Fish production in the country has increased from 5.65 million tonnes in 2000-2001 to 8.66 million tonnes in 2011-12, of which inland and marine sectors contributes to 5.29 and 3.25 million tonnes respectively. The growth rate in marine fisheries in recent years has been slow compared to inland fisheries. India is the second largest producer of fish in the world. About 14 million persons depend directly on fisheries sector for their livelihood. India is endowed with vast and varied marine and inland fishery resources, an outline of which is as follows:

**Marine Fishery Resources**

Coastline : 8129 km
Exclusive economic zone : 2.02 million km$^2$
Inshore area (<50 m depth) : 0.18 million km$^2$
Continental shelf : 0.50 million km$^2$
Estimated annual production potential : 3.90 million tonnes

**Inland Fishery Resources**

Rivers and canals : 0.20 million km
Area under reservoirs : 3.15 million ha
Tanks and ponds : 2.25 million ha
Beels, oxbow lakes and derelict water bodies : 0.82 million ha
Brackishwater area : 1.24 million ha
Estimated annual production potential : 4.5 million tonnes

**Indian Fisheries Legislation**

The need for fisheries legislation was emphasized as long back as in 1873 when the attention of the then Government of India was drawn towards widespread slaughter of fish, fry and fingerlings and the urgency to adopt legislative measures to conserve the fisheries resources. At that time, the Government of India enacted the Indian Fisheries Act, which came into being in 1897.

**The Act highlighted the following:**

- Use of destructive methods of fishing such as dynamiting or other substances in inland and coastal waters (up to one marine league) was prohibited. Similarly, poisoning of water with noxious materials was also prohibited.
- Provincial governments were empowered to make rules in selected waters for protection of fish with previous notification, restricting the creation and use of fixed engines (dams, weirs, bar pattas, etc.) for catching fish; to put a limit on mesh size, size of fish and catch, and to ban the fish in certain seasons and certain places for a period of 2 years (declaration of closed season and sanctuaries).
Marine Fishery Legislation in the Maritime States of India

There are 10 maritime states/union territories in India, viz. Gujarat, Maharashtra, Karnataka, Goa and Kerala along the west coast, bordering the Arabian Sea; and Tamil Nadu, Pondicherry, Andhra Pradesh, Orissa and West Bengal along the east coast, bordering the Bay of Bengal. The two island union territories, viz. Lakshadweep, and Andaman and Nicobar Islands are situated in the Arabian Sea and Bay of Bengal, respectively.

The introduction of small mechanized boats of 9 to 10 m has rapidly caught on since the 1960s, and at present, about 53,000 such boats are operating in the inshore area, engaged mostly in bottom trawling, gill netting and purse-seining. During the 1970s, purse-seining was introduced for pelagic shoaling fishes like mackerel and sardines. It was in this backdrop that the scope and possibility to safeguard the interests of traditional fishermen were recognized by the 10th Meeting of the Central Board of Fisheries held on 22-23 March, 1976, at New Delhi. Based on its recommendations, the Central Government constituted a committee in May, 1976, for examining the questions of delimiting the areas of fishing for different types of boats. The Committee submitted its report in December, 1978, with a model Marine Fisheries Regulations Bill. The model bill was circulated to all maritime states and union territories in 1979 for enacting suitable legislation.

Various state governments have issued regulations under the Indian Fisheries Act 1897 for regulation and protection of fisheries. The regulations concerning Indian marine fisheries are listed below:

