Department of Fisheries Ministry of Fisheries, Animal Husbandry and Dairying Government of India

Pradhan Mantri Matsya Kisan Samriddhi Sah-Yojana (PM-MKSSY)

(Fisheries Sector Prosperity Project No. *Ln-94190-IN* Fisheries Sector Strengthening Project No. *CIN1157 01*

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

01st August, 2025

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Abbreviation:

AA Administrative Approval

AFD Agence Française de Développement
BIRD Bankers' Institute for Rural Development

CAA Coastal Aquaculture Authority
CAC Central Apex Committee
CCIs Certified Credit Counsellors

CERC Contingency Emergency Response Component

COU Universities and Colleges

CPCB Central Pollution Control Board

CRZ Coastal Regulation Zone

CS Central Sector

CSC Common Service Centre

DBTS Direct Benefit Transfer Scheme

DoF Department of Fisheries
DPR Detailed Project Report

DPSPs Directive Principles of State Policies

EAFM Ecosystem Approach to Fisheries Management

EEZ Exclusive Economic Zone

ESCP Environmental and Social Commitment Plan

ESF Environmental and Social Framework

ESIA Environment and Social Impact Assessment

ESMF ENVIRONMENTAL AND SOCIAL MANAGEMENT

FRAMEWORK

ESMP Environment and Social Management Plan

ESSs Environment and Social Standards
FAO Food and Agriculture Organization
FFPO Fish Farmers Producer Organization

FGA Final Grant Application

FHs Fish Harbours

FLCs Fish Landing Centres FVC Food Value Chain GA Grant Agreement GAP Gender Action Plan

GAPs Good Aquaculture Practices
GBV Gender-Based Violence

GC Grant Committee
GHG Green House Gases
Gol Government of India
GPN Good Practice Note

GRC Grievance Redressal Cell

GRM Grievance Redressal Mechanism

GSC Grant Selection Committee

HTL High Tide Line

ICAR Indian Council of Agriculture Research

ICC Internal Complaints Committee

IMC Indian Major Carps

IUU Illegal, Unreported and Unregulated

LTL Low Tide Line

M&E Monitoring and Evaluation

MFRA Marine Fisheries Regulation Act
MSC Monitoring, Control and Surveillance

MSK Matsya Seva Kendra

MSME Micro, Small and Medium Enterprises

MTR Mid Term Review

NABARD National Bank for Rural Development and Agriculture

NFDB National Fisheries Development Board NFDP National Fisheries Digital Platform

NFP National Fisheries Policy

NGO Non Government Organization NMP National Mariculture Policy

NPOA-MCS
OHS
Occupational Health and Safety
PAD
Project Appraisal Documents
PDO
Project Development Objective

PGMC Performance Grant Management Consultant

PMMKSSY Pradhan Mantri Matsya Kisan Samriddhi Sah-Yojana

PMMSY Pradhan Mantri Matsya Sampada Yojana

PMU project management unit PPP Public Private Partnership

PVTGs Particularly Vulnerable Tribal Groups RAS Recirculating Aquaculture Systems

RSETI Rural Self-Employment Training Centers

SALSA State Legal Service Authority

SC Scheduled Castes

SECC Environmental and Communication Cell

SEP Stakeholders Engagement Plan

SHGs Self-Help Groups
SSF Small-Scale Fisheries
ST Scheduled Tribes

TEC Technical Evaluation Committee

TNJFU Tamil Nadu Dr. J Javalalitha Fisheries University

TPP Tribal Peoples Plan

TVET Technical and Vocational Education and Training

V&MC Verification and Monitoring Consultants

VLO Village Level Organisation

WSA Water Spread Area

EXECUTIVE SUMMARY:

India is blessed with rich and varied fisheries resources and a diverse array of fish species that have traditionally supported livelihood for millions of people. The Indian fisheries sector is regarded as the sunrise sector that provides livelihood and employment opportunities, ensures nutrition and food security and contribute to the national's economy through international trade. Currently, India is the 2nd largest fish producer, with 8% global share in fish production. It also stands second in aqua culture production, 3rd in marine capture fisheries and is one of the top shrimp - producing and exporting nations.

To build the fisheries sector more prosperous in the country, the Government of India launched the Pradhan Mantri Matsya Sampada Yojana (PMMSY) in May 2020 for five years (FY 2020-21 to FY 2024-25). Further in order to address the inherent weaknesses of the largely informal sector such as its vulnerability to external shocks and its inability to benefit from larger support / protection programs, the Government of India ,approved Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY) Central Sector Sub-Scheme under the ongoing PMMSY referred as Fisheries Sector Prosperity Project (by the World Bank) and referred as Fisheries Sector Strengthening project (by the AFD) in February 2024 for four years 2023-24 to 2026-2027.

The project is funded by the World Bank and implemented by Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India. The Department of Fisheries is the primary implementing agency. The proposed Project Development Objective is to support the fisheries sector recovery with expanded access to working capital and insurance, improved fisheries value-chains, traceability and enhanced fish product safety. The project encompasses of four components:

- 1. **Component 1-A:** Formalization of fisheries sector and facilitating access of fisheries microenterprises to Government of India programs for working capital financing
- 2. Component 1-B: Facilitating adoption of aquaculture insurance
- 3. **Component 2:** Supporting microenterprises to improve fisheries sector value chains efficiencies.
- 4. **Component 3:** Adoption and expansion of fish and fishery product safety and quality assurance systems
- 5. Component 4: Project Management, Monitoring and Reporting

The Environment and Social Management Framework (ESMF), outlines the principles, rules, guidelines, and procedures for assessing and mitigating environmental and social risks associated with project activities. It also emphasizes the importance of public review and comment on environmental and social impact assessments for transparency and accountability. The objectives of the ESMF include conducting assessment of environmental and social impacts, establishing clear procedures for impact screening and approval, defining roles and responsibilities, identifying training needs, and outlining requirements for effective implementation.

The ESMF for the PM-MKSSY has been prepared and disclosed on 24th August, 2021 and now updated with an objective to manage the social and environment impacts through appropriate and timely measures during the implementation of various activities. The framework identifies as adopting in international aided projects of the World Bank and AFD provides specific guidance for environmental issues and managements, their deferent

implementation strategies and, along with roles and responsibilities of the implementing agencies to ensure effective environmental and social management.

The ESMF has been developed based on desk reviews of the Government's relevant Laws Rules and Regulations as well as Project Appraisal Documents (PAD) of PM-MKSSY. The World Bank's Guidance Note for Borrowers on the Application of the ESSs, the guideline for preparation of ESMF for World Bank financing project in India and AFD related documents have been referred to. The ESMF covers broadly:

- Project Description;
- Policy, Legal, and Administrative Framework;
- Detailed Environmental & Social Profile;
- Potential Environment & Social Impacts, Risks & Mitigation Measures;
- Public Consultation & Disclosure;
- Procedures for Review, Clearance & Implementation;
- Implementation Arrangements;
- Capacity Building, Training & Technical Assistance;
- Grievance & Redress Mechanism

The World Bank's Environmental and Social Framework (ESF) is applicable to the project with the following standards:

ESS1: Assessment and Management of Environment and Social Risks and Impacts

ESS2: Labour and Working Conditions

ESS3: Resource Efficiency and Pollution Prevention Management

ESS4: Community Health and Safety

ESS7: Indigenous Peoples

ESS10 Stakeholder Engagement and Information Disclosure

The project activities will largely benefit the community and support long-term sustainability of the fisheries sector. Project financed activities will take place within the existing/established footprint of aquaculture operations. While several positive impacts are anticipated, a few potential adverse risks are also identified, such as possible exclusion of vulnerable communities/individuals in accessing credit and other services, less participation of women, a proper wastes management system at farm level and processing units. Appropriate outreach activities for creating more awareness among these communities and application of relevant environment and social standards which help in avoiding and mitigating these risks.

1. PROJECT DESCRIPTION

1.1 Objectives

Fisheries in India is an important source of food, nutrition, employment, income, and foreign exchange earnings. The sector provides livelihood, employment and entrepreneurship to more than 3 crore fishers and fish farmers at the primary level and several lakhs along the value chain. The fish production in the country rose from 07.52 lakh tonne in 1950-51 to an all-time record of 184 lakh tonne in 2023-24. However, the fisheries sector has certain fundamental weaknesses which were exposed during COVID-19 pandemic. These weaknesses include informal and fragmented nature of the sector, absence of investible surpluses with stakeholders, sub-optimal access to institutional finance, fragmented value chains and low value chain efficiencies, skewed distribution of domestic markets, issues of safety and quality assurance in fish and fishery products, and vulnerability to climate change and disasters. These weaknesses need to be addressed so as to enable the sector to realise its full potential and to be able to withstand such shocks in future. Climate cobenefits is given at **Annexure-I.**

Recognizing the importance of fisheries in the national economy and for focused and holistic development of the sector with socio-economic wellbeing of fishers, fish farmers and fish workers, Gol approved the PM-MKSSY as a Sub-scheme of PMMSY (The Project). The aims and objectives of the Sub-scheme are to support Micro & Small Entrepreneurs in the fisheries sector by facilitating the access to working capital and insurance, improve fisheries value-chains, and enhance fish product safety and quality assurance system and creation and maintain of jobs. The broad aims and objectives of the sub-scheme are: -

- I. Gradual formalization of the unorganized fisheries sector including creation of work based digital identities of fish workers for improved service delivery.
- II. Facilitating greater access to institutional finance including working capital in order to enable the fish farmers, fishers and micro and small enterprises to reduce their cost of capital and to expand their operations.
- III. Providing one-time incentive to those fish farmers willing to buy aquaculture insurance.
- IV. Incentivizing fisheries and aquaculture microenterprises to improve value-chain efficiencies and to create and maintain jobs through performance grants.
- V. Incentivizing micro and small enterprises in the fisheries sector to establish supply chains of safe fish and fishery products including creation and maintenance of jobs through performance grants.
- VI. Integration and consolidation of fisheries value chains.

The focus is on facilitating and reorganizing the sector by providing capital and insurance for improved risk management, and by establishing safety, quality, and hygiene systems for fish products in the retail market. Additionally, training and knowledge-sharing programs will be conducted for fish farmers and others stakeholders in the fisheries and aquaculture sector. These efforts, alongside labelling and standardization, will help establish sustainable fish production units with proper management strategies.

The sub-scheme through its components encourage and promotes:

Use of energy-efficient technology,

- Decarbonisation
- Deployment of less-polluting small vessels,
- Use of renewables
- Hygiene working condition
- Proper waste management
- Disease management
- Quality and safety standards
- Certification and Traceability
- Good Aquaculture Practices
- · Adoption of sustainable fishing techniques,
- Reskilling and capacity building for fishers and fish farmers already engaged in the sector.

The activities under the PM-MKSSY intends to promote incentives / Performance Grants. The projects / proposals under the sub scheme will be supported after post verification. No upfront subsidies will be given. The project after due verification will be supported under the Sub-scheme. Appropriate indicators for social, gender and environmental state of affairs will be indicated in the administrative approval on project-to-project basis. Therefore, the applicants can take needful action at the conceptualization and initial stage of the project.

The prior infrastructure on the project requirements will be excluded. This will also check the use of legal labour only as permitted under Indian Labour Law.

Importantly, no project activities will be located in or around conservation areas or wetlands. The negative list in Section 4.3.2 of ESMF clearly defines the activities that are excluded from this Sub-scheme. Besides, a negative list, this Sub-scheme restricts the project activities in or around reserved areas from the environment point of view.

This ESMF will guide the applicant not to use hazardous substance at any point of time of its operations.

1.2 The Components

The projects have four major components which have briefly described as below.

1.2.1 Component 1-A: Formalization of fisheries sector and facilitating access of fisheries microenterprises to Government of India programs for working capital financing

Under this component, a National Fisheries Digital Platform (NFDP) and Mobile Apps have been developed for self-registration, assisted registration through CSC, self-reporting and verification of gender-disaggregated work-based identities, with appropriate interfaces for digital payment and financial access including interfaces with States/UTs platforms for social safety net and benefit transfer with appropriate verification by local authorities.

The sector needs to be gradually formalized by creation of registry of the fish producers and other supporting actors such as fish workers, vendors and processors including micro and small enterprises working in the sector at the national level. A large segment of fish farmers and fishers do not have access to institutional credit. To improve the situation, this

sub scheme has the provision to facilitate access to institutional credit through training and extension support, financial literacy, project preparation and documentation etc. Financial support upto ₹ 5,000 is available under this component for successful approval of a bankable loan proposal.

This component also includes provision of formalization and strengthening of 5,500 fisheries cooperatives to operate as FFPOs with mentoring, capacity building and need based financial support.

All the individuals/organizations involved in fisheries and aquaculture are mobilized to register on NFDP. They will be encouraged to do so through providing financial incentives. Besides registration process, NFDP will serve multiple functions such as credit facilitation, adoption of aquaculture insurance, performance grant, traceability, training and capacity building etc.

1.2.2 Component 1-B: Facilitating adoption of aquaculture insurance.

This component envisages facilitating development of appropriate aquaculture insurance products in the market by insurance companies besides adoption of the same by fish farmers through extension activities. Provisions have also been made for one-time incentive for one crop cycle on purchase of insurance.

To avail this facility, beneficiary needs to first buy the aquaculture insurance product online or offline. If insurance purchased by offline, beneficiary needs to upload documents on NFDP. After completion of process, beneficiary will get 'One Time Incentive' against purchase of aquaculture insurance will be at the rate of 40% of the cost of premium subject to a limit of ₹25,000 per hectare of Water Spread Area (WSA) of the aquaculture farm and a maximum of 4 Ha WSA per farmers, for approximately 1 lakh Ha WSA. For more intensive form of aquaculture other than farms such as cage culture, Re-circulatory Aquaculture System (RAS), bio-floc, raceways, etc. the incentive payable is 40% of premium. Maximum incentive payable is ₹1 lakh and the maximum unit size eligible will be of 1800 m³. The SC, ST and Women beneficiaries would be provided an additional incentive @ 10% of the incentive payable for General Categories.

Purchasing aquaculture insurance product requires certain commitments from the farmers to meet the product requirements such as adopting better management practices keeping social and environmental aspect into consideration for creation and maintenance of jobs with special focus on jobs for women.

1.2.3 Component-2: Supporting Microenterprises to Improve Fisheries Sector Value Chains efficiencies.

This component seeks to improve value chain efficiencies in fishery sector by attracting investment and providing performance grant to fisheries and aquaculture micro-enterprises for the investment made besides undertaking associated analytics and awareness campaigns. The provision for performance grants under this component is based on performance / outcomes assessed. Performance grants will be provided to micro-enterprises based on transparent and measurable criteria such as re-engagement in production, expansion of the value chains with specific performance targets, creation and maintenance of jobs with priority for women, reduction of fish losses; decarbonisation and

improved energy efficiency and use of renewables; enhanced climate resilience; improved hygiene and waste/pollution management;

This component will support fisheries sector microenterprises in protecting their profit margins by enhancing productivity and reducing the inefficiencies and fragmentation.

The performance grants will be evaluated based on their environmental best practices, supporting carbon credits, reduction in GHG, increase energy efficiency etc.

To avail the benefits of the sub scheme, the applicant / proponent has to make necessary investment first and then claim the performance grant as per the guidelines of the subscheme after following the process and verification cum-monitoring, the project of the applicant will be approved and payment will be made accordingly. The provisions of ESMF will be applied on such project.

ESMF will be applied through outreach program for the beneficiaries to adopt good construction practices, etc. and ensuring access to benefits by the socially excluded groups.

1.2.4 Component 3: Adoption and expansion of fish and fishery product safety and quality assurance systems

Under this component, Fisheries Micro and Small Enterprises will be provided with performance grant against the investments made towards adoption of product safety and quality assurance system, creation and maintenance of jobs with special focuses to jobs for women.

This component targets to address current demand in domestic markets for safe fish products by making such products available to consumers, including in smaller cities with low supply of fish products. It will support: (a) performance grants for the fisheries sector micro- and small enterprises, especially women-owned ones, with specific performance targets relevant to good environmental practices for supplying safe fish products to domestic consumers, job creation, especially for women, and adoption of the requisite quality assurance systems.

ESMF will apply by promoting good practices on Occupational Health and Safety and management of waste both solid and liquid leading to pollution at the end.

Traceability facilitates knowledge regarding the identity, history, and source of a product or of materials contained within a product. It is the ability to access any or all information relating to the fish or fishery product under consideration, throughout its entire life cycle, by means of recorded identifications.

An appropriate IT enabled traceability and labelling system will be supported to ensure tracking of fish and fish products throughout the supply chain from 'bait to plate'/ 'catch to consumer' and describing accurately to consumers. ESMF will apply on operation part of the project such as handling of instruments / equipment, hazardous substances, pollution related issues etc.

1.2.5 Component 4: Project Management, Monitoring and Reporting

This component supports strengthening institutional capacity of the Department of Fisheries (DoF) for Project implementation, through the maintenance of project management units (PMUs) to manage, implement, monitor and evaluate project activities, including: (a) preparation and implementation of assessments and mitigation/management measures pursuant to the Environmental and Social Commitment Plan (ESCP); (b) ensuring adequate financial management and procurement management systems; (c) implementation of communications plans and a Grievance Redressal Mechanism; (d) carrying out of monitoring and evaluation activities and third party audits; (e) coordination with state departments of fisheries and other state or national government agencies and other public/private stakeholders including civil society and NGOs that are vital for holistic adoption of good fishery/aquaculture practices; and (f) conducting special evaluation exercises.

1.3 Project Implementation Arrangement

The institutional structure in support of fisheries sector is comprehensive and covers both development as well as research needs of the sector. At the Central Government-level, the Department of Fisheries (DoF) under Ministry of Fisheries, Animal Husbandry & Dairying has eight Research and five developmental Institutions, including autonomous and regulatory body the National Fisheries Development Board (NFDB) and Coastal Aquaculture Authority (CAA). Similarly, the Ministry of Commerce, the Ministry of Earth Sciences, Department of Science and Technology also have Institutions, whose mandates include support to the fisheries sector.

It is a Central Sector (CS) project involving 100 % of the project cost borne by Gol. Beneficiaries are directly applying for the benefits to DoF through NFDP. Incentives to the project are provided through Direct Beneficiary Transfer (DBT). The Specific implementation responsibilities including planning, implementing, monitoring, reporting and evaluation of project will be that of DoF through a Project Management Unit (PMU).

