

# National Fisheries Policy, 2020

## 1.0 Introduction

Intertwined in mythology, culture and the social fabric, Indian fisheries are set in a unique and diverse array of geographies, ranging from the mighty Himalayas in the north to the Oceans that surround the peninsular half of the country. Unparalleled in the global fisheries scenario, the astounding fisheries biodiversity of the country includes a vivid spectrum of fin and shellfishes and aquatic plants that provide livelihoods to millions of people directly and many more millions in the ancillary and supporting activities.

Growing in leaps and bounds from the time when the sector was brought under planned development in the early fifties, India's total fish production now stands at 13.76 million metric tonnes (2018-19), making it the third-largest producer of fish in the world after China and Indonesia. With the marine sector maintaining a steady trajectory of moving towards its estimated potential of 5.31 million metric tons (mmt), it's the aquaculture production that has exhibited phenomenal growth in the last three decades, placing India as the second highest producer of farmed fish in the world.

Providing livelihoods to an estimated 28 million fishers and fish farmers, which is about 2.04 percent of the national population, the sector offers immense opportunities for employment generation, especially for youth and women, and for meeting the food and nutritional security and foreign exchange earnings. During 2018-19, the sector's Gross Value Added (GVA) was Rs 2,12,915 crores at current prices, which was about 1.12 percent of the national GDP and 7.28 percent of the GVA from the agriculture and allied sector. During the same period, the sector has earned foreign exchange worth Rs. 46,589 crores by exporting 13.92 lakh tonnes of marine products. Overall, from 2014-15 to 2018-19, the sector has registered an average annual growth of 10.87 percent which is higher than the growth of the national economy (7.16%) at constant (2011-12) prices.

India's fisheries sector provides enormous potential in extending its reach to hitherto un/underexploited resources in both marine and inland waters; sizeable hikes in production and productivity from aquaculture; productive integration with other farming sectors such as agriculture, horticulture, poultry, and livestock; expansion of non-food fisheries such as ornamental; and in enhancing the availability of nutritious fish protein rich in omega-3 fatty acids to the nation's growing population. On the environmental front, pond, tanks and floodplains can play a very important role in harvesting and holding rainwater and in the process serving as a valuable ameliorating agent for the re-charging of groundwater.

With the growing population of the country and the increasing requirements for fish protein, the need for sustainable development of the resources is now felt much more than ever before. To match such demands and ensuring a growth trajectory that fulfils the requirements of today and leaves an equally better fishery for tomorrow, it is necessary for the country to develop a sound National Fisheries Policy framework. The Policy will provide the blueprint to optimally harness the capture and culture fishery resources that would help in sustaining the desired production and productivity levels. It is also expected that this policy framework will guide similar initiatives at the State and Union Territory-levels in the coming period.

Accepting the fact that the fisheries resources are set in diverse ecosystems that determine the health and the integrity of the resources and the plant and animal wealth contained in it, the NFP will adopt a mountain to sea-scape approach. This will ensure that the sector

receives minimum adverse impacts from external sources and in the process creates minimum adverse impacts on the environment. Within the framework of 'Blue Economy', the NFP will also ensure a productive integration with the other economic sectors, such as agriculture, livestock, water resources, hydro-electric power, energy, forestry and environment, eco-tourism, rural development, shipping, etc. to meet the goals of the 'Blue Economy'.

The NFP will lay adequate emphasis on reducing the vulnerability of fishing communities from the ever-increasing impacts of climate change mediated global warming, extreme natural events such as cyclones and tsunamis, floods and droughts, and any other unprecedented situation such as the COVID-19 pandemic, ensuring that the communities' resilience is built to offset such threats.

The NFP will also take into account the fact that fisheries are gradually moving into a globalized environment that involves trade, sharing of water basins, inter-Exclusive Economic Zone (EEZ) movement of migratory fish species, trans-boundary movement of live aquatic animals, curbing of Illegal, Unreported and Unregulated fishing, and finally India's commitments to international instruments of both binding and non-binding nature.

Similarly, the regional dimensions will also be adequately reflected in the NFP to ensure cooperative arrangements in the trans-boundary management of shared fisheries ecosystems and the resources contained in them and in the interest of their long-term sustainability.

Finally, drawing inspiration from the fact that the Government has created a separate Ministry for the fisheries sector, the policy will mirror the national aspirations and the developmental goals set by the country's leadership, to ensure that fisheries become an equal partner with the other developmental sectors in making India a USD 5.0 trillion economy by the year 2025.

## **2.0 Preamble**

Based on the cardinal principles of the Constitution, and adopting a people-centric and participatory approach, the National Fisheries Policy will aim at furthering equity and equality, ensuring sustainability, mainstreaming gender and enhancing its role, fostering inclusive development, promoting self-reliance and entrepreneurship, building partnerships, maintaining intergenerational equity, following the principle of subsidiarity, and charting a road-map for the fisheries sector for the coming one decade.

