

DRAFT



Food and Agriculture
Organization of the
United Nations

Developing and Implementing a National Plan of Action for Small-Scale Fisheries (NPOA-SSF)

PROFILE OF SMALL-SCALE FISHERIES IN INDIA

WORKING DOCUMENT



Food and Agriculture Organization of the United Nations (FAO)
Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO)
2025

*Developing and Implementing a
National Plan of Action for Small-Scale Fisheries
(NPOA-SSF)*

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This SSF profile, developed in support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), informs the initiation of an NPOA-SSF and will be reviewed and further developed as part of the NPOA-SSF development.

Food and Agriculture Organization of the United Nations (FAO)
Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO)

2025

Preface

The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) is an international instrument focusing on the needs of small-scale fisheries. The SSF Guidelines provide an all-inclusive framework for guiding small-scale fisheries governance and development. They advocate the development of a comprehensive implementation plan in the format of a National Plan of Action for the implementation of the SSF Guidelines (NPOA-SSF), that identifies strategies and priority actions to be taken at the country level.

This SSF profile informs the initiation of an NPOA-SSF. It is expected that this will be reviewed and further developed as part of the NPOA-SSF development.

The first draft of the country profile for India was prepared by the BOBP IGO team using the template given in **Developing and implementing a National Plan of Action for Small-Scale Fisheries (NPOA-SSF) SSF profile** (1-2 template)¹. The section headers are maintained largely as given in this document, except that the numbering of tables is different with the addition of tables and figures.

The document was revised based on the critical inputs received from the subject matter experts from FAO and national experts. The revised draft was discussed during the FAO Regional Capacity Development Workshop on Development of National Plan of Action for Small Scale Fisheries (NPOA-SSF) held in Chennai from 17-19 September 2025, and the feedback obtained from the country's official nominees to the Workshop were incorporated.

The DRAFT Final version was then circulated to the Government of India and all the experts and community representatives involved in the process for review and the document was further revised and improved based on the comments received.

This version of the SSF Country Profile for India will serve as a working document for the National Task Force members and as reference material for outreach and communication, during the development of the NPOA-SSF for India and will be subject to revision and adaptation based on continuous feedback and inputs.



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¹ https://www.fao.org/fishery/services/storage/fs/fishery/data/npoassfprocess/1-2_SSF_profile_template_en.pdf

Table of Contents

Preface	<i>Error! Bookmark not defined.</i>
Acknowledgements	<i>Error! Bookmark not defined.</i>
Table of Contents	<i>i</i>
List of Tables	<i>i</i>
List of Figures	<i>ii</i>
List of Maps.....	<i>ii</i>
1. Definition of small-scale fisheries in INDIA.....	3
2. Small-scale fisheries	3
2.1. Geographical scope and location	4
2.2. Main species and ecosystems	6
2.3. Scale of the small-scale fisheries sector	8
2.4. Social and economic significance	10
3. Small-scale fisheries structure	12
3.1. Small-scale fisheries fisher groups	12
3.1.1. Fisher organisations	12
3.2. Supply chain	14
3.3. Local community	16
3.4. The role of women in small-scale fisheries	17
4. Small-scale fisheries Management	19
4.1. Fisheries laws	19
4.2. Governance structures	21
4.3. Management measures	22
5. Small scale fisheries knowledge	23
5.1. Research	23
5.2. Data	25
5.2.1. Marine	25
5.2.2. Inland	26
5.3. Projects.....	27
6. Issues and opportunities	29
6.1. Issues and Opportunities.....	29
7. Bibliography	33

List of Tables

Table 2.1. Characteristics of small-scale fisheries in INDIA	3
Table 2.2: Zones reserved for non-motorized and motorized fishing boats.....	5
Table 2.3: Inland fisheries	6
Table 2.4: Main species and ecosystems (marine)	7
Table 2.5: Major fish from pelagic and demersal fisheries	7
Table 2.6: Overall fishermen population details (2020-21).....	8
Table 2.7: Trends in fishing craft over time	9
Table 2.8: Vessel classification by RealCraft	10
Table 2.9: Summary of the valuation of marine fish landings	11

Table 3.1: Major craft-gear groups	12
Table 3.2: Membership in Fisheries Cooperatives.....	13
Table 3.3: Membership in Primary Cooperative Societies in Tamil Nadu.....	13
Table 3.4: Key NGO/CSO in the fisheries domain in India	13
Table 3.5: The fisheries supply-chain.....	15
Table 3.6: Stakeholders in the Fisheries Sector	15
Table 3.7: The marine fishing community -a snapshot from the 2016 MF census.....	16
Table 4.1: State/ UT Fisheries Legislation.....	20
Table 5.1: Key fisheries research institutions in India	24
Table 5.2: Data Availability.....	26
Table 5.3: State-wise inland fish production.....	26
Table 6.1: Issues and Opportunities in SSF	29

List of Figures

Figure 2.1: Marine fisheries production from different areas.....	8
Figure 2.2: Fishing craft along the coast.....	9
Figure 3.1: Gender-wise fishing activities (non-harvest)	18

List of Maps

Map 1: Map showing proposed fishing zones in Indian EEZ	5
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1. Definition of small-scale fisheries in INDIA

Small-scale fisheries are mentioned in the National Marine Fisheries Policy, 2017 but not defined. The preamble refers to “*Observing* that the marine fisheries of the country are highly diverse but predominantly comprising small-scale and artisanal fishers”. Small-scale is mentioned elsewhere as well: paragraph 15 on investments in the deep-sea fishing and processing, paragraph 25 on safety at sea, paragraph 48 on gender equity, paragraph 54 on implementation of the SSF Guidelines and empowerment of the small-scale fishing communities. However, there is no legal definition of SSF available.

In the State/UT Marine Fishing Regulation Acts, artisanal refers to both motorized and non-motorized traditional craft operations².

The operational definition of SSF above is for use in the context of the implementation of the National Plan of Action for Small-scale Fisheries (NPOA-SSF).

TIPS:

Commonly used terms for small-scale fisheries’ fishers, associated groups and the legal standing of these groups (that is, are they mentioned and recognized in national laws?).

Propose a working definition of small-scale fisheries, noting that the objective is for stakeholder inclusion and to cover the whole supply chain.

If there is uncertainty or disagreement over the inclusion of certain fisheries within the working definition of small-scale fisheries, the FAO characterization matrix could be used to compare fisheries. This matrix provides a semi-quantitative approach to enable fisheries to be compared against various scale criteria.

2. Small-scale fisheries

Table 2.1. Characteristics of small-scale fisheries in INDIA³

Small-scale fisheries in numbers (2019-20)		A small-scale fishery is defined as...
National population (number); 1364892691	Total fishermen population = 2,80,63,538 Employed in small-scale fisheries (percent of national population) = 2% (considering all fishermen as SSF)	No legal definition A working definition is given below- The National Marine Fisheries Census 2016 used the following definitions:

² Peter Flewwelling and Gilles Hosch, India. In De Young, C. (ed.), Review of the state of world marine capture fisheries management: Indian Ocean. FAO Fisheries Technical Paper. No. 488. Rome, FAO. 2006. 458p.

³ Handbook on Fisheries Statistics <https://dof.gov.in/sites/default/files/2024-06/Handbook.pdf>

Fishermen population	Male	Female	<ul style="list-style-type: none"> • Marine fisherman as ‘A person (male/female/LGBTQ) who is engaged in marine fishing or any other activity associated with marine fishery or both’. • Traditional fishermen: Those who are fishermen by birth and fishing is their ancestral occupation. • Fishermen family: A family in which at least one member is engaged in marine fishing or associated activities or both. <p>More than 91% came under the ‘traditional fishermen’ category in the NMFC 2016.</p>	
Fishers total	15,665,630	12,397,908		
Marine fishers	2,651,652	2,294,066		
Inland	13,013,978	10,103,842		
	Inland	Marine (EEZ)		
Area	7.08 million km ²	2.02 million km ²		
	Inland	Marine		
<u>Average production (2023-24)</u>	13.9 million tonnes	4.5 million tonnes		
Fisheries GVA in 2024 ⁴	~₹1.8 lakh crore; ~7.43% of Agriculture GVA (3.5 times growth since 2010-11)			
Key small-scale fisheries production	Inland ⁵ (tonnes)		Marine ⁶ (tonnes)	
	Murrels (<i>Ophiocephalus spp.</i>)	257,000	Indian mackerel	343,042
	Major carps (Catla, Rohu, Marigal)	6,736,000	Ribbon Fishes	269,616
	Catfishes (<i>Wallago attu</i> , <i>pangasius</i>)	569,000	Oil sardine	245,420
	Minor carps	345,000	Non-penaeid prawns	211,260
	Exotic carps	1,085,000	Threadfin breams	207,232
	Others	2,569,000	Penaeid prawns	159,201

2.1. Geographical scope and location

Government of India defines territorial waters as extending upto 12 nautical miles (approx. 22.2 km) from the baseline⁷.

