairtailfishes, frostfishes, scabbardfishes): Western Indian Ocean (Fishing Area 51). v. 1.

Ghosh, A. K., 1991. The Ganga. A profile and biological resources. Faunal Resources of Ganga, Part I. Zoological Survey of India, Calcutta, , pp. 1-12.

Ghosh, A., Present status of fish diversity in a 12 km stretch in the freshwater zone of the Hooghly estuary. *Journal of the Inland Fisheries Society of India.*, 2008, 40(spl.1), p 60-66.

Hamilton-Buchanan, F. 1822. An Account of the Fishes of River Ganges and its Branches. Archibald Constable and Company, Edinburg. pp 405

Hossain MY, Hossain MA, Ahmed ZA, Islam R, Hossen M et.al, 2015, Threatened fishes of the world *Eutropiichthys vacha* (Hamilton, 1822) (Siliuriformes: Schilbidae), *Croat. J fish.*, (73). 80-82.

- M. K. Das, A. P. Sharma, R. K. Tyagi, P. K. Saha, V. Pathak, V. R. Suresh, D. K. De, S. K. Paul, P. Sett, Munmun Chakrabarty, K. Mondal 2010. Fishes of River Ganga - A Field Identification Manual. Bulletin, Central Inland Fisheries Research Institute, Barrackpore 700 120, West Bengal. 100 pp
- Froese, R. and D. Pauly, Editors. 2000. FishBase 2000: concepts, design and data sources. ICLARM, Los Banos, Laguna, Philippines. 344 p
- IUCN (2020), International Union for Conservation of Nature. IUCN red list of threatened fishes. www.iucn.redlist.org.
- Jayaram K.C. 1999. The freshwater fishes of Indian region. Narendra Publishing House, New Delhi, pp 1-551.
- Jayaram, K. C. 2006. Catfishes of India. Narendra Publishing House, Delhi, India. pp 7-383.
- Jhingran, V.G. 1991. Fish and Fisheries of India Hindustan Publishing Corporation, New Delhi
- Joshi, K. D. and Biswas, B. K. 2010. Piscine diversity and fisheries in the river Ken, proposed for inter-river-linking. Journal Inland Fish. Soc. India 42(2):25-31.
- Joshi, K. D., Bhaumik, U. and Sharma, A. P. 2010. Fisheries of the Ganga river system: threat to Indian major carps and catfishes. In the Seminar on "Caring wetlands and Conservation of Riverine Fisheries", organized by Department of Fisheries, W. Bengal & CIFE, Mumbai, held at CIFE, Kolkata Centre on 02.10.2010. p. 82-85.
- Joshi, K. D., Biswas, B. K., Lal, Shyam, Vass, K. K. 2009. Piscine diversity in the river Betwa. Journal Inland Fish. Soc. India 41(1): p 61-64.
- Joshi, K. K., Nair, R. J., Samad, E. M. A., Thomas, S., Kakati, V. S., Jasmine, S. & Manisseri, M. K. 2011. The Carangids of India: A Monograph. Central Marine Fisheries Research Institute, Indian Council of Agricultural Research. 437 p.
- Katiha, P. K., Sharma A. P. & Chandra, G. 2013. Institutional arrangements in fisheries of Ganges River system, Aquatic Ecosystem Health & Management, 16:4, 465-472
- Lakra, W. S., Sarkar, U. K., Kumar, R. S., Pandey, A., Dubey, V. K., & Gusain, O. P. 2010. Fish diversity, habitat ecology and their conservation and management issues of a tropical River in Ganga basin, India. The Environmentalist, 30(4), 306-319.
- Manna, R. K., Satpathy, B. B., Roshith, C. M., Naskar, M., Bhaumik, U. & Sharma A. P. 2013. Spatio-temporal changes of hydro-chemical parameters in the estuarine part of the River Ganges under altered hydrological regime and its impact on biotic communities, Aquatic Ecosystem Health & Management, 16:4, 433-444.
- Matsuura, K., Golani, D., & Bogorodsky, S. V. 2011. The first record of *Lagocephalus guentheri* Miranda Ribeiro, 1915 from the Red Sea with notes on previous records of *L. lunaris* (Actinopterygii, Tetraodontiformes, Tetraodontidae). Bulletin of the National Museum of Nature and Science, Series A, 37(3), p 163-169.
- Menon, A.G.K. 1974. A check list Fishes of Himalayan and the Indo-Gangetic plains. Special publication. IFSI. 1: p 1-136.

