Reliance Foundation

INCOIS

From Sea Voices to Science Systems

India's National Marine Risk Intelligence Brief 2026

Converging Fisher Field Evidence, Research Priorities and Digital Advisory Systems

Study Conducted by: Reliance Foundation

Released at World Ocean Science Congress 2026 in Goa

February 24, 2026

The findings and recommendations in this report are those of the study team and do not necessarily reflect the official positions of INCOIS, Reliance Foundation, or other collaborating institutions."

Foreword

I am pleased to write a foreword to the survey report titled “From Sea Voices to Science Systems: Bridging Fisher Realities with Research & Digital Platforms (Marine Risk Intelligence Study)” based on the survey conducted by the Reliance Foundation during February 2026. INCOIS is associated with Reliance Foundation for more than a decade for taking its scientific services to the society. INCOIS shares the Ocean Information and advisory services with Reliance Foundation for further downstream dissemination to the end users through various dissemination platforms. Reliance Foundation works with community to collect their feedback on INCOIS Services thereby enabling INCOIS to improve the services. The present study was carried out in a short span with a focused approach, accommodating multiple stakeholders across the country, and includes participation from 238 marine fisherfolk across eight coastal states as well as 167 students and researchers from fisheries and marine science institutions.

The Indian National Centre for Ocean Information Services (INCOIS) is mandated to provide reliable, science-based ocean information and advisory services to multiple stakeholders, particularly the marine fishing community whose safety and livelihoods depend on timely and accurate information. In this regard, the present report is of significant value, as it represents a systematic compilation of feedback obtained directly from users at the ground level. Such inputs are invaluable in understanding the usability, accessibility, practical relevance and existing gaps of the advisory services, and they help us refine and improve our services in accordance with user needs.

INCOIS recognizes that science is continuously evolving, and no prediction or advisory system can be considered final or absolute. Our mission includes the continual validation, improvement, and updating of ocean information and advisory services in line with advances in science, technology, and user feedback. Studies of this nature provide an important interface between scientific systems and end users, enabling progressive enhancement of operational services. We sincerely appreciate the efforts of the Reliance Foundation and collaborating organizations, including WOSC and VIBHA, as well as other field-level partner agencies that have undertaken extensive interactions with fisher communities and academic institutions. Their ground-level engagement and contributions are invaluable in strengthening user-oriented service delivery. We believe that such groundwork will also provide an important foundation for the Fishermen Meet proposed to be organized as part of WOSC 2026.

I convey my best wishes for the successful completion and wider dissemination of this important initiative.

Dr. T. M. Balakrishnan Nair
Director, INCOIS

Special Message

India's marine fisheries sector stands at a decisive moment. As climate variability intensifies and operational uncertainties grow more frequent, the lived experiences of marine fisherfolk are revealing new patterns of risk that extend far beyond episodic cyclones. *From Sea Voices to Science Systems: India's National Marine Risk Intelligence Brief 2026* represents an important step in recognising that marine risk today is continuous, layered, and journey-based — spanning departure decisions, offshore exposure, navigation corridors, harbour entry, and livelihood security at landing points.

This report is significant not only for the scale of its consultation — engaging fisher communities, students, researchers, and digital advisory users across the country — but also for the way it converges field intelligence with scientific priorities and digital system design. By aligning grassroots realities with research gaps and advisory delivery architecture, the study advances a more integrated, evidence-based approach to marine risk governance. I appreciate Reliance Foundation for conceptualising and executing the project that came up with this report.

The collaboration between Reliance Foundation and the Indian National Centre for Ocean Information Services (INCOIS) strengthened the digital dissemination platforms and demonstrate how institutional partnerships can create robust field-to-science feedback loops. The emphasis on voice-first communication, connectivity resilience, modelling gaps, and validation datasets reflects a mature recognition that advisory systems must evolve from static forecast dissemination to calibrated, decision-support intelligence.

As India advances its leadership in ocean science and blue economy development, this brief provides a timely blueprint for building a National Marine Risk Intelligence Architecture — one that integrates science, technology, governance, and community knowledge. It is both a call to action and a roadmap for collaborative innovation in safeguarding marine livelihoods and strengthening climate resilience along India's coasts.

S.S.C. Shenoi

Former Director, INCOIS

Ocean Science Perspective

Over several decades of research in physical oceanography, coastal processes, and biogeochemistry at CSIR–National Institute of Oceanography, I have observed that India's marine systems are becoming increasingly dynamic and complex. Variability in basin-scale currents, coastal circulation, atmosphere–ocean interactions, and physical–biogeochemical coupling is no longer episodic; it is structural and continually evolving.

In this evolving marine environment, the gap between scientific modelling and operational decision-making must steadily narrow. Marine fisherfolk do not encounter the ocean as abstract data, but as lived risk—through decisions on departure timing, mid-sea turbulence, shifting currents, and harbour re-entry under unstable conditions. Integrating this experiential knowledge with structured scientific systems is both a scientific necessity and a governance imperative.

The initiative led by Reliance Foundation, culminating in *From Sea Voices to Science Systems – India's National Marine Risk Intelligence Brief 2026*, is noteworthy for its effort to bridge these domains. By engaging marine fisher communities, academic institutions, and digital advisory users across coastal states, the study demonstrates how community-grounded intelligence can meaningfully inform the evolution of advisory systems.

Viewed through the lens of physical oceanography, the focus on corridor-level differentiation, harbour-specific risk signalling, connectivity limitations, and reduced reaction times signals an important evolution in marine risk thinking. Forecasting can no longer remain purely predictive; it must transition toward calibrated, adaptive decision-support systems that are shaped by user realities and responsive to dynamic coastal environments.

India's ambitions in ocean science and Blue Economy growth hinge not merely on improved modelling sophistication, but on reinforcing systematic feedback mechanisms linking institutions, digital platforms, and marine practitioners. Efforts of this nature help construct the connective architecture necessary for resilient and responsive marine governance.

I appreciate the careful and considered effort reflected in this work and hope it catalyses sustained collaboration between ocean scientists, digital systems designers, and coastal communities to strengthen marine resilience in the years ahead.

Dr. Prasanna Kumar S
Acting Director (Headquarters, Goa)
Department of Physical Oceanography
CSIR – National Institute of Oceanography
World Ocean Science Congress Organizing Committee

TABLE OF CONTENTS

Executive Summary
From Sea Voices to Science Systems
India's National Marine Risk Intelligence Brief 2026

India's marine fisheries sector is navigating an era of accelerating climatic volatility, compressed decision windows, economic pressure, regulatory complexity, and digital delivery fragility. Marine vulnerability is no longer episodic or cyclone-bound. It is continuous and journey-based — unfolding across departure decisions, offshore exposure, navigation corridors, harbour entry, and landing-stage livelihood pressures.

This National Marine Risk Intelligence Brief consolidates structured field intelligence from:

- **339 Marine Fisher Folk** across nine coastal states
- **254 Students and Researchers** representing academic and scientific institutions
- **172 Machli App digital advisory feedback responses** informing advisory system strengthening

Together, this represents one of the most comprehensive structured marine risk consultations undertaken in India in recent years.

Institutional Partnership and Advisory Ecosystem

This study has been undertaken in close collaboration with the **Indian National Centre for Ocean Information Services (INCOIS)**. Reliance Foundation maintains an active institutional partnership and Memorandum of Understanding (MoU) with INCOIS for the dissemination of:

- Ocean State Forecasts
- Potential Fishing Zone (PFZ) advisories
- Cyclone and marine safety alerts

Through this partnership, real-time advisories generated by INCOIS are disseminated to **millions of marine fisherfolk across India** through a multi-modal, multilingual communication architecture, including:

- Voice-first outreach systems
- IVR-based advisories
- WhatsApp voice and text dissemination
- Field facilitation networks
- The AI-enabled **Machli Marine Advisory App** developed by Reliance Foundation

Reliance Foundation is also supporting the National Council of Applied Economic Research (NCAER) through technology-enabled field data collection for a national-level impact assessment of INCOIS advisories among marine fisherfolk across the country, thereby further strengthening evidence-based marine advisory systems.

We express deep gratitude to INCOIS for conceptualising and operationalising India's marine advisory framework and for enabling a strengthened field-to-science feedback loop that underpins this national brief.

Methodology and Evidence Architecture

The study adopted a structured, technology-enabled and scalable methodology using:

- Low / No-Code digital survey platforms for structured data capture
- Guided interaction tools for moderated consolidation
- Multilingual feedback instruments
- Structured Excel-based master dataset validation
- Statistical cross-verification and percentage normalisation
- AI-assisted synthesis and drafting for publication preparation

The approach ensured standardised data capture, quantifiable outputs, cross-validation, and reproducible evidence suitable for national and international policy engagement.

National Operational Risk Signals

(Marine Fisher Folk, n = 339)

The most frequently cited operational stress indicators include:

- **Weather unpredictability / sudden sea change** — 231 of 339 (68.1%)
- **Cyclone or strong storm exposure** — 199 of 339 (58.7%)
- **Fish availability uncertainty** — 182 of 339 (53.7%)
- **Offshore connectivity loss** — 78 of 339 (23.0%)

These findings confirm that marine risk is layered and cumulative. Cyclones remain significant, but day-to-day sea unpredictability and compressed decision-making windows are equally disruptive.

Advisory Delivery Architecture Constraints

(Marine Fisher Folk, n = 339)

Advisory effectiveness is constrained less by forecast generation and more by delivery design:

- **Network connectivity limitations** — 168 of 339 (49.6%)
- **Delay or lack of timeliness** — 104 of 339 (30.7%)
- **Trust / accuracy concerns** — 45 of 339 (13.3%)
- **Language barriers** — 41 of 339 (12.1%)

Communication preference patterns strongly reinforce a voice-first ecosystem:

- **Voice Call / IVR** — 183 of 339 (54.0%)
- **WhatsApp Voice** — 73 of 339 (21.5%)
- **Application Notifications** — 69 of 339 (20.4%)

This confirms that advisory performance depends not only on forecast accuracy but on behaviour-aligned communication architecture.

Academic Convergence: Research & Modelling Gaps

(Students-FGD, n = 254)

Students and researchers demonstrated strong convergence with fisher realities. Priority gaps identified include:

- **Governance and compliance behaviour systems** — 132 of 254 (52.0%)
- **Communication reliability mapping** — 115 of 254 (45.3%)
- **Cyclone-linked fisheries risk modelling** — 111 of 254 (43.7%)
- **Low-bandwidth / resilient delivery systems** — 50 of 254 (19.7%)

Critical validation datasets identified as missing include:

- **Trip-level catch and effort logs** — 143 of 254 (56.3%)
- **Network coverage mapping at sea** — 115 of 254 (45.3%)
- **Incident and safety records** — 95 of 254 (37.4%)
- **Harbour-level sea condition observations** — 65 of 254 (25.6%)

The convergence between operational stress and modelling priorities signals readiness for a structured National Marine Risk Intelligence Architecture.

Strategic Inflection Point

India stands at a strategic inflection point in marine advisory evolution. Advisories must transition:

- From forecast dissemination to calibrated, confidence-scored decision intelligence
- From static information streams to journey-based, harbour-sensitive and corridor-aware systems
- From retrospective validation to continuous ground-truth integration
- From siloed research to integrated field-science-policy loops

Translating Evidence into National R&D and Policy Partnerships

(Initial Institutional Mapping – To Be Expanded Post-WOSC 2026)

The findings emerging from this national consultation indicate the need for structured convergence between field intelligence, advisory systems, research institutions, regulatory bodies, and digital innovation platforms.

Marine risk is layered and journey-based. Addressing it requires coordinated engagement across ocean science institutions, fisheries research bodies, academic modelling centres, telecom and digital infrastructure actors, and governance agencies.

The table below presents an initial mapping of key R&D and policy pathways aligned with the identified gaps. This mapping is indicative and represents the first step toward building a structured National Marine Risk Intelligence Architecture.

Initial National R&D and Policy Ecosystem Mapping

Key Finding / Gap Identified	R&D Focus Area	Potential Institutional Partners	Policy / Action Pathway
Weather unpredictability & journey-based risk	Corridor-level risk modelling; harbour nowcasting	INCOIS, IMD, NIOT, IITs (coastal engineering), NCCR	Integrate corridor-risk layer into national marine advisory systems

Key Finding / Gap Identified	R&D Focus Area	Potential Institutional Partners	Policy / Action Pathway
Offshore connectivity loss (23%)	Marine network mapping; store-and-forward advisory logic	ISRO / NRSC, Telecom operators, TRAI	Policy dialogue on offshore connectivity resilience standards
Governance & compliance behaviour gaps (52%)	Behaviour systems modelling; enforcement analytics	Fisheries Universities, TISS, CMFRI, State Fisheries Departments	Integrate compliance and behaviour analytics into fisheries governance frameworks
Cyclone-linked fisheries risk modelling (43.7%)	Reaction-time gap analytics; safe-return window modelling	INCOIS, IMD, IITs	Embed safe-return decision layers within advisory workflows
Missing trip-level catch & effort logs (56.3%)	Standardised digital logging protocols	ICAR–CMFRI, Fisheries Departments	Pilot national digital catch–effort documentation systems
Harbour-level sea condition observations (25.6%)	Harbour congestion & local risk modelling	NCCR, NIOT, Maritime Boards	District-level harbour risk dashboards
Advisory delivery architecture constraints	Voice-first escalation design; low-bandwidth resilient systems	Reliance Foundation Platforms, Telecom partners	Behaviour-aligned communication redesign
Market intelligence integration (Machli feedback)	Real-time price and buyer integration	MPEDA, State Fisheries Marketing Boards	Integrate market intelligence into marine advisory ecosystem

This represents an initial institutional alignment framework. Following deliberations and Marine Fisher Folk Interaction Sessions at the World Ocean Science Congress (WOSC) 2026, this mapping will be expanded and refined to support a coordinated National Marine Risk Intelligence Architecture.

Strategic Value

This initiative represents a foundational national R&D and evidence-generation exercise. It operationalises a structured integration model:

Sea Voices → Advisory Systems → Research Inputs → Technology Evolution → Policy Feedback

The findings will be presented during the Marine Fisher Folk Interaction Session at the **World Ocean Science Congress (WOSC) 2026**, demonstrating a scalable model of participatory marine advisory strengthening.

Senthilkumaran
Study Lead – India's National Marine Risk Intelligence Brief 2026
Head – Platforms & Applications
Reliance Foundation

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Acknowledgement

This National Marine Risk Intelligence Study represents a collective coastal effort integrating community intelligence, academic research, institutional science systems, and technology-enabled advisory platforms. It was undertaken through structured collaboration with fisheries universities, marine science institutions, research centres, governance stakeholders, and coastal communities across India, reflecting a shared commitment to strengthening marine safety, advisory resilience, and evidence-based marine governance.

Reliance Foundation gratefully acknowledges the scientific ecosystem leadership of the **Indian National Centre for Ocean Information Services (INCOIS)**, whose ocean state forecasts, Potential Fishing Zone (PFZ) advisories, and marine safety alerts form the backbone of India's marine advisory framework. The Foundation also recognises the academic and global policy platform of the **World Ocean Science Congress (WOSC)**, the mobilisation support extended by **Vijnana Bharati** (**VIBHA)**, and the structured institutional interaction inputs received from **Sagari Seema Manch (SSM)**, which significantly strengthened the governance and marine safety dimensions reflected in this report.

The Study Team sincerely acknowledges **Shri Sudarshan Suchi, Chief Development Officer, Reliance Foundation**, for deputing colleagues from the Rural Transformation vertical to undertake this mission-mode, multi-state marine risk intelligence study.

Reliance Foundation gratefully acknowledges **Dr. M. Nagaraja Kumar, INCOIS**, for his continued guidance and support over more than a decade, including his encouragement during various stages of this study and his support in facilitating the publication design through the INCOIS team.

The Foundation further recognises the effective efforts of **Mr. Rameswaran, Mr. Nitesh Prajapati, and Mr. Mohammad Aslam** in data management, IVRS script conversion, designing low/no-code digital forms, and deploying presentation-linked technology tools that strengthened structured evidence capture and analysis.

Reliance Foundation sincerely acknowledges the **Department of Fisheries Engineering, Nellore (Andhra Pradesh Fisheries University)** and expresses gratitude to the marine fisherfolk of **Nellore and Kakinada districts** for sharing their operational realities and advisory experiences. Mission-mode field coordination by **Mr. P. Siva Kalyan** and **Mr. M.V.S.L. Sai** is gratefully recognised.

In **Goa**, the Foundation appreciates the academic and institutional contributors who strengthened the consultative process and thanks the marine fisherfolk of **North Goa and South Goa districts** for their meaningful participation. Coordination support by **Mr. Ravi Mahalankar** and **Mr. Mayur** is acknowledged.

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In **Tamil Nadu**, the Foundation acknowledges the **Fisheries College and Research Institute, Thoothukudi**, and **Dr. M.G.R Fisheries College and Research Institute, Thalainayeru (Dr. J. Jayalalithaa Fisheries University)** for contributing to structured institutional dialogue. The marine fisherfolk of **Thoothukudi, Tirunelveli, Ramanathapuram, and Nagapattinam districts** are deeply thanked for their experiential inputs. Representation from **Kadal Osai Community Radio, Pamban (Ramanathapuram)** also participated and shared valuable feedback, reinforcing the importance of community-level marine advisory dissemination and coastal communication outreach. Mission-mode support by **Mr. Antony Edward Singh, Ms. Sree Kirupa, Mr. Antony Jerome, Mr. Maikandan, Mr. Selvaraj, and Mr. Gurumoorthy** in conducting consultations and systematically collecting structured feedback from Marine Fisher Folk as well as Students and Researchers is gratefully acknowledged.

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Above all, Reliance Foundation expresses its deepest gratitude to the marine fisherfolk, students, researchers, harbour leaders, institutional representatives, and coastal stakeholders whose collective knowledge forms the foundation of *India's National Marine Risk Intelligence Brief 2026*. Their voices bridge sea-level realities with science systems and meaningfully contribute to safer, smarter, and more resilient marine governance aligned with India's Blue Economy vision.

Study Design & Consultation Architecture

Consultation Framework Overview

This national study was conducted through structured **Focus Group Discussions (FGDs)** across coastal India during February 2026. The consultation architecture integrated:

- Marine Fisher Folk FGDs (9 coastal states)
- Students & Researcher FGDs (multi-institutional participation)
- Institutional consultations with organised fisher bodies
- Digital advisory feedback capture (R&D stream)

The design ensured triangulation across field realities, academic modelling capacity, and digital advisory usability.

Geographic Coverage

Marine Fisher Folk (n = 339)

Nine coastal states were covered:

- Tamil Nadu (88)
- Maharashtra (55)
- Gujarat (37)
- Odisha (34)
- Karnataka (32)
- Andhra Pradesh (28)
- West Bengal (27)
- Kerala (26)
- Goa (12)

This distribution enables balanced eastern–western corridor comparison and micro-geographic analysis.

Students & Researchers (n = 254)

Primary participation emerged from:

- Maharashtra (55)
- Karnataka (53)

- Andhra Pradesh (34)
- Odisha (34)
- Gujarat (33)
- West Bengal (22)
- Tamil Nadu (12)
- Kerala (7)
- Goa and selected non-coastal academic affiliations (1 each)

Participation from non-coastal states reflects national research engagement in marine risk modelling.

Refer Annexure A: State-wise Participation Tables for detailed distribution matrix.

FGD Locations

Consultations were conducted at:

- Harbour locations (Pamban, Veraval, Ratnagiri, Karwar, Uppada, Nuagada, Vizhinjam, etc.)
- Fisheries universities and colleges (Veraval, Shirgaon, Muthukur, Sarisha, Berhampur, Thoothukudi, Mangaluru)
- Coastal settlement clusters
- Institutional consultation nodes (Maharashtra–Goa organised fisher bodies)

This ensured representation from deep-sea operators, mechanised vessel crews, small-scale fishers, and academic modelling communities.

Institutional Partners

The study was conducted with valuable institutional inputs from:

- **INCOIS (Indian National Centre for Ocean Information Services)** – ocean-state advisory foundations
- **WOSA (World Ocean Science Congress convening partners)** – consultation coordination
- State Fisheries Universities and affiliated colleges
- Harbour-level facilitators and community representatives
- Organised fisher institutions including **Sagari Seema Manch (SSM)** (qualitative consultation stream)

This study was exclusively conducted as a **Feature Research & Development initiative** to strengthen marine advisory systems through structured feedback integration.

Methodology

The methodology followed a structured, technology-enabled data-for-development framework:

1. Multilingual digital survey tools
2. Standardised FGD templates
3. Thematic coding of risk signals
4. Frequency extraction and validation
5. Cross-corridor comparative analysis
6. Academic research-gap mapping
7. Dataset deficit identification
8. Digital advisory usability capture (separate R&D stream)

This ensured traceability from field input → research gap → system requirement.

Dataset Integrity

- Marine Fisher Folk dataset: **n = 339**
- Students-FGD dataset: **n = 254**
- Digital advisory feedback dataset (R&D stream): **n = 172**

All percentages are calculated within respective sample sizes.

The digital advisory dataset is analytically separated from core fisher evidence to prevent distortion of field risk signals.

The consultation architecture ensures that this brief is:

- Multilingual
- Cross-coastal
- Multi-stakeholder
- Behaviour-aligned
- Scientifically convergent
- Dataset-transparent

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Chapter 1
Executive Synthesis

Marine Fisher Folk (n = 339) | Students-FGD (n = 254) | Machli Feedback (n = 172)

This chapter synthesises national-level marine risk intelligence emerging from structured field consultations conducted across nine coastal states. It integrates fisher operational realities, academic research priorities, and digital advisory feedback signals to establish the foundational architecture for a National Marine Risk Intelligence framework.

Chapter 1
Executive Synthesis

Institutional input note: Annexure E summarises a **Sagari Seema Manch (SSM)** (Maharashtra–Goa) interaction; it is discussion-based qualitative evidence and is not part of the structured survey datasets.

India's marine fisheries are operating within an increasingly volatile risk environment shaped by climate instability, economic uncertainty, and communication-system fragility. Marine risk is no longer episodic. It is embedded across the full operational journey.

This 2026 synthesis integrates structured intelligence from:

- **339 Marine Fisher Folk**
- **254 Students and Researchers**
- **172 Digital Advisory Feedback Inputs (R&D stream)**

The evidence confirms that vulnerability extends beyond cyclone landfall events. Fishers report uncertainty at multiple decision stages:

- Pre-departure
- Offshore fishing corridors
- Mid-sea escalation
- Return corridor navigation
- Harbour entry
- Landing-stage economic viability

National Operational Stress Signals

(Marine Fisher Folk, n = 339)

- Weather unpredictability / sudden sea change — 68.1%
- Cyclone or strong storm exposure — 58.7%
- Fish availability uncertainty — 53.7%
- Offshore connectivity loss — 23.0%

Marine exposure must therefore be understood as a **journey-based system**, not a singular hazard event.

Structural Risk Layers

Three interconnected vulnerability layers emerge:

1. **Safety Instability -** Driven by weather unpredictability and cyclone intensification.
2. **Economic Volatility -** Driven by fish availability uncertainty, fuel pressure, and trip viability risk.
3. **Delivery Fragility -** Driven by connectivity breakdown, delayed alerts, and advisory usability barriers.

Academic Alignment

Students-FGD analysis confirms strong modelling readiness. Research priorities directly mirror fisher stress signals:

- Governance & compliance modelling
- Communication reliability mapping
- Cyclone-linked fisheries analytics
- Catch–effort validation datasets
- Harbour-sensitive calibration

This convergence indicates that advisory strengthening is not constrained by conceptual gaps, but by integration architecture.

Reaction-Time Gap

A recurring field message is the existence of a **reaction-time gap** — where environmental volatility escalates faster than vessels can safely return.

This gap is amplified by:

- Offshore connectivity loss
- Lack of mid-trip reinforcement alerts
- Harbour entry uncertainty
- Limited validation loops

Reducing this reaction-time gap becomes the central objective of next-generation marine intelligence systems.

Strategic Transition

Marine advisories must transition:

From:

- Static forecasts
- Regional-scale alerts
- Retrospective validation

To:

- Corridor-based intelligence
- Harbour-sensitive analytics
- Confidence-scored alerts
- Voice-first delivery
- Continuous ground-truth calibration

The synthesis therefore establishes the foundation for a **National Marine Risk Intelligence Framework** that integrates field validation, predictive modelling, delivery resilience, and economic viability intelligence.

India’s marine advisory evolution now requires structural convergence — not incremental refinement.

Chapter 2

Voices from India’s Coastal Fishing Corridors

Marine Fisher Folk (n = 339)

This chapter captures ground-level realities from India’s eastern and western coastal corridors. It highlights journey-based vulnerability, decision-speed compression, harbour-level pressures, and corridor exposure dynamics as articulated directly by marine fisher communities.

Chapter 2: Voices from India's Coastal Fishing Corridors

(Marine Fisher Folk n = 339)

Across India's eastern cyclone-prone belt and western monsoon-dominated corridors, fishers consistently describe an accelerating change in sea behaviour. The sea is perceived as shifting faster, becoming less predictable, and offering shorter reaction windows for operational decision-making.

Risk is not experienced as a single catastrophic event. Instead, it accumulates through a sequence of uncertain decisions.

Fishers repeatedly highlighted:

- Rapid wind-direction shifts
- Sudden swell amplification
- Wave-height variability within short time spans
- Compressed safe-return windows after departure

When vessels are already offshore, these environmental changes reduce response time and increase exposure. The central concern is not only whether a cyclone occurs, but whether sea behaviour escalates after departure.

Operational Decision Stress

Across coastal states, fisher narratives consistently revolved around three recurring questions:

- Should the vessel depart under uncertain weather signals?
- Should the crew continue when sea conditions shift mid-trip?
- Is safe harbour return still viable under escalating instability?

Small mechanised and motorised vessels were repeatedly identified as particularly vulnerable during monsoon transitions and sudden wind–swell interactions.

The field evidence reinforces that marine vulnerability is embedded within a **decision-speed environment**, not merely hazard occurrence.

Behavioural Insights: Communication Under Stress

Communication format plays a decisive behavioural role during high-risk navigation. Fishers emphasised that during unstable sea conditions, reading long text messages becomes impractical and unsafe.

Listening is faster than reading when vessels are pitching under rough waters.

Marine Fisher Folk responses (n = 339) indicate the following preferred channels for receiving urgent safety communication:

Preferred Channel	Respondents	Percentage
Voice Call / IVR	183	54.0%
WhatsApp Voice Message	73	21.5%
Application Notification	69	20.4%

The dominance of voice-based communication — representing more than half of all respondents — confirms that advisory systems must structurally prioritise **voice-first, local-language delivery**, particularly in offshore and low-connectivity corridors.

Advisory effectiveness is therefore shaped not only by forecast precision, but by format design aligned with real-world operating conditions at sea.

Chapter 3

Study Scope, Coastal Coverage and Evidence Base

Marine Fisher Folk (n = 339) | Students-FGD (n = 254)

This chapter outlines the consultation design, state-wise participation distribution, and methodological framework adopted between 3–12 February 2026. It establishes the structured evidence base supporting this national marine risk assessment.

Chapter 3: Study Scope, Coastal Coverage and Evidence Base

This study spans nine principal coastal states — Tamil Nadu, Maharashtra, Karnataka, West Bengal, Andhra Pradesh, Kerala, Odisha, Goa, and Gujarat — enabling comparative analysis across cyclone-dominant eastern corridors and monsoon-influenced western belts.

The geographic spread ensures balanced coastal representation and strengthens cross-corridor validation of marine risk exposure patterns.

Marine Fisher Folk Participation

(n = 339)

State	Participants	Percentage
Tamil Nadu	88	26.0%
Maharashtra	55	16.2%
Gujarat	37	10.9%
Odisha	34	10.0%
Karnataka	32	9.4%
Andhra Pradesh	28	8.3%
West Bengal	27	8.0%
Kerala	26	7.7%
Goa	12	3.5%
Total	**339**	**100%**

Tamil Nadu provides the largest participation base, offering extensive cyclone-linked experiential validation. Maharashtra and Gujarat demonstrate high engagement levels, while Odisha and Karnataka contribute strong corridor-level insights.

This distribution enables robust east–west comparative analysis.

Students and Researchers Participation

(n = 254)

State	Participants	Percentage
Maharashtra	55	21.7%
Karnataka	53	20.9%
Andhra Pradesh	34	13.4%
Odisha	34	13.4%
Gujarat	33	13.0%
West Bengal	22	8.7%
Tamil Nadu	12	4.7%
Kerala	7	2.8%
Goa	1	0.4%
Non-Coastal Academic Affiliations	3	1.2%
Total	**254**	**100%**

The academic distribution reflects strong modelling readiness in Maharashtra and Karnataka, while eastern corridor states show close alignment between fisher realities and research priorities.

