



Fishery and Aquaculture Country Profiles

The People's Republic of Bangladesh



Part I Overview and main indicators

1. Country brief
2. General geographic and economic indicators
3. FAO Fisheries statistics

Part II Narrative (2010)

4. Production sector
 - Marine sub-sector
 - Inland sub-sector
 - Aquaculture sub-sector - NASO
 - Recreational sub-sector
5. Post-harvest sector
 - Fish utilization
 - Fish markets
6. Socio-economic contribution of the fishery sector
 - Role of fisheries in the national economy
 - Trade
 - Food security
 - Employment
 - Rural development
7. Trends, issues and development
 - Constraints and opportunities
 - Government and non-government sector policies and development strategies
 - Research, education and training
 - Foreign aid
8. Institutional framework
9. Legal framework
10. References

Source of information

- United Nations Geospatial Information Section <http://www.un.org/Depts/Cartographic/english/htmain.htm>
- Imagery for continents and oceans reproduced from GEBCO, www.gebco.net

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Additional information

11. FAO Thematic data bases
12. Publications
13. Meetings & News archive

Part I Overview and main indicators

Part I of the Fishery and Aquaculture Country Profile is compiled using the most up-to-date information available from the FAO Country briefs and Statistics programmes at the time of publication. The Country Brief and the FAO Fisheries Statistics provided in Part I may, however, have been prepared at different times, which would explain any inconsistencies.

Country brief

Prepared: June 2014

Bangladesh has a unique position in the sub-tropical region, within the delta of three great rivers, the Ganges, the Brahmaputra (and Jamuna) and the Meghna covering an area of 14.4 million ha. In view of this important river system, inland fisheries and aquaculture are prime contributors to food security and employment. About 1.2 million people find jobs in inland water fishing, while another 0.3 million people find jobs in marine fishing. The fisheries sector is currently contributing 3.8 percent of the GDP. Fish provide 55 percent of animal protein intake in Bangladesh.

Bangladesh is one of the world's most important inland fishing nations. Inland waters capture production has more than doubled between 1998 and 2009 but declined since then to around 1.0 million tonnes. The catch is dominated by carp species accounting for about half of total freshwater production. Marine catches have been stable in 2009 and 2010 around 600,000 tonnes.

The fishery fleet reported to FAO in 2012 consisted of 204 motorized decked trawlers 12 to 60 m long. In addition, there were about 52 000 undecked vessels of up to 12 m long and about half of them were motorized.

Aquaculture development has been strongly promoted by both the public and private sector in an attempt to meet the need of fish for food for the country's population of approximately 156 million. Annual production reached the level of 1.7 million tonnes in 2012, with 91 percent originating from freshwater and 9 percent from brackish water. The production is dominated by finfish (92 percent) mainly carps, which provide inexpensive fish for domestic consumption. Another 8 percent of the total production is farmed shrimp destined mostly for export market.

In 2012, the estimated value of imports of fish and fishery products was USD 27.5 million, with fishmeal as the main product imported (31 percent of the total value). In 2012, exports of fish and fishery products were estimated at USD 592.5 million, with shrimps and prawns as the main species exported (72 percent of the value). The *per caput* annual consumption of fish was estimated at 19.7 kg in 2011, but this figure varies according to status, with poorer families and women and children consuming less fish per capita than the national average.

Bangladesh is Party to the 1982 UN Convention on the Law of the Sea (UNCLOS) since 2001; signed the 1995 UN Fish Stocks Agreement but has not ratified it. Bangladesh is a member of the Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia and Pacific Region (INFOFISH), Bay of Bengal Programme (BOBP), and the Network of Aquaculture Centres in Asia and the Pacific (NACA).