Mishra, S. S., Acharjee, S. K., & Chakraborty, S. K. 2009. Development of tools for assessing conservation categories of siluroid fishes of fresh water and brackish water wetlands of South West Bengal, India. *Environmental biology of fishes*, 84(4), p 395-407.

Nelson, J. S., Grande, T. C., & Wilson, M. V. 2016. *Fishes of the World*. John Wiley & Sons, New Jersey, Canada, pp 526

Pathak, V. and Tyagi, R. K. 2010. Riverine ecology and fisheries vis-a-vis hydro-dynamic alterations: impacts and remedial measures. Central Inland Fisheries Research Institute, Bulletin No. 161, 35p.

Payne A. I., Sinha, R. K., Singh, H. R., Haq, S. 2004. A review of the Ganges Basin: its fish and fisheries. In: Welcomme, R. L., Peter, T. (eds) *Proceedings of the second international symposium on the management of large rivers for Fisheries*, vol. 1, FAO Regional Office for Asia and the Pacific, Bangkok, Thailand, pp 229-251

Raje, S. G., Sivakami, S., Mohanraj, G., Manojkumar, P. P., Raju, A., & Joshi, K. K. 2007. Atlas on the Elasmobranch fishery resources of India. CMFRI Special Publication, 95, 1-253.

Roshith, C. M., Sharma, A. P. R. K. Manna, B. B. Satpathy & U. Bhaumik 2013. Ichthyofaunal diversity, assemblage structure and seasonal dynamics in the freshwater tidal stretch of Hooghly estuary along the Gangetic delta, *Aquatic Ecosystem Health & Management*, 16:4, p 445-453

Roshith, C. M., Sharma, A. P., Manna, R. K., Satpathy, B. B., & Bhaumik, U., Ichthyofaunal diversity, assemblage structure and seasonal dynamics in the freshwater tidal stretch of Hooghly estuary along the Gangetic delta. *Aquatic Ecosystem Health & Management.*, 2001, 16, p 445-453.

Saigal, B. N., & Motwani, M. P. 1967. Studies on the fishery and biology of commercial catfishes of the Ganga river system. *Indian Journal Fisheries*, 11, p 1-44.

Samanta, S. 2013. Metal and pesticide pollution scenario in Ganga River system, *Aquatic Ecosystem Health & Management*, 16:4, p 454-464.

Sani, R., Gupta, B. K., Sarkar, U. K., Pandey, A., Dubey, V. K., & Singh Lakra, W. 2010. Length-weight relationships of 14 Indian freshwater fish species from the Betwa (Yamuna River tributary) and Gomti (Ganga River tributary) rivers. *Journal of Applied Ichthyology*, 26(3), p 456-459.

Sarkar, U. K., A. K. Pathak, R. K. Sinha, K. Sivakumar, A. K. Pandian, A. Pandey, V. K. Dubey, and W. S. Lakra. "Freshwater fish biodiversity in the River Ganga (India): changing pattern, threats and conservation perspectives." *Reviews in Fish Biology and Fisheries* 22, no. 1 (2012): 251-272.

Sarkar, U. K., Gupta, B. K., & Lakra, W. S. 2010. Biodiversity, ecohydrology, threat status and conservation priority of the freshwater fishes of river Gomti, a tributary of river Ganga (India). *The Environmentalist*, 30(1), 3-17.

Sarkar, U. K., Pathak, A. K., Sinha, R. K., Sivakumar, K., Pandian, A. K., Pandey, A., Dubey, V. K. and Lakra, W. S. 2011. Freshwater fish biodiversity in the River Ganga (India): changing pattern,

threats and conservation perspectives. *Rev. Fish. Biol. Fisher.* 22(1), 251-272. DOI: 10.1007/s11160-011-9218-6

Singh, A. K., Kumar, D., Srivastava, S. C., Ansari, A., Jena, J. K. & Sarkar U. K. 2013. Invasion and impacts of alien fish species in the Ganga River, India, *Aquatic Ecosystem Health & Management*, 16:4, 408-414.