Key academic focus areas identified include:

- Cyclone-linked fisheries modelling
- Structured catch–effort dataset strengthening
- Communication reliability mapping
- Harbour-sensitive calibration
- Validation-linked advisory design

Refer Annexure A: State-wise Participation Tables for detailed distribution matrix.

Chapter 4
Integrated Marine Risk Landscape

Marine Fisher Folk (n = 339)

This chapter presents the layered marine risk ecosystem — including weather unpredictability, cyclone exposure, fish availability volatility, and offshore connectivity loss — demonstrating that marine vulnerability is continuous and cumulative.

Chapter 4: Integrated Marine Risk Landscape

(Marine Fisher Folk n = 339)

The marine risk landscape emerging from this synthesis is multi-dimensional. It combines climatic instability, economic exposure, digital delivery limitations, and behavioural decision stress into a unified vulnerability structure.

Hazard Exposure Patterns

Marine Fisher Folk responses (n = 339) indicate the following dominant hazard exposures:

Hazard Theme	Respondents	Percentage
Cyclone or strong storm	199	58.7%
Heavy rain or flooding	128	37.8%

Cyclones remain central. However, fishers emphasise that **sudden sea turbulence and rapid wind intensification** are equally disruptive.

Risk intensifies when vessels are distant from shore. Fuel margins, travel time, and harbour entry conditions constrain safe-return options. This creates a **reaction-time gap**, where environmental volatility exceeds manual judgement capacity.

Economic Exposure Layer

Economic vulnerability operates in parallel with climatic exposure.

Marine Fisher Folk responses (n = 339) indicate:

Numeric frequencies are consolidated in the Executive Summary and Annexure B; this section focuses on interpretation rather than repeating the same list.

- Fish availability uncertainty — 182 of 339 (53.7%)
- Fuel-related stress and trip viability pressures (multi-mention themes)

Fishers frequently weigh safety against economic survival, particularly when mid-sea deterioration occurs after limited catch accumulation.

Delivery and Usability Constraints

Marine advisory systems are constrained by delivery fragility.

Marine Fisher Folk responses (n = 339) indicate primary advisory usability barriers:

Advisory Barrier	Respondents	Percentage
Network connectivity issues	168	49.6%
Delay / lack of timeliness	104	30.7%
Trust / accuracy concerns	45	13.3%
Language barriers	41	12.1%

Connectivity breakdown offshore reduces advisory accessibility precisely when it is most needed. Text-heavy advisories lose usability during turbulent conditions.

The central issue emerging from the evidence is not forecast inadequacy, but delivery architecture limitations.

Three Interlinked Risk Layers

The integrated marine risk structure therefore comprises:

1. **Safety Instability -** Weather unpredictability and cyclone intensification.
2. **Economic Exposure -** Catch uncertainty and trip viability pressures.
3. **Systemic Delivery Gaps -** Connectivity breakdown and advisory usability constraints.

These layers interact dynamically across the fishing journey.

Strategic Implication

Marine advisories must evolve:

- From regional forecasts to corridor-based intelligence
- From single-event alerts to reinforcement logic
- From retrospective validation to continuous calibration
- From text-heavy communication to voice-first architecture
- From hazard-only tools to integrated safety–economic decision systems

Refer Annexure B: National Risk Signals, Delivery Constraints and Platform Patterns.

Chapter 5

Advisory Access, Connectivity and Delivery Realities

Marine Fisher Folk (n = 339)

This chapter analyses advisory delivery constraints including network limitations, timeliness gaps, trust dynamics, and language barriers. It reinforces the need for behaviour-aligned, voice-first marine communication systems.

Chapter 5: Advisory Access, Connectivity and Delivery Realities

(Marine Fisher Folk n = 339 | Students-FGD n = 254)

Marine advisories are only as effective as their delivery systems. While predictive models and oceanographic intelligence continue to advance, field evidence demonstrates that usability and access constraints significantly influence real-world decision-making at sea.

Marine Fisher Folk responses (n = 339) indicate the following primary advisory barriers:

Advisory Barrier	Respondents	Percentage
Network connectivity issues	168	49.6%
Delay / lack of timeliness	104	30.7%
Trust / accuracy concerns	45	13.3%
Language barriers	41	12.1%

These findings confirm that systemic delivery constraints remain as critical as forecast precision. Connectivity breakdown, delayed messaging, and comprehension challenges collectively reduce advisory confidence and behavioural responsiveness during high-risk situations.

The core issue emerging from the evidence is not forecast inadequacy, but delivery architecture fragility.

Offshore Connectivity Breakdown

Responses to the question “What Problems Do You Face Most?” (n = 339) indicate:

- Network / communication failure as a primary operational problem — 78 of 339 (23.0%)

Connectivity was also cited directly as an advisory usability barrier — 168 of 339 (49.6%).

Offshore corridors frequently experience reduced signal strength precisely when weather conditions deteriorate. This creates a structural disconnect between forecast availability on land and advisory usability at sea.

Parallel academic consultations (Students-FGD, n = 254) reinforce this constraint:

- Communication reliability mapping — 115 mentions (45.3%)

- Low-bandwidth / resilient delivery systems — 50 mentions (19.7%)

This confirms that delivery resilience must become a modelling priority rather than a peripheral system enhancement.

Voice-First Communication as Structural Requirement

Marine Fisher Folk responses (n = 339) indicate preferred channels for receiving urgent safety communication:

Preferred Channel	Respondents	Percentage
Voice Call / IVR	183	54.0%
WhatsApp Voice Message	73	21.5%
Application Notification	69	20.4%

The dominance of voice-based communication establishes that audio-first design is not optional. It is structurally required for safe navigation under unstable sea conditions.

Language barriers (12.1%) further reinforce the need for simplified, local-language delivery formats.

Timeliness and Trust Gap

Advisory credibility depends on timeliness and transparency.

Marine Fisher Folk responses (n = 339) indicate:

See the Executive Summary and Annexure B for national frequency values; the narrative below explains implications without duplicating figures.

- Delay or lack of timeliness — 104 of 339 (30.7%)
- Trust or accuracy concerns — 45 of 339 (13.3%)

Fishers repeatedly requested clearer differentiation between general advisory updates and immediate safety-risk warnings.

Students (n = 254) further emphasised:

- Cyclone-linked fisheries risk modelling — 111 mentions (43.7%)

Confidence improves when advisories explain underlying data logic and risk classification reasoning. Escalation-based alert tiers may therefore strengthen trust and behavioural alignment.

Chapter 6

Climate Volatility, Ocean Variability and Safety Signals

Marine Fisher Folk (n = 339)

This chapter examines the intensifying impact of ocean variability, sudden sea changes, and cyclone-linked exposure patterns, highlighting the narrowing safety margins within active marine journeys.

Chapter 6: Climate Volatility, Ocean Variability and Safety Signals

(Marine Fisher Folk n = 339)

India's eastern and western maritime corridors exhibit distinct but interconnected vulnerability patterns. Climate volatility is increasingly characterised by accelerated unpredictability and compressed operational response windows.

Marine Fisher Folk responses (n = 339) indicate the following dominant operational risk signals:

Operational Risk Signal	Respondents	Percentage
Weather unpredictability / sudden sea change	231	68.1%
Cyclone or strong storm exposure	199	58.7%
Fish availability uncertainty	182	53.7%
Offshore connectivity loss	78	23.0%

The defining safety signal across corridors is unpredictability.

Reaction-Time Gap

Fishers clearly distinguished between:

- Advance cyclone warnings before departure
- Cyclone intensification after departure

The latter was consistently described as more operationally severe because vessels are already committed offshore.

A recurring field message is the existence of a reaction-time gap — where sea conditions may deteriorate faster than vessels can safely return.

Marine resilience therefore becomes a decision-speed challenge.

Advisory systems must reduce this reaction-time gap through:

- Trajectory-linked corridor alerts
- Harbour-sensitive intelligence

- Mid-sea reinforcement updates
- Escalation-based risk tiers
- Voice-enabled emergency alerts

Corridor-Level Variability

Eastern corridor states frequently emphasised cyclone intensification and harbour-entry stress.

Western corridor narratives more often described monsoon variability and swell instability.

However, across both corridors, compressed safe-return windows were consistently reported. Climate volatility must therefore be modelled not only as hazard probability, but as **corridor-based operational exposure**.

Chapter 7

Integrated Marine Risk Intelligence – Bridging Field Realities with Scientific Modelling

Marine Fisher Folk (n = 339) | Students-FGD (n = 254)

This chapter bridges fisher field intelligence with academic modelling frameworks. It introduces the convergence principle required to translate operational realities into calibrated decision-support systems.

Chapter 7: Integrated Marine Risk Intelligence — Bridging Field Realities with Scientific Modelling

(Marine Fisher Folk n = 339 | Students-FGD n = 254)

Marine fisheries operate within a connected vulnerability system. Safety instability, economic volatility, and delivery fragility reinforce one another.

Field consultations identified dominant operational risks:

- Weather unpredictability / sudden sea change — 231 of 339 (68.1%)
- Cyclone or strong storm exposure — 199 of 339 (58.7%)
- Fish availability uncertainty — 182 of 339 (53.7%)
- Offshore connectivity loss — 78 of 339 (23.0%)

Parallel academic consultations (Students-FGD, n = 254) revealed systemic modelling and data gaps:

Research Gap Identified	Mentions	Percentage
Governance & compliance behaviour systems	132	52.0%
Communication reliability mapping	115	45.3%
Cyclone-linked fisheries risk modelling	111	43.7%
Low-bandwidth / resilient delivery systems	50	19.7%

This combined evidence demonstrates strong alignment between field-level operational stress signals and academic modelling priorities.

Technology-Enabled Data-for-Development Methodology

A structured multilingual digital survey framework was implemented, supported by standardised FGD templates. Risk indicators were quantified using thematic coding and frequency extraction.

Academic consultations were analysed to identify modelling readiness across:

- Artificial Intelligence-based predictive systems
- Geographic Information System-enabled spatial analytics
- Multi-parameter oceanographic integration
- Remote sensing–based modelling

This methodology ensured alignment between experiential marine intelligence and structured scientific capacity.

Convergence Principle

The central strategic insight emerging from this synthesis is convergence.

Marine resilience requires:

- Field-grounded validation loops
- Multi-source modelling integration
- Corridor-level delivery resilience
- Harbour-scale calibration
- Behaviour-aligned communication design

Advisory systems must evolve from forecast dissemination platforms into **Marine Risk Intelligence Ecosystems**.

Such systems integrate safety analytics, economic modelling, and delivery reliability into a unified operational intelligence backbone.

The Indian case study demonstrates that community-grounded validation, applied scientific modelling, and institutional convergence together can strengthen safety outcomes, stabilise income patterns, and advance Blue Economy sustainability.

Chapter 8

Research Gaps, Data Deficits and Modelling Priorities

Students-FGD (n = 254)

This chapter presents priority research areas including governance behaviour systems, communication reliability mapping, cyclone-linked fisheries risk modelling, and low-bandwidth advisory design.

Chapter 8: Research Gaps, Data Deficits and Modelling Priorities

(Students-FGD n = 254)

The academic consultations reveal strong readiness within India's marine research ecosystem to collaborate on applied marine risk intelligence frameworks. Students and researchers consistently identified modelling gaps that align closely with fisher field realities, indicating that advisory evolution is constrained less by technical capacity and more by structured integration between field intelligence, datasets, and modelling systems.

Most Urgent Research Gaps

Students-FGD responses (n = 254) indicate the following priority modelling requirements:

Research Gap Identified	Mentions	Percentage
Governance & compliance behaviour systems	132	52.0%
Multi-source ocean data integration	141	55.5%
Communication reliability mapping	115	45.3%
Cyclone-linked fisheries risk modelling	111	43.7%
Harbour-level risk models	81	31.9%

A clear direction emerges: marine advisories must move beyond regional forecasts toward district- and harbour-scale calibration. Researchers emphasised the need for impact modelling that reflects real fishing corridors, harbour-entry safety, landing infrastructure vulnerability, and safe-return windows.

Three advanced modelling requirements recur across academic inputs:

- Reaction-time analytics linking cyclone trajectory shifts with safe-return windows
- Corridor-level connectivity modelling for offshore operations
- Integration of biological uncertainty into predictive fisheries systems

These priorities mirror fisher-reported exposure patterns identified in earlier chapters.

Technology Stack Readiness

Students were also asked to identify which technologies can realistically strengthen marine advisory systems within the next three to five years.

Technology Area	Mentions	Percentage
AI / ML (prediction & pattern modelling)	190	74.8%
Remote sensing (satellite variables)	164	64.6%
GIS mapping (spatial layers & zoning)	161	63.4%
GeoAI (spatial + AI integration)	148	58.3%

These findings confirm high academic readiness to operationalise integrated modelling architectures.

The constraint is not technological capability — it is structured data availability and interoperability.

Critical Data Inputs Identified as Missing

Students-FGD responses (n = 254) indicate the following missing inputs limiting modelling validation:

- Satellite ocean parameters (SST, chlorophyll, etc.) — 71 mentions (28.0%)
- Network coverage at sea — 115 mentions (45.3%)

Connectivity mapping emerges as both a delivery constraint and a modelling gap.

Validation Dataset Gaps

Students-FGD responses (n = 254) indicate the following missing validation datasets:

Validation Dataset Missing	Mentions	Percentage
Trip-level catch & effort logs	143	56.3%
Incident / safety records	95	37.4%
Fuel use & trip distance	51	20.1%

Without structured catch–effort logging, it remains statistically difficult to validate advisory performance at harbour scale.

Advisory improvement therefore requires institutionalised data capture, standardised digital logging protocols, and participatory validation systems.

Chapter 9

Validation Challenges and Ground-Truth Integration

Students-FGD (n = 254)

This chapter identifies missing validation datasets such as trip-level catch–effort logs, offshore network coverage mapping, incident records, and harbour-level observations necessary for robust modelling.

Chapter 9: Validation Challenges and Ground-Truth Integration

(Marine Fisher Folk n = 339 | Students-FGD n = 254)

Advisory credibility depends on traceability and local validation.

Marine Fisher Folk responses (n = 339) indicate:

National frequencies are already summarised (Executive Summary/Annexure B); this chapter uses them as context and proceeds with analysis.

- Trust or accuracy concerns — 45 of 339 (13.3%)

While this percentage may appear modest, it represents a structural signal. Confidence declines when advisories do not align with observed outcomes or when reinforcement alerts are absent during active trips.

Fish Availability and Prediction Confidence

Fish-availability-related operational concern appears in:

- 182 of 339 respondents (53.7%)

Fishers frequently described uncertainty regarding catch prediction accuracy. Students interpret this as a validation architecture gap rather than a forecasting failure.

Students-FGD responses (n = 254) further reinforce the need for structured evaluation:

- PFZ performance evaluation / validation studies — 82 mentions (32.3%)

Ground-Truth Integration Requirements

Students-FGD responses (n = 254) indicate missing validation inputs critical for confidence-building:

- Trip-level catch & effort logs — 143 mentions (56.3%)
- Incident / safety records — 95 mentions (37.4%)
- Harbour-level sea condition observations — 65 mentions (25.6%)
- Network coverage at sea — 115 mentions (45.3%)

These datasets form the foundation of a scientific validation architecture.

Validation must transition from periodic retrospective evaluation toward continuous ground-truth integration.

This requires:

- Standardised digital catch–effort logging
- Harbour-level observation integration
- Corridor-specific connectivity mapping
- Incident and near-miss reporting systems
- Participatory feedback loops

Marine advisory systems must evolve into continuously learning systems calibrated against real-world outcomes.

Chapter 10
Coast-Wise Risk Differentiation – Eastern and Western Corridors

Marine Fisher Folk (n = 339)

This chapter analyses regional differentiation in risk exposure across eastern and western coastal states, highlighting corridor-specific stress indicators and governance variations.

Chapter 10: Coast-Wise Risk Differentiation — Eastern and Western Corridors

Western corridor lens: Annexure E (SSM – Maharashtra & Goa) provides organised-fisher perspectives; qualitative discussion inputs, separate from the n=339 structured dataset.

(Marine Fisher Folk n = 339)

India's marine vulnerability is not uniform. Distinct exposure patterns across the eastern and western maritime corridors require differentiated advisory calibration rather than standardised national templates.

For analytical comparison, fisher respondents are grouped as:

- Eastern corridor: West Bengal, Odisha, Andhra Pradesh, Tamil Nadu (n = 177)
- Western corridor: Maharashtra, Goa, Karnataka, Kerala (n = 125)
- Gujarat (west-coast extension): Gujarat (n = 37)

Corridor-Level Differentiation

Corridor	Sample (n)	Cyclone / Sudden Sea Change	Network Advisory Barrier
Eastern corridor	177	103 (58.2%)	83 (46.9%)
Western corridor	125	69 (55.2%)	52 (41.6%)
Gujarat	37	27 (73.0%)	23 (62.2%)

These signals reinforce a strategic principle: marine advisory systems must adopt differentiated regional logic.

Eastern Corridor: Cyclone-Dominant Exposure

The eastern coast demonstrates concentrated cyclone-linked and rapid sea-change exposure. Harbour vulnerability during cyclone alerts, compressed safe-return windows, and settlement-level risk are consistently reported.

Strategic modelling priorities:

- Harbour-level cyclone impact analytics
- Trajectory-based corridor alerts
- Storm surge–linked harbour modelling

- Evacuation-linked advisory frameworks

Western Corridor: Monsoon and Delivery Stress

The western coast reflects monsoon-driven variability and delivery resilience stress.
Fishers frequently describe:

- Offshore communication breakdown
- Harbour congestion during monsoon returns
- Trip viability under fuel and market pressure

Strategic modelling priorities:

- Connectivity heatmaps
- Low-bandwidth advisory design
- Bio-economic modelling integration
- Harbour congestion intelligence

Strategic Differentiation Principle

Eastern modelling logic must centre on cyclone resilience and harbour readiness. Western modelling logic must prioritise delivery resilience and trip viability.

National marine intelligence architecture must embed corridor-specific calibration rather than uniform modelling assumptions.

Chapter 11

Micro-Geography Intelligence – State-Level Risk Spotlights

Marine Fisher Folk (n = 339)

This chapter presents state-wise insights and micro-geographic variations influencing marine safety, advisory responsiveness, and livelihood resilience.

Chapter 11: Micro-Geography Intelligence — State-Level Risk Spotlights

(Marine Fisher Folk n = 339)

While corridor-level differentiation provides strategic orientation, district and harbour-level evidence reveals micro-geographic variability that directly shapes advisory credibility and behavioural response. Harbour entry, final-stage navigation, and corridor-specific turbulence repeatedly emerge as vulnerable phases within the fishing journey system.
State-level signals below reflect proportions within each state sample.

Tamil Nadu (n = 88)

Tamil Nadu provides the largest participation base and extensive cyclone-linked insight. Deep-sea turbulence and rapid wind shifts were repeatedly highlighted as time-sensitive return challenges. Harbour entry during rough sea conditions and tidal variability also feature strongly in landing-stage risk narratives.

- Cyclone / sudden sea change signal: 60 of 88 (68.2%)
- Weather & sea-safety signal: 61 of 88 (69.3%)
- Network-related advisory usability barrier: 55 of 88 (62.5%)

Maharashtra (n = 55)

Narratives emphasise monsoon-linked variability, offshore communication weakening, and trip-viability pressure under fuel constraints. Harbour-level stress during monsoon peak return windows was repeatedly cited.

- Cyclone / sudden sea change signal: 35 of 55 (63.6%)
- Weather & sea-safety signal: 20 of 55 (36.4%)
- Network-related advisory usability barrier: 26 of 55 (47.3%)

Karnataka (n = 32)

Karnataka fishers emphasise offshore operational uncertainty and advisory usability during variable sea conditions. Delivery resilience and low-bandwidth design needs emerge as practical priorities.

- Cyclone / sudden sea change signal: 17 of 32 (53.1%)
- Weather & sea-safety signal: 21 of 32 (65.6%)
- Network-related advisory usability barrier: 10 of 32 (31.3%)

West Bengal (n = 27)

Operating within estuarine and deltaic systems, West Bengal fishers describe strong cyclone-linked exposure and storm surge vulnerability affecting harbour and settlement safety.

- Cyclone / sudden sea change signal: 17 of 27 (63.0%)
- Weather & sea-safety signal: 20 of 27 (74.1%)
- Network-related advisory usability barrier: 11 of 27 (40.7%)

Andhra Pradesh (n = 28)

Sudden sea change exposure and weather-linked instability dominate operational narratives. Connectivity and usability barriers reinforce the need for corridor-aware delivery systems.

- Cyclone / sudden sea change signal: 12 of 28 (42.9%)
- Weather & sea-safety signal: 18 of 28 (64.3%)
- Network-related advisory usability barrier: 10 of 28 (35.7%)

Odisha (n = 34)

Cyclone-related concern and preparedness stress are pronounced. Timely alerts and harbour-level modelling are repeatedly emphasised.

- Cyclone / sudden sea change signal: 14 of 34 (41.2%)
- Weather & sea-safety signal: 22 of 34 (64.7%)
- Network-related advisory usability barrier: 17 of 34 (50.0%)

Kerala (n = 26)

Kerala narratives strongly reflect weather and sea-safety stress, with monsoon-linked variability shaping operational challenges. Harbour return timing and safe landing decisions emerge as important micro-geography stress points.

- Cyclone / sudden sea change signal: 16 of 26 (61.5%)
- Weather & sea-safety signal: 22 of 26 (84.6%)
- Network-related advisory usability barrier: 13 of 26 (50.0%)

Goa (n = 12)

Network barriers and offshore decision stress signals indicate need for expanded engagement.

- Cyclone / sudden sea change signal: 1 of 12 (8.3%)
- Weather & sea-safety signal: 1 of 12 (8.3%)
- Network-related advisory usability barrier: 3 of 12 (25.0%)

Gujarat (n = 37)

Gujarat, treated as the west-coast extension in this study, shows one of the strongest cyclone / sudden sea-change signals and a comparatively high network-related advisory usability barrier. The pattern indicates that risk escalation and advisory access constraints often coincide, reinforcing the need for timely, voice-first delivery and stronger offshore connectivity resilience.

- Cyclone signal is moderate (40.5%)
- Weather & sea-safety hazard exposure is high (73.0%)
- Network advisory barrier is high (62.2%)

Micro-geographic evidence confirms that harbour entry and final-stage navigation often represent the most vulnerable phases in the fishing journey.

Chapter 12

Integrated Marine Risk Intelligence – Convergence Framework

This chapter proposes a structured convergence model linking field evidence, advisory systems, institutional coordination, and digital innovation into a unified national architecture.

Chapter 12

Integrated Marine Risk Intelligence — Convergence Framework

(Marine Fisher Folk n = 339 | Students-FGD n = 254)

Marine risk across India's coastal corridors is multi-dimensional and interdependent. Structured consultations confirm that climatic exposure, economic pressure, and delivery fragility operate simultaneously within the fishing lifecycle. Environmental unpredictability, cyclone-linked intensification, fish availability uncertainty, and offshore connectivity breakdown interact to shape real-time decision stress.

Marine Fisher Folk responses (n = 339) indicate:
Frequency tables are referenced in the Executive Summary and Annexure B; this section avoids repeating identical numeric bullets.

- Weather unpredictability / sudden sea change — 231 of 339 (68.1%)
- Cyclone or strong storm exposure — 199 of 339 (58.7%)
- Fish availability uncertainty — 182 of 339 (53.7%)
- Offshore connectivity loss — 78 of 339 (23.0%)
- Advisory usability barrier: network connectivity issues — 168 of 339 (49.6%)

Parallel academic consultations (Students-FGD, n = 254) reinforce structural modelling priorities:

- Governance and compliance behaviour systems — 132 mentions (52.0%)
- Communication reliability mapping — 115 mentions (45.3%)
- Cyclone-linked fisheries risk modelling — 111 mentions (43.7%)
- Structured trip-level catch & effort logging — 143 mentions (56.3%)
- Incident and near-miss safety records — 95 mentions (37.4%)

These findings confirm that marine vulnerability is not event-specific. It is distributed across the full fishing journey: departure decisions, offshore navigation, mid-sea escalation risk, corridor return, harbour entry, docking, and landing.

An integrated convergence framework links four functional domains:

1. **Environmental Intelligence Layer -** Multi-parameter oceanographic modelling, cyclone trajectory analytics, and harbour-sensitive sea condition integration form the

hazard backbone. Environmental signals must be interpreted at corridor and harbour scale rather than solely at regional forecast scale.

2. **Economic Viability Layer -** Trip-level cost exposure, fuel-distance relationships, catch probability, and market intelligence signals operate as behavioural modifiers. Risk decisions are influenced by income viability alongside environmental exposure.
3. **Delivery & Communication Layer -** Voice-first advisory formats, low-bandwidth optimisation, corridor-level connectivity mapping, and reinforcement alerts during active trips are embedded as structural requirements. Delivery architecture becomes part of safety infrastructure.
4. **Validation & Feedback Layer -** Structured catch–effort logging, harbour-level observation capture, incident dataset integration, and corridor-specific calibration loops form the evidence backbone. Validation transitions toward continuous ground-truth integration rather than periodic retrospective evaluation.

The convergence framework integrates field intelligence, modelling systems, delivery resilience, and governance analytics into a unified Marine Risk Intelligence ecosystem. Safety, economic stability, and advisory credibility are treated as interconnected outcomes rather than isolated performance indicators.

Chapter 13

National Marine Risk Intelligence Architecture

This chapter outlines the proposed multi-layered architecture integrating corridor modelling, harbour intelligence, validation systems, and behaviour-aligned advisory design.

Chapter 13

National Marine Risk Intelligence Architecture

(Marine Fisher Folk n = 339 | Students-FGD n = 254 | Machli App R&D n = 172)

The National Marine Risk Intelligence Architecture translates convergence principles into an operational system design integrating data foundations, predictive modelling, delivery resilience, and governance dashboards within a single interoperable framework.

1. Data Foundation Layer

Structured dataset requirements emerging from Students-FGD (n = 254) establish the national data spine:

- Trip-level catch & effort logs — 143 of 254 (56.3%)
- Corridor-level network coverage mapping — 115 of 254 (45.3%)
- Incident and near-miss safety records — 95 of 254 (37.4%)
- Harbour-level sea condition observations — 65 of 254 (25.6%)
- PFZ performance evaluation frameworks — 82 of 254 (32.3%)

These datasets enable district-sensitive calibration, harbour-aware modelling, and probabilistic safety analytics.

2. Multi-Parameter Modelling Layer

Academic consultations demonstrate high modelling readiness:

- AI/ML-based predictive systems — 190 mentions (74.8%)
- Remote sensing integration — 164 mentions (64.6%)
- GIS-based spatial analytics — 161 mentions (63.4%)
- GeoAI integration — 148 mentions (58.3%)

This modelling layer integrates atmospheric dynamics, oceanographic variability, fisheries behaviour modelling, corridor exposure mapping, harbour congestion analytics, and bio-economic decision support.

3. Delivery Resilience Layer

Marine Fisher Folk responses (n = 339) confirm delivery fragility as a structural constraint:

- Network connectivity issues as advisory barrier — 168 of 339 (49.6%)
- Operational connectivity failure at sea — 78 of 339 (23.0%)

- Trust / accuracy concerns — 45 of 339 (13.3%)
- Language barriers — 41 of 339 (12.1%)
- Voice Call / IVR as preferred urgent channel — 183 of 339 (54.0%)

The architecture embeds voice-first communication, store-and-forward advisory logic, low-bandwidth design, tiered alert classification, and reinforcement messaging during offshore operations.

4. Validation & Confidence Architecture

Advisory credibility depends on traceable calibration mechanisms. Continuous integration of catch–effort datasets, harbour-level observations, incident analytics, and corridor connectivity metrics strengthens statistical reliability and confidence scoring.

Validation evolves into an ongoing calibration process supported by structured digital capture and institutional data-sharing protocols.

5. Economic Intelligence Integration

Marine decision systems incorporate trip-cost modelling, market intelligence signals, fuel-distance optimisation analytics, and corridor-level viability mapping. Machli App R&D signals (n = 172) reflect strong demand for economic integration:

- Market price & buyer information — 89 of 172 (51.7%)
- Higher alert accuracy & timeliness — 80 of 172 (46.5%)
- Navigation & safe harbour guidance — 75 of 172 (43.6%)

Economic intelligence becomes embedded within advisory logic rather than treated as an external layer.

6. Governance & Dashboard Integration

The national architecture supports:

- District Marine Resilience Indices
- Corridor-level exposure dashboards
- Harbour vulnerability analytics
- Incident-linked predictive safety modelling
- Advisory adoption metrics

Institutional roles align across oceanographic agencies, meteorological systems, fisheries research institutions, harbour authorities, telecom and connectivity mapping systems, national fisheries bodies, state universities, and organised fisher representation platforms.