Current issues

- Seed and feed quality is recognized as one of the key constraints to the sustainable aquaculture development in the country.
- There is a strong focus on improving inland fisheries by enhancing fisheries resources through restocking. There is less emphasis on enacting conservation and management measures, although the Jatka fisheries (juvenile Hilsa) is a good example.
- Fisheries resources survey and assessment of stocks are undertaken, but are not used extensively for management planning.
- Due to the high rural poverty and dependence upon fishery resources, there is a need to facilitate alternative income-generating activities for rural poor and unemployed people towards poverty alleviation.
- Shrimp and prawn, the second most important export commodities in Bangladesh next to textiles, with exports valued at around USD 430 million mainly to the EU and the USA, faced an export ban imposed in 1997 due to the detection of antibiotic (i.e. nitrofurans) in exported prawn products.
- Bangladesh fisheries and aquaculture are very sensitive to climatic variability and climate change. Vulnerability involves food access, nutrition aspects, livelihoods, development gender opportunities, etc.

Membership in Regional Fishery Bodies

- Asia-Pacific Fishery Commission (APFIC)
- Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO)
- Indian Ocean Tuna Commission (IOTC)
- Network of Aquaculture Centers in Asia-Pacific (NACA)

General geographic and economic indicators

Table 1 - Bangladesh -General Geographic and Economic Data

Water area*:	10 848km ²
Shelf area:	67 000 km ²
Length of coastline:	710 km
Population (2014)**:	156.4 million
GDP at purchaser's value (2012):	USD 116.4 billion
GDP per head (2012):	USD 752
Agricultural GDP (2012):	USD 19 865 million
Fisheries GDP (2009-10)*:	USD 3 181 million BDT 218 billion

*Statistical Yearbook of Bangladesh - 2010 **Estimate by the Bangladesh Bureau of Statistics (www.bbs.gov.bd)

		Source
Country area	148 460 km ²	FAOSTAT. 2013

Land area	130 170 km ²	FAOSTAT. 2013
Inland water area	18 290 km ²	Computed. 2013
Population - Est. & Proj.	163.8 millions	FAOSTAT. 2018
Exclusive Economic Zone (EEZ) area	112 485 km ²	VLIZ
GDP (current US\$)	274 025 millions	World Bank. 2018
GDP per capita (current US\$)	1 698 US\$	World Bank. 2018
Agriculture, forestry, and fishing, value added	13.07 % of GDP	World Bank. 2018

FAO Fisheries statistics

Part II of the Fishery and Aquaculture Country Profile provides supplementary information that is based on national and other sources and that is valid at the time of compilation (see update year above). References to these sources are provided as far as possible.

Production sector

The three river systems Ganges, Brahmaputra and Meghna create the vast delta which constitutes Bangladesh. There are 24 000 km of rivers (230 rivers), an estimated 5.5 million ha of fertile floodplains and an exclusive economic zone of 166 000 km². Inland capture fisheries have historically dominated fish production. Over the last decades, however, there has been a considerable growth in aquaculture. The marine and coastal fisheries production represents 19% of the total production. The annual growth in fish production, according to official figures, has varied between 4.79 and 7.2 % since 1999/2000.

The total value of fish production constitutes 4 % of GDP. Exports amount to 72 888 tonnes (2008), of which 50 368 is shrimp. Shrimp account for 60% of the value of exports.

The inland capture fisheries are all small-scale operations either without boats or from small, wooden non-motorized boats. The marine fisheries have three distinct sub-sectors, i.e. the small-scale coastal fisheries, the mechanized semi-industrial fisheries and the industrial fisheries.

Marine sub-sector

The marine fisheries are dominated by small-scale operations including small-scale near shore fry fishing with push and drag nets and operations with motorized and non-motorized boats ranging from 6 to 12 m l.o.a. deploying set bag nets, gill nets and longlines. There is also semi-industrial gill net fishing with mechanized vessels up to 20 m l.o.a. and the industrial trawler (shrimp and finfish) fleet.