Singh, A. K., Pathak, A. K., & Lakra, W. S. 2010. Invasion of an exotic fish-common carp, *Cyprinus carpio* L.(actinopterygii: cypriniformes: cyprinidae) in the Ganga River, India and its impacts.

Singh, G., & Agarwal, N. K. 2014. Fishing methods in upper Ganga River system of central Himalaya, India. *Journal of Fisheries*, 2(3), 195-202.

Singh, H. R., & Johal, M. S. 2009. Present status of fish species diversity of the River Ganges in the vicinity of Allahabad, Uttar Pradesh, India. *Acta Universitatis Carolinae Environmentalica*, 1-2.

Sinha, M. & Khan, M. A. 2001. Impact of environmental aberrations on fisheries of the Ganga (Ganges) River, *Aquatic Ecosystem Health & Management*, 4:4, 493-504, DOI: 10.1080/146349801317276143.

Sinha, M. 2002. Riverine and reservoir Fisheries of India- Present status and Future prospects. In: *Riverine and reservoir Fisheries of India* (Editors Bhoopendranath et al, 2002). Society of Fisheries Technologists (India) Cochin, pp.197-203.

Sinha, M. 2006. Riverine Fisheries of India. In: *Hand Book of Fisheries and Aquaculture*. (Editors Ayyappan et al.) Directorate of Information and Publications of Agriculture, Indian Council of Agriculture, New Delhi, pp. 142-157.

Sinha, M., Khan, M. A., 2001. Impact of environmental aberrations on fisheries of the Ganga (Ganges) River. *Aquat. Ecosyst. Health*. 4(4), 493-504.

Sinha, M., Mukhopadhyay, M. K., Mitra, P. M., Bagchi, M. M., Karamkar, H. C. 1996. Impact of Farakka barrage on the hydrology and fishery of Hooghly estuary. *Estuaries* 19(3): 710-722.

Srivastava, P. K., & Srivastava, S. K. 2009. Checklist of Fish Species Richness of Jai Prakash Narayan Bird Sanctuary, Suraha Lake, Ballia, UP, India. *Our Nature*, 7(1), 207-211.

Talwar PK & Jhingran AG., *Inland fishes of India and adjacent countries*. Vol-1 & Vol-2, (Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi, Bombay and Calcutta, India), 1991, 5-1158.

Tripathi, S., Gopesh, A., & Dwivedi, A. C. 2017. Fish and fisheries in the Ganga river: current assessment of the fish community, threats and restoration. *Journal of Experimental Zoology, India*, 20(2), 907-912.

Vannote, R. L.; Minshall, G. W., Cummin, K. W., Sedell, J. R. and Cushing, C. E. 1980. The river continuum concept. *Can J. Fish. Aquat. Sci.* 37:130-137.

Vass, K. K., Das, M. K., Srivastava, P. K., Dey, S. 2009. Assessing the impact of climate change on inland fisheries in River Ganga and its plains in India. *Aquat Ecosyst Health Manage* 12(2):138-151

Vass, K. K., Mondal, S. K., Samanta, S., Suresh, V. R. & Katiha, P. K. 2010a. The environment and fishery status of the River Ganges. *Aquatic Ecosystem Health & Management* Volume 13, Issue 4, 385-394.

Vass, K. K., Tyagi, R. K., Singh, H. P. & Pathak, V. 2010b. Ecology, changes in fisheries, and energy estimates in the middle stretch of the River Ganges. *Aquatic Ecosystem Health & Management* Volume 13, Issue 4, 374-384.

Welcomme, R. L. 1985. River fisheries. Food and Agriculture Organization, Technical Paper 262. Rome, Italy.