i. The Indian Fisheries Act, No. IV of 1897, Government of India
ii. The Indian Fisheries Act as adopted and applied by the State of Saurashtra, 1897
iii. The Mysore Game and Fish Preservation Act 2 of 1901, Government of Mysore
iv. The Game and Fish Protection Regulation Act 12 of 1914, Government of Travancore (1914) (modified 1921)
v. Cochin Fisheries Act 3 of 1917 (modified 1921), Government of Cochin
vi. Andaman and Nicobar Islands Fisheries Regulation 1 of 1938
vii. The United Provinces Fisheries Act 45 of 1948
viii. Government of Travancore-Cochin Fisheries Act 34 of 1950
ix. The Maharashtra Fisheries Act 1960 (modified 1962), Government of Maharashtra
x. The Indian Fisheries (Pondicherry Amendment) Act 18 of 1965
xi. The Indian Wildlife Act 1972. 2lb-The territorial waters, continental shelf, EEZ and other maritime zones Act 1972
xii. The Marine Products Export Development Authority Act 1972
xiii. The Maritime Zones of India (Regulation of fishing by foreign vessels) Act 1981
xv. The Goa Marine Fishing Regulation Act, 1980
xvii. The Orissa Marine Fishing Regulation Act 981 (Orissa Act 10 of 1982) and the Orissa Marine Fishing Regulation Rules 1983
xviii. The Tamil Nadu Marine Fishing Regulation Rules 1983
xix. The Karnataka Marine Fishing Regulation Act, 1986
xx. The Andhra Pradesh Marine Fishing Regulation Act, 1994
xxi. Lakshadweep Marine Fishing Regulation Act, 2000

xxiii. Andaman and Nicobar Marine Fishing Regulation Act, 2003

The Marine Fishing Regulation Acts (MFRAs) have provision for regulating fishing and conservation measures in the territorial waters. These include regulation of mesh size to avoid catch of juvenile fish; minimum-maximum fish sizes, regulation of gear to avoid over exploitation of certain species; reservation of zones to traditional fishermen and declaration of closed seasons. These Acts demarcate fishing zones in territorial waters for fishing by non-mechanized and mechanized fishing vessels. The distance from the shore earmarked for each category varies from state to state. In general, 5 to 10 km is reserved for operation by artisanal (non-mechanized) vessels.


Unlike regulations of fishing areas provided in the Acts, the decision on seasonal closure is taken on a year to year basis normally prior to or during the onset of the south-west monsoon. As per the recent order issued by Department of Animal Husbandry, Dairy and Fisheries, Government of India, dated 9th March, 2011, uniform ban on fishing by all fishing vessels in the Indian Exclusive Economic Zone (EEZ) beyond territorial waters on East Coast including Andaman & Nicobar islands and West coast including Lakshadweep has been imposed for conservation and effective management of fishing resources and for sea safety reasons. Along the east coast, uniform seasonal closure of 47 days is being implemented from 15th April to 31st May, while along the west coast it is from 15th June to 31st July.

Zonation and other fishing regulations in different states are summarized below:

**Gujarat**

(i) The area up to 9 km from the shore is reserved for non-mechanised vessels and mechanised vessels beyond 9 km.

(ii) In case of trawl net, square mesh of minimum 40 mm size at cod ends need to be used.

(iii) Gill net with mesh size less than 150 mm cannot be operated.

**Maharashtra**

(i) Operation of trawl net by mechanized fishing vessels is prohibited from the seashore to 5 fathoms and 10 fathoms depth zone in specified areas; Fishing vessels is banned from 15th June to 31st July.

(ii) Operation of trawl gear by mechanized fishing vessels is prohibited between 6 pm and 6 am.

(iii) Fishing by mechanized fishing vessels of any type with more than 6 cylinder engines is prohibited within the territorial waters of Maharashtra up to 22 km.

(iv) Purse-seine shall not be operated by any mechanized fishing vessel within the territorial water of Greater Mumbai, Thane, Raigad, Ratnagiri and Sindhudurg districts.

(v) Mechanized fishing vessels operating purse-seine gear beyond the territorial waters shall not land the catch caught by such gear in any port other than Mirkarwada (Ratnagiri Port).

(vi) No trawl gear having less than 35 mm mesh size shall be operated by any mechanized fishing vessel within territorial waters of Thane, Greater Mumbai, Raigad and Sindhudurg.

