No.21001/5/2014-Fy(Ind) Vol.II Government of India Ministry of Agriculture & Farmers Welfare Department of Animal Husbandry, Dairying & Fisheries

Krishi Bhawan, New Delhi. Dated the 15thJune, 2016.

Subject:- Second draft Statement on the National Policy on Marine Fisheries –invitation of feedback / comments- regarding.

Sir / Madam.

I am directed to refer to this Department's Order of even No. dated 28.07.2015 regarding constitution of the Committee to suggest Draft National Policy on Marine Fisheries under the chairmanship of Dr. S. Ayyappan, Former Director General, ICAR and to inform that the second draft Statement on National Policy on Marine Fisheries as provided by the above-mentioned Committee is uploaded on the website of this Department.

- 2. It is requested that stakeholders may kindly provide their feedback, considered views / comments, if any on the second draft Statement on National Policy on Marine Fisheries for consideration by the said Committee on or before 26th June, 2016.
- 3. The comments may please be communicated by e.mail / fax / speed-post on the following addresses:

Dr. S. Ayyappan,
(Chairman of the Committee)
Room No.103,
Krishi Anusandhan Bhawan-II,
Pusa,
New Delhi - 110 012.
E.mail:sayyappan1955@gmail.com
Fax: 011-25843477

Shri Aditya Kumar Joshi, (Member Secretary of the Committee) Joint Secretary (Fisheries), Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture & Farmers Welfare, Room No.221-A,

Krishi Bhawan, New Delhi-110014

E.mail: jsfy@nic.in Fax: 011-23070370

Yours faithfully,

(Dr. P. Paul Pandian)
Fisheries Development Commissioner

Telefax. 011-23386379

<u>Distribution to</u>: All members (As per the list)

Copy for kind information to:

1. Dr. S. Ayyappan, former DG, ICAR & Chairman of the Committee

2. Shri Aditya Kumar Joshi, J.S.(Fy) & Member Secretary of the Committee

Second revised draft Statement on National Policy on Marine Fisheries

Preamble

1.0 The overarching goal of the National Policy on Marine Fisheries, 2016 (NPMF, 2016) will be to ensure the health and ecological integrity of the marine living resources of India through sustainable harvests for the benefit of current and future generations of the nation. The overall strategy of the NPMF, 2016 will be based on the four pillars of sustainable development, principle of subsidiarity, inter-generational equity and precautionary approach. These four pillars will guide the actions of various stakeholders in meeting the vision set for the marine fisheries sector of the country. While fishers will be at the core of this Policy, actions will also be guided by the 'Public Trust Doctrine'.

Objectives and Vision

Noting that India has an Exclusive Economic Zone of 2.02 million sq.km, a long coastline of 8118 km and two major groups of islands with rich and diverse marine resources;

Recognizing that the marine fisheries wealth is estimated at an annual harvestable potential of 4.412 million metric tonnes;

Considering that an estimated 4.0 million people depend for their livelihoods on the marine fisheries resources;

Acknowledging that the marine fisheries contribute to an economic wealth valued at about Rs.65,000 crore;

Recognizing further that the marine fisheries are an important source of food, nutrition, employment and income generation;

Realising that the marine fisheries wealth contributes significantly to the export earnings of the country and balance of trade;

Observing that the marine fisheries of the country are highly diverse but predominantly comprising small-scale and artisanal fishers;

Observing further that the marine fisheries sector is serviced by a range of other stakeholders, including non-governmental and governmental agencies;

Accepting that the marine living resources of the nation offer immense potential for enhancement of production through sustainable means, including mariculture;

Knowing that the marine fisheries resources are not in-exhaustive and subject to over-exploitation;

Realising further that such over-exploitation would lead to loss of biodiversity and reduced availability of resources for our future generations;

Bearing in mind that the nation is committed to International agreements and arrangements for sustainable use of the marine resources;

The Committee set up by the Government of India for formulation of the NPMF, 2016 recommends the following objectives and vision for the marine fisheries sector of the country:

Objectives

2.0 The specific objectives of the Policy will focus on sustainable fish production and utilization, employment and livelihoods; equity and equality; provision of food security and nutrition; and creation of wealth and prosperity in the sector. As a part of the process adopted for formulation of this draft Policy Statement, wide consultations were held with stakeholders at all levels to ensure a balanced understanding of the needs of the sector. While keeping 'sustainability of the resources' at the core of all actions, the policy framework is expected to meet the national economic goals and is intended to guide the coordination and management of marine fisheries in the country during the next ten years.