Existing Central Apex Committee (CAC) of PMMSY chaired by Secretary (Fisheries), Department of Fisheries, Government of India will be the Apex Committee for PM-MKSSY as well. CAC will see overall implementation of Sub-scheme, approve the Action Plan prepared by PMU.

The DoF has delegated execution responsibilities for Sub component 1-B to the National Fisheries Development Board (NFDB), for which NFDB has set up a separate PMU for implementation.

- (A) The PMU at DoF is headed by a Project Director (at Joint Secretary level) and has 5 Divisions responsible for: (i) Technical, Inclusion, Gender, Environment and Climate Change aspects; (ii) Communication, Advocacy, Branding and Knowledge Services, (iii) Financial Management, Procurement, M&E (iv) Aquaculture and Inland Fisheries and (v) Seaweed and Marine Fisheries. Each division headed by an Additional Project Directors (at the level of Additional/Deputy Commissioners at DoF). A detailed organogram is placed at Annexure- 2
- (B) The **PMU at NFDB**, is headed by the Chief Executive Officer as Project Director, assisted by Deputy Project Directors and experts from the field of insurance and

procurements etc. PMU will be responsible for (i) Marketing Insurance Scheme, Awareness and Outreach, (ii) Coordination with Stakeholders, and (iii) Financial Management, Procurement and Monitoring and Evaluation. A detailed organogram is placed at **Annexure-2**

1.4 Monitoring and Evaluation (M&E):

Evaluations will be conducted at various stages of the program lifecycle to ensure continuous improvement and accountability. The specific frequency of evaluations will be determined based on the program's needs and available resources to provide timely feedback and facilitate adaptive management throughout the program's duration.

M&E of the DoF will be strengthen with the involvement of the State and district level Fisheries Department and suitable investments in technology , capacity building, and evaluation systems. The key interventions will include:

- (a) Establishment of the National Fisheries Digital Platform (NFDP): This will be an integration of (i) a web-based real-time project MIS, (ii) a reporting system for the Fisheries Sector Insurance Scheme, and (iii) Third-party Monitoring and Verification systems needed for disbursement of incentive and performance grants. Specific dashboard will be developed to regularly track progress indicators to support decision-making at all levels, including at state/district/cluster level.
- (b) **Analytics- based learning systems:** MIS data will be used for deeper analysis, going beyond auto-generated progress and exception reports, especially where systems identify persistent problems. Capacity building and collaboration with external expert institutions will support this data analysis;
- (c) **Project evaluation:** the project will commission rigorous, independent impact evaluation, featuring a mixed-methods approach and a robust counterfactual analysis (randomized if possible) one at mid-term and another prior to closing of the project. Small, rapid, and rigorous evaluations of key innovations in value chains (as supported by sub component 1-B) and other interventions may also be done;
- (d) **Process monitoring**: quantitative MIS data analyses and project evaluations will be complemented by process monitoring and qualitative evaluations;
- (e) **Capacity building for M&E:** Internal M&E capacity will be built in the PMU at the DoF and NFDB by hiring specific project/program monitoring specialists with an aim to make such monitoring capacity a permanent feature in DoF, initially through a large consulting firm recruited for and integrated monitoring and verification function.

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

This section presents a review of the national policy, legal, and regulatory framework relevant to the environmental and social aspects of the PM-MKSSY. There are several laws and policies applicable to PM-MKSSY and accordingly, some of the key laws are described here.

2.1 Applicable National Laws and Regulations

According to the Seventh Schedule ¹ of the Constitution of India, 1949, the State Government can frame laws and rules under State List and Concurrent List. Fisheries is a State subject. The State Governments are framing Laws, Rules and Regulations required for the fisheries activities. Besides, a number of other legal permissions, laws, are also applicable to the fisheries and aquaculture activities in both States and Union Territories. These inter-alia includes:

(i) Environment (Protection) Act, 1986

The Environment (Protection) Act was enacted in 1986 with the objective of providing the protection and improvement of the environment. It empowers the Central Government to establish authorities (under section 3(3)) charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.

(ii) National Environment Policy, 2006

The objectives of the NEP 2006 are (i) Conservation of Critical Environmental Resources, (ii) intra-generational equity (iii) livelihood security for the Poor (iv) intergenerational equity (v) integration of environmental concerns in economic and social development (vi) efficiency in environmental resource use (vii) environmental governance and (viii) enhancement of resources for environmental conservation.

(iii) Indian Forest Act, 1927

The Act aims to protect and conserve forests while also controlling the transit of forest produce

(iv) Coastal Regulation Zone Notification 2019

The aim of the CRZ Notification is to conserve and protect coastal stretches, marine areas, and ensure livelihood security for coastal communities.

(v) Island Protection Zone Notification 2019

Aims to conserve and protect the unique environment of coastal stretches and marine areas, besides livelihood security to the fisher communities and other local communities in the coastal areas and to promote sustainable development based on scientific principles taking into account the dangers of natural hazards, sea level rise in coastal stretches of the eight bigger oceanic islands

¹The Seventh Schedule to the Constitution of India defines and specifies allocation of powers and functions between Union & States. It contains three lists; i.e. 1) Union List, 2) State List and 3) Concurrent List.

(vi) Wild Life (Protection) Act, 1972

An Act to provide for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto with a view to ensuring the ecological and environmental security of the country

(vii) The Wetlands (Conservation and Management) Rules, 2017

Objectives of the Rules is to enhance the focus of management of wetlands from a central authority to state bodies. The rules provide for an advisory role for the National Wetland Committee, to guide the state bodies on integrated management of wetlands based on wise use principle.

(viii) Solid Waste Management Rules 2016

The aims of the Rules is to ensure the scientific and environmentally sound management of solid waste and disposed off.

(ix) Water (Prevention and Control of Pollution) Act, 1974

This act was enacted to prevent and control water pollution and maintain the quality of water resources in India. In the context of aquaculture, is to regulate and prevent pollution of waters arising from aquaculture activities. It is also to ensure sustainable development of aquaculture by minimizing its environmental impact and promoting responsible aquaculture practices.

(x) The Biological Diversity Act, 2002 and Biological Diversity Rules, 2004

An Act was enacted with objective of promoting the conservation of biological diversity, ensuring the sustainable use of its components, and facilitating the fair and equitable sharing of benefits arising from the utilization of biological resources and associated traditional knowledge.

(xi) State Marine Fishing Regulation Acts

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

(xii) Coastguard Act, 1978

India

Mandates is to protect ocean and offshore wealth including oil, fish and minerals and also to enforce maritime laws with respect to sea, poaching, smuggling.

(xiii) The Coastal Aquaculture Authority (Amendment) Act, 2023

Act aims to ensure that coastal aquaculture does not cause any detriment to the coastal environment and the concept of responsible coastal aquaculture contained in guidelines shall be followed in regulating the coastal aquaculture activities to protect the livelihood of various sections of the people living in the coastal areas.

(xiv) Maritime Zones (Regulation of fishing by Foreign Vessels) Act, 1981 An Act aims to regulate or prohibit fishing by Foreign Vessels in maritime zone of

(xv) National Policy on Marine Fisheries, 2017

The main objective of NPMF 2017 is to ensure the healthy and ecological integrity of the marine fisheries resources of India's Exclusive Economic Zone (EEZ) through sustainable harvests for the benefit of present and future generations of the nation. The policy framework aims to meet the national, social and economic goals, livelihood sustainability and socio-economic upliftment of the fisher community and is intended to guide the coordination and management of marine fisheries in the country

(xvi) The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act. 1989

Act aimed at preventing atrocities against members of Scheduled Castes (SC) and Scheduled Tribes (ST). It defines various offenses against SC/ST individuals, provides for special courts for their trial, and outlines provisions for their relief and rehabilitation

(xvii) National Policy for Women, 2016

The major objectives of the policy are (a)creating a conducive socio-cultural, economic and political environment for women, (b) mainstreaming gender in all-round development processes / programmes, (c) a holistic and life cycle approach to women's health, (d) improving and incentivising work force participation of women in the economy (e) elimination of all forms of violence against women through strengthening of policies, legislations, programmes, institutions and community engagement (f) development and empowerment of women belonging to the vulnerable and marginalized groups etc.

2.2 International Treaties:

At the global level, India has been proactive in contributing to international deliberations towards conservation and management of ecosystems, biological diversity and sustainable utilisation of resources. India is a signatory to various conventions related to the environment, some of are as follows:

(i) United Nations Convention on the Law of the Sea (UNCLOS)

UNCLOS aims to minimize conflicts and disputes over ocean space and resources by establishing clear rules and procedures for their use. Defines territorial Sea, Exclusive Economic Zone (EEZ), International maritime boundary.

(ii) The Ramsar Convention on Wetlands of International Importance, 1971

The Ramsar Convention is an international treaty for the conservation and sustainable utilization of wetlands i.e. to stem the progressive encroachment on and loss of wetlands now and in the future, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific and recreational value

(iii) Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)

This convention came into force in 1992 and aims to reduce the amount of waste produced by signatories and regulates the international traffic in hazardous wastes.

(iv) Stockholm Convention on Persistent Organic Pollutants (POPs)

Treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed

geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment.

(v) Convention on the Conservation of Migratory Species (CMS or Bonn Convention)

Intergovernmental treaty, concluded under the aegis of the UNEP, concerned with the conservation of wildlife and habitats on a global scale. It is the only global convention specializing in the conservation of migratory species, their habitats and migration routes. The treaty aims to conserve terrestrial, aquatic and avian migratory species throughout their range

(vi) Convention on Biological Diversity (CBD), commonly Biodiversity

International legally binding treaty opened for signature at the United Nations Conference on Environment and Development (UNCED) in 1993. The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources

(vii) United Nations Fish Stocks Agreement

UNFSA aims to ensure the long-term conservation and sustainable use of straddling and highly migratory fish stocks within the framework of UNCLOS.

(viii) International Convention for the Prevention of Pollution from Ships, (MARPOL)

MARPOL is short for maritime pollution and 73/78 short for the years 1973 and 1978) is one of the most important international marine environmental conventions. It was developed by the International Maritime Organization in an effort to minimize pollution of the oceans and seas, including dumping, oil, and air pollution.

3. ENVIRONMENTAL AND SOCIAL PROFILE

India is the second largest fish producing country in the world and accounts for 8% of the global production. The total fish production during the Fy 2023-24 is estimated at 18.40 MMT with a contribution of 13.91 MMT from Inland sector and 4.49 MMT from Marine sector. Fisheries and aquaculture continue to be an important source of food, nutrition, income and livelihood for millions of people.

Majority of fisher folks continue to fall behind the national indices of socio-economic development. Population engaged in this sector can broadly be classified as (1) Marine and Inland fishers, (2) fish farmers (3) processing labours (4) traders/retailers/labourers engaged in ancillary activities.

3.1 Fisheries Resources in India

India has rich and diverse fisheries resources ranging from deep seas to lakes, ponds, rivers and more than 10 % to the global biodiversity in terms of fish and shellfish species. Indian fisheries broadly categorized as follows:

(i) Capture fisheries:

India's capture fisheries resources are vast and diverse, encompassing both marine and inland water bodies. The marine fisheries resources are spread along the country's vast coastline and Exclusive Economic Zone (EEZ) (2.02 million sq. km), large continental shelf area (0.53 million sq. km) and 11,099 km long coastline. The marine fisheries potential has been estimated at 5.31 MMT (*Najmudeen, T. M. 2023*).

The Inland Fisheries resources are in the form of rivers and canals, flood plain lakes, ponds and reservoirs, brackish water, saline / alkaline affected areas etc. The potential of inland fisheries has not been fully realized yet. The vast inland resources comprise of 0.195 million km of rivers and canals, 1.2 million ha flood plain lakes, 2.45 million ha of ponds and tanks and 3.15 million ha of reservoirs.

(ii) Aquaculture fisheries:

India has diverse aquaculture resources, including freshwater bodies like ponds, tanks, and reservoirs, as well as brackish water resources. India has 1.24 million ha of brackish water area spread overall maritime States/UTs. Currently, shrimps oysters, mussels, crabs, lobsters, seabass, grouper, mullets, milk fish, cobia, silver pompano, pearl spot, ornamental fishes and seaweeds are being farmed.

India's inland fish production has increased due to scientific breeding and improved aquaculture techniques. Major species include Indian Major Carps (Catla, Rohu, Mrigal) exotic carps (Silver carps, Grass carps, Common carps), catfishes, and shellfish. Biofloc and Recirculatory Aquculture Systems (RAS) are emerging as promising technologies for sustainable fish farming.

(iii) Cold water fisheries:

In India, cold water resources are distributed mainly in the form of upland streams, rivers, lakes, and reservoirs that are located at medium to high altitudes

of Himalayan corridor such as Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal and all North-Eastern States. Commercial farming of high value cold water species like exotic rain bow trout has been taken up successfully in cold water fisheries.

(iv) Brackish water fisheries:

Estuaries or river mouth is set of water body of fluctuating salinity because of tidal effects. Brackish water bodies have huge potential for both fin fish and shell fish culture. The Coastal Aquaculture Authority (CAA) is regulating these fisheries activities in brackish water systems within 2 km of the High Tide Line for sustainable development of Coastal Aquaculture sector.

3.2 Issues of the Sector

The annual average growth rate in the Fisheries sector of India is growing @ 9.08% over the last five years. This sector plays an important role in the economy and the share of this sector in the total Gross Value Added (GVA), is estimated to be about 1.12 % of the total Nation GVA and 7.26 % of agriculture GVA.

Further, Inland fish production constitutes about 75% of the total fish production of the country and annual growth rate of production has also been high. However, despite its growth, the sector faces challenges such as overfishing, habitat degradation, and climate change, which have put immense pressure on fish stocks and raised concerns about sustainability. The major issues are as follows:

3.2.1 Depleting resource:

Fish stocks across the world are depleting at a rapid pace, posing a threat to the marine ecosystem. According to the Stanford report, all species of wild seafood will collapse by 2050, which indicates the extent of overfishing and exploitation of living aquatic resources. In the event of overfishing, the rate of fish catch is higher than that of replenishment, thus leading to a collapse of fish stocks. The negative impact of overfishing goes beyond the marine ecosystem and affects the livelihoods and food security of millions of people, especially in India where the dependency is high (FICCI 2022).

India is one of the most densely-populated countries with its population spread across foothills to delta of rivers all the way upto the Bay of Bengal. The cumulative population of Gangetic basin states (Haryana, Delhi, UP, MP, Bihar, Jharkhand, WB is at least 1.5million people where the riparian population are dependent on fishing for their livelihoods and fish remains the most important source of animal protein.

A report commissioned by the Biodiversity Board of India highlights a concerning decline not only in the overall quantity of fish but also in the availability of valuable species such as hilsa, scampi, and several types of catfish, which have nearly disappeared. Numerous species that were once commonly caught are now rarely seen.

3.2.2 Technical

The fisheries industry needs to adopt advanced technologies and modern practices to meet the growing demand and sectoral growth. However, the uptake of innovations such as improved hatchery systems, water-efficient methods like Recirculatory Aquaculture Systems (RAS), and sustainable marine practices including mariculture and GPS-enabled mechanised boats remains limited at the production level.

Aquaculture faces many challenges, notably, combating diseases and epizootics, brood stock improvement and domestication, development of appropriate feeds and feeding mechanisms, hatchery and grows out technology, as well as water-quality management.

Aquaculture should be done with the use of technological processes and equipment's to aid faster and better yields and improve efficiency. There are modern technics for intensive fish farming, which require infrastructure, equipment and investment.

3.2.3 Financial

As fisheries is an unorganised sector, access of credit for the activities continues to be a major constraint for the units. Individual and organizations functioning in this sector have limited assets to pledge for loans. So, people engaged in this sector largely depend up on private money lenders who exploit fishers, fish vendors and farmers. Further, financial institution are yet to give importance to fisheries sector and are less aware about the scope and potential it holds. To address the gaps related to the access of credit for this sector, NFDP platform is bringing on board all the financial institutions and simultaneously creating awareness through Pradhan Mantri Matsya Kisan Samridhi-Sah Yojana (PM-MKSSY).

There are provisions for applying for loan through NFDP, which is integrated with the loan system of banks. Loan proponents can select bank and branches to apply loan through the portal. Such request from fishery entrepreneurs are converted as leads that are shared with Banks. The Primary Fisheries Cooperative Societies (PFCSs) which have sizable number of fishermen members are being supported by Intermediary Agency to prepare bankable business plan which will be posed to financial institutions for credit support through NFDP. To sensitize the functionaries in the financial institutions, provision for training and awareness has been created. Through these interventions the flow of credit to the sector will be enhanced and will reach the socio-economic weaker sections of the fisher communities.

3.2.4 Social

The Indian fisheries sector, while economically significant, is burdened with multiple socioeconomic challenges that disproportionately affect small-scale and artisanal fishing communities. These challenges include poverty, limited access to education, inadequate healthcare services, and the absence of comprehensive social security systems. Environmental pressures such as overfishing, pollution, and climate change further threaten fish stocks, exacerbating livelihood insecurity and income instability.

Fishing communities often live in poor housing conditions, with inadequate sanitation and minimal access to clean drinking water, which adversely impacts their overall health and well-being. The lack of formal social protection—such as unemployment insurance, health coverage, and pension schemes—makes these communities highly vulnerable, especially during periods of low catch, natural calamities, or illness

A critical structural issue is the dominance of intermediaries in the fish marketing system. Middlemen often purchase fish from producers at low prices and resell them at high margins, depriving fishers of fair value and reinforcing power imbalances due to their limited bargaining capacity

Furthermore, most fish farms are situated in rural areas far from markets, and the lack of reliable transportation infrastructure—including poor road connectivity—poses serious logistical challenges. Inadequate extension services, limited awareness, low literacy levels, and high levels of indebtedness compound these difficulties. Social issues such as theft, poaching, and pilferage also affect production and profitability (*Srinivas et al., 2019*).

The primary conflict arises from the competition for fishing grounds and resources between small-scale traditional fishers and large-scale mechanized fishing operations, particularly trawlers. Traditional fishers, who often operate closer to the shore and rely on sustainable practices, face declining catches and economic hardship due to the destructive fishing methods and larger catches of mechanized boats.

