

NATIONAL INLAND FISHERIES AND AQUACULTURE POLICY

2019



Technical Committee for Drafting NIFAP

1. Dr. Dilip Kumar, Director (Retd.), ICAR-CIFE, Mumbai-Chairman
2. Joint Secretary, DoF, Ministry of A&FW, New Delhi
3. Ms. I. Rani Kumudini IAS Chief Executive, National Fisheries Development Board, Hyderabad
4. Dr. Sudhir M. Bobde IAS, Managing Director, Fisheries Development Corporation, Uttar Pradesh
5. Shri Rama Shankar Naik IAS, Commissioner of Fisheries, Andhra Pradesh
6. Dr. M. V. Gupta, World Food Prize Laureate, Hyderabad
7. Dr. A. G. Ponniah, Director (Retd.), ICAR-CIBA, Chennai
8. Dr. Paul Pandian, Fisheries Development Commissioner, DoF, New Delhi
9. Dr. P. K. Katiha, Principal Scientist, ICAR-HQ, Krishi Bhawan, New Delhi
10. Shri Nishat Ahmed, Director of Fisheries, Bihar
11. Shri Subrata Mukherjee, Director of Fisheries, West Bengal
12. Dr. Salim Sultan, Senior Consultant (Fisheries), NFDB / DoF, New Delhi
13. Shri K. B. Surwade, Director (Fy. Stats) DoF, New Delhi
14. Dr. Gopal Krishna, Director, ICAR-CIFE, Mumbai
15. Dr. B. K. Das, Director, ICAR-CIFRI, Barrackpore, Kolkata
16. Dr. Manash Choudhury, Joint Adviser, NITI Aayog, New Delhi
17. Shri B. K. Mishra, Managing Director, FISHCOPFED, New Delhi
18. Dr. R. S. Biradar, Joint Director (Retd.), ICAR-CIFE, Mumbai
19. Dr. B. C. Jha, Principal Scientist (Retd.), ICAR-CIFRI, Barrackpore, Kolkata

The NIFAP Drafting Sub-Committee

1. Dr. Dilip Kumar, Former Director, ICAR-CIFE, Mumbai
2. Dr. A. G. Ponniah, Former Director, ICAR-CIBA, Chennai
3. Dr. R. S. Biradar, Former Joint Director, ICAR-CIFE, Mumbai
4. Dr. B. C. Jha, Principal Scientist (Retd.), ICAR-CIFRI, Barrackpore, Kolkata
5. Dr. P. K. Katiha, Principal Scientist, ICAR- Krishi Bhawan, New Delhi
6. Dr. Salim Sultan, Senior Consultant (Fisheries), NFDB / DoF, New Delhi

ICAR-CIFE Policy Research & Support Group

1. Dr. Gopal Krishna, Director, ICAR-CIFE, Mumbai
2. DoF Dr. Shashi Bhushan, Scientist, FRHPHM Division, ICAR-CIFE, Mumbai
3. Ms. Rathi B., Scientist, AAHM Division, ICAR-CIFE, Mumbai
4. Ms. Neha Qureshi, Scientist, FEES Division, ICAR-CIFE, Mumbai

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1. PREAMBLE

1.1. Introduction

Fisheries and aquaculture remain important sources of food, nutrition, income, economic prosperity and livelihoods for people around the world. Global capture and culture fish production (2016) were 90.90 and 80.00 million tonnes respectively with India being second largest producer of fish in the world. From 0.75 million tonnes in 1950-51, total fish production of India touched 12.61 million tonnes in 2017-18 with a contribution of 8.92 million tonnes (about 71%) from inland sector. This sunrise sector contributes about 1% to National Gross Value Added (GVA) and 5.43% to Agricultural GVA (2015-16) while engaging over 14.5 million people at the primary level and almost twice the number along the value chain. During 2017-18 the export of fisheries products reached over 1.37 million tonnes valued at INR 451070 million (US\$ 7.08 billion). The inland sector grew at a Compounded Annual Growth Rate (CAGR) of nearly 6% between 1979 and 2015, while overall fish production has registered an average annual growth rate of more than 7% in recent years.

