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Продовольственная и  
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Объединенных  
Наций

Organización  
de las  
Naciones Unidas  
para la  
Alimentación y la  
Agricultura

## ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

<b>TWENTY-SIXTH SESSION</b>
<b>Thimphu, Bhutan, 15-19 February 2016</b>
<b>Agenda Item 6.3</b>
<b>Fisheries Statistics in Bangladesh: Issues, Challenges and Plans</b>

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**Welcome**  
**APCAS 26 Participants**



## Fisheries Statistics in Bangladesh: *Issues, Challenges and Plans*



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## BANGLADESH

□ The total area of the country is **147,570 sq km** (56,977 sq. miles).

□ A wide portion of land is covered by large rivers such as the **Padma**, the **Jamuna**, the **Teesta**, the **Meghna**, the **Brahmaputra**, and the **Surma**.

□ There are also thousands of tributaries with a total length of about **24,140 km**. These rivers are connected to the Bay of Bengal.

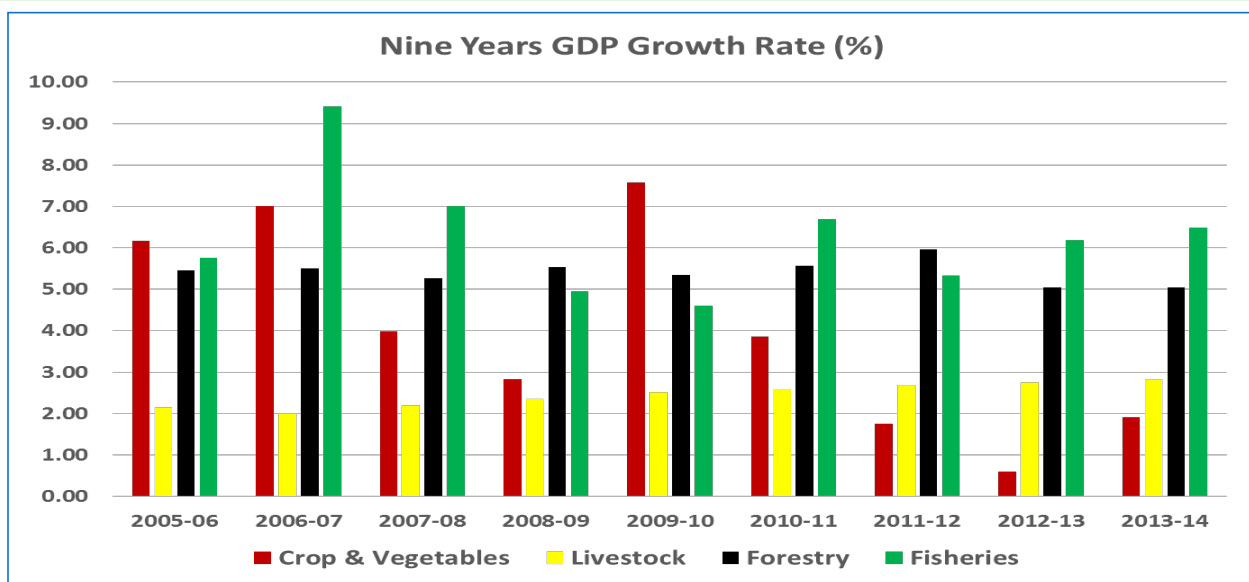


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□ **Fisheries Contribution to National GDP** **3.69%**