3.2.5 Infrastructural

Fish is a highly perishable commodity, with spoilage beginning immediately after harvest. This underscores the critical need for proper storage, preservation, and timely transportation to maintain quality and reduce losses. Despite India's strong standing in the global fisheries trade, the sector faces significant infrastructure challenges, particularly across the domestic value chain. Ports and harbors require urgent modernization, along with the establishment of hygienic fish handling facilities and robust food safety systems at wholesale and retail levels.

A major bottleneck lies in the inadequate cold chain infrastructure, which is essential for sustaining product quality and ensuring market competitiveness. A resilient cold chain system—comprising ice plants, cold storage units, chilling facilities, and temperature-controlled transport such as reefer and insulated vans—is vital to reduce post-harvest losses and support efficient distribution. Strengthening this infrastructure will not only curb spoilage but also improve operational efficiency, enabling India's fisheries sector to consolidate and expand its global market presence.

3.2.6 Environmental

The Indian fishery sector faces multiple environmental challenges including overfishing, habitat destruction, climate change, and pollution. Change in temperature, sea level and ocean current due to Climate change disrupt fish distribution, breeding cycles and overall production which affecting fish catches and the livelihoods of fishing communities. Fisheries are prone to natural calamities such as unprecedented rain and floods, leading to the destruction of fish /aquaculture ponds and systems which leads to loss of fish stocks, destruction of cages, etc.

Other issues are urbanization and anthropogenic activities which leads in destruction of habitat like mangroves, mudflat and coral reef, in breeding depression, pollution and over-exploitation. Pollution from industrial activities, agricultural practices (use of Chemical fertilizer, pesticides etc.) and coastal development threatens aquatic ecosystems and fish habitats. Inland water bodies face threats from pollution, over-exploitation, and habitat degradation, impacting fish biodiversity and livelihoods.

Indiscriminate methods like poisoning, dynamite, and electrocution, along with overfishing and illegal practices, are rapidly depleting fish stocks and undermining the industry's long-term sustainability. Bottom trawling by mechanized boats damages the seabed, impacting fish breeding grounds and overall marine biodiversity.

Further, introduction of exotic species and an invasion threatening the local species is one of the major issues. There is a risk to escape exotic species from aquaculture farm which can significantly impact local biodiversity by competing with native fish for resources, introducing diseases, and altering habitats. This can lead to declines in native fish populations and disruptions in the natural ecosystem. Many exotic species, such as Tilapia (*Oreochromis spp.*) and Common Carp (*Cyprinus carpio*), can outcompete native fish for food and habitat. Their rapid reproduction and adaptability often lead to the decline or displacement of indigenous species, threatening local biodiversity and ecosystem stability.

3.2.7 Gender

According to the 2022 edition of the "Handbook on Fisheries Statistics" published by Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, fisher women account for 44% of the total fisher folk population that engages in various fishing and fisheries-related activities. Fisher women participate in various activities of the fisheries industry, such as fish-drying, net-making, and shrimp-making, among others².

Although women contribute heavily in the sector, their work is often not acknowledged and given due recognition. Fish processing industries engage large number of women who are involved in activities such as cleaning, grading, and peeling where may not be fixed working hours in these units and these women are also burdened with household responsibilities. Further, the wages given to the women may not be regulated and at par with minimum wages. Moreover, such units may not have ideal working conditions, may lack of safe drinking water, health care, and poor sanitation. Women entrepreneurs may face credit issues due to non-availability of collaterals, which is prerequisite for lending agencies to consider.

Keeping in view of the above, Women participation in formal decision-making platforms may be insignificant. Unless, women are not empowered financially and their contribution to the sector recognized, significant development of the sector may not be as envisaged.

Lack of information about the rights and privileges of women, livelihood schemes for women, technical, managerial and leadership skill to initiate sustainable business units, prevents women to access resources, play a major role in decision making and creating a significant impact in the sectoral development. Women specific training and capacity building program with emphases on leadership and decision making, will improve the confidence to take initiatives and leads to gender balance. The PM-MKSSY therefore, intends to grant 10% more to the women led entrepreneurs and also formalize the women involved in the fisheries sector with more incentives in the form of wages and better working conditions.

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²VenkateshSalagrama, Climate Change and Fisheries: Perspectives from Small-scale Fishing Communities in India on Measures to Protect Life and Livelihood, (Chennai: International Collective in Support of Fishworkers, 2012). http://www.fao.org/family-faming/detail/en/c/1025904/

4. POTENTIAL ENVIRONMENT & SOCIAL IMPACTS, RISKS, AND MITIGATION MEASURES

4.1 Introduction

The fishery sector in India is dominated by production from aquaculture by more than 75% and the export is dominated by shrimp products. The aquaculture is dominated from Indian Major Carps, *Pangasius*, *L. vannamei*, Tilapia, Indian major shrimp, cold water fish culture etc. The capture fisheries in India is having substantial marine capture fisheries and fresh water capture fisheries is under PM-MKSSY.

Under PM-MKSSY {Fisheries Sector prosperity Project (World Bank), Fisheries Sector Strengthening (AFD) Project}, the larger share of planned investments is on enabling Performance Grant and other activities, such as, insurance, access to credit, traceability and certification, *etc.* Further, Cooperatives with large aggregation of fishers are being strengthen to participate actively in production and productivity of fish and fishery products and play a major role in the value chains. The Performance Grant in particular supports gender equality and environment friendly technology that promotes reduction in GHG, Waste Management, energy efficiency, supply of safe fish etc.

These are unlikely to have any irreversible and significant adverse impacts and/or pose environmental risks. Project activities likely to influence the fish farming/production practices and supply/value chains emphasize reducing pollution and GHG emission, conserving natural resources, inclusion, promoting gender equality, adaptation, risk management and resilience. The environment risk of the project is low or low-moderate. The ESMF will include adequate mitigation to manage any such potential risks and negligible / less moderate impacts. Detailed list given at 4.3.2 titled "EXCLUSION LIST"

4.2 Potential Environmental and Social (E&S) benefits

Provide advisory services and capacity building support to promote sustainable intensification, improve quality and safety of produce, reduce post harvest losses, increase energy efficiency, strengthen climate resilience, and use of alternative feeds with a relatively lower carbon footprint.

Support shifts in current micro-scale fisheries value chain practices towards approaches that would be aligned and consistent with building back better and with a vision that encompasses, better sector organization, new jobs for women, enhanced productivity for aquaculture, improved resource management for capture fisheries, improved hygiene and safety, improved product management (storage, grading), greater decarbonisation, improved and safer employment conditions for women as well as other imperatives to be defined and prioritized through multi-stakeholder consultations. Ensures responsible use of natural resources, reducing environmental degradation, protects ecosystems and wildlife from harmful activities and encourages eco-friendly practices, such as energy efficiency and carbon reduction.

The potential social benefits projects include the additional investment, employment creation with special focus on women employment, promotion of women and SC/ST owned enterprises etc. in fisheries sector. Promotion of the establishment of Internal Complaints

Committee (ICC) against harassment of women at workplace in fisheries sector enterprises. Beneficiaries of performance grant needs to be established separate wash room and changing cum feeding room for women. Participation of women, ST and SC has been specifically maintained and special / additional benefits are also to be provided to them.

4.3 Potential adverse Environmental and Social impacts and risks

The implementation of any project, without proper assessment of Environment & Social aspects would cause unsustainable development projects with unforeseen consequences on the environment and continued exclusion of vulnerable communities (women, SC or ST). The PM-MKSSY therefore, has the required components that are sensitive to these issues and addresses them emphatically.

The project's possible potential impacts and risks are highlighted at table No. 2 below to guide E&S impact assessment of activities (sub projects).

4.3.1 Risk Assessment:

The project activities will largely benefit the community and support build long-term sustainability of the fisheries sector. Project financed activities will take place within the existing/established footprint of aquaculture operations.

The risk assessment shall be undertaken in two steps. Firstly, the key issues associated with the project are categorized as beneficial or adverse. Secondly, potential impacts shall be categorized as Very High, High, Moderate and Low based on consideration of the parameters such as reversibility, likelihood, duration of the potential impact, legal standards and established professional criteria etc. The magnitude of the potential impacts of PM-MKSSY shall be identified according to the categories outlined in table given below.

Aspects for Determining the Magnitude of Impacts

Aspects	High	Average	Low	Negligible/Nil
Duration of	Long term (more	Medium Term	1 to 2 years or	Temporary with
potential	than 20 years)	Lifespan of the	Less than the	no detectable
impact		Program (5 to	lifespan of the	potential impact
		10 years)	program	
Spatial	Regional – much	Beyond	Within	Specific location
extent of the	beyond project	immediate	program	within program
potential	boundaries	Program	boundary	component or
impact		components,		site boundaries
		site		with no
		boundaries or		detectable
		local area		potential impact
Reversibility	Potential impact	Potential	Baseline	Baseline
of potential	(including positive	impact	returns	remains
impacts	impact) is	requires a year	Naturally or	constant
	effectively	or so with	with limited	
	permanent,	some	intervention	
	requiring	interventions	within a few	
	considerable	to return to	months	
		baseline		

	intervention to			
	return to baseline			
Legal	Against	Complies with	Meets	Not applicable
standards	national/approved	limits given in	minimum	
and	standards and or	national	national	
established	international	standards but	standard limits	
professional	guidelines/obligati	not confirming	or international	
criteria	ons	to international	guidelines	
		lender		
		guidelines in		
		one or more		
		parameters		
Likelihood	Commonly occurs	Usually seen	Occurs under	Unlikely to occur
of potential	under typical	occurring abnormal,		
impacts	operating or	under most	exceptional or	
occurring	construction	situations	emergency	
	conditions	(Likely)	conditions	
	(Certain)		(Occasional)	

There are few potential adverse risks identified, such as, possible exclusion of vulnerable communities/individuals in accessing credit and other services, low women participation, generation of additional wastes at farm level and processing units and unsolicited use of chemicals on the production side. These risks, mostly from components 1 and 2, are unlikely to have any significant and/or irreversible impacts, and application of the relevant environment and social standards (ESS-3, ESS-7, and ESS-10) would help avoiding and mitigating these risks.

The overall risk to achieving the Project Development Objectives (PDO) is rated as low or low-moderate, there will be no sub projects having High impact / very high impact.

The ESMF has specific provisions for screening the location of all eligible sub-projects to exclude those located in legally protected and internationally recognized areas of high biodiversity value and potential critical habitats; and will include specific measures to avoid or minimize negative impacts on modified or natural habitats. The project will strategically use the performance grant agreements to specify relevant mitigation actions for addressing the risks.

The assessment of risk and identification of magnitude of impacts takes account of any incorporated mitigation measures adopted due to any anticipated potential impact of Project activities. It will be primarily dependent on the extent and duration of change in water quality, wastewater discharge, occupational risks and hazards, environmental hazards and risks, food safety and public health hazards and social risk. These risks may impact the number of people or size of the resource affected and their sensitivity to the change. Risk can lead to impacts can be both negative and positive (beneficial), and the methodology defined below will be applied to define both beneficial and adverse potential impacts.

The criteria for determining significance are generally specific for each environmental and social aspect but generally the magnitude of each potential impact is defined along with the

sensitivity of the receptor. Generic criteria for defining magnitude and sensitivity used for the Project are summarized below:

The guidelines for promoting good practices on Occupational Health and Safety and management of waste both solid and liquid leading to pollution is prepared and given at **Annexure-3**

4.3.2 Exclusion List:

There is a list of negative activities which will not be eligible for availing performance grant which are as follows:

- a) Any production, processing or marketing activities that are situated in protected areas (national parks, wildlife sanctuaries, coral reefs, mangroves, turtle nesting sites, horseshoe crab nesting sites) or based on any endangered species of fish or other fauna or flora,
- b) Any production or processing activities that use wildlife products,
- c) Any production process that uses inputs or products illegally obtained from protected areas.
- d) Any activity that does not include acceptable pollution control measures/norms.
- e) Any production, processing, or marketing activities in violation of the seasonal ban on fishing or any such prohibited activities imposed by government.
- f) Any activities that utilise the exotic fishes banned by government.
- g) Use of any banned antibiotics and pharmacologically active substances in aquaculture
- h) Any other activities as notified by DoF, Gol from time to time.

4.3.3 Environment and Social Standards:

The Environmental and Social Standards (ESSs) set out the requirements for DoF (for activities funded under World Bank project component) relating to the identification and assessment of environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. The ten Environmental and Social Standards establish the standards that the project will meet through the project life cycle. A screening checklist for the Environment and Social Assessment is given at **Annexure-4.**

At project appraisal, the following Environment and Social Standards (ESSs) are considered relevant:

Table 1: Relevant Environmental and Social Standards (ESSs):

ESS	Relevance
ESS ESS1: Assessment and Management of Environmental and Social Risks and Impacts	Yes Aquaculture activities may have environmental impact including the threats to biodiversity and other issues due to misuse of antibiotics and pharmacologically active substance. Besides, mismanagement of aquaculture practices may lead to occupational health
	and safety concerns through exposure to pharmacological chemicals, and waterborne diseases; and community health and safety hazards.

ESS2: Labor and Working	Yes			
Conditions	There is no construction work financed under the			
	project. However, working condition in the aquaculture			
	farm or other fisheries sector may not be up to the			
	mark, therefore ESS2 will apply (Risks of gender			
	based violence and sexual harassment and abuse in			
	work places). The performance grant emphatically			
ESS3: Resource Efficiency and	Yes			
Pollution Prevention	The risks and impacts related to the release of			
Management	pollutants, waste generation and management			
	including wastes, impact on community will be			
	triggered			
ESS4: Community Health and	Yes			
Safety	The quality and safety of the fish product are important			
	for the community Health and Safety. The component			
	provides for appropriate guidance and aims at supply			
5005 Last Assistan	of safe fish to the consumer.			
ESS5: Land Acquisition,	No			
Restrictions on Land Use and	Sub-Scheme has not financed for any land acquisition			
Involuntary Resettlement ESS6. Biodiversity	No.			
Conservation and Sustainable	Culture of banned species and import of exotic			
Management of Living Natural	invasive aquatic species is not supported.			
Resources	invasive aquatio species is not supported.			
ESS7: Indigenous Peoples	Yes			
	Risk of less involvement of vulnerable people from			
	benefits of Sub-scheme. However, Sub-scheme has			
	provision for SC/ST people by providing 10%more			
	benefits.			
ESS8: Cultural Heritage	No			
	No project finance in around cultural heritage sites			
ESS9:Financial Intermediaries	No			
	No financial intermediaries (FI) are involved nor they			
	are supported in the project			
ESS10 Stakeholder	Yes			
Engagement and Information	As engaging agency under the project, the vulnerable			
Disclosure	groups are also targeted for awareness about the			
	benefits available under the project through massive			
	outreach activities.			

Table 2: Details of sub-project and relevant ESS

Table 2: Details of sub-project and relevant ESS							
Component /	Details of activity	Applicable	When to apply	Who is	Risk	Mitigation measures	Monitorin
details of	and risks	ESS (1-10)	the screening	responsibl	rating	_	g and
activities		standard	checklist	e	based on		Review
					the		
					findings		
					of the		
					screenin		
					g		
Formalization of	Facilitating the	ESS10	SEP disclosure	MSME/Indiv	Low	Mapping of	PMU
fisheries sector	_	ESS 1	/ project	idual	LOW	stakeholders and	1 1010
and facilitating		ESS 2	proposal	Entreprene			
access of	in NFDP.	ESS 7	proposar	ur fisheries		implementing the	
	III NEDE.	E33 <i>I</i>				process of	
fisheries				and		stakeholder	
microenterprises	_			Aquaculture		engagement as	
to Government				sector		described in the	
of India						SEP.	
programs for						 Awareness on 	
working capital						Financial	
financing	paid as per the					management Out	
	eligible criteria.					reach and	
						Awareness	
						building	
						beneficiaries	
						 Enhancing 	
						awareness on	
						access institutional	
						facilities	
						 Projects submitted 	
						by micro/small	
						entrepreneur	
						entrepreneur	

Facilitating adoption of aquaculture insurance.	One time incentive upto 40% of insurance premium amount. Risk: issues during claim settlement.	ESS10	Proposal	Applicant / insurance provider	Low	Operational guidelines for project development. Project form claim settlement which included grievance settlement Forms. Provide 10% additional incentives to women and vulnerable groups.	NFDB PMU
Supporting microenterprises to improve fisheries sector value chains efficiencies	Grants based on	ESS 1 ESS 2, ESS 3 ESS 4 ESS 7 ESS 10	Screening	Applicant	Low	NFDP application for performance grants to include detailed E&S requirements/conditions for reimbursement of grants Approval to be given by committee. VMC to verify on ground the implementation of E&S requirement VMC to report to DoF on ground validation of the required E&S activities. Integrated Finance Division (IFD) has to	V&MC / PMU

						approve final payment for project.	
Adoption and expansion of fish and fishery product safety and quality assurance systems	Support through – Performance Grants based on quality and safety improvement for fish and fishery products	ESS 1 ESS 2, ESS 3 ESS 4 ESS 7 ESS 10	Screening	Applicant	Low	NFDP application for performance grants to include detailed E&S requirements/conditions for reimbursement of grants (annexure 3). Approval to be given by committee. VMC to verify on ground the implementation of E&S requirements VMC to report to DOF on ground validation of the required E&S activities	V&MC / PMU
Project Management, Monitoring and Reporting	Monitoring of environmental and social risk during the implementation	ESS 10	Screening	VMC/PMU	Low	Environmental, Social and Gender specialist engaged in the PMU to look over the prose and Cause of environment and social issues.	DoF

5. Public consultation & disclosure

The primary and crucial importance on involving primary and secondary stakeholders to promote the stakeholder engagement through the life of the program. In order to gather local knowledge for baseline conditions, understand perceptions of the community regarding impact significance, and propose meaningful mitigation measures, participation of stakeholders is an integral part of the Program. The project level stakeholder engagement plan is prepared. The project is required to comply, monitor and report on its implementation.