Vision

"A healthy and vibrant marine fisheries sector that meets the needs of the present and future generations."

Marine Fisheries Sector of India

- 3.0 The potential of fisheries sector in general and marine fisheries sector in particular was recognized quite early in the Indian development planning and since then, a considerable amount of public effort has been channelled into the sector for developing it as an instrument of growth. Apart from the prime consideration of securing food and nutritional requirements of the population, fisheries sector plays an important role in trade and commerce and in the process, promotes livelihoods of millions of people often living at the margin.
- Commencing as a purely traditional activity in the fifties, fisheries have now 4.0 transformed to a commercial enterprise. After declaration of the Exclusive Economic Zone (EEZ) in 1976, the sea area available to India is estimated at 2.02 million sq. km. With an absolute right on the EEZ, India has also acquired the responsibility to conserve, develop and optimally harness the marine living resources within this area. In 2011 the potential yield from the Indian EEZ has been estimated as 4.412 million metric tonnes (mmt). This estimate is 12.2% higher than the previous estimate made by the Working Group (WG) in the year 2000 (3.934 mmt). Pelagic resources such as oil sardine, ribbonfish, Indian mackerel, etc. form 2.128 mmt (48.2%); demersal resources such as penaeid and non-penaeid prawns, cephalopods, perches, croakers, etc. form 2.067 mmt (46.8%) and oceanic resources such as yellowfin tuna, skipjack tuna, bigeye tuna, billfishes, pelagic sharks, barracuda, dolphin fish, wahoo, etc. form 0.217 mmt (4.9%). Depth-wise distribution of the estimated potential yield from the Indian EEZ is 3.821 mmt up to 100 m depth (86.6%), 0.259 mmt from depth between 100-200 m (5.8%), 0.115 mmt from depth betwen 200-500 m (2.6%) and the remaining 0.217 mmt is from oceanic waters (4.9%). The average marine fish catch during the last 5 years (2011-2015) was 3.707 mmt, with the maximum of 3.938 mmt, in 2012 and minimum of 3.404 mmt, in 2015. While the fisheries resources from the near-shore waters are fully utilized, the off-shore waters still provide opportunities of increasing the catch.
- 5.0 In terms of revenue, some of the high value species such as tunas that occur in the deeper waters are yet to be optimally harvested. Harnessing the full potential of marine resources will ensure sustainable benefits for the country and the people. As the sector is quite dynamic, there is a need to streamline policies and programmes to take advantage of

the present sum of technical knowledge and state of resources. In this direction, the Committee recommends a set of Strategic Actions that on acceptance will specify the intent of the Government towards fulfilling the objectives of the NPMF, 2016.

Fisheries Management

- 6.0 While re-defining its strategy for the fisheries sector, the Government will focus on bringing in 'Blue Revolution' by sustainable utilization of the fisheries wealth from the marine and other aquatic resources of the country for improving the lives and livelihoods of fishers and their families. The Blue Revolution also reinforces the 'Blue Growth Initiative (BGI)' voiced at the 2012 Rio+20 meet held at Rio de Janeiro City.
- 7.0 To realize the full potentials of marine fisheries, efforts of the Government will be directed towards fishing effort management; fleet-size optimization; mainstreaming biodiversity conservation in production processes; species-specific and area-specific management plans, including conservation of Ecologically and Biologically Sensitive Areas (EBSAs) and Vulnerable Marine Ecosystems (VMEs), protection of endangered and threatened species; spatial and temporal measures for sustainable utilization of resources, etc.
- 8.0 According to the National Marine Fisheries Census 2010, the marine fishermen population in India is estimated at 4.0 million, of which 0.99 million are active fishermen. Among the active fishermen, 33% are employed in the mechanised sector, 62% in the motorised sector and 5% in the artisanal sector. Of the total marine fish production 75% comes from mechanised sector, 23% from motorised sector and 2% from artisanal sector. The motorized and artisanal sectors together account for 25% of the production. The pattern of marine fish landings in India during the past fifty years clearly reveals that the contribution by the artisanal sector to the total production was significant up to the sixties. As a result of popularization and consequent expansion of mechanised fishing during the subsequent periods along with motorization of artisanal crafts, the contribution by the artisanal sector declined considerably over years. The mechanized trawl fishery is now the most important among various fishing methods in India and contributes about 55% to the total marine fish production in the country. The Working Group (WG) of 2011 indicated the level of overcapacity for different sectors for all maritime states and the optimum fleet size as suggested by the WG has to be maintained for sustainability. Strategies will be developed to reduce overcapacity and implement the same in a phased manner in consultation with stakeholders.
- 9.0 Marine fish harvests from the EEZ of the seas around India are close to the current potential yield estimates (4.412 mmt), and there is an untapped potential of high valued resources like tuna and tuna-like species. However, considering the wide confidence intervals of catch and potential yield estimates, there is a need for taking a precautionary approach in line with the global standards regarding wild fish harvests. Therefore, the main emphasis will be to maintain the harvest at about the current levels of Maximum Sustainable Yield (MSY), with sustainability and equity as the key principles. It will also be ensured that the small-scale character of the entire marine fisheries sector is retained.
- 10.0 Management of fisheries will follow an integrated approach, blending traditional knowledge and science with business principles and effective engagement of both primary