□ **Fisheries Contribution to Agricultural GDP** **23.12%**



Source: Bangladesh Economic Review 2015

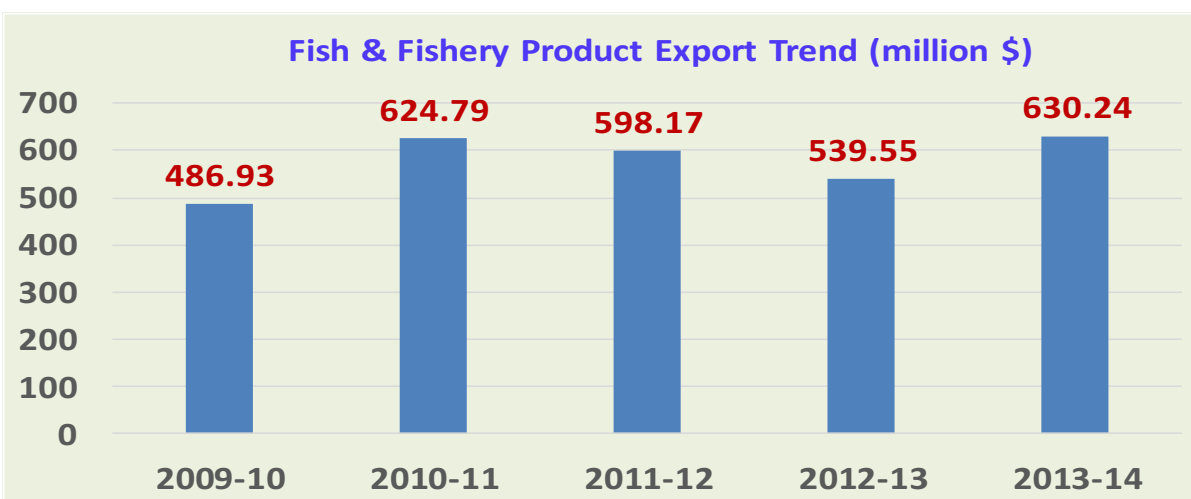


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## Export Earning (2nd largest, next to Ready-Made Garments-RMG)

2.01%



Source: Export Promotion Bureau, Bangladesh 2014



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- ❑ **Animal protein supply ( $\approx$ )** **60%**
- ❑ **Current fish intake (g/person/day)** **53.00**
- ❑ **Desirable fish intake (g/person/day)** **60.00**

- ❑ **Employment (full time & part time)** **17.80 million**  
( $\approx$  11% of total population)
- ❑ **Women employment** **1.40 million**  
( $\approx$  8.5% of fisheries sector employment)

Source: Department of Fisheries Report, 2015



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## Fish Production (2013-14)

**3.548 m MT**

**Inland Closed Water (culture)**

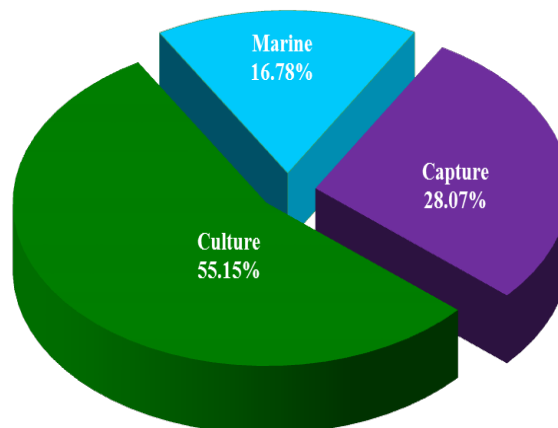
**1.957 m MT**

**Inland Open Water (capture)**

**0.996 m MT**

**Marine Fisheries**

**0.595 m MT**



Source: Department of Fisheries  
FRSS Report, 2015

*Aquaculture production from inland closed water-bodies is **55.15%** of the total production.*



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## Sector-wise Annual Fish Production 2014-15

Sector of Fisheries	Water Area (Ha)	Production (MT)	%
<b>A. Inland Fisheries</b>			
<b>(i) Inland Open Water (Capture)</b>			
1. River and Estuary	853863	174878	4.75%
2. Sundarbans	177700	17580	0.48%
3. Beel	114161	92678	2.52%
4. Kaptai Lake	68800	8645	0.23%
5. Floodplain	2692964	730210	19.82%
<b>Capture Total</b>	<b>3907488</b>	<b>1023991</b>	<b>27.79%</b>



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## Sector-wise Annual Fish Production 2014-15.....