Zoological Survey of India. 1977. Records of the Zoological Survey of India: Miscellaneous publication. Occasional paper (No-10). Manager of Publications, Civil Lines, Delhi. pp 2-32

Anonymous, 2009-10. Annual Report, Central Inland Fisheries Research Institute, Barrackpore, 2009-10.

www.Fishbase.org version (12/2019)



Index

INDEX

<i>Aborichthys elongatus</i>	88	<i>Chagunius chagunio</i>	108
<i>Ailia coila</i>	314	<i>Chanda nama</i>	220
<i>Ailiichthys punctata</i>	316	<i>Channa gachua</i>	222
<i>Amblyceps mangois</i>	318	<i>Channa marulius</i>	224
<i>Amblypharyngodon mola</i>	90	<i>Channa punctata</i>	226
<i>Anabas testudineus</i>	208	<i>Channa striata</i>	228
<i>Anguilla bengalensis</i>	20	<i>Chelon parsia</i>	188
<i>Anodontostoma chacunda</i>	48	<i>Chirocentrus dorab</i>	50
<i>Aplocheilus panchax</i>	26	<i>Chitala chitala</i>	202
<i>Apocryptes bato</i>	210	<i>Cirrhinus mrigala</i>	110
<i>Arius arius</i>	320	<i>Cirrhinus reba</i>	112
<i>Arius gagara</i>	322	<i>Clarias gariepinus</i>	426
<i>Atropus atropos</i>	212	<i>Clarias magur</i>	332
<i>Badis badis</i>	214	<i>Clupisoma garua</i>	334
<i>Bagarius bagarius</i>	324	<i>Coilia dussumieri</i>	52
<i>Bagarius yarrelli</i>	326	<i>Coilia reynaldi</i>	54
<i>Bangana dero</i>	92	<i>Corica soborna</i>	56
<i>Barilius barila</i>	94	<i>Ctenopharyngodon idella</i>	414
<i>Barilius vagra</i>	98	<i>Cynoglossus arel</i>	302
<i>Batasio batasio</i>	328	<i>Cynoglossus cynoglossus</i>	304
<i>Bengala elanga</i>	96	<i>Cynoglossus lingua</i>	306
<i>Boleophthalmus boddarti</i>	216	<i>Cyprinus carpio</i>	416
<i>Botia dario</i>	100	<i>Devario devario</i>	114
<i>Botia lohachata</i>	102	<i>Deveximentum insidiator</i>	276
<i>Botia rostrata</i>	104	<i>Drepane punctata</i>	230
<i>Brachirus pan</i>	300	<i>Eleotris fusca</i>	232
<i>Brachygobius nusus</i>	218	<i>Eleutheronema tetradactylum</i>	234
<i>Bregmaceros mccllellandi</i>	40	<i>Epinephelus coioides</i>	236
<i>Brevitrygon walga</i>	198	<i>Escualosa thoracata</i>	58
<i>Cabdio morar</i>	106	<i>Esomus danrica</i>	116
<i>Chaca chaca</i>	330	<i>Eupleurogrammus muticus</i>	286