stakeholders, as also those engaged in ancillary activities to ensure that fisheries are ecologically and economically sustainable.

- 11.0 Knowledge management will be the prime approach to foster quick and easy availability of information on key attributes of the marine fisheries sector, such as- resource abundance and distribution; real-time resource maps; productivity assessments; real-time Potential Fishing Zone (PFZ) advisories and weather forecasts for the benefit of the fishers. The use of Information Technology (IT) sector and space technology will be put to optimum use for harnessing the benefits in support of the community.
- 12.0 Spatial and temporal closures have helped in sustaining the marine fish wealth of the country. To ensure that such management measures effectively improve the livelihoods of fisher people, periodic reviews will be conducted taking into account the best scientific information available, including a precautionary approach, and with due engagement of fishers and other concerned stakeholders.
- 13.0 The marine fish resources are not inexhaustible, and uncontrolled harvests will lead to depletion of resources, as experienced in many cases. Appropriate steps will be taken in consultation with concerned scientific institutions and fishers in optimizing the fishing effort and implementing measures that will help in sustaining the resources. Such measures will inter alia include mechanisms to limit fishing effort through input and output controls, fleet size, fishing days and area of operation, engine horsepower, gear size, MSY, minimum mesh size, minimum legal size, etc.; moving effort to areas which are relatively less exploited; developing fleet plan maps; and creating fisheries management areas to ensure that resource depletion is contained.
- 14.0 Presently, coastal States/UTs have specific areas earmarked (based on depth or distance from shore) as reserved for traditional fishers. Such Territorial Use Rights to Fisheries or TURFs have proved to be useful in sustaining the livelihoods of such artisanal fishers. The Government would continue to provide such support to artisanal/traditional fishers. In consultation with user groups the Government will consider further enlarging the scope through increase in the area presently available to the traditional/fishermen in the Territorial Waters.
- 15.0 The Ecosystem Approach to Fisheries Management (EAFM) will be implemented with due consideration to the well-being of all living and non-living components in the marine ecosystem and the social status of stakeholders. In the same vein, participatory management or co-management in fisheries, which is recognized as one of the successful management systems for multi-stakeholder, multispecies and multi-fleet fisheries throughout the world, will be promoted. Such a co-management system, which includes local, regional, interstate and national fisheries councils would also address resolving conflicts among different groups of fishermen. The norms for introducing these management measures will be worked out in consultation with the fisheries research institutions, coastal States/UT Governments, fishers and their associations and other concerned stakeholders in the sector.
- 16.0 The fishing operations in the 12-200 nm zone of the Indian EEZ are currently guided by a set of guidelines issued by the DADF, which was modified in 2014. Considering that the LOP scheme has not had the expected impact in the inclusive development of the deep sea fishing sector, an alternate mechanism will be looked at for development of the deep sea fishing sector and the committee recommends to rescind the LOP scheme. Alternatively, a new development scheme would be introduced for enhancing the skills and capabilities of

the traditional fishermen to undertake deep sea fishing. The scheme will *inter alia* consider modernisation of existing indigenous deep sea fishing fleet, introduction of new indigenous deep sea fishing vessels through fishermen cooperatives/self-help groups, on-board training and linkages to market and export, etc.

