

Inland Fisheries of Indus Ecoregion

Fact Sheet (010.09.04)

Introduction

At the juncture of both freshwater and marine habitats the Indus Delta is a highly productive ecosystem of the Indus Ecoregion. The area is critically important for the rich fish fauna and migrating water birds. The snow from the glaciers in the Himalayan Mountains fills in the 3000 km long Indus River providing mineral rich soil and water to the flood plains of Delta. Both the Indus River and the tributaries that feed it are home to many types of unusual fish and other animals. During the monsoon season the heavy rains inundate the Indus River from June to September. The flooding of the River Indus creates a delta of swamps, streams, and extensive mangroves before it enters into the Arabian Sea.

Many fish species live in or migrate through the waters of the Indus River Delta. The 'Hilsa Shad' swims up from the Arabian Sea to spawn in freshwater. This fast swimmer has been clocked at 43 miles (71 km) per day. Other unusual fish that live in the Indus include the Indus Baril, Indus Garua (a catfish), and the Rita catfish. Several snakehead fish also live here, including the Giant snakehead, which can grow to be 6 feet (2 m) long and eats fish, frogs, snakes, insects, and earthworms. There are even reports that it will occasionally eat a water bird! Fish species that are important to people as food, are the Golden Mahseer and large freshwater shrimp (*Macrobrachium spp.*) all of which are part of the abundant aquatic life of the delta.

The Indus River is home to about 179 species (including 15 exotic fish species) which belong to 82 genera, 26 families and 10 orders. These fishes include number of endemic like Indus Baril (*Barilius modestus*), Indus Garua (*Clupisoma naziri*) and Rita Catfish (*Rita rita*) and commercial fishes, such as *Catla catla*, *Labeo rohita*, *Labeo calbasu*, *Cirrhinus* and *Channa* species, *Wallago attu*. Several snake head fishes also live here, including the Giant snakehead (*Channa marulius*). Several fish species, such as Hilsa Shad (*Tenualosa ilisha*), return from the Arabian Sea to spawn in freshwater.



Tenualosa ilisha



Wallago attu

Fish	Order	Family	
<i>Catla catla</i>	Cypriniformes	Cyprinidae	
<i>Labeo rohita</i>			
<i>Labeo calbasu</i>			
<i>Labeo gonius</i>			
<i>Puntius sophore</i>			
<i>Puntius ticto</i>			
<i>Cirrhinus mrigala</i>			
<i>Cirrhinus reba</i>			
<i>Salmostoma bacaila</i>			
<i>Barbus sarana</i>			
<i>Mystus vittatus</i>	Siluriformes	Bagridae	
<i>Mystus cavasius</i>		Schibedae	
<i>Clupisoma garua</i>		Siluridae	
<i>Wallago attu</i>			
<i>Ompo bimaculatus</i>			
<i>Heteropneustus fossilis</i>			
<i>Rita rita</i>		Clupeiformes	
<i>Mystud bleekeri</i>			
<i>Gudusia chapra</i>		Clupeiformes	Clupidae
<i>Notopterus notopterus</i>			Notopteridae
<i>Notopterus chitala</i>			
<i>Channa morulius</i>	Channiformes	Channidae	
<i>Channa punctatus</i>			
<i>Channa striatus</i>			
<i>Xenentodon cancila</i>	Beloniformes	Belonidae	
<i>Chanda ranga</i>	Perciformes	Chandidae	
<i>Mastacembelus armatus</i>			
<i>Mastacembelus pancalus</i>			
<i>Macrognathus oculeatus</i>			
<i>Oreochromis mossambicus</i>		Cichlidae	
<i>Glossogobuis giuris</i>		Gobidae	

Current Scenario

Recent developments such as the construction of reservoirs, canals and barrages upstream, has resulted in reduced water flow to the lower reaches of the Indus. Compounded with very little precipitation in the area the amount of water reaching the delta is barely sufficient to support the ecosystem. The disposal of untreated sewage and industrial pollution has led to the destruction of mangroves, a nursery and shelter zone of fish species. The extreme decline in water flow towards the sea in the delta for over two decades has caused eradication of mangrove forest to one-third, submergence of over 2.2 million acres of fertile land into sea, depletion of fisheries resources, pushing two million people below the poverty line and forcing migration of nearly 0.3 million people from the deltaic areas.

The total production of some of the important commercial fin fish and shell fish mostly found in creeks and mangroves areas of the Indus Delta for the period covering the last five years (1997-2001) is given in the table. T.ilisha and Elentheronema tetradactylum shows a drastic decline during the last two years.



Sindh has an annual production of 394,000 tonnes in 2005-2006, an increase of almost 3% over preceding year (109,000 tonnes of inland fisheries).

Threats and Challenges

- Insufficient discharge of freshwater
- Scarcity of water during breeding season
- Intrusion of sea water in river beds
- Loss of mangrove cover resulting in decreasing reproduction
- Poor water quality
- Dumping of untreated effluence
- Over fishing and depletion of fish stock
- Use of illegal nets

For Further Information
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