

West Bengal:
Ultimate
Destination for
Investment in
Fisheries Sector

Fisheries Sector - An overview

West Bengal is such a State in the country, blessed with all kinds of fishery resources, plenty of water, most congenial agro-climate for aqua farming and having century's old heritage of association with fish and fisheries by way of food habit, livelihood & ritual/culture, which has made Fisheries Sector – the most important one.

But up gradation or adoption of modern technology in aqua farming or fishing, as has been developed/happened in many developed countries (Internationally) and to some extent in

one state in the country, not happened in West Bengal to that level, which has resulted Fisheries Sector in the State remains to its almost VIRGIN state yet.

On the other hand, presence of Sundarbans, the largest mangroves, in the country, touching Bay of Bengal in it's South and reported to act as the Nursery Ground for more than 40% animal life in the Bay of Bengal (which includes many riverine fish species), has made the connected open water/riverine system, as the RICHEST FISH BIO-DIVERSITY SPOT in the country.

But from the traditional view point, Fisheries, until 2014-15, has been seen as a sector more to do with small and marginal fishermen and their activities without much relevance to the overall economy of the State. Such view largely ignored the potential role, FISHERIES can play in contributing to the economy of the State. Most of this sector's potential is lying untapped till date.

In the year 2014-15, State Government, in the Fisheries Department, towards achieving the very objective “SABAR JONYO MAACHH O SAB JALASAYE CHASH” (Fish for All and Fish Farming in All Kinds of Water Bodies) and translating recommendation of the Task Force on Fisheries, has started identifying and harnessing the large but hitherto Unharnessed Potentiality of Fisheries Sector through commercial venture and increase State's productivity and has set up a separate Investment Promotion Unit (IPU).

The investment attraction in the Fisheries Sector : Factofile

- Fish has universal taste with persistent global market growth and West Bengal is the highest fish consuming State with ever increasing demand.
- Abundant and diversified natural fishery resources with huge availability of rich knowledgeable manpower for aqua farming at low cost.
- Best suited agro-climate for aqua farming.
- Short duration of crop assuring quick return on investment.
- Harvesting can be planned according to the market demand for fetching better price.
- According to FAO, aquaculture if responsibly developed and practiced, can make significant contribution to global food security and economic growth and 62% of fish food will come from Aquaculture by 2030.
- With the increase in aquaculture area and enhancement of yield / production, demand for other fish-related investment opportunity to come are Fish Feed Mill, Aquatic Animal/ Fish

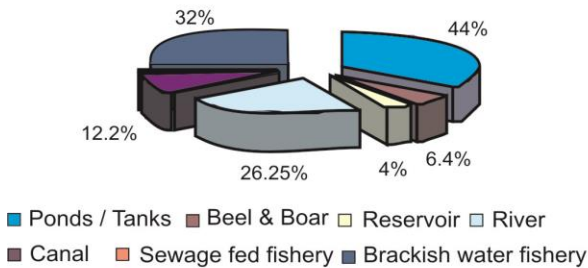
health & aquatic environment management products, cold chain, processing & value addition, fish & shell fish hatcheries, fish tourism etc.

- Raw materials for fish feed mill plants are available locally in plenty.
- West Bengal, being Gate Way of Fish Loving seven North Eastern and three Eastern States, beside adjoining countries like Bhutan, Bangladesh and Nepal can play a pivotal role in Fisheries Business Promotion in these States.
- Business Friendly West Bengal Fisheries Investment Incentive Policy, Government's keen interest for Fisheries sector development by Private Investment, uninterrupted power supply and availability of plenty of water and Ease of Doing Business (single window).

Resources Galore

The State's rich marine & inland water resources coupled with human resources, having rich traditional fishery knowledge/expertise offer an attractive and promising sector for employment, livelihood, food security, economic growth & thereby huge Business Opportunity.

INLAND FISHERY RESOURCE IN WEST BENGAL



Freshwater:

Pond-2.88 L ha
 Beel & Boar-0.42 L ha
 Reservoir-0.27 L ha
 River-1.72 L ha
 Canal-0.80 L ha
 Sewage Fed-0.04 Lha
 Other-0.42 L ha

Brackishwater :

Brackishwater-2.1 Lha

Marine :