⁴ CMFRI Annual Report 2024

<https://eprints.cmfri.org.in/19030/1/CMFRI%20Annual%20Report%202024.pdf>

⁵ Handbook on Fisheries Statistics <https://dof.gov.in/sites/default/files/2024-06/Handbook.pdf>

⁶ Estimated marine fish landings in India during 2023 (In tonnes). <https://www.cmfri.org.in/2023> accessed 1 September 2025

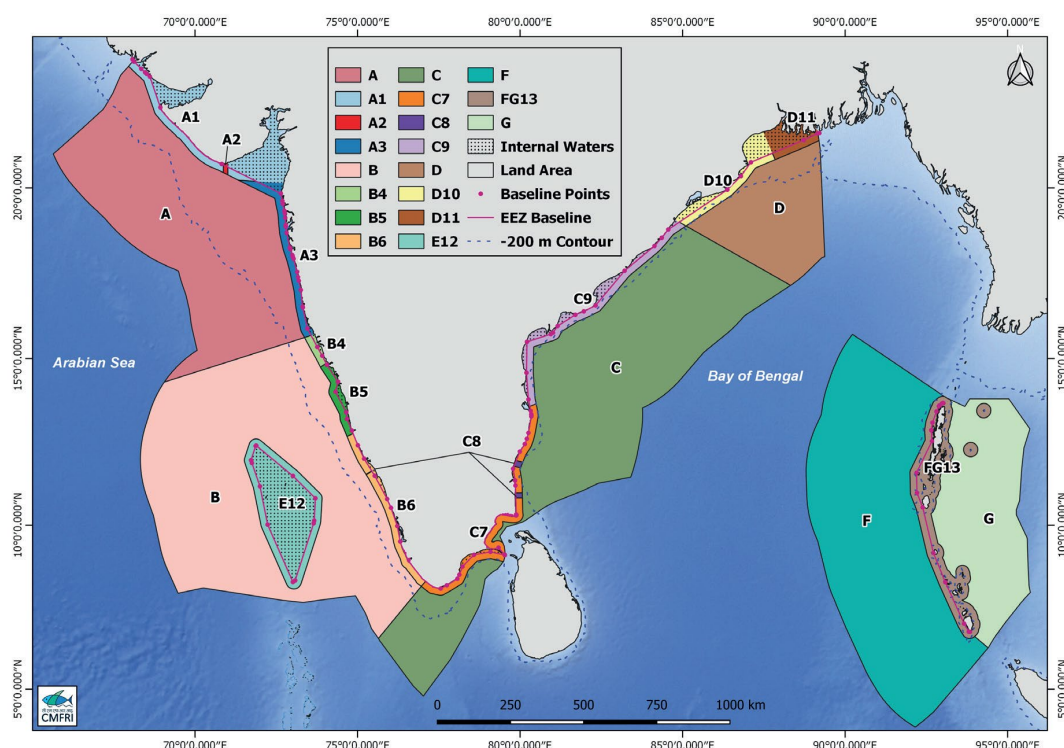
⁷ The Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976 Act No. 80 of 1976

Length of coastline⁸: 11,099 km, EEZ⁹ of 2.20 million sq. km

The coastal States/UTs through MFRA have earmarked the zones/sea areas reserved for fishing only by the traditional fishermen using non-motorized and motorized fishing boats, wherein mechanized fishing vessels are not allowed to fish as follows.

Table 2.2: Zones reserved for non-motorized and motorized fishing boats¹⁰

State	Distance from shore (nautical miles - nm) (shortest distance from baseline)
Gujarat	9.0
Goa	2.7
Karnataka	3.23 (or upto 4 fathoms, whichever is farther)
Tamil Nadu and Odisha	5.0
Andhra Pradesh	4.3



Map 1: Map showing proposed fishing zones in Indian EEZ¹¹

⁸ SUB: LENGTH OF COASTLINE OF INDIA

<https://www.surveyofindia.gov.in/UserFiles/files/Length%20of%20Coastline%20of%20India.pdf>

⁹ Marine Fisheries <https://dof.gov.in/marine-fisheries> last accessed 1 September 2025

¹⁰ Rights for Fishermen over Marine Resources.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2084067> 13 DEC 2024 12:32PM by PIB Delhi

¹¹ Mohamed, K. Sunil, T. V. Sathianandan, and Shelton Padua. "Integrated spatial management of marine fisheries of India for more robust stock assessments and moving towards a quota system." Marine Fisheries Information Service; Technical and Extension Series 236 (2018): 7-15.

Inland fisheries resources¹²:

- 0.28 million km of rivers and canals,
- 1.2 million ha of flood plain lakes,
- 2.45 million ha of ponds and tanks and
- 3.15 million ha of reservoirs)

Table 2.3: Inland fisheries¹³

	Resources	Size (Ha)	Type
1	Rivers & canals	191024 Kms	Capture
2	Mangroves	356,000	Conservation Capture & culture (e.g. mud crab)
3	Estuaries	300,000	Capture
4	Estuarine wetlands (Bheries)	39,600	Aquaculture
5	Backwater/Lagoon	190,500	Capture
6	Large and Medium reservoirs	1806,780	Capture/Enhancement
7	Small Reservoirs	1,509,457	Culture based
8	Floodplain wetlands	554,213	Culture based
9	Upland lakes	720,000	Traditional fisheries
10	Ponds & tanks	2,360,000	Aquaculture

2.2. Main species and ecosystems

The Indian Oil Sardine (*Sardinella longiceps*), Hilsa Shad (*Tenualosa ilisha*) and Indian Mackerel (*Rastrelliger kanagurta*) are among the most commercially important fish species in India, widely dispersed along the coastline and inland waters. The Indian Oil Sardine is predominantly found along the southwest coast with major landings in Kerala, particularly in Kozhikode, Alappuzha and Kollam, as well as along the Karnataka coast including Mangalore and Udupi, and parts of Tamil Nadu and Goa¹⁴. The Hilsa Shad, an anadromous species, is highly valued in eastern India, especially in the Hooghly Bhagirathi River system of West Bengal, along with the estuaries of the Mahanadi in Odisha and the Godavari and Krishna rivers in Andhra Pradesh¹⁵. The Indian Mackerel is mainly landed along the west coast, with significant concentrations in Karnataka Goa

¹² Inland Fisheries <https://dof.gov.in/inland-fisheries> last accessed 1 September 2025

¹³ Ganesh Chandra and BK Das, Fisheries Legislation and its Impact on Inland Fisheries in India. Paper presented in National Workshop: Towards Developing an Implementation Plan for India's 2018 (Draft) National Policy on Inland Fisheries and Aquaculture (NIFAP) and the SSF Guidelines, Kolkata, India, 6-7 September 2019. https://icsf.net/wp-content/uploads/2022/11/INF_3-Ganesh-Fisheries-legislation-icsf-workshop-1.pdf

¹⁴ Indian Oil Sardine. NGK Pillai, U. Ganga and AA Jayaprakash in Status of Exploited Marine Fishery Resources of India (eds. M Mohan Josph and AA Jayaprakash), 2005 https://eprints.cmfri.org.in/15/1/new_arti2.pdf

¹⁵ Current Knowledge on Hilsa. VR Suresh et al., 2017. https://eprints.cmfri.org.in/16913/1/Current-Status-of-Knowledge-on-Hilsa_2017.pdf

and Maharashtra¹⁶. It is also found in the coastal waters of Kerala and Tamil Nadu. These species form the backbone of regional small-scale fisheries with seasonal peaks influenced by monsoon patterns and coastal productivity.