5.1 Stakeholder identification:

The process to identify stakeholders includes the following, as appropriate:

- First, at the beginning of the environmental and social assessment for the project, the Borrower develops a list of project-affected and other interested parties, paying special attention to identifying disadvantaged or vulnerable groups. Information from any preliminary social impact assessment can inform this list.
- Second, other interested parties are identified by listing relevant interest groups, and considering historical issues, social relations, relationships between local communities and the project implementer, and any other relevant factors related to the sector and location that help anticipate local and external responses to the project.
- Third, the discussions with representatives of the stakeholders identified and with
 persons knowledgeable about the local, country, and sector contexts. In some
 circumstances, media and social media searches may help to verify the list and
 identify any other project-affected or interested parties and to contact them.
 Specific attention should be paid to identifying any disadvantaged or vulnerable
 groups.

A separate Stakeholders Engagement Plan (SEP) has been prepared for the PM-MKSSY which is the main guiding document for the PMU and for other implementing partners. The following sections are summarizing the ESMF requirements for stakeholder's consultations and disclosures specifically for preparing ESMP.

Stakeholders are people, groups, or institutions, which are likely to be impacted (either negatively or positively) by the proposed project interventions or those who can influence the outcome of the project. A stakeholders mapping will conduct prior to conducting consultation meeting held virtually using web-based platform. The primary stakeholders include all directly affected persons such as fishermen community and fisheries-dependent households and indirectly affected persons and community's/host institutions. To contribute towards socioeconomic development of fishing communities, the project is designed with a holistic approach that embraces the broader rural fishermen community, comprising both fishing and non-fishing households. The approach acknowledges that the livelihood status of fishing households is inextricably linked to the wider economy. The secondary stakeholders are NGOs, Community-Based Organizations, community development projects, governance agencies, development partners, media, community leaders, civil society, traders, construction workers and consultants in the project area.

5.2 Stakeholder engagement plan

The various tools identified in the SEP used for consultations including household level interviews, participatory rural appraisal, stakeholder consultation meetings, issue specific consultation meetings, open meetings, and workshops at both local and national levels. Local level workshops will be organized at some selected Sub-district/districts to ensure a comprehensive coverage of the entire project area and provide them specific list of interventions.

Consultations with the key stakeholders is need to be carried out throughout the program life. These will include consultations and liaison with communities and other stakeholders during the project implementation and also extensive consultations with the grass-root as well as institutional stakeholders. A detailed Stakeholder Engagement Plan is placed **at Annexure-5**.

5.3 Stakeholder consultation information disclosure

The mechanism of information dissemination will be simple and be accessible to all. Two of the important means that have been followed until now include briefing material and organization of community consultation sessions. The briefing material (all to be prepared in local language can be in the form of (a) brochures (including project information, details of entitlements. (b) posters to be displayed at prominent locations and (c) leaflets that can be distributed in the project areas. Consultation meetings should also be organized at regular intervals by the project to acquaint the communities, target group beneficiaries and affected persons of the following:

- Timeline and progress of the project by components;
- Information on beneficiary participation;
- Information of participation of small ethnic communities;

Disclosure of information will enhance governance and accountability specifically with respect to strengthening of monitoring indicators to help the World Bank monitor compliance with the agreements and assess impact on outcomes.

5.4 Meaningful consultation

As required for informed consultation, proponent will provide communities and affected persons with all activity-related information, including that on potential adverse impacts in a language familiar to and understandable by the target communities. To facilitate consultation, the implementing agency will,

- Prepare a timetable for dialogues during activity selection, design and implementation processes, and consult them in manners so that they can express their views and preferences freely.
- In addition to the communities in general, consult community organizations, community elders/leaders and others with adequate gender and generational representation; and civil society organizations like NGOs and groups knowledgeable of issues related communities living within project area.
- Consultation will include the activity objectives and scope; the likely key adverse impacts on (and benefits for) communities; communities' own perception of the impacts and feedback; and a preliminary assessment of economic opportunities which the implementing agency could promote – in addition to mitigation of the adverse impacts.
- Consultation will in general concentrate on targeting and the adverse impacts perceived by the communities and the probable (and feasible) mitigation measures, as well as exploring additional development activities that could be promoted under the project.
- The implementing agency will keep Minutes of these consultation meetings in the activity files and make them available for inspection by World Bank, respective government officials and other interested groups and persons.
- If the presence of small ethnic communities is identified in the sub-project area, based on the baseline data appropriate social tool will be adopted using informed consultation. This will serve as the basis for sub-project implementation and monitoring.

6. GENDER ACTION PLAN

6.1 Introduction:

The objective of this gender analysis and gender mainstreaming action plan is to provide a framework for the project implementation team to ensure women and men will be equally involved in the project and receive equitable social and economic benefits. Mainstreaming gender equity and empowerment is already a focus area in the project. In the sub projects, activities related to livelihood restoration will address women's needs. A Gender Action Plan is a part of Environment and Social Management Framework (ESMF), which will help in analysing gender issues during the preparation stage of sub project and design interventions and also during implementation. At the sub project level, gender analysis will be part of the social assessment and the analysis will be based on findings from gender specific queries during primary data collection process and available secondary data.

Based on the analysis, the specific interventions will be designed and if required gender action plan will be prepared. The overall monitoring framework of the project will include sex disaggregated indicator and gender relevant indicator.

PM-MKSSY emphasizes inclusive community development through a number of integrated interventions, especially taking into considerable the vulnerable communities – sustaining by traditional means of utilizing natural resources including coastal and marine resources. In order to make the project more inclusive and participatory, it is required that women associate themselves in different activities which they find feasible. This approach of inclusion and equity, specifically involvement and engagement of women will be helpful to attain social justice and reduce marginalization of women and empower them to avail maximum benefit from the project. Thus, incorporating gender and other social issues in the development projects helps to improve project performance and facilitate achievement of the Bank's goal of poverty reduction. A gender approach in the overall project framework takes care of key gender issues and brings in parity in association and participation of women and minimises gap between male and female at the project implementation level. A gender approach is also a way to comprehend the impacts on the women beneficiaries and ensures equality in project induced wellbeing.

During the social assessment, consultations will be organised with different stakeholders to understand the gender issues and possible measures that can help women in ensuring their participation in the overall process. The assessment helped to identify certain key issues pertaining to women and their involvement in different fisheries related activities as well as other activities, which will directly or indirectly affect their lives.

6.2 Policy Provision:

Directions in Constitution

The constitution of India provides provisions to secure equality in general and gender equality in particular. Various articles in the Constitution safeguard women's rights by putting them at par with men socially, politically and economically. The Preamble, the Fundamental Rights, Directive Principles of State Policies (DPSPs) and other constitutional provisions provide several general and special safeguards to secure women's human rights. The Preamble to the Constitution of India assures justice, social, economic and political; equality of status and opportunity and dignity to the individual. Thus, it treats both men and women equal.

The policy of women empowerment is well entrenched in the Fundamental Rights enshrined in our Constitution. For instance:

- 1. Article 14 ensures to women the right to equality;
- 2. Article 15(1) specifically prohibits discrimination on the basis of sex;
- 3. Article 15(3) empowers the State to take affirmative actions in favour of women;
- 4. Article 16 provides for equality of opportunity for all citizens in matters relating to employment or appointment to any office. These rights being fundamental rights are justifiable in court and the Government is obliged to follow the same. Directive principles of State Policy also contains important provisions regarding women empowerment, and it is the duty of the government to apply these principles while making laws or formulating any policy. Though these are not justifiable in the Court but these are essential for governance nonetheless. Some of them are:
 - 1. Article 39 (a) provides that the State to direct its policy towards securing for men and women equally the right to an adequate means of livelihood.
 - 2. Article 39 (d) mandates equal pay for equal work for both men and women.
 - 3. Article 42 provides that the State to make provision for securing just and humane conditions of work and for maternity relief.

Fundamental Duties

Fundamental duties are enshrined in Part IV-A of the Constitution and are positive duties for the people of India to follow. It also contains a duty related to women's rights. Article 51 (A) (e) expects from the citizen of the country to promote harmony and the spirit of common brotherhood amongst all the people of India and to renounce practices derogatory to the dignity of women.

Other Constitutional Provisions

Through 73rd and 74th Constitutional Amendment of 1993, a very important political right has been given to women which is a landmark in the direction of women empowerment in India. With this amendment women were given 33.33 percent reservation in seats at different levels of elections in local governance i.e. at Panchayat, Block and Municipality elections. Thus, it can be seen that these Constitutional provisions are very empowering for women and the State is duty bound to apply these principles in taking policy decisions as well as in enacting laws.

Specific Laws for Women

Some specific laws, which were enacted by the Parliament in order to fulfil Constitutional obligation of women empowerment are;

1. The Equal Remuneration Act, 1976.

2. The Sexual Harassment of Women at Work Place (Prevention, Protection and) Act, 2013.

National Policy for Woman

In the year 2001, the Government of India launched a National Policy for Empowerment of Women which was revised in the year 2016. The National Policy for Women, 2016 (draft) having the vision of "A society in which, women attain their full potential and are able to participate as equal partners in all spheres of life and influence the process of social change". The objectives of the policy are

- 1. Creating a conducive socio-cultural, economic and political environment to enable women enjoy de jure and de facto fundamental rights and realize their full potential;
- 2. Mainstreaming gender in all-round development processes/programmes/projects/actions;
- 3. A holistic and life-cycle approach to women's health for appropriate, affordable and quality health care;
- 4. Improving and incentivizing access of women/ girls to universal and quality education;
- 5. Increasing and incentivizing work force participation of women in the economy;
- 6. Equal participation in the social, political and economic spheres including the institutions of governance and decision making;
- 7. Transforming discriminatory societal attitudes, mind-sets with community involvement and engagement of men and boys;
- 8. Developing a gender sensitive legal-judicial system;
- 9. Elimination of all forms of violence against women through strengthening of policies, legislations, programmes, institutions and community engagement;
- 10. Development and empowerment of women belonging to the vulnerable and marginalized groups;
- 11. Building and strengthening stakeholder participation and partnerships for women empowerment;
- 12. Strengthen monitoring, evaluation, audit and data systems to bridge gender gaps.

World Bank's Approach

The World Bank's approach to promoting gender equality makes all staff responsible for ensuring that the Bank's work is responsive to the differing needs, constraints and interests of males and females in client countries. Gender equality is now a core element of the Bank's strategy to reduce poverty. There is a clear understanding that until women and men has equal capacities, opportunities and voice, the ambitious poverty-reduction agenda set out in the Sustainable Development Goals will be difficult to achieve.

6.3 Issues of Significance

Mainstreaming gender equity and empowerment is already a focus area in the scheme. In the sub projects, activities related to fisheries and other diversification of livelihood, improvement of basic services and sustainable and safe fisheries will address women's needs. A Gender Development Framework has is a part of ESMF which will help analyse gender issues during the Detailed Project Report preparation stage of sub project.

6.3.1 Significant Gender Issues

The following gender issues encountered generally in fisheries sector and applicable to most of the interventions.

- I. Fisheries sector in India, core activities are men dominated and women are engaged as retail marketing, packaging, processing, seaweed cultivation etc. Now a days women led entrepreneurs have been completely engaged in fisheries core activities. Still a lots of works need to be carried out under different schemes and programs of Government to bring more women lead entrepreneurs into fisheries core activities. This project encouraging the same by facilitating different activities.
- II. Women have negligible role in decision-making process of the community or family resources or disaster management or other fishery related issues.
- III. Women earn less wage for the same duration and quantity of work, especially in informal / private sector.
- IV. Due to the insufficient rest time, rest room, hygienic work condition, safety materials, women in fisheries sector are more vulnerable to occupational hazards such as back pain, joint pain, muscle strain, rashes, infections, dryness of body, chilling injuries etc.
- V. Active participation of women is limited in community institutions due to customs or traditions. Large number of women do not participate or remain passive in meetings.
- VI. Limited access to information, technology, capital, and trainings for adopting alternative livelihood options.
- VII. Drudgery of women in fishery related / aqua cultural activities due to lack of required equipment;
- VIII. School dropouts and child marriage are common in fisheries communities leads to sexual harassment, exploitation, alcoholism etc.
 - IX. Limited options of occupation for the women of fisheries community. Absence of diversity of work other than helping with the catch at the landing sites or street vending affects the income of household especially for small traditional fishing community during lean period.
 - X. As the fisheries sector is unorganised, the livelihood and income for women working in fisheries sector are seasonal.

6.4 Gender Action Plan through the Project Cycle

Three major tools are used to identify and deal with gender issues in the project cycle: gender analysis, project design, and policy dialogue. The screening to identify roles and responsibilities for women beneficiaries to adopt a targeted approach. Listed below are the key action points:

a) General Check list

- 1. Opportunities for women in fisheries sector
- 2. Programs for awareness, skill development, resource accessibility to women.
- 3. Minimum wages to workers especially women workers
- 4. Equal wage for equal work for women and men
- 5. Women specific facilities in workplace like separate washroom, dress changing cum feeding room for women workers etc.
- 6. Internal Complaints Committee in workplace to comply with POSH Act at PMU and Implementing partner agencies

6.5 Key Activities in Project Cycle

Involvement of women groups in the identification of impacts and opportunities through project activities shall form the basis for preparation of gender sensitive project activities. The procedure to be followed and process and outcome are presented in the following matrix.

Table 3: Measures to improve the Involvement of Women during Project

implementation

<u>implementatio</u>	n		
Project	Key Activities	Responsibility	Means of
Planning Stage	 Develop women focused communication material, training programme for enhanced women participation in the project. Ensure the development of appropriate systems to assess the participation women in different components of the project Plan special meetings for women to create awareness about the project, its components, additional benefits to women etc. Plan application mobilisation camps for women. Plan to sensitize stakeholders on gender concerns/issues; Prepare project component wise activity plan where 		Copies of materials developed Participants list, Number of trainings conducted, topics covered in training, report of training, name of resource persons associated, list of training locations, news items of trainings/ camps, component wise activity planner
	women can be engaged in		
1 1	different project activities.	\/\documents	B.4 '. '
Implementatio n Stage		VMC, Gender Specialist, Social	Monitoring cum evaluation reports,
	 Monitor the engagement of women in different project activities and develop and 	Specialist, ,	News items, success stories,
	implement additional awareness programmes		Field visits
	required		Payroll, vouchers,
	 Monitor safety and security measures for women in work place 		bank statements
	 Monitor women specific provisions and facilities 		

Project Stages	Key Activities	Responsibility	Means of verification
	created in the project sites and camps. • Supervising adherence to wage payment norms • Documentation of success stories		
Post- Implementatio n Stage			evaluation reports,

6.6 Monitoring of Gender Action Plan

The indicators, frequency and agency recommended for monitoring are presented in *Table 8.2*.

Table 4: Monitoring Indicators for Gender Action Plan

Acnosts	Monitoring Indicators	Frequency Monitoring Means		Means of
Aspects		rrequency	_	
	(Process and Outcome)		Responsibility	
Economic	 No. of women beneficiaries in different project 	 Half yearly Monitoring 	Third party Evaluation	Progress reports,
	' '		along with	Study
	proportion to total	Review	PMU	reports,
	allocation;	(MTR)		News
	 Engagement of women in 			items,
	different wage / non-wage			success
	activities and proportional			stories,
	days of engagement in			audit report, balance
	comparison to their male			sheet
	counterpart;Growth in income of women			Silect
	due to such engagements;			
	 No. of women having 			
	additional / new market			
	oriented employable skills			
	for self-engagement;			
	 No. of women accessed 			
	different govt. schemes /			
	provisions including			
	beneficial enrolment in			
	fisheries sector			
	• Improvement in asset			
	holding of women			
	(occupational and			
Social	household assets). • Role of women in decision	• Half yearly	Third party	Progress
Joolai	making at household level,		Evaluation	reports,
	workplace level,	wiormorning		Study
			PMU	reports,

Aspects	Monitoring Indicators	Frequency	Monitoring	Means of
	(Process and Outcome)		Responsibility	verification
	• Board membership in PRI,	Mid Term		News
	Cooperatives, management	Review		items,
	positions in other	(MTR)		success
	associations and	 Final Impact 		stories,
	institutions	Assessment		
	 Recognitions and awards to 			
	women for the			
	achievements for effective			
	participation in project			
	activities			

6.7 Implementation Arrangements of Gender Action Plan

The preparation, implementation and monitoring of Gender Action Plan (GAP) is the responsibility of the PMU of PM-MKSSY and DoF. The Gender specialist, Social Development Specialist, and Knowledge coordinator, at the PMU level will facilitate and supervise this process of preparation and implementation of Action Plan. All efforts will be made to coordinate and work with associated line departments and other department, more specifically the Women and Child Development Department, State Livelihood Mission, Panchayati Raj and Rural Development department to help dovetailing with their development programs for the socio-economic development of women.

7. INDEGENOUS PEOPLES PLANNING FRAMEWORK

7.1 Introduction

Indigenous Peoples are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced. Indigenous Peoples often lack formal recognition over their lands, territories and natural resources, are often last to receive public investments in basic services and infrastructure and face multiple barriers to participate fully in the formal economy, enjoy access to justice, and participate in political processes and decision making.

Indigenous Peoples in India comprise an estimated population of 104 million or 8.6% of the national population. In India, there are 705 ethnic groups officially recognized as "Scheduled Tribes"(ST). In central India, the Scheduled Tribes (ST) are usually referred to as Adivasis, which literally means Indigenous Peoples. India has several laws and constitutional provisions, such as the Fifth Schedule for Central India and the Sixth List for certain areas of north eastern India that recognize the rights of Indigenous Peoples to land and self-government.

The Indigenous People are often vulnerable and endure specific disadvantages in terms of social indicators of quality of life, economic status and usually as subject of social exclusion.

There were 218 tribal districts (2011 census), 75 communities of ST located in 18 States and the Union Territory of Andaman and Nicobar Islands have been categorized as Particularly Vulnerable Tribal Groups (PVTGs) (2011 census). These PVTGs continue to face vulnerability in social, economic and educational fields. The people of this section who are relatively isolated and economically backward and are prone to exploitation and their habitats are backward with regards to amenities like housing, communication, drinking water, irrigation, health, education, agriculture and marketing. State and Union Territory wise details of Scheduled Tribes is given at **Annexure-6.**

The Constitution of India provides a comprehensive framework for the socio-economic development of Scheduled Tribes and for preventing their exploitation by other groups of the society. A detailed and comprehensive review of the tribal problems was taken on the eve of the Fifth Five Year Plan and the Tribal Sub-Plan strategy took note of the fact that an integrated approach to the tribal problems was necessary in terms of their geographic and demographic concentration. The tribal areas in the country were classified under three broad categories, i.e., (1) category 1: States and Union Territories having a majority Scheduled Tribes population, (2) Category 2: States and Union Territories having substantial tribal population but majority tribal population in particular administrative units, such as block and tehsils, and (3) Category 3: States and Union Territories having dispersed tribal population.

