DETAILED REPORT ON THE 4TH STAKEHOLDERS MEETING ON SMALL PELAGIC PURSE SEINE FISHERIES – KARNATAKA STATE FIP & OFFICIAL WEBSITE LAUNCH

Introduction: The 4th Stakeholders Meeting on Small Pelagic Purse Seine Fisheries – Karnataka State Fishery Improvement Program (FIP) and the official launch of the Karnataka State FIP website was successfully conducted on **Saturday, 8th March 2025**, at **Hotel AJ Grand Elite, Mangalore**. The event was hosted by **Yashaswi Fish Meal and Oil Company** and saw the participation of key stakeholders from the fisheries industry, government bodies, and research institutions.

Event Summary: The meeting commenced with a **registration process** at **6:00 PM**, followed by a **welcome address** by **Mr. Ramesh M R (International Aquaculture Consultant)**, setting the stage for discussions on sustainable fishery practices and industry collaboration.

KEY HIGHLIGHTS:

INTRODUCTORY SPEECH:

Speaker: Mr. Udaya Kumar Salian (Managing Director, Yashaswi Fish Meal and Oil Company)

Mr. Udaya Kumar Salian delivered the **introductory speech**, highlighting the **importance of the Fishery Improvement Program (FIP) initiatives** and **active industry participation** in promoting sustainable fisheries.

Key Points Covered:

- **The Journey of Small Pelagic Purse Seine Fisheries – Karnataka State FIP**
    - The **evolution and milestones** of the program over time.
    - The **collective efforts** of fishermen, industry stakeholders, and policymakers in driving sustainability.

- **Significance of FIP in Karnataka's Fisheries Sector:**
    - Ensuring **sustainable fishing practices** and marine resource conservation.
    - Enhancing **global market access** through compliance with international sustainability standards.
    - **Collaboration between stakeholders** (fishers, fishmeal companies, government bodies) as the key to success.

Mr. Salian reinforced the commitment of the industry to **strengthening Karnataka's FIP**, ensuring that it remains **an example of responsible fishery management** while benefiting both the environment and the livelihoods of fishing communities.

OFFICIAL WEBSITE LAUNCH:

Speaker: Shri. Harish Kumar (Additional Director, Department of Fisheries, Govt. of Karnataka)

Shri. Harish Kumar officially **launched the Karnataka State Fishery Improvement Program (FIP) website**, marking a significant step in promoting **digital transparency and accessibility** in fisheries management.

Key Highlights of the Launch:

- **Purpose of the Website:**
  - Provides **comprehensive information** on Karnataka's FIP initiatives.
  - Serves as a **resource hub** for stakeholders, including **fishers, fishmeal companies, policymakers, and researchers**.
  - Offers real-time updates on **fishery assessments, stock status, and sustainability efforts**.
- **Government's Role in Sustainable Fisheries:**
  - The Department of Fisheries is committed to **implementing strong policies** to support responsible fishing.
  - Emphasis on **monitoring, control, and surveillance (MCS)** to combat **Illegal, Unreported, and Unregulated (IUU) fishing**.
  - Strengthening **collaboration between government agencies and industry stakeholders** to ensure Karnataka's fisheries remain sustainable.

The launch of the **Karnataka State FIP website** represents a milestone in **modernizing fishery management** and ensuring that sustainability efforts are **transparent, data-driven, and accessible to all stakeholders**.

PRESIDENTIAL REMARKS:

Shri Pramod Madhwaraj, former Minister for Fisheries, Youth Empowerment, and Sports, Government of Karnataka, shared his valuable insights on policies and initiatives aimed at promoting sustainability in the fisheries sector and enhancing industry welfare. He emphasized the importance of government interventions in ensuring the long-term viability of marine and inland fisheries while addressing challenges faced by fishing communities. Shri Madhwaraj highlighted key policies, including subsidies for modernized fishing equipment, support for

small-scale fishers, and programs designed to improve marine conservation efforts. Additionally, he underscored the role of youth empowerment in the fisheries sector, advocating for skill development programs, financial assistance, and innovative approaches to sustain livelihoods. His remarks provided a comprehensive perspective on the intersection of policy, sustainability, and economic growth in the fisheries industry.

GUEST SPEECH:

Dr. H. N. Anjanayappa, Professor and Dean at the College of Fisheries, Mangalore, delivered an insightful address on the academic contributions towards advancements in the fisheries sector. He highlighted the critical role of research, education, and technological innovations in improving fishery practices, enhancing productivity, and ensuring sustainable resource management. Dr. Anjanayappa emphasized the importance of interdisciplinary collaboration between academia, industry, and policymakers to drive evidence-based decision-making and introduce modern scientific techniques.

He also discussed ongoing research initiatives at the College of Fisheries, focusing on areas such as sustainable aquaculture, marine biodiversity conservation, and the development of eco-friendly fishing techniques. Additionally, he underscored the need for capacity-building programs and higher education opportunities to equip students and professionals with the necessary skills to address emerging challenges in the sector. His speech reinforced the vital role of academia in shaping the future of fisheries through knowledge dissemination, innovation, and community engagement.

STAKEHOLDER MEMBERSHIP REQUESTS:

The meeting included a discussion on the membership requests submitted by M/s Raj Fishmeal and M/s Akash Fishmeal for inclusion in the Fisheries Improvement Program (FIP). These companies, actively engaged in the fishmeal industry, expressed their commitment to sustainable fishing practices and industry best standards.

The formal request letters from Raj Fishmeal and Akash Fishmeal were officially received by Mr. Udaya Kumar Salian, FIP Lead - Small Pelagic Purse Seine Fisheries, Karnataka State

Fishery Improvement Program (FIP), and Dr. Nim, Coordinator - Small Pelagic Purse Seine Fisheries, Karnataka State Fishery Improvement Program (FIP).

This marks a significant step towards strengthening stakeholder participation and promoting responsible fisheries management in Karnataka's small pelagic purse seine sector.

FIP MILESTONE REPORT:

Presented by: Dr. Nim Piewthongngam, Coordinator, Small Pelagic Purse Seine, Karnataka State FIP

Key Highlights:

1. Progress in Fisheries Management & Surveillance

- **Monitoring, Control, and Surveillance (MCS) System:**
    - Discussions held with the **Karnataka Department of Fisheries (DoF)** on controlling **Illegal, Unreported, and Unregulated (IUU) fishing**.

- Measures on **surveillance, enforcement, and compliance** were reviewed in meetings on **July 30, 2024**, and **August 3, 2024**.
- **Status: Ongoing** (Further implementation required).

2. Catch Composition & Stock Assessment

- **Review of Purse Seine Catch (5-Year Data):**
  - Scientific data collected from **CMFRI** to improve assessment accuracy.
  - **Status: Completed** (Used for MarinTrust Version 3 assessment).
- **Stock Assessment Data Collection:**
  - Data gathering initiated; full assessment will be conducted upon reaching the required sample size.
  - **Status: Ongoing** (Mandated by MarinTrust to be conducted every **three years**).

- **Fisheries Management Plan (FMP) Workshop:**
    - Stakeholders participated in discussions to align FIP with **Fisheries Management Plans (FMPs)**.
    - **Status: Ongoing** (Implementation of management measures underway).

3. Impact of Vulnerable Species & Ecosystem Considerations

- **Mauritian Sardinella (S. jussieui) Misidentification:**
    - **CMFRI analysis** found no records of this species in Karnataka waters.
    - **Status: Completed** (Species removed from re-assessment).
- **Endangered, Threatened, and Protected (ETP) Species Management:**
    - **Survey findings:** No reported interactions with ETP species during CMFRI studies.
    - **Awareness Program:**
        - Karnataka DoF initiated awareness campaigns.
        - Discussions on a **reward system** for reporting ETP species.
        - Organized an **awareness event for Whale Shark conservation**.
    - **Status: Ongoing** (Short report on ETP interactions expected by June 2025).

Conclusion:

The report showcases **significant progress in fisheries monitoring, stock assessment, species management, and conservation efforts** under Karnataka's **Fisheries Improvement Program (FIP)**. While some **milestones are completed**, ongoing actions are focused on **ETP species management, FMP implementation, and stock data collection** to meet **MarinTrust Version 3 requirements**.

REQUIREMENT OF FIP/SUSTAINABILITY IN GLOBAL SEAFOOD CHAIN:

Presented by: Mr. Sarabpreet Singh (General Manager, Devi Seafoods)

Key Highlights:

1. **Overview of FIP:**

A **Fishery Improvement Program (FIP)** is a structured **step-by-step plan** aimed at making fisheries more **sustainable**. It involves collaboration among **fishermen, suppliers, governments, and stakeholders** to meet sustainability standards and market demands.

2. **Why is FIP Important?**

- **Addressing Declining Fish Stocks:**
    - Overfishing and habitat destruction threaten fish populations.
- **Better Market Access:**

- Sustainable fishing practices attract more buyers.

- **Improved Livelihoods:**
  - Maintaining fish stocks ensures long-term income stability for fishing communities.
- **Regulatory Compliance:**
  - Helps fishermen adhere to **government and international fishing regulations**.

3. **How Does a FIP Work?**

- **Engages multiple stakeholders** to implement sustainability measures.
- **Monitors fishery performance** and improves practices over time.
- **Ensures compliance** with environmental and market sustainability standards.

4. **Role of Stakeholders in FIP:**

- Governments, research institutions, NGOs, and seafood companies **collaborate to support sustainable fisheries**.
- Fishermen play a critical role by adopting sustainable fishing techniques and **following best practices**.

Conclusion:

The **FIP framework** is essential for ensuring **long-term fishery sustainability, improving market access, and protecting marine ecosystems**. Stakeholder engagement is crucial in implementing **effective fishery management policies**.

ROLE OF SEAFOOD TASK FORCE (STF) IN THE SUSTAINABLE SUPPLY CHAIN:

Mr. AB Jain (Programme Manager, STF) provided an in-depth overview of STF's pivotal role in promoting sustainability across the seafood supply chain. He emphasized STF's collaborative approach, which brings together industry stakeholders, including seafood

processors, suppliers, retailers, and policymakers, to address environmental and social challenges in fisheries.

Mr. Jain highlighted key initiatives undertaken by STF, such as promoting responsible fishing practices, reducing illegal, unreported, and unregulated (IUU) fishing, and ensuring compliance with ethical labor standards. He discussed how STF works closely with seafood companies, regulatory bodies, and certification agencies to enhance transparency and traceability within seafood supply chains.

Furthermore, he underscored the importance of industry accountability, stressing the need for sustainable sourcing, improved fisheries management, and community engagement. Through these efforts, STF continues to play a crucial role in fostering a resilient and ethical seafood industry while safeguarding marine ecosystems for future generations.

STOCK ASSESSMENT & CATCH COMPOSITION IN PURSE SEINE FISHERY:

Presented by: Dr. Rajesh K. M., Principal Scientist- ICAR-Central Marine Fisheries Research Institute, Mangalore Regional Centre

Key Topics Covered:

1. **Data Collection and Catch Composition Analysis**
    - Data collected from **91 major and minor landing centers across five fishing harbors in Karnataka**.
    - Utilization of **stratified multi-stage random sampling** for accurate landing data.
    - Use of **electronic tablets** and a **web-based system** for real-time data entry and retrieval.

2. **Total Marine Landings & Purse Seine Contribution**
    - Purse seine fisheries contribute approximately **26%** of total fish landings in Karnataka.
    - Major fishing methods: **Trawls (71%)**, **Purse Seines (26%)**, **Others (3%)**.
3. **Species Composition in Purse Seine Fisheries**
    - Dominant species: **Oil Sardine (35.8%)**, **Indian Mackerel (34.0%)**, **Scads (10.2%)**, **Tunas (8.2%)**.
    - **88.2% of purse seine catch comprises four species** (Oil Sardine, Indian Mackerel, Scads, and Tunas).
4. **Stock Assessment of Indian Mackerel**
    - **Ideal fishing size: 17.5 cm** for sustainable stock utilization.
    - **Fishing mortality should be optimized** between **1.5 to 2.0** to maintain stock sustainability.
    - **Spawning stock biomass** recorded at **67.5%**, ensuring replenishment.
5. **Species Diversity and Fishing Areas in Karnataka**
    - **60 species identified** as key contributors to the fishery.
    - **November** marked the highest species diversity.
    - **Purse seines operate at depths up to 50m**, whereas **trawl nets operate up to 100m**.
6. **Corporate Activities & Conservation Efforts**
    - **Fishermen felicitated** for the **release of a whale shark** caught accidentally.
    - **International Whale Shark Day Awareness Program** (30th August 2024, Malpe).
    - **Walkathon (24th September 2024)** to raise awareness about marine conservation.
7. **Potential of Mesopelagic Fisheries in India's EEZ**
    - **Exploration event (May 2024)** by ICAR-CMFRI and Yashaswi Fish Meal and Oil Company.

- **1.7 million metric tons (mmt)** of mesopelagic fish resources identified as an alternative source for **nutraceuticals & pharmaceuticals**.
- Successful **trial harvest** encouraged fishermen to target **20-30 tons in future expeditions**.

Conclusion:

The presentation emphasized **sustainable fishing practices, stock assessment, species diversity, conservation initiatives, and emerging opportunities in mesopelagic fisheries**. Data-driven approaches and technology integration were highlighted as crucial for effective fishery management.

ROLE OF SEA=MC2 IN CONSERVATION OF ETP SPECIES:

Presented by: Dr. Shivakumar Magada, Director General-SEA=MC2 - Arabian Sea Fisheries Management Coordination Committee

Key Highlights:

1. Introduction to SEA=MC2

- **Registered under Karnataka Societies Registration Act (1960)** for fisheries management.
- Works on **sustainable fisheries management, policy advocacy, and conservation efforts** in the Arabian Sea.
- Aims to **combat Illegal, Unreported, and Unregulated (IUU) fishing** and **develop fisheries research initiatives**.

2. Objectives of SEA=MC2

- **Sustainable Fisheries Management:** Policies for protecting fish populations and marine ecosystems.
- **Regulatory Compliance & Policy Advocacy:** Coordinating with international bodies to enforce fishing regulations.
- **Fisheries Research Vessel:** Proposed research vessel through crowdfunding for **stock assessment, pollution research, and ecosystem monitoring**.

- **Fisheries Improvement Program (FIP):** Involves multiple stakeholders, including **fishers, seafood industries, and conservation organizations**, to ensure sustainability.
- **Boat Certification:** Certifying **fishing boats, nets, and mariculture farms** to promote responsible fishing.
- **Data Collection & Research:** Scientific studies on **fish stocks, ecosystem health, and fishing impacts**.
- **Habitat Protection:** Safeguarding **mangroves, breeding grounds, and critical marine habitats**.
- **Stakeholder Collaboration & Capacity Building:** Enhancing skills of local agencies and communities for **better fisheries management**.
- **Economic Development:** Supporting **sustainable fishing practices** to benefit fishing communities.
- **Education & Awareness:** Organizing **conferences, webinars, and workshops** on marine conservation.
- **Emergency Response:** Developing strategies for responding to **oil spills, climate change impacts, and environmental disasters**.

3. Marine Endangered, Threatened, and Protected (ETP) Species

- **ETP species** include those listed under **national and international conservation laws**.
- India prioritizes protection for species such as:
    - **Marine Turtles:** Olive Ridley, Green, Hawksbill, Loggerhead, and Leatherback.
    - **Marine Mammals:** Humpback Whale, Dugong.
    - **Sharks & Rays:** 63% decline in shark populations in the last 75 years.
    - **Whale Shark:** Recently included in **Schedule I of India's Wildlife (Protection) Act (1972)**, making its capture illegal.

4. Conservation Strategies

- **Shark and Ray Protection:** Essential for regulating marine food chains.
- **Whale Shark Conservation:** Raising awareness about illegal hunting and protecting breeding grounds.
- **Sea Cucumber & Ambergris Protection:** Preventing illegal harvesting and trade.

5. Global Collaboration & Future Plans

- Partnering with **government agencies, research institutions, and conservation groups** to improve **marine biodiversity protection**.
- Developing **traceability systems** for sustainable fishing and **advocating for stronger laws** against illegal fishing.

Conclusion:

The presentation emphasized **SEA=MC2's efforts in fisheries management, habitat conservation, and ETP species protection**. It highlighted **the need for stronger policies, community participation, and scientific research** to ensure the long-term sustainability of marine resources.

FISHERY ACTION PLANS AS PER MARINTRUST V3.0:

Presented by: Mod Talawat, Technical Advisor

Key Focus Areas:

The Fishery Action Plan, based on **MarinTrust 3.0**, focuses on **three critical areas**:

1. **Management** – Regulatory framework, enforcement, and compliance.
2. **Catch (Species)** – Target and non-target species management.
3. **Ecosystem Impact** – Effects on Endangered, Threatened, and Protected (ETP) species, habitat, and the broader ecosystem.

1. Management & Compliance

- Surveillance, Control, and Enforcement mechanisms are in place.
- Monitoring and patrols are carried out to prevent illegal fishing.
- Traceability systems (paper-based or electronic) ensure catch reporting and vessel monitoring.

Actions:

✓ Reports on monitoring, patrol frequency, and enforcement effectiveness.
✓ List of illegal fishing activities (e.g., banned zones, seasonal closures, unlicensed gear).
✓ Development of an advanced traceability system for improved regulation.

2. Catch (Species) Management

- **95% of catch** comes from key species (Indian Mackerel, Indian Oil Sardine, Scads, Tuna, etc.).
- **5% of catch** comprises non-target species (Horse Mackerel, Ribbonfish, etc.).

Actions:

✓ Continue stock assessments for key species.

✓ Collect data on **fishing mortality, biomass, and reference points** to guide management decisions.

✓ Study species productivity factors (age, fecundity, maturity size) for better conservation planning.

3. Ecosystem Impact & Sustainability Measures

ETP (Endangered, Threatened, and Protected) Species

- Fishery interactions with ETP species are recorded and analyzed.
- The impact assessment ensures minimal negative effects on ETP populations.

Actions:

✓ Continue recording interactions with ETP species.

✓ Implement **rescue processes** for accidental captures.

✓ Evaluate the effectiveness of existing **ETP management strategies**.

Habitat Impact

- Assessment of fishery effects on marine habitats.
- If **no significant negative impact** is found, **no additional measures** are required.

Actions:

✓ Gather data on **seafloor depth, purse seine net depth, and fishing grounds**.

✓ Link fishing operations with **location tracking (logbooks, VMS)** for better monitoring.

Ecosystem-Wide Impact

- Current data **does not indicate** major negative effects on the ecosystem.
- Ongoing evaluations ensure that **removal of small pelagics does not disrupt marine food chains**.

Actions:

✓ Update the **Ecopath & Ecosim** models for Southwest India to track ecosystem health.

✓ Develop recommendations for inclusion in **Fishery Management Plans (FMPs)**.

Conclusion:

The Fishery Action Plan under **MarinTrust 3.0** is structured to **enhance monitoring, improve species-specific management, and mitigate ecosystem impacts**. The plan emphasizes **sustainability, scientific assessments, and compliance with global seafood supply chain requirements**.

INTERACTIVE Q&A SESSION:

The session provided an open platform for participants to engage with panelists, fostering a dynamic discussion on key issues related to sustainability, regulatory compliance, and the broader impact of industry practices. Attendees, including industry stakeholders,

researchers, and policymakers, posed insightful questions addressing challenges in fisheries management, sustainable sourcing, and the implementation of responsible fishing practices.




Panelists offered expert perspectives on pressing concerns such as marine conservation, traceability in seafood supply chains, policy frameworks, and the role of technology in sustainable fisheries. Discussions also covered the economic and social implications of sustainability initiatives, ensuring that both environmental goals and the welfare of fishing communities were considered.

This interactive exchange allowed for a deeper understanding of best practices and emerging trends, reinforcing the collective commitment toward a responsible and resilient fisheries sector.

VOTE OF THANKS:

Mr. Chethan Kumar Suvarna, Senior Plant Manager at Yashaswi Fish Meal and Oil Company – Branch 1, delivered the Vote of Thanks, expressing heartfelt gratitude to all stakeholders and participants for their valuable contributions to the event.

He extended his appreciation to the distinguished speakers, including Shri Pramod Madhwaraj, Dr. H. N. Anjanayappa, Mr. A.B. Jain, and other panelists, for sharing their insights on sustainable fisheries, industry best practices, and policy frameworks. He also acknowledged the active participation of industry representatives, researchers, policymakers, and members of the Fisheries Improvement Program (FIP) for their engagement in meaningful discussions.

Mr. Suvarna highlighted the importance of collective efforts in promoting responsible fisheries management, strengthening industry collaboration, and ensuring long-term sustainability. He also thanked the organizing team, sponsors, and support staff for their dedication in making the event a success.

Concluding his remarks, he emphasized the need for continued cooperation and dialogue among all stakeholders to drive positive change in the fisheries sector.

CONCLUSION:

The event concluded with a **networking dinner** at **8:30 PM**, allowing attendees to discuss collaboration opportunities. The meeting successfully fostered discussions on improving sustainable fisheries, strengthening stakeholder engagement, and promoting Karnataka's FIP initiatives on a global platform.