Table 2.4: Main species and ecosystems (marine)

Main Species	Seasonality	Associated Ecosystems	Methods of Fishing
Indian Oil Sardine (<i>Sardinella longiceps</i>)	June to September (southwest monsoon peak)	Coastal pelagic zones, open coastal waters, near estuaries	Purse seines, gillnets, ring seines
Indian Mackerel (<i>Rastrelliger kanagurta</i>)	Year-round; peaks June to November (monsoon/post-monsoon)	Near shore coastal waters, reefs, shallow bays	Gillnets, cast nets, purse seines
Ribbon fish (<i>Trichiurus lepturus</i>)	July-April	Inshore waters, deep waters	bag nets and shore-seines, especially when they moved in schools in inshore areas. Now more by trawl nets in deeper waters
Penaeid shrimp	June-September (west coast) November-January (both coasts)	Demersal	Trawl nets, bag nets, (dol nets), drag nets, cast nets, stake nets
Hilsa Shad (<i>Tenualosa ilisha</i>)	February to April & September to November (pre- and post-monsoon)	Estuaries, tidal rivers, freshwater riverine systems	Drift nets, stake nets, gillnets

Table 2.5: Major fish from pelagic and demersal fisheries

Major fish from pelagic fisheries	Major fish from demersal fisheries
wolf herring, oil sardine, lesser sardine, Hilsa, anchovies, Bombay duck, halfbeaks, fullbacks, flying fishes, ribbon fishes, carangids, Indian mackerels, seer	sharks, groupers, threadfins, pomfrets and Indian halibut, rays, eels, catfishes, lizard fishes, pigface bream, perches, goatfishes, sciaenids, silver bellies, white

¹⁶ Yohannan, T M and Nair, P N Radhakrishnan (2002) The resources of the Indian mackerel - characteristics, exploitation and future prospects. In: Management of Scombroid Fisheries. CMFRI; Kochi, Kochi, pp. 24-32.

fishes, tunas, billfishes, barracudas, mullets and unicorn cod.	fish, mullets, unicorn cod, flounders and soles
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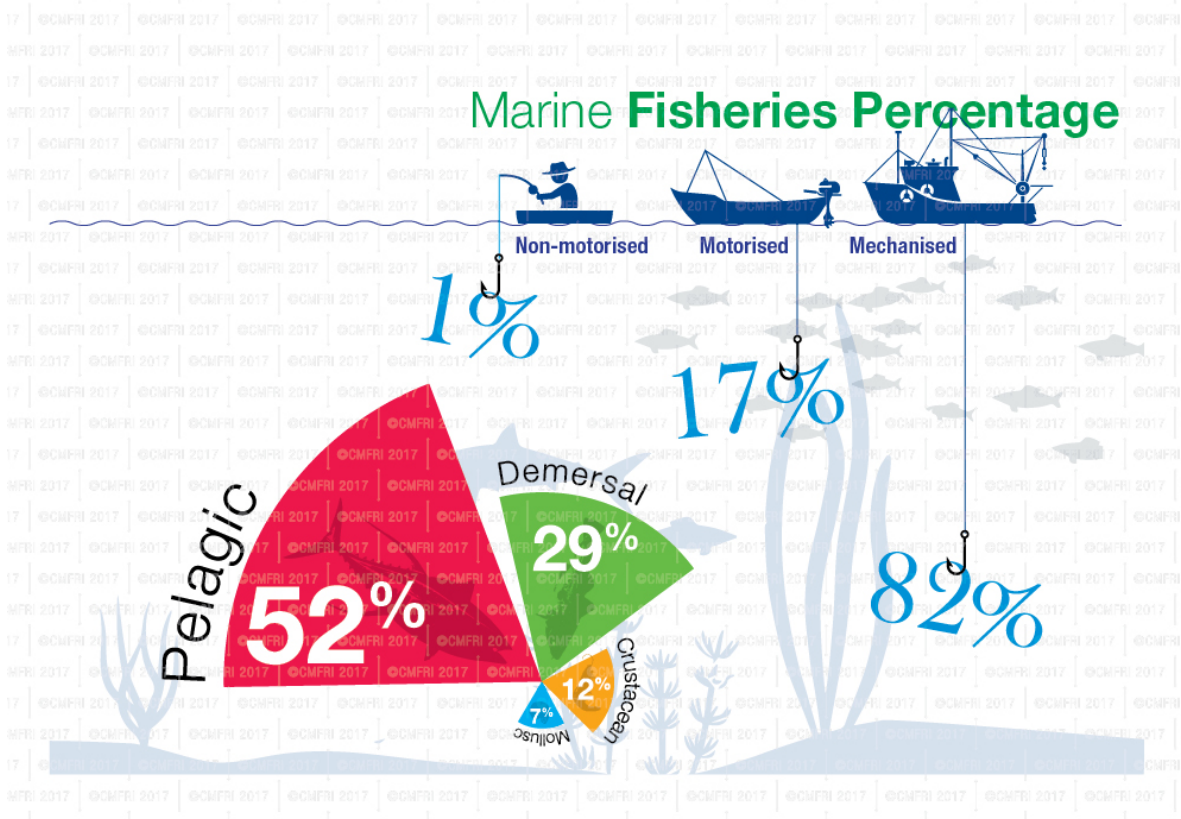


Figure 2.1: Marine fisheries production from different areas¹⁷

The fishing craft-gear combinations available in India can be categorized into mechanised, motorized, and non-mechanised/non-motorised vessels, operating four types of gears, namely, gillnets, seines, trawl nets and hooks and line locally known by different vernacular names¹⁸.

2.3. Scale of the small-scale fisheries sector

Table 2.6: Overall fishermen population details (2020-21)

	Male	Female	Total
Inland	13,013,978	10,103,842	2,3,117,820
Marine	2,651,652	2,294,066	4,945,718
All-India	15,665,630	12,397,908	28,063,538

Traditionally, fishing craft were classified as non-motorised, motorised and mechanised vessels. Details of state-wise distribution of the various craft types from the 2016 Marine Fishing Census are presented in the figure.

¹⁷ Marine fisheries percentage <https://www.cmfri.org.in/uploads/infographics/INFOS2.jpg>

¹⁸ J.K. Jena and Grinson George, Small-scale fisheries in India: An appraisal. In Giri, S.S. (Ed) , 2018. Small-scale fisheries in south Asia, SAARC Regional Centre, Dhaka, Bangladesh, 137p.

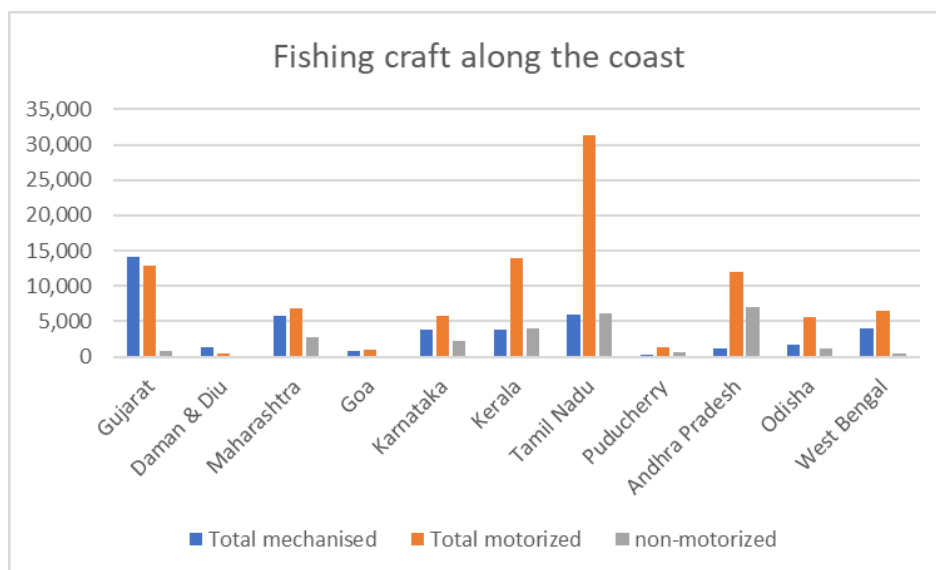


Figure 2.2: Fishing craft along the coast

The structure of the marine fishing fleet has undergone much change in the last 50 years. Looking at historical trends in marine fishers by craft-gear groups, the following highlights may be noted as presented in the table. The number fishing without vessels is not provided in any report or census.

Table 2.7: Trends in fishing craft over time

	Time	Trend	Current Estimate
Non-Mechanized Craft & Traditional Gear	1950s–1980s: Dominated the sector. Most fishers used catamarans, dugouts, and shore seines. Local markets, low availability of ice boxes and storage facilities; excess fish catch processed as dried fish	Gradual decline in proportion due to motorization and mechanization	~25–30% of total marine fishers
Motorized Traditional Craft & Improved Gear	1980s–2000s Rapid growth due to government subsidies for outboard motors and fuel; post-tsunami boats; extensive availability of storage – ice	Became the largest segment by the 2000s.	~35–40% of total marine fishers

	Time	Trend	Current Estimate
	facilities, access to larger markets		
Mechanized Craft & Commercial Gear	1990s–Present: Expansion of trawlers, purse seiners, and deep-sea vessels.	Steady increase, especially in Tamil Nadu, Gujarat, Maharashtra, and Kerala	~30–35% of total marine fishers

This shift reflects a broader transformation from local-level fishing to commercial operations, with increased pressure on marine resources and a growing need for sustainable practices.