## **3.0 Vision**

“A healthy and vibrant fisheries sector that meets the needs of the present and future generations.”

## **4.0 Mission**

“While keeping the sustainability of the resources at the core of all actions, the National Fisheries Policy will meet the social and economic goals and well-being of the fishers and fish farmers and is intended to guide the coordination and management of the fisheries sector in the country during the next ten years.”

## **5.0 Objectives**

The objective of the National Fisheries Policy is to secure the overall development of capture fisheries and aquaculture in the country. While the fishers and fish farmers will be at the core of the Policy, the intent will be to ensure sound management and sustainable development of the resources and associated habitats, maintaining the ecosystem integrity, meeting the food and nutritional security of the growing population, protecting the rights of the fishing and farming communities and building their resilience, making Indian fish and fish products globally competitive, and supporting India's commitment towards fulfilment of the global agenda on sustainable and wise-use of the fisheries resources.

## **6.0 Strategy**

The National Fisheries Policy (NFP) encompasses the entire land and the EEZ of the country and is set in a time-frame of ten years (2021-2030). The broad parameters of the strategy are outlined under 10 sections (6.1-6.10) in the following narrative.

## 6.2 Inland Fisheries

The inland capture fisheries resources are as vast and varied as the marine fisheries resources and their importance as a source of livelihoods, food, and nutrition for the population has been no less than their marine counterpart. The riparian communities along the major river systems of India have been as old and traditional as the marine fishers, although with the changing scenario in the inland sector, their migration to other sources of livelihoods is more prominent than any other food production sector.

The inland capture fisheries resources include a riverine length of 2,01,496 km (including the tributaries, and irrigational canals), 3.52 million ha of small and large reservoirs and 1.2 million ha of floodplains, etc. The total area available for the inland fishery is estimated at 8.24 million ha excluding rivers and canals. The total inland fisher population is estimated at approximately 24.29 million.

### *6.2.1 Managing fisheries in the Indian rivers and their floodplains, natural lakes and wetlands*

Rivers, their tributaries and associated floodplain lakes form the prime resource of inland capture fisheries in the country. Since ages, these inland fisheries resources have sustained thriving riparian communities and provided freshwater fishes to a large segment of the population. Until the technology for seed production of Indian Major Carps (IMC; catla, rohu, mrigal) was not perfected, the Major River Systems like the Ganges and the Brahmaputra were the source of fish seed that was raised in ponds and tanks for growing into table-size fishes. These river systems are still the backbone of freshwater aquaculture production in the country as they are the only source of obtaining mature/graavid IMC species for maintaining the vitality of the germplasm.

With the increasing urbanization, industrial development, flood protection and water abstraction for irrigation and power generation, the riverine fisheries have been badly affected. Reduced water flow in the rivers is not only affecting the riverine ecosystem but is also impacting the estuaries and the coastal waters, which need an adequate flow of

freshwater and sediments to retain their ecological integrity. To revive the riverine ecosystem and reverse the decline of fisheries, the prime focus of the NFP will be to ensure that the availability of water flow is conducive to sustain fisheries in the rivers and their tributaries. Second, the Policy will focus on improving the ecological health of the riverine ecosystem and curbing the flow of pollution from point and non-point sources into the rivers and their tributaries. Third, the riverine stretches and the associated floodplains that are proven grounds for breeding and larval growth of IMC species, minor carps, catfishes and a large number of forage fish species and several other key riverine species (mahseer, catfish, etc.) will be protected to ensure that the population of these endemic species is sustained. Any disruption in the riverine environment that hampers the IMC populations, will have major repercussions on the freshwater aquaculture production in the country.

The estuaries, as the transitional zones between the rivers and seas, also offer lucrative fisheries. All the major river systems in the country that flow into the seas have estuarine stretches; in some cases, like those of the Gangetic River system, the estuaries cover very large areas and support thriving fisheries of a large number of fin and shellfishes. The flow of fresh water and tidal influence largely determines the productivity of fish and fisheries of the estuaries. However, with the increase in the coastal settlements and industrialization, estuaries have also become the receptacle of pollution coming from point and non-point sources. Further, with the upstream abstraction of water, the required flow of freshwater into the estuaries has gradually diminished, affecting its unique characteristic and consequent reduction in the production and productivity of fin and shellfishes.

Floodplain lakes, as a continuum of the rivers and their tributaries, have since time immemorial formed vital fisheries resources in the Ganga and the Brahmaputra river basins. They are the lifeline of riverine fisheries. With an estimated area of around 1.2 million ha, these water bodies have not only sustained fisheries for the communities but have also served as a receptacle for the excess riverine flows during the monsoon months. With heavy siltation, loss of connection between several floodplains and their associated rivers, and weed infestation (primarily water hyacinth – *Eichhornia crassipes*), the water retention capacity and productivity of these water bodies have considerably reduced, leading to a decline in the riverine fisheries and also the occurrence of recurrent floods in the river basins. Encroachment has further aggravated the situation. The use of harmful fishing gear and excessive exploitation of the resources by the marginal communities is also rampant and needs regulation. Efforts will be made to restore the link between the rivers and the floodplains and rejuvenate these resources to gainfully utilize their innumerable ecosystem services.