- 17.0 Utilization of deep sea resources in the EEZ will be reconsidered in terms of not only the resources available in the EEZ, but also of infrastructure, human capacity development and a comprehensive and implementable set of rules and regulations, with a strong Monitoring, Control and Surveillance (MCS) regime in place, availability of scientific and technical information on the commercial fisheries resources and the best fishing methods with which to target them.
- 18.0 A holistic research resource utilization plan will be developed for the EEZ, taking in to considerations the requirements of coastal States. At the same time, coastal States would also have to recognize that the area of EEZ beyond 12 nautical miles is a common resource and isolated fishing strategies by the States may lead to over-exploitation and inter-state conflicts for this common resource. Therefore, the Union Government and the State Governments will act together to agree upon management policies and measures for sustainable utilization of the resources in the EEZ.
- 19.0 There is also considerable scope to harvest the fishery resources of the Areas Beyond National Jurisdiction (ABNJ) as done by many other countries. The Government will promote the utilization of fishery resources in the ABNJ by Indian fishing vessels subject to compliance of relevant provisions in the International Agreements/arrangements concerning fisheries in the high seas.

Monitoring, Control and Surveillance

The present mechanisms in place for a sound and effective MCS regime for marine fisheries sector need further strengthening. The Government has put in place an online uniform registration and licensing system (ReALCraft) to register all fishing crafts operating in the marine sector (traditional, motorized, mechanized and non-mechanized). While monitoring of fish catch & effort and control of fishing through registration and licensing is in place, MCS activities will be further strengthened through greater engagement of concerned agencies such as the Department of Fisheries, Coastal Marine Police and the Coast Guard. Strengthening and improvements in MCS will be carried out in a phased manner, by using conventional means (such as, use of log books, movement tokens, colour coding of fish vessels, biometric cards to fishers for their identity) and also space technologies and IT tools (e.g. Vessel Monitoring System and Automatic Identification System). The MCS system will allow the Government to put in place a sound enforcement mechanism at sea and at port to ensure full compliance and in the process, will also ensure that the Indian fishing fleet does not engage in any Illegal, Unreported and Unregulated (IUU) fishing within its own EEZ, high seas and EEZs of other nations. Legislations dealing with registration and manning of fishing vessels in the country also need to be updated for addressing the present needs of the sector and for ensuring that best labour conditions as per International Labour Organization (ILO) standards for fishing crews are put into place.

Marine Environment and Pollution

- 21.0 The state of the marine environment in India is under stress due to pollution and is probably one of the reasons for decline in fish stocks. Further, factors like poor effluent treatment on land, plastics (especially, micro-plastic particles) in the sea and ghost fishing are equally affecting fish stocks. Regulatory mechanisms to control pollutants will be made more stringent to ensure that land and sea-based pollution have minimum impact on the life in sea.
- 22.0 Development of Ports often leads to erosion and accretion along Indian coasts. Changes brought about in coastal configuration from such developments impact the coastline, damage fisher habitations and affect the ecology and fisheries. This is a matter of utmost concern affecting fisher livelihoods. Adequate mechanisms will be put in place to ensure that opinion of fishers is taken before such projects are launched in future and in cases where their livelihoods are affected.
- 23.0 It is well known that coastal and inshore marine fish resources are highly dependent on many inland water bodies (estuaries, lakes and backwaters) for completing the life cycles of fish species. These water bodies are subject to anthropogenic pressures and degradation of environmental quality affects stocks of several important marine fishery resources, particularly the high value shrimps and many fish species, that complete one phase of their life cycle in these inland coastal waters. Appropriate mechanisms will be considered to address such issues related to development and ecological sustainability in large water bodies and also in Critically Vulnerable Coastal Areas (CVCA).
- 24.0 While promoting development of fisheries, emphasis will be accorded to maintain the ecological integrity of marine environment, so as to ensure that there are no adverse effects on the endangered, threatened or protected marine species. Mangrove plantations, seagrass beds and coral reefs are integral part of the coastal marine ecosystems and provide a range of ecosystem services, including habitation for many fish species and marine mammals, such as dugong. Such ecosystems will be protected from any undue anthropogenic impact.