Under the Disclosure Policy, this Indigenous Peoples Planning Framework will be discussed with and disclosed to the key stakeholders. This framework encompasses suggestions and recommendations received from different sections during its preparation. Further, this framework shall be disclosed to the public on the project web-site.

7.2 Process

PM-MKSSY provides special consideration to Tribal people. For the inclusion of vulnerable, additional incentives are provide to Scheduled Tribes (ST) and Scheduled Castes (SC). 10% additional incentives for the units owned by beneficiaries belonging to these communities.

7.3 Key activities in project cycle

Involvement of Tribal people in the identification of opportunities through project activities shall form the basis for preparation of tribal sensitive project activities. The procedure to be followed and process as well as outcome are presented in the following matrix.

Table 5: Measures to improve the Involvement of Tribals during Project implementation

Project	Key Activities	Responsibility	Means of
Stages	They receive the	пооронованту	verification
Stage	 Develop tribal focused communication material, training programme for enhanced participation of tribal people in the project. Develop appropriate systems to assess the participation tribal people in different component of the project Plan special meeting in tribal areas to create awareness about the project, its components and additional benefits to women. Plan application mobilisation camps for tribal people. Plan to sensitize stakeholders on tribal concerns/issues; Prepare project component wise activity plan where tribal can be engaged in different project activities. 	DoF/PMU	Copies of materials developed and provided to such groups. During the training & capacity building and awareness programme a special focus given to vulnerable groups. Number of trainings conducted, topics covered in training, report of training, name of resource persons associated, list of training locations, news items of trainings/ camps, component wise activity planner
Implementatio n Stage	 Tribal people centric communications, training etc. Monitor the engagement of tribal in different project activities and develop and implement additional 	VMC, Social Development Specialist, , PMU, DoF	Monitoring cum evaluation reports, News items, success stories, Field visit

Project Stages	Key Activities	Responsibility	Means of verification
	awareness programmes required • Supervising adherence to wage payment norms • Documentation of success stories		Payrolls, vouchers, bank statements
Post- Implementatio n Stage	 Evaluation of project achievements and benefits accessed by tribal people. 	VMC, Social Development Specialist, PMU & DoF	Evaluation Reports,

7.4 Monitoring Tribal Action Plan

The indicators, frequency and agency recommended for monitoring are presented in *Table 8.2*.

Table 6: Monitoring Indicators for Tribal Action Plan

A - 11 - 14 -	Manifering India			Massas
Aspects	Monitoring Indicators	Frequency	Monitoring	Means of
	(Process and Outcome)		Responsibility	
Economic	 Numbers of tribal 	 Half yearly 		Progress
	beneficiaries in different	Monitoring	Evaluation	reports,
	project components and	Mid Term	•	Study
	their proportion to total	Review	PMU	reports,
	allocation;	(MTR)		News
	 Engagement of tribal 	 Final Impact 		items,
	people in different wage /	Assessment		success
	non-wage activities and			stories,
	proportional days of			audit report,
	engagement in comparison			balance
	to their general category			sheet
	counterpart;			
	 Growth in income of tribal 			
	people due to such			
	engagements;			
	No. of tribal people having			
	additional / new market			
	oriented employable skills			
	for self-engagement;			
	No. of tribals accessed			
	different govt. schemes /			
	provisions including			
	beneficial enrolment in			
	fisheries sector			
	 Under the project, special 			
	attention given to the tribal			
	people and provision for			
	additional benefits have			
	been already kept.			

Aspects	Monitoring Indicators	Frequency	Monitoring	Means of
	(Process and Outcome)		Responsibility	verification
Social	 Role of tribal people in decision making at household level, workplace level, Board membership in PRI, Cooperatives, management positions in other associations and institutions Recognitions and awards to tribal people for the achievements for effective participation in project activities 	Mid Term Review (MTR)	Monitor along with PMU	Progress reports, Study reports, News items, success stories,

7.5 Entitlement

This project does not have provision for acquisition of land and hence, no R&R is required.

7.6 Tribal Peoples Plans (TPP)

The tribal community is a part of the project and the entrepreneur from this community stand to benefit an additional 10% of the performance grant as well as for purchase of insurance. This is mainly to encourage them to be part of the project along with other communities. Therefore, there is no need for separate TPP.

7.7 Implementation Arrangements

PMU monitor the inclusion of ST people in sub projects during the project implementation period. A Social Development Specialist at PMU, will ensure full compliance.

7.8 Monitoring system of Tribal People of India

The project would largely keep in extending the benefits of the scheme for improvement of indigenous people of India wherever applicable. The proposals which may have adverse impact on the indigenous tribal people of India would not be considered for support. By adopting appropriate monitoring mechanism at ground level through agencies like V&MC and PMU team, it would be ensured that Indigenous peoples are benefited under the program and are not impacted by any permitted project.

The specific frequency of evaluations will be determined based on the program's needs and available resources to provide timely feedback and facilitate adaptive management throughout the program's duration. Consortium of Fisheries Universities and Colleges (COU) will be engaged as independent field level Verification and Monitoring Consultants (V&MC) spanning across all states and Union Territories in India. Monitoring and evaluation will be done at two levels viz., overall Project level monitoring of ESMF implementation and sub-project level monitoring of ESMP implementation. This, essentially, involves cross-checking the implementation of the

ESMF and sub-project ESMPs as well as monitoring the environmental quality through suitable indicators in the specific sub-project locations during operation stages.

V&MC will do field level verification of credentials and information's provided by beneficiary in PGA and Performance Grant Claim application.

8. IMPLEMENTATION ARRANGEMENTS

The PM-MKSSY is a Central Sector (CS) Scheme of PMMSY. The States are not expected to commit any budget for this project, and all expenditure to be borne by DoF, GoI and National Fisheries Development Board (NFDB). Specific implementation responsibilities including financing, monitoring, reporting and evaluation is with DoF. Given the need for focused attention for implementation of this project and to ensure internal capacity building for project management services, DoF set up a Project Management Unit (PMU) to coordinate project activities on a full-time basis and directly execute the components. The subcomponent 1B for adoption of aquaculture insurance to be implemented by NFDB.

To guide the PMU and approve annual action plans, the Central Apex Committee (CAC) constituted in DoF for PM-MKSY. The CAC has the role to oversee the overall implementation of the Sub-scheme including policy guidance and supervision till the end of the project.

8.1 Project Implementation Arrangement

8.1.1 Process for registration on NFDP Portal:

- Fisheries sector in India is largely unorganised. To Formalise the fisheries sector and bring digitalisation, National Fisheries Digital Platform (NFDP) has been developed and operational. Also 25.5 lakh stakeholders so far have registered on the same.
- To avail the benefits of the sub scheme, the stakeholders need to register on NFDP as individual or organization through self-registration or assisted registration through CSC. Information regarding the registration process has given at NFDP Portal as well as in Operational Guidelines. The link of NFDP and Operational Guidelines are:
 - NFDP : https://nfdp.dof.gov.in/nfdp/#/
 - PM-MKSSY Operational Guidelines: https://pmmkssy.dof.gov.in/pmmkssy/#/guidelines
- CSCs will act as information dissemination hubs, distributing pamphlets, booklets, and posters about government schemes and programs relevant to users.
- Upon registration the applicant will receive the provisional certificate based on which the applicant can submit the application on the portal.

(i) Verification process:

The user data will be sent to the respective State/UT nodal officer of Fisheries Department for verification and validation. State/UT (Union Territory) officials receive login credentials to access the registration details and verify their authenticity. Verified records will be presented to the Director of the State/UT, to final recommending for approval of the registration on the portal.

(ii) Approval Process:

Director of the State/UT will approve the registration based on verification report. After Director approval, the validated information is updated in the system and reflected on the beneficiary list. The registration which required rectification, applications are sent back to the user or State Department for corrections.

After, successful approval of the beneficiary registration, the beneficiary can avail the benefits under different module under PM-MKSSY on NFDP Portal.

8.1.2 Process for facilitating access of fisheries sector microenterprises to the Gol Programs for Working Capital Financing

- Applicant show interest on NFDP portal for loan from the desired bank
- The loan lead is sent to the concerned bank
- The Bank as per the procedure approves/reject this loan application
- The loan approved by the bank is updated on the portal by the Bank and after receiving the first disbursement of the loan, the applicant needs to submit a request for the success fee.
- Approved loan application will be eligible for One Time Incentive and amount
 of incentive should be credited to the borrower's bank account.

8.1.3 Strengthening of Fisheries Cooperative to Function as FFPOs:

- All the fisheries cooperatives need to register on the NFDP for availing the Grant under PM-MKSSY.
- The Intermediary Agencies like NCDC, NAFED, NERAMC and SFAC will apply on behalf of registered and eligible Primary Fisheries Cooperative Society (PFCS).
- Selection Committee (SC) headed by CE,NFDB will scrutinize and shortlist the Cooperative Grant application received online through NFDP.
- Applications which are found in order and complete in all respect on preliminary scrutiny, the Selection Committee shall refer the shortlisted application to PMU, DoF.
- PMU, DoF shall examine the cooperative grant application and compile their comments/observations for consideration. Grant Application will approve at PMU level through Grant Sub Committee and Grant Committee.
- The applications reviewed by the Selection Committee will be submitted for approval of Project Director (PD) and after consideration of IFD sanction and release of grant to Cooperative Society and Intermediary Agency will be done.

8.1.4 Adoption of Aquaculture Insurance.

- Eligible beneficiaries who want to buy aquaculture insurance shall register on NFDP and use the 'Insurance' module to search for aquaculture insurance products.
- Upon selection of the insurance product, applicant will be redirected to the respective insurance company's portal/website/app for purchasing the insurance product and payment of the premium as per the terms & conditions of the respective insurance companies.
- Insurance companies shall make all efforts to process the proposals received through NFDP in the shortest possible time period.
- After purchase of the insurance policy, the beneficiary (insured) shall submit a claim for availing the 'one-time incentive' through the 'Insurance' module on NFDP
- Upon confirmation, NFDB shall internally verify the claim application and upon approval, process the 'one-time incentive' payment immediately and disburse the incentive amount directly to the insured's bank account as given on the NFDP portal

8.1.5 Performance Grant Disbursement

The Performance Grant will be provided under the following two components:

- a. Supporting micro enterprises to improve fisheries sector value chains' efficiencies and creation and maintenance of jobs with priority for women.
- b. Adoption and expansion of fish product safety and quality assurance systems and creation and maintenance of jobs with priority for women by fisheries and aquaculture micro- and small- enterprises
- For availing the benefits, interested stakeholder shall make online application in the relevant module on NFDP after registration. At this stage, the submitted application shall be called as Preliminary Grant Application (PGA).
- The PGAs received online in NFDP shall be scrutinized by the Performance Grants Management Consultants (PGMC) under the PMU, DoF
- PGA which is found in order and complete in all respect on preliminary scrutiny by PGMC, its summary/details shall be forwarded online through NFDP to V&MC for field verification
- The concerned V&MC partner shall verify the credentials and information submitted by the Applicant in the PGA.

- After verification, the concerned V&MC shall submit field verification report online through NFDP
- Field verification report shall be examined by the PGMC, and comments / observations shall be compiled for consideration of GSC and if PGA found satisfactory by GSC, applicant will be advised to submit FGA online through NFDP.
- PGMC will examine the FGA submitted by applicant and forward the same along with observations and comments for the consideration of the GSC and GSC will evaluate the FGA and make necessary recommendations to the Grant Committee (GC) for the final approval.
- Upon Approval of GC, Grant Agreement (GA)/ Administrative Approval (AA) will be executed between PMU, DoF and applicant once the applicant accepts the terms and conditions of the approval.

Note: After the primary verifications of online application by PMU & PGMC, DoF will give Preliminary sanction, V & MC conducts field level verification of E & S assessment indicators shown in application submitted. After the approval of final application, selected beneficiaries will get eligible incentives in instalments, through DBT from DoF.

A detailed Operational Guidelines is available on https://pmmkssy.dof.gov.in/pmmkssy/#/quidelines

8.2 Roles and Responsibilities:

8.2.1 Role of PMU at DoF:

The responsibilities of the PMU included: (i) periodic project progress reviews; (ii) consolidating and disseminating information on project progress from NFDB (and PMU situated within NFDB), (iii) reporting on project achievements against the agreed project Results Framework; and (iv) commissioning surveys, studies, and assessments as necessary.

At the NFDB, the PMU will be responsible for preparing and submitting quarterly reports on implementation progress. To support reporting processes, the PMU /DoF will design standardized reporting templates to ensure that project reports provide clear and transparent progress updates on all relevant aspects of the Results Framework and on key implementation parameters. Performance grant management consultants (PGMC) will be hired to support the DoF to assist the processes of selection, monitoring, and disbursement of performance grants. Consortium of Fisheries Universities and Colleges (COU) will be engaged as independent field level Verification and Monitoring Consultants (V&MC) spanning across all states and Union Territories in India

8.2.2 Role of PMU at NFDB:

PMU at NFDB will examine the proposals received under Component 1B, and process for the disbursement of One Time Incentive for the insurance.

NFDB will do supervision and monitoring of the activities carried out under component 1B.

8.2.3 Role of the States and Union Territories:

DoF directly implement the project through PMU, PGMC and V&MC. However, Department of Fisheries, Government of India may also seek support of the Directorates of fisheries of State Governments to assist in screening and evaluation of beneficiaries' applications at various stages.

In addition to this, the States/UTs will support Intermediary Agency to select eligible Primary Fisheries Cooperative Societies to be Strengthen as FFPOs.

The user data of beneficiaries registered on NFDP will be sent to the respective State/UT nodal officer of fisheries department for verification and validation.

8.2.4 Role of Performance Grant Management Consultant (PGMC)

PGMC an agency to be hired by DoF, shall work under PMU to review, screen and assess Performance Grant Applications submitted by applicants online in NFDP.

PGMC will coordinate with Verification & Monitoring Consultants (V&MCs) for field verification.

PGMC will verify the accuracy and legitimacy of performance grant claims submitted by grantees. Monitor the progress and performance of grantees to ensure compliance with agreed-upon targets and objectives.

8.2.5 Role of Verification and Monitoring Committees (V&MCs)

Consortium of Fisheries Universities and Colleges (CoU) will be engaged as independent field level Verification and Monitoring Consultants (V&MC)

V&MC shall verify the credentials and information submitted by the Applicant in the PGA and will submit the submit field verification report online through NFDP

8.3 Reporting Arrangements

The PM-MKSSY is a Central Sector (CS) project. Given the current fiscal context, the states are not expected to commit any budget for this project, and all financing will come from DoF budget including the finance from the IBRD and AFD. As far as possible, implementation of the project will take advantage of the institutional arrangements already in place for Gols' PMMSY program, which includes all State Fisheries Departments. DoF will also use the state network of Matsya Seva Kendra (MSKs) and Sagar Mitra, wherever established by the states as part of the PMGSY. Evidently, the reach of the State Departments is limited below the district level,

whereas most of the target beneficiaries are located in villages and small urban centres. To reach the target micro- and small enterprises across the fisheries sector value chain, the DoF will use specialized service providers such as the Common Service Centres (CSC), who have reach throughout the country. For specialized expert inputs and service provision such as training, the National Bank for Rural Development and Agriculture (NABARD), Bankers' Institute for Rural Development (BIRD), and a consortium of fisheries colleges and universities across the country again mainly to achieve reaching the intended beneficiaries.

To guide the PMUs and approve annual action plans, DoF has set up a Central Apex Committee chaired by the Secretary, DoF. Specific implementation responsibilities including financing, monitoring, reporting and evaluation will be with DoF. Given the need for focused attention for implementation of this project and to ensure internal capacity building for project management services, DoF has set up a Project Management Unit (PMU) within administrative control of the DoF, coordinate project activities on a full-time basis and directly execute some of the sub components. DoF has delegated execution responsibilities for subcomponent 1B, adoption of aquaculture insurance to the National Fisheries Development Board (NFDB), on a full-time basis. NFDB can also use its regional offices to implement the respective parts of the project.

9. CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

9.1 Specific and Target Capacity Building

In order to achieve the objectives of the program and to successfully implement the environmental mitigation measures and recommendations in the ESMF, it is important to ensure that target groups and stakeholders who have a key role in the implementation of the ESMF are provided with the appropriate awareness, skills and training.

The aim of the training is to reduce environmental, social, health and safety risk during the implementation. All relevant stakeholders who would be directly or indirectly involved with minimizing the environmental and social, health and safety risk in project will be considered for the awareness programme / trainings.

Training programs will be organized and coordinated by the DoF at national level and by the local government at District level. Individuals experienced in environmental and social aspects of such projects will be called upon through a competitive process to develop and conduct short-term training on various aspects of implementing the ESMF guidelines.

The objectives of the training under the ESMF are to:

- Support representatives and leaders of community groups to prioritize their needs, and to identify, prepare, and implement environmental and social aspects of their sub projects;
- Actively promote opportunities to increase human capital and skills development through Technical and Vocational Education and Training (TVET), promote entrepreneurship and support the growth of Micro, Small and Medium Enterprises (MSMEs).
- Ensure that local government officials have the capacity to analyse potentially adverse environmental impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of management plans;
- Strengthen local NGOs and other stakeholders, which may be involved in the public participation in preparing and implementation of project.
- Address issues for which the local farmers require training to achieve a sustainable fishery model.

Stakeholders involved in the project implementation have different training needs hence the training will be based on their needs broadly as given below:

- i. Awareness building for participants to appreciate the significance and relevance of environmental and social issues;
- ii. Sensitization for participants to be familiarising the participants to identify environmental and social issues which may require technical support; and
- iii. Detailed technical training for participants who will need to analyze potentially adverse environmental and social impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of management plans.

