

### **A Quadrimester Newsletter**

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Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) is a Regional Fisheries Advisory Body (RFAB) for promoting sustainable fisheries in the Bay of Bengal and associated regions. Its current members are Bangladesh, India, the Maldives, and Sri Lanka. It serves as the think tank on transboundary and contemporary national issues of the member countries concerning fisheries management.





**Dr. P. Krishnan**Director, BOBP-IGO



#### **New Dawn on Regional Cooperation to Combat IUU Fishing**

A united front emerges to safeguard the Bay of Bengal's precious marine living resources for generations to come. Endorsed by key member countries and aligned with global frameworks, the BOB RPOA-IUU provides a roadmap for collaborative action against illegal fishing, ensuring sustainable fisheries management and protecting coastal livelihoods.

February 21, 2025, marks a watershed moment in the governance of marine fisheries in the Bay of Bengal. On this day, member countries of the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) convened in Lankanfinolhu, a scenic island in the Maldives, to formally endorse the Bay of Bengal Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (BOB RPOA-IUU). That this milestone coincided with International Mother Language Day added symbolic significance, highlighting the importance of a common regional voice—one that speaks to the values of sustainability, responsibility, and solidarity in managing the shared marine ecosystems of the Bay of Bengal.

Marine fisheries is the bedrock of the coastal economy in the BOB, shaped by traditions and trysts with the sea. However, the very foundation of marine fisheries—sustainability of fish stocks and just remuneration for fishers—is increasingly under threat from illegal, unreported, and unregulated (IUU) fishing. IUU fishing is a complex and layered issue, rooted in legal and administrative

shortcomings, distorted incentives, and myopic extraction strategies. While initially identified as a fisheries management concern, IUU fishing has, over time, revealed deeper linkages to smuggling, arms trafficking, illegal migration, and even terrorist activities. To fully grasp