Post-harvest & Processing

- 25.0 The general hygiene condition and sanitary aspects of fishing harbours and fish markets in the country need improvement to raise them to international standards. All stakeholders will be sensitized for maintaining cleanliness and hygiene in the fishing harbours. State Governments and Port Trust Authorities will be encouraged to develop suitable mechanisms to address the issue, including stakeholder run management committees for day-to-day management of the harbour facilities. This will ensure availability of safe and hygienic seafood.
- 26.0 Presently, the landing and berthing facilities are inadequate to meet the requirements of the large fishing fleet. Provision of adequate infrastructure facilities is critical to the marine fisheries value chain, and also critical for many MCS functions. Based on a re-assessment of the requirements, additional facilities will be constructed including fish processing estates. The Public-Private Partnership route will also be adopted to ensure speedy fulfilment of requirements of infrastructure facilities along the coastline.
- 27.0 Post-harvest losses will be adequately addressed through better on-board handling of fish, as it will lead to better quality and prices, particularly for high value fishes. More

importantly, loss of valuable fish wealth will be minimized so that more fish is available for human consumption. Mitigation measures to reduce by-catch will be promoted through relevant implements and gears.

28.0 Use of low-value fish in fish feed industry is becoming a matter of concern as it can lead to overfishing of low value fish and bycatch, and could undermine the marine ecosystem. The spread of fish meal plants in some parts of the country and their overwhelming demand for small pelagics has led to overfishing, resulting in low level of pelagic stocks in some parts of the country. This issue will be addressed by taking steps to control and regulate the proliferation of fish meal plants.

Trade

- 29.0 Indian seafood finds a significant place in the global seafood trade. Over the period, seafood exports from India have grown both quantitatively and qualitatively. Notwithstanding these developments, Indian seafood is yet to realize its optimum value, first due to the low levels of value addition before the products leave the shore and second poor product branding. To overcome these weaknesses, efforts will be made to promote diversification of products, improve value addition and product branding and enhance the reach to new markets in different parts of the world.
- 30.0 Fishery product traceability and chain-of-custody needs should be addressed, as they have assumed paramount significance in global seafood trade. Besides, there is room to diversify seafood products at par with international standards, in order to get maximum value for fishery products. Furthermore, fishery products will be integrated with Food Safety Standards Authority of India (FSSAI) benchmarks to improve the domestic marketing value chain.
- 31.0 Traceability of seafood and ecolabelling are gradually gaining as important market-based interventions to ensure environmental sustainability of fisheries. Demonstrating the traceability of seafood is an important requirement for all the seafood exported to EU markets. It is likely that in the coming years, more importing countries as also markets will demand only certified and labelled seafood to be sold through their counters. An enabling environment will be created for promoting ecolabelling of key Indian fisheries that would benefit the fish stocks, seafood industry and fishers.

Mariculture

32.0 Mariculture can play an important role in increasing fish production from the coastal marine waters. Schemes to set up mariculture farms/parks and setting up of hatcheries for seed supply for development of the sector will be encouraged. Institutional needs of this emerging sector, which would include lease rights, technology (farming practices, seed, feed, aquatic animal health management, etc.); environmental and social impacts; capacity building of fishers and entrepreneurs to take up mariculture; and develop market value chains will be addressed in consultation with the coastal States/UTs and concerned stakeholders.

Fisher Welfare & Social Security Nets

- 33.0 The current welfare measures that are in vogue will be continued and further strengthened to provide adequate safety nets to the fisher community in the country through Government of India's Direct Benefit Transfer Scheme (DBTS). Such measures will also include insurance coverage, housing and other amenities and community welfare programmes to fishermen. Availability of public finance to fishermen community would be made easier.
- 34.0 Weather events of extreme nature such as storm surges, cyclones, rogue waves, etc. will be considered as natural calamities and of man-made disasters (such as oil spill), the fishing communities will be provided with the admissible support/assistance in restoration of their livelihoods. In cases of loss of fishers life at sea, the procedures for compensation would be made easier so that the benefits to the affected fishers family is provided within a reasonable time using new technologies.
- 35.0 The institution of fisheries cooperatives has gained momentum over the years and in some States, such cooperatives have demonstrated their success. The cooperatives in fisheries sector can best serve the community if they adopt good business models that would include both harvest and post-harvest functions. Fisheries cooperatives in the country will be facilitated and strengthened through skill development and technical and financial support, wherever necessary.
- 36.0 Institutionalizing cooperatives can also help in collecting a minimum levy or cess on fish production, which can then be pooled for funding fisher welfare measures and in the long run, also aid in fisher-directed local and regional research on fisheries. The cooperatives will also be encouraged and strengthened in carrying out a science-based approach to address fisheries and climate related issues.
- 37.0 Steps will be taken for training, capacity building as well as upgradation of technological skills of traditional fishers in moving from artisanal fishing to more economic and efficient means of fishing.