Natural lakes and wetlands form another important fishery resource in the country. From the high altitude lakes and wetlands to the *tals* and *jheels* of the Gangetic plains and the estuarine lakes such as Chilika in Odisha, Pulicat in Tamil Nadu/Andhra Pradesh and Vembanad in Kerala, these water bodies have been providing both animal and plant protein as also various other ecosystem services to the community. The *tals* and *jheels* of the Gangetic basin are the key source plant protein such as *makhana* or fox nut (*Eurayle ferox*) and *singhara* or water caltrops (*Trapa bispinosa*). Estuarine lakes such as Chilika are home to the iconic Gangetic and Irrawaddy dolphins, protected under the Wildlife (Protection) Act, 1972. Upland lakes in the Himalayas also need due attention to harness their fisheries potential that can provide valuable food and nutrition for the communities in such remote areas as also for the defence personnel guarding the country's frontiers.

As inland capture fisheries are subject to heavy external influences, management approaches, which in a broad sense are considered akin to marine fisheries, will be

followed. This *inter alia* will include optimisation of the fleet size and the number of fishing days; review of the leasing policies, updating them where required; recognizing the rights of traditional fishing communities; implementation of the closed season and closed areas (fish sanctuaries) largely for the protection of broodstock of key species used for aquaculture; regulation on fishing gear and methods; habitat restoration including de-encroachment and regulations on minimum water flow in the rivers and their tributaries that will ultimately reach the estuaries; provision of fish passes and ladders where the rivers or their tributaries have dams or barrages; and ensuring adequate flow of seawater into the estuarine lakes through regular dredging of the lake mouth. Such structures/actions will allow for the migratory species to negotiate and reach the breeding or the feeding grounds. Ranching of rivers and other inland water bodies with selected endemic fish species will be resorted to where populations have declined considerably and require stock replenishment/enhancement. Policy interventions, through active engagement with the Central Water Commission and the Central State Pollution Control Boards will aim to restore the pristine condition of these water bodies so that their food and other ecosystem services are available to the population residing in the area and elsewhere in the country. Bearing in mind that the Government intends to link major rivers, policy interventions will ensure that such linkages do not have an adverse impact on the fisheries resources and more importantly on the endemic germplasm that the rivers harbour.

### **6.2.2 Harnessing the potential of Indian reservoirs**

The reservoir resources in the country are huge (>3.0 million ha) and comprise water bodies of large (>5000 ha), medium (1000 – 5000 ha) and small (<100 ha) sizes that can be manipulated to several combinations of stocking and harvesting and can be a valuable source of fish production from the inland waters. India, being a country of continental proportions, its reservoirs are spread over various types of terrains and soil types are exposed to diverse climatic conditions, and they receive drainage from a variety of catchment areas.

However, the present yield levels from the Indian reservoirs are very low and these water bodies need to be put to sound management practices to realise their production potential and contribute to the national fish production targets. The key policy interventions required for fisheries development in the reservoirs would include (i) categorisation of the resources from their productivity and fisheries management point of view (natural recruitment, supplemental stocking and harvesting strategies, etc.); (ii) sound policies for leasing/fishing rights in the water bodies, including setting up of pens and cages for raising of stocking material and table-sized fish; (iii) empowering the reservoir-based communities to manage the fisheries resources and also sustaining their traditional rights in such reservoirs where part or the whole water body falls within the protected or reserved area; (iv) productive utilization through cage/pen fish farming in the extensive network of irrigation canals that carry water from the reservoirs to the agriculture fields; (v) discouraging the use of harmful gear and also unsafe fishing craft using thermocole and plastics; and (vi) establishing forward and backward linkages to support supplemental stocking of the reservoirs where required and provision of post-harvest infrastructure to ensure hygienic handling and quick movement of the catch to the markets.

The key areas for immediate intervention would include:

- *Ensuring the availability of water flow conducive to sustain fisheries in the rivers and their tributaries.*

- *Improving the ecological health of the riverine ecosystem by curbing the flow of pollution from point and non-point sources into the rivers and their tributaries in coordination with relevant agencies.*
- *Protecting the riverine stretches and the associated floodplains to ensure that the population of the endemic species is sustained through setting up of the protected area, time and area closure, and effort management.*
- *Restoring the link between the rivers and the floodplains to rejuvenate these resources and to gainfully utilize their innumerable ecosystem services.*
- *Implementing leasing policies to ensure resources are used as per their productivity and empowering local communities to manage resources.*
- *Providing necessary infrastructure for seed production and stocking.*