The [ReALCraft portal](#) classifies fishing vessels into four distinct categories based on their propulsion and operational categories: Deep-sea fishing vessels, motorized non-mechanical vessel, motorized mechanical vessel and non-motorized vessels. The first two may be classified as small-scale.

Table 2.8: Vessel classification by RealCraft

	Class	Description
1	Non-motorized	Traditional vessels without any motorized propulsion.
2	Motorized non-mechanical	Vessels powered by motors but lacking mechanical gear systems.
3	Motorized Mechanical	Equipped with both motor and mechanical systems for enhanced functionality.
4	Deep Sea Fishing Vessel	Specialized vessels designed for deep-sea operations, often larger and more advanced.

2.4. Social and economic significance

The fisheries and aquaculture production contributes around 1% to India’s Gross Domestic Product (GDP) and over 5% to the agricultural GDP¹⁹, contributing about 1.09% to the country’s Gross Value Added (GVA) and over 6.724% to the agricultural GVA²⁰.

¹⁹ Fish Production and Consumption. Ministry of Agriculture & Farmers Welfare Press Information Bureau, Government of India. 08-January-2019.

<https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=187305>

²⁰ Year End Review 2023, Department of Fisheries (Ministry of Fisheries, Animal Husbandry and Dairying). 14 DEC 2023.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1986155#:~:text=Fisheries%20sector%20plays%20an%20important,responsible%2C%20inclusive%20and%20equitable%20growth.>

The estimated contribution of the marine fisheries sector to the country's gross value added (GVA) in 2024 was Rs 39,5254 crore²¹, accounting for 63.04% of the gross revenue. The capital productivity ratio was estimated to be 0.56, with an input-output ratio of 0.34, and a labour share of 28% across different fishing operations.

A summary of the valuation of marine fish landings is given in the table.

Table 2.9: Summary of the valuation of marine fish landings²²

Total value of the landings in mainland India	Rs 62,702 crores (landing centres)
	Rs 90,104 crores (retail centres)
Average price per kg	Rs 182.59 (landing centres)
	Rs 262.38 (retail centres)

Most coastal and inland communities in India depend heavily on small-scale fisheries for primary income, food security, and affordable nutrition, with the sector also supporting millions through secondary livelihoods in processing, trading, and related services, making it vital to local economies and well-being. However, this is changing due to declining fish stocks, increased competition, and lack of steady income. In communities near growing cities like Chennai, Kochi, Mumbai, Kolkata, etc., the younger, more educated, generation is increasingly moving to jobs in IT, marketing, construction, and other sectors. There is pressure from their parents to not continue in the sector because of the increasing uncertainties. However, there are still many who prefer fisheries as a way of life.

It may be noted that according to the 2016 [Marine Fisheries Census](#), 67.3% of the total marine fishermen families are below poverty line (BPL) Nearly 30.6% of the BPL families are in Tamil Nadu and 25.1% are in Andhra Pradesh.

Access to social services, housing, and basic amenities for small-scale fisheries communities in India is often limited and uneven, especially in remote or marginalized areas. Many fishers face challenges related to inadequate housing, poor sanitation, limited healthcare, and lack of formal social security, though some progress has been made through government schemes and NGO interventions. For example, according to the 2016 Marine Fisheries Census 69.7% of the marine fishermen households live in pucca houses, 30.3% reside in *kutcha* houses and the percentage of *kutcha* houses is maximum in West Bengal (81.0%) and minimum in Goa (3.8%).

²¹ 1 crore =10 million

²² CMFRI Annual Report, 2024

3. Small-scale fisheries structure

3.1 Small-scale fisheries fisher groups

India’s marine fisheries sector supports a vast and diverse population of fishers, and while exact numbers fluctuate due to seasonal and regional variations. The number of marine fishers in India—and the types of craft-gear combinations they use—has evolved dramatically over the decades, shaped by technological advances, policy shifts, and market demands. India’s marine fisheries rely on a diverse set of major fishing gears, each suited to specific species, habitats, and vessel types. Exact fisher counts per gear type vary by region and season.

Table 3.1: Major craft-gear groups

	Craft-Gear Group	Description
1	Non-Mechanized Craft & Traditional Gear	Artisanal fishers using catamarans, dugouts, shore seines, gill nets, and hooks. Mostly operate nearshore.
2	Motorized Traditional Craft & Improved Gear	Use powered country craft with drift nets, long lines, and small trawls. Active in coastal and slightly offshore zones.
3	Mechanized Craft & Commercial Gear	Large-scale operations with trawlers, purse seiners, and deep-sea vessels. Target high-value species.

The first two come under small-scale sector whereas the third is not completely small-scale even though many owners and crew are from traditional fishing communities.

Regional Highlights

- East Coast (Tamil Nadu, Andhra Pradesh, Odisha): Dominated by non-mechanized and motorized craft.
- West Coast (Kerala, Karnataka, Gujarat): Higher concentration of mechanized vessels and purse seiners.
- Islands (Lakshadweep, Andaman & Nicobar): Mostly small-scale, motorized craft with specialized gear like trolling lines and pole-and-line for tuna

3.1.1. Fisher organisations

Fisher organisations include cooperatives, self-help groups (SHG), joint liability groups (JLG), Fish Farmers Producers Organisations (FFPOs), trader associations and others. A large number of fisheries cooperatives exist throughout the country. A [National Federation of Fishers Cooperatives](#) (FISHCOPFED) exists under the Ministry of Fisheries, Animal Husbandry and Dairying.

Table 3.2: Membership in Fisheries Cooperatives²³

1	Cooperative Fishermen Membership	3966572
2	Primary Fishermen Cooperative Societies (Members)	28226
3	District level Societies	147
4	Regional level federation	9
5	State level federations	22
6	National level federation	1

An example of membership in fisheries cooperative societies at the state level (Tamil Nadu) is given in the table.

Table 3.3: Membership in Primary Cooperative Societies in Tamil Nadu

Type of society	Number of societies	Members enrolled
Marine Fishermen Cooperative Societies	578	380,764
Marine Fisherwomen Cooperative Societies	486	301,748
Inland Fishermen Cooperative Societies	340	77,103
Inland Fisherwomen Cooperative Societies	76	11,250
Total	1,480	770,885

In addition to the fisher organisations, a number of local level organisations exist. For example, in Tamil Nadu and Puducherry, the Hindu fishing village has a traditional panchayat that plays an important role in resolving disputes and controlling access to the sea (deciding local fishing holidays, bans, gear usage etc); in Christian fishing village, the local parish plays a similar role.

Key NGOs active in the SSF and associated communities are given in the table.

Table 3.4: Key NGO/CSO in the fisheries domain in India

S. No.	Name of NGO / CSO	Key activities (examples)
1	Dr MS Swaminathan Research Foundation (MSSRF): https://www.mssrf.org	Under programme area – coastal resources programme: Through the Fish for All Research and Training Centre, train coastal communities in sustainable fishing, safe fish handling, and value addition.
2	International Collective in Support of Fishworkers: https://icsf.net/	Extensive work with SSF, specifically SSF Guidelines – capacity building, training, focus on women etc
3	Dakshin Foundation https://dakshin.org/	Sustainable Fisheries: Improving governance and management of

²³ FISHCOPFED <https://fishcopfed.in/>

S. No.	Name of NGO / CSO	Key activities (examples)
		fisheries by decentralising knowledge to empower stakeholder communities and to ensure their direct involvement in decision-making.
4	DISHA: https://dishaearth.org/fishing-communities/	Fishworker empowerment
5	South Indian Federation of Fishermen Societies (SIFFS) http://www.siffs.org/	Apex body of organisations of small-scale artisanal fish workers.
6	Dakshinbanga Matsyajibi Forum	Develop collective strength of small-scale fish workers of southern part of West Bengal.
7	Social Need Education and Human Awareness (SNEHA) https://snehangt.com/about-us/	Women in fisheries
8	FishMARC a vertical of Vrutti https://vruttiimpactcatalysts.org/what-we-do/	Co-management, organising producer company etc
9	Riverine Ecosystems and Livelihoods programme, Wildlife Conservation Trust	co-management of riverine wildlife and fisheries in the Ganges
10	Dhan Foundation	SHG

There are a number of other organisations that serve as apex bodies of fisher associations at different levels such as the National Fishworkers Forum and the [National Federation of Small-scale fishworkers](#) at the national level; Kerala Swathantra Matsyathozhilali Federation, Andhra Pradesh Traditional Fishermen Union, Maharashtra Machhimar Kruti Samiti (MMKS), Odisha Traditional Fishworkers' Union (OTFWU), Ramnad District Fishworkers Trade Union, Self Employed Women's Association (SEWA),

3.2. Supply chain

About three-fourths of total marine fish landed in India is marketed in its internal consumption channel. This, when translated to specific terms, is estimated at a quantity of around 2.7 mmt²⁴. India's fisheries supply chain is a massive employment engine, supporting millions of livelihoods across harvesting, handling, processing, and marketing. The sector provides livelihood to about 25 million fishers and fish farmers at the primary level and twice the number along the value chain²⁵.