Gender Equity

38.0 Women constitute more than 66% of the total work force in post-harvest activities of the fisheries sector. Besides raising families, women play important roles in retailing fish, fish drying and other value addition activities. The Government will continue to support its contributions to the roles played by women and will further enhance support by way of forming women cooperatives; women-friendly financial support schemes; good working conditions that would include safety, security and hygiene, transport facilities for retail marketing, and also encouragement to take up small-scale fishing and value-addition activities.

Island Fisheries

39.0 Andaman & Nicobar and the Lakshadweep Group of Islands harbour significant fisheries resources, including lucrative fisheries of tuna and tuna-like species and other species of commercial values such as groupers, snappers and coral fishes. Their geographic remoteness has so far impeded fisheries development and optimal harnessing of the fisheries

wealth. The government will implement dedicated programmes for sustainable exploitation of fisheries resources, developing local capacities in terms of both men (and women) and material, and institute post-harvest support that can allow the harvested resources to come to the mainland markets as also to seafood export destinations.

Additional/Alternate Livelihoods

40.0 Keeping in mind the dwindling marine fisheries resources, additional/ alternative sources of livelihoods will be essential for the vast number of fisher communities spread all along the coastline. Mariculture and eco-tourism are considered important in this regard and both offer good potential of offering additional/alternate sources of livelihoods. Game Fishing and the concept of Catch, Photograph and Release (CPR) is gaining importance throughout the world as part of fisheries tourism. The Andaman & Nicobar Islands and the Lakshadweep Group of Islands besides some coasts of the main land are ideally suited for promotion of such activities. The Government would promote CPR schemes among fishermen in areas suitable for such activities. In case of eco-tourism, it is essential that the Department of Tourism plans its activities related to coastal and marine waters in consultation with the Department of Fisheries to protect the livelihood of fishers.

Climate Change (Adaptation and new initiatives)

41.0 Climate change is one of the biggest challenges that the fisheries sector is facing and time-bound adaptation and management plans are imminent. The impacts of climate change on marine fisheries are amply visible in the Indian EEZ and surrounding high seas. Such impacts have brought perceptible changes in the fishery of some species, forcing fishers to make changes in fishing operations. Climate change is considered to be one of the reasons for changes in abundance of some stocks of some fish species. Focused studies on climate change impacts on fish stocks will be encouraged. As a part of the International commitments on climate change, the concept of green fisheries by reducing Green House Gases (GHG) emissions from fishing and fishing related activities will be encouraged.

Regional Cooperation

- 42.0 The Indian sub-continent is surrounded on the west by the Arabian Sea and on the east by the Bay of Bengal. Together, the two seas form part of the upper Indian Ocean. On the west coast, India shares its maritime boundaries with Pakistan and the Maldives, while on the east coast, the boundaries are shared with Sri Lanka and Bangladesh. In some cases, it is not only the shared maritime boundaries but also shared ecosystems, such as the Gulf of Mannar and Palk Bay between India and Sri Lanka; Sunderbans between Bangladesh and India. Both the Arabian Sea and Bay of Bengal harbour migratory as well as straddling fish stocks such as tuna and tuna-like species, sharks and Spanish mackerels. Such situations necessitate strong regional cooperation in management and sustainable utilization of the resources, including conservation of species/stocks, wherever necessary.
- 43.0 Cooperation in safety and security of fishermen is also necessary as the upper Indian Ocean, especially the Bay of Bengal, witnesses high number of adverse weather events and every year many fishers lose their lives or suffer extreme hardships. Cooperation in the field of marine fisheries through bilateral arrangements as also by participating in the regional fisheries and environment bodies will be further enhanced. Such cooperation will facilitate

managing of shared resources and shared ecosystems; harmonization of policies and programmes aimed at optimized harvesting of trans-boundary resources; safeguard of human rights, in particular for fishermen straying in waters of other countries.