Catch profile

The official statistics distinguish between industrial and artisanal fisheries (with artisanal encompassing all small-scale fisheries from the drag and push net to 20 m l.o.a. gillnetters). An estimated 93% of marine catch was produced in the artisanal sub-sector. Hilsa is the most important species with 202 951 tonnes, all from artisanal fisheries. Other important species are Bombay Duck (58 263 tonnes), Pomfret (46 643 tonnes), and Jew Fish (35 743 tonnes). The total shrimp fisheries produce 52 217 tonnes, of which 2 932 are catches from trawlers, the balance artisanal production.

Landing sites

There are five government fish landing centers in the coastal areas (black squares on map in Figure 13) established and administered by Bangladesh Fisheries Development Corporation (BFDC), and private fish landing sites (red squares on map). There are numerous more informal landing and fish trading sites of varying sizes. There are no records available regarding the different sites.

Fishing practices/systems

There is an important shrimp fry fishery with drag- and pushnets in coastal areas, providing essential raw material for the shrimp culture sector, and seasonally employing large numbers (estimates vary from 150 000 –

400 000), mainly women and children. This fishery is in principle banned, but there are indications that it is increasing.

The commercial gill-net fleet consists of wooden mechanized vessels up to 20 m l.o.a. and with a crew of up to 15 people. They mainly operate in waters deeper than 10 meters. The coastal artisanal fleet consists of a variety of wooden boats 6 – 12 m l.o.a. They are gradually being motorized and operate up to 10 m depth. Set bag nets (estuarine and marine) are a major gear in this fleet segment. (See table 3).

The industrial fleet comprises 40 double-rigged shrimp trawlers and 101 stern fish trawlers (DOF Annual Statistics). This includes 30 unregistered vessels, which are engaged in fishing following the issuance of a special court order.

Figure 13 – Bangladesh - Major landing sites (black: BDFC landing sites, red: private)

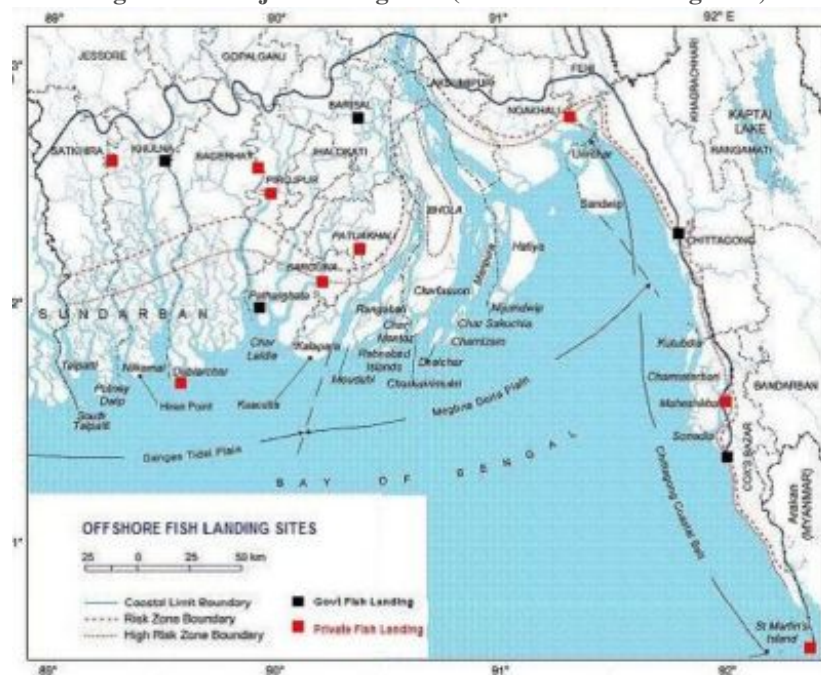


Table 3 – Bangladesh - . No of fishing vessels (M=motorized, NM= non-motorized)

Small-scale fishing vessels			
	Total	M	NM
Gill-netters	25 369	18 992	6 377
Set bag net vessels	12 765	1 091	11 674
Longline vessels	2 641	1 350	1 291
Trammel net vessels*	1 103		
Vessels deploying other gear*	2 082		
Total	43 960	21 323	19 342