The training program for various role players will include (i) Orientation program on the ESMF, (ii) Environmental Assessment Processes, (iii) Participatory Methodologies (iv) Project Management (v) Environmental analysis; (vi) Using the environmental and social screening checklist and assignment of environmental categories (vii) Design of appropriate mitigation measures (viii) Integrating environmental and social management aspects into the implementation of the project activities (ix) Reporting; (x) Project components supervision and monitoring.

A training plan will be developed by the PMU and will be adjusted based on the stakeholders. Detailed agenda and specification of resource needs (venue, trainers, materials, etc.) for each type of training activity will be worked out at the time of actual implementation.

10. GRIEVANCE AND REDRESS MECHANISM (GRM)

10.1 Grievance Mechanism

A Grievance mechanism is established under PM-MKSSY to receive and facilitate resolution of concerns and grievances of project-affected parties arising in connection with the project, in particular about the Borrower's environmental and social performance. The grievance mechanism will be proportionate to the risks and impacts of the project. Project-affected parties may submit complaints regarding a Bankfinanced project to the project grievance mechanism, appropriate local grievance mechanism.

10.1.1 Objectives

The establishment of the GRM underscores the following objectives:

- Resolve grievance of any individual and/or community related to the project implementation in an efficient, unbiased, transparent, timely and cost-effective manner
- Provide a platform for the aggrieved person/community to communicate their grievance through an appropriate process
- Provide an accessible, rapid, fair and effective response to the stakeholders concerned, especially the vulnerable groups who lack access to formal legal regimes
- Encourage mutually acceptable resolution of the grievance as they arise; and
- · Not delay or hinder any mutually acceptable resolution.

Effective Grievance Redressal Mechanism (GRM) gives an opportunity to the organization to implement a set of specific measures to ensure good governance accountability and transparency in managing and mitigation of environmental and social issue of a particular project.

This consists of defining the process for recording/receiving complaints and their redressal in respect of environmental and social matters. The Grievance Redressal Mechanism for the Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY) -Fisheries Sector Prosperity Project incorporates an integrated system with Grievance Redressal Cell (GRC), with dedicated staff and systems, at the Project Management Unit (PMU) at Central Level in Department of Fisheries (DoF). There should be a person in change/nodal officer at the PMU level to receive the complaints. Grievances may be submitted through Web based Portal besides other mediums, such as, in written form to a designated address, e-mail or through direct telephone calls to concerned official/s including a toll free number. The person in-charge in the concerned agency shall be responsible for coordination of grievances/complaints received. The grievance redressal mechanism should be in place at the time of initiating the implementation of the project.

10.2 Grievance Redressal Mechanism (GRM)

DoF has developed a National Fisheries Digital Platform (NFDP), a Web based Portal including a dedicated toll free number. Grievance can register through Web Portal or email, or Toll Free number. A ticket or a unique number will generate for all such Grievance /Complaints automatically through portal and system generated Short Message or Email will be sent to concern applicant. There will be a Grievance Officer

in PMU who will screen the grievance. On verification of the case, the grievance officer will distribute the same to the concerned dealing hand to resolve it in a time-bound manner. The Aggrieved Person can track the complaint through web portal based on that unique number. All calls and messages will be responded within two weeks. The aggrieved person or party shall be informed the outcome of the complaint through a formal communication. The Grievance Officer/concerned Dealing Hand at PMU shall seek to resolve the grievance as soon as possible and avoid escalation. The Grievance Officer will contact to aggrieved person to seek their feedback. Grievance Officer close the grievance based on the feedback of the aggrieved person.

A link for web-based portal and toll free number will share with State Fisheries Departments with a request to display on their websites so that the public can register their grievance with the PMU.

Facilities available:

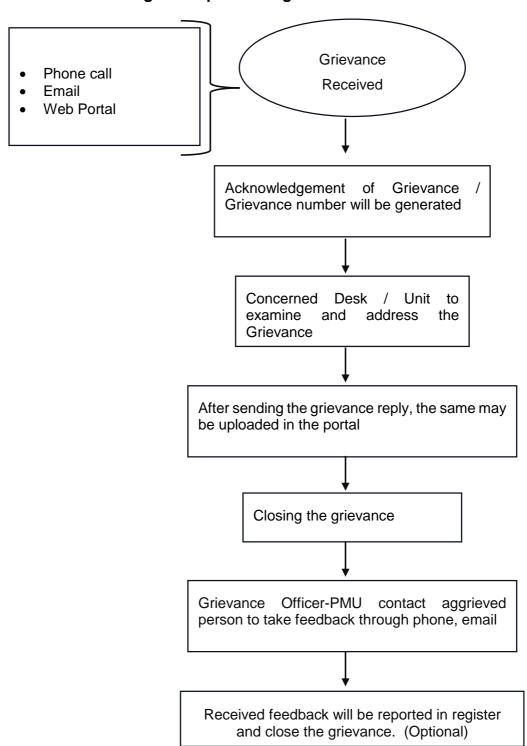
Locations	Information (the aggrieved person has the right to keep his/her identity undisclosed)
PMU (website)	Phone number (national toll-free number), email, link to website for registering complaint.
NFDB (website)	Phone number (of all the concerned authorities including PMU, and the national toll-free number), email, complaint box, link to website

The individual (aggrieved person) can register their grievance on the given web portal, toll free number, email and the Grievance Officer of PMU will prepare a monthly report on these cases and submit to the Project Director.

All complaints will be registered and specific complaints related to the PM-MKSSY will be addressed. The following are the criteria that shall qualify the grievances for the redressal:

- Perceived negative economic, social or environmental impact on an individual and/or group, or the foreseeable concern about the potential to cause an impact
- 2. Specific type of impact that had occurred or has the potential to occur and explanation of how the project caused or may cause such an impact; and
- 3. The grievance may be filed by an individual or group who is directly affected or at risk of being affected. It may also be filed by an individual or group acting on behalf of others, provided they can demonstrate that they have been authorized to represent the interests of those who have been, or may potentially be, affected.

Flow diagram of processing of Grievance:



10.3 Maintaining Communication and Status Updates

Summary documentation of each grievance will be available for review by the aggrieved person and other stakeholders involved in the grievance, or their designated representative(s). Appropriate steps will be taken to maintain the confidentiality of the grievance if previously requested.

The Grievance Officer will provide periodic updates to the aggrieved person regarding the status and current actions to resolve the grievance.

If an aggrieved person is not satisfied with the results of grievance redress by the DoF, such a person can approach the Courts, under the laws of the Country, and the verdicts of the Courts will be final, as per the judicial processes established in India. In general, the legal system is accessible to all such aggrieved persons. However, there might be cases where vulnerable sections of the citizens of India face hurdles in accessing the legal recourse system. These hurdles usually include the cost of litigation, knowledge about the legal system, or the lack of awareness about formal legal procedures. To help citizens to access the legal recourse system, each State has an operational mechanism called the State Legal Service Authority (SALSA) which provides free services including services of lawyers without any cost to the litigants. For this project, respective SALSA to will provide such services to the aggrieved persons claiming impact from the project. As part of the partnership, the project will reimburse all additional costs that accrue to the SALSA. This facilitation will be available to the aggrieved person(s) if they fulfil the following two conditions: (1) that such aggrieved person(s) belong to any of the following vulnerable sections of the society - below poverty line families, scheduled castes, scheduled tribes; or is disabled, handicapped, orphaned or destitute person; and (2) such a person or persons have at least accesses both the second and third tier grievance redress mechanism offered by the project.

10.4 Monitoring and Reporting

Involvement of Stakeholders in Monitoring Activities. The Project will involve project stakeholders in monitoring of project activities. The PMU will be involved in monitoring the project performance and E&S risks and impacts at all levels. The PMU will prepare monitoring reports.

10.5 Reporting Back to Stakeholder Groups

The information dissemination to the stakeholders includes the Project monitoring results. The nominated Community Engagement/GRM Specialist in the PMU will ensure that monitoring results on Project performance as well as E&S risks and impacts and implemented mitigation measures will be made available to the above identified stakeholders at the local, state and national level. The implementation of the stakeholder consultation plan, in turn, will allow the key stakeholders to react and voice their feedback with regards to the monitoring results. Information dissemination will always include information on the available Project GRM and its different channels to file a grievance or provide feedback.

10.6 Process of Grievance Redress

Once identified as a safeguards complaint, the overall process for the GRM will be comprised of 6 steps: (1) uptake, (2) sorting and processing, (3) acknowledgment and follow up, (4) verification, investigation and action, (5) monitoring and evaluation, and (6) feedback.

- **Step 1 Uptake:** Project stakeholders will have the opportunity to provide feedback and report complaints through several channels (in-person, mail, telephone, project website) at different levels (village, Project Implementing Agency, offices).
- **Step 2 Sorting and Processing:** To consolidate, monitor and report on information related to grievances and feedback related to the project/sub-project will be documented upon receipt/communication at each level of the GRM, and will be classified and prioritized in order to manage the grievance redress process more effectively. Feedback regarding environmental or social issues will be referred to the GRM established for the project.
- **Step 3 Acknowledgement and Follow-Up:** The aggrieved person will be informed within seven days of receiving grievance /feedback, by the GRM about the time-frame and the likely course of action. At the 15 days mark, if a grievance is still pending, the Grievance Dealing Hand should provide an update about the status of grievance to the person who submitted it and provide an estimate of how long it will take to resolve the grievance or respond.
- **Step 4 Verification, Investigation & Action:** Verification and investigation involves gathering information about the grievance to determine its validity and to generate a clear picture of the circumstances surrounding the issue under consideration. This process normally includes site visits, document reviews, a meeting with the aggrieved person (if known and willing to engage) and meetings with individuals and/or entities who can assist with resolving the issue. Potential actions include responding to a query or comment, providing users with a status update, imposing sanctions, or referring the grievance to another level of the system for further action.
- **Step 5 Monitoring & Evaluation:** Monitoring refers to the process of tracking grievances and assessing the extent to which progress is being made to resolve them. Ultimately, the PMU will be responsible for consolidating, monitoring and reporting on the total number of grievance for the project that has been received, and resolved.
- **Step 6 Providing Feedback:** This step entails informing GRM users and the public at large about the results of investigations and the actions taken. Dealing Hand Officer will provide feedback by contacting the Aggrieved Peron directly within a 45-day period of receiving the feedback/complaint. The PMU will make annually reports available to the World Bank team on the implementation of the Project GRM. In addition, data on grievances and/or original grievance logs will be made available to World Bank missions on request.

To ensure impartiality and transparency, hearings on complaints will remain open to the public. PMU will record the details of the complaints and their resolution in a register, including intake details, resolution process and the closing procedures. PMU will maintain the following three Grievance Registers:

Intake Register: (1) Case number, (2) Date of receipt, (3) Name of Aggrieved Peron, (4) Gender, (5) Father or husband, (6) Complete address, (7) Main objection, (8) Aggrieved Peron's' story and expectation with evidence, and (8) Previous records of similar grievances.

Resolution Register: (1) Serial no., (2) Case no., (3) Name of Aggrieved Peron, (4) Aggrieved Peron's story and expectation, (5) Date of hearing, (6) Date of field investigation (if any), (7) Results of hearing and field investigation, (8) Decision (9) Progress (pending, solved), and (10) Agreements or commitments.

Closing Register: (1) Serial no., (2) Case no., (3) Name of Aggrieved Peron, (4) Decisions and response to Aggrieved Persons, (5) Mode and medium of communication, (6) Date of closing, (7) Confirmation of Aggrieved Peron's' satisfaction, and (8) Management actions to avoid recurrence.

Annexure 1: Climate Co-Benefits

Climate Change Vulnerability Context

Climate Change and Disasters: As per the World Bank Report on "India Climate Risk Country Profile 2021", India has very high exposure to flooding (ranked jointly 13th), including, riverine, flash, and coastal, as well as high exposure to tropical cyclones and their associated hazards (ranked jointly 14th) and drought (ranked jointly 24th). Out of 7,516 km coastline, 5,700 km is prone to cyclones and tsunamis; 68% of the cultivable land is vulnerable to drought, hilly areas are at risk from landslides and avalanches, and 15% of landmass is prone to landslides³. About 650 million rural Indians are dependent on rain-fed agriculture for their livelihoods; around 250 million Indians live along a coastline that is at high risk due to sea level rise and extreme weather events such as cyclones and tidal surges. The country has around 1382 large and small islands which are also highly vulnerable to the impact of climate change such as sea level rise, rising ocean temperatures, and changing rainfall patterns. Analyses of long-term climate data sets and ocean model sensitivity experiments indicated that significant increase in North Indian Ocean sea level during last three to four decades is accompanied by a weakening of the summer monsoon circulation⁴.

Climate Change and Fisheries: Climate change and increased carbon dioxide absorption in the oceans leads to warming water temperatures; changing ocean currents; southern oscillation; sea level rise; changes in rainfall, river flows, lake levels, thermal structure, storm severity and frequency; and ocean acidification. Rising ocean temperatures and ocean acidification are radically altering aquatic ecosystems, while freshwater ecosystems are being impacted by changes in water temperature, water flow, and fish habitat loss. These impacts could result in changes in total fish catch, composition of the catch, and the distribution of fish. The impacts of climate change on ocean systems has impacts on the sustainability of fisheries and aquaculture, on the livelihoods of the communities that depend on fisheries, and on the ability of the oceans to capture and store carbon (biological pump). The effect of sea level rise means that coastal fishing communities are significantly impacted by climate change, while changing rainfall patterns and water use impact on inland freshwater fisheries and aquaculture. These changes could especially impact small-scale fishers using traditional methods. Extreme weather events and sea level rise are anticipated to impact fisheries related infrastructure such as ports and fleets, further raising costs of fishing, processing and distribution activities.

Climate Change Impacts on Fish Farmers Livelihoods: The fisheries sector supports around 30 million, one of the largest workforces of fishers in the world. India is the second largest fish producing country and also the second largest aquaculture fish producer in the world. India contributes about 8% to the global fish production. The country is also home to more than 10% of the global fish biodiversity and is one

⁴Swapna, P., Jyoti, J., Krishnan, R., Sandeep, N., &Griffies, S. M. (2017).Multidecadal Weakening of Indian Summer Monsoon Circulation Induces an Increasing Northern Indian Ocean Sea Level. Geophysical Research Letters, 44(20), 10,560-10,572. https://doi.org/10.1002/2017GL074706

³Annual Report 2018-19, National Disaster Management Authority of India, Gol. Page 1.

of the 17-mega biodiversity rich countries. Around 14 million people are engaged in fisheries and its allied activities (NFDB 2021).

Direct and indirect impacts influence the distribution and productivity of target species, disrupt habitats and food webs, and affect the operational costs, efficiency, and sustainability of fisheries and aquaculture, ultimately threatening the livelihoods and safety of fishing communities. Sea-level rise, storm surges and flooding can have negative impacts on fish productivity. Inland aquaculture provides an important animal protein source. However, it is affected by changing temperatures, water scarcity and salinization of coastal waters.

Climate change and Open Access Fishing: Climate change is modifying the distribution of freshwater species. Although there is a decline of fisheries due to climate change, a related cause for this decrease is due to over-fishing. Over-fishing exacerbates the effects of climate change by creating conditions that make a fishing population more sensitive to environmental changes. 'Open-access', makes it very easy for people to overfish. If there was a specific amount of fish that people were allowed to catch, then this could very well solve the problem of overfishing and reduce impacts of climate change on the sector.

Climate Impacts on Safe Fish Products: Food quality will have a more pivotal role as food resources come under greater pressure and the availability and access to fish supplies will become an increasingly critical development issue. Climate-induced movements in aquatic species used by the fisheries and aquaculture sector will require adaptation at all stages of the seafood value chain, from producers, processors, marketers, exporters, and importers as they search for and adapt to changing supplies in order to meet the growing demand for seafood.

The implications of climate change affect the four dimensions of food security: (i) availability of aquatic foods will vary through changes in habitats, stocks and species distribution; (ii) stability of supply will be impacted by changes in seasonality, increased variance in ecosystem productivity and increased supply variability and risks; (iii) access to aquatic foods will be affected by changes in livelihoods and catching or farming opportunities; and (iv) quality and utilization of aquatic products will also be impacted and, for example, some societies and communities will need to adjust to species not traditionally consumed.

The PM-MKSSY recognizes climate change as a systemic threat to the sustainability of India's fisheries sector. Through targeted investments in energy-efficient cold chains, climate-indexed insurance, resilient infrastructure, and ecosystem-based adaptation, the project aligns with India's NDC and the National Action Plan on Climate Change (NAPCC). The project's climate co-benefits include measurable reductions in GHG emissions, increased adaptive capacity of vulnerable microenterprises, and enhanced biodiversity co-benefits. A robust monitoring and evaluation mechanism, integrated into the NFDP, will track climate outcomes in real time.