Coast Line-158 km

Waterlogged & others-5.34 L ha

RESOURCE WISE PRODUCTION POTENTIALITY

SI No.	Type of Resource	Water area available (L ha)	Area under scientific/ commercial culture/ exploitation (L ha)	Present Production (L MT) 2014-15	Sustainable Production /Yield Potentiality (L MT) (Estimated)	Like to Result Demand for setting up of
1	Impounded culture area	3.77	1.26	12.73	16.44	<ul style="list-style-type: none"> • Feed Mill • Cold Storage /Chain • Processing Plant • Aqua Culture • Medicine/ Growth Promoter/ Health products • Many more
2	Open water system	1.75	Destructive Exploitation		4.26	
3	Impounded Brackish Water	0.80	0.20	1.64	4.0	
4	Open Brackish water	1.3	Destructive Exploitation		0.85	
5	Marine Water (Open)	158 kms	Limited to 50-75 kms	1.98	4.7	
6	Mari Culture	2844 km ²	NIL	NIL		
7	Water Logged / Water shed etc.	5.94	Fallow / Under Utilised	Negligible	Negligible	

Fishermen | 29.38 Lakh (Inland - 25.63 Lakh and Marine- 3.75 lakh)

Fishermen Co-op Societies | 1162 nos

Fisheries Technical Officers | 734 nos

Executing Organisation/Agencies | Directorate of Fisheries; State Fisheries Development Corporation Ltd., W.B. Fisheries Corporation Ltd., Benfish & Fish Farmers Development Agency (FFDA).

Academic Institute | 30 nos BFSc Fishery Graduates and 100 nos other Fishery Graduates (Diploma/Vocational/certificate etc) from WBUAFS/CU/VU/ICAR-CIFE etc. each year.

**PRESENT PRODUCTION, FUTURE TARGET, ESTIMATED
SUSTAINABLE POTENTIALITY** (Unit: L MT)

Year wise projection of demand and production of fish in West Bengal (Unit in lakh ton)			
Year	Demand*	Production	Deficit or Surplus
2012-2013	16.29	14.90	(-) 1.39
2013-2014	16.52	15.80	(-) 0.72
2014-2015	16.72	16.17	(-) 0.55
2015-2016	16.95	17.95	(+) 1.00
2016-2017	17.19	18.50	(+) 1.31
2017-2018	17.43	19.16	(+) 1.73
2018-2019	17.67	19.85	(+) 2.18
2019-2020	17.91	20.56	(+) 2.65

Areas of interest for private sector !

AQUACULTURE IN LARGE WATER BODIES & FISH TOURISM

Aquaculture has evolved as a viable farming practice over last three decades with considerable diversification in terms of species and systems. In the state there exists about 900 big Govt water bodies (>20 acres) which are suitable for big / table size fish production. To facilitate entry of entrepreneurs and companies in this sector, the State Government has allowed management of these water bodies on long term lease basis.

Many of these water bodies have potential for developing Fish Tourism (Eco Tourism).

FISH FEED

The major portion of the West Bengal fish farming area (sector) makes limited use of modern feeds, providing vast potential for the feed sector to grow in the future based on aquaculture. To achieve the fish production target of 20 L MT of fish by 2018, there will be a demand for about 40 LMT of formulated fish feed in the sector. Presently, estimated 2.0 L MT of shrimp feed and 3 LMT of carp feed is used, which is mainly supplied from other States. With the modernization of the farming techniques the demand for species specific commercial feed is growing rapidly. Thus, there is ample opportunity to set up modern fish feed mills in the State to cater to the present /future demand.

POST HARVEST PROCESSING AND VALUE ADDITION

At Chakgaria, Kolkata, there are 10 nos of Export Processing units for prawn and shrimps, owned and managed by private companies. K.N.C Agro Limited has set up state of the art processing unit at Ramnagar, Purba Midnapur equipped with latest technologies.

There is a high demand of fish fillet in the consumer market, which is met up by Bhetki, Kalo Bhetki, Bhola Bhetki. These species are becoming costlier due to their low catch from the sea.

On the other hand Basa Fillet coming from Vietnam and different value added fish products are gaining fast popularity. Farmers of this State are capable of producing huge quantities of Pangus (above 2 kg), suitable for fillet. Value addition of Pangus fillet is good option and has immense potential in the field of fillet making, export and value addition.

This will require setting up of more Cold Storage, Processing Plant & Value added fish production centres.

PRODUCTION AND EXPORT OF SHRIMP/PRAWN & PROCESSING UNITS

Shrimp, Crabs, Fresh water prawn and Ornamental fishes command a steady export market. Sundarban Tiger shrimp and Mud Crab have special preference in the export market. In 2014-15, total export reached 85138.46 MT valued at Rs. 3687.68 crores. The estimated potential of the state is more than 100 000 MT (excluding domestic demand), provides immense scope of investment in this area.