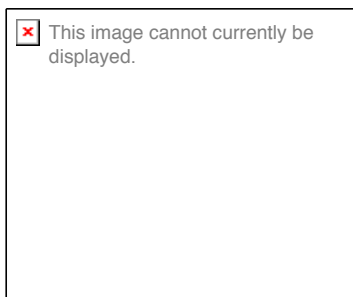
Sector of Fisheries	Water Area (Ha)	Production (MT)	%
<b>(ii) Inland Closed Water (Culture)</b>			
6. Pond	377968	1610875	43.72%
7. Seasonal cultured water body	133330	201280	5.46%
8. Baor (Oxbow lakes)	5488	7267	0.20%
9. Shrimp/Prawn Farm	275583	223582	6.07%
10. Pen Culture	8326	16084	0.44%
11. Cage Culture	10	1969	0.05%
<b>Culture Total</b>	<b>800705</b>	<b>2061057</b>	<b>55.93%</b>
<b>Inland Fisheries Total</b>	<b>4708193</b>	<b>3085048</b>	<b>83.72%</b>
<b>B. Marine Fisheries</b>			
12. Industrial (Trawl)		84846	2.30%
13. Artisanal		515000	13.98%
<b>Marine Fisheries Total</b>		<b>599846</b>	<b>16.28%</b>
<b>COUNTRY TOTAL</b>		<b>3684894</b>	<b>100%</b>



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- ❑ Bangladesh ranked **5th** as aquaculture producing country in the world (FAO, 2015).
- ❑ Last 10 years average growth rate of **fisheries** is **5.4%**.
- ❑ Where **aquaculture** shows the growth performance of **8.2%**.



### Farmed food fish production in 2012

(FAO Report, 2014)

1.China	41 108 306
2.India	4 209 415
3.Viet Nam	3 085 500
4.Indonesia	3 067 660
<b>5.Bangladesh</b>	<b>1 726 066</b>
6.Norway	1 321 119
7.Thailand	1 233 877
8.Chile	1 071 421
9.Egypt	1 017 738



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# Fisheries Resources

**Inland Closed Water** (in million ha) **0.741 m ha**  
ha

Pond/dighi (nos. $\approx$ 2.5 million)	0.338 m ha
Seasonal cultured water body	0.122 m ha
Baor	0.006 m ha
Shrimp/Prawn Farm (nos. $\approx$ .23 million)	0.275 m ha



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**Inland Open Water** (in million ha) **4.025 m ha**

River and Estuary	0.854 m ha
Sundarbans	0.178 m ha
Kaptai Lake	0.069 m ha
Beel	0.114 m ha
Flood Plain	2.810 m ha



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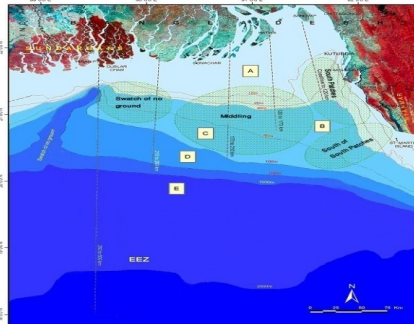




# Marine Fisheries Resources

❑ Marine Water (Territorial)	9,060 km <sup>2</sup>
❑ Maritime Boundary	118,813 km <sup>2</sup>
❑ Coast line	710 km

- 225 industrial trawlers of which 24 are mid-water
- Around 68 thousand mechanized and non-mechanized boats
- Marine fisherman: > 0.5 million

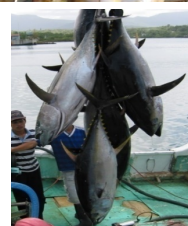
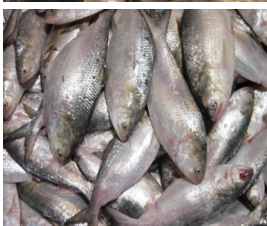


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## Well Enriched in Fish Biodiversity

✚ Freshwater fish species	260
✚ Exotic fish species	12
✚ Marine fish species	486
✚ Freshwater shrimp species	24
✚ Marine shrimp species	36



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# Policy and Legal Framework

## A. National Fisheries Policy (NFP) 1998

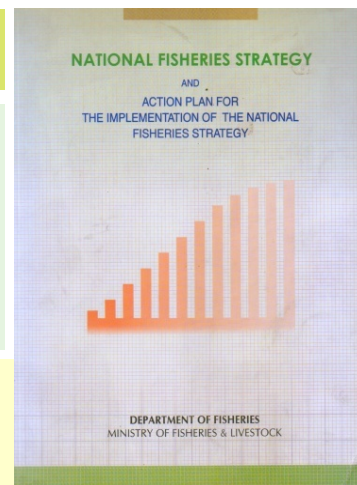
## B. National Fisheries Strategy (NFS) 2006