Component-wise Adaptation and Mitigation Climate Actions

Component-wise Adaptation and Mitigation Climate Actions Adaptation Actions Mitigation Actions				
Activities	Adaptation Actions	Mitigation Actions		
Oppose and A. Franchischian of	fish siles and and fishting	and the same of the same of		
Component1-A: Formalization of fisheries sector and facilitating access of fisheries microenterprises to Government of India programs for working capital financing				
(a) Establish a National Fisheries digital Platform and Mobile Apps		 Compilation of available data on 		
for self-registration, self-	fisheries sector and working	fisheries sector.		
reporting and verification	capital accessibility issues.	Sector-wide and		
9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		targeted analytics,		
(b) Mobilize local functionaries,	Climate change and extreme	and technical		
fisher persons' cooperatives,	weather events threatens the	assistance		
women entrepreneurs, industry	livelihoods of fish farmers.	Preparation of		
and traders' associations to	Mobilizing working capital.	bankable proposals		
prepare the required	The activities listed under this	for the prosperity of		
documentation needed to	sub-component will	sector.		
access the relevant Gol	incentivise business plans	Access working		
schemes.	and proposals that are climate-friendly and resource-	capital for the sector		
(c) Provide bridge courses and	efficient.			
mentoring to micro enterprises	emolent.			
with specific emphasis on				
women-owned micro enterprises				
to prepare bankable proposals.				
(d) Develop dialogue and				
agreement with scheduled				
commercial banks including a "				
fisheries sector literacy				
campaign " for staff of the bank sand other financial institutions				
that would include knowledge				
sharing on available resource-				
efficient technologies and				
climate-adaptive fishing				
practices.				
(e) Conduct periodic evaluation and				
mitigation of policy barriers with				
respect to demand and supply-				
side constraints relevant to				
access to working capital financing.				
manung.				
(f) Developing dialogue and				
agreement with scheduled				
commercial banks including a				
"fisheries sector literacy				
campaign" for staff of the banks				
and other financial institutions				

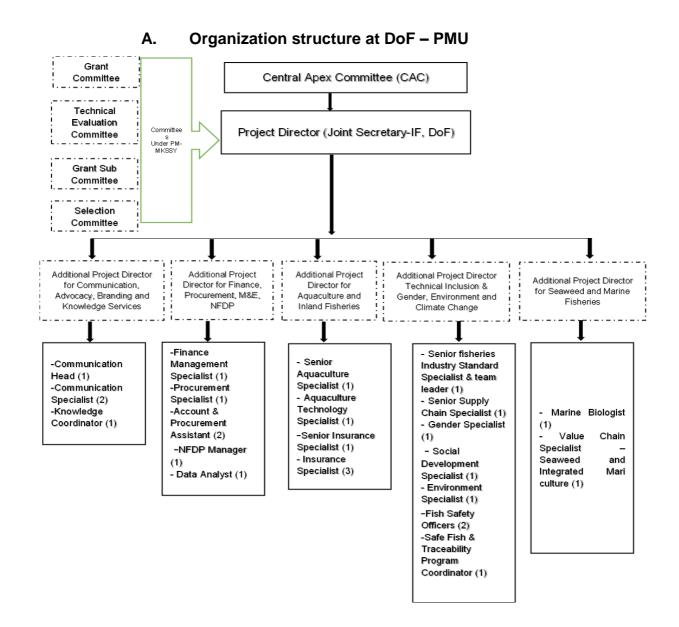
Activities	Adaptation Actions	Mitigation Actions		
(g) Undertaking periodic evaluation and mitigation of policy barriers				
(Sub component 1-B) Facilitating ad				
(a) Increasing accessibility, availability and adoption/usage of insurance mechanism in the fisheries sector	Incentives built in the Market Insurance Scheme will help fishermen adopt practices that are climate friendly (also	Incentives for aquaculture Insurance Scheme will induce adoption of good		
 (b) Providing regulatory and supervisory framework to set up effective claims management and making insurance for "loss and damage due to diseases and natural calamities" mandatory for relatively large (>4 ha) shrimp farms and all shrimp processing units (c) Developing eligibility and performance criteria for smaller 	covered within 'Good Aquaculture Practices'). The fisheries insurance will cover loss and damages due to disease, climate induced disasters such as floods, droughts, etc. therefore will help protect livelihoods of the fish farmers.	aquaculture practices, which will also be monitored. Insurance against loss and damages due to disease and disaster will protect the livelihoods of fish farmers.		
fish farms and enterprises to be supported to adopt the market insurance scheme (d) Setting up market practice and institutional processes taking account insurance companies approach for institutional loss assessment and verification systems, self-reporting of losses and inspections for standards defined in good aquaculture practices	These activities will provide adaptive social safety net to vulnerable fishermen against extreme weather events and pandemic shocks and improve preparedness to future climate change induced emergencies.			
(e) Grants to insurance companies against part of the appropriate regulated premiums to be paid by small fish farms and enterprises				
(f) Integrating a digital payment system in the National Fisheries Digital Platform for the insurance companies for claims management (to compensate the insured fisheries enterprises for losses assessed)				
Component 2: Supporting microenterprises to improve fisheries sector value chains				
efficiencies.	The contor wide application and	Enhanced officions:		
(a) Multi-stakeholder consultations to design and validate a new vision for the fisheries value	technical assistance will	Enhanced efficiency and improved product quality and access to		

Activities	Adaptation Actions	Mitigation Actions
chains organizing competitions	considerations such as total	more efficient and
and incentive grants to select	fish stock, over exploitation in	sustainable supply
scalable innovative value chain	climate-sensitive areas,	chains
proposals from firms particularly	fishing practices used by fish	
women-owned enterprises, fish	farmers to inform decisions to	
cooperatives/associations, and	transition away from open-	
consortia among fish farmer, fish	access. The analytics and	
retailers, market agents, input	dialogues will inform the	
suppliers, research	stakeholders on better	
organizations, and service	planning, decision-making	
providers	and management of fish	
(b) Performance grants to expand	resources by addressing	
the value chains with specific	some questions such as	
targets of job creation for women	which areas should be	
(c) Monitoring and documentation	protected, what is the	
of implementation performance	maximum yield based in	
and achievements of the such	different zones and how its	
grant-financed activities public	impacted by climate change,	
disclosure of the documented	fishing practices adopted by	
innovations.	fishermen, co-management	
ililovations.	strategies between	
	community and government,	
	how will they be monitored	
	and enforced, institutional	
	arrangement, inspection	
	regime, etc. Robust data	
	related climate-smart and	
	sustainable fisheries will be	
	collected in accordance to	
	FAO which includes pH levels,	
	water temperature, fishing	
	efforts, catches, safe fish	
	products, supply chain and	
	analytics to understand how	
	they are impacted due to	
	climate change and extreme	
	weather events.	
	These activities will help lay	
	foundation for adoption of	
	climate and disaster resilient	
	fishing practices and	
	transition away from "open-	
	access" fisheries; and will	
	therefore, build adaptive	
	resilience of vulnerable	
	coastal communities towards	
	projected climate and disaster	
	risks. The collected data will	
	provide fuller estimate of the	

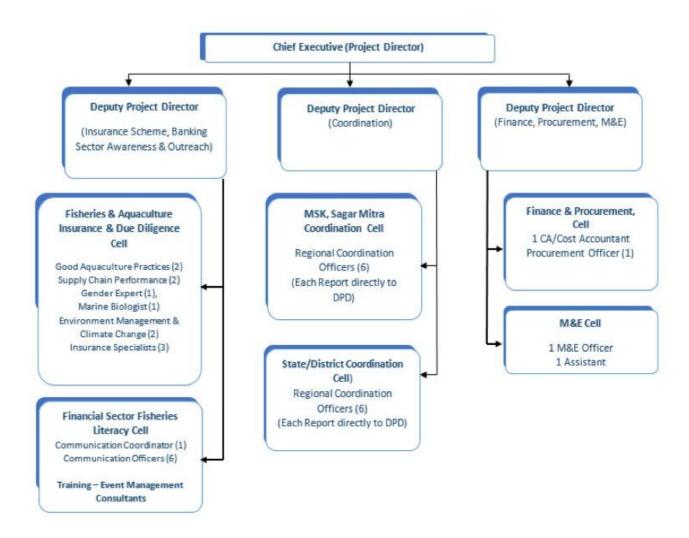
۸۰	Activities Actions Actions Mitigation Actions		
AC	tivities	Adaptation Actions	Mitigation Actions
		sector economy and the	
		analytics will help planning for	
		a long-term climate and	
		disaster resilient development	
		of the sector. The National	
		Digital Platform will contribute	
		to the planning of adaptation	
		options available for	
		vulnerable communities and	
		fisheries.	
	emponent 3: Adoption and expansion	on of fish and fishery product safe	ety and quality assurance
_	stems		
(a)	Development and adoption of	_ = =	Following activities will
	fish quality and safety standards,	and certification scheme	be undertaken to
	and the relevant traceability and	would address adaptation	reduce carbon
	monitoring systems	need for sustainable fisheries	footprints of the sector.
(b)	Performance grants for the	and aquaculture as well as	
	sector to adopt the requisite	climate resilience.	The standards and
	quality assurance systems,	Establishment of monitoring	certification scheme to
	necessary	system for residues of	include environment
	infrastructure/equipment and	aquaculture drugs and	and biodiversity
	good practices to deliver safe	environment contaminants	conservation
	food to domestic consumers	etc. will help keep check on	measures such as
(c)	Identification and integration in	environmental pollution. With	TED, biodiversity
,	the National Fisheries Digital	respect to retail markets,	conservation.
	Platform tracking standards	improvement of hygienic	Movable Retail Outlets
	necessary to ensure traceability	conditions of such wet fish	to be designed with
	including the use of block chains	markets will reduce overall	electric vehicles (e-
(d)	Strengthening the extension	solid waste management	Rickshaws) complete
` ′	service network for hand holding	burden and prevent	with full waste
	for the implementation of good	transmission of climate-	collection facility.
	practices, traceability protocols,	induced pathogens. This will	Full recycling of fish
	monitoring plans and corrective	also help in utilizing the fish	solid wastes, and "zero
	actions	waste for fish/poultry feed, fish	discharge" techniques.
(e)	Rolling out a national fish	oil and other nutrients used in	This will result in GHG
(5)	products' quality and safety	pharmaceutical industry.	reduction of 1,287,964
	monitoring and inspection	priamidodalida indudity.	tCO2e. Please refer to
	program		detailed GHG
(f)	Strengthen and transform the	The traceability guidelines	calculations.
(')	policy and institutional	and certification scheme	Calculations.
	. ,		Adoption of operation
	arrangements to achieve	would address climate	Adoption of energy-
	comprehensive achievement of	adaptation by capturing	efficient technologies
/~\	traceability in the sector	information parameters such	and climate-friendly
(g)	Development of a retail market	as how much fish waste does	market infrastructure
	hygiene performance monitoring	it contributed to and if it was	improvements will
/I \	system	recycled, if the mode of	result in GHG reduction
(n)	Performance grants for	transport was energy-efficient,	of 103,020tCO2e.
	infrastructure improvements to	if the fish product used cold	
		storage, etc. This information	

۸۵	tivities	Adaptation Actions	Mitigation Actions
AC		Adaptation Actions will promote adoption of	Mitigation Actions
	manage wastes and improve	•	
/:\	hygiene	sustainable and climate-	
(i)	Performance grants to improve	friendly fishing practices. With	
	safety standards.	respect to improved retail wet	
		markets, the project activities	
		will incentivize solutions to	
		promote market hygiene,	
		waste management and	
		sanitation services. Hygiene	
		and safety standards will help	
		reduce transmission of	
		climate-induced pathogens	
		that impacts freshwater	
0	property Designs Management	animals and human health.	
	emponent4: Project Management,		
(a)	Incremental operating costs for	Marginal fishermen and micro	
/h)	the PMUs at DoF and NFDB	enterprises will benefit from	
(b)	Preparation and	facilitation and capacity	
	implementation of	building to access working	
	environmental and social	capital and insurance	
	impact assessments (ESIAs)	products and adopt	
	and environmental and social	sustainable and climate-	
	management plans (ESMPs)	friendly business practices.	
	pursuant to the Environmental	Civil analati man	
	and Social Commitment Plan	Civil society, non-	
(0)	(ESCP)	governmental organizations	
(c)	Ensuring adequate financial	(NGOs), and government	
	management and procurement	organizations need to be	
(4)	management systems	included in climate change	
(d)	Implementation of	planning, not just technically	
	communications plans and a		
	grievance redressal	•	
(0)	mechanism	will help build partnerships	
(e)	Carrying out of monitoring and	between private, public, civil	
	evaluation activities and third-	society and NGO sectors that	
(£)	party audits	are vital for holistic climate	
(f)	Coordination with state	change adaptation planning.	
	departments of fisheries and		
	other state or national		
	government agencies and		
(~)	other stakeholders		
(g)	Conducting special evaluation		
	exercises.		

Annexure 2: Organization structure



B. Organization structure of PMU at NFDB



Annexure 3: Guidelines for Preparation of ESMP

The environmental and social screening process will take place during the process of approval of Performance Grant Application initiated. The environmental and social screening process leading towards the review and approval of the applications from environmental and social management aspects including Good Aquaculture Practices. The procedures followed incorporate the requirement of both, relevant national laws and World Bank's environmental and social safeguards policies. The ESMP will follow the procedures:

Screening procedure: Using a screening form, the subprojects will be assessed to identify potential adverse environmental and social impacts. This will provide information on the assignment of the appropriate environmental and social category to a particular activity as either low, medium, high or very high environmental and social risk.

Assessment procedure: This process will finalize environmental and social risk status, a site visits will be made by V&MC to determine if there gather more information about the situation and highlight if there are any key environmental or social concerns that need to be considered, that were not mentioned during the submission of application form.

Documentation: This procedure outline the necessary documentation needed and monitoring and reporting requirements – This step of the implementation is key to providing updates on environmental aspects, especially on the mitigation measures, if any, being used and take action if required.

The sub-projects must be monitored during implementation by PMU through, PGMC, V&MC, NFDB and relevant regulatory agencies where applicable.

Monitoring:

Monitoring is a key component of the ESMP during project implementation. It is essential that the basis for the choices and decisions made in the application for subproject submitted and other environmental and social safeguard measures implemented are verified.

V&MC will visit the project site during application verification and after the implementation of the project. V&MC will collect the data on environment and Social considerations. It will also ensure that the activities are in line with the Good Aquaculture Practices including energy efficiency

Some monitoring indicators to assess the effectiveness of the institutional arrangement, and also mitigation measures implemented are suggested in the table below:

General information form

1	Name of the Applicant / project	
	proponent:	
2	Name of the sub project / Activities:	
3	Location of the project site:	
4	Name of the Village :	
5	Name of the State & District	
6	Description of the subproject:	

Technical information

Sr. No.	Issues	Indicators
1	Waste Management including construction debris and Hazardous Waste Disposal	 Facility available for collection of Waste and disposed of through Municipality or Panchayat SWM Facility. Waste materials such as used chemical containers, fuel cans, waste oil, expired chemicals, and lubricants stored separately.
2	Discarded fishing gears	 Project site and in or around ponds, cages, or inlet/outlet channels free from discarded fishing gears. Reduced water flow or clogging in canals or filters due to gear blockage. Collection of discarded fishing gears facility available through Plastic recycler debris collectors at water inlets/outlets
3	Water pollution	 Number of temporary water storage pond created or Effluent Treatment Plant available Numbers of pollution incidents
4	Oil leakages	 Availability of Safe Fuel and Oil Storage tanks Thin film on the pond or tank surface observed
5	Use of chemical piscicides	 Decrease in DO and increased in COD Water coloured changed Chlorine or chemical Odor in water Presence of dead aquatic insects near ponds Degraded plants available
6	Use of organic piscicides	 Increased BoD Presence of specific Alkaloids or Compounds Targeted small/weed or predatory fish show mass mortality shortly after application
7	Prohibited Fish Species	 Presence of fast-growing and highly carnivorous fish Absence of valid seed purchase records from certified hatcheries Lack of species-specific documentation

8	Risks to community Health and safety		established OHS policies and procedures to ensure a safe working environment
9	Safe working condition		availability of clean, separate washroom, changing cum feeding room for women.
10	Gender-Based Violence and Harassment		established and followed specific policies to prevent gender-based violence (GBV), sexual harassment, and abuse at the workplace
11	Equal Opportunity and Non-Discrimination		enforcement of clear policies ensuring non- discrimination and equal employment opportunities
12	Inclusion of vulnerable group	•	Numbers of women/ST/SC beneficiary Total amount disbursed to Women / SC and ST beneficiary

Annexure 4: Information Checklist on E&S Screening

Environm	Environment Screening					
Sub-project Name	:					
Sub-project Location (e.g. region,	:					
district, etc.)						
Type of activity (e.g. new construction,	:					
expansion, rehabilitation, periodic						
maintenance, any other)						
Scope of Activity: (e.g. Pond, Building,						
road/bridge/jetty, water supply,						
electrification, Sanitation etc.)						
Brief Description of Activity						
Sub-project Owner and Address						

Sr. No.	Criteria for Environmental Screening	Yes	No
1	Does the sub-project have the potential to de-carbonization of value chain ?		
2	Will the project have climate smart technology?		
3	Will the sub project have improved waste / pollution management system?		
4	Does the sub-project have resource efficiency including water and energy efficiency?		
5	Will the sub project facilitate in reducing Green House Gas (GHG) emission?		
6	Will the sub project contribute in achievement of zero waste target?		
7	Will the sub-project have promote use of renewable energy?		
8	Will the sub project have optimum Operational Health and Safety measures in place and improved site hygiene ??		

Social Screening
Social Screening will be done in case there will be displacement of people due to the sub-projects

Sr. No.	Criteria for Social Screening	Yes	No
1	Does the sub- project have measures to prevent child labour?		
2	Will the sub-project ensure equal wages for women and men workers?		
3	Does the project ensure separate washroom for women workers?		
4	Does the project ensure changing cum feeding room for women workers?		
5	Does the project ensure Internal Complaints Committee?		
6	Does the project ensure measures to protect livelihood of tribal people?		

Annexure 5: Stakeholder Engagement Plan

Introduction

The Government of India approved Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY) (the Project) in February, 2024 as a Central Sector Sub-scheme under the ongoing Pradhan Mantri Matsya Sampada Yojana (PMMSY) for a period of four years from FY 2023-24 to FY 2026-27. The approved estimated outlay of PM-MKSSY is ₹6,000 crore with external assistance from the World Bank and *The Agence Française de Développement* (AFD). The Project is recognised by the World Bank (*International Bank for Reconstruction and Development, hereinafter referred to as the Bank*) as Fisheries Sector Prosperity Project - World Bank (Ln-94190-IN) and by AFD as Fisheries Sector Strengthening Project- AFD (CIN115701).

Stakeholder identification and analysis

The overall objective of this SEP is to define a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. The SEP outlines the ways in which the project team will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback or make complaints about project and any activities related to the project. The involvement of the local population is essential to the success of the project in order to ensure smooth collaboration between project staff and local communities and to minimize and mitigate environmental and social risks related to the proposed project activities. Project stakeholders are defined as individuals, groups or other entities who:

- (i) Are impacted or likely to be impacted directly or indirectly, positively or adversely, by the Project (also known as "affected parties"); and
- (ii) May have an interest in the Project ("interested parties"). They include individuals or groups whose interests may be affected by the Project and who have the potential to influence the Project outcomes in any way.

Cooperation and negotiation with the stakeholders throughout the project development phase often also require the identification of persons who act as legitimate representatives of their respective stakeholder groups, i.e. the individuals who have been entrusted by their fellow group members with advocating the groups' interests in the process of engagement with the Project. Community representatives may provide helpful insight into the local settings and act as main conduits for dissemination of the Project-related information and as a primary communication /liaison link between the Project and targeted communities and their established networks. Verification of stakeholder representatives (i.e. the process of confirming that they are legitimate and genuine advocates of the community they represent) remains an important task in establishing contact with the community stakeholders. Legitimacy of the community representatives can be verified by talking informally to a random sample of community members and heeding their views on who can be representing their interests in the most effective way.