²⁴ Jena and George, 2018

²⁵ National Fisheries Development Board, https://nfdb.gov.in/welcome/about_indian_fisheries

Table 3.5: The fisheries supply-chain

Segment	Description
Harvesting (Fishers)	Includes full-time, part-time, and seasonal marine fishers
Landing & Handling	Workers involved in sorting, grading, icing, and transporting fish at landing centres
Processing & Value Addition	Includes workers in freezing units, drying yards, fish meal plants, and seafood factories
Marketing & Distribution	Retailers, wholesalers, auctioneers, and transporters across domestic and export markets
Export & Logistics	Includes staff in export houses, cold chain logistics, and quality control (MPEDA-linked)

Stakeholders in the different segments were identified as part of the **FIMSUL** Project in Tamil Nadu and Puducherry. A snapshot from the district level reports is presented in the table below.

Table 3.6: Stakeholders in the Fisheries Sector

Fishers	Post-Harvest & Marketing	Providers of Services & Support to Fisheries
<ul style="list-style-type: none"> • Kattumaram fishers • FRP Boat owners • Fishing crew (FRP boats & trawlers) • Trawler owners • Mechanised boat owners (gillnets, hook & line) • Ring seine owners & crew • Stay fishers • Shore seine fishers • Divers 	<ul style="list-style-type: none"> • Fresh-fish vendors • Dry fish producers • Traders, merchants, buyers/ moneylenders (fisher) • Traders, merchants, buyers / moneylenders (non-fisher) • Agents • Fish processors • Exporters • Auctioneers 	<ul style="list-style-type: none"> • Ice-makers • Fuel suppliers • Mechanics • Net makers • Net menders • Equipment and supplies vendors • Transporters • Snack sellers • Loaders • Moneylenders • Banks • Pawnbrokers • Boat builders • Ice plant operators

In India, fishers and crew are usually part of traditional caste or community-based groups (often, both), boat owner associations, or fisher cooperatives²⁶. Women processors and vendors are often organized into self-help groups, women's fish vendor associations, or cooperatives like the Matsyafed women's groups in Kerala. Traders and exporters operate through independent trader associations, fish merchants' unions, or have linkages with export promotion councils. Support service providers are generally independent or informal but may be part of artisanal associations such as boat builders' guilds or net weavers' collectives. Credit providers and transporters are mostly informal,

²⁶ V. Vivekanandan, 2010.

though some are linked to cooperative banks, SHG federations, or microfinance institutions. Institutional actors such as fisheries officials, NGOs, and researchers function within their respective departments or networks, including the Department of Fisheries, CMFRI, and NGOs like SIFFS.

3.3. Local community

Till the 2004 Indian Ocean tsunami, fishermen across the Indian coast were considered to be largely away from the mainstream with their own panchayats and regulatory systems. In the last 25 years, this has changed, but still fishermen in India are largely distributed caste-wise; while in some areas, they constitute single caste communities, in other locations, there may be multiple castes active in the fishing sector. Along the Indian coast there are 3,477 marine fishing villages distributed in 9 coastal states, union territories of Puducherry, Daman & Diu, Lakshadweep and Andaman & Nicobar, which is where the majority of the fishers live. Data from the 2016 Marine fisheries census is presented in the table. It may be seen that most fishermen families are considered traditional fishermen families.

Table 3.7: The marine fishing community -a snapshot from the 2016 MF census

	Coastal length (km)	landing centres	fishing villages	Fishermen families	traditional fishermen families	BPL families	fisherfolk population
State							
Gujarat	1,600	107	280	67,610	64,395	19,123	3,54,992
Maharashtra	720	155	526	87,717	80,906	27,400	3,64,899
Goa	104	32	41	2,986	2,922	650	12,651
Karnataka	300	84	162	32,479	30,897	27,312	1,57,989
Kerala	590	174	220	1,21,637	1,16,598	72,507	5,63,903
Tamil Nadu	1,076	349	575	2,01,855	1,96,784	1,83,683	7,95,708
Andhra Pradesh	974	234	533	1,55,062	1,52,062	1,50,669	5,17,435
Odisha	480	55	739	1,15,228	92,569	48,601	5,17,623
West Bengal	158	49	171	81,067	56,447	55,301	3,68,816
Union Territory							
Andaman & Nicobar	1,962	57	169	5,944	4,486	1,486	26,521
Lakshadweep	132	37	10	4,163	3,003	1,170	27,934
Puducherry	45	22	39	14,347	14,328	12,968	50,270
Daman & Diu	21	8	12	3,163	3,094	20	15,836

Village panchayat heads/ leaders are often the liaison between the community and the world, including the state. However, they remain largely marginalized. More recently,

there has been a move to set up three tier co-management systems by the state fisheries departments with members from the fishing community.

3.4. The role of women in small-scale fisheries

Women in Indian fisheries are crucial to the sector, engaging in diverse roles from fish processing, marketing, and value addition to direct harvesting in small-scale and inland fishing, constituting about 44-47% of the total fisher population. Only a small percentage of women is involved in direct harvesting, particularly in near-shore and small-scale fishing, as well as seaweed cultivation and inland fishing; others are in the non-harvest activities²⁷.

- Marketing and sales: a significant number buy fish directly from the fishermen/wholesalers at the point of landing and sell to consumers
- Post-harvest work: fish cleaning, curing (drying), salting, processing, and prawn peeling.

Women in India are actively represented in various groups related to small-scale fisheries. They commonly participate in self-help groups²⁸, women's fish vendor associations (e.g. JLG under PTSLP²⁹), and processing cooperatives, playing key roles in post-harvest activities, marketing, aquaculture and community organization within the fisheries sector.

²⁷ Tanuja S., Mridula Devi, S.K. Sarangi. and P.R. Sahoo, Women In Fisheries: Roles, Constraints and Recommendations. Indian Farmer, Volume 11, Issue 04, 2024, Pp. 107-112, Available online at: www.indianfarmer.net

²⁸ SHG are promoted by private enterprises including NGO such as MSSRF as well as government supported entities and schemes such as PMMSY, National Rural Livelihood Mission, state departments such as Fisheries, Rural Development etc. Seed money is provided as a grant or loan and used by the members for their activities. India has around 1.2 crore SHGs, 88 per cent being all-women SHGs (PIB).

²⁹ Post Tsunami Sustainable Livelihoods Project (PTSLP): <https://www.ifad.org/documents/48415603/49455874/Supervision+Report+July+2018.pdf/21838503-37d9-009d-6327-62f484a040e8?t=1726609566528>

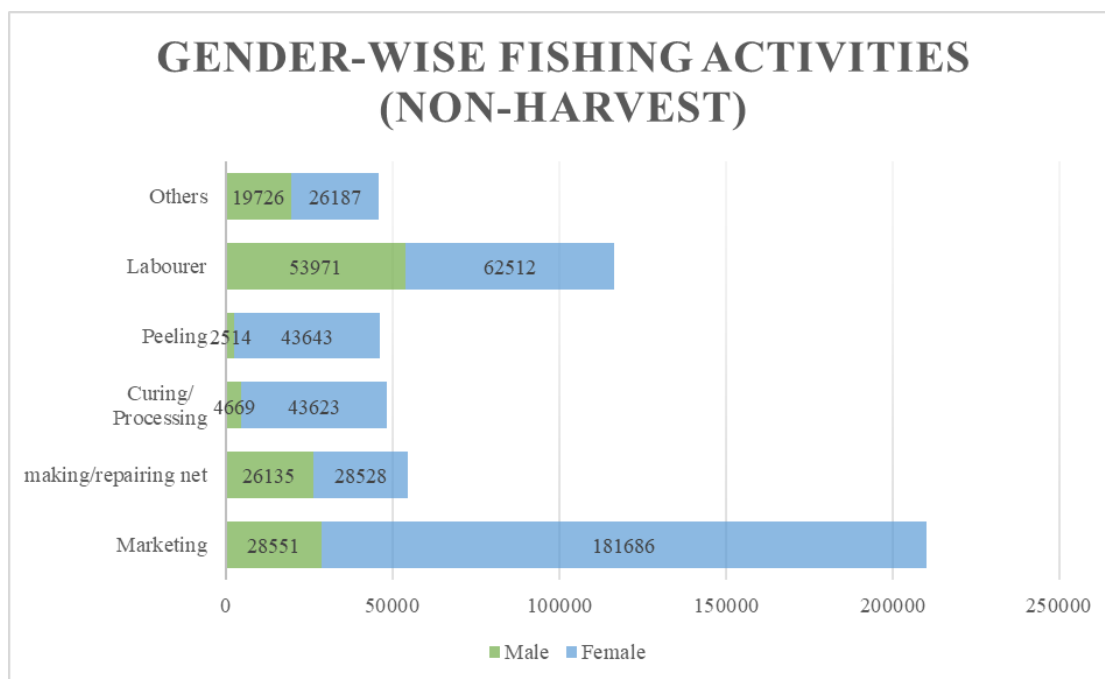


Figure 3.1: Gender-wise fishing activities (non-harvest)