The National Marine Risk Intelligence Architecture establishes an interoperable, continuously learning system integrating environmental forecasting, economic analytics, delivery resilience, validation datasets, and governance oversight within a unified Marine Resilience Grid.

Chapter 14

2026–2030 Marine Risk Reduction Roadmap

This chapter presents a phased roadmap for strengthening marine advisory systems, validation frameworks, governance coordination, and digital resilience over the next five years.

Chapter 14

2026–2030 Marine Risk Reduction Roadmap

(Marine Fisher Folk n = 339 | Students-FGD n = 254 | Machli App R&D n = 172)

The 2026–2030 Marine Risk Reduction Roadmap operationalises the National Marine Risk Intelligence Architecture into a phased national implementation strategy. The roadmap integrates environmental modelling, delivery resilience, validation datasets, economic intelligence, and institutional interoperability into sequenced system strengthening.

Evidence across consultations establishes clear priority signals:

- Trip-level catch & effort logging required — 143 of 254 (56.3%)
- Communication reliability mapping required — 115 of 254 (45.3%)
- Cyclone-linked fisheries risk modelling required — 111 of 254 (43.7%)
- Network connectivity usability barrier — 168 of 339 (49.6%)
- Weather unpredictability exposure — 231 of 339 (68.1%)
- Market intelligence feature demand — 89 of 172 (51.7%)

These signals shape phased national implementation.

2026: Baseline Consolidation and Data Architecture

Priority Focus: Structured Data Foundations and Pilot Risk Indices

This phase establishes the national data spine required for calibrated modelling and advisory validation.

Core actions include:

- Standardised national catch–effort logging framework across coastal states
- Corridor-level offshore connectivity mapping
- National incident and near-miss safety reporting system
- Harbour-level sea condition observation integration
- PFZ validation framework linking predicted zones with trip outcomes

Pilot Marine Risk Dashboards are initiated in cyclone-prone and monsoon-sensitive districts. Integration between oceanographic forecasts, harbour observations, and trip-level data begins structured calibration.

Outcome Target: Baseline National Marine Risk Dashboard operational in selected pilot corridors with integrated validation loops.

2027: Predictive Modelling and Corridor Intelligence
Priority Focus: Reaction-Time Reduction and Delivery Resilience

This phase strengthens modelling precision and delivery architecture.

Core actions include:

- Cyclone-trajectory-linked corridor alerts
- Multi-parameter modelling integrating SST, chlorophyll, and current patterns
- Corridor-based connectivity heatmaps embedded into advisory logic
- Low-bandwidth and store-and-forward advisory architecture
- Reinforcement alerts during active offshore trips

AI/ML (74.8%) and GIS (63.4%) readiness within academic inputs supports predictive expansion and spatial analytics integration.
Outcome Target: Measurable reduction in reaction-time gap during cyclone intensification and improved mid-sea advisory reinforcement.

2028: Economic Stability and Bio-Economic Integration
Priority Focus: Income Resilience within Advisory Systems

Marine decision systems incorporate livelihood viability modelling.

Core actions include:

- Market price and buyer intelligence modules
- Trip-cost and fuel-distance optimisation analytics
- Catch probability modelling linked to environmental parameters
- Bio-economic advisory overlays for departure decisions
- Corridor-specific economic exposure mapping

Machli App R&D demand signals (51.7% for market intelligence; 43.6% for navigation guidance) align directly with this phase.
Outcome Target: Integrated safety–economic advisory modules operational in at least five coastal states.

2029: Institutional Convergence and National Scaling
Priority Focus: Interoperability and Governance Integration

This phase integrates institutions into a unified marine intelligence backbone.
Core actions include:

- Interoperable APIs connecting oceanographic, meteorological, fisheries, harbour, and market datasets
- Standardised advisory evaluation metrics
- Harbour vulnerability analytics embedded into advisory protocols
- Continuous validation loops across states
- Governance dashboards integrating corridor-level risk signals

Institutional convergence formalises shared analytical infrastructure across national and state agencies.

Outcome Target: National Marine Advisory Integration Framework operational across all principal coastal states.

2030: National Marine Resilience Grid
Priority Focus: System Maturity and Predictive Benchmarking

The final phase institutionalises predictive and preventive marine governance.

Core actions include:

- Real-time National Marine Risk Index
- Incident-based probabilistic safety modelling
- Climate-linked fisheries migration modelling integration
- Annual National Marine Risk and Resilience Report
- District-level Marine Resilience Indices

The system transitions from reactive forecasting to calibrated, continuously learning Marine Decision Intelligence.

Outcome Target: Demonstrable reduction in marine safety incidents, strengthened advisory credibility, and improved livelihood stability indicators.

Chapter 15

Policy Directions for a Resilient Blue Economy

This chapter translates evidence into actionable policy directions aligned with marine safety, fisheries governance, climate adaptation, and digital inclusion priorities.

Chapter 15

Policy synthesis note: Selected governance and scheme-access insights also draw from Annexure E (SSM institutional interaction), treated as qualitative evidence outside the survey datasets.

Policy Directions for a Resilient Blue Economy

(Marine Fisher Folk n = 339 | Students-FGD n = 254 | Machli App R&D n = 172)

Marine resilience requires policy alignment across advisory reform, data governance, harbour infrastructure, environmental stewardship, and inclusive digital enablement. Consultation evidence demonstrates that safety exposure, livelihood stability, environmental risk, and delivery reliability operate within a shared vulnerability system.

1. Advisory Reform and Data Governance

Students-FGD (n = 254) highlight foundational data requirements:

- Catch & effort logging — 56.3%
- Connectivity mapping — 45.3%
- Incident records — 37.4%

Marine Fisher Folk (n = 339) reinforce delivery constraints:

- Network usability barrier — 49.6%
- Trust / accuracy concerns — 13.3%

Policy direction includes:

- Institutionalisation of structured catch–effort datasets
- National connectivity mapping integration within marine advisories
- Incident and near-miss reporting mandates
- Confidence-scored alert protocols
- Tiered urgency classification in advisory dissemination

Advisories evolve from forecast broadcasting toward calibrated decision intelligence governed by measurable validation standards.

2. Harbour Infrastructure and Nearshore Governance

Field signals confirm that risk extends into harbour entry and landing operations.

Marine Fisher Folk (n = 339) report nearshore governance stress:

Port / Crowding Impact Theme	Mentions	Percentage
More vessels near fishing areas	177	52.2%
Dredging / coastal construction impacts	146	43.1%
Expanded restricted zones	136	40.1%
Bright port lights affecting fishing	51	15.0%

Policy strengthening includes:

- Harbour vulnerability mapping
- Congestion-sensitive docking protocols
- Breakwater reinforcement in vulnerable zones
- Corridor-aware regulation of vessel density
- Structured nearshore enforcement coordination

Harbour intelligence becomes embedded within marine advisory frameworks.

3. Environmental Governance Integration

Pollution perception and ecological stress signals are widespread.

Marine Fisher Folk responses (n = 339):

Pollution Visibility

- Often — 160 (47.2%)
- Sometimes — 119 (35.1%)
- Rarely — 34 (10.0%)
- No — 19 (5.6%)
- Not sure — 5 (1.5%)

Observed Pollution Types

Pollution Type	Mentions	Percentage
Plastic waste	267	78.8%
Sewage / dirty discharge	144	42.5%
Industrial / chemical discharge	129	38.1%
Oil / diesel pollution	112	33.0%
Algae / green water	49	14.5%
Fish market waste	48	14.2%
Dead fish incidents	33	9.7%

Policy alignment integrates:

- SOP-based coastal waste removal
- Mangrove and estuarine ecosystem monitoring
- Industrial discharge accountability systems
- Community-linked environmental reporting channels

Environmental governance becomes structurally aligned with marine safety intelligence.

4. Digital Inclusion and Community Enablement

Machli App R&D signals (n = 172) reinforce inclusive onboarding needs:

- Training simplification demand — 72 (41.9%)
- Language / localisation demand — 49 (28.5%)

Policy support includes:

- Structured community volunteer models
- Voice-first advisory architecture institutionalisation
- Multilingual content expansion
- Assisted digital onboarding in harbour communities

Digital advisory infrastructure is positioned as public safety infrastructure requiring community-grounded enablement.

5. Institutional Convergence for Blue Economy Stability

Marine resilience integrates ocean science, fisheries research, connectivity infrastructure, harbour governance, environmental monitoring, and economic analytics.

A coordinated framework aligns:

- Ocean forecasting systems
- Cyclone trajectory intelligence
- Fisheries science institutions
- Harbour and maritime boards
- Connectivity and telecom mapping systems
- National fisheries bodies
- State universities as validation nodes
- Organised fisher representation platforms

The Blue Economy resilience framework embeds safety analytics, livelihood stability modelling, environmental governance, and digital advisory interoperability within a unified national marine intelligence system.

Chapter 16
Digital Advisory R&D – The Machli Marine Intelligence Platform

Machli Feedback (n = 172)

This chapter analyses digital advisory feedback and outlines R&D priorities including market intelligence integration, alert accuracy improvement, navigation guidance, and multilingual onboarding systems.

Chapter 16

Digital Advisory R&D — The Machli App Marine Intelligence Platform

(Machli App Digital Feedback n = 172 | Marine Fisher Folk n = 339 | Students-FGD n = 254)

From Forecast Access to Marine Confidence System

The Machli App Marine Advisory App, developed by Reliance Foundation, integrates ocean-state forecasts powered by INCOIS and incorporates marine fisheries intelligence from the Department of Fisheries and allied scientific institutions. The platform operates as a science-to-community bridge, translating institutional marine intelligence into last-mile advisory delivery for fishing communities.

Machli App functions as a Digital Advisory Research & Development platform within the broader Marine Risk Intelligence framework. Its role within this study is distinct: it captures structured digital feedback and feature-enhancement signals, supporting advisory evolution without altering the core fisher and academic evidence base.

Core Functional Architecture

Machli App currently integrates:

- Multilingual advisory dissemination
- Voice-enabled communication formats
- Ocean-state forecasts and PFZ information
- Cyclone and severe-weather alerts
- Fisheries advisory information
- Structured in-app feedback capture

The platform aligns with fisher communication preferences, where 54.0% of Marine Fisher Folk (n = 339) prefer voice-based urgent alerts. Its design supports audio-first dissemination and structured digital interaction under varying connectivity conditions.

R&D Enhancement Pathways

(Derived from Machli App Digital Feedback n = 172)

Digital feedback signals indicate clear next-generation feature priorities:

Feature Demand	Mentions	Percentage
Market price & buyer information	89	51.7%
Higher alert accuracy & timeliness	80	46.5%
Navigation & safe harbour return guidance	75	43.6%
Training videos / simplified onboarding	72	41.9%
Additional language / localisation support	49	28.5%

These signals position Machli App's next phase as an expanded Marine Decision Support Interface integrating:

- Harbour-level nowcasting
- Corridor-based connectivity logic
- Offline advisory storage capability
- Trip-stage reinforcement alerts
- Confidence-scored risk communication
- Bio-economic decision-support integration

Machli App remains structurally separate from the core dataset findings. It serves as a calibrated innovation layer supporting advisory validation, behavioural alignment, and delivery resilience.

Strategic Positioning within National Architecture

Machli App's R&D evolution aligns with the National Marine Risk Intelligence Architecture by enabling:

- Advisory validation loops
- Field-integrated feedback refinement
- Low-connectivity corridor resilience
- Multilingual and voice-first design
- Integration between institutional forecasting and community decision behaviour

Its trajectory supports transformation from information dissemination toward calibrated marine decision intelligence.

Chapter 17

India’s Marine Resilience Inflection Point

This chapter synthesises the national evidence and establishes the strategic inflection point requiring transition from forecast dissemination to calibrated marine risk intelligence systems.

Chapter 17

Closing synthesis note: The overall ‘inflection point’ discussion also reflects Annexure E (SSM interaction) as a qualitative institutional layer, separate from the structured datasets.

India’s Marine Resilience Inflection Point

(Marine Fisher Folk n = 339 | Students-FGD n = 254 | Machli App R&D n = 172)

India’s marine fisheries are operating within a structurally shifting risk environment shaped by climatic volatility, economic uncertainty, environmental stress, and delivery fragility. The consolidated dataset establishes that marine vulnerability is not episodic; it is journey-based and systemic.

The most consistent field-level operational signals include:

- Weather unpredictability / sudden sea change — 231 of 339 (68.1%)
- Cyclone or strong storm exposure — 199 of 339 (58.7%)
- Fish availability uncertainty — 182 of 339 (53.7%)
- Network connectivity usability barrier — 168 of 339 (49.6%)

Parallel academic signals reinforce structural modelling priorities:

- Governance & compliance systems — 132 of 254 (52.0%)
- Communication reliability mapping — 115 of 254 (45.3%)
- Cyclone-linked fisheries modelling — 111 of 254 (43.7%)
- Catch & effort validation datasets — 143 of 254 (56.3%)

The convergence of these signals confirms that advisory evolution requires:

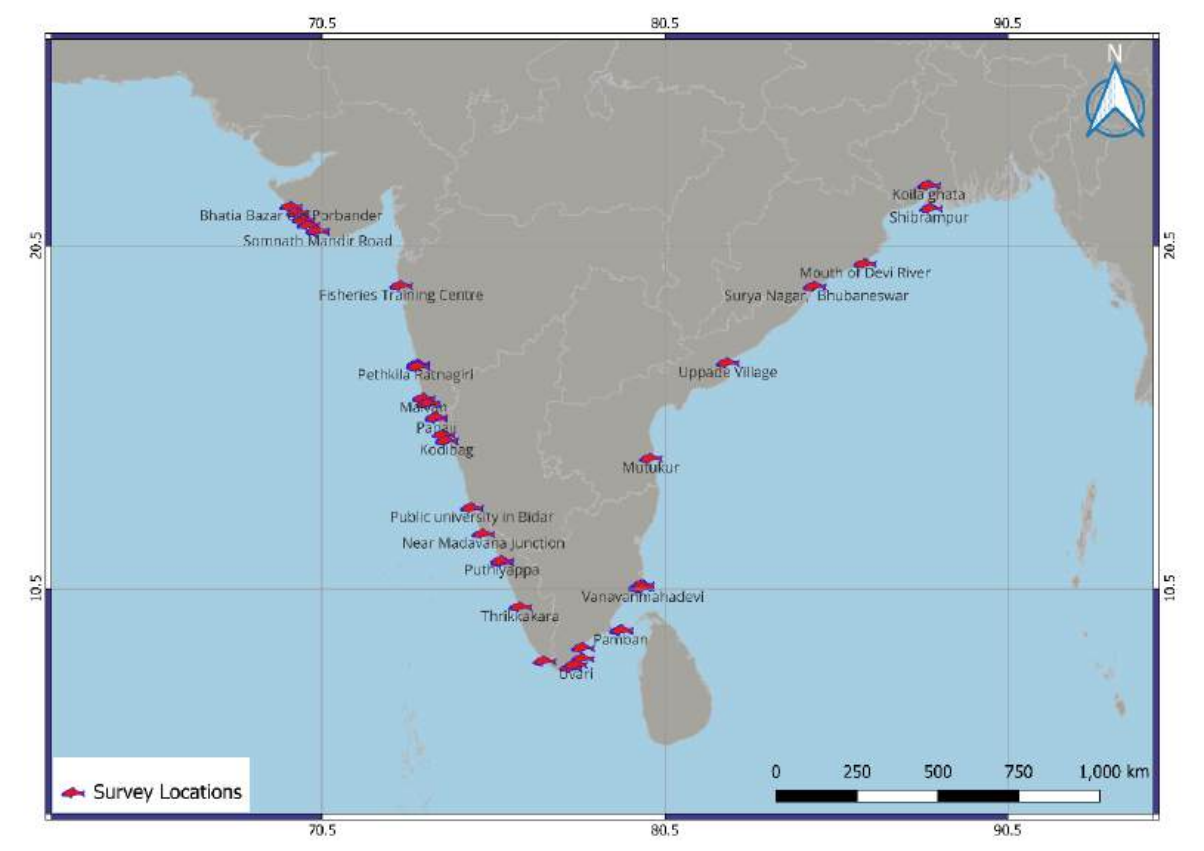
- Corridor-sensitive modelling
- Harbour-level intelligence integration
- Connectivity-aware delivery architecture
- Structured validation datasets
- Bio-economic risk integration
- Institutional interoperability

Marine resilience is positioned at a strategic inflection point. The transition required is structural: from forecast dissemination to calibrated Marine Risk Intelligence Systems that integrate environmental analytics, economic viability modelling, digital delivery resilience, and ground-truth validation loops.

The 2026–2030 roadmap establishes phased implementation. The National Marine Risk Intelligence Architecture embeds data interoperability. Policy directions align advisory reform, environmental governance, harbour infrastructure, and inclusive digital systems.

India now stands positioned to consolidate sea voices, scientific systems, and digital innovation into a unified National Marine Resilience Grid.

Geographic Distribution of Survey Locations



Chapter 18
Annexures

This section provides the structured datasets, state-wise tables, validation frameworks, and institutional consultation summaries that substantiate the analytical findings presented in the main report. The annexures serve as the technical evidence base supporting the National Marine Risk Intelligence Brief.

Annexure A

State-Wise Participation Tables

This annexure presents the detailed state-wise distribution of Marine Fisher Folk and Students/Researchers who participated in the structured consultations conducted between 3–12 February 2026.

Annexure A: State-Wise Participation Tables

Referenced in Chapters 1 & 3

A1. Marine Fisher Folk Participation (n = 339)

State	Participants	Percentage
Tamil Nadu	88	26.0%
Maharashtra	55	16.2%
Gujarat	37	10.9%
Odisha	34	10.0%
Karnataka	32	9.4%
Andhra Pradesh	28	8.3%
West Bengal	27	8.0%
Kerala	26	7.7%
Goa	12	3.5%
Total	**339**	**100%**

A2. Students-FGD Participation (n = 254)

State	Participants	Percentage
Maharashtra	55	21.7%
Karnataka	53	20.9%
Andhra Pradesh	34	13.4%
Odisha	34	13.4%
Gujarat	33	13.0%
West Bengal	22	8.7%
Tamil Nadu	12	4.7%
Kerala	7	2.8%
Goa	1	0.4%
J&K / Rajasthan / Tripura	3	1.2%
Total	**254**	**100%**

A3. Machli App Digital Feedback Base (n = 172)

Category	Respondents	Percentage
Digital Feedback Respondents	172	100%

Annexure B

National Risk Signals & Platform Patterns

This annexure consolidates aggregated national risk indicators, advisory access patterns, communication preferences, and platform usage trends emerging from the structured datasets.

Annexure B: National Risk Signals & Platform Patterns

Referenced in Chapters 4, 5, 6, 16

Hazard Exposure (n = 339)

Hazard	Respondents	Percentage
Cyclone / Strong Storm	199	58.7%
Heavy Rain / Flooding	128	37.8%

Advisory Usability Barriers (n = 339)

Barrier	Respondents	Percentage
Network Connectivity	168	49.6%
Delay / Not Timely	104	30.7%
Trust / Accuracy Concerns	45	13.3%
Language Barriers	41	12.1%

Preferred Communication Channels (n = 339)

Channel	Respondents	Percentage
Voice Call / IVR	183	54.0%
WhatsApp Voice	73	21.5%
App Notification	69	20.4%

Machli App Experience Rating (n = 172)

Rating	Number	Percentage
Useful	87	50.6%
Very Useful	71	41.3%
Somewhat Useful	12	7.0%
Not Useful	2	1.2%

Machli App Feature Demand (n = 172)

Feature	Mentions	Percentage
Market Price & Buyer Info	89	51.7%
Higher Alert Accuracy	80	46.5%
Navigation Guidance	75	43.6%
Training Videos	72	41.9%

Annexure C

State-Level Risk & Governance Indicators

This annexure provides state-level risk differentiation, operational stress signals, advisory constraints, and governance-linked observations across coastal regions.

Annexure C
State-Level Risk & Governance Indicators
Referenced in Chapters 10, 11, 12, and 15
Dataset Base: Marine Fisher Folk (n = 339)

Annexure C consolidates all spatially differentiated risk indicators derived from Marine Fisher Folk responses. It enables corridor-level comparison, state-level calibration, and governance stress mapping. This annexure supports Chapters 10 and 11 (corridor and micro-geography differentiation), Chapter 12 (risk convergence framework), and Chapter 15 (policy directions).

C1. Corridor-Level Risk Comparison

(Marine Fisher Folk n = 339)

Corridor	Sample (n)	Cyclone / Sudden Sea Change	Weather & Sea-Safety Signal	Network Advisory Barrier
Eastern Corridor (WB, OD, AP, TN)	177	103 (58.2%)	122 (68.9%)	83 (46.9%)
Western Corridor (MH, GA, KA, KL)	125	69 (55.2%)	83 (66.4%)	52 (41.6%)
Gujarat (West-Coast Extension)	37	27 (73.0%)	13 (35.1%)	23 (62.2%)

This table establishes corridor-level climatic and delivery differentiation, forming the spatial backbone for Chapter 10.

C2. State-Level Cyclone & Sea-Safety Signals

(Marine Fisher Folk n = 339)

State	n	Cyclone / Sudden Sea Change	Weather & Sea-Safety	Network Advisory Barrier
Tamil Nadu	88	60 (68.2%)	61 (69.3%)	55 (62.5%)
Maharashtra	55	35 (63.6%)	20 (36.4%)	26 (47.3%)
Gujarat	37	27 (73.0%)	13 (35.1%)	23 (62.2%)
Odisha	34	14 (41.2%)	22 (64.7%)	17 (50.0%)

State	n	Cyclone / Sudden Sea Change	Weather & Sea-Safety	Network Advisory Barrier
Karnataka	32	17 (53.1%)	21 (65.6%)	10 (31.3%)
Andhra Pradesh	28	12 (42.9%)	18 (64.3%)	10 (35.7%)
West Bengal	27	17 (63.0%)	20 (74.1%)	11 (40.7%)
Kerala	26	16 (61.5%)	22 (84.6%)	13 (50.0%)
Goa	12	1 (8.3%)	1 (8.3%)	3 (25.0%)

These indicators support micro-geographic advisory calibration discussed in Chapter 11.

C3. Pollution Visibility Frequency

(Marine Fisher Folk n = 339)

Frequency	Respondents	Percentage
Often	160	47.2%
Sometimes	119	35.1%
Rarely	34	10.0%
No	19	5.6%
Not Sure	5	1.5%

Combined “Often + Sometimes” = 82.3%, indicating strong environmental stress visibility.

C4. Observed Pollution Types

(Multi-select | n = 339)

Pollution Type	Mentions	Percentage
Plastic waste	267	78.8%
Sewage / dirty discharge	144	42.5%
Industrial / chemical discharge	129	38.1%
Oil / diesel pollution	112	33.0%
Algae / green water	49	14.5%
Fish market waste	48	14.2%
Dead fish incidents	33	9.7%

C5. Port Crowding & Dredging Impact Signals

(Marine Fisher Folk n = 339 | Multi-select)

Port / Crowding Indicator	Mentions	Percentage
More vessels near fishing areas	177	52.2%
Dredging / coastal construction impacts	146	43.1%
Expanded restricted zones	136	40.1%
Bright port lights affecting fishing	51	15.0%

This governance signal cluster directly supports Chapter 15 (Policy Directions).

Annexure D

Students-FGD Research & Validation Architecture

This annexure outlines the research priorities, modelling gaps, and validation datasets identified by students and researchers, forming the academic foundation for a structured Marine Risk Intelligence Architecture.

Annexure D

Students-FGD Research & Validation Architecture

Referenced in Chapters 7, 8, 9, 13, and 14

Dataset Base: Students-FGD (n = 254)

Annexure D consolidates all modelling, validation, and technology-readiness signals derived from academic consultations. It anchors Chapters 7–9 and provides the scientific basis for Chapters 13 and 14.

D1. Most Urgent Research Gaps

(Students-FGD n = 254)

Research Gap	Mentions	Percentage
Governance & compliance behaviour systems	132	52.0%
Communication reliability mapping	115	45.3%
Cyclone-linked fisheries risk modelling	111	43.7%
Fisheries multi-source data integration	141	55.5%
Harbour-level risk models	81	31.9%
PFZ performance evaluation studies	82	32.3%

D2. Missing Validation Datasets

Dataset Gap	Mentions	Percentage
Trip-level catch & effort logs	143	56.3%
Incident / safety records	95	37.4%
Corridor-level network coverage maps	115	45.3%
Harbour-level sea condition observations	65	25.6%
Fuel use & trip distance logs	51	20.1%

D3. Technology Mapping to Research Priorities

Technology Area	Mentions	Percentage
AI / ML modelling	190	74.8%
Remote sensing integration	164	64.6%
GIS spatial mapping	161	63.4%
GeoAI integration	148	58.3%

D4. State-Wise Academic Priority Matrix

(Condensed summary; full matrix included in Chapter 8)

State	Governance Priority	Connectivity Mapping	Cyclone Modelling	Harbour Models
Maharashtra	69.5%	30.5%	45.8%	30.5%
Karnataka	58.9%	50.0%	41.1%	33.9%
Andhra Pradesh	47.1%	47.1%	52.9%	38.2%
Odisha	58.8%	50.0%	61.8%	38.2%
Gujarat	65.6%	46.9%	28.1%	15.6%
West Bengal	54.5%	45.5%	45.5%	31.8%
Tamil Nadu	54.5%	72.7%	27.3%	36.4%
Kerala	33.3%	50.0%	0%	33.3%

Annexure E

Maharashtra & Goa Organised Fisher Institutional Consultation

This annexure documents structured institutional consultation inputs from Maharashtra and Goa, including governance dynamics, enforcement perspectives, harbour infrastructure concerns, and environmental management observations. These qualitative insights complement the structured survey dataset.

Annexure E

Maharashtra & Goa Organised Fisher Institutional Consultation

(Sagari Seema Manch – Institutional Interaction)

Referenced in Chapter 15: Policy Directions for a Resilient Blue Economy

Nature of Evidence: Qualitative Institutional Consultation

Dataset Status: Not part of structured survey dataset (n = 339).

E1. Institutional Representation & Regional Scale

This consultation was conducted with representatives of **Sagari Seema Manch (SSM)**, an organised platform representing traditional marine fishing communities across the Maharashtra–Goa coastal belt.

The consultation reflects consolidated inputs from organised nearshore-dependent fishing groups.

Representation Scale (Pratinidhitva Base)

Region	Representation
Mumbai	580
Raigad	200
Ratnagiri	450
Sindhudurg	600
Goa	150
Total Representation Base	**1,980**

Interpretation: This institutional layer represents nearly 2,000 organised fishers across major west-coast districts. The consultation therefore reflects structured collective perspectives rather than individual-level responses.

E2. Nearshore Governance & Enforcement Stress

Institutional inputs emphasised regulatory and operational pressure in nearshore zones.

Key Themes

Governance Domain	Institutional Input
Illegal Nearshore Fishing	LED fishing, speed trawlers, purse seine operations entering traditional fishing zones
Enforcement Gaps	Action perceived only when illegal gear is physically seized
Maritime Boundary Tensions	Frequent inter-state operational friction
Regulatory Consistency	Need for layered enforcement coordination across agencies

Consolidated Governance Signal

- Nearshore intrusion by mechanised and light-assisted vessels.
- Perceived enforcement inconsistency affecting compliance credibility.
- Operational stress from maritime boundary overlaps.
- Demand for coordinated enforcement between Fisheries Department, Coastal Police, Coast Guard, and Maritime Boards.

This reinforces Chapter 15's emphasis on governance alignment within marine resilience policy.

E3. Landing Infrastructure & Operational Safety Constraints

Institutional representatives highlighted infrastructure inequality and safety exposure at harbour and creek (khadi) levels.

Infrastructure & Access Themes

Domain	Institutional Concern
Jetty Access	Perceived inequity for small traditional operators
Breakwater Infrastructure	Demand for protective structures in vulnerable khadi zones
Harbour Congestion	Simultaneous vessel returns creating docking risk

Mechanised Support	Need for hauling and landing technology to reduce physical strain

Operational Insight

- Smaller operators face access disadvantage in structured harbour facilities.
- Creek-based geographies remain structurally vulnerable during monsoon turbulence.
- Docking and landing-stage risk forms part of livelihood vulnerability.

This aligns directly with the harbour-level modelling priorities in Chapters 10 and 15.

E4. Livelihood Viability & Economic Pressures

Organised fisher inputs reflect structural economic stress beyond weather exposure.

Economic Stress Signals

Domain	Institutional Concern
Fuel Cost	Rising diesel burden affecting trip viability
Declining Yields	Reduced catch volumes driving livelihood instability
By-Catch Burden	Labour-intensive removal increasing time and cost
Fisheries Census	Demand for updated and independent enumeration

Livelihood Interpretation

- Fuel economics significantly shapes departure decisions.
- Yield decline pressures occupational continuity.
- Trust deficit in census data affects policy confidence.
- Migration from traditional fishing emerging as structural risk.