*Information is not available on how these fleets divide Into motorized and non-motorized vessels

Main resources

There have been no recent surveys of fish stocks in Bangladesh waters. Surveys before and during the 1980s

indicate a demersals stock of 150 000 – 160 000 tonnes within 10 – 100 m depth. The key demersal finfish species are croakers and catfishes, threadfin bream and Bombay duck. It has been estimated that the maximum sustainable yield would be 40 000 – 50 000 t of demersal finfish and 7 000 – 8 000 tonnes/year from the offshore fishing grounds. There are no reliable estimates of pelagic finfish.

Table 4 – Bangladesh -. Major fishing grounds in Bangladesh EEZ

Fishing ground	Location	Major commercial fish species
South Patches (6 200 km ²) 60 – 80 m depth	91°10'E – 91°50'E, 21°10'N – 21°40'N	Indian salmon, Hilsa, pomfret, ribbonfish, Bombay duck, carangids, eel, jew fish, catfish, sharks and rays
Middle Ground (4 600 km ²) 80 – 100 m depth	90°30'E – 91°40'E, 20°45'N – 21°10'N	Pomfret, red snappers, ribbonfish, silver Jew, Carangids, shrimp
Southwest of South Patches East of Swatch of No-ground	90°00'E – 90°40'E, 21°00'N – 21°25'N	Indian mackerel, snappers, groupers, Jew fish,
Swatch of No-ground (3 800 km ²) 800 – 1 000 m depth	89°00'E – 90°00'E, 21°00'N – 21°40'N	Shrimps, Hilsa, pomfret, ribbonfish Bombay duck, Jew fish

Management applied to main fisheries

Marine fisheries are an open access resource. The industrial sector is regulated through licensing of vessels, regulated mesh sizes for the cod-ends (45 mm for shrimp and 60 mm for fish trawl). Shrimp trawlers must land, not discard, finfish and finfish must exceed 30% of landings. Licensed vessels must land at designated ports in the presence of a Department of Fisheries Officer. The input controls are complemented with quality control (Act 1983). Objectives are to protect fish and shrimp stocks, ensure food safety and improve the quality of exportable products.

Monofilament net are banned and the minimum mesh-size in gillnets is 60 mm. There is no input control in the small-scale sector, with the exception of the Sundarbans mangrove swamp, where the Department of Forest issues fishing permits against a fee.

The Marine Fisheries Ordinance (1983) provides for zoning of the use of fishing gear; set bag nets ≤40 m depth, hook and line ≤40 m depth, Hilsha and other drift gillnets ≤40 m depth and trawling outside the 40 m depth curve.

In 2000 the Government of Bangladesh established a Marine Reserve extending for 698 km² at Middle Ground and South Patches. Two Marine Parks have been established at St. Martin Island and in the Sundarban mangrove forest. Fry fishing is in principle banned, a ban which is not effectively implemented.

Fishing communities

Boat and gear owners seldom fish but contract fishing groups. There are approximately 900 000 fishers belonging to such groups or fishing individually without boats (fry fishing). It should be noted that a substantial portion of the fishers are women. The fishing communities are often marginalized and belong to the poorest sections of the population, lacking secure rights to settlements, access to health facilities and to education. These communities are vulnerable and their adaptive capacity to natural disasters and climate change impact is low. Coastal fisheries is a social safety net for groups lacking other livelihoods options. The alternative livelihoods options are limited and seasonally (January – June) fry fishing is the major source of income for poor fisher families.

Inland sub-sector

Fishing in inland waters has been the main source of fish for the inhabitants of Bangladesh, and there is a preference for inland fish among consumers. In spite of impressive growth in aquaculture, the inland fisheries still provide 42% of the total catches.