Project Beneficiaries:

Fisheries sector microenterprises are registered on NFDP and will be supported to access working capital, Aquaculture Insurance and Performance Grant. Under this project aquaculture especially shrimp will be covered under Insurance Products. Fisheries Cooperatives will get the support for strengthening as effective FFPOs, cluster and product-specific business plans will be approved for fisheries sector value-chains to achieve improved efficiency. Safe fish products will be supplied by the identified vendors / Micro and Small Enterprises to consumers will also be supported with Performance Grant. Through this project, Jobs (including women) creation also be considered for Performance Grant.

Methodology

In order to meet best practice approaches, the project will apply the following principles for stakeholder engagement:

- <u>Openness and life-cycle approach:</u> public consultations for the project(s) will be arranged during the whole lifecycle, carried out in an open manner, free of external manipulation, interference, coercion or intimidation;
- <u>Informed participation and feedback:</u> information will be provided to and widely distributed among all stakeholders in an appropriate format; opportunities are provided for communicating stakeholders' feedback, for analysing and addressing comments and concerns:
- <u>Inclusiveness and sensitivity:</u> stakeholder identification is undertaken to support
 better communications and build effective relationships. The participation process
 for the projects is inclusive. All stakeholders are always encouraged to be involved
 in the consultation process. Equal access to information is provided to all
 stakeholders. Sensitivity to stakeholders' needs is the key principle underlying the
 selection of engagement methods. Special attention is given to vulnerable such as,
 women, youth, and the elderly people; and
- <u>Flexibility:</u> if social distancing inhibits traditional forms of engagement, the methodology should adapt to other forms of engagement, including various forms of internet communication. The project stakeholders include parties other than the directly beneficiaries including:
 - a. Ministry of Fisheries, Animal Husbandry and Dairying (MoFAHD)
 - b. National Fisheries Development Board (NFDB)
 - c. National Cooperative Development Corporation (NCDC),
 National Agricultural Cooperative Marketing Federation of India Ltd.
 (NAFED)Small Farmers' Agri-Business Consortium (SFAC) and Northeastern Regional Agricultural Marketing Corporation (NERAMAC) Limited
 as Intermediary Agencies of Strengthening cooperatives.
 - d. Research Institutes in Fisheries Sector
 - e. Fisheries Universities
 - f. People involved in fisher sector such as officials of Department of Fisheries; exporters, traders, etc.,
 - g. State government officials,
 - h. NGOs working with fisher folks, district administration, panchayat representatives; transporters
 - i. Government and Private Sector Consultants, officials of Banks, Insurance companies, expert institutions

- j. Local businesses,
- k. Fish consumers and the public at large and specifically coastal community
- I. Traditional and digital media (Television, Radio, and print media in Hindi, English, and other regional languages) and Advertisement Companies
- m. Other departments (Health, Environment, Finance, Home, etc.)

Disadvantaged / vulnerable individuals or groups

It is particularly important to understand whether project impacts may disproportionately fall on disadvantaged or vulnerable individuals or groups, who often do not have a voice to express their concerns or understand the impacts of a project and to ensure that awareness raising and stakeholder engagement with disadvantaged or vulnerable individuals or groups or individuals particular sensitivities, concerns and cultural sensitivities and to ensure a full understanding of project activities and benefits. Engagement with the vulnerable groups and individuals often requires the application of specific measures and assistance aimed at the facilitation of their participation in the project-related decision making so that their awareness of and input to the overall process are commensurate to those of the other stakeholders.

Within the Project, the vulnerable or disadvantaged groups may include and are not limited to the following:

- Elderly disaggregated by gender
- Youths those who are Illiterate or those with limited education disaggregated by gender
- People with disabilities disaggregated by gender and age
- Women, especially Young women and girls at heightened risk of Sexual Exploitation and Abuse / Sexual Harassment
- Female-headed households, especially single mothers with underage children
- Those below poverty line disaggregated by gender and age
- Ethnic or religious minorities disaggregated by gender and age
- Scheduled Caste and Tribes; Other Backward Castes if engaged in fishery activities

Vulnerable groups within the fishing community and community at large will be further confirmed and consulted through dedicated means, as appropriate. Description of the methods of engagement that will be undertaken by the project is provided in the following sections.

Stakeholder Engagement Program

Summary of project stakeholder needs and methods, tools and techniques for stakeholder engagement

The following are some considerations for selecting channels of communication:

 Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, and mail) when stakeholders do not have access to online channels or do not use them frequently. Traditional channels can also be highly effective in conveying relevant information to stakeholders and allow them to provide their feedback and suggestions;

- Where direct engagement with project affected people or beneficiaries is necessary, identify channels for direct communication with each affected household via a context specific
- Combination of email messages, mail, online platforms, dedicated phone lines with knowledgeable operators;
- Each of the proposed channels of engagement should clearly specify how feedback and suggestions can be provided by stakeholders;
- Identify trusted local civil society, ethnic organizations, community organizations and similar actors who can act as intermediaries for information dissemination and stakeholder engagement; engage with them on an ongoing basis;
- The project will adopt differentiated measures to engage with vulnerable and disadvantaged groups during the stakeholder engagement process under project implementation as presented below.
 - ✓ Dedicated consultations with vulnerable households during planning, as well as during implementation. This will include women specific FGDs wherever required.
 - ✓ Consultations will be carried out in local dialect / language. To the extent possible communication materials will be utilized which will be shared beforehand. The date, time and place will be decided in consultation with the community before the formal consultation.

Stakeholder engagement under the project will be carried for consultations with stakeholders throughout the entire project cycle to identify beneficiaries; keep stakeholders informed about the project activities, including their concerns and feedback about the project and any activities related to the project; any grievances.

In terms of consultations with stakeholders on the project activities and implementation arrangements, etc., the revised SEP, continuously updated throughout the project implementation period when required, will clearly lay out:

- Type of Stakeholder to be consulted
- Anticipated Issues and Interests
- Stages of Involvement
- Methods of Involvement
- Proposed Communications Methods
- Information Disclosure
- Responsible authority/institution

The frequency of consultations will depend on the scope of the activity such as mobilization will require multiple engagement with the community whereas information dissemination may require only one visit. In most cases, it will be multiple engagement.

The table below provides the mechanism to be followed and frequency of engagement.

Process	Mechanism	Frequency
Correspondences (Phone, Emails)	 Distribute Project brief/information to Government officials, NGOs, Local Government, and organizations /agencies Invite stakeholders to meetings and follow-up 	 Once when sub activities / sub projects are finalized Multiple
Formal meetings	 Present the Project information to a group of stakeholders Allow group to comment – opinions and views Build impersonal relation with high level stakeholders Disseminate technical information (as required) Record discussions Satisfaction survey results for enterprises that access any or more of the project support 	 Once when sub activities / sub projects are finalized Multiple Multiple Multiple Multiple Once Multiple At midterm and end term evaluation stage
Awareness camp / Trainings / Workshops	 Present Project information to a large group of stakeholders, especially communities Allow the group to provide their views and opinions Build relationship with the communities, especially the vulnerable Distribute non-technical information (as required) Facilitate meetings with presentations, PowerPoint, posters etc. Record discussions, comments, questions. 	 Once when sub activities / sub projects are finalized Multiple Multiple Once Multiple Once Once
Focus group meetings	 Present Project information to a group of stakeholders Allow stakeholders to provide their views on targeted baseline information Build relationships with communities Record responses 	OnceMultipleMultiple
Project website and disclosure	 Present project information and progress updates Disclose ESCP, ESMF including SEP, GAP and TPP Implementation progress, Grievances and redresses of Grievances and other relevant project documentation. 	 Multiple Once at draft stage and second time once documents are finalized

Project promotion	Share information on timing of	• Once
materials, Social media and mass	commencement of project activitiesSelection of beneficiaries	Multiple
communication	 Project benefits for beneficiaries 	• Multiple
	Brief project information to provide	 Multiple
	regular update	
	Site specific project information.	

The consultations shall focus on inclusiveness in participation of community members, perceptions and concerns about the positive and negative (if any) impacts / risks of the project. Separate individual interviews shall be held with disadvantaged and vulnerable members of the community to disseminate information about the Project and to understand their views about the Project. Women at select locations shall also be consulted on their interest in ensuing their participation in sub project planning and other activities, concerns on SEA/SH, etc. The stakeholder engagement is an ongoing process, throughout the following stages of the Project Planning/design (including disclosure) and implementation.

Table 2: Information dissemination and modes of disclosure and engagement for							
consultation							
Target	Information	Tools of	Frequency	Responsibiliti			
stakeholders	to	engagement		es			
	be disclosed	& mode of					
		disclosure					
Component 1A: Formalization of fisheries sector and facilitating access of fisheries							
microenterprises	to Government of I	ndia programs for wor	king capital finar	ncing			
Component 1-B:	Facilitating adoptio	n of aquaculture insui	rance				
✓ Department	✓ National	✓ Consultative	✓ Multiple	✓ MoFAHD			
of fisheries	Fisheries	meetings	✓ Continuous	✓ Department			
✓ Expert	Digital	✓ Focus Groups		of Fisheries			
institutions	Platform and	discussions		✓ Expert			
✓ Facilitators of	Mobile Apps	✓ Newspaper		Institutions			
supply chain	for self-	advertisements,		✓ Insurance			
such as	registration,	pamphlets,		Companies			
Insurance	self-reporting	websites		and Banks			
companies,	✓ Required	notification,		✓ Industry			
Banks, etc.	documentation	1 /					
✓ Urban	needed to	exhibitions,					
Consumers	access the	trade fairs, etc.					
✓ Media /	relevant Gol	✓ Online training					
advertisement	schemes	courses					
companies	✓ Training and						
✓ Producers	mentoring of						
and Traders	microenterpris						
✓ Producers of	es to prepare						
fish/ shrimp	bankable						
feed	proposals						

Table 2: Information dissemination and modes of disclosure and engagement for consultation								
Target stakeholders ³	& n	ols of gagement node of closure	Frequency	Responsibiliti es				
 ✓ Women fisherfolks, women SHGs ✓ Entrepreneurs interested in new enterprises based on fish wastes 	✓ expansion of the access to finance✓ Requirements	Consultative meetings Focus Groups discussions Advertisements, pamphlets, websites notification, Workshops, ning courses etc.						

Component 2: Supefficiencies	pporting microenterprises to improve fish	neries sector value chains
✓ Implementing agency ✓ Fisherfolks ✓ Fish federation / Cooperatives ✓ Traders and Exporters ✓ Insurance and Bank officials ✓ Local authorities	✓ Information on hygiene, safety and traceability ✓ eligibility and performance standards for supply chains to receive government support ✓ shifts in current microscale fisheries value chain practices ✓ business development support services and performance grants ✓ training for improved resource	✓ Multiple ✓ MoFAHD ✓ Department of Fisheries ✓ Insurance and Bank officials ✓ Cooperative Intermediary Agencies
	management hygiene and quality, better value chain integration, and improved product management ✓ Grievance mechanisms	

Component 3: Adoption and expansion of fish and fishery product safety and quality							
assurance system	ms						
✓ State Department of fisheries especially extension workers ✓ Expert Institutions ✓ Digital media and traditional media ✓ Consultants	 ✓ Fish quality and safety standards ✓ Traceability framework for the fisheries ✓ Residue monitoring program; 	\[\] \[\sqrt{ \] \[\s	surveys Focus Group Discussions		Multiple Continuous	✓ ✓ ✓ ✓	MoFAHD Department of Fisheries Expert institutions

Component 4: Project Management, Monitoring and Reporting							
✓ State Department of fisheries especially extension workers ✓ Expert Institutions ✓ Digital media and traditional media Consultants	✓ Project safeguards including ESMF / ESMPs	✓ Consultative meetings ✓ Household Surveys ✓ Focus Group Discussions ✓ Website notifications, notifications in print media ✓ Workshops, online courses ✓ WhatsApp notifications or SMS alerts ✓ In formal	_	Multipl e Contin uous	✓ ✓ ✓	MoFAHD Department of Fisheries Expert institutions	
		meetings	l		l		

This Stakeholder Engagement Plan as well as the Environmental and Social Management Framework (ESMF) that have been prepared and updated document

under will be disclosed. The project includes considerable resources to implement the above-mentioned activities and actions. The details of this will be prepared during the update of this SEP, expected to be updated continuously throughout the project implementation period when required.

Proposed strategy for information disclosure

The responsibility of project preparation and implementation lies with Ministry of Fisheries, Animal Husbandry and Dairying, Government of India and will be supported by State level department of fisheries during implementation. The website of MoFAHD (https://www.dahd.nic.in) will be used to disclose project documents. Besides the draft disclosure documents (and the final documents in future), project brochures and updates will be posted. In addition, the site shall provide details about the Grievance Redress Mechanism and contact details. Other opportunities for information disclosure and dissemination shall be utilized as well, which may include - consultation platforms, working groups, workshops, seminars, conferences, focus groups etc.

Resources and responsibilities for implementing stakeholder engagement activities:

Resources

The Project Management Unit at Centre level, will be fully responsible for stakeholder engagement activities though overall coordination with Common Service Centre, NFDB, Central Fisheries Institutes, Cooperative Intermediary Agencies, and State Fisheries Department for this purpose. Since stakeholder engagement is part of the project design itself, the budget for the SEP is included under the components of the project.

Management functions and responsibilities

As mentioned above, the PMU within the MoFAHD will be responsible for implementing the SEP while working closely with other agencies and institutions. The stakeholder engagement activities will be documented through quarterly progress reports, to be shared with the World Bank.

At the PMU level within MoFAHD, an Environment and Social experts has been placed. The PMU shall be responsible to monitor the management of E&S issues by Implementing Agencies. At the State level, Common Service Centre and NFDB shall be responsible for the management, coordination and implementation of the SEP and its integral tasks. The Roles and Responsibilities of the organizations are presented below

The key tasks of PMU are inter alia to:

- ✓ Approve the content of the SEP (and any further revisions):
- ✓ Approve prior to release, all materials to be used for providing information associated with the project such as project information, IEC materials, technical information, environmental and social safeguard documents, gender, measures to address SEA/SH
- ✓ Approve and facilitate all stakeholder engagement events and disclosure of

- material to support stakeholder engagement events;
- ✓ Participate either themselves, or identify a suitable member representative, during all face-to face stakeholder meetings
- Maintain the stakeholder database.

E&S Specialist at PMU will be responsible for implementing community engagement activities; and shall oversee all planned stakeholder engagement activities or in process of being implemented. Furthermore, these specialist(s) need to ensure that all stakeholder engagement aspects are permanent item agenda at all meetings, within implementing agency and that all actions arising from management decisions are duly implemented. The broad responsibilities of social and environmental specialists include the following:

- Develop, implement and monitor all stakeholder engagement strategies/plans
- > Ensure implementation of project as per the agreed ESMF
- > Prepare ESMPs if required
- > Oversee all stakeholder engagement related activities for the Project;
- Manage the grievance mechanism;
- Interact with related and complementary support activities that require ad hoc or intensive stakeholder engagement (beneficiary identification, raising awareness, project implementation);

Monitoring and Reporting

The SEP will be periodically revised and updated as necessary in the course of project implementation in order to ensure that the information presented herein is consistent and is the most recent. Any major changes to the project related activities and to its schedule will be duly reflected in the SEP. Quarterly summaries and internal reports on public grievances, enquiries and related incidents with the status of implementation of associated corrective / preventative actions. Information on public engagement activities undertaken by the Project during the year may be conveyed to the stakeholders.

Annexure 6: State and Union Territory wise details of Scheduled Tribes (Census 2011)

2011)		Scheduled Tribes			
Sr. No	Name of State/UT	Person	Male	Female	
1	ARUNACHAL PRADESH	951,821	468,390	483,431	
2	ASSAM	3,884,371	1,957,005	1,927,366	
3	BIHAR	1,336,573	682,516	654,057	
4	CHHATTISGARH	7,822,902	3,873,191	3,949,711	
5	GOA	149,275	72,948	76,327	
6	GUJARAT	8,917,174	4,501,389	4,415,785	
7	HARYANA				
8	HIMACHAL PRADESH	392,126	196,118	196,008	
9	JAMMU & KASHMIR	1,493,299	776,257	717,042	
10	JHARKHAND	8,645,042	4,315,407	4,329,635	
11	KARNATAKA	4,248,987	2,134,754	2,114,233	
12	KERALA	484,839	238,203	246,636	
13	MADHYA PRADESH	15,316,784	7,719,404	7,597,380	
14	MAHARASHTRA	10,510,213	5,315,025	5,195,188	
15	MANIPUR	1,167,422	588,279	579,143	
16	MEGHALAYA	2,555,861	1,269,728	1,286,133	
17	MIZORAM	1,036,115	516,294	519,821	
18	NAGALAND	1,710,973	866,027	844,946	
19	ODISHA	9,590,756	4,727,732	4,863,024	
20	PUNJAB	291,903	148,669	143,234	
21	RAJASTHAN	9,238,534	4,742,943	4,495,591	
22	SIKKIM	206,360	105,261	101,099	
23	ANDHRA PRADESH	5,918,073	2,969,362	2,948,711	
24	TAMIL NADU	794,697	401,068	393,629	
25	TRIPURA	1,166,813	588,327	578,486	
26	UTTAR PRADESH	1,134,273	581,083	553,190	
27	UTTARAKHAND				
28	WEST BENGAL	5,296,953	2,649,974	2,646,979	
29	UNION TERRITORY - ANDAMAN & NICOBAR ISLANDS	28,530	14,731	13,799	
30	UNION TERRITORY - CHANDIGARH				
31	UNION TERRITORY - DADRA & NAGAR HAVELI and DAMAN & DIU	193,927	96,615	97,312	
32	UNION TERRITORY - LAKSHADWEEP	61,120	30,515	30,605	
33	UNION TERRITORY - NCT OF DELHI				
34	UNION TERRITORY - PUDUCHERRY				
	Total	104,545,716	52,547,215	51,998,501	

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