With respect to decision-making, the general view is that women have a very small role to play in decision-making. Earlier, in marine fisheries, women were the custodians of the catch once it was landed and took full charge of the household finances; but that appears to be a thing of the past³⁰. Patriarchal systems ensure that women do not participate in the traditional panchayats; they are poorly represented in fisheries' associations, cooperatives and unions. However, there is representation of women in the elected panchayats, especially because of reservation. They rarely have a say in the decisions that govern their fisheries and other matters that affect their life and livelihood. Mainstream policies and programmes remain gender-blind or biased. Lack of data undermines women's role in fisheries^{31,32}. Their participation in meetings and support for decision-making has been enabled by having organisations such as ICSF and MSSRF which have conducted capacity building exercises focused on women in the sector. Provision of translation facilities and pre-meeting capacity building in such exercises has helped a great deal.

³⁰ Venkatesh Salagrama, Climate Change and Fisheries: Perspectives from Small-scale Fishing Communities in India on Measures to Protect Life and Livelihood. Samudra Monograph, ICSF, 2012

³¹ Sajna, V & Rejula, K & Sethulakshmi, C & Kumar, Sreejith & Madhu, V & K M, Sandhya & O'Leary, Bethan & Bhowmik, Deepayan & Kemp, Paul & Shah, Bindi & Gopal, Nikita. (2025). Declining Participation of Women in Kerala's Fisheries Sector: A Case Study from Chellanam Village. Fishery Technology. 62. 10.56093/ft.v62i3.166981.

³² Mythili, DK and Niveditha, Sridhar (2022) *Report on national workshop on SSF guidelines and women in fisheries, 8 to 10 April 2022, Asha Nivas Social Service Centre, Chennai, India*. International Collective in Support of Fishworkers, Chennai.

4. Small-scale fisheries Management

4.1. Fisheries laws

From a governance perspective, fisheries management in India is constitutionally decentralized. The Constitution of India, as last consolidated in 2023, allocates responsibilities for fisheries governance between the Union and State governments (Constitution of India, Seventh Schedule, 2023). States and Union Territories (UTs) have jurisdiction over fisheries within the territorial sea up to 12 nautical miles, while the Union Government governs marine fisheries beyond this limit up to 200 nautical miles, within the EEZ (Constitution of India, Seventh Schedule, List I Entry 57 & List II Entry 21, 2023). This distribution of legislative authority is reflected in the Seventh Schedule of the Constitution: Entry 21 of the State List empowers state governments to regulate inland and coastal fisheries, while Entry 57 of the Union List grants the central government authority over fisheries beyond territorial waters (Constitution of India, 2023). Accordingly, the Union Government formulates national fisheries policy and legislative frameworks, while all nine coastal states and four UTs have enacted their respective MFRA to govern fishing activities within their maritime jurisdictions.

National Level:

The *Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981* and Rules, 1982 primarily regulate fishing by foreign vessels in India's EEZ.

Other national level legislation that have an impact on fisheries include:

- 1) Merchant Shipping Act, 1958
- 2) MPEDA Act, 1972
- 3) The Coast Guard Act, 1978
- 4) Water (Prevention and Control of Pollution) Act, 1974
- 5) Wildlife Protection Act, 1972
- 6) Environment (Protection) Act, 1986, especially Coastal Regulation Notification 2011, 2019 and the Environmental Impact Assessment Notification, 2006 issued under the Act as well as other related notification related to waste disposal and plastics
- 7) Biodiversity Act, 2002
- 8) Coastal Aquaculture Authority Act, 2005
- 9) The Indian Ports Bill, 2025
- 10) The Forest Rights Act, 2006

State level:

State/UT Fisheries Acts and associated rules are as given in the table. Only coastal states have enacted Marine Fishing Regulation Acts

Table 4.1: State/ UT Fisheries Legislation

	State/ UT	Marine	Inland
1	Andaman and Nicobar Islands	Andaman and Nicobar Islands Marine Fishing Regulation Act, 2003	
2	Andhra Pradesh	Andhra Pradesh Marine Fishing (Regulation) Act, 1994	
3	Arunachal Pradesh		Arunachal Pradesh Fisheries Act 2006
4	Assam		Assam Fisheries Rules 1953
5	Bihar		Bihar Fish Jalkar Management Act, 2006
6	Chhattisgarh		Chhattisgarh Fisheries Act 1948
7	Goa	Goa, Daman and Diu Marine Fishing Act, 1981	
8	Gujarat	Gujarat Fisheries Act, 2003	The Gujarat Fisheries Act, 2003 Gujrat reservoir Fisheries Policy 2004
9	Haryana		Haryana Fisheries Rules, 1996
10	Himachal Pradesh		The Himachal Pradesh Fisheries Act, 1976 Himachal Pradesh Fisheries Rules, 1979
11	Jammu and Kashmir		Jammu and Kashmir Fisheries Act 2018
12	Jharkhand		No law, only Fisheries Policy & administrative guidelines
13	Karnataka	Karnataka Marine Fishing Regulation Act, 1986	The Karnataka Inland Fisheries (Conservation Development and Regulation) Act, 1996
14	Kerala	Kerala Marine Fishing Regulation Act, 1980	The Kerala Inland Fisheries and Aqua Culture Act, 2010
15	Lakshadweep	Lakshadweep Marine Fishing Regulation, 2000 (UT)	
16	Madhya Pradesh	Madhya Pradesh Fisheries Act, 1948	MP Fisheries Act 1948
17	Maharashtra	Maharashtra Marine Fishing Regulation Act, 1981	Maharashtra Fisheries Act 1960 Maharashtra Fisheries Rules, 1969

	State/ UT	Marine	Inland
18	Manipur	--	Manipur Fisheries Act 1988
19	Meghalaya	--	No law. Only Meghalaya Fisheries (Welfare of Fishermen) Rules, 1987
20	Mizoram	--	Mizoram Fisheries Act, 2002
21	Nagaland	--	Nagaland Fisheries Act, 1980
22	Odisha	Orissa Marine Fishing Regulation Act, 1982	Odisha Fisheries Policy, 2015 Inland Fisheries Act being developed
23	Puducherry	Puducherry Marine Fishing Regulation Act, 2008 (UT)	
24	Punjab	--	Punjab Fisheries Rules, 1965
25	Rajasthan	--	Rajasthan Fisheries act 1953 Rajasthan Fisheries Rules, 1958
26	Sikkim	--	Sikkim Fisheries Act of 1980
27	Tamil Nadu	Tamil Nadu Marine Fishing Regulation Act, 1983	The Fisheries (Madras Amendment) Act, 1927 (Madras Act II of 1929)
28	Telangana	--	In the process of preparing an Act
29	Tripura	--	In the process of preparing an Act
30	Uttar Pradesh	--	UP Fisheries Act 1948
31	Uttarakhand	--	Uttarakhand Fisheries Act 2003
32	West Bengal	West Bengal Marine Fishing Regulation Act, 1993	West Bengal Inland Fisheries Act 1984

4.2. Governance structures

At the national level, the Department of Fisheries³³ is a constituent of the Ministry of Fisheries, Animal Husbandry & Dairying. The Department of Fisheries was established from the former Department of Animal Husbandry, Dairying & Fisheries in 2019. The administrative head of the Department is the Secretary, Fisheries. Secretary (Fisheries) is assisted by two Joint Secretaries with Inland and Marine Fisheries divisions.

The Department is responsible for matters relating to formulation of policies and schemes pertaining to development of Inland, Marine and Coastal Fisheries and Fishery

³³ Department of Fisheries <https://dof.gov.in/about-us/about-department>

Institutes including its four subordinate institutions and one autonomous body and one regularly authority. The Department advises the State Governments /Union Territories (UTs) in formulation of policies and programmes in the field of fisheries.

Since fisheries within territorial limits comes under the purview of the state government, most states have departments of fisheries with a commissioner/ director of fisheries in charge supported by staff in three or four tiers.