Inland waters comprise a wide variety of open and closed waters. Inland open waters comprise rivers and estuaries, *beels* (small lakes), low-lying depressions, permanent bodies of floodplain water, or bodies of water created by rains or floods that may or may not dry up in the dry season. In the wet season fishing is carried out in *haors* or large flooded areas formed when smaller water bodies unify (common in the north-east of the country), in Kaptai Lake (a man-made lake created for hydroelectricity) and in floodlands (annually flooded, low-lying areas associated with rivers).

Inland open-water production shows signs of decline because of environmental degradation due to other human impacts.

Catch profile

Inland capture fisheries produced 1 123 925 tonnes from 4 047 316 ha of waters in 2008/9. The contribution from different types of waters was as given in table 5. The recorded catches have shown a steady increase from 1990/2000.

Table 5 – Bangladesh - Inland capture fisheries production in 2008/09

Type of water body	Water area (ha)	Total catch	Catch/area (kg/ha)
Rivers and estuaries	853 863	138 160	162
Sundarbans	177 700	18 462	104
Beels	114 161	79 200	694
Kaptai Lake	68 800	8 590	125

Flood Plains	2 832 792	879 513	310
Total	4 047 316	1 123 513	

Major carps (the indigenous species rui, catla, mrigal) are the dominant species, followed by exotic carps (silver carp, common carp, mirror carp, grass carp). Other prominent species are cat fish, snake head, Hilsa and prawn.

Landing sites

The production from inland capture fisheries is scattered and individual landings are small. There are numerous private formal and informal landing places, where sale and at times auctions take place.

Fishing operations

In inland waters fishers deploy a wide variety of fishing gear, including gill nets, seine nets, push nets, dag nets, lift nets, hook and line and various types of traps. Ecological differences, social status and tradition influence which type of gear is used. All operations are technically small-scale in nature.

Country boat types, with or without inboard engines, are used in inland capture fisheries.

Main resources

The major resources for inland fisheries are major carps, carps, cat fish, snake head and Hilsa. The catches in major inland water systems are shown in table 3.

Management applied to inland open water fisheries

There is open access to river fish resources. However, management measures have been introduced in rivers to contain fisheries of hilsa, which migrate up rivers from the Bay of Bengal for breeding. Hilsa has been regarded as fully exploited or overexploited and there has been an increasing exploitation of juveniles, jatka. The Government has introduced a short banned season for Hilsa on major spawning grounds during the breeding season (10 days closure), covering 7 000 km². In addition, jatka migration to the sea is facilitated by complete closure of all fisheries in four areas during March and April (2009) in the lower Meghna estuary, the Shahbajpur River (a tributary to Meghna), a 100 km stretch of Tentulia River and 40 km stretch of Andharmanik River. The Department of Fisheries reports increased production of hilsa, increased spawning success and increased CPUE of jatka in test fishing carried out by the Bangladesh Fisheries Research Institute (BFRI). Hilsa management measures have been combined with subsidies in the form of rice rations provided to affected fishing households.

The Ministry of Land leases water bodies (Jalmohals) to individuals or groups on an annual basis.

Community-based fisheries management has been piloted through development projects (funded by the Government and by donor agencies). Community-Based Organizations (CBO) have been established, which prepare management plans, which may include habitat restoration, closed seasons, effort regulations and sanctuaries. There are an estimated 400 functioning CBOs.

The establishment of fish sanctuaries is being encouraged by DOF and 377 sanctuaries had been established by 2006. To enhance capture fisheries, the DoF stocks water bodies with major carps. This activity is funded from the revenue budget. A reported 16.2 million fingerlings were released in 105 787 ha water area in 2009.

Aquaculture sub-sector

Production systems

Aquaculture systems are extensive and improved extensive, with few semi-intensive and intensive systems. The extensive systems rely on stocking with Indian major carp and there is no fertilization or feeding. In improved extensive systems the Indian major carps are complemented with exotic carps. The ponds are irregularly fertilized. Semi-intensive systems include culture of catfish (primarily striped catfish, *Pangasianodon hypophthalmus*, locally known as Thai pangas) and monosex tilapia. Ponds are fertilized and fish feed applied.