Although inland fisheries and aquaculture have grown in absolute terms, the development in terms of its potential is yet to be realized. The unutilized and underutilized vast and varied resources, in the form of 191,024 km of rivers and canals, 1.2 million hectare of floodplain lakes, 2.36 million hectare of ponds and tanks, 3.54 million hectare of reservoirs and 1.24 million hectare of brackish water resources offer great opportunities for livelihood development and ushering economic prosperity. As the sector is extremely diverse and dynamic, there is a need to streamline policies and programmes, infuse public and private investments, and take R&D benefits to the farmers and fishers towards optimal resource utilization and development of the sector as an instrument of growth. It is essential to evolve an integrated and comprehensive approach towards sustainable development of inland fisheries and Aquaculture that caters to the needs of the states/UTs and the priorities of the country as a whole. Issues related to inland capture fisheries and Aquaculture are trans-boundary in nature that needs to be addressed in a concerted manner. Considering such aspects, the National Inland Fisheries and Aquaculture Policy (NIFAP) has been envisaged.

The overall objective of NIFAP is to create an enabling environment for sustainable development of inland fisheries and aquaculture in the country, to ensure food and nutritional security, gainful employment and livelihoods, economic prosperity and ecological health. The scope of NIFAP encompasses development and management of all inland fishery resources including aquaculture in freshwater, brackish water and landlocked saline/alkaline areas. The NIFAP adopts an Ecosystem Approach to Fisheries (EAF) management within the overall framework of relevant national and international instruments and policies.

1.2 Vision

“Ecologically healthy, economically viable and socially inclusive inland fisheries and aquaculture that generates gainful employment and economic prosperity”

1.3 Mission

“Inland fisheries and aquaculture resources are developed, managed, conserved and sustainably utilized for improving livelihoods, generating gainful employment, food and nutrition security, economic prosperity and wellbeing through appropriate strategies and legislations, stakeholders’ participation, public-private and community partnership, market support, and strengthening research, extension and their linkages”

1.4 Objectives

1. To optimally utilize and sustainably harness inland fisheries and aquaculture resources and their effective management.
2. To increase fish production and productivity and enhance incomes of fishers and fish farmers towards improving their living standards and ushering economic prosperity.
3. To create additional gainful employment opportunities through marketing, trade and export of globally competitive fish and value added fish products.
4. To ensure food and nutritional security by increasing the per capita availability of quality fish.
5. To conserve and manage native fish genetic stocks and associated habitats of fisheries resources and ecosystem services.

2. INLAND FISHERIES

2.1 Riverine Fisheries

1. Conservation of indigenous fisheries resources and restoration of natural productivity through ecosystem restoration would be the primary focus of riverine fisheries.
2. States/UTs may carry out habitat conservation measures for protection and rehabilitation of native fish stocks in association with concerned agencies.
3. Production of native species in the rivers will be enhanced through seed ranching of native stock by developing dedicated seed production units in the vicinity.

4. Fisheries management has to be integral to river management. Active participation of fisheries governance in the management of riverine systems has to be ensured.
5. Fishing regulations encompassing closed season, mesh size, wanton killing of juveniles, destructive fishing, etc. needs to be updated followed by effective implementation by States/UTs.

2.2 Reservoir Fisheries

1. The management of fisheries in all manmade reservoirs needs to be transferred to the State Fisheries Department(s)/Agencies who in turn will bring such open water bodies under scientific fisheries enhancement programmes and efficient governance framework.
2. Measures have to be taken for promotion of cage culture in reservoirs based on recommendations of scientific organizations like ICAR Institutes, Universities, etc. and the Department of Fisheries, Government of India.
3. Primary focus has to be on production optimization through culture based fisheries in small and medium reservoirs. Site-specific Action Plan for each reservoir has to be worked out by respective Departments of Fisheries.
4. For stocking of reservoirs with required fingerlings, adequate fingerling production units needs to be established at suitable locations in the vicinity of the reservoirs. An integrated approach in developing post-harvest and marketing facilities and mobilizing of inputs is required to be adopted for large reservoirs.
5. Issues related to the fishing in reservoirs within the jurisdiction of areas declared as sanctuaries/reserves by Ministry of Environment, Forest and Climate Change needs to be resolved by the State/UTs through consultation to balance ecological, food and fishers livelihood needs and ensure optimum utilization of resources.