<i>Eutropiichthys murius</i>	338	<i>Lagocephalus lunaris</i>	410
<i>Eutropiichthys vacha</i>	340	<i>Lates calcarifer</i>	296
<i>Gagata cenia</i>	342	<i>Laubuka laubuca</i>	136
<i>Gagata gagata</i>	344	<i>Leiodon cutcutia</i>	408
<i>Garra gotyla</i>	118	<i>Lepidocephalichthys guntea</i>	138
<i>Gerres filamentosus</i>	238	<i>Lobotes surinamensis</i>	250
<i>Gerres oyena</i>	240	<i>Macragnathus aral</i>	396
<i>Glossogobius giurus</i>	242	<i>Macragnathus pancalus</i>	398
<i>Glyptothorax cavia</i>	346	<i>Mastacembelus armatus</i>	400
<i>Glyptothorax garhwali</i>	348	<i>Megalaspis cordyla</i>	252
<i>Gogangra viridescens</i>	350	<i>Microphis cuncalus</i>	404
<i>Gonialosa manmina</i>	60	<i>Monopterus cuchia</i>	394
<i>Gudusia chapra</i>	62	<i>Mystus bleekeri</i>	354
<i>Hara hara</i>	336	<i>Mystus cavasius</i>	356
<i>Harpadon nehereus</i>	30	<i>Mystus gulio</i>	358
<i>Hemibagrus menoda</i>	360	<i>Mystus tengara</i>	362
<i>Heteropneustes fossilis</i>	352	<i>Mystus vittatus</i>	364
<i>Hypophthalmichthys molitrix</i>	424	<i>Nandus nandus</i>	254
<i>Hypophthalmichthys nobilis</i>	422	<i>Nemapteryx caelata</i>	366
<i>Hyporhamphus limbatus</i>	34	<i>Notopterus notopterus</i>	204
<i>Ilisha elongata</i>	64	<i>Nuchequula blochii</i>	248
<i>Ilisha megaloptera</i>	66	<i>Odontamblyopus rubicundus</i>	256
<i>Johnius coitor</i>	244	<i>Ompok bimaculatus</i>	370
<i>Johnius gangeticus</i>	246	<i>Ompok pabda</i>	372
<i>Labeo angra</i>	122	<i>Ompok pabo</i>	374
<i>Labeo bata</i>	124	<i>Opsarius barna</i>	140
<i>Labeo boga</i>	126	<i>Opsarius bendelisis</i>	142
<i>Labeo calbasu</i>	128	<i>Opsarius tileo</i>	144
<i>Labeo catla</i>	120	<i>Oreichthys cosuatis</i>	146
<i>Labeo dyocheilus</i>	130	<i>Oreochromis niloticus</i>	418
<i>Labeo gonius</i>	132	<i>Osteobrama cotio</i>	148
<i>Labeo rohita</i>	134	<i>Osteogeneiosus militaris</i>	376

<i>Pachypterus atherinoides</i>	368	<i>Salmostoma phulo</i>	174
<i>Pama pama</i>	258	<i>Sardinella gibbosa</i>	72
<i>Pampus chinensis</i>	260	<i>Scatophagus argus</i>	274
<i>Pangasius pangasius</i>	378	<i>Schizothorax richardsonii</i>	176
<i>Pangio pangia</i>	150	<i>Scoliodon laticaudus</i>	44
<i>Panna microdon</i>	262	<i>Securicula gora</i>	178
<i>Paracanthocobitis botia</i>	152	<i>Setipinna brevifilis</i>	74
<i>Parambassis baculis</i>	264	<i>Setipinna phasa</i>	76
<i>Parambassis lala</i>	272	<i>Setipinna taty</i>	78
<i>Parambassis ranga</i>	266	<i>Setipinna tenuifilis</i>	80
<i>Pellona ditchela</i>	68	<i>Sicamugil cascasia</i>	194
<i>Pethia conchoniuis</i>	154	<i>Siganus javus</i>	278
<i>Pethia gelius</i>	156	<i>Sillaginopsis domina</i>	280
<i>Pethia phutunio</i>	158	<i>Sillago sihama</i>	282
<i>Pethia ticto</i>	164	<i>Silonia silondia</i>	382
<i>Pisodonophis boro</i>	22	<i>Sisor rabdophorus</i>	384
<i>Planiliza tade</i>	190	<i>Sperata aor</i>	386
<i>Platycephalus indicus</i>	310	<i>Sperata seenghala</i>	388
<i>Polynemus paradiseus</i>	270	<i>Stolephorus bagnansis</i>	82
<i>Pseudapocryptes elongatus</i>	268	<i>Systemus sarana</i>	180
<i>Pterygoplichthys disjunctivus</i>	420	<i>Tariqilabeo latius</i>	182
<i>Puntius chola</i>	160	<i>Tenualosa ilisha</i>	84
<i>Puntius sophore</i>	162	<i>Terapon jarbua</i>	284
<i>Raconda russeliana</i>	70	<i>Tor putitora</i>	184
<i>Raiamas bola</i>	166	<i>Trichiurus lepturus</i>	288
<i>Rasbora daniconius</i>	168	<i>Trichogaster chuna</i>	290
<i>Rhinomugil corsula</i>	192	<i>Trichogaster fasciata</i>	292
<i>Rita rita</i>	380	<i>Trichogaster lalius</i>	294
<i>Salmostoma acinaces</i>	170	<i>Wallago attu</i>	390
<i>Salmostoma bacaila</i>	172	<i>Xenentodon cancila</i>	36