Culture-based fisheries in closed waters has expanded rapidly in some areas of Bangladesh. Since 1995 about 2 000 ha have been brought under culture-based fisheries in enclosed areas in Comilla. The main species, which are stocked, are a mix of indigenous and exotic species, including tilapia. The enclosed areas are being managed as joint stock companies. Concerns have been raised about biodiversity impact as well as exclusion of poor fishers from the new management system.

Production

The Department of Fisheries reports the following aquaculture production in 2009:

Table 6 – Bangladesh - Aquaculture production 2008/09

Type	Water area (ha)	Total catch (tonnes)	Catch/area (kg/ha)
Ponds	305 025	912 178	2 991
Oxbow lakes (local name: <i>baors</i>)	5 488	5 038	918
Shrimp/Prawn farms	217 877	145 585	668
Total	528 390	1 062 801	

Of the reported total area of fish ponds (305 025 ha) 90% are reported to be in use. The main species are Indian major carps: rohu (*Labeo rohita*) catla (*Catla Catla*), mrigal (*Cirrhinus cirrhosus*), exotic carps: silver carp, common carp, and catfish: Thai pangas (*Pangasius hypophthalmus*), all contributing 5% or more to the total production. Other common aquaculture species are: bighead carp, mirror carp and silver barb. The later three are all introduced species. The contribution of tilapia (primarily Nile tilapia and also Java tilapia, *Oreochromis mossabicus*) is growing but still reported to just 1.5% of the total.

In the publicly managed oxbow lakes (baors) the exotic carps (silver carp, grass carp, common carp and also bighead carp) make up 46% of the total production, followed by the major carps with 13%. The composition is more varied in the privately managed oxbow lakes, where exotic carps make up 56% and major carps 22% of the production. Other species are catfish, snakehead and other carps.

Shrimp farming is concentrated in southern Bangladesh, with Khulna Division having 171 505 ha, followed by Chittagong Division with 34 704 ha and Barisal Division with 11 425 ha. The total production in shrimp farms

in 2008-09 was 145 585 tonnes, of which 97 745 tonnes was shrimp and the remaining finfish. The main species are *Penaeus monodon* (local name: *bagda*) and *Macrobrachium rosenbergii* (local name: *golda*). Other species are *Metapenaeus monoceros* (local name: *horina*), and *Penaeus indicus* (local name: *chaka*).

Handling, processing and marketing

The major part of the pond produced fish is marketed locally without any processing and sold fresh. Fish destined for the major urban markets are iced and sold fresh. There is a small export of frozen tilapia to niche markets mainly in the UK.

The shrimp is processed and frozen in 82 fish/shrimp processing plants, of which 71 are EU approved and HACCP certified. During the last 10 years a quality control system has gradually been established with laboratories mainly for inspection of export consignments.

Aquaculture communities

Fish farming in ponds is carried out by individual small-scale agriculture farmers with land which includes one or more ponds. The increasing importance of pond culture has led to larger units, where larger-scale farmers have expanded their pond areas. Also, more entrepreneurs have started fish farming and established large-scale fish farms.

More information at: **National Aquaculture Sector Overview (NASO)**

Recreational sub-sector

Recreational fisheries (subsistence fisheries by poor people are not included in this section) are of limited although increasing importance. The major sites for this form of fisheries are Kaptai Lake in the Chittagong Hill Tracts and lakes in the major cities, notably Dhanmondi, Gulshan and Banani lakes in Dhaka. These suburbs are the most affluent. Fishing is done by rod and line. Major carps dominate catches. Right to fish is licensed by local government institutions or by clubs.