2.3 Natural Wetlands

1. Towards promotion of sustainable fisheries in natural wetlands
 - a) The ecological integrity of important natural wetlands has to be conserved and restored.
 - b) The States/UTs have to demarcate public water bodies, prevent

encroachments and regulate their use.

- c) The connectivity between natural wetlands (i.e. ox-bow lakes, beels, etc.) and rivers has to be maintained or restored to ensure ecological integrity of these water bodies.
2. Each State/UT has to formulate guidelines adopting scientific approach for promotion of culture based fisheries in identified floodplain wetlands.
3. To ensure availability of stocking materials, facilities for hatcheries and seed rearing need to be developed in the vicinity of potential areas following scientific practices.

2.4 Coldwater fisheries

1. Policies and legislation along with development and conservation programmes need to be in place for developing fisheries in Himalayan and North Eastern States.
2. Awareness for conservation of hill stream fishes and protection of endemic germplasm has to be created among the masses.
3. Availability of adequate broodstock of cultivable species has to be ensured along with strengthening of seed production infrastructure.
4. International support/cooperation may be sought for acquiring improved germplasm, disease management and farming practices.

2.5 Recreational Fisheries

Appropriate sustainable models of recreational fisheries and ecotourism enterprises need to be developed and promoted by the States/UTs in association with local communities and the private sector within the existing regulatory framework and guidelines.

3. AQUACULTURE

3.1 Aquaculture Development

1. States/UTs have to develop Action Plans for introduction and expansion of shrimp/prawn farming in inland saline/alkaline and freshwater areas as per the recommendations of scientific organizations like ICAR Institutes, Universities, etc. and the Department of Fisheries, Government of India with due consideration to sustainability and ecosystem health. States/UTs are encouraged to prepare Integrated Coastal Aquaculture Development Plan for

each of the coastal blocks and districts.

2. Aquaculture zoning along with area specific plans has to be formulated using modern scientific tools for scientific and planned development of aquaculture and its regulation.
3. Development of aquaculture may be promoted in low-lying areas, lands with saline and alkaline soils, and lands not suitable for crop cultivation and large land blocks of such areas may be earmarked for development as aquaculture zones.
4. In order to utilize vast unutilized resources including government owned land for aquaculture, the scope of land use categories at state level would require redefinition and enlarging to specifically include fisheries and aquaculture as integral components of agriculture.
5. It is essential to distinguish the needs and aspirations of farmers with small aquaculture holdings from those having large holdings. Union in consultation with States/UTs need to define, document and handhold farmers with small aquaculture holdings through schemes and programmes. Fish Farmers Producer Organizations (FFPOs), Common Interest Groups (CIG), Self-help Groups (SHG), etc. need to be encouraged to cater the needs of these farmers.
6. Mandatory registration of aquaculture farms, simplification of legal and environmental requirements for farm registration and leasing has to be ensured.
7. Best Management Practices (BMPs) / Good Aquaculture Practices (GAPs) are to be promoted to minimize disease incidence and other ecological externalities thereby ensuring sustainability. The practice of screening of seed for causative organisms before stocking would be strictly implemented.
8. Foolproof mechanisms have to be put in place to ensure traceability of the aquaculture produce along with requisite regulatory framework and infrastructure.
9. Spurt in growth of cage culture in open water resources and shrimp/prawn farming in inland saline and freshwater areas warrant a regulatory framework for inland aquaculture by State Authorities on the lines of Coastal Aquaculture Authority (CAA).

10. Aquaculture development efforts will be in alignment with relevant national and global instruments, guidelines and good practices including Sustainable Development Goals (SDGs), Code of Conduct for Responsible Fisheries (CCRF) Guidelines and Voluntary Guidelines on Sustainable Small Scale Fisheries (VG-SSF).
11. In order to ensure that the fish produced from waste water aquaculture is safe for consumption, appropriate regulatory, management and precautionary measures need to be put in place in coordination with relevant agencies.
12. Trout farming is the main stay of fish production in high altitude areas of the country. Trout seed and feed production has to be promoted in suitable areas following a cluster approach and increased private sector participation.