44.0 The skills, industrious nature and the ability to work under challenging conditions of the Indian fishers are widely recognized in other countries. Resultantly, more and more fishers from India are now finding employment in fishing fleets of other countries. On many occasions Indian fishers have been apprehended in neighbouring countries while fishing in other countries EEZ, making it difficult for the Government to secure their release through normal channels. It will be ensured that fishers who are willing to take employment in the fisheries sector in other countries go through formal approvals and knowledge of the Government.

International Agreements/Arrangements

- 45.0 Indian fisheries is now set in a globalized world. The global agenda on fisheries is guided by a set of binding and non-binding instruments that concern both fisheries and environmental aspects. India being a signatory to such instruments and agreements needs to implement the provisions of such instruments and agreements to meet its international obligations and make fisheries sustainable. Non-compliance of their provisions will impact the fisheries sector and in turn the livelihoods of fishermen. Active participation in the activities of the regional/international bodies and demonstrating India's leadership in management of its marine resources that are part of the 'Common heritage of the world' would be ensured.
- 46.0 The FAO's Code of Conduct for Responsible Fisheries (CCRF or Code) is today the most significant of the non-binding agreements in the global fisheries sector. It is global in scope and directed towards members and non-members of FAO, fishing entities, organizations of all kinds, fishers, people engaged in the processing and marketing of fish and fishery products in short, everyone concerned with conservation of fishery resources and management and development of fisheries. The Code is voluntary, but certain parts of the Code reflect and include major articles and provisions from a number of global UN conventions and agreements, as mentioned earlier. The Code sets forth principles and standards applicable to the conservation, management and development of all fisheries. The Government will ensure that the Code and its Principles are well-integrated in all its activities that relate to marine fisheries sector.
- 47.0 The global community has recognized the importance of small-scale fisheries as a principal contributor to poverty alleviation and food security and has agreed to the Voluntary Guidelines on Sustainable Small-Scale Fisheries (VG-SSF). The main objectives of the VG-SSF Guidelines are expected to be achieved through the promotion of a human rights-based approach, by empowering small-scale fishing communities. Efforts would be made to implement the provisions of the VG-SSF.
- 48.0 As the provisions contained in the binding and non-binding international instruments normally draw strength from each other, it is essential that these instruments are considered holistically and not in isolation. Wide consultations with stakeholders and fisheries organizations will be encouraged to provide a more balanced understanding and better implementation of such instruments.

Governance and Institutional Aspects

49.0 The marine fisheries sector is being dealt by a range of institutions from coastal State/UT Governments (DoF), Central Government (DADF), scientific bodies, Ministry of Defence (through Indian Coast Guard). This pluralistic governance set-up necessitates a strong coordination between the Ministry of Agriculture and Farmers Welfare and the Coastal states/UTs on one hand and the different Ministries/Departments of the Union Government on the other hand. Further, similar cooperation between coastal States/UTs will also be essential to ensure that fisheries, which move between the waters of one coastal State/UT to the other, are sustainably exploited. In this regard, it will be ensured that mechanisms are instituted to allow for this coordination between all concerned agencies.

50.0 Marine fisheries in India is dynamic with continuous changes in practices and resource harnessing. The Marine Fishing Regulation Acts (MFRAs) have come into existence from the 1980s, and barring a few States/UTs, the MFRAs were in place by mid-1990s. Keeping in view the fact that most of the MFRAs were adopted before the adoption of key international agreements/arrangements (1982 UNCLOS, 1992 UNFSA, 1995 CCRF, etc.), the existing rules and regulations for governing fisheries in the MFRAs will be updated and aligned with these international instruments/arrangements to ensure that they cover all aspects of fisheries management.

51.0 The Central Government is mandated to control and regulate fisheries in the EEZ, *i.e.*, the area from 12 to 200 nautical miles. There is a need to regulate fisheries in the EEZ with appropriate legislation. Steps will therefore be taken to bring in such legislation for development and management of fisheries in this area.

Way Forward

52.0 The NPMF, 2016 is expected to meet the multi-dimensional and growing needs of the marine fisheries sector for the next one decade. The Policy is holistic and adequately addresses the needs of all the segments of this diverse economic activity. The NPMF, 2016 will have an 'Implementation Plan' that will specify the action points under each recommendation contained in the Policy. These action points will be further elaborated with timelines for implementation, agencies responsible for the work and estimates and likely sources of the funds required for implementation. The Implementation Plan will also have a 'Monitoring and Evaluation' section that will address the timeliness and efficacy of implementation.