To meet the growing international demand as well as demand for processed and or frozen packed fish / prawn etc, a number of processing unit need to be set up.

MODERN HATCHERIES FOR FISH/SHELL FISH SEED

West Bengal is the largest fish seed (carp) producer in the country. Seed production has become a cottage industry in rural Bengal. There is no dearth of carp seed but there is need for setting up of modern hatcheries for production of seed of newly introduced fish species that have potential for farming and market demand likes Monosex Tilapia, selected variety of Koi, Pangus etc.

In case of Brackish Water farming, estimated total seed demand of more than 4000 crores of shrimp, 300 crores of mullets and 50 crores of crab, is met up from either wild collection or supplied from other States. In most cases such seeds are found to be of poor quality. Thus there remains an immense scope for setting up of modern hatcheries for production of Shrimp (*P. monodon*, *Litopenaeus vannamei*) and other brackish water fish seeds (Bhetki, Chanos etc.)

ORNAMENTAL FISHERIES

Ormental Fish is an important item in pet industry with substantial export potential. For empowering women folk, about 83 women ornamental co-op societies have been formed comprising of 1650 no. of members. A significant number of rural men and women have been brought under the purview of ornamental fish farming who are earning a modest income through this trade.

The congenial climatic condition of the State aided with the skill of women folk can be utilised for production of major fish species / varieties of Exotic species (about 180 nos), as well as indigenous ornamental fish species. There is need for setting up of Mother Hatcheries and Ornamental Hubs alike Singapore-Hongkong. This is possible if PPP module is adopted or private enterprise come forward. The fish are estimated to represent approximately 15% of the total turnover in ornamental sector. The rest consists of the fish food, aquarium plants, lighting, filters etc. If judiciously looked into, the ornamental sub sector may be one of the most promising sectors in earning foreign exchange and livelihood support of rural people.

DEEP SEA FISHING & MARICULTURE

Due to low horse power engine, the conventional Fishing Boats, locally called Trawlers, cannot go for Sea Fishing beyond a distance of 50 to 75 kms. Whereas fishing can be done upto 360 kms from the shore line. Thus Deep Sea Fishing either remains unexplored or is being explored by the Deep Sea Fishing Boats of other States & Countries. Thus, there remains a huge scope for investment in Deep Sea Fishing and introduction of Mariculture /Cage Farming in the sea. The all weather multi facility Deshpran Fishing Harbour (sea port in the State) at Petuaghat (Purba Medinipur) is capable of harbouring all kinds of Deep Sea Fishing Boats.

COLD CHAIN : COLD STORAGE, ICE PLANTS, INSULATED VANS

There is an urgent need to build up Integrated Cold Chain Functions across the State in order to provide advance controlled warehousing and transport solutions, right from the farm gate till to the end use consumption. Fish being a perishable commodity, requires a good network of cold chains for preservation. Cold storage of fish is also a necessity to cater to market demands. West Bengal has a dearth of such cold chains for fish and there is enough investment opportunity for setting up of cold storages, ice plants and insulated vans.

MODERN FISH MARKETS/BOUTIQUES

Fish in Bengal Market is mostly sold in the most primitive market format, either by road side vender or in municipal market shed without any provision for food safety measurement. The State in particular, Kolkata, is in need of modern hygienic / clean / air-conditioned fish market. The customer awareness for purchase of fish from hygienic and air-conditioned markets/fish boutique is on the rise. The concept of Fish Retail Chain Stores (like Fish n Chip/Fresh Fish/Bengal Fish etc.) can cater to the consumer preference for fish in hygienic form.

IMPORT AND SALE OF 'HILSA' AND 'SALMON' ETC. FOR DOMESTIC MARKET

Hilsa, the King of fish, has a perennial demand in this State. At present supply is met through import from Bangladesh and Myanmar with few licensed importers. There is an absolute need of more importers in this trade. Demand for imported Salmon is also increasing.

PACKAGING

There is high demand for packaged materials in the fish industry. Safe and hygienic packaging is essential for fish seed, fish (whole or dressed), ornamental fish, crab etc.

But there exists no such modern packaging industry to support this though raw materials are available locally in plenty in and around Kolkata / Haldia.

AQUATIC ANIMAL & FISH HEALTH AND AQUATIC ENVIRONMENT MANAGEMENT PRODUCTS

With the development in culture practices from traditional to semi-intensive and intensive, requirement of medicines, prophylactics, probiotics etc., is on a rise, which is met up /supplied from the production of others States and thus there remains a huge potentiality for investment in the sector.