3.2 Seed, feed and other aquaculture inputs

1. Farmers and Private sector will be encouraged for setting up of hatcheries and seed rearing farms across the country, especially in seed deficient areas.
2. Adequate broodbanks especially at the national and state level are to be established to cater the requirements of hatcheries.
3. Registration and accreditation of hatcheries is to be made mandatory by States/UTs. Use of seeds produced from certified broodstock, hatcheries and seed production units will be encouraged.
4. Private sector will be encouraged to establish fish feed mills and use of locally available ingredients in feed formulations.
5. Registration of all aquaculture inputs needs to be made mandatory. The specifications of aquaculture inputs, type and quality of ingredients used therein has to be notified, accredited and inspected for compliance. Requisite regulatory framework and infrastructure has to be put in place.
6. The use of drugs and chemicals including antibiotics and pesticides in aquaculture needs to be regulated through suitable mechanism.

3.3 Introduction and regulation of exotic species

Entry of any exotic species meant for aquaculture including broodstock, seed and Specific Pathogen Free (SPF) stocks etc. needs to be regulated as per the existing National Laws/ Rules for import, breeding and farming.

3.4 Disease surveillance

The present disease surveillance and reporting system will be further strengthened with inbuilt provisions to identify and contain any emerging diseases with the involvement of States/UTs.

3.5 Diversification of aquaculture

1. Major thrust need to be given on diversification of species in both freshwater and brackish water systems by establishing hatcheries, brood stock multiplication centers and nuclear breeding centers.
2. R&D programs require focus on developing breeding, hatching, seed rearing and grow-out technology for identified alternative species suitable for pond aquaculture.
3. Thrust will be given bring in/adopt advanced technologies and practices to enhance production and productivity.

3.6 Ornamental fish culture

Collection and trade of native ornamental fish species from natural waters require regulation by the concerned States/UTs. The database on native ornamental fish species need to be further strengthened. Institutional support and efforts for breeding, rearing and promotion of trade of indigenous ornamental fishes need to be intensified to facilitate growth in this segment.

4. CROSS-CUTTING AREAS AND THEMES

4.1 Post-harvest, marketing and value addition

1. Post harvest infrastructure will be developed meeting National and International standards. Besides, up-gradation of existing infrastructure facilities would be given impetus.
2. Strengthening of marketing infrastructure will be the major focus in modernization of fish marketing and trade.
3. Thrust will be on product diversification and value addition to meet National and International standards. Production of high value products from processing wastes needs to be encouraged.
4. Measures to minimize post-harvest losses and building skills of stakeholders have to be taken up.
5. Thrust will be on 'sustainable user management' of the infrastructure and

services for long term viability and efficiency.

4.2 Food safety and Trade

1. Quality and food safety standards for domestically traded fish in conformity with national regulatory framework need to be effectively implemented to protect consumer interests.
2. Traceability in processed fish and fish products would be ensured for quality assurance and food safety.
3. Efforts will be made to increase domestic consumption of fish. Fish will be promoted as health food and consumer awareness will be created on its nutritional value especially as a cheap source of protein.

4.3 Human resource development

1. States/ UTs to strengthen the institutions of fisheries by reinforcing technical orientation through development of their planning, extension and technical capabilities and assigning technical persons to lead fisheries establishments.
2. Policy seeks to strengthen training and skill development infrastructure including e- courses in DoFs and Fisheries Colleges, and mandate regular and compulsory capacity building of staff and faculty on technical knowhow, societal skills and development management.

4.4 Extension and support services

1. Pluralistic forms of extension systems involving public, private; Non-Governmental Organisations (NGOs), fisher cooperatives and farmers' associations will be harnessed. Participatory aquaculture extension will become the guiding principle of all extension programs.
2. Skill development training on BMPs/GAPs and recent technologies, exposure visit for farmers, development and dissemination of farmer friendly extension literature and effective use of Information and Communication Tools (ICT) tools by DoF are to be given due importance.