(vii) No trawl gear having less than 25 mm mesh size shall be operated by any mechanized fishing vessel within territorial waters of Ratnagiri.
Goa
(i) The area up to 5 km from the coast-line is the specified area and mechanized fishing vessels are prohibited from fishing in the area.
(ii) Restrictions on mesh size of nets, i.e. 20 mm for prawn and 24 mm for fish.

Karnataka
(i) The area up to 6 km from the shore or up to 4 fathoms (whichever is farther) is reserved for traditional crafts.
(ii) Mechanized boats (up to 50’ length) are allowed to operate beyond 6 km.
(iii) Deep-sea vessels (of 50’ and above) are required to operate beyond 20 km.

Kerala
(i) The area from shore up to 30 m line in the sea along the coast from Kollencode in the south to Paravoor (Pozhikkara), a length of 78 km, is called the First Zone.
(ii) The area up to 20 m line in the sea along the coast line from Paravoor in the south to Manjeswar in the north for a length of 512 km is called the Second Zone.
(iii) Mechanised fishing except fishing by motorized country craft is prohibited in the First and Second zones. Only fishing with country craft and traditional craft is allowed in these zones.
(iv) Small mechanized vessels (<25 GRT) are allowed to operate between 40 and 70 m depth in the first zone and between 20 and 40 m in the second zone.

Tamil Nadu
(i) Areas up to 5 km are reserved for traditional non-mechanised boats.
(ii) Mechanized boats are permitted to use areas beyond 5 km.
(iii) Fishing within 100 m below a river mouth is prohibited.
(iv) No gill net of mesh size less than 25 mm shall be used.
(v) No shrimp trawl net with mesh size less than 37 mm at cod end shall be used.
(vi) No fish trawl net with mesh size less than 40 mm at cod end shall be used.
(vii) The number of mechanized fishing vessels which may be used for fishing in any specified area shall be decided by the Authorized Officer.

Andhra Pradesh
(i) The area up to 8 km from the shore is reserved for traditional craft.
(ii) Mechanised boats are allowed to operate beyond 8 km.
(iii) Mechanised fishing vessels of 25 Gross tonnage and above or 15 m and above of length shall be allowed to operate only beyond 15 km from the coast.
(iv) No vessel to be engaged in fishing using nets with mesh size below 15 mm.
(v) Shrimp trawlers engaged in fishing without Turtle Excluder Device (TED) shall be liable for confiscation of entire catch and impose a fine of Rs. 2,500/-. 

Orissa
(i) Non mechanized traditional craft shall be allowed to operate freely without restriction. Waters up to 5 km from the shore have been exclusively reserved for such fishing craft.
(ii) Mechanized fishing vessels up to 15 m in length shall be allowed to operate beyond 5 km from the coast.
(iii) Mechanized fishing vessels of 25 GRT and above or 15 m length shall be allowed to operate beyond 10 km from shore.

**West Bengal**

(i) The area up to 18 km from the shore is reserved for artisanal fishing craft and craft fitted with engines less than 30 HP.

(ii) Fishing craft fitted with more than 30 HP engine are allowed to operate beyond 18 km.

(iii) No gill net with mesh size less than 25 mm shall be used.

(iv) No bag net/ dol net with mesh size below 37 mm shall be used.

(v) No shore seine/drag net with mesh size below 25 mm to be used.

(vi) Trawl net of standard mesh size fitted with turtle excluder devices to be used.

**Andaman and Nicobar islands**

(i) Vessels up to 30 HP only are allowed to operate up to 10 km.

(ii) Vessels above 30 HP are allowed to operate beyond 10 km.

(iii) Every year 15 April to 31 May shall be closed season for bottom trawlers and vessels engaged in shark fishing.

(iv) Every year 1 May to 30 September closed season for fishing sea shells.

(v) Fishing nets below 20 mm mesh size are prohibited.

(vi) Trawl nets of standard mesh size fitted with turtle excluder device alone are permitted.

(vii) Only gill nets, shore seines and dragnets with mesh size above 25 mm are allowed to operate.