ORGANIC FISH AND ORGANIC FISH PRODUCTS

With the increasing concern and awareness of people for good health, demand for organic food is growing all over and in view of fish protein considered to be the safe, easily digestible and having omega 3 fatty acid, there remains a huge scope for production of organic fish and fish products. Culture practice of Sundarbans area may easily be modified/turned into Organic Fish culture system .

MANAGEMENT OF TOURIST LODGES

Beautiful Tourists Lodges / Guest Houses, under Benfish/SFDC/WBFC (more than 23 nos), located in different location of tourist importance, all over the State may be considered for management under JV/PPP etc.

A. Ornamental Hatchery units

Ornamental Hatchery units at Raignaj / Jalpaiguri / Coochbehar / Amtala and International Ornamental Fish Market Building at Salt Lake (under Benfish).

B. Virgin Open Coal Pit and Pathar Khadan

More than 500 ha of OCP & PK (big water body) available in Burdwan (Asansol) & Birbhum Districts where large scale Cage Aqua Farming (GIFT Tilapia and Pangus) & Fish Tourism may be developed.

C. Vast Resources of Sundarbans

Unique in the country towards developing Sundarbans Fishery Zone for production of world famous tiger shrimp and mud crab and varieties of value added fish food products under the branding Sundarban Products/Organic Fish & Fish Products.

D. Some fishery infrastructure in West Bengal :

Fishing Harbours	:	7
Fish Landing Centres	:	78
Fish Processing Centre	:	1 (Govt)
Wholesale markets	:	636
Seed Hatcheries	:	IMC/EC (300), Prawn & Shrimp (4)

E. Government intervention

To address and facilitate the Investors, Fisheries Department has set up a dedicated cell – Investment Promotion Unit (IPU).

F. Attractive Incentives / Assistance Available*

Sl. No.	Item	Micro (15 Lakh -1 cr)	Small (1 cr- 5 cr)	Medium (5-10 cr)	Large (10 crore and above)
1.	Capital Investment Subsidy	15% - 40% (maximum Rs. 20 lakh)	10% - 50% (maximum Rs. 1 cr.)	5% - 20% (maximum Rs. 75 lakh)	Upto 75%
2.	Electricity Duty	Upto 100%	80% - 100%	80% - 100%	Rs. 25 lakh/ year (max)
3	Power Subsidy	Rs. 30 lakh/ annum (max)	Rs. 40 lakh/ annum (max)	Rs. 50 lakh/ annum (max)	Rs. 75 lakh/ annum (max)
4	Refund of Stamp Duty	30% - 100%	25% - 100%	20% - 80%	75%
5	Reimbursement of Value Added Tax (VAT)	60% - 90%	60% - 90%	60% - 90%	80% - 90%
6	Waiver of Land Conversion Fee	25% - 90%	25% - 90%	25% - 90%	25% - 90%
7	Central Sales Tax (CST)	Total refund for 3 yrs	Total refund for 3 yrs	Total refund for 3 yrs	Total refund for 3 yrs
8	Work Force Welfare Assistance	75% - 100%	75% - 100%	75% - 100%	80% - 90%

* For details, please visit website [www.bengalfisheriesinvestment.org & www.wbidc.com]

G. Electricity and Road connectivity

The State is surplus in power production and has good road connectivity.

H. Manpower :

A rich pool of technical personnel and graduates from Colleges / University / Fisheries Research Institutes beside huge work force (skill / unskilled manpower) is available.

I. Ready Land /Work Shed:

Beside the above, ready developed land / shed having all facilities like road connectivity, electricity, water etc. is available in different location all over the State with the WBIDC (www.wbidc.com) / MSME (www.msmewb.gov.in) / FPI&H (www.ipshabengal.com) / WBIIDC (www.wbiidc.org) on suitable terms. For further details and/or assistance, IPU Cell (Fisheries Dept.) may be contacted.

J. Political , Social Stability & Ease of Doing Business

K. Investment already made / pipeline :

- 40 ha state of the art vannamei prawn farm at Digha (East Medinipore)
- State of the art, first of its kind (in the country) organic shrimp seed hatcheries at Digha (Purba Medinipur)
- State of the art modern floating fish feed plant at Panagarh (Burdwan) & at Kharagpur (Purba Medinipur, under construction).
- State of the art shrimp seed hatchery at Tajpur (Purba Medinipur)
- State of the art largest fish / prawn processing centre (in the country) at Pichhaboni (Purba Medinipur) & many more on the pipeline.

CONTACTS & MORE DETAILS

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