These themes support Chapter 15's bio-economic policy direction.

E5. Scheme Access & Institutional Interface Gaps

Organised representatives highlighted administrative friction affecting scheme access.

Administrative Concerns

Domain	Institutional Input
PM Matsya Sampada Yojana (PMMSY)	Documentation complexity limiting access
Licensing	Procedural delays and bureaucratic timelines
Compliance	Perceived complexity for small operators
Community Platforms	Decline in active unified fisher collectives

Governance Implication

- Scheme complexity may unintentionally exclude marginal fishers.
- Licensing timelines affect operational continuity.
- Community-level representation platforms require revitalisation.
- Structured policy consultation channels needed.

This layer strengthens Chapter 15's regulatory reform focus.

E6. Safety, Technology & Digital Enablement Needs

Institutional participants expressed readiness for structured safety technology integration.

Safety System Priorities

Domain	Institutional Input
Distress Alert Transmitters (DAT)	Wider deployment and awareness required
GPS Vessel Mapping	Structured registration and tracking needed
SOS Training	Practical drills and crew readiness
Volunteer Model	Harbour-level community safety facilitators

Safety Interpretation

- Technology adoption willingness exists.
- Training and institutional coordination required.
- Harbour-level volunteer systems can strengthen response readiness.
- Safety architecture must combine digital systems and physical enablement.

E7. Coastal Environmental Governance Concerns

Environmental governance themes were repeatedly emphasised as operational risk multipliers.

Environmental Monitoring Themes

Domain	Institutional Concern
Plastic Waste	Need for Standard Operating Procedures for removal
Creek (Khadi) Pollution	Structured clean-up mechanisms required
Mangrove Protection	Awareness and conservation strengthening
Industrial Monitoring	Gas/oil leakage vigilance near ports and industrial zones

Environmental Interpretation

- Pollution perceived as affecting fish availability and ecosystem stability.
- Mangrove and creek systems require local stewardship.
- Institutional monitoring and complaint channels need strengthening.
- Environmental governance directly influences advisory credibility.

Annexure F: Marine Fisherfolk Survey Instruments (Multi-Language Formats)

This annexure contains the structured feedback forms administered to Marine Fisherfolk across nine coastal states in English, Tamil, Telugu, Marathi, Odia, Bengali, Kannada, Malayalam, and Gujarati. These instruments formed the primary field-level data collection tools for marine safety, risk perception, and livelihood assessment.

Reliance Foundation

WOSC 2026 - Fisherfolk FGD

BASIC PARTICIPANT PROFILE

Do you agree to share basic details for research and event documentation? *:

○ Yes ○ No

Your name will NOT be published.

PARTICIPANT CATEGORY

Which best describes you? *:

○ Marine fisher – boat owner

○ Marine fisher – crew member

○ Women in post-harvest work

○ Harbour / auction / ice / transport worker

○ Mechanic / repair / support service

○ Student / researcher

○ Government / institution

○ Other

Please select any one option

LOCATION

State *:

Please enter your State name here

District *:

Please enter your district name here

Harbour / Landing Centre Name *:

Please enter your harbour / landing centre name here

FISHING ZONE

Which zone do you mostly work in? *:

- ○ Nearshore (0–5 km)
- ○ Mid-sea (5–20 km)
- ○ Offshore (20+ km / multi-day)
- ○ Not applicable / Not sure

Please select any one option

FISHING EXPERIENCE

How many years have you been involved in fishing or fish-related work? *:

- ○ Less than 5 years
- ○ 5–10 years
- ○ 10–20 years
- ○ More than 20 years

Please select any one option

MARINE FISHER FOLK – EXPERIENCE & ISSUE CAPTURE

MAIN PROBLEMS

What Problems Do You Face Most? *:

- ☐ Weather & Sea Safety
- ☐ Cyclone / Sudden Sea Change
- ☐ Fish Availability Uncertainty
- ☐ Fuel & Trip Cost High
- ☐ Market Price / Buyer Problem
- ☐ Ice / Cold Storage Problem
- ☐ Harbour / Landing Centre Problem
- ☐ Network / Communication Failure
- ☐ Boundary / Arrest Fear (IMBL)
- ☐ Light Fishing Conflict (LED)

- [ ] Rules / Compliance Confusion
- [ ] Accidents / Rescue Delay
- [ ] Gear Damage / Net Loss
- [ ] Port / Shipping / Construction Disturbance
- [ ] Pollution Near Harbour or Sea
- [ ] Other

Max Choice allowed: 4

Please select a maximum of 4 options based on your recent fishing experience.

WHEN IT HAPPENS

When Does Your Biggest Problem Happen Most? *:

- ○ Specific months
- ○ Monsoon season
- ○ Winter season
- ○ Summer season
- ○ Throughout the year

Please select any one option

HOW OFTEN

How Often Does It Affect You? *:

- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost every trip

Please select any one option

IMPACT ON LIFE

What Happens Because of This Problem? *:

- [ ] Income loss
- [ ] Trip cancelled
- [ ] Safety fear
- [ ] Debt increases
- [ ] Crew problems

- [ ] Boat damage / repair loss
- [ ] Family stress

Max Choice allowed: 3

Please select a maximum of 3 options.

EVIDENCE FROM EXPERIENCE

What Proof Matches Your Experience? *:

- [ ] Catch reduced compared to earlier
- [ ] Fishing days reduced
- [ ] Costs increased sharply
- [ ] Safety incident or near-miss
- [ ] Conflicts increased
- [ ] Quality loss / delay to market
- [ ] Legal trouble or fear
- [ ] Other

Max Choice allowed: 3

Please select a maximum of 3 options.

INFORMATION GAP BEFORE GOING TO SEA

Before Leaving Harbour, What Do You Need Most? *:

- [ ] Wind and rain timing
- [ ] Wave / sea roughness
- [ ] Fish location advice (PFZ)
- [ ] Cyclone early warning
- [ ] Safe route guidance
- [ ] Boundary clarity
- [ ] Network expectation
- [ ] Market price signals
- [ ] Harbour entry/exit safety

Max Choice allowed: 3

Please select a maximum of 3 options.

OFFSHORE BARRIERS

If You Want to Go Offshore, What Stops You? *:

- [ ] Boat not suitable
- [ ] Safety kit not sufficient
- [ ] Rescue support not reliable
- [ ] Insurance problems
- [ ] Crew not trained
- [ ] Ice / storage not enough
- [ ] Offshore price not assured
- [ ] Governance / penalty fear

Max Choice allowed: 3

Please select a maximum of 3 options.

SEA CHANGES NOTICED

Changes You Notice in the Sea (Last 3–5 Years) *:

- [ ] Sea feels hotter
- [ ] Wind becomes sudden strong
- [ ] Waves rougher than before
- [ ] Fish season timing changed
- [ ] Fish size reduced
- [ ] New or unusual fish seen
- [ ] Not sure / no change

Max Choice allowed: 3

Please select a maximum of 3 options.

Which months are becoming difficult? *:

- [ ] January
- [ ] February
- [ ] March
- [ ] April
- [ ] May
- [ ] June
- [ ] July
- [ ] August
- [ ] September
- [ ] October

- [ ] November
- [ ] December

Max Choice allowed: 3

Please select a maximum of 3 options.

HARBOUR & VILLAGE HAZARDS

Hazards *:

- [ ] Cyclone / strong storm
- [ ] Flooding during heavy rain
- [ ] Sea water entering houses
- [ ] Coast erosion
- [ ] High tide entering harbour
- [ ] Heatwave on coast
- [ ] None / Not sure
- [ ] Select all

Max Choice allowed: 4

Please select a maximum of 4 options.

Biggest loss during hazard *:

- ○ Boat or gear damage
- ○ Lost fishing days
- ○ Market / auction stops
- ○ Ice / cold chain breaks
- ○ House or village damage
- ○ Injury or life risk

Please select any one option

POLLUTION & SEA DISTURBANCE

Do you see pollution? *:

- ○ Often
- ○ Sometimes
- ○ Rarely
- ○ No
- ○ Not sure

Please select any one option

What type? *:

- [ ] Plastic waste
- [ ] Oil / diesel smell
- [ ] Sewage / dirty discharge
- [ ] Factory / chemical discharge
- [ ] Fish market waste
- [ ] Algae / green water
- [ ] Dead fish incidents
- [ ] Not sure

Max Choice allowed: 3

Please select a maximum of 3 options.

Sea area crowding / port impact *:

- [ ] More ships close to fishing area
- [ ] Dredging or coastal construction
- [ ] Restricted zones increased
- [ ] Bright port lights affect fishing

Max Choice allowed: 2

Please select a maximum of 2 options.

INFORMATION PREFERENCE & SUBMIT

How Do You Prefer to Receive Important Messages? *:

- ○ WhatsApp text/image
- ○ WhatsApp voice message
- ○ Voice call / IVR
- ○ App notification
- ○ SMS
- ○ Harbour announcement

Please select any one option

Machli App Status *:

- ○ Use regularly
- ○ Use sometimes
- ○ Downloaded but not using
- ○ Not downloaded yet

Please select any one option

If not using, can you start within 7 days? *:

- ○ Yes
- ○ No
- ○ Need support

Please select any one option

What Makes Advisories Hard to Use? *:

- ☐ Language problem
- ☐ Message too long
- ☐ Comes late
- ☐ Not trusted
- ☐ Network problem
- ☐ Maps hard to understand
- ☐ Other

Max Choice allowed: 2

Please select a maximum of 2 options.

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Marathi

सहभागींची मूलभूत माहिती

आपण संशोधन आणि कार्यक्रम दस्तऐवजीकरणासाठी मूलभूत माहिती शेअर करण्यास सहमत आहात का? *:
○ हो ○ नाही

आपले नाव प्रकाशित केले जाणार नाही.

सहभागी श्रेणी

आपण कोणत्या श्रेणीत येता? *:
○ सागरी मच्छीमार – नौका मालक
○ सागरी मच्छीमार – खलाशी/कामगार
○ मासे पकडल्यानंतरच्या कामात महिला (सुकवणे, वर्गीकरण, लिलाव सहाय्य)
○ बंदर / लिलाव / बर्फ / वाहतूक कामगार
○ मेकॅनिक / दुरुस्ती / सहाय्य सेवा
○ विद्यार्थी / संशोधक
○ शासकीय / संस्था
○ इतर
○ Other

कृपया कोणताही एक पर्याय निवडा.

स्थान

राज्य *:

जिल्हा *:

बंदर / लँडिंग सेंटरचे नाव *:

मासेमारी क्षेत्र

आपण प्रामुख्याने कोणत्या क्षेत्रात काम करता? *:

- ○ किनाऱ्याजवळ (0–5 किमी)
- ○ मध्य समुद्र (5–20 किमी)
- ○ खोल समुद्र (20+ किमी / अनेक दिवस)
- ○ लागू नाही / खात्री नाही

कृपया कोणताही एक पर्याय निवडा.

मासेमारीचा अनुभव

आपण किती वर्षे मासेमारी किंवा संबंधित कामात आहात? *:

- ○ 5 वर्षांपेक्षा कमी
- ○ 5–10 वर्षे
- ○ 10–20 वर्षे
- ○ 20 वर्षांपेक्षा जास्त

कृपया कोणताही एक पर्याय निवडा.

सागरी मच्छीमार – अनुभव आणि समस्या नोंद

मुख्य समस्या

आपण कोणत्या समस्या सर्वाधिक अनुभवता? *:

- ☐ हवामान आणि समुद्र सुरक्षा समस्या
- ☐ चक्रीवादळ / अचानक समुद्र बदल
- ☐ माशांची उपलब्धता अनिश्चित
- ☐ इंधन व प्रवास खर्च जास्त
- ☐ बाजारभाव / खरेदीदार समस्या
- ☐ बर्फ / कोल्ड स्टोरेज समस्या
- ☐ बंदर / लँडिंग सेंटर समस्या
- ☐ नेटवर्क / संवाद समस्या
- ☐ सीमा उल्लंघन / अटक भीती
- ☐ एलईडी लाईट मासेमारी संघर्ष
- ☐ नियम / कागदपत्र गोंधळ

- ☐ अपघात / मदत उशिरा
- ☐ जाळे नुकसान / हरवणे
- ☐ बंदर / ड्रेजिंग / बांधकाम त्रास
- ☐ प्रदूषण समस्या
- ☐ इतर
- ☐ Other

Max Choice allowed: 4

कृपया अलिकडच्या मासेमारीच्या अनुभवावर आधारित जास्तीत जास्त ४ पर्याय निवडा.

समस्या कधी जास्त होते

आपली सर्वात मोठी समस्या कधी जास्त होते? *:

- ○ ठराविक महिने (उदा: जून–ऑगस्ट)
- ○ पावसाळा ऋतू (मोठ्या लाटा, जोरदार वारे)
- ○ हिवाळा ऋतू (थंड वारे किंवा धुके)
- ○ उन्हाळा ऋतू (गरम समुद्र, माशांची हालचाल)
- ○ संपूर्ण वर्षभर

कृपया कोणताही एक पर्याय निवडा.

किती वेळा परिणाम होतो

ही समस्या किती वेळा तुम्हाला त्रास देते? *:

- ○ क्वचित (वर्षातून एक-दोन वेळा)
- ○ कधी कधी (काही प्रवासात)
- ○ अनेक वेळा (बऱ्याच प्रवासात)
- ○ जवळपास प्रत्येक प्रवासात

कृपया कोणताही एक पर्याय निवडा.

जीवनावर परिणाम

या समस्येमुळे जीवनावर काय परिणाम होतो? *:

- ☐ उत्पन्न कमी होते
- ☐ प्रवास रद्द होतो
- ☐ जीवनाला धोका / कुटुंबाची चिंता

- [ ] कर्ज वाढते
- [ ] खलाशी / कामगार समस्या
- [ ] नौका नुकसान / दुरुस्ती खर्च
- [ ] कुटुंबावर ताण

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

अनुभवावर आधारित पुरावे

आपल्या अनुभवाशी कोणते पुरावे जुळतात? *:

- [ ] पूर्वीपेक्षा मासे कमी मिळतात
- [ ] मासेमारीचे दिवस कमी झाले
- [ ] खर्च खूप वाढला आहे
- [ ] अपघात किंवा जवळपास अपघात
- [ ] संघर्ष वाढले आहेत
- [ ] माशांची गुणवत्ता कमी / बाजारात उशीर
- [ ] कायदेशीर अडचणी / भीती
- [ ] इतर

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

समुद्रात जाण्यापूर्वी आवश्यक माहिती

बंदरातून निघण्यापूर्वी तुम्हाला काय सर्वात जास्त हवे आहे? *:

- [ ] वारा आणि पावसाची वेळ
- [ ] लाटा / समुद्र खवळलेला आहे का
- [ ] माशांच्या ठिकाणाची माहिती (PFZ)
- [ ] चक्रीवादळाची पूर्वसूचना
- [ ] सुरक्षित मार्गदर्शन
- [ ] सीमेबाबत स्पष्ट माहिती
- [ ] नेटवर्क कुठे मिळेल याची माहिती
- [ ] बाजारभाव माहिती
- [ ] बंदर प्रवेश/निर्गमन सुरक्षितता

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

खोल समुद्रात जाण्याच्या अडचणी

आपण खोल समुद्रात जायचे असेल तर काय अडथळा येतो? *:

- ☐ नौका योग्य नाही
- ☐ सुरक्षा साधने अपुरी
- ☐ बचाव सहाय्य भरोसेमंद नाही
- ☐ विमा समस्या
- ☐ खलाशी प्रशिक्षित नाहीत
- ☐ बर्फ / साठवण अपुरी
- ☐ खोल समुद्रातील किंमत निश्चित नाही
- ☐ नियम / दंडाची भीती

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

समुद्रातील बदल

गेल्या 3–5 वर्षांत समुद्रात कोणते बदल दिसले? *:

- ☐ समुद्र गरम वाटतो
- ☐ वारा अचानक जोरदार होतो
- ☐ लाटा अधिक खवळलेल्या
- ☐ माशांचा हंगाम बदलला
- ☐ माशांचा आकार कमी झाला
- ☐ नवीन / वेगळ्या प्रकारचे मासे दिसले
- ☐ खात्री नाही / बदल नाही

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

कोणते महिने अधिक कठीण होत आहेत? *:

- ☐ जानेवारी
- ☐ फेब्रुवारी
- ☐ मार्च
- ☐ एप्रिल
- ☐ मे

- [ ] जून
- [ ] जुलै
- [ ] ऑगस्ट
- [ ] सप्टेंबर
- [ ] ऑक्टोबर
- [ ] नोव्हेंबर
- [ ] डिसेंबर

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

बंदर आणि गावातील धोके

धोके *:
- [ ] चक्रीवादळ / जोरदार वादळ
- [ ] जोरदार पावसात पूर
- [ ] समुद्राचे पाणी घरात येणे
- [ ] किनारपट्टीची धूप
- [ ] बंदरात जास्त भरतीचे पाणी
- [ ] किनाऱ्यावर उष्णतेची लाट
- [ ] काहीही नाही / खात्री नाही
- [ ] सर्व निवडा

Max Choice allowed: 4

कृपया जास्तीत जास्त 4 पर्याय निवडा.

आपत्तीमध्ये सर्वात मोठे नुकसान *:
- ○ नौका किंवा जाळ्याचे नुकसान
- ○ मासेमारीचे दिवस वाया जाणे
- ○ बाजार / लिलाव बंद
- ○ बर्फ / कोल्ड चेन बंद
- ○ घर किंवा गावाचे नुकसान
- ○ इजा किंवा जीवित धोका

कृपया कोणताही एक पर्याय निवडा.

प्रदूषण आणि समुद्रातील व्यत्यय

तुम्हाला प्रदूषण दिसते का? *:

- ○ अनेक वेळा
- ○ कधी कधी
- ○ क्वचित
- ○ नाही
- ○ खात्री नाही

कृपया कोणताही एक पर्याय निवडा.

कोणत्या प्रकारचे प्रदूषण? *:

- ☐ प्लास्टिक कचरा
- ☐ तेल / डिझेल वास
- ☐ सांडपाणी / घाण पाणी
- ☐ कारखाना / रासायनिक स्राव
- ☐ मासे बाजार कचरा
- ☐ शैवाल / हिरवे पाणी
- ☐ मृत मासे घटना
- ☐ खात्री नाही

Max Choice allowed: 3

कृपया जास्तीत जास्त 3 पर्याय निवडा.

समुद्रातील गर्दी / बंदर प्रभाव *:

- ☐ मासेमारी क्षेत्राजवळ जास्त जहाजे
- ☐ ड्रेजिंग / किनारी बांधकाम
- ☐ प्रतिबंधित क्षेत्र वाढले
- ☐ बंदरातील तेजस्वी लाईट मासेमारीवर परिणाम

Max Choice allowed: 2

कृपया जास्तीत जास्त 2 पर्याय निवडा.

माहिती प्राप्त करण्याची पसंती

महत्त्वाच्या सूचना तुम्हाला कशा मिळायला हव्यात? *:

- ○ व्हॉइस कॉल / IVR
- ○ व्हॉट्सॲप व्हॉइस संदेश
- ○ व्हॉट्सॲप मजकूर / फोटो
- ○ ॲप नोटिफिकेशन

- ○ एसएमएस
- ○ बंदर घोषणा

कृपया कोणताही एक पर्याय निवडा.

माचली ॲप स्थिती *:

- ○ नियमित वापरतो
- ○ कधी कधी वापरतो
- ○ डाउनलोड केले पण वापरत नाही
- ○ अजून डाउनलोड केले नाही

कृपया कोणताही एक पर्याय निवडा.

जर वापरत नसाल, तर 7 दिवसात सुरू करू शकता का? *:

- ○ होय
- ○ नाही
- ○ मदत हवी

कृपया कोणताही एक पर्याय निवडा.

सूचना वापरणे कठीण का आहे? *:

- ☐ भाषेची अडचण
- ☐ संदेश खूप लांब
- ☐ उशिरा येतो
- ☐ विश्वास नाही
- ☐ नेटवर्क समस्या
- ☐ नकाशे समजायला कठीण
- ☐ इतर

Max Choice allowed: 2

कृपया जास्तीत जास्त 2 पर्याय निवडा.

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Tamil

பங்கேற்பாளரின் அடிப்படை விவரங்கள்

ஆய்வு மற்றும் நிகழ்வு பதிவுகளுக்காக உங்கள் அடிப்படை தகவல்களை வழங்க நீங்கள் சம்மதிக்கிறீர்களா? *:
○ ஆம் (தொடரவும்) ○ இல்லை (படிவத்தை முடிக்கவும்)

(உங்கள் பெயர் வெளியிடப்படாது.)

பங்கேற்பாளர் வகை

உங்களுக்கு பொருத்தமானது எது? *:
○ கடல்சார் மீனவர் – படகு உரிமையாளர்
○ கடல்சார் மீனவர் – குழு உறுப்பினர்
○ மீன்பிடிப்புக்குப் பிந்தைய பணிகளில் ஈடுபடும் பெண்கள்
○ துறைமுகம் / ஏலம் / ஐஸ் / போக்குவரத்து பணியாளர்
○ மேக்கானிக் / பழுது சரிசெய்தல் / இதர சேவை
○ மாணவர் / ஆய்வாளர்
○ அரசு / நிறுவனம்
○ மற்றவை

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

இருப்பிடம் பற்றிய தகவல்

மாநிலம் *:

மாவட்டம் *:

துறைமுகம் / மீன் இறங்கு தளத்தின் பெயர் *:

மீன்பிடி பகுதி

நீங்கள் பெரும்பாலும் எந்த பகுதியில் மீன்பிடி செய்கிறீர்கள்?:
- ○ கடற்கரைக்கு அருகில் (0–5 கி.மீ)
- ○ நடுத்தர கடல் பகுதி (5–20 கி.மீ.)
- ○ ஆழ்கடல் (20+ கி.மீ / பல நாட்கள்)
- ○ பொருந்தாது / உறுதியாகத் தெரியவில்லை

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

மீன்பிடி அனுபவம்

மீன்பிடி அல்லது மீன் தொடர்பான பணிகளில் நீங்கள் எத்தனை வருடங்களாக ஈடுபட்டு வருகிறீர்கள்? *:
- ○ 5 வருடங்களுக்கும் குறைவு
- ○ 5–10 வருடங்கள்
- ○ 10–20 வருடங்கள்
- ○ 20 வருடங்களுக்கு மேல்

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

கடல்சார் மீனவர்களின் அனுபவங்கள் மற்றும் சவால்கள்

முக்கிய பிரச்சினைகள்

நீங்கள் அதிகமாக எதிர்கொள்ளும் பிரச்சினைகள் எவை? *:
- ☐ வானிலை மற்றும் கடல் பாதுகாப்பு
- ☐ சூறாவளி / திடீர் கடல் மாற்றம்
- ☐ மீன் கிடைப்பதில் நிச்சயமற்ற தன்மை.
- ☐ எரிபொருள் மற்றும் பயணச் செலவு அதிகம்
- ☐ சந்தை விலை / வாங்குபவர் பிரச்சனை
- ☐ ஐஸ்கட்டி / குளிர்பதனச் சேமிப்புப் பிரச்சனை
- ☐ துறைமுகம் / இறங்குதள பிரச்சனை
- ☐ நெட்வொர்க் / தொலைபேசி தொடர்பு செயலிழப்பு
- ☐ எல்லை/கைது பயம் (IMBL)
- ☐ லைட் ஃபிஷிங் மோதல் (LED)
- ☐ விதிகள் / இணக்கம் குறித்த குழப்பம்

- [ ] விபத்துக்கள் / மீட்புப் பணியில் தாமதம்
- [ ] மீன்பிடி உபகரணச் சேதம் / வலை இழப்பு
- [ ] துறைமுகம் / கப்பல் போக்குவரத்து / கட்டுமான இடையூறு
- [ ] துறைமுகம் அல்லது கடலுக்கு அருகில் ஏற்படும் மாசுபாடு
- [ ] மற்றவை

Max Choice allowed: 4

சமீபத்திய மீன்பிடி அனுபவத்தின் அடிப்படையில் அதிகபட்சம் 4 விருப்பங்களைத் தேர்வு செய்யவும்.

எப்போது நிகழ்கிறது

உங்கள் மிகப்பெரிய பிரச்சனை எப்போது அடிக்கடி நிகழ்கிறது? *:

- ○ குறிப்பிட்ட மாதங்கள்
- ○ பருவமழை காலம்
- ○ குளிர்காலம்
- ○ கோடைக்காலம்
- ○ ஆண்டு முழுவதும்

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

எத்தனை முறை

இது உங்களை எத்தனை முறை பாதிக்கிறது? *:

- ○ எப்போதாவது
- ○ சில நேரங்களில்
- ○ அடிக்கடி
- ○ ஏறக்குறைய ஒவ்வொரு பயணத்திலும்

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

வாழ்க்கையில் ஏற்படும் தாக்கம்

இந்த பிரச்சனையால் என்ன நடக்கிறது? *:

- [ ] வருமான இழப்பு
- [ ] மீன்பிடிபயணம் ரத்து
- [ ] பாதுகாப்பு அச்சம்
- [ ] கடன் அதிகரிப்பு

- [ ] பணியாளர் குழுவில் சிக்கல்கள்
- [ ] படகு சேதம் / பழுதுபார்ப்பு இழப்பு
- [ ] குடும்பத்தில் மன அழுத்தம்

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

அனுபவத்திலிருந்து கிடைக்கும் சான்றுகள்

உங்கள் அனுபவத்துடன் பொருந்தக்கூடிய ஆதாரம் எது? *:

- [ ] மீன்பிடிப்பு முன்பு இருந்ததை விடக் குறைந்துள்ளது
- [ ] மீன்பிடிப்பு நாட்கள் குறைந்துவிட்டன
- [ ] செலவுகள் கடுமையாக அதிகரித்துள்ளன
- [ ] பாதுகாப்புச் சம்பவம் அல்லது பெரும் விபத்து தவிர்க்கப்பட்டது
- [ ] மோதல்கள் அதிகரித்தன
- [ ] தர இழப்பு / சந்தைக்கு தாமதம்
- [ ] சட்ட சிக்கல் அல்லது பயம்
- [ ] பிற

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

கடலுக்குச் செல்வதற்கு முன் உள்ள தகவல் இடைவெளி

துறைமுகத்தை விட்டுப் புறப்படுவதற்கு முன், உங்களுக்கு மிகவும் தேவைப்படுவது எது? *:

- [ ] காற்று மற்றும் மழையின் நேரம்
- [ ] அலை / கடல் கொந்தளிப்பு
- [ ] மீன்கள் இருக்கும் இடம் குறித்த ஆலோசனை (PFZ)
- [ ] புயல் முன் எச்சரிக்கை
- [ ] பாதுகாப்பான வழி வழிகாட்டுதல்
- [ ] எல்லைத் தெளிவு
- [ ] தொலைபேசி நெட்வொர்க் கிடைக்கும் நிலை
- [ ] சந்தை விலை நிலவரங்கள்
- [ ] துறைமுக நுழைவு/வெளியேறும் பாதுகாப்பு

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

ஆழ்கடலுக்குச் செல்வதில் உள்ள தடைகள்

நீங்கள் ஆழ்கடல் செல்ல விரும்பினால், உங்களைத் தடைகள் எது? *:

- ☐ படகு பொருத்தமற்றது
- ☐ பாதுகாப்பு உபகரணங்கள் போதுமானதாக இல்லை
- ☐ மீட்பு ஆதரவு நம்பகமானதல்ல
- ☐ காப்பீட்டுச் சிக்கல்கள்
- ☐ பணியாளர்களுக்குப் பயிற்சி இல்லை
- ☐ ஐஸ் / சேமிப்பு வசதி போதாது
- ☐ ஆழ்கடல் மீன்பிடி விலை உறுதியில்லை
- ☐ நிர்வாகம் / அபராதம் குறித்த பயம்

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

கவனிக்கப்பட்ட கடல் மாற்றங்கள்

கடலில் நீங்கள் கவனிக்கும் மாற்றங்கள் (கடந்த 3–5 ஆண்டுகளில்) *:

- ☐ கடல் நீர் முன்பை விட சூடாக உள்ளது
- ☐ காற்று திடீரென்று பலமாக வீசுகிறது
- ☐ அலைகள் முன்பை விட கடுமையாக உள்ளன
- ☐ மீன்பிடிப் பருவ நேரம் மாறியுள்ளது
- ☐ மீன்களின் அளவு குறைந்துள்ளது
- ☐ புதிய அல்லது வழக்கத்திற்கு மாறான மீன்கள் காணப்படுகின்றன
- ☐ உறுதியாகத் தெரியவில்லை / மாற்றம் இல்லை

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

எந்த மாதங்கள் கடினமாக இருக்கின்றன? *:

- ☐ ஜனவரி
- ☐ பிப்ரவரி
- ☐ மார்ச்
- ☐ ஏப்ரல்
- ☐ மே

- [ ] ஜூன்
- [ ] ஜூலை
- [ ] ஆகஸ்ட்
- [ ] செப்டம்பர்
- [ ] அக்டோபர்
- [ ] நவம்பர்
- [ ] டிசம்பர்

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

துறைமுகம் மற்றும் கிராமப்புற அபாயங்கள்

அபாயங்கள் *:
- [ ] புயல் / பலத்த சூறாவளி
- [ ] கனமழையின் போது வெள்ளப்பெருக்கு
- [ ] கடல் நீர் வீடுகளுக்குள் புகுதல்
- [ ] கடற்கரை அரிப்பு
- [ ] உயர் அலை துறைமுகத்திற்குள் நுழைதல்
- [ ] கடற்கரையில் வெப்ப அலை
- [ ] எதுவுமில்லை / உறுதியாகத் தெரியவில்லை
- [ ] அனைத்தையும் தேர்ந்தெடுக்கவும்

Max Choice allowed: 4

அதிகபட்சம் 4 விருப்பங்களைத் தேர்வு செய்யவும்

பேரிடரின் போது ஏற்பட்ட மிகப்பெரிய இழப்பு *:
- ○ படகு அல்லது மீன்பிடி உபகரணங்களுக்கு சேதம்
- ○ மீன்பிடி நாட்களை இழந்தது
- ○ சந்தை / ஏலம் நிறுத்தம்
- ○ ஐஸ் / குளிரூட்டும் சங்கிலி துண்டிப்பு
- ○ வீடு அல்லது கிராமத்திற்கு சேதம்
- ○ காயம் அல்லது உயிருக்கு ஆபத்து

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

மாசுபாடு மற்றும் கடல் சீர்குலைவு

நீங்கள் மாசுபாட்டைக் காண்கிறீர்களா? *:

- ○ அடிக்கடி
- ○ சில நேரங்களில்
- ○ எப்போதாவது
- ○ இல்லை
- ○ உறுதியாகத் தெரியவில்லை

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

என்ன வகை? *:

- ☐ பிளாஸ்டிக் கழிவுகள்
- ☐ எண்ணெய் / டீசல் வாசனை
- ☐ கழிவுநீர் / அசுத்தமான வெளியேற்றம்
- ☐ தொழிற்சாலை / இரசாயனக் கழிவுகள்
- ☐ மீன் சந்தைக் கழிவுகள்
- ☐ பாசி / பச்சை நிறத் தண்ணீர்
- ☐ மீன்கள் செத்து மிதக்கும் சம்பவங்கள்
- ☐ உறுதியாகத் தெரியவில்லை

Max Choice allowed: 3

அதிகபட்சம் 3 விருப்பங்களைத் தேர்வு செய்யவும்

கடல் பகுதியில் நெரிசல் / துறைமுகத்தின் தாக்கம் *:

- ☐ மீன்பிடிப் பகுதிக்கு அருகில் அதிக கப்பல்கள் இருப்பது
- ☐ தூர்வாருதல் அல்லது கடலோரக் கட்டுமானப் பணிகள்
- ☐ தடைசெய்யப்பட்ட பகுதிகள் அதிகரிக்கப்பட்டுள்ளன
- ☐ துறைமுகத்தின் பிரகாசமான விளக்குகள் மீன்பிடிப்பைப் பாதிக்கின்றன

Max Choice allowed: 2

அதிகபட்சம் 2 விருப்பங்களைத் தேர்வு செய்யவும்

தகவல் விருப்பத்தேர்வு மற்றும் சமர்ப்பிப்பு

முக்கியமான செய்திகளை நீங்கள் எந்த முறையில் பெற விரும்புகிறீர்கள்? *:

- ○ குரல் அழைப்பு / ஐவிஆர் (IVR)
- ○ வாட்ஸ்அப் குரல் செய்தி
- ○ வாட்ஸ்அப் உரை/படம்
- ○ செயலி அறிவிப்பு

○ எஸ்எம்எஸ் (SMS)

○ துறைமுக அறிவிப்பு

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

மச்லி செயலியின் நிலை *:

○ தவறாமல் பயன்படுத்துகிறேன்

○ எப்போதாவது பயன்படுத்துகிறேன்

○ பதிவிறக்கம் செய்துள்ளேன், ஆனால் பயன்படுத்தவில்லை

○ இன்னும் பதிவிறக்கம் செய்யப்படவில்லை

ஏதேனும் ஒரு விருப்பத்தைத் தேர்ந்தெடுக்கவும்.

நீங்கள் இதைப் பயன்படுத்தவில்லை என்றால், 7 நாட்களுக்குள் தொடங்க முடியுமா? *:

○ ஆம்

○ இல்லை

○ ஆதரவு தேவை

ஆலோசனை அறிவிப்புகளைப் பயன்படுத்துவதை கடினமாக்குவது எது? *:

☐ மொழிப் பிரச்சனை

☐ செய்தி மிகவும் நீளமாக உள்ளது

☐ தாமதமாக வருகிறது

☐ நம்பகத்தன்மை இல்லை

☐ நெட்வொர்க் பிரச்சனை

☐ வரைபடங்கள் புரிந்துகொள்ள கடினமாக உள்ளன

☐ மற்றவை

Max Choice allowed: 2

அதிகபட்சம் 2 விருப்பங்களைத் தேர்வு செய்யவும்

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WOSC 2026 - Fisherfolk FGD - Gujarati

માછીમારી સંબંધિત વસ્તી વિષયક માહિતી

શું તમે સંશોધન માટે મૂળભૂત વિગતો શેર કરવા માટે સંમત છો? *:
○ હા ○ ના

તમારું નામ અને મોબાઇલ નંબર પ્રકાશિત કરવામાં આવશે નહીં.

ભાગ લેનાર વિષે ની માહિતી

તમારા માટે કયું શ્રેષ્ઠ છે? *:
○ દરિયાઇ માછીમાર - ફ્રૂ સભ્ય ○ લણણી પછીના કામમાં મહિલાઓ
○ બંદર / હરાજી / બરફ / પરિવહન કાર્યકર ○ મિકેનિક / સમારકામ / સહાયક સેવા
○ વિદ્યાર્થી / સંશોધક ○ સરકાર / સંસ્થા ○ અન્ય

સ્થાન

જીલ્લા નુ નામ *:

કૃપા કરી ને તમારો જીલ્લા નું નામ દાખલ કરો

માછીમારી સ્થાનનું નામ *:

કૃપા કરી ને તમારો માછીમારી સ્થાનનું નામ દાખલ કરો

માછીમારી ઝોન

તમે મોટાભાગે કયા ઝોનમાં માછીમારી કરો છો? *:
○ નજીકનો કિનારો (0-5 કિમી) ○ મધ્ય સમુદ્ર (5-20 કિમી) ○ ઓફશોર (20+ કિમી / બહુ-દિવસ)
○ લાગુ પડતું નથી / ખાતરી નથી

માછીમારીનો અનુભવ

તમે માછીમારી અથવા માછલી સંબંધિત કાર્યમાં કેટલા વર્ષોથી સંકળાયેલા છો? *:
○ ૫ વર્ષથી ઓછા ○ ૫-૧૦ વર્ષ ○ ૧૦-૨૦ વર્ષ ○ ૨૦ વર્ષથી વધુ

દરિયાઇ માછીમાર લોક - અનુભવ અને મુદ્દો

મુખ્ય સમસ્યાઓ

દરિયામાં માછીમારી કરતી વખતે તમને કયા મુખ્ય પડકારોનો સામનો કરવો પડે છે? *:
☐ હવામાન અને દરિયાઇ સલામતી
☐ ચક્રવાત / અચાનક દરિયામાં ફેરફાર
☐ માછલીની ઉપલબ્ધતા અનિશ્ચિતતા
☐ બળતણ અને સફરનો ખર્ચ ઊંચો
☐ બજાર ભાવ / ખરીદનારની સમસ્યા
☐ બરફ / કોલ્ડ સ્ટોરેજ સમસ્યા
☐ બંદર / લેન્ડિંગ સેન્ટર સમસ્યા
☐ નેટવર્ક / સંદેશાવ્યવહાર નિષ્ફળતા
☐ સીમા / ધરપકડનો ભય (IMBL)
☐ હળવી માછીમારી સંઘર્ષ (LED)
☐ નિયમો / પાલન મૂંઝવણ
☐ અકસ્માતો / બચાવ વિલંબ
☐ ગિયર નુકસાન / ચોખ્ખી ખોટ
☐ બંદર / શિપિંગ / બાંધકામમાં ખલેલ
☐ બંદર અથવા સમુદ્ર નજીક પ્રદૂષણ
☐ અન્ય
☐ Other
Max Choice allowed: 4

તાજેતરના માછીમારીના અનુભવના આધારે કૃપા કરીને વધુમાં વધુ 4 વિકલ્પો પસંદ કરો.

જ્યારે તે બને છે

તમારી સૌથી મોટી સમસ્યા ક્યારે સૌથી વધુ થાય છે? *:
○ ચોમાસાની ઋતુ ○ શિયાળો ઋતુ ○ ઉનાળો ઋતુ ○ આખું વર્ષ ○ ચોક્કસ મહિનાઓ

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

કેટલી વાર

તે તમને કેટલી વાર અસર કરે છે? *:
○ ભાગ્યે જ ○ ક્યારેક ○ ઘણી વાર ○ લગભગ દરેક સફર

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

જીવન પર અસર

તમને સૌથી વધુ કઈ સમસ્યાઓનો સામનો કરવો પડે છે? *:
☐ આવકમાં ઘટાડો
☐ યાત્રા રદ
☐ સલામતીનો ભય
☐ દેવામાં વધારો
☐ કૃ સમસ્યાઓ
☐ બોટને નુકસાન / સમારકામનું નુકસાન
☐ કૌટુંબિક તણાવ

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

અનુભવ પરથી પુરાવા

તમારા અનુભવ સાથે કયો પુરાવો મેળ ખાય છે? *:
☐ પહેલાની સરખામણીમાં પકડવામાં ઘટાડો
☐ માછીમારીના દિવસો ઘટ્યા
☐ ખર્ચમાં તીવ્ર વધારો
☐ સુરક્ષાની ઘટના અથવા લગભગ ચૂકી જવાની ઘટના
☐ ઘર્ષણોમાં વધારો
☐ ગુણવત્તામાં ઘટાડો / બજારમાં વિલંબ
☐ કાનૂની મુશ્કેલી અથવા ભય
☐ અન્ય
☐ Other

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

સમુદ્રમાં જતા પહેલા માહિતીનો અભાવ

બંદર છોડતા પહેલા, તમારે સૌથી વધુ શું જોઈએ છે? *:

- ☐ પવન અને વરસાદનો સમય
- ☐ મોજા / દરિયાઈ ખડકાળપણું
- ☐ માછલી સ્થાન સલાહ (PFZ)
- ☐ ચક્રવાતની વહેલી ચેતવણી
- ☐ સલામત માર્ગ માર્ગદર્શન
- ☐ સીમા સ્પષ્ટતા
- ☐ નેટવર્ક અપેક્ષા
- ☐ બજાર ભાવ સંકેતો
- ☐ બંદર પ્રવેશ/બહાર નીકળવાની સલામતી

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

અપતટીય અવરોધો

જો તમે દરિયા કિનારા પર જવા માંગતા હો, તો તમને શું રોકી શકે છે? *:

- ☐ બોટ યોગ્ય નથી
- ☐ સલામતી કીટ પૂરતી નથી
- ☐ બચાવ સહાય વિશ્વસનીય નથી
- ☐ વીમા સમસ્યાઓ
- ☐ ફ્રૂ તાલીમ પામેલા નથી
- ☐ બરફ / સંગ્રહ પૂરતો નથી
- ☐ દરિયા કિનારા પર કિંમત સુનિશ્ચિત નથી
- ☐ શાસન / દંડનો ડર

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

સમુદ્ર પરિવર્તન નોંધાયા

દરિયામાં તમે જોયેલા ફેરફારો (છેલ્લા 3-5 વર્ષ) *:

- ☐ સમુદ્ર ગરમ લાગે છે

- [ ] પવન અચાનક જોરદાર બને છે
- [ ] મોજા પહેલા કરતા વધુ ઉગ્ર બને છે
- [ ] માછલીની મોસમનો સમય બદલાયો છે
- [ ] માછલીનું કદ ઘટાડ્યું છે
- [ ] નવી કે અસામાન્ય માછલીઓ જોવા મળી છે
- [ ] ખાતરી નથી / કોઈ ફેરફાર નથી

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

કયા મહિનાઓ મુશ્કેલ બની રહ્યા છે? *:

- [ ] જાન્યુઆરી
- [ ] ફેબ્રુઆરી
- [ ] માર્ચ
- [ ] એપ્રિલ
- [ ] મે
- [ ] જૂન
- [ ] જુલાઈ
- [ ] ઓગસ્ટ
- [ ] સપ્ટેમ્બર
- [ ] ઓક્ટોબર
- [ ] નવેમ્બર
- [ ] ડિસેમ્બર

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 3 વિકલ્પ પસંદ કરો.

બંદર અને ગામડાના જોખમો

તમારા બંદર અથવા ગામને અસર કરતા જોખમો

જોખમો ? *:

- [ ] ચક્રવાત / મજબૂત તોફાન
- [ ] ભારે વરસાદ દરમિયાન પૂર
- [ ] દરિયાનું પાણી ઘરોમાં ઘૂસી જવું
- [ ] દરિયાકાંઠાનું ધોવાણ

☐ બંદરમાં પ્રવેશતી ઊંચી ભરતી

☐ દરિયાકાંઠે ગરમીનું મોજું

☐ કોઈ નહીં / ખાતરી નથી

☐ બધા પસંદ કરો

Max Choice allowed: 4

કૃપા કરીને વધુમાં વધુ 4 વિકલ્પ પસંદ કરો.

જોખમ દરમિયાન સૌથી મોટું નુકસાન *:

○ બોટ અથવા ગિયરને નુકસાન ○ માછીમારીના દિવસો ગુમાવવા ○ બજાર / હરાજી બંધ

○ બરફ / કોલ્ડ ચેઇન તૂટવા ○ ઘર અથવા ગામને નુકસાન ○ ઈજા અથવા જીવનું જોખમ

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

પ્રદૂષણ અને દરિયાઈ વિક્ષેપ

તમારા દરિયાઈ વિસ્તારમાં પ્રદૂષણ અને વિક્ષેપ

શું તમને પ્રદૂષણ દેખાય છે? *:

○ ઘણી વાર ○ ક્યારેક ○ ભાગ્યે જ ○ ના ○ ખાતરી નથી

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

કયા પ્રકારનો? *:

☐ પ્લાસ્ટિક કચરો

☐ તેલ / ડીઝલની ગંધ

☐ ગટર / ગંદુ પાણી

☐ ફેક્ટરી / રાસાયણિક પાણીનો નિકાલ

☐ માછલી બજારનો કચરો

☐ શેવાળ / લીલું પાણી

☐ મૃત માછલીના બનાવો

☐ ખાતરી નથી

Max Choice allowed: 3

કૃપા કરીને વધુમાં વધુ 4 વિકલ્પ પસંદ કરો.

દરિયાઈ વિસ્તારમાં ભીડ / બંદર પર અસર *:

☐ માછીમારી વિસ્તારની નજીક વધુ જહાજો

☐ ડ્રેજિંગ અથવા દરિયાકાંઠાનું બાંધકામ

☐ પ્રતિબંધિત ઝોનમાં વધારો

☐ તેજસ્વી બંદર લાઇટ્સ માછીમારીને અસર કરે છે

Max Choice allowed: 2

કૃપા કરીને વધુમાં વધુ 2 વિકલ્પ પસંદ કરો.

માહિતી પસંદગી અને સબમિટ કરો

તમે મહત્વપૂર્ણ સંદેશાઓ કેવી રીતે પ્રાપ્ત કરવાનું પસંદ કરો છો? *:

○ વોઇસ કોલ / IVR ○ વોટ્સએપ વોઇસ મેસેજ ○ વોટ્સએપ ટેક્સ્ટ/ઇમેજ ○ એપ નોટિફિકેશન

○ SMS ○ હાર્બર જાહેરાત

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

માછલી એપ સ્ટેટસ *:

○ નિયમિત ઉપયોગ કરો ○ ક્યારેક ઉપયોગ કરો ○ ડાઉનલોડ કર્યું છે પણ ઉપયોગ નથી કરતો

○ હજુ સુધી ડાઉનલોડ કર્યું નથી

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

જો તમે ઉપયોગ ન કરી રહ્યા હો, તો શું તમે 7 દિવસની અંદર શરૂ કરી શકો છો? *:

○ હા ○ ના ○ સપોર્ટની જરૂર છે

કૃપા કરીને કોઈપણ એક વિકલ્પ પસંદ કરો.

સલાહનો ઉપયોગ કરવો મુશ્કેલ કેમ બને છે? *:

☐ ભાષા સમસ્યા

☐ સંદેશ ખૂબ લાંબો

☐ મોડો આવે છે

☐ વિશ્વસનીય નથી

☐ નેટવર્ક સમસ્યા

☐ નકશા સમજવા મુશ્કેલ

☐ અન્ય

☐ Other

Max Choice allowed: 2

કૃપા કરીને વધુમાં વધુ 2 વિકલ્પ પસંદ કરો.

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Odia

ମୌଳିକ ଅଂଶଗ୍ରହଣକାରୀଙ୍କ ପ୍ରୋଫାଇଲ୍

ଗବେଷଣା ଏବଂ କାର୍ଯ୍ୟକ୍ରମ ଡକ୍ୟୁମେଣ୍ଟେସନ ପାଇଁ ଆପଣଙ୍କ ପ୍ରାଥମିକ ବିବରଣୀ ସେୟାର କରିବାକୁ ଆପଣ ସହମତ କି? *:

○ ହଁ ○ ନା

ତୁମର ନାମ ପ୍ରକାଶିତ ହେବ ନାହିଁ।

ଅଂଶଗ୍ରହଣକାରୀ ବର୍ଗ

ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ ଆପଣଙ୍କୁ ସର୍ବୋତ୍ତମ ଭାବେ ବର୍ଣ୍ଣନା କରେ *:

○ ସାମୁଦ୍ରିକ ମତ୍ସ୍ୟଜୀବୀ - ଡଙ୍ଗା ମାଲିକ

○ ସାମୁଦ୍ରିକ ମତ୍ସ୍ୟଜୀବୀ - କ୍ରୁ ସଦସ୍ୟ

○ ଅମଳ ପରବର୍ତ୍ତୀ କାମରେ ମହିଳାମାନେ

○ ବନ୍ଦର / ନିଲାମ / ବରଫ / ପରିବହନ କର୍ମଚାରୀ

○ ମେକାନିକ୍ / ମରାମତି / ସହାୟତା ସେବା

○ ଛାତ୍ର / ଗବେଷକ

○ ସରକାର / ଅନୁଷ୍ଠାନ

○ ଅନ୍ୟାନ୍ୟ

○ Other

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସ୍ଥାନ

ରାଜ୍ୟ *:

ଜିଲ୍ଲା *:

ବନ୍ଦର / ଲ୍ୟାଣ୍ଡିଂ ସେଣ୍ଟର ନାମ *:

ମାଛ ଧରିବା ଅଞ୍ଚଳ

ଆପଣ ଅଧିକାଂଶ ସମୟ କେଉଁ ଜୋନରେ କାମ କରନ୍ତି? *:

- ○ ନିକଟବର୍ତ୍ତୀ କୂଳ (୦-୫ କିମି)
- ○ ମଧ୍ୟ ସମୁଦ୍ର (୫-୨୦ କିମି)
- ○ ସମୁଦ୍ର ମଧ୍ୟସ୍ଥ (20+ କିମି / ବହୁ-ଦିନ)
- ○ ପ୍ରଯୁଜ୍ୟ ନୁହେଁ / ନିଶ୍ଚିତ ନୁହେଁ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ମାଛ ଧରିବା ଅଭିଜ୍ଞତା

ଆପଣ କେତେ ବର୍ଷ ଧରି ମାଛଧରା କିମ୍ବା ମାଛ ସମ୍ପର୍କିତ କାମରେ ଜଡିତ ଅଛନ୍ତି? *:

- ○ 5 ବର୍ଷରୁ କମ୍
- ○ ୫-୧୦ ବର୍ଷ
- ○ ୧୦-୨୦ ବର୍ଷ
- ○ 20 ବର୍ଷରୁ ଅଧିକ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସାମୁଦ୍ରିକ ମତ୍ସ୍ୟଜୀବୀ ଫୋକ୍ - ଅଭିଜ୍ଞତା ଏବଂ ସମସ୍ୟା ଆବୃତ

ମୁଖ୍ୟ ସମସ୍ୟା

ଆପଣ ସବୁଠାରୁ ଅଧିକ କେଉଁ ସମସ୍ୟା ମୁହାଁ ଦେଉଛନ୍ତି? *:

- ☐ ପାଣିପାଗ ଏବଂ ସମୁଦ୍ର ସୁରକ୍ଷା
- ☐ ଘୂର୍ଣ୍ଣିବାତ୍ୟା / ହଠାତ୍ ସମୁଦ୍ର ପରିବର୍ତ୍ତନର
- ☐ ମାଛ ଉପଲବ୍ଧତା ଅନିଶ୍ଚିତତା
- ☐ ଇନ୍ଧନ ଏବଂ ଯାତ୍ରା ମୂଲ୍ୟ ଅଧିକ
- ☐ ବଜାର ମୂଲ୍ୟ / କ୍ରେତା ସମସ୍ୟା
- ☐ ବରଫ / ଶୀତଳ ସଂରକ୍ଷଣ ସମସ୍ୟା
- ☐ ବନ୍ଦର / ଅବତରଣ କେନ୍ଦ୍ର ସମସ୍ୟା
- ☐ ନେଟୱାର୍କ / ଯୋଗାଯୋଗ ବିଫଳତା
- ☐ ସୀମା / ଗିରଫ ଭୟ (IMBL)
- ☐ ହାଲୁକା ମାଛ ଧରିବା ବିବାଦ (LED)
- ☐ ନିୟମ / ଅନୁପାଳନ ଦ୍ୱନ୍ଦ୍ୱ

- [ ] ଦୁର୍ଘଟଣା / ଉଦ୍ଧାର ବିଳମ୍ବ
- [ ] ଗିଅର୍ କ୍ଷତି / ନେଟ୍ କ୍ଷତି
- [ ] ବନ୍ଦର / ପରିବହନ / ନିର୍ମାଣ ବାଧା ସୃଷ୍ଟି କରୁଥିବା
- [ ] ବନ୍ଦର କିମ୍ବା ସମୁଦ୍ର ନିକଟରେ ପ୍ରଦୂଷଣ
- [ ] ଅନ୍ୟାନ୍ୟ
- [ ] Other

Max Choice allowed: 4

ଆପଣଙ୍କର ସାମ୍ପ୍ରତିକ ମାଛ ଧରିବା ଅଭିଜ୍ଞତା ଉପରେ ଆଧାର କରି ଦୟାକରି ସର୍ବାଧିକ 4ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ଯେତେବେଳେ ଏହା ହୁଏ

ଆପଣଙ୍କ ସବୁଠାରୁ ବଡ ସମସ୍ୟା ସାଧାରଣତଃ କେବେ ହୁଏ? *:

- ○ ନିର୍ଦ୍ଦିଷ୍ଟ ମାସ
- ○ ମୌସୁମୀ ଋତୁ
- ○ ଶୀତ ଋତୁ
- ○ ଗ୍ରୀଷ୍ମ ଋତୁ
- ○ ବର୍ଷସାରା

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

କେତେଥର

ସେହି ସମସ୍ୟା ଆପଣଙ୍କୁ କେତେଥର ପ୍ରଭାବିତ କରେ? *:

- ○ କ୍ୱଚିତ୍
- ○ କେତେବେଳେ
- ○ ପ୍ରାୟତଃ
- ○ ପ୍ରାୟ ପ୍ରତ୍ୟେକ ଯାତ୍ରା

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ଜୀବନ ଉପରେ ପ୍ରଭାବ

ଏହି ସମସ୍ୟା ହେତୁ କଣ ଘଟେ? *:

- [ ] ଆୟ ହ୍ରାସ
- [ ] ଯାତ୍ରା ବାତିଲ ହୋଇଛି |
- [ ] ସୁରକ୍ଷା ଭୟ

- [ ] ଋଣ ବୃଦ୍ଧି ପାଉଛି |
- [ ] ଲେବର ସମସ୍ୟା
- [ ] ଡଙ୍ଗା କ୍ଷତି / ମରାମତି କ୍ଷତି
- [ ] ପାରିବାରିକ ଚାପ

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ଅଭିଜ୍ଞତାରୁ ପ୍ରମାଣ

ଆପଣଙ୍କ ଅନୁଭବ ସହ ମେଳ ଖାଉଥିବା ପ୍ରମାଣ କଣ? *:
- [ ] ପୂର୍ବ ତୁଳନାରେ ମାଛ ଧରା କମିଛି
- [ ] ମାଛ ଧରିବା ଦିନ ହ୍ରାସ ପାଇଛି
- [ ] ଖର୍ଚ୍ଚ ହଠାତ୍ ବୃଦ୍ଧି ପାଇଛି
- [ ] ସୁରକ୍ଷା ଘଟଣା କିମ୍ବା ପ୍ରାୟ ଭୁଲ
- [ ] ବିବାଦ ବୃଦ୍ଧି ପାଇଛି
- [ ] ଗୁଣବତ୍ତା ହ୍ରାସ / ବଜାରରେ ବିଳମ୍ବ
- [ ] ଆଇନଗତ ସମସ୍ୟା କିମ୍ବା ଭୟ
- [ ] ଅନ୍ୟାନ୍ୟ
- [ ] Other

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସମୁଦ୍ରକୁ ଯିବା ପୂର୍ବରୁ ସୂଚନା ବ୍ୟବଧାନ

ବନ୍ଦର ଛାଡିବା ପୂର୍ବରୁ ଆପଣଙ୍କୁ ସବୁଠାରୁ ଅଧିକ କଣ ଦରକାର? *:
- [ ] ପବନ ଏବଂ ବର୍ଷା ସମୟ
- [ ] ଢେଉ / ସମୁଦ୍ର ଅଶାନ୍ତି
- [ ] ମାଛ ସ୍ଥାନ ପରାମର୍ଶ (PFZ)
- [ ] ଘୂର୍ଣ୍ଣିବାତ୍ୟା ପ୍ରାରମ୍ଭିକ ସତର୍କତା
- [ ] ନିରାପଦ ମାର୍ଗ ମାର୍ଗଦର୍ଶନ
- [ ] ସୀମା ସ୍ପଷ୍ଟତା
- [ ] ନେଟୱାର୍କ ଆଶା
- [ ] ବଜାର ମୂଲ୍ୟ ସଙ୍କେତ
- [ ] ବନ୍ଦର ପ୍ରବେଶ/ପ୍ରସ୍ଥାନ ସୁରକ୍ଷା

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସମୁଦ୍ର ମଧ୍ୟସ୍ଥ ବାଧା

ଆପଣ ଅଫସୋରକୁ ଯିବାକୁ ଚାହାଁଲେ, କଣ ଆପଣଙ୍କୁ ରୋକେ? *:

- ☐ ଡଙ୍ଗା ଉପଯୁକ୍ତ ନୁହେଁ
- ☐ ସୁରକ୍ଷା କିଟ୍ ପର୍ଯ୍ୟାପ୍ତ ନୁହେଁ
- ☐ ଉଦ୍ଧାର ସହାୟତା ନିର୍ଭରଯୋଗ୍ୟ ନୁହେଁ |
- ☐ ବୀମା ସମସ୍ୟା
- ☐ କର୍ମଚାରୀମାନେ ତାଲିମପ୍ରାପ୍ତ ନୁହଁନ୍ତି
- ☐ ବରଫ / ସଂରକ୍ଷଣ ଯଥେଷ୍ଟ ନୁହେଁ
- ☐ ସମୁଦ୍ର ମଧ୍ୟସ୍ଥ ମୂଲ୍ୟ ନିଶ୍ଚିତ ନୁହେଁ
- ☐ ଶାସନ / ଦଣ୍ଡ ଭୟ

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସମୁଦ୍ର ପରିବର୍ତ୍ତନ ନୋଟିସ୍ କରାଯାଇଛି

ଗତ 3–5 ବର୍ଷରେ ସମୁଦ୍ରରେ ଆପଣ ଦେଖିଥିବା ପରିବର୍ତ୍ତନ *:

- ☐ ସମୁଦ୍ର ଗରମ ଅନୁଭବ କରୁଛି
- ☐ ପବନ ହଠାତ୍ ପ୍ରବଳ ହୋଇଯାଏ
- ☐ ପୂର୍ବ ଅପେକ୍ଷା ଅଧିକ କଠିନ ତରଙ୍ଗ
- ☐ ମାଛ ଋତୁର ସମୟ ପରିବର୍ତ୍ତନ ହୋଇଛି
- ☐ ମାଛର ଆକାର ହ୍ରାସ ପାଇଛି |
- ☐ ନୂଆ କିମ୍ବା ଅସାଧାରଣ ମାଛ ଦେଖାଯାଇଛି
- ☐ ନିଶ୍ଚିତ ନୁହେଁ / କୌଣସି ପରିବର୍ତ୍ତନ ନାହିଁ

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

କେଉଁ ମାସଗୁଡ଼ିକ କଷ୍ଟକର ହେଉଛି? *:

- ☐ ଜାନୁଆରୀ
- ☐ ଫେବୃଆରୀ
- ☐ ମାର୍ଚ୍ଚ
- ☐ ଏପ୍ରିଲ
- ☐ ମେ

- [ ] ଜୁନ
- [ ] ଜୁଲାଇ
- [ ] ଅଗଷ୍ଟ
- [ ] ସେପ୍ଟେମ୍ବର
- [ ] ଅକ୍ଟୋବର
- [ ] ନଭେମ୍ବର
- [ ] ଡିସେମ୍ବର

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ହାର୍ବର ଏବଂ ଗ୍ରାମ ବିପଦ

ବିପଦଗୁଡ଼ିକ *:
- [ ] ଘୂର୍ଣ୍ଣିବାତ୍ୟା / ଶକ୍ତିଶାଳୀ ଝଡ଼
- [ ] ପ୍ରବଳ ବର୍ଷା ସମୟରେ ବନ୍ୟା ଆସିବା ଯୋଗୁଁ
- [ ] ଘରେ ସମୁଦ୍ର ପାଣି ପ୍ରବେଶ କରିବା ଦ୍ୱାରା
- [ ] ସମୁଦ୍ର ଖାଇଯାଇଥିବା
- [ ] ବନ୍ଦର ଭିତରକୁ ପ୍ରବେଶ କରୁଥିବା ଉଚ୍ଚ ଜୁଆର
- [ ] ଉପକୂଳରେ ଗରମ ଲହରୀ
- [ ] କିଛି ନୁହେଁ / ନିଶ୍ଚିତ ନୁହେଁ
- [ ] ସମସ୍ତ ଚୟନ କରନ୍ତୁ

Max Choice allowed: 4

ଦୟାକରି ସର୍ବାଧିକ 4ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ବିପଦ ସମୟରେ ସବୁଠାରୁ ବଡ କ୍ଷତି *:
- ○ ଡଙ୍ଗା କିମ୍ବା ଗିଅର କ୍ଷତି
- ○ ମାଛ ଧରିବା ଦିନଗୁଡିକ ହଜିଗଲା
- ○ ବଜାର / ନିଲାମ ବନ୍ଦ
- ○ ବରଫ / ଥଣ୍ଡା ଶୃଙ୍ଖଳା ଭାଙ୍ଗିବା
- ○ ଘର କିମ୍ବା ଗାଁ କ୍ଷତି
- ○ ଆଘାତ କିମ୍ବା ଜୀବନ ବିପଦ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ପ୍ରଦୂଷଣ ଏବଂ ସମୁଦ୍ର ଅଶାନ୍ତି

ଆପଣ ପ୍ରଦୂଷଣ ଦେଖୁଛନ୍ତି କି? *:

- ○ ପ୍ରାୟତଃ
- ○ କେତେବେଳେ
- ○ କ୍ୱଚିତ୍
- ○ ନା
- ○ ନିଶ୍ଚିତ ନୁହେଁ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

କେଉଁ ପ୍ରକାର? *:

- ☐ ପ୍ଲାଷ୍ଟିକ୍ ଅବଞ୍ଚିତ ବସ୍ତୁ
- ☐ ତେଲ / ଡିଜେଲ ଗନ୍ଧ
- ☐ ନର୍ଦ୍ଦମା / ମଇଳା ନିର୍ଗତ
- ☐ କାରଖାନା / ରାସାୟନିକ ଡିସଚାର୍ଜ
- ☐ ମାଛ ବଜାରର ଅଳିଆ
- ☐ ଶୈବାଳ / ସବୁଜ ପାଣି ଘନ
- ☐ ମୃତ ମାଛ ଘଟଣା
- ☐ ନିଶ୍ଚିତ ନୁହେଁ

Max Choice allowed: 3

ଦୟାକରି ସର୍ବାଧିକ 3ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସମୁଦ୍ର ଅଞ୍ଚଳ ଭିଡ଼ / ବନ୍ଦର ପ୍ରଭାବ *:

- ☐ ମାଛ ଧରିବା କ୍ଷେତ୍ର ନିକଟରେ ଅଧିକ ଜାହାଜ
- ☐ ଡ୍ରେଜିଂ କିମ୍ବା ଉପକୂଳ ନିର୍ମାଣ
- ☐ ପ୍ରତିବନ୍ଧିତ ଅଞ୍ଚଳ ବୃଦ୍ଧି ପାଇଛି
- ☐ ଉଜ୍ଜ୍ୱଳ ପୋର୍ଟ ଲାଇଟ୍ ମାଛ ଧରିବାକୁ ପ୍ରଭାବିତ କରେ

Max Choice allowed: 2

ଦୟାକରି ସର୍ବାଧିକ 2ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସୂଚନା ପସନ୍ଦ ଏବଂ ଦାଖଲ

ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ସନ୍ଦେଶ ଆପଣ କିପରି ପାଇବାକୁ ଚାହାଁନ୍ତି? *:

- ○ WhatsApp ଟେକ୍ସଟ୍/ଛବି
- ○ WhatsApp ଭଏସ୍ ମେସେଜ୍
- ○ ଭଏସ୍ କଲ୍ / IVR
- ○ ଆପ୍ ବିଜ୍ଞପ୍ତି

- ○ SMS
- ○ ବନ୍ଦର ଘୋଷଣା

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ମଛଲି ଆପ୍ ସ୍ଥିତି *:

- ○ ନିୟମିତ ବ୍ୟବହାର କରନ୍ତି
- ○ ବେଳେବେଳେ ବ୍ୟବହାର କରନ୍ତି
- ○ ଡାଉନଲୋଡ୍ ହୋଇଛି କିନ୍ତୁ ବ୍ୟବହାର କରୁନାହିଁ
- ○ ଏପର୍ଯ୍ୟନ୍ତ ଡାଉନଲୋଡ୍ ହୋଇନାହିଁ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ଯଦି ବ୍ୟବହାର କରୁନାହାଁନ୍ତି, 7 ଦିନ ମଧ୍ୟରେ ଆରମ୍ଭ କରିପାରିବେ କି? *:

- ○ ହଁ
- ○ ନା
- ○ ସମର୍ଥନ ଆବଶ୍ୟକ

ଦୟାକରି ଯେକୌଣସି ଗୋଟିଏ ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

ସଲାହ / ସୂଚନା ବ୍ୟବହାର କରିବାକୁ କଣ କଷ୍ଟକର କରେ? *:

- ☐ ଭାଷା ସମସ୍ୟା
- ☐ ମେସେଜ୍ ବହୁତ ଲମ୍ବା ଅଟେ
- ☐ ଡେରିରେ ଆସେ
- ☐ ବିଶ୍ୱସ୍ତ ନୁହେଁ
- ☐ ନେଟୱାର୍କ ସମସ୍ୟା
- ☐ ମାନଚିତ୍ର ବୁଝିବା କଷ୍ଟକର
- ☐ ଅନ୍ୟାନ୍ୟ
- ☐ Other

Max Choice allowed: 2

ଦୟାକରି ସର୍ବାଧିକ 2ଟି ବିକଳ୍ପ ଚୟନ କରନ୍ତୁ।

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Telugu

సర్వే లో పాల్గొనే వారి ప్రాథమిక వివరములు

మా పరిశోధన మరియు ఈవెంట్ డాక్యుమెంటేషన్ కోసం మీ ప్రాథమిక వివరాలను పంచుకోవడానికి మీరు అంగీకరిస్తున్నారా? *:
○ అవును (కొనసాగించు) ○ లేదు (ముగింపు రూపం)

(మీ పేరు ప్రచురించబడదు.)

పార్టిసిపెంట్ వర్గం

ఈ క్రింది వాటిలో మీరు ఏ వర్గానికి చెందెదరు? *:
○ సముద్ర జాలరి - పడవ యజమాని
○ సముద్ర జాలరి - సిబ్బంది సభ్యుడు
○ వేట తర్వాత పని చేసే మహిళలు
○ హార్బర్ / వేలం / ఐస్ / రవాణా కార్మికుడు
○ మెకానిక్ / మరమ్మత్తు / ఇతర సేవలు
○ విద్యార్థి / పరిశోధకుడు
○ ప్రభుత్వం / సంస్థ
○ ఇతరములు

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

స్థానం

రాష్ట్రం *: _____

జిల్లా *: _____

హార్బర్ / ల్యాండింగ్ సెంటర్ పేరు *: _____

ఫిషింగ్ జోన్

మీరు వేట ఎంత దూరంలో చేస్తారు? *:

- ○ తీరానికి దగ్గరగా (0–5 కి.మీ)
- ○ సముద్రం మధ్యలో (5–20 కి.మీ)
- ○ ఆఫ్‌షోర్ (20+ కి.మీ / బహుళ-రోజుల)
- ○ వర్తించదు / ఖచ్చితంగా తెలియదు

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

ఫిషింగ్ అనుభవం

మీరు ఎన్ని సంవత్సరాలుగా చేపలు పట్టడం లేదా చేపల సంబంధిత పనిలో పాల్గొంటున్నారు? *:

- ○ 5 సంవత్సరాల కంటే తక్కువ
- ○ 5–10 సంవత్సరాలు
- ○ 10–20 సంవత్సరాలు
- ○ 20 సంవత్సరాలకు పైగా

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

మత్స్యకారుల అనుభవం మరియు సమస్యల సంగ్రహణ

మీరు ఎక్కువగా ఎదుర్కొనే సమస్యలు ఏమిటి? *:

- ☐ వాతావరణం & సముద్ర భద్రత
- ☐ తుఫాను / ఆకస్మిక సముద్ర మార్పు
- ☐ చేపల లభ్యతపై అనిశ్చితి
- ☐ ఇంధనం & ప్రయాణ ఖర్చు ఎక్కువ
- ☐ మార్కెట్ ధర / కొనుగోలుదారు సమస్య
- ☐ ఐస్ / కోల్డ్ స్టోరేజ్ సమస్య
- ☐ హార్బర్ / ల్యాండింగ్ సెంటర్ సమస్య
- ☐ నెట్‌వర్క్ / కమ్యూనికేషన్ వైఫల్యం
- ☐ సరిహద్దు / అరెస్టు భయం (IMBL)
- ☐ లైట్ ఫిషింగ్ కాన్ఫ్లిక్ట్ (LED)
- ☐ నియమాలు / సమ్మతి గందరగోళం
- ☐ ప్రమాదాలు / రక్షణ ఆలస్యం
- ☐ గేర్ డ్యామేజ్ / నికర నష్టం

☐ ఓడరేవు / షిప్పింగ్ / నిర్మాణ భంగం

☐ ఓడరేవు లేదా సముద్ర కాలుష్యం

☐ ఇతర సమస్యలు

Max Choice allowed: 4

ఇటీవలి ఫిషింగ్ అనుభవం ఆధారంగా గరిష్టంగా 4 ఎంపికలను ఎంచుకోండి.

ప్రమాద సంభవ కాలం

మీ అభిప్రాయ ప్రకారం వేటకు సంబంధించి అతి పెద్ద సమస్య ఎప్పుడు ఎక్కువగా వస్తుంది? *:

○ నిర్దిష్ట నెలలు

○ వర్షాకాలం

○ శీతాకాలం

○ వేసవి కాలం

○ ఏడాది పొడవునా

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

ఎంత తరచుగా

ఆ సమస్య మిమ్మల్ని ఎంత తరచుగా ప్రభావితం చేస్తుంది? *:

○ అరుదుగా

○ కొన్నిసార్లు

○ తరచుగా

○ దాదాపు ప్రతి ట్రిప్

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

జీవితంపై ప్రభావం

ఈ సమస్య వల్ల ఏమి జరుగుతుంది? *:

☐ ఆదాయ నష్టం

☐ ట్రిప్ రద్దు చేయబడింది

☐ భద్రతా భయం

☐ అప్పు పెరుగుతుంది

☐ సిబ్బంది సమస్యలు

☐ పడవ నష్టం / మరమ్మత్తు నష్టం

☐ కుటుంబ ఒత్తిడి

Max Choice allowed: 3

గరిష్టంగా 3 ఎంపికలను ఎంచుకోండి.

అనుభవాల నుండి ఆధారాలు

మీ అనుభవానికి సరిపోయే రుజువు ఏది? *:

☐ మునుపటితో పోలిస్తే చేపలు తగ్గాయి

☐ చేపలు పట్టే రోజులు తగ్గాయి

☐ ఖర్చులు బాగా పెరిగాయి

☐ భద్రతా సంఘటన లేదా దాదాపు ప్రమాదం తప్పిన సంఘటన

☐ సంఘర్షణలు ఇతర పడవలతో సమస్యలను పెంచాయి

☐ నాణ్యత కోల్పోవడం / మార్కెట్‌కు ఆలస్యం కావడం

☐ చట్టపరమైన ఇబ్బంది లేదా భయం

☐ ఇతరములు

Max Choice allowed: 3

గరిష్టంగా 3 ఎంపికలను ఎంచుకోండి

సముద్రంలోకి వెళ్ళే ముందు సమాచార అంతరం

హార్బర్ నుండి బయలుదేరే ముందు, మీకు ఏది ఎక్కువగా అవసరం? *:

☐ గాలి మరియు వర్షం సమయం

☐ అల / సముద్ర కల్లోలం

☐ చేపల స్థాన సమాచారం (PFZ)

☐ తుఫాను ముందస్తు హెచ్చరిక

☐ సురక్షిత మార్గ సమాచారం

☐ సరిహద్దు స్పష్టత

☐ నెట్‌వర్క్ అంచనా

☐ మార్కెట్ ధర సంకేతాలు

☐ హార్బర్ ప్రవేశ/నిష్క్రమణ భద్రత

Max Choice allowed: 3

గరిష్టంగా 3 ఎంపికలను ఎంచుకోండి

ఆఫ్‌షోర్ అడ్డంకులు

మీరు ఆఫ్‌షోర్‌కు వెళ్లాలనుకుంటే, మిమ్మల్ని ఏది ఆపుతుంది? *:

- ☐ పడవ సరైన
- ☐ భద్రతా కిట్ సరిపోక
- ☐ రెస్క్యూ సపోర్ట్ నమ్మదగినది కాదు
- ☐ బీమా సమస్యలు
- ☐ శిక్షణ పొందని సిబ్బంది
- ☐ ఐస్ / నిల్వ సరిపోక
- ☐ ఆఫ్‌షోర్ ధరకు హామీ లేక
- ☐ పాలన / జరిమాన భయం

Max Choice allowed: 3

గరిష్ఠంగా 3 ఎంపికలను ఎంచుకోండి

సముద్ర మార్పులు గమనిక

సముద్రంలో మీరు గమనించిన మార్పులు (గత 3–5 సంవత్సరాలు) *:

- ☐ సముద్రం వేడిగా అనిపిస్తుంది
- ☐ గాలి అకస్మాత్తుగా బలంగా మారుతుంది
- ☐ అలలు మునుపటి కంటే కఠినంగా ఉన్నాయి
- ☐ చేపల సీజన్ సమయం మార్చబడింది
- ☐ చేపల పరిమాణం తగ్గింది
- ☐ కొత్త లేదా అసాధారణమైన చేపలు కనిపించాయి
- ☐ ఖచ్చితంగా తెలియదు / మార్పు లేదు

Max Choice allowed: 3

గరిష్ఠంగా 3 ఎంపికలను ఎంచుకోండి

ఏ నెలలు కష్టంగా మారుతున్నాయి? *:

- ☐ జనవరి
- ☐ ఫిబ్రవరి
- ☐ మార్చి
- ☐ ఏప్రిల్
- ☐ మే
- ☐ జూన్
- ☐ జూలై
- ☐ ఆగస్టు
- ☐ సెప్టెంబర్

☐ అక్టోబర్

☐ నవంబర్

☐ డిసెంబర్

Max Choice allowed: 3

గరిష్టంగా 3 ఎంపికలను ఎంచుకోండి

హార్బర్ & విలేజ్ ప్రమాదాలు

ప్రమాదాలు *:

☐ తుఫాను / బలమైన తుఫాను

☐ భారీ వర్షం సమయంలో వరదలు

☐ సముద్రపు నీరు ఇళ్లలోకి ప్రవేశించడం

☐ తీరప్రాంత కోత

☐ ఓడరేవులోకి ప్రవేశించే అధిక అలలు

☐ తీరప్రాంతంలో వేడిగాలులు

☐ ఏదీ లేదు / ఖచ్చితంగా తెలియదు

☐ అన్నింటినీ ఎంచుకోండి

Max Choice allowed: 4

గరిష్టంగా 4 ఎంపికలను ఎంచుకోండి

ప్రమాదం సమయంలో అతిపెద్ద నష్టం *:

○ పడవ లేదా గేర్ నష్టం

○ చేపలు పట్టే రోజులు తగ్గిపోవడం

○ మార్కెట్ / వేలం ఆగిపోవడం

○ ఐస్ / కోల్డ్ చైన్ నిలిచిపోవడం

○ ఇల్లు లేదా గ్రామ నష్టం

○ గాయం లేదా ప్రాణాపాయం

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

కాలుష్యం & సముద్రపు అలజడి

మీకు కాలుష్యం కనిపిస్తుందా? *:

○ తరచుగా

○ కొన్నిసార్లు

○ అరుదుగా

○ లేదు

○ ఖచ్చితంగా తెలియదు

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

ఏ రకం? *:

☐ ప్లాస్టిక్ వ్యర్థాలు

☐ ఆయిల్ / డీజిల్ వాసన

☐ మురుగునీరు / మురికి ఉత్సర్గ

☐ ఫ్యాక్టరీ / రసాయన ఉత్సర్గ

☐ చేపల మార్కెట్ వ్యర్థాలు

☐ ఆల్గే / ఆకుపచ్చ నీరు

☐ చనిపోయిన చేప సంఘటనలు

☐ ఖచ్చితంగా తెలియదు

Max Choice allowed: 3

గరిష్ఠంగా 3 ఎంపికలను ఎంచుకోండి

సముద్ర ప్రాంతంలో రద్దీ / ఓడరేవు ప్రభావం *:

☐ ఫిషింగ్ ప్రాంతానికి దగ్గరగా మరిన్ని ఓడలు

☐ పూడిక తీయడం లేదా తీరప్రాంత నిర్మాణం

☐ పరిమిత మండలాలు పెరిగాయి

☐ ప్రకాశవంతమైన పోర్ట్ లైట్లు చేపలు పట్టడాన్ని ప్రభావితం చేస్తాయి

Max Choice allowed: 2

గరిష్ఠంగా 2 ఎంపికలను ఎంచుకోండి

సమాచార ప్రాధాన్యత & సమర్పణ

ముఖ్యమైన సందేశాలను స్వీకరించడానికి మీరు ఎలా ఇష్టపడతారు? *:

○ వాయిస్ కాల్ / IVR

○ WhatsApp వాయిస్ సందేశం

○ వాట్సాప్ టెక్స్ట్/ఇమేజ్

○ యాప్ నోటిఫికేషన్

○ SMS

○ హార్బర్ ప్రకటన

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

మచ్లి యాప్ స్థితి *:

- ○ క్రమం తప్పకుండా వాడుతున్నాం
- ○ కొన్నిసార్లు వాడుతున్నాం
- ○ డౌన్‌లోడ్ చేయబడింది కానీ ఉపయోగించడం లేదు
- ○ ఇంకా డౌన్‌లోడ్ కాలేదు

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

ఉపయోగించకపోతే, మీరు 7 రోజుల్లోపు ప్రారంభించగలరా? *:

- ○ అవును
- ○ లేదు
- ○ మద్దతు అవసరం

దయచేసి ఏదైనా ఒక ఎంపికను ఎంచుకోండి

అడ్వైజరీలను ఉపయోగించడం కష్టతరం చేసేది ఏమిటి? *:

- ☐ భాషా సమస్య
- ☐ సందేశం చాలా పొడవుగా ఉంది
- ☐ ఆలస్యంగా వస్తుంది
- ☐ నమ్మదగినది కాదు
- ☐ నెట్‌వర్క్ సమస్య
- ☐ మ్యాప్‌లను అర్థం చేసుకోవడం కష్టం
- ☐ ఇతరములు

Max Choice allowed: 2

గరిష్ఠంగా 2 ఎంపికలను ఎంచుకోండి

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Bengali

অংশগ্রহণকারীদের সাধারণ পরিচিতি

আপনি কি গবেষণা এবং অনুষ্ঠানের ডকুমেন্টেশনের জন্য সাধারণ পরিচিতি শেয়ার করতে সম্মত? *:

○ হ্যাঁ ○ না

আপনার নাম প্রকাশ করা হবে না।

অংশগ্রহণকারী বিভাগ

আপনি কোন কাজের সাথে যুক্ত? *:

○ সামুদ্রিক মত্স্যজিবী

○ মাছ ধরার পরের কাজে নিযুক্ত মহিলা

○ বন্দর / নিলাম / বরফ / পরিবহন কর্মী লোডিং, বরফ সরবরাহ, পরিবহন

○ মেকানিক / মেরামত / সহায়তা পরিষেবা ইঞ্জিন বা মাছ ধরার সরঞ্জাম মেরামত

○ ছাত্র / গবেষক

○ সরকারি / প্রতিষ্ঠান

○ অন্যান্য

○ Other

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

অবস্থান

রাজ্য *:

জেলা *:

হারবার / জেটীঘাটের নাম *:

মাছ ধরার অঞ্চল

আপনি কোন জোনে বেশিরভাগ সময় কাজ করো? *:

- ○ তীরের কাছাকাছি (০-৫ কিমি)
- ○ মধ্য-সমুদ্র (৫-২০ কিমি)
- ○ অফশোর (২০+ কিমি / বহু-দিন)
- ○ প্রযোজ্য নয় / নিশ্চিত নই

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

আপনি কত বছর ধরে মাছ ধরা বা মাছ সম্পর্কিত কাজে জড়িত? *:

- ○ ৫ বছরের কম
- ○ ৫-১০ বছর
- ○ ১০-২০ বছর
- ○ ২০ বছরেরও বেশি সময় ধরে

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

সামুদ্রিক মত্স্যজিবী - অভিজ্ঞতা এবং সমস্যা চিহ্নিত করা

প্রধান সমস্যা

আপনি কোন সমস্যার সবচেয়ে বেশি সম্মুখীন হন? *:

- ☐ আবহাওয়া এবং সমুদ্র নিরাপত্তা
- ☐ ঘূর্ণিঝড় / হঠাৎ সমুদ্র পরিবর্তনের
- ☐ মাছের প্রাপ্যতা অনিশ্চয়তা
- ☐ জ্বালানি ও ভ্রমণের দাম বেশি
- ☐ বাজার মূল্য / ক্রেতা সমস্যা
- ☐ বরফ / হিমগার সমস্যা
- ☐ বন্দর / জেটিঘাট সমস্যা
- ☐ নেটওয়ার্ক / যোগাযোগ ব্যর্থতা
- ☐ সীমানা / গ্রেপ্তারের ভয় (IMBL)
- ☐ উজ্জ্বল আলোতে মাছ ধরার সংঘর্ষ (LED)
- ☐ নিয়ম / সম্মতি বিভ্রান্তি
- ☐ দুর্ঘটনা / উদ্ধার বিলম্ব
- ☐ গিয়ারের ক্ষতি / জাল লস
- ☐ বন্দর / জাহাজীকরণ / নির্মাণ ব্যাঘাত
- ☐ বন্দর বা সমুদ্রের কাছাকাছি দূষণ

- [ ] অন্যান্য
- [ ] Other

Max Choice allowed: 4

আপনার সাম্প্রতিক মাছ ধরার অভিজ্ঞতার উপর ভিত্তি করে সর্বাধিক ৪টি বিকল্প নির্বাচন করুন।

যখন এটি ঘটে

আপনার সবচেয়ে বড় সমস্যা কখন সবচেয়ে বেশি ঘটে? *:

- ○ নির্দিষ্ট মাস
- ○ বর্ষা ঋতু
- ○ শীতকাল
- ○ গ্রীষ্মকাল
- ○ গ্রীষ্মকাল উত্তপ্ত সমুদ্র , মাছের আনাগোনা

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

কতবার

এটি আপনাকে কত ঘন ঘন প্রভাবিত করে? *:

- ○ কদাচিৎ
- ○ মাঝে মাঝে
- ○ প্রায়শই
- ○ প্রায় প্রতিটি ট্রিপে

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

জীবনের উপর প্রভাব

এই সমস্যার কারণে কী ঘটে? *:

- [ ] আয় হ্রাস
- [ ] ট্রিপ বাতিল হয়েছে
- [ ] নিরাপত্তার ভয়
- [ ] ঋণ বৃদ্ধি পায়
- [ ] শ্রমিক সমস্যা
- [ ] নৌকার ক্ষতি / মেরামতের ক্ষতি
- [ ] পারিবারিক চাপ

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

অভিজ্ঞতা থেকে প্রমাণ

আপনার অভিজ্ঞতার সাথে কোন প্রমাণের মিল আছে? *:

- ☐ খরচ তীব্রভাবে বৃদ্ধি
- ☐ মাছ ধরার দিন কমেছে আরও প্রতিবন্ধ দিন
- ☐ খরচ তীব্রভাবে বৃদ্ধি পেয়েছে, জ্বালানি, বরফ, মেরামতের খরচ বেশি।
- ☐ নিরাপত্তাজনিত ঘটনা অথবা প্রায় মিস হয়ে যাওয়া ইঞ্জিনের ব্যর্থতা, উত্তাল সমুদ্র
- ☐ দ্বন্দ্ব বৃদ্ধি পেয়েছে অন্যান্য নৌকার সাথে সমস্যা
- ☐ মানের ক্ষতি / বাজারে পৌঁছাতে বিলম্ব, নষ্ট বা কম দামে মাছ
- ☐ আইনি ঝামেলা বা ভয় চেকিং, জরিমানা, গ্রেপ্তারের ভয়
- ☐ অন্যান্য
- ☐ Other

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

সমুদ্রে যাওয়ার আগে তথ্যের ব্যবধান

হারবার ছাড়ার আগে, আপনার সবচেয়ে বেশি কী প্রয়োজন? *:

- ☐ বাতাস এবং বৃষ্টির সময় যখন এটি বিপজ্জনক হয়ে ওঠে
- ☐ ঢেউ / সমুদ্রের রুক্ষতা যাওয়া অথবা না যাওয়ার সিদ্ধান্ত
- ☐ মাছের অবস্থান সংক্রান্ত পরামর্শ (PFZ) বাস্তবতার সাথে মিল থাকা উচিত
- ☐ ঘূর্ণিঝড়ের পূর্ব সতর্কতা ২-৩ দিনের স্পষ্ট তথ্য
- ☐ নিরাপদ রুট নির্দেশিকা ঝুঁকিপূর্ণ সমুদ্র এলাকা এড়িয়ে চলুন
- ☐ সীমানা স্পষ্টতা দুর্ঘটনাক্রমে অতিক্রম করা এড়িয়ে চলুন
- ☐ নেটওয়ার্ক উপলব্ধতা যেখানে ফোন কাজ নাও করতে পারে
- ☐ বাজার মূল্যের সংকেত ভ্রমণ কি মূল্যবান
- ☐ বন্দরে প্রবেশ/প্রস্থান নিরাপত্তা ভিড়, ঢেউ, সময়

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

সমুদ্রে যাওয়ায় বাধা

যদি আপনি সমুদ্রে যেতে চান, তাহলে কী আপনাকে থামায়? *:

- ☐ নৌকা উপযুক্ত নয় আকার অথবা ইঞ্জিন শক্তিশালী নয়
- ☐ নিরাপত্তা কিট পর্যাপ্ত নয় , লাইফ জ্যাকেট, ভিএইচএফ, র‍্যাফট নেই।
- ☐ উদ্ধার সহায়তা নির্ভরযোগ্য নয় সাহায্য দেরিতে আসতে পারে।
- ☐ বীমা সমস্যা বিলম্বিত বা প্রত্যাখ্যাত দাবি
- ☐ শ্রমিক দের প্রশিক্ষণ নেই বেশি-দিনের দক্ষতার অভাব রয়েছে
- ☐ বরফ / সংরক্ষণ পর্যাপ্ত নয় মাছের গুণমান নষ্ট হচ্ছে
- ☐ সমুদ্রের মধ্যে দাম নিশ্চিত নয়। কোনও নির্দিষ্ট ক্রেতা নেই।
- ☐ শাসন / জরিমানার ভয় নিয়ম অস্পষ্ট

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

সমুদ্র পরিবর্তন লক্ষ্য করা গেছে

সমুদ্রে আপনি যে পরিবর্তনগুলি লক্ষ্য করেছেন (গত ৩-৫ বছর) *:

- ☐ সমুদ্রের তাপমাত্রা বেশি অনুভূত হচ্ছে মাছ দূরে সরে যাচ্ছে; জেলিফিশের সংখ্যা বৃদ্ধি পাচ্ছে
- ☐ বাতাস হঠাৎ করেই তীব্র হয়ে ওঠে সকালের শান্ত, পরে বিপজ্জনক
- ☐ ঢেউ আগের চেয়ে আরও তীব্র, আরও অনিরাপদ দিন
- ☐ মাছের মৌসুমের সময় পরিবর্তন হয়েছে মাছ তাড়াতাড়ি বা দেরিতে আসে
- ☐ মাছের আকার কমে গেছে এখন বেশিরভাগ ছোট মাছ
- ☐ নতুন বা অস্বাভাবিক মাছ দেখা গেছে যা আগে দেখা যায়নি
- ☐ নিশ্চিত নই / কোনও পরিবর্তন নেই

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

কোন মাসগুলো কঠিন হয়ে উঠছে? *:

- ☐ জানুয়ারি
- ☐ ফেব্রুয়ারি
- ☐ মার্চ
- ☐ এপ্রিল
- ☐ মে
- ☐ জুন
- ☐ জুলাই
- ☐ আগস্ট
- ☐ সেপ্টেম্বর

- [ ] অক্টোবর
- [ ] নভেম্বর
- [ ] ডিসেম্বর

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

বন্দর ও গ্রামের ঝুঁকি

বিপদ *:

- [ ] ঘূর্ণিঝড় / শক্তিশালী ঝড় নৌকা ক্ষতিগ্রস্ত; মাছ ধরা বন্ধ
- [ ] ভারী বৃষ্টিপাতের সময় বন্যা বন্দর বা বাজারে জলাবদ্ধতা
- [ ] সমুদ্রের পানি ঘরে ঢুকছে কূয়ো বা জমি লবণাক্ত হয়ে যাচ্ছে
- [ ] উপকূল ক্ষয় সমুদ্র দ্বারা গ্রাস করা উপকূল বা রাস্তা
- [ ] বন্দরে প্রবেশকারী উচ্চ জোয়ারের জল আগের চেয়ে বেশি বেড়েছে
- [ ] উপকূলে তাপপ্রবাহ কাজ করা কঠিন; স্বাস্থ্য সমস্যা
- [ ] কেউ না / নিশ্চিত নই
- [ ] সবগুলো নির্বাচন করুন

Max Choice allowed: 4

সর্বাধিক ৪টি বিকল্প নির্বাচন করুন।

বিপদের সময় সবচেয়ে বড় ক্ষতি *:

- ○ নৌকা বা গিয়ারের ক্ষতি
- ○ মাছ ধরার দিন হারিয়ে গেছে
- ○ বাজার / নিলাম জায়গা
- ○ বরফ / ঠান্ডা চেইন ভাঙা
- ○ বাড়ি বা গ্রামের ক্ষতি
- ○ আঘাত বা জীবনের ঝুঁকি

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

দূষণ এবং সমুদ্রের অস্থিরতা

আপনি কি দূষণ দেখতে পাচ্ছেন? *:

- ○ প্রায়শই
- ○ মাঝে মাঝে
- ○ কদাচিৎ

- ○ না
- ○ নিশ্চিত নই

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

কোন ধরণের? *:

- ☐ প্লাস্টিকের বর্জ্য ব্যাগ, বোতল জাল বা তীরে
- ☐ তেল / ডিজেলের গন্ধ বন্দরের কাছে তৈলাক্ত জল
- ☐ পয়ঃনিষ্কাশন / নোংরা স্রাব দুর্গন্ধ, কালো জল
- ☐ কারখানা / রাসায়নিক স্রাব ফেনা বা রঙ পরিবর্তন
- ☐ মাছ বাজারের বর্জ্য পচা বর্জ্য, নোংরা ড্রেন
- ☐ শৈবাল / সবুজ জল জল ঘন; গন্ধ পরিবর্তন হয়
- ☐ মরা মাছের ঘটনা
- ☐ নিশ্চিত নই

Max Choice allowed: 3

সর্বাধিক ৩টি বিকল্প নির্বাচন করুন।

সমুদ্র এলাকায় ভিড় / বন্দরের প্রভাব *:

- ☐ মাছ ধরার এলাকার কাছাকাছি আরও জাহাজ
- ☐ ড্রেজিং বা উপকূলীয় নির্মাণ
- ☐ সীমাবদ্ধ অঞ্চল বৃদ্ধি করা হয়েছে
- ☐ উজ্জ্বল বন্দর আলো মাছ ধরার উপর প্রভাব ফেলে

Max Choice allowed: 2

সর্বাধিক ২টি বিকল্প নির্বাচন করুন।

তথ্য পছন্দ এবং জমা দিন

গুরুত্বপূর্ণ বার্তাগুলি আপনি কীভাবে পেতে পছন্দ করেন? *:

- ○ হোয়াটসঅ্যাপ টেক্সট/ছবি দ্রুত পড়া
- ○ হোয়াটসঅ্যাপ ভয়েস মেসেজ রিপ্লে এবং শেয়ার করা যাবে
- ○ ভয়েস কল / আইভিআর কাজ করার সময় শুনতে সহজ
- ○ অ্যাপ বিজ্ঞপ্তি সকল পরামর্শ এক জায়গায়
- ○ এসএমএস বেসিক ফোনে কাজ করে
- ○ বন্দর ঘোষণা

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

মাচলি অ্যাপ স্ট্যাটাস *:

- ○ নিয়মিত ব্যবহার করেন
- ○ মাঝে মাঝে ব্যবহার করেন
- ○ ডাউনলোড করা হয়েছে কিন্তু ব্যবহার করা হচ্ছে না
- ○ এখনও ডাউনলোড করা হয়নি

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

যদি ব্যবহার না করেন, তাহলে কি ৭ দিনের মধ্যে শুরু করতে পারবেন? *:

- ○ হ্যাঁ
- ○ না
- ○ সমর্থন প্রয়োজন

দয়া করে যেকোনো একটি বিকল্প নির্বাচন করুন।

পরামর্শ ব্যবহার করা কঠিন কেন? *:

- ☐ ভাষার সমস্যা
- ☐ বার্তাটি অনেক লম্বা
- ☐ দেরিতে আসে
- ☐ বিশ্বস্ত নয়
- ☐ নেটওয়ার্ক সমস্যা
- ☐ মানচিত্র বোঝা কঠিন
- ☐ অন্যান্য
- ☐ Other

Max Choice allowed: 2

সর্বাধিক ২টি বিকল্প নির্বাচন করুন।

Submit

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WOSC 2026 - Fisherfolk FGD - Kannada

ಮೂಲ ಭಾಗವಹಿಸುವವರ ಪ್ರೊಫೈಲ್

ಸಂಶೋಧನೆ ಮತ್ತು ಈವೆಂಟ್ ದಾಖಲಾತಿಗಾಗಿ ಮೂಲಭೂತ ವಿವರಗಳನ್ನು ಹಂಚಿಕೊಳ್ಳಲು ನೀವು ಒಪ್ಪುತ್ತೀರಾ? *:

- ○ ಹೌದು (ಮುಂದುವರಿಸಿ)
- ○ ಇಲ್ಲ (ಅಂತ್ಯ ರೂಪ)

(ನಿಮ್ಮ ಹೆಸರನ್ನು ಪ್ರಕಟಿಸಲಾಗುವುದಿಲ್ಲ.)

ಭಾಗವಹಿಸುವವರ ವರ್ಗ

ಯಾವುದು ನಿಮ್ಮನ್ನು ಉತ್ತಮವಾಗಿ ವಿವರಿಸುತ್ತದೆ? *:

- ○ ಸಮುದ್ರ ಮೀನುಗಾರ - ದೋಣಿ ಮಾಲೀಕರು
- ○ ಸಮುದ್ರ ಮೀನುಗಾರ - ಸಿಬ್ಬಂದಿ ಸದಸ್ಯ
- ○ ಕೊಯ್ಲಿನ ನಂತರದ ಕೆಲಸದಲ್ಲಿರುವ ಮಹಿಳೆಯರು
- ○ ಬಂದರು / ಹರಾಜು / ಐಸ್ / ಸಾರಿಗೆ ಕೆಲಸಗಾರ
- ○ ಮೆಕ್ಯಾನಿಕ್ / ದುರಸ್ತಿ / ಬೆಂಬಲ ಸೇವೆ
- ○ ವಿದ್ಯಾರ್ಥಿ / ಸಂಶೋಧಕ
- ○ ಸರ್ಕಾರ / ಸಂಸ್ಥೆ
- ○ ಇತರೆ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಸ್ಥಳ

ರಾಜ್ಯ *: _____

ಜಿಲ್ಲೆ *: _____

ಹಾರ್ಬರ್ / ಲ್ಯಾಂಡಿಂಗ್ ಸೆಂಟರ್ ಹೆಸರು *: _____

ಮೀನುಗಾರಿಕೆ ವಲಯ

ನೀವು ಹೆಚ್ಚಾಗಿ ಯಾವ ವಲಯದಲ್ಲಿ ಕೆಲಸ ಮಾಡುತ್ತೀರಿ? *:
- ○ ತೀರದ ಹತ್ತಿರ (0–5 ಕಿ.ಮೀ)
- ○ ಸಮುದ್ರದ ಮಧ್ಯ (5–20 ಕಿಮೀ)
- ○ ಆಫ್‌ಶೋರ್ (20+ ಕಿಮೀ / ಬಹು-ದಿನ)
- ○ ಅನ್ವಯಿಸುವುದಿಲ್ಲ / ಖಚಿತವಿಲ್ಲ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಮೀನುಗಾರಿಕೆ ಅನುಭವ

ನೀವು ಎಷ್ಟು ವರ್ಷಗಳಿಂದ ಮೀನುಗಾರಿಕೆ ಅಥವಾ ಮೀನು ಸಂಬಂಧಿತ ಕೆಲಸದಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿದ್ದೀರಿ? *:
- ○ 5 ವರ್ಷಗಳಿಗಿಂತ ಕಡಿಮೆ
- ○ 5–10 ವರ್ಷಗಳು
- ○ 10–20 ವರ್ಷಗಳು
- ○ 20 ವರ್ಷಗಳಿಗೂ ಹೆಚ್ಚು

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಸಮುದ್ರ ಮೀನುಗಾರರ ಜನಾಂಗ - ಅನುಭವ ಮತ್ತು ಸಮಸ್ಯೆ ಸೆರೆಹಿಡಿಯುವಿಕೆ

ಮುಖ್ಯ ಸಮಸ್ಯೆಗಳು

ದಯವಿಟ್ಟು ನಿಮ್ಮ ಇತ್ತೀಚಿನ ಮೀನುಗಾರಿಕೆ ಅನುಭವದ ಆಧಾರದ ಮೇಲೆ ಆಯ್ಕೆಮಾಡಿ. *:
- ☐ ಹವಾಮಾನ ಮತ್ತು ಸಮುದ್ರ ಸುರಕ್ಷತೆ
- ☐ ಚಂಡಮಾರುತ / ಹಠಾತ್ ಸಮುದ್ರ ಬದಲಾವಣೆಯ
- ☐ ಮೀನು ಲಭ್ಯತೆಯ ಅನಿಶ್ಚಿತತೆ
- ☐ ಇಂಧನ ಮತ್ತು ಪ್ರಯಾಣ ವೆಚ್ಚ ಹೆಚ್ಚಾಗಿದೆ
- ☐ ಮಾರುಕಟ್ಟೆ ಬೆಲೆ / ಖರೀದಿದಾರರ ಸಮಸ್ಯೆ
- ☐ ಐಸ್ / ಶೀತಲ ಶೇಖರಣಾ ಸಮಸ್ಯೆ
- ☐ ಬಂದರು / ಲ್ಯಾಂಡಿಂಗ್ ಕೇಂದ್ರದ ಸಮಸ್ಯೆ
- ☐ ನೆಟ್‌ವರ್ಕ್ / ಸಂವಹನ ವೈಫಲ್ಯ

☐ ಗಡಿ / ಬಂಧನ ಭಯ (IMBL)

☐ ಲೈಟ್ ಫಿಶಿಂಗ್ ಸಂಘರ್ಷ (LED)

☐ ನಿಯಮಗಳು / ಅನುಸರಣೆ ಗೊಂದಲ

☐ ಅಪಘಾತಗಳು / ರಕ್ಷಣೆ ವಿಳಂಬ

☐ ಗೇರ್ ಹಾನಿ / ಬಲೆ ನಷ್ಟ

☐ ಬಂದರು / ಸಾಗಣೆ / ನಿರ್ಮಾಣ ಅಡಚಣೆ

☐ ಬಂದರು ಅಥವಾ ಸಮುದ್ರದ ಬಳಿ ಮಾಲಿನ್ಯ

☐ ಇತರೆ

Max Choice allowed: 4

ದಯವಿಟ್ಟು ಇತ್ತೀಚಿನ ಮೀನುಗಾರಿಕೆ ಅನುಭವದ ಆಧಾರದ ಮೇಲೆ ಗರಿಷ್ಠ 4 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ.

ಅದು ಸಂಭವಿಸಿದಾಗ

ನಿಮ್ಮ ದೊಡ್ಡ ಸಮಸ್ಯೆ ಯಾವಾಗ ಹೆಚ್ಚಾಗಿ ಬರುತ್ತದೆ? *:

○ ನಿರ್ದಿಷ್ಟ ತಿಂಗಳುಗಳು

○ ಮಾನ್ಸೂನ್ ಋತುವಿನಲ್ಲಿ

○ ಚಳಿಗಾಲದ ಋತುವಿನಲ್ಲಿ

○ ಬೇಸಿಗೆ ಕಾಲ

○ ವರ್ಷವಿಡೀ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಎಷ್ಟು ಬಾರಿ

ಇದು ನಿಮ್ಮ ಮೇಲೆ ಎಷ್ಟು ಬಾರಿ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ? *:

○ ಅಪರೂಪಕ್ಕೆ

○ ಕೆಲವೊಮ್ಮೆ

○ ಆಗಾಗ್ಗೆ

○ ಬಹುತೇಕ ಪ್ರತಿಯೊಂದು ಪ್ರವಾಸ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಜೀವನದ ಮೇಲೆ ಪರಿಣಾಮ

ಈ ಸಮಸ್ಯೆಯಿಂದ ಏನಾಗುತ್ತದೆ? *:

☐ ಆದಾಯ ನಷ್ಟ

- ☐ ಪ್ರವಾಸ ರದ್ದುಗೊಂಡಿದೆ
- ☐ ಸುರಕ್ಷತಾ ಭಯ
- ☐ ಸಾಲ ಹೆಚ್ಚಾಗುತ್ತದೆ
- ☐ ಸಿಬ್ಬಂದಿ ಸಮಸ್ಯೆಗಳು
- ☐ ದೋಣಿ ಹಾನಿ / ದುರಸ್ತಿ ನಷ್ಟ
- ☐ ಕೌಟುಂಬಿಕ ಒತ್ತಡ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಅನುಭವದಿಂದ ಪುರಾವೆ

ನಿಮ್ಮ ಅನುಭವಕ್ಕೆ ಯಾವ ಪುರಾವೆ ಹೊಂದಿಕೆಯಾಗುತ್ತದೆ? *:
- ☐ ಹಿಂದಿನದಕ್ಕೆ ಹೋಲಿಸಿದರೆ ಮೀನುಗಾರಿಕೆ ಕಡಿಮೆಯಾಗಿದೆ
- ☐ ಮೀನುಗಾರಿಕೆ ದಿನಗಳು ಕಡಿಮೆಯಾಗಿವೆ
- ☐ ವೆಚ್ಚಗಳು ತೀವ್ರವಾಗಿ ಹೆಚ್ಚಾಗಿದೆ
- ☐ ಸುರಕ್ಷತಾ ಘಟನೆ ಅಥವಾ ಅದೃಷ್ಟವಶಾತ್ ತಪ್ಪಿದ ಘಟನೆಗಳು
- ☐ ಹೆಚ್ಚಿದ ಸಂಘರ್ಷಗಳು
- ☐ ಗುಣಮಟ್ಟದ ನಷ್ಟ / ಮಾರುಕಟ್ಟೆಗೆ ಬರುವಲ್ಲಿ ವಿಳಂಬ
- ☐ ಕಾನೂನು ತೊಂದರೆ ಅಥವಾ ಭಯ
- ☐ ಇತರೆ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಸಮುದ್ರಕ್ಕೆ ಹೋಗುವ ಮುನ್ನ ಮಾಹಿತಿ ಅಂತರ

ಬಂದರಿನಿಂದ ಹೊರಡುವ ಮೊದಲು, ನಿಮಗೆ ಹೆಚ್ಚು ಏನು ಬೇಕು? *:
- ☐ ಗಾಳಿ ಮತ್ತು ಮಳೆಯ ಸಮಯ
- ☐ ಅಲೆ / ಸಮುದ್ರದ ಒರಟುತನ
- ☐ ಮೀನು ಸ್ಥಳ ಸಲಹೆ (ಸಂಭಾವ್ಯ ಮೀನುಗಾರಿಕಾ ವಲಯ /PFZ)
- ☐ ಚಂಡಮಾರುತದ ಮುನ್ನೆಚ್ಚರಿಕೆ
- ☐ ಸುರಕ್ಷಿತ ಮಾರ್ಗ ಮಾರ್ಗದರ್ಶನ
- ☐ ಗಡಿ ಸ್ಪಷ್ಟತೆ
- ☐ ನೆಟ್‌ವರ್ಕ್ ನಿರೀಕ್ಷೆಗಳು
- ☐ ಮಾರುಕಟ್ಟೆ ಬೆಲೆ ಸಂಕೇತಗಳು

☐ ಬಂದರಿನ ಪ್ರವೇಶ/ನಿರ್ಗಮನ ಸುರಕ್ಷತೆ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಆಫ್‌ಶೋರ್ ಬ್ಯಾರಿಯರ್‌ಗಳು

ನೀವು ಸಮುದ್ರದಾಚೆಗೆ ಹೋಗಲು ಬಯಸಿದರೆ, ನಿಮ್ಮನ್ನು ಏನು ತಡೆಯುತ್ತದೆ? *:

☐ ದೋಣಿ ಸೂಕ್ತವಲ್ಲದ

☐ ಸುರಕ್ಷತಾ ಕಿಟ್ ಸಾಕಾಗುವುದಿಲ್ಲ

☐ ವಿಶ್ವಾಸಾರ್ಹವಲ್ಲದ ರಕ್ಷಣಾ ಬೆಂಬಲ

☐ ವಿಮಾ ಸಮಸ್ಯೆಗಳು

☐ ತರಬೇತಿ ಪಡೆಯದ ಸಿಬ್ಬಂದಿ

☐ ಐಸ್ / ಸಂಗ್ರಹಣೆ ಸಾಕಾಗುವುದಿಲ್ಲ

☐ ಕಡಲಾಚೆಯ ಬೆಲೆ ಖಚಿತವಿಲ್ಲ

☐ ಆಡಳಿತ / ದಂಡದ ಭಯ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಸಮುದ್ರ ಬದಲಾವಣೆಗಳನ್ನು ಗಮನಿಸಲಾಗಿದೆ

ಸಮುದ್ರದಲ್ಲಿ ನೀವು ಗಮನಿಸಿದ ಬದಲಾವಣೆಗಳು (ಕಳೆದ 3–5 ವರ್ಷಗಳು) *:

☐ ಸಮುದ್ರವು ಹೆಚ್ಚು ಕಾವೇರಿದಹಾಗೆ ಇದೆ

☐ ಗಾಳಿ ಹಠಾತ್ತನೆ ಬಲಗೊಳ್ಳುತ್ತದೆ

☐ ಮೊದಲಿಗಿಂತ ಅಲೆಗಳು ಒರಟಾಗಿವೆ

☐ ಮೀನಿನ ಋತುವಿನ ಸಮಯ ಬದಲಾಗಿದೆ

☐ ಮೀನಿನ ಗಾತ್ರ ಕಡಿಮೆಯಾಗಿದೆ

☐ ಹೊಸ ಅಥವಾ ಅಸಾಮಾನ್ಯ ಮೀನುಗಳನ್ನು ನೋಡಲಾಗಿದೆ

☐ ಖಚಿತವಿಲ್ಲ / ಬದಲಾವಣೆ ಇಲ್ಲ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಯಾವ ತಿಂಗಳುಗಳು ಕಷ್ಟಕರವಾಗುತ್ತಿವೆ? *:

☐ ಜನವರಿ

☐ ಫೆಬ್ರವರಿ

☐ ಮಾರ್ಚ್

- [ ] ಏಪ್ರಿಲ್
- [ ] ಮೇ
- [ ] ಜೂನ್
- [ ] ಜುಲೈ
- [ ] ಆಗಸ್ಟ್
- [ ] ಸೆಪ್ಟೆಂಬರ್
- [ ] ಅಕ್ಟೋಬರ್
- [ ] ನವೆಂಬರ್
- [ ] ಡಿಸೆಂಬರ್

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಬಂದರು ಮತ್ತು ಗ್ರಾಮದ ಅಪಾಯಗಳು

ಅಪಾಯಗಳು *:

- [ ] ಚಂಡಮಾರುತ / ಬಲವಾದ ಬಿರುಗಾಳಿ
- [ ] ಭಾರೀ ಮಳೆಯ ಸಮಯದಲ್ಲಿ ಪ್ರವಾಹ
- [ ] ಮನೆಗಳಿಗೆ ನುಗ್ಗುವ ಸಮುದ್ರದ ನೀರು
- [ ] ಕರಾವಳಿ ಸವೆತ
- [ ] ಬಂದರಿಗೆ ಪ್ರವೇಶಿಸುವ ಅತಿ ಹೆಚ್ಚಿನ ಅಲೆಗಳು
- [ ] ಕರಾವಳಿಯಲ್ಲಿ ಬಿಸಿಗಾಳಿ
- [ ] ಯಾವುದೂ ಇಲ್ಲ / ಖಚಿತವಿಲ್ಲ
- [ ] ಎಲ್ಲವನ್ನೂ ಆಯ್ಕೆಮಾಡಿ

Max Choice allowed: 4

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 4 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಅಪಾಯದ ಸಮಯದಲ್ಲಿ ಅತಿ ದೊಡ್ಡ ನಷ್ಟ *:

- ○ ದೋಣಿ ಅಥವಾ ಗೇರ್ ಹಾನಿ
- ○ ಕಳೆದುಹೋದ ಮೀನುಗಾರಿಕೆ ದಿನಗಳು
- ○ ಮಾರುಕಟ್ಟೆ / ಹರಾಜು ನಿಲುಗಡೆಗಳು
- ○ ಐಸ್ / ಕೋಲ್ಡ್ ಚೈನ್ ಬ್ರೇಕ್‌ಗಳು
- ○ ಮನೆ ಅಥವಾ ಗ್ರಾಮಕ್ಕೆ ಹಾನಿ
- ○ ಗಾಯ ಅಥವಾ ಜೀವಕ್ಕೆ ಅಪಾಯ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಮಾಲಿನ್ಯ ಮತ್ತು ಸಮುದ್ರದ ಅಡಚಣೆ

ನಿಮಗೆ ಮಾಲಿನ್ಯ ಕಾಣಿಸುತ್ತಿದೆಯೇ? *:

- ○ ಆಗಾಗ್ಗೆ
- ○ ಕೆಲವೊಮ್ಮೆ
- ○ ಅಪರೂಪಕ್ಕೆ
- ○ ಇಲ್ಲ
- ○ ಖಚಿತವಾಗಿಲ್ಲ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಯಾವ ಪ್ರಕಾರ? *:

- ☐ ಪ್ಲಾಸ್ಟಿಕ್ ತ್ಯಾಜ್ಯ
- ☐ ಎಣ್ಣೆ / ಡೀಸೆಲ್ ವಾಸನೆ
- ☐ ಕೊಳಚೆ ನೀರು / ಕೊಳಕು ವಿಸರ್ಜನೆ
- ☐ ಕಾರ್ಖಾನೆ / ರಾಸಾಯನಿಕ ವಿಸರ್ಜನೆ
- ☐ ಮೀನು ಮಾರುಕಟ್ಟೆ ತ್ಯಾಜ್ಯ
- ☐ ಪಾಚಿ / ಹಸಿರು ನೀರು ದಪ್ಪ
- ☐ ಸತ್ತ ಮೀನುಗಳ ಘಟನೆಗಳು
- ☐ ಖಚಿತವಿಲ್ಲ

Max Choice allowed: 3

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 3 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಸಮುದ್ರ ಪ್ರದೇಶದ ಜನದಟ್ಟಣೆ / ಬಂದರು ಪರಿಣಾಮ *:

- ☐ ಮೀನುಗಾರಿಕೆ ಪ್ರದೇಶಕ್ಕೆ ಹತ್ತಿರದಲ್ಲಿ ಹೆಚ್ಚಿನ ಹಡಗುಗಳು
- ☐ ಹೂಳೆತ್ತುವುದು ಅಥವಾ ಕರಾವಳಿ ನಿರ್ಮಾಣ
- ☐ ನಿರ್ಬಂಧಿತ ವಲಯಗಳ ಹೆಚ್ಚಳ
- ☐ ಪ್ರಕಾಶಮಾನವಾದ ಬಂದರು ದೀಪಗಳು ಮೀನುಗಾರಿಕೆಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತವೆ

Max Choice allowed: 2

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 2 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

ಮಾಹಿತಿ ಆದ್ಯತೆ ಮತ್ತು ಸಲ್ಲಿಕೆ

ಪ್ರಮುಖ ಸಂದೇಶಗಳನ್ನು ಸ್ವೀಕರಿಸಲು ನೀವು ಹೇಗೆ ಬಯಸುತ್ತೀರಿ? *:

- ○ ವಾಟ್ಸಾಪ್ ಪಠ್ಯ/ಚಿತ್ರ

- ○ WhatsApp ಧ್ವನಿ ಸಂದೇಶಗಳು
- ○ ಧ್ವನಿ ಕರೆ / IVR
- ○ ಅಪ್ಲಿಕೇಶನ್ ಅಧಿಸೂಚನೆ
- ○ SMS
- ○ ಬಂದರಿನ ಘೋಷಣೆ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಮಚ್ಚಿ ಅಪ್ಲಿಕೇಶನ್ ಸ್ಥಿತಿ *:

- ○ ನಿಯಮಿತವಾಗಿ ಬಳಸಿ
- ○ ಕೆಲವೊಮ್ಮೆ ಬಳಸಿ
- ○ ಡೌನ್‌ಲೋಡ್ ಮಾಡಲಾಗಿದೆ ಆದರೆ ಬಳಸುತ್ತಿಲ್ಲ
- ○ ಇನ್ನೂ ಡೌನ್‌ಲೋಡ್ ಆಗಿಲ್ಲ

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಬಳಸುತ್ತಿಲ್ಲದಿದ್ದರೆ, 7 ದಿನಗಳಲ್ಲಿ ಪ್ರಾರಂಭಿಸಬಹುದೇ? *:

- ○ ಹೌದು
- ○ ಇಲ್ಲ
- ○ ಬೆಂಬಲ ಬೇಕು

ದಯವಿಟ್ಟು ಯಾವುದಾದರೂ ಒಂದು ಆಯ್ಕೆಯನ್ನು ಆರಿಸಿ

ಸಲಹೆಗಳನ್ನು ಬಳಸಲು ಕಷ್ಟವಾಗುವುದು ಯಾವುದು? *:

- ☐ ಭಾಷಾ ಸಮಸ್ಯೆ
- ☐ ಸಂದೇಶ ತುಂಬಾ ಉದ್ದವಾಗಿದೆ
- ☐ ತಡವಾಗಿ ಬರುತ್ತದೆ
- ☐ ವಿಶ್ವಾಸಾರ್ಹವಲ್ಲ
- ☐ ನೆಟ್‌ವರ್ಕ್ ಸಮಸ್ಯೆ
- ☐ ನಕ್ಷೆಗಳನ್ನು ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವುದು ಕಷ್ಟ
- ☐ ಇತರೆ

Max Choice allowed: 2

ದಯವಿಟ್ಟು ಗರಿಷ್ಠ 2 ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆಮಾಡಿ

Submit

Reliance Foundation

WOSC 2026 - Fisherfolk FGD - Malayalam

പങ്കെടുക്കുന്നയാളുടെ അടിസ്ഥാന വിവരണം

ഗവേഷണത്തിനും ഇത് സംബന്ധിച്ച രേഖപ്പെടുത്തലിനുമായി അടിസ്ഥാന വിവരങ്ങൾ പങ്കിടാൻ നിങ്ങൾക്ക് സമ്മതമാണോ? *:

- ○ അതെ (തുടരുക)
- ○ ഇല്ല (ഫോം അവസാനിപ്പിക്കുക)

(നിങ്ങളുടെ പേര് പ്രസിദ്ധീകരിക്കില്ല.)

പങ്കെടുക്കുന്നവരുടെ വിഭാഗം

നിങ്ങളെ എങ്ങനെ ഏറ്റവും നന്നായി വിശേഷിപ്പിക്കാം? *:

- ○ സമുദ്ര മത്സ്യത്തൊഴിലാളി- ബോട്ട് ഉടമ
- ○ സമുദ്ര മത്സ്യത്തൊഴിലാളി- ക്രൂ അംഗം
- ○ മത്സ്യബന്ധനത്തിന് ശേഷമുള്ള ജോലികളിൽ ഏർപ്പെടുന്ന സ്ത്രീകൾ
- ○ തുറമുഖം / ലേലം / ഐസ് / ഗതാഗത തൊഴിലാളി
- ○ മെക്കാനിക്ക് / റിപ്പയർ / സപ്പോർട്ട് സർവീസ്
- ○ വിദ്യാർത്ഥി / ഗവേഷകൻ
- ○ സർക്കാർ / സ്ഥാപനം
- ○ മറ്റുള്ളവ

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

ലൊക്കേഷൻ

സംസ്ഥാനം *: _____

ജില്ല *: _____

ഹാർബർ / ലാൻഡിംഗ് സെന്ററിന്റെ പേര് *: _____

ഫിഷിംഗ് സോൺ

ഏത് മേഖലയിലാണ് നിങ്ങൾ കൂടുതലായി ജോലി ചെയ്യുന്നത്? *:
- ○ തീരത്തിനടുത്ത് (0–5 കി.മീ)
- ○ തീരത്തു നിന്നും മാറി (5–20 കി.മീ)
- ○ ആഴക്കടൽ (20+ കി.മീ / ഒന്നിലധികം ദിവസം)
- ○ ബാധകമല്ല / ഉറപ്പില്ല

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

മത്സ്യബന്ധന അനുഭവം

എത്ര വർഷമായി നിങ്ങൾ മീൻപിടുത്തത്തിലോ മത്സ്യബന്ധനത്തിലോ ഏർപ്പെട്ടിരിക്കുന്നു? *:
- ○ 5 വർഷത്തിൽ താഴെ
- ○ 5–10 വർഷം
- ○ 10–20 വർഷം
- ○ 20 വർഷത്തിലധികം

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

മറൈൻ ഫിഷർ ഫോക്ക് - അനുഭവവും പ്രശ്നപരിഹാരവും

പ്രധാന പ്രശ്നങ്ങൾ

നിങ്ങൾ ഏറ്റവും കൂടുതൽ നേരിടുന്ന പ്രശ്നങ്ങൾ എന്തൊക്കെയാണ്? *:
- ☐ കാലാവസ്ഥയും സമുദ്ര സുരക്ഷയും
- ☐ ചുഴലിക്കാറ്റ് / പെട്ടെന്നുള്ള കടൽ വ്യതിയാന
- ☐ മത്സ്യ ലഭ്യത അനിശ്ചിതത്വം
- ☐ ഇന്ധന, യാത്രാ ചെലവ് ഉയർന്നത്
- ☐ മാർക്കറ്റ് വില / വാങ്ങുന്നയാളുടെ പ്രശ്നം
- ☐ ഐസ് / കോൾഡ് സ്റ്റോറേജ് പ്രശ്നം
- ☐ ഹാർബർ / ലാൻഡിംഗ് സെന്റർ പ്രശ്നം
- ☐ നെറ്റ്വർക്ക് / ആശയവിനിമയ പരാജയം
- ☐ അതിർത്തി / അറസ്റ്റ് ഭയം (IMBL)

☐ ലൈറ്റ് കത്തിച്ചുള്ള മത്സ്യബന്ധനം (എൽഇഡി)

☐ നിയമങ്ങൾ / പിൻതുടരുന്നതിലെ ആശയക്കുഴപ്പം

☐ അപകടങ്ങൾ / രക്ഷാപ്രവർത്തന കാലതാമസം

☐ ഉപകരണങ്ങളുടെ കേടുപാടുകൾ / വല നഷ്ടപ്പെടൽ

☐ തുറമുഖം / ഷിപ്പിംഗ് / നിർമ്മാണ തടസ്സങ്ങൾ

☐ തുറമുഖത്തിനോ കടലിനോ സമീപമുള്ള മലിനീകരണം

☐ മറ്റുള്ളവ

Max Choice allowed: 4

സമീപകാല മത്സ്യബന്ധന അനുഭവത്തിന്റെ അടിസ്ഥാനത്തിൽ പരമാവധി 4 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

പ്രശ്നങ്ങൾ സംഭവിക്കുമ്പോൾ

നിങ്ങൾക്ക് ഏറ്റവും കൂടുതൽ പ്രശ്നങ്ങൾ എപ്പോഴാണ് ഉണ്ടാകുന്നത്? *:

○ പ്രത്യേക മാസങ്ങൾ

○ മൺസൂൺ കാലം

○ ശൈത്യകാലം

○ വേനൽക്കാലം

○ വർഷം മുഴുവനും

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

പ്രശ്നങ്ങൾ എത്ര തവണ നേരിടുന്നു

പ്രശ്നങ്ങൾ നിങ്ങളെ എത്ര തവണ ബാധിക്കുന്നു? *:

○ അപൂർവ്വമായി

○ ചിലപ്പോൾ

○ പലപ്പോഴും

○ മിക്കവാറും എല്ലാ യാത്രകളിലും

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

ജീവിതത്തിലുണ്ടാകുന്ന സ്വാധീനം

ഈ പ്രശ്നങ്ങൾ കാരണം എന്ത് സംഭവിക്കുന്നു? *:

☐ വരുമാന നഷ്ടം

- [ ] യാത്ര റദ്ദാക്കി
- [ ] സുരക്ഷാ ഭയം
- [ ] കടം വർദ്ധിക്കുന്നു
- [ ] ക്രൂ പ്രശ്നങ്ങൾ
- [ ] ബോട്ട് കേടുപാടുകൾ / അറ്റകുറ്റപ്പണി നഷ്ടം
- [ ] കുടുംബ സമ്മർദ്ദം

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

അനുഭവത്തിൽ നിന്നുള്ള തെളിവ്

നിങ്ങളുടെ അനുഭവത്തിൽ പ്രശ്നങ്ങളുടെ പ്രതിഫലനം എന്താണ്? *:
- [ ] മുമ്പത്തെ അപേക്ഷിച്ച് മീൻപിടിത്തം കുറഞ്ഞു.
- [ ] മത്സ്യബന്ധന ദിവസങ്ങൾ കുറച്ചു
- [ ] ചെലവ് കുത്തനെ വർദ്ധിച്ചു
- [ ] സുരക്ഷാ അനിഷ്ടസംഭവം അല്ലെങ്കിൽ അപകടം തൊട്ടടുത്ത്
- [ ] സംഘർഷങ്ങൾ മറ്റ് ബോട്ടുകളുമായുള്ള പ്രശ്നങ്ങൾ വർധിച്ചു
- [ ] ഗുണനിലവാര നഷ്ടം / വിപണനത്തിലെ കാലതാമസം
- [ ] നിയമപരമായ പ്രശ്നം അല്ലെങ്കിൽ ഭയം
- [ ] മറ്റുള്ളവ

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

കടലിൽ പോകുന്നതിന് മുമ്പുള്ള വിവരങ്ങളിലുള്ള വിടവ്

ഹാർബർ വിടുന്നതിനുമുമ്പ്, നിങ്ങൾക്ക് ഏറ്റവും ആവശ്യമുള്ളത് എന്താണ്? *:
- [ ] കാറ്റിന്റെയും മഴയുടെയും സമയം
- [ ] തിരമാല / കടൽ പ്രക്ഷുബ്ധത
- [ ] മത്സ്യലഭ്യത സാധ്യതയുള്ള പ്രദേശങ്ങളുടെ വിവരം (PFZ)
- [ ] ചുഴലിക്കാറ്റ് മുന്നറിയിപ്പ്
- [ ] സുരക്ഷിതമായ വഴിയെക്കുറിച്ചുള്ള മാർഗ്ഗനിർദ്ദേശം .
- [ ] അതിർത്തി വ്യക്തത
- [ ] ഫോൺ പ്രവർത്തിക്കാത്തിടത്ത് നെറ്റ്വർക്ക് പ്രതീക്ഷ
- [ ] വിപണി വില സൂചനകൾ

☐ തുറമുഖത്തേയ്ക്ക് പ്രവേശനം/പുറത്തു കടക്കൽ ആയി ബന്ധപ്പെട്ട സുരക്ഷ

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

ഓഫ്ഷോർ തടസ്സങ്ങൾ

നിങ്ങൾക്ക് ആഴക്കടലിലേക്ക് പോകാൻ താൽപ്പര്യമുണ്ടെങ്കിൽ, എന്താണ് നിങ്ങളെ തടസ്സപ്പെടുത്തുന്നത്? *:

☐ ബോട്ട് അനുയോജ്യമല്ല

☐ സുരക്ഷാ കിറ്റ് പര്യാപ്തമല്ല

☐ രക്ഷാ സഹായം വിശ്വസനീയമല്ല

☐ ഇൻഷുറൻസ് പ്രശ്നങ്ങൾ

☐ പരിശീലനം ലഭിച്ചിട്ടില്ലാത്ത തൊഴിലാളികൾ

☐ ഐസ് / സംഭരണം ആവശ്യത്തിന് ഇല്ല

☐ ആഴക്കടൽ മത്സ്യത്തിൻറെ വില ഉറപ്പില്ല

☐ ഭരണം / ശിക്ഷാ ഭയം

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

കടൽ മാറ്റങ്ങൾ അറിയിച്ചു

കടലിൽ നിങ്ങൾ കാണുന്ന മാറ്റങ്ങൾ (കഴിഞ്ഞ 3–5 വർഷം) *:

☐ കടലിൽ ചൂട് കൂടുന്നു

☐ കാറ്റ് പെട്ടെന്ന് ശക്തമാകും

☐ മുമ്പത്തേക്കാൾ രൂക്ഷമാകുന്ന തിരമാലകൾ

☐ മത്സ്യ സീസൺ സമയം മാറി

☐ മത്സ്യത്തിന്റെ വലിപ്പം കുറഞ്ഞു

☐ പുതിയതോ അസാധാരണമോ ആയ മത്സ്യങ്ങളെ കാണുന്നു.

☐ ഉറപ്പില്ല / മാറ്റമില്ല

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

ഏതൊക്കെ മാസങ്ങളാണ് ബുദ്ധിമുട്ടായി മാറുന്നത്? *:

☐ ജനുവരി

☐ ഫെബ്രുവരി

- [ ] മാർച്ച്
- [ ] ഏപ്രിൽ
- [ ] മേയ്
- [ ] ജൂൺ
- [ ] ജൂലൈ
- [ ] ഓഗസ്റ്റ്
- [ ] സെപ്റ്റംബർ
- [ ] ഒക്ടോബർ
- [ ] നവംബർ
- [ ] ഡിസംബർ

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

ഹാർബർ & വില്ലേജ് അപകടങ്ങൾ

അപകടങ്ങൾ *:

- [ ] ചുഴലിക്കാറ്റ് / ശക്തമായ കൊടുങ്കാറ്റ്
- [ ] കനത്ത മഴയിൽ വെള്ളപ്പൊക്കം
- [ ] കടൽ വെള്ളം വീടുകളിലേക്ക് കയറുന്നു
- [ ] കടൽ
- [ ] തുറമുഖത്തേക്ക് പ്രവേശിക്കുന്ന ഉയർന്ന വേലിയേറ്റം
- [ ] തീരദേശത്ത് ഉഷ്ണതരംഗം
- [ ] ഒന്നുമില്ല / ഉറപ്പില്ല
- [ ] എല്ലാം തിരഞ്ഞെടുക്കുക

Max Choice allowed: 4

പരമാവധി 4 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

അപകടസമയത്ത് ഏറ്റവും വലിയ നഷ്ടം *:

- ○ ബോട്ട് അല്ലെങ്കിൽ ഉപകരണങ്ങൾക്ക് കേടുപാടുകൾ
- ○ നഷ്ടപ്പെട്ട മത്സ്യബന്ധന ദിനങ്ങൾ
- ○ മാർക്കറ്റ് / ലേലം നിർത്തിവെക്കുന്നു
- ○ ഐസ് / ശീതീകരണ ഉപാധികൾ ഇല്ലാതാകുന്നു
- ○ വീടിനോ ഗ്രാമത്തിനോ കേടുപാടുകൾ
- ○ പരിക്ക് അല്ലെങ്കിൽ ജീവന് അപകടസാധ്യത

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

മലിനീകരണവും കടൽക്ഷോഭവും

നിങ്ങൾ മലിനീകരണം കാണുന്നുണ്ടോ? *:

- ○ പലപ്പോഴും
- ○ ചിലപ്പോൾ
- ○ അപൂർവ്വമായി
- ○ ഇല്ല
- ○ ഉറപ്പില്ല

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

ഏത് തരം? *:

- ☐ പ്ലാസ്റ്റിക് മാലിന്യം
- ☐ എണ്ണ / ഡീസൽ ഗന്ധം
- ☐ മലിനജലം / വൃത്തികെട്ട വെള്ളത്തിൻറെ ഒഴുക്ക്
- ☐ ഫാക്ടറി / രാസപദാർത്ഥങ്ങളുടെ ഒഴുക്ക്
- ☐ മത്സ്യ മാർക്കറ്റ് മാലിന്യം
- ☐ പായൽ / പച്ച നിറത്തിലുള്ള ജലം
- ☐ മത്സ്യം ചത്ത് കിടക്കുന്ന അവസ്ഥ
- ☐ ഉറപ്പില്ല

Max Choice allowed: 3

പരമാവധി 3 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

കടൽ മേഖലയിലെ തിരക്ക് / തുറമുഖ ആഘാതം *:

- ☐ മത്സ്യബന്ധന മേഖലയ്ക്ക് സമീപം കൂടുതൽ കപ്പലുകൾ
- ☐ ഡ്രെഡ്ജിംഗ് അല്ലെങ്കിൽ തീരദേശ നിർമ്മാണം
- ☐ നിയന്ത്രിത മേഖലകൾ വർദ്ധിപ്പിച്ചു
- ☐ തിളക്കമുള്ള പോർട്ട് ലൈറ്റുകൾ മത്സ്യബന്ധനത്തെ ബാധിക്കുന്നു

Max Choice allowed: 2

പരമാവധി 2 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

വിവര മുൻഗണനയും സമർപ്പിക്കലും

പ്രധാനപ്പെട്ട സന്ദേശങ്ങൾ സ്വീകരിക്കാൻ നിങ്ങൾ എന്താണ് ഇഷ്ടപ്പെടുന്നത്? *:

- ○ ഫോൺ വഴിയുള്ള ശബ്ദ സന്ദേശം / IVR
- ○ വാട്ട്സ്ആപ്പ് വഴിയുള്ള ശബ്ദ സന്ദേശം
- ○ വാട്ട്സ്ആപ്പ് ടെക്സ്റ്റ്/ഇമേജ്
- ○ ആപ്പ് അറിയിപ്പ്
- ○ അടിസ്ഥാന ഫോണുകളിൽ SMS പ്രവർത്തിക്കുന്നു
- ○ തുറമുഖ പ്രഖ്യാപനം

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

മച്ച്ലി ആപ്പ് ഉപയോഗം *:

- ○ പതിവായി ഉപയോഗിക്കുന്നു
- ○ ചിലപ്പോൾ ഉപയോഗിക്കുന്നു
- ○ ഡൗൺലോഡ് ചെയ്തു പക്ഷേ ഉപയോഗിക്കുന്നില്ല
- ○ ഇതുവരെ ഡൗൺലോഡ് ചെയ്തിട്ടില്ല

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

ഉപയോഗിക്കുന്നില്ലെങ്കിൽ, 7 ദിവസത്തിനുള്ളിൽ തുടങ്ങാമോ? *:

- ○ അതെ
- ○ ഇല്ല
- ○ പിന്തുണ ആവശ്യമാണ്

ദയവായി ഏതെങ്കിലും ഒരു ഓപ്ഷൻ തിരഞ്ഞെടുക്കുക.

എന്താണ് നിർദേശങ്ങൾ ഉപയോഗിക്കുന്നതിൽ ബുദ്ധിമുട്ടാക്കുന്നത്? *:

- ☐ ഭാഷാ പ്രശ്നം
- ☐ സന്ദേശം വളരെ നീണ്ടതാണ്
- ☐ വൈകി വരുന്നു
- ☐ വിശ്വസനീയമല്ല
- ☐ നെറ്റ്വർക്ക് പ്രശ്നം
- ☐ മാപ്പുകൾ മനസ്സിലാക്കാൻ പ്രയാസമാണ്
- ☐ മറ്റുള്ളവ

Max Choice allowed: 2

പരമാവധി 2 ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക.

Submit

Annexure G: Students and Researchers Consultation Format (English)

This annexure presents the structured discussion and feedback format used for Fisheries and Maritime Students/Researchers. The instrument supported academic, technological, and policy-oriented inputs integrated into the National Marine Risk Intelligence Brief 2026.

Reliance Foundation

WOSC 2026 - Fisheries Student FGD

Basic Participant Profile

Do you agree to share basic details for research planning and event documentation? *:

○ Yes ○ No

Your name will NOT be published.

Participant Type

Which best describes you? *:

○ UG student

○ PG student

○ PhD / Doctoral scholar

○ Research staff / Project staff

○ Faculty / Scientist

○ Other

Please select any one option

Institution Details

College / University / Institute Name *:

Please enter your institute / organization name

State *:

please enter your state name

Coastal region of study / interest *:

Please enter your Coastal region of study

Specialisation *:

○ Fishing Technology

○ Marine Fisheries Resource Management

- ○ Oceanography / Marine Biology
- ○ Fisheries Economics / Marketing
- ○ Post-harvest Technology
- ○ Aquaculture (marine)
- ○ Climate / Disaster / Coastal studies
- ○ Other

Please select any one option

Field Interaction with Marine Fisherfolk *:

- ○ Yes (fieldwork / FGD)
- ○ Yes (internship)
- ○ No (only academic)

Please select any one option

Poorly Solved Marine Fisheries Problems

Which marine fisheries problems are still poorly solved today? *:

- ☐ Weather forecast accuracy Forecasts are not reliable at local fishing levels
- ☐ PFZ relevance Fish location advisories do not match actual catch
- ☐ Offshore safety Lack of tools to assess offshore trip risk
- ☐ Climate change impact Unclear effect of climate change on fish and fishing
- ☐ Cyclone impact prediction Difficult to predict disruption and recovery after cyclones
- ☐ Gear efficiency & sustainability Gear not optimised or eco-friendly; bycatch issues
- ☐ Post-harvest losses Quality loss due to handling, ice, storage gaps
- ☐ Market inefficiency Price variation, middlemen, poor transparency
- ☐ Governance & compliance Rules complex, poorly communicated, unclear enforcement
- ☐ Fisheries data gaps Lack of reliable, continuous catch/effort/harbour data
- ☐ Select all

Max Choice allowed: 4

Please select maximum 4 options based on your studies or field exposure

Research Areas Lacking Data / Models

Which research areas lack good data or models? *:

- ☐ Harbour-level risk models Predict waves/tides/wind congestion and entry/exit hazards
- ☐ Fish stock movement prediction Predict where fish move over time and seasons

- [ ] Climate–catch relationship How climate and weather affect catch and effort
- [ ] Cyclone impact models Predict fishing day loss and livelihood impact by location
- [ ] Human safety & behaviour models Why risk-taking happens; behaviour during hazards
- [ ] Market–quality linkage How handling/quality affects price and demand
- [ ] Multi-source data integration Combine satellite + IMD/INCOIS + harbour + catch + field data
- [ ] Select all

Max Choice allowed: 4

Please select maximum 4 options

Technology Can Help in 3–5 Years

Where can technology realistically help in the next 3–5 years? *:

- [ ] Artificial Intelligence (AI/ML) Prediction, pattern detection, decision support
- [ ] GIS mapping Risk layers, zoning, harbour and route mapping
- [ ] Remote sensing Satellite ocean/weather monitoring (SST, chlorophyll, etc.)
- [ ] GeoAI (Spatial + AI) Location-based risk scoring and hotspot detection
- [ ] Mobile platforms Apps for fishers and agencies
- [ ] Low-bandwidth / offline systems Works even with poor network
- [ ] Decision dashboards Visual tools for planners and administrators
- [ ] Select all

Max Choice allowed: 4

Please select maximum 4 options

Problem Areas Poorly Addressed

Which problems remain poorly solved today? *:

- [ ] Local weather reliability for fishers Local wind/wave reality differs from forecast
- [ ] Sea-state / wave decision tools (harbour go/no-go) No simple harbour-level indicator for entry/exit safety
- [ ] PFZ relevance and trust PFZ advice does not match catch outcomes consistently
- [ ] Cyclone disruption prediction & recovery planning No clear local recovery planning after cyclones
- [ ] Offshore safety & SAR readiness gaps Safety support and rescue readiness is weak
- [ ] Boundary/IMBL risk and communication Awareness tools and communication are insufficient
- [ ] Post-harvest loss & quality drop Ice, handling, storage and grading gaps
- [ ] Market price instability & poor transparency Large daily variation; low fisher bargaining power

☐ Illegal / unsustainable practices (light fishing etc.) Conflicts and ecological impacts not controlled well

☐ Fisheries data gaps (catch/effort, spatial, harbour-level) No standard continuous data streams

☐ Select all

Max Choice allowed: 4

Please select maximum 4 options

Most Urgent Research Gaps

Which research gaps are most urgent? *:

☐ Harbour-level risk models Predict risky conditions at a specific harbour using wind/waves/tides and entry/exit hazards

☐ Micro-forecast validation Check if forecasts match nearshore and fishing ground reality

☐ PFZ performance evaluation Measure if PFZ improves catch or saves fuel in real conditions

☐ Offshore corridor & route optimisation Safer and fuel-efficient routes using wind/waves/currents

☐ Cyclone-linked fisheries risk models How cyclones affect fishing days, harbour damage, livelihood loss by location

☐ Safety readiness & incident modelling Analyse accident patterns and minimum safety kit needs

☐ Communication reliability mapping Where mobile/VHF works or fails; best protocols

☐ Tuna/offshore species value-chain research Quality, icing, grading, buyer linkage and price stability

☐ Governance & compliance behaviour studies Why rules are misunderstood; how to build trust

☐ Fisheries multi-source data integration Combine satellite + IMD/INCOIS + harbour + catch + fisher observations

Max Choice allowed: 4

Please select maximum 4 options based on rank wise (First selection will most urgent)

Tech Mapping for Your Top Gap

For your top research gap, which tech can help? *:

☐ AI/ML (prediction, patterns)

☐ GIS mapping (spatial layers, zoning)

☐ Remote sensing (satellite variables)

☐ GeoAI (spatial + AI scoring)

☐ Mobile platforms (delivery to users)

☐ Low-bandwidth / offline systems

☐ Dashboards for agencies

☐ Select all

Max Choice allowed: 4

Please select maximum 4 options

What Data is Missing Most?

What data is missing most? *:

- [ ] Harbour-level sea condition observations
- [ ] Incident / safety records (near-miss, losses)
- [ ] Catch & effort logs (trip-level)
- [ ] Fuel use and trip distance
- [ ] Market price / quality data
- [ ] Satellite ocean parameters (SST, chlorophyll etc.)
- [ ] Network coverage at sea
- [ ] Boundary / zone clarity datasets
- [ ] Cyclones / strong storms
- [ ] Other

Max Choice allowed: 3

Please select maximum 3 options

Coastal Hazards & Community Impacts

Which hazards are most serious in your coastal region? *:

- [ ] Flooding in harbour/coastal villages
- [ ] Coast erosion
- [ ] Sea water entering wells/land (salty water problem)
- [ ] Heatwaves on coast
- [ ] Tsunami risk awareness
- [ ] Not sure
- [ ] Local early warning (harbour-level)

Max Choice allowed: 3

Please select maximum 3 options

What is most missing today? *:

- ○ Safer harbour planning (entry/exit, shelter)
- ○ Post-disaster support planning for fishers
- ○ Data to estimate losses properly

○ Plastic waste

Please select maximum 1 option

Water Quality, Pollution & Fish Quality

In your study area, which pollution is common? *:

- ☐ Sewage discharge
- ☐ Oil/port pollution
- ☐ Industrial discharge
- ☐ Harmful algae / dirty water blooms
- ☐ Fish kill events
- ☐ Not sure
- ☐ Select all
- ☐ Simple monitoring method near harbours

Max Choice allowed: 2

Please select maximum 2 options

Which research is urgently needed? *:

- ☐ Link between pollution and fish catch/quality
- ☐ Safe waste management models for landing centres
- ☐ Community reporting system (crowd reporting)
- ☐ Harbour go/no-go indicator (green/yellow/red)

Max Choice allowed: 2

Please select maximum 2 options

Winds/Waves/Currents & Fisher Decision Needs

What should be improved for fisher decision-making? *:

- ☐ Short-term wave forecast accuracy
- ☐ Current/wind route guidance for fuel saving
- ☐ Fog/visibility warnings
- ☐ Local language + audio advisories
- ☐ Fishing zones reduced due to restricted areas

Max Choice allowed: 3

Please select maximum 3 options

Ports, Shipping & Coastal Development Impacts

Which issues are common near ports/coastal infrastructure? *:

- [ ] Net damage / accident risk from vessels
- [ ] Dredging affects fish/catch
- [ ] Harbour congestion and safety issues
- [ ] Market chain changes due to port activity
- [ ] Not sure
- [ ] Select all
- [ ] Boundary/IMBL risk and awareness tools

Max Choice allowed: 4

Please select maximum 4 options

Security, Governance & Compliance

Which governance challenge needs study? *:

- [ ] Fair and clear enforcement communication
- [ ] Emergency communication protocols (who to call, how fast)
- [ ] Trust and data privacy concerns (who sees fisher data)
- [ ] WhatsApp information + feedback

Max Choice allowed: 2

Please select maximum 2 options

Low-cost / Tier-3 Friendly Solutions

What kind of solution is most realistic for fishers? *:

- [ ] Voice/IVR advisory system
- [ ] Simple app with offline mode
- [ ] Harbour display board / speaker announcements
- [ ] Local volunteer “sea information support group”
- [ ] Field survey / data collection

Max Choice allowed: 2

Please select maximum 2 options

Which area can you contribute to? *:

- ○ Simple data analysis (Excel)

- ○ GIS mapping (basic)
- ○ App testing and user feedback
- ○ Documentation / report writing

Please select maximum 1 option

Optional Insight

If you had access to better data/tools, what would you research differently? *:

Optional but recommended

Submit

Kerala

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: Kozhikode, Thiruvananthapuram

Academic Institutions:• School of Industrial Fisheries, Cochin University of Science and Technology (CUSAT), Ernakulam•

Kerala University of Fisheries and Ocean Studies (KUFOS), Kannur

West Bengal

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Location: South 24 Parganas

Academic Institution: School of Maritime Studies, The Neotia University, South 24 Parganas

Tamil Nadu

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: Nagapattinam, Ramanathapuram, Thoothukudi, Tirunelveli

Academic Institutions:• Dr. M.G.R Fisheries College, Tamil Nadu Dr. J. Jayalalithaa Fisheries University, Nagapattinam•

Fisheries College & Research Institute, Tamil Nadu Dr. J. Jayalalithaa Fisheries University, Thoothukudi

Goa

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: North Goa, South Goa

Academic Institution: Goa University, North Goa

Odisha

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Location: Astaranga, Puri

Academic Institution: College of Fisheries, Odisha University of Agriculture & Technology, Rangeilunda, Ganjam

Andhra Pradesh

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Location: Kakinada

Academic Institution: Department of Fisheries Engineering, Andhra Pradesh Fisheries University, Nellore

Karnataka

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: Karwar, Uttara Kannada

Academic Institution: Karnataka Veterinary, Animal and Fisheries Sciences University (KVAFSU), Mangalore

Gujarat

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: Veraval, Mangrol, Porbandar

Academic Institution: College of Fisheries Science, Kamdhenu University, Veraval

Maharashtra

From Sea Voices to Science Systems: Field Evidence and Research Partnership

Marine Fisherfolk Locations: Palghar, Ratnagiri, Sindhudurg

Academic Institution: College of fisheries ,shirgaon, Dr. Balasaheb sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri

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