**Lakshadweep**

(i) Use of purse seine, ring seine, pelagic, mid water and bottom trawl of less than 20 mm mesh size is prohibited except live bait net;

(ii) Use of draft gill net of less than 50 mm mesh size and shore seine of less than 20 mm mesh size is prohibited.

**The Maritime Zones of India (Regulations of fishing by foreign vessels) Act, 1981**

This act was introduced to control activities of foreign fishing vessels within Indian Maritime Zone. The Act provides basis for joint ventures and chartered vessels and also for bilateral / multilateral fishing access agreements.

If any foreign vessel is used in contravention of the provision of section 3 of the Act in any area within the territorial waters of India are punishable with imprisonment for a term not exceeding three years or with fine not exceeding rupees fifteen lakhs or with both. If such contravention takes place in any area within the exclusive economic zone of India be punishable with fine not exceeding rupees ten lakhs. The penalty for contravention of license is not exceeding rupees ten lakhs. The penalty for contravention of permit related to area of operation or method of fishing specified in such permit will be not exceeding rupees five lakhs and rupees fifty thousand in other cases. If any person intentionally obstructs any authorized officer in the exercise of any powers conferred under this Act or fails to afford reasonable facilities to the authorized officer or fails to stop the vessel or produce the license permit, log book or other document or any fish, fishing gear or other equipment on board the vessel when required to do so by the authorized officer, shall be punishable with imprisonment for a term which may extend to one year or with fine not exceeding rupees fifty thousand or with both.
The Environment (Protection) Act, 1986

It authorizes the Central Government to protect and improve environmental quality, control and reduce pollution from all sources and prohibit or restrict the setting and/or operation of any industrial facility on environmental grounds. It also makes it mandatory to conduct Environmental Impact Assessment (EIA) for specified developmental activities. Public hearings are also made mandatory for all developmental activities that require environmental clearance from the Ministry of Environment.

The Coastal Regulation Zone (CRZ) 1991 notification was issued under the provisions of Environment (Protection) Act, 1986. It outlines a zoning scheme to regulate development in a defined coastal belt. It declares the coastal stretch influenced by tidal action in the landward side up to 500 m from the high tide line (HTL) and the land between the low-tide line (LTL) and the HTL as the CRZ. It imposes restrictions on setting up and expansion of industries, operations or processes etc., in the said CRZ. The CRZ has been classified into four categories for regulation of developmental activities.

The CRZ-I includes areas that are ecologically sensitive and important which include national ponds/marine parks, sanctuaries, reserved forests, wild life habitats, mangroves, corals/coral reefs areas close to breeding and sparing grounds of fish and others marine life and areas rich in genetic diversity. The CRZ-I also includes area between the Low Tide Line and the High Tide Line.

The CRZ-II includes the areas that have already been developed up to or close to the shore line.

The CRZ-III includes the areas that are relatively undisturbed and those which do not belong to either CRZ-I or II. These will include coastal zone in the rural areas (developed and undeveloped) and also areas within municipal limits or in others legally designated urban areas which are not substantially built-up.

The CRZ-IV includes coastal stretches in the Andaman and Nicobar, Lakshadweep and small islands except those designated as CRZ-I, CRZ-II or CRZ-III.

New Deep Sea Fishing Policy, 1991

In March 1991, the Indian government announced New Deep Sea Fishing Policy (NDSP) as part of the economic reforms programme. The policy involved three schemes (i) leasing out of foreign fishing vessels to operate in the Indian EEZ; (ii) engaging foreign fishing vessels for test fishing and (iii) forming joint ventures between foreign companies and Indian companies on 49:51 equity basis in deep sea fishing, processing and marketing. Government of India started giving licenses to joint venture, lease and test fishing vessels. There was opposition to the policy by artisanal fishers.