## C. Other Sector Policies

- Vision 2021 of Fisheries Sector
- Seventh Five Year Plan (7FYP) (2016-2020)
- Sustainable Development Goals (2015-2030)

## D. Recent Act and Regulations

- Feed and Animal Feed Act, 2010
- Fish Feed Regulation, 2011
- Fish Hatchery Act, 2010
- Fish Hatchery Regulation, 2011



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# Key Challenges in Fisheries Sector

- Habitat degradation/ gradual resource depletion
- Scarcity of good quality spawn, fries/PL, feed and other inputs.
- Blocking migratory routes of indigenous fish species.
- Expansion of coastal aquaculture and climate smart technologies
- Lack of secure lease and access to public water bodies.
- Alternative livelihoods support to fishers during banned fishing seasons.
- Poor institutional linkage among the relevant stakeholders.
- Lack of exploratory survey on stocks assessment
- Entry of illegal fishing vessels and poaching in our EEZ
- Licensing of fishing boats and control of effort at sustainable level
- Implementation of the relevant rules of the FAO/UN CCRF
- IUU fishing



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## Blue Growth Initiative

- ✓ Protect, restore and expand mangrove forestation
- ✓ Train and educate artisanal fishers for resource conservation and management- establish social justice
- ✓ Overfishing, coastal hypoxia, invasive spp., coastal habitat loss, ocean acidification be addressed
- ✓ Investing in capacity building- human resources/financial/ transfer of technology-Cooperation from Regional/Int. communities
- ✓ Marine spatial planning- allocating space for various use and protection: MPA, FAD, cross sectional
- ✓ Integrated objective- environment, economic and societal
- ✓ Rebuild overfished species- control over harvest of juveniles
- ✓ Reduction of post harvest loss



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## Goals, Targets under 7FYP

Goals	Targets
<b>01. Attain self-sufficiency in aquaculture and fisheries production and generate surplus for export</b>	a. Increased 45% aquaculture production by 2020 b. Increased 20% fisheries production by 2020 c. Raise per capita protein intake to 60 g from domestically produced fish and fisheries product by 2020 d. Raise export earnings to US\$ 1.25 billion by 2020 from frozen shrimp, fish and value added fish products e. Ensure quality seed and feed at growers level
<b>02. Improve conservation of aquatic biodiversity in inland open water-bodies</b>	a. Reappear at least 75% of endangered fish species in sanctuary area by 2020 from baseline b. Increased 20% hilsa fish production by 2020
<b>03. Enhance coastal and marine fisheries production in line with Blue Economy Initiatives</b>	a. Increased 18% marine fisheries production by 2020 b. Introduction of mariculture by 2020 c. Diversified coastal aquaculture



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## Goals, Targets under 7FYP.....

Goals	Targets
<b>04. More income and equitable distribution of benefits</b>	a. Creation of more (25%) employment opportunity for unemployed youths b. Fish farmers/fishers income raise by 20% by 2020. c. Participation of women in aquaculture production, fisheries CBOs and fish/ shrimp processing industries increase to 25%
<b>05. Improve food safety</b>	a. Good Aquaculture Practices (GAP) and Good Manufacturing Practices (GMP) at all stages of fish/shrimp supply chain to comply international market. b. Food safety measures for domestic markets



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## Key Issues/Challenges in line with Fisheries Statistics

- Old survey framework (1983-84)
- Diversified fisheries resources
- Enriched biodiversity
- Stock assessment of marine fisheries resources
- Assimilation of socio-economic aspects in fisheries statistics
- Updating survey framework
- Lack of skilled manpower



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## **Plans for Updating Fisheries Resources Survey System of Bangladesh (DoF Initiatives)**

- Data and statistics are important pre-requisites and essential tools for resource management and development. Sound knowledge base and updated information pool help to know and understand current status of resources for planning and management.
- DoF has developed project proposal to update survey framework in collaboration with development partners
- DoF has planned to introduce Research Vessel for marine stock assessment



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## **Potential Fields of Cooperation for Updating Fisheries Statistics of Bangladesh**

- ✓ Comprehensive survey framework for inland fisheries resources
- ✓ Stock assessment of marine fisheries resources
- ✓ Institutional capacity building
- ✓ Develop GIS/MIS



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**Thank You All**

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