The National Policy for Marine Fisheries, 2017 has called for formation of local, regional, inter-state and national fisheries councils to support co-management and EAFM. Some state MFRA have taken this up and notified the formation of such councils. For example, in Kerala, the Kerala Marine Fishing Regulation Act, 1980³⁴ has enabled the constitution of a three-tier co-management. State and district level management councils have been constituted but it is not clear if fishing village management councils have been constituted. Small-scale fisheries stakeholders are expected to be a part of these councils.

In Tamil Nadu³⁵, Co-management Committees have been formed involving the fishers at Village level, District level and state level in all the 13 Coastal districts. The State Level co-management Committee will be formed. Asset Management Committees have been formed in all fishing harbour / fish landing centres involving local fishermen stakeholders and provided training on hygienic maintenance of fishing harbour / fish landing centre premises.

In states such as Maharashtra where the fisheries cooperatives are active, small-scale fishers are involved in governance through these agencies.

4.3. Management measures

What are the main tools used to manage small-scale fisheries, and to what extent are they open access fisheries?

The main tools to manage small-scale fisheries are the state Marine Fisheries Regulation Acts which work through a Registration-Licence regime. All craft have to be registered and acquire a licence to fish. However, there are no quotas. Other management measures include seasonal bans (annual closed seasons for 61 days: from June 1 to July 31 along the west coast and from April 15 to June 14 along the east coast), gear restrictions (such as mesh size limits), and area closures (e.g. MPA). Community-based management through fisher cooperatives and participatory governance exists in some regions, sometimes incorporating traditional practices like territorial user rights (TURFs). Marine Protected Areas (MPAs), such as the Gulf of Mannar and Bhitarkanika, contribute

³⁴ The Kerala Marine Fishing Regulation Act, 1980. <https://fisheries.kerala.gov.in/sites/default/files/inline-files/KERALA%20FISHERMEN%20MARINE%20FISHING%20ACT.pdf>

³⁵ <https://www.fisheries.tn.gov.in/WhatWeDo.html>

to habitat conservation and indirectly support fisheries management, though their primary focus is biodiversity protection.

Some states have notified minimum legal size of commercially important fish that may be harvested. For example, is 23 cm in the case of Hilsa in West Bengal. Kerala³⁶ and Maharashtra have notified minimum fish length for a number of species. In Maharashtra, silver pomfret, and bangda (Indian mackerel) must be 14cm long, a prawn should be 9cm long, Bombay duck should be 18cm and for surmai, MLS is 37cm while it is 70 cm for croakers and 50 cm for tuna³⁷.

Though theoretically they are open access fisheries, there is some control at the landing centre-level. For example, in Tamil Nadu and Puducherry, in village-based fisheries, there are entry barriers where operations take place with the permission of the village. One can operate from that area only if born there or is descended from locals³⁸. These may not be so strict in the case of harbour-based fisheries.

5. Small scale fisheries knowledge

5.1. Research

India has a robust network of research institutions and agencies dedicated to marine fisheries, spanning everything from resource assessment to post-harvest technology and export promotion. Fisheries research in India is primarily coordinated by the Indian Council of Agricultural Research (ICAR), which oversees several dedicated research institutes like the ICAR-Central Marine Fisheries Research Institute (CMFRI), the ICAR-Central Inland Fisheries Research Institute (CIFRI), and others, focusing on specific areas such as marine, inland, and brackishwater fisheries. Services offered include potential fishing zone (PFZ) advisories using satellite data, genetic resource databases, sustainable mariculture development, technology transfer, and policy briefs, all aimed at improving the fishing community and promoting sustainable practices.

The table below presents the key institutions and their specializations. Apart from these, fishery related studies are carried out in a number of universities dedicated to fisheries,

³⁶ Minimum legal size imposed on fish catch. https://www.thehindu.com/todays-paper/tp-national/tp-kerala/minimum-legal-size-imposed-on-fish-catch/article19101769.ece#google_vignette June 19, 2017

³⁷ Maharashtra specifies minimum size for fish that can be sold. <https://timesofindia.indiatimes.com/india/maharashtra-specifies-minimum-size-for-fish-that-can-be-sold/articleshow/124512313.cms> Oct 13, 2025

³⁸ V. Vivekanandan, 2010. 'Fisheries Management in Tamil Nadu and Puducherry, An overview'. In FIMSUL (2010). Report of the Workshop on Fisheries Management Approaches and Techniques. A Report prepared for the Fisheries Management for Sustainable Livelihoods (FIMSUL) Project, undertaken by the UN FAO in association with the World Bank, the Government of Tamil Nadu and the Government of Puducherry. Report No. FIMSUL/R18. FAO/UTF/IND/180/IND. New Delhi, Chennai and Puducherry, India. <https://sites.google.com/site/fimsul/>

their constituent colleges as well as public (government) and private universities and institutions in India.

Table 5.1: Key fisheries research institutions in India

	Name of institution	Focus	website
1	ICAR-Central Marine Fisheries Research Institute (CMFRI)	Focuses on marine fisheries research, including resource assessment, sustainable mariculture (like bivalve farming), pathology, and genetic studies	https://www.cmfri.org.in/
2	ICAR-Central Inland Fisheries Research Institute (CIFRI)	Conducts research and training for inland fisheries, offering information on technologies and ongoing projects, according to the National Portal of India	http://www.cifri.res.in/
3	ICAR-Central Institute of Brackishwater Aquaculture (CIBA)	Specializes in research related to brackishwater aquaculture	http://ciba.res.in/
4	ICAR-Central Institute of Fisheries Technology (CIFT)	Focuses on technologies related to fisheries, particularly post-harvest technology	https://www.cift.res.in/
5	ICAR- Central Institute of Fisheries Education (CIFE)	Human resource development, capacity building and skill development through training, education and extension	https://www.cife.edu.in/
6	ICAR – National Bureau of Fish Genetic Resources (NBFGR)	Conservation and genetic improvement of fish species	https://www.nbfgr.res.in/
7	ICAR – Directorate of Coldwater Fisheries Research (DCFR)	Research on coldwater fisheries, especially in Himalayan regions	https://cicfr.res.in/
8	ICAR – Central Institute of Freshwater Aquaculture (CIFA)	Freshwater aquaculture research, breeding technologies, and farmer training	https://www.cifa.nic.in/
9	ICAR-Central Institute for	Mission is to generate and disseminate knowledge to	https://icar-ciwa.org.in/

	Name of institution	Focus	website
	Women in Agriculture (CIWA)	promote gender sensitive decision making for enhancing efficiency and effectiveness of women in agriculture (includes fisheries)	
10	Indian National Centre for Ocean Information Services (INCOIS):	Provides valuable Potential Fishing Zone (PFZ) advisories to the fishing community by analyzing satellite data for oceanic fronts and upwelling areas.	https://incois.gov.in/
11	Fishery Survey of India (FSI)	Exploratory surveys, monitoring surveys, charting of fishing grounds, assessment of the fish stocks in the Indian EEZ including adjoining high seas, data collection and maintenance, fishing gear suitability studies	https://fsi.gov.in

5.2. Data

According to the Statistics Division³⁹ of the DoF, GoI, data on items like fish production, prawn production, fish seed production, disposal of fish catches, preserved and processed items and aquaculture are being collected from State Governments and data related to Human Resource Development in this sector are being collected from the Fisheries Institutes. The data on marine fish production are collected through multistage sample survey conducted by the State Governments. The Methodologies are the Survey for Marine Fisheries developed by the Central Marine Fisheries Research Institute (CMFRI), Kochi and Inland Fisheries by Central Inland Fisheries Research Institute (CIFRI), Barrack pore, and West Bengal.

The statistics are compiled and presented as the Handbook on Fisheries Statistics is published annually and available from the website.

5.2.1. Marine

Species wise catch, fishing effort, details of fishing crafts and gears and other related information are collected by following a scientific sampling scheme, stratified multi-stage random sampling design, developed by CMFRI and used to estimate landings and fishing effort each month for smaller non-overlapping geographical areas referred to as

³⁹ <https://dof.gov.in/fisheries-statistics>

fishing zones covering the entire coast. The information generated is stored under National Marine Fishery Resources Data Centre (NMFDC) of CMFRI.