Murari Committee, 1995

The Murari Committee comprising 41 members including bureaucrats, experts, activists and representatives from fishing communities was constituted. It was divided into five groups and went around all the coastal states to collect opinion from all sections of Fisheries Sector. All the five groups unanimously recommended the cancellation of all licenses to foreign vessels and review of the deep sea fishing policy. The committee came up with 21 recommendations, the important ones include:

- No renewal, extension or new licenses be issued in future to joint venture/charter/lease/test fishing vessels.
- The present licenses be cancelled as per going through the legal procedures
- Upgrade the skill of the fishing community to equip them with exploiting the deep sea resources
- Stop pollutions
- Supply of fuel at subsidized rate
- Fishing regulations in the entire EEZ
- A separate ministry to deal with the entire fisheries
- Monsoon trawl ban
• The area already being exploited or which may be exploited in the medium term by fishermen operating traditional craft or mechanized vessels below 20m size should not be permitted for exploitation by any vessels above 20m length except currently operated Indian vessels which may operate in the current areas for only three years.

The Central Government accepted all the recommendations of the committee in September 1997. The Minister of Food Processing Industry nominated a small committee from the National Fisheries Action Committee against Foreign Fishing Vessels to oversee the implementation of Murari Committee recommendations.

**Broad Guidelines for the Operation of Indian Deep-Sea Fishing Vessels in Indian EEZ**

Outline of broad guidelines circulated by the government for operation of Indian deep sea fishing vessels in the Indian EEZ are given below:

Permission in writing (LOP) is required from the nodal ministry for operating any fishing vessel in Indian EEZ. Presently, permission is accorded only for (i) Long lining for tuna; (ii) tuna purse seining; (iii) squid jigging and squid hand lining and (iv) mid-water/ pelagic trawling and (v) trap fishing

The operation of Indian deep-sea fishing vessels will be governed by the executive orders issued/to be issued from time to time. The area of operation of the deep-sea fishing vessels will be regulated by the instructions/orders issued by the Government of India from time to time. For proper monitoring of the operations of Indian deep sea fishing vessels and sea safety point of view, it is mandatory for all deep-sea fishing vessel operators to report their vessels' position, intended course and speed and area of operation with latitude and longitude to Coast Guard at 08.00 hours daily or any other time specified by the authority. Date of commencement of voyage, likely period, together with crew list should be furnished to Coast Guard and Fishery Survey of India, Mumbai, before each sailing. Intimation on completion of each voyage shall also be furnished to these agencies on return. The operator shall furnish an undertaking to the effect that (a) they will not resort to any type of fishing other than what has been permitted to them, (b) the company will not exploit any endangered species of marine turtles, mammals and fish species and the vessel will not resort to bottom trawling/pair trawling/bull trawling and (c) will not violate the Code of Conduct for Responsible Fisheries (CCRF). The operator should take clearance from the Government for assignment of foreign crew.

**Biological Diversity Act, 2002**

Main objective of the Act is to protect biological diversity of India. The Act provides for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and related matters. There is a provision for setting up of National and State Biodiversity Boards. The Act encourages conservation and has a provision to declare a fish stock threatened if it is over exploited.

**The Marine Fishing Policy, 2004**

The Ministry of Agriculture has been paying due attention in the past decade to the development of deep-sea fishery in the country. On realization that most of the deep sea fishery resources are beyond the conventional fishing limit and fishing capability of the indigenous craft and can be gainfully exploited only if upgraded and sophisticated vessels of adequate size and capabilities are inducted into the fishery, Government addressed this issue in 1981 Charter Policy.

Consequent upon the introduction of the Charter Policy in 1981 which permitted entry of foreign fishing vessels to fish in the Indian EEZ, the Central Government enacted the Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981 and the Rules there under in 1982. The enforcement of this Act is resting with the Ministry of Agriculture. Subsequent to the Charter Policy of 1981, initiatives were taken by the Government from time to time to enable Indian companies to acquire fishing vessels. After the expiry of five years of operation of this policy the government revised the policy to rectify the deficiencies noticed during its operation and to make it more beneficial to the country. Accordingly a revised 1986 charter policy was pronounced. The charter policy envisaged acquisition of
vessels by Indian Companies either through import/construction in India or through joint venture etc. As a result of the above 97 companies were permitted to operate 311 foreign fishing vessels. Having laid the foundation for the Indian deep sea fishing industry, the government went ahead to broaden the initiative through 1991 policy. The New Deep Sea Policy of 1991 permitted Indian companies to enter into Joint Venture arrangements with foreign fishing companies and acquire fishing vessels for fishing in the Indian EEZ, flying the Indian flag.

The other measures for resource conservation include implementation of closed season, ban on destructive methods of fishing and mesh size regulations. The policy also envisages prohibition of catching of juveniles and non-targeted species and discarding less preferred species once they are caught through legislation. Monitoring control and surveillance system (MCS) would be enforced through posting of observers on commercial fishing vessels. Seed production for sea ranching, designation of certain areas as marine sanctuaries and regulating capture of brood stock from these locations would form important components of resource enhancement programme. Open sea cage culture and fish aggregating devices form other important areas of resource management.

The policy highlights ensuring socio-economic security of the fishermen. Artisanal fisheries deploying outboard motors (OBMs) and small mechanized boats up to 12 m would be treated par with agriculture while small scale fisheries involving mechanized boats under 20 m registered length would be treated at par with small scale industries. Fishing vessels above 20 m and fishing activity involving mother ships or factory vessels would be treated as industrial activity. Further, full time occasional fishermen whose household does not own a boat would be treated at par with landless labourers and would qualify for special care and protection. Housing scheme for fishermen, greater focus by financing institutions and improved safety at sea are the other components of fishermen welfare programmes.

The marine fishing policy 2004 also outlines policy for development of fisheries in the Union Territories of Lakshadweep and Andaman & Nicobar Islands.

**Marine Fisheries (Regulation and Management) Bill, 2009**

The Union Government proposes to bring fishing vessels of Indian origin in the Indian EEZ, along with other categories, under a legal regime called the Marine Fisheries (Regulation and Management) Bill 2009, through a common legal framework for regulation of fisheries, and conservation and sustainable use of fishery resources in all maritime zones including territorial waters. The scope of the proposed Bill 2009 includes the territorial waters (can be up to 12 nautical miles from the base line), contiguous zone (can be up to 24 nautical miles from the base line), EEZ (can be up to 200 nautical miles from the base line) and the continental shelf (can be up to 350 nautical miles from the base line). It proposes to bring into its ambit Indian fishing vessels constructed in India, owners of such vessels and fishery and fish-workers on board these vessels and their operations, especially in the EEZ.

Fisheries in territorial waters are a state subject, while that of other zones are a Union subject. The regulation of fishing in territorial waters is being legally undertaken by the State Fisheries Departments under marine fishing regulation acts/rules (based on a model bill prepared by the Central Government). In the EEZ, Indian citizens have been given more or less freedom to fish. The Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act 1981 and the Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Rules, 1982 are meant to regulate foreign fishing vessels in the Indian EEZ that are owned and/or operated by both Indian Citizens and foreign nations. Thus there is a legal vacuum in relation to the regulation of Indian fishing vessels of Indian build in the EEZ with no legal responsibility or accountability except the requirement to follow the seasonal monsoon ban and the prohibition on taking certain endangered or protected species under the 1972 wildlife (Protection) Act. This Bill seems to be proposed mainly with the purpose of bringing all Indian and foreign vessels and related interests in the EEZ under a legal mechanism so as to meet India’s obligations under 1982 United Nations Law of the sea convention and the 1995 United nations Fish Stocks Agreement and to draw upon relevant sections from the 1995 FAO Code of Conduct for Responsible Fisheries.
International Agreements

The following four international agreements emerging out of the endorsement of the Code are relevant in this context for incorporation under the relevant laws/legislation proposed in this regard.


(ii) Agreement to promote compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas.

(iii) International Plan of Action to prevent, deter and eliminate, illegal, unreported and unregulated fishing.

(iv) International Plan of Action for Management of Fishing Capacity, Conservation and Management of Sharks, reducing incidental catch of Sea Birds in long line fishing.