Post-harvest sector

Fish utilization

Fish is mainly sold fresh on local markets close to landing sites. For the major urban markets fish is iced and transported by truck and sold fresh. Dedicated fishing for drying is carried out in the Bay of Bengal during the winter months. There are also small niche domestic markets for fish paste and smoked fish. Fish and shrimp for export market (either from capture fisheries or aquaculture) are frozen and processed. Europe and Japan have been the main destinations for frozen shrimp. Export consignments have frequently been rejected on the European market, and Bangladesh voluntarily closed exports for a six-month period, during which the Department of Fisheries conducted an awareness campaign among shrimp farmers and processors on improved quality.

Fish markets

Socio-economic contribution of the fishery sector

Role of fisheries in the national economy

The fisheries sector contributes more than 4% to GDP and is the second largest export product (7% of total exports). The importance for employment is high, up to 7% of the population is engaged in fisheries, aquaculture and associated activities. The importance for the populations well-being is demonstrated by the important contribution of fish and fish products to the diet, providing the major (and for poor groups the only) source of animal protein, essential vitamins and other nutrients.

Trade

Supply and demand

The *per caput* supply of fish and fish products is 14.9 kg/yr. The supply has increased from 7 kg/yr in 1989. Fish provides 50.5% of the total animal protein supply. In rural areas and among poorer population groups fish is the only significant source of animal protein.

Trade Bangladesh exports frozen shrimp and prawn, frozen fish, chilled fish, dry fish, sharp fins, live crabs and live eel. During 2009 Bangladesh voluntarily ceased export of shrimp to EU for a six-month period, because of concerns with quality.

Food security

Fish together with rice is the backbone of the Bangladeshi diet. The recorded *per capita* consumption is 14.9 kg, and fish provides essential vitamins and other nutrients. Fish is especially important for poorer groups for which fish often is the only source of animal protein. It is estimated that some 70% of rural population fish occasionally for subsistence.

Employment

There are an estimated 12 million people engaged in fisheries, of which 1.4 million rely exclusively on fisheries. Of these there are 900 000 in the marine fisheries sub-sector (including up to 450 000 seasonal fry fishers, mainly women and children). An estimated 9.5 million people (73 percent) are involved in subsistence fisheries on the country's flood plains. There are 3.08 million fish farmers, 1.28 million inland fishermen and it is estimated that fisheries and related activities support more than 7 percent of the country's population.

Rural development

The number of landless in rural areas is increasing and non-farm rural employment is increasingly important for poverty reduction. Fishing (professionally or for subsistence) provides an important source of employment. The growth of aquaculture provides non-traditional employment opportunities in rural areas.

Trends, issues and development

Constraints and opportunities

The inland capture fisheries sector faces habitat degradation through agricultural development, urbanization, and development of industries and communications. The opportunities for capture fisheries restoration and rehabilitation may be realized by bringing an increasing area under co-management where fisheries are managed responsibly, optimizing the use of water bodies for fish production and raising the voice of the sector during environmental impact assessments.

The marine fisheries functions as a resource of last resort while the near-shore resources are heavily exploited. The challenges are to gradually bring the small-scale sector under co-management arrangements with the long-term aim to control inputs and to reserve resources for the small-scale sector through zoning. Aquaculture is a growth sector in Bangladesh. There is still a vast potential for development of the sector, but it will increasingly meet resistance from and be competing with agriculture. Pollution from fish farming but also the impact of pollution on fish farming is becoming an issue. Quality is a major concern in the shrimp farming industry. Responsible development of the aquaculture sector may cause a growth in availability of high-value animal protein for the growing local population as well as for an expanding export market.

Government and non-government sector policies and development strategies

The present Fisheries Policy was adopted in 1998. The objectives include enhancement of resources and production; poverty alleviation through self-employment in the sector; meeting the demand for animal protein; achieve economic growth and earn foreign exchange; and maintain ecological balance, biodiversity and public health. The Ministry of Fisheries and Livestock in 2006 adopted a Fisheries Strategy with eight sub-strategies for inland and marine capture fisheries, aquaculture and shrimp farming and aquaculture extension, quality control, human resources development and monitoring and evaluation. The strategy takes the policy further towards poverty reduction, co-management and conservation of resources, while creating an enabling environment for management and development.

Research, education and training

Research

The Bangladesh Fisheries Research Institute is based in Mymensingh, with nine stations spread over the country. Its mandate is adaptive research, technology development and training.

Education and training

The Bangladesh Agricultural University located in Mymensingh has a Faculty of Fisheries dedicated to undergraduate and post-graduate teaching and research in the field of fisheries and aquaculture. The other major universities (Dhaka, Chittagong and Khulna) have fisheries departments with undergraduate and postgraduate teaching facilities. The Bangladesh Marine Fisheries Academy (BMFA) is a government-run training institution in Bangladesh for the fishing industry. There are a number of training institutions dedicated to the training of the staff of the Government Department of Fisheries.

Foreign aid

The number of externally funded development projects has decreased since 2005. The Fourth Fisheries Project (World Bank and DFID up to 2006) and the Fisheries Training and Extension Project (DFID, closed in 2003) were major projects. Also DANIDA has provided long-term assistance in aquaculture development (ongoing). There has been limited external support for marine fisheries after substantial boat building projects (DANIDA)

in the 1970s and the Bay of Bengal Programme (FAO) in the 1980s and 1990s. At present there is a capacity development programme for the marine sector funded by the Organization of Islamic Countries and Malaysia. FAO is implementing projects with World Bank and EU funding for rehabilitation after recent cyclones. The World Bank has initiated, upon request by the Government, a major inland and marine capture fisheries project (Integrated Fisheries Livelihoods Project), planned to become operational in 2012. The reduction of external assistance has been compensated by increased allocation from revenue funding for management and development projects carried out by the Department of Fisheries. The Annual Report for 2009 lists 16 revenue funded projects.

Institutional framework

The Ministry of Fisheries and Livestock (www.mofl.gov.bd) is the ministry responsible for fisheries. The main functions are to preserve fisheries resources, fulfill the requirement of animal protein through proper management and planned development, increase socio-economic conditions of fishermen, create employment opportunities for rural unemployed and landless people, expand foreign exchange earnings by exporting fish and fishery products and to innovate new technologies through research for fisheries development and preservation; The Department of Fisheries (www.fisheries.gov.bd). The mandate of the Department is to support sustainable growth in fish and shrimp production for domestic consumption and export, and management of open water fisheries resources through community participation leading to equitable distribution of the benefits generated, for optimal economic and social growth (DOF Annual Report, 2009); The Bangladesh Fisheries Development Corporation (BFDC) was created as an autonomous organization under Act No. XXII of 1964 and ratified in 1973. It has a wide ranging mandate to promote and engage commercially in all aspects of fisheries. The core of BFDC's activities has over time become handling, processing and marketing; The Ministry of Lands (www.minland.gov.bd) plays an important role in inland fisheries management by being the lessor of *jalmohals*, government-owned water bodies.

Legal framework

Policy and strategy guidance:

- National Fisheries Policy, 1998.
- National Fisheries Strategy, 2006

Acts:

- The Protection and Conservation of Fish Act, 1950
- The Protection and Conservation of Fish Rules, 1985
- The Marine Fisheries Ordinance, 1983
- The Marine Fisheries Rules, 1983
- The Fish and Products (Inspection and Quality Control) Ordinance, 1983

More information at: **National Aquaculture Legislation Overview (NALO)**

More information at: **FAOLEX legislative database**

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 - [Asia-Pacific Fishery Commission \(APFIC\)](#)
 - [Bay of Bengal Programme Inter-Governmental Organization \(BOBP-IGO\)](#)
 - [Indian Ocean Tuna Commission \(IOTC\)](#)
 - [Network of Aquaculture Centers in Asia-Pacific \(NACA\)](#)

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