4.5 Institutional finance

1. Benefits of institutional finance like credit, insurance, etc. provided to agricultural farmers may be extended to fishers and fish farmers as well.
2. Union and State/UTs governments will coordinate with national and international funding institutions to enhance flow of investment and institutional credit to Inland fisheries and Aquaculture sector.

3. Opportunities available under various government schemes may be utilized for promotion of small and medium scale businesses in Inland fisheries and Aquaculture. The sector has to be included in various government schemes aimed at promotion of small and medium scale businesses.

4.6 Fishers and farmers welfare

Current welfare and social protection programmes may be further strengthened to provide enhanced safety net to all categories of formal and informal inland fishers, fish farmers, fish workers and their families in convergence with other similar schemes.

4.7 Governance and Institutions

Inter-sectoral Coordination

1. Fisheries sector needs to be recognized as a legitimate stakeholder in determining sharing of water use, river management, watershed management and rural development. DoF, GoI has to be represented in the National level Committees entrusted with the management of water resources and allocation of water for its various uses.
2. State/UTs governments have to form state level Inter-Departmental Coordination Committees to provide coordination support for addressing cross-sector issues confronting the development of fisheries and aquaculture in their respective state.

Water use and Management

1. The present National water policy, 2012 clearly recognizes the use of water for basic human requirements as part of right to life and livelihood. Its scope needs to be enlarged to clearly recognize the minimal right to water for fisheries and aquaculture having non-consumptive water usage.
2. DoFs of States/UTs have to engage with Revenue Departments and other agencies to ensure that the village ponds and tanks are productively utilized for fisheries and aquaculture. Existing provisions contained in the guidelines of Ministry of Rural Development concerning rejuvenation of tanks and ponds will be fully made use of to ensure that the existing tanks and ponds are rejuvenated and additional resources created.

Management of inland water bodies under multiple ownership

Leasing and management rights of all water bodies would be transferred and vested with State/UT Fisheries Departments, while respective agencies may continue to retain trusteeship / custodial rights of those resources.

Leasing of public water bodies for aquaculture

States will be encouraged to develop comprehensive leasing and licensing guidelines for all public water bodies by balancing competing objectives of resource development, livelihoods, welfare and revenue generation etc., with due priority to local fishing communities and their cooperatives, fisheries professionals /trained entrepreneurs. The guidelines will also suggest a minimum lease period in the range of 7-10 years with periodic review and the minimum lease value be determined on scientific principles, equity and long term sustainable resource utilization.

4.8 Fisheries cooperatives

Fisheries cooperatives require to be strengthened by making them business entities by taking up various activities with good governance, transparency and accountability in their functioning.

4.9 Research and development linkage

In order to benefit from R&D in fisheries sector, involvement of user groups namely State DoFs, farmers/fishers and their organizations and industry in prioritizing research agenda of ICAR Fisheries institutes, Universities, etc. has to be enhanced.

4.10 Strengthening of inland fisheries and aquaculture database

Census at regular intervals covering inland fisheries and aquaculture needs to be undertaken to obtain comprehensive picture of production including resource usage and users through appropriate mechanisms.

4.11 Gender and equity

Gender mainstreaming as well as equity needs to be made integral part across the value chain. Empowerment of women and strengthening their organization and leadership capabilities will receive adequate attention.

4.12 Climate change and disaster management

While disaster risk reduction is a national priority and within the domain of the National and State Disaster Management Authorities, fisheries and aquaculture specific sub- plans are to be integrated in state disaster management plans in a collaborative cross- sectoral mode.

5. STRATEGY FOR IMPLEMENTATION

1. The NIFAP serves as an overarching policy framework which will provide guidance to states/UTs in developing state specific policies and legislations. The NIFAP has both regulatory and developmental features which can be implemented through short, medium and long term plans.
2. The NIFAP is envisaged as an evolving instrument that is open to review from time to time based on the needs and feedback of stakeholders. It will be periodically reviewed and revised as and when required in consultation with stakeholders through an institutional mechanism.