Table 5.2: Data Availability⁴⁰

Meaning of terms used:	Summary of Available Data on Marine Fish Landings in NMFDC
National	Entire coast in the mainland excluding Lakshadweep, Andaman & Nicobar Islands
Region	The mainland along the coast is categorized into four regions namely North-East, South-East, South-West and North-West
State	The entire coast is divided into nine coastal states and these are West Bengal, Odisha, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra and Gujarat
UT	The union territories under the central government along the coast line are Puducherry, Daman and Diu.
District	These are distinct subdivisions of states covering the coastal region belonging to the coastal state
Fishing Zone	These are non-overlapping exclusive subdivisions of coastal districts.
Sector	Fishery is divided into three sectors namely, Mechanized, Motorized and Non-motorized
Gear	Different craft/gear combinations used for harvesting from the sea are termed under this. Major gears are Mechanized Trawl nets, Mechanized Gillnets, Mechanized Hooks & lines etc. under Mechanized sector and Outboard Gillnets, Outboard Ring seines, Outboard Hooks & lines under Motorized sector.
Category	The four Categories are Pelagic, Demersal, Crustacean and Molluscs
Group	The species landed are summarised into 83 resource groups for presentation in tabular form based on their dominance in the fishery and commercial importance

5.2.2. Inland

State-wise data is available for fish production, species-wise inland fish landings, fishermen population (men, women) in the DoF Fisheries Handbook.

Table 5.3: State-wise inland fish production

State	Production (Lakh tonnes)	State	Production (Lakh tonnes)
Andhra Pradesh	45.06	Odisha	8.39
West Bengal	18.56	Chhattisgarh	6.52
Uttar Pradesh	9.15	Karnataka	4.95
Bihar	8.46	Telangana	4.48

⁴⁰ <https://www.cmfri.org.in/fish-catch-estimates>

State	Production (Lakh tonnes)
Assam	4.43
Madhya Pradesh	3.42
Jharkhand	2.8
Tamil Nadu	2.32
Kerala	2.3
Haryana	2.12
Gujarat	1.94
Punjab	1.85
Maharashtra	1.44
Tripura	0.83
Rajasthan	0.79

State	Production (Lakh tonnes)
Manipur	0.34
Jammu & Kashmir	0.27
Meghalaya	0.19
Himachal Pradesh	0.17
Arunachal Pradesh	0.09
Nagaland	0.09
Uttarakhand	0.07
Goa	0.06
Mizoram	0.05
Puducherry	0.05
Sikkim	0.01

5.3. Projects

There are a number of fisheries projects supported by the Government of India. These include projects under Pradhan Mantri Matsya Sampada Yojna (PMMSY), Fisheries and Aquaculture Development Fund, Group accident insurance scheme and Blue Revolution (Neel Kranthi mission); Corporate Social Responsibility initiatives of the National Fisheries Development Board etc,

There are a number of NGO and CSO working in the area of SSF. Projects of some key NGO are listed below. The list is not exhaustive.

- **MSSRF:**
 - Mangrove and shelterbelt plantations in Andhra Pradesh and Tamil Nadu.
 - Integrated aquaculture and blue carbon solutions in the Palk Bay region.
 - Community-led ghost gear recovery in Gulf of Mannar.
 - ICT innovations to bridge the gender digital divide in fisheries.
 - Strengthening education, health, and livelihoods of tribal fishing communities.
 - Promoting Fish Farmer Producer Organizations in coastal Tamil Nadu and Puducherry.
- **Dakshin Foundation: Sustainable Fisheries**
 - From Bycatch to 'BuyCatch': Reduction fisheries and their implications
 - Fish for the Future: Fisheries co-management in the Lakshadweep Islands
 - Illuminating Hidden Harvests
 - Commercialisation of Fisheries Bycatch
 - Monitoring fish catch in the Muttukadu Lagoon
 - Fisheries resource monitoring in Karnataka
 - Addressing fisheries governance and management in the Andaman Islands

- **Nature Conservation Foundation**
 - Analyzing the dialogue between fisheries policy and fish biology in capture fisheries along India's west coast
 - Documenting the changing trends of fish catch and consumption in the Lakshadweep islands

6. Issues and opportunities

6.1. Issues and Opportunities

Table 6.1: Issues and Opportunities in SSF

Small-scale fisheries dimension	Stakeholders to ask*	Key issues*	Responses	Opportunities
5. Governance of tenure in small-scale fisheries and resource management a. Responsible governance of tenure	Local leaders Local government Regional government National government	Are small-scale fisheries adequately recognized in government policy?	Partly. The NPMF 2017 refers to SSF but does not define or elaborate; however, their needs are mentioned	A clear definition of SSF in policy and legislation would support the SSF in many ways
		Do small-scale fishers have secure tenure?	No	Ensuring secure tenure for SSF would improve their ability to safely pursue their livelihood; encouraging safe tenure could be an opportunity for certification
		Are there conflicts between larger-scale operators, or other parties, and small-scale fisheries' fishers?	Yes	Carrying out participatory spatial planning exercises and ensuring implementation through co-management councils
		Are small-scale fisheries involved in fisheries management decision-making?	Partly.	Increased participation would help understanding long term impacts and in cooperation from the sector

Small-scale fisheries dimension	Stakeholders to ask*	Key issues*	Responses	Opportunities
5b. Sustainable resource management	Fishers, Researchers, scientists Resource managers	What is the status (e.g. stable, overfished, unknown) and ecological significance of small-scale fisheries resources?	Varies by fish type, in general the feedback is that fish size is smaller, they have to go further out to sea to catch the fish	Minimum legal size has been identified for a number of fish, building awareness and cooperative implementation would increase availability of larger fish (and hence better prices)
		Are other human activities affecting these resources or ecosystems? Examples are coastal development, pollution or mangrove cutting.	Yes, coastal and nearshore development activities, tourism, port development, coastal structures such as breakwaters and seawalls causing erosion, pollution due to discharge of untreated and partially treated wastes, mangrove cutting for development (e.g. port)	Coastal zone management plans as well as coastal development activities need active participation by fisheries department and fishermen communities
6. Social development, employment and decent work	Fisher groups (per fishery) Small-scale fisheries community groups, leaders, elders	Are there conflicts between groups across fisheries sectors (small-scale versus industrial; inland versus marine)? Across different sectors (small-scale fisheries versus agricultural sector, etc.)?	Yes	Mediation and ADR through

Small-scale fisheries dimension	Stakeholders to ask*	Key issues*	Responses	Opportunities
		Do small-scale fisheries communities have access to public services such as education, healthcare and public safety?	Yes. In some areas there are special schools for fisher children (e.g. Kerala), but in general they have access to public services like other citizens	Greater awareness of fisher-specific facilities
7. Value chains, post-harvest and trade	Supply chain groups: Upstream – suppliers (net and boat builders)	Are supply chain operators included in discussions and decision-making?	Sometimes, such as when they represent both SSF and their own activity (e.g. ice plants)	Enumeration of supply-chain actors and ensuring their inclusion in discussions and decision-making
	Downstream – buyers, processors, traders, retailers	How do wage levels compare and how secure are jobs and income? Are there alternative incomes in small-scale fisheries communities (community-based tourism, etc.)?	In some areas, there are community-based tourism initiatives (e.g. Vengurla , Maharashtra mangroves)	List best practices and encourage in other locations
		How is the small-scale fisheries subsector affected by competition with larger economic sectors (industrial-scale fisheries, shipping, etc.)?	With greater engine power, they are able to go deeper into the sea and catch more fish	Stricter zoning and other restrictions on large scale fishers; promotion of SSF as sustainable

Small-scale fisheries dimension	Stakeholders to ask*	Key issues*	Responses	Opportunities
8. Gender equality	Small-scale fisheries community groups, leaders, elders	Do opportunities in small-scale fisheries differ for men and women?	Yes	Create awareness of opportunities and services available so that they are well utilized
		Does access to public services differ for men and women?	Somewhat	
9. Disaster risks and climate change	Resource managers, scientists Fisher groups (per fishery) Small-scale fisheries community groups, leaders, elders	How is climate change affecting resources and small-scale fisheries communities?	Multiple factors affect resource availability and it is not easy to distinguish between climate change impacts and other impacts. However, climate change impacts are most seen in terms of more intense cyclones and storm surge impacts, increasing number of 'rough seas' days when SSF cannot go fishing	Increase adaptation abilities, implement parametric insurance
		How are communities adapting to climate change, and to what extent are they able to adapt?		Increase skilling options so that the options to move into more stable livelihoods is available

*Suggestions for targeting stakeholders and prompting information concerning the main issues.

7. Bibliography

- Handbook on Fisheries Statistics 2023, Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, New Delhi, November 2023.
- ICAR-CMFRI 2025. Annual Report 2024. ICAR-Central Marine Fisheries Research Institute, Kochi, 295p
- T. M. Najmudeen, Overview of Marine Fisheries of India, https://eprints.cmfri.org.in/17860/1/AARDO_2023_T%20M%20Najmudeen.pdf
- Mukesh Bhatnagar, Policy interventions to achieve a sustainable blue economy. Published 26 March, 2025. <https://impact.economist.com/ocean/sustainable-ocean-economy/indias-fisheries-sector-a-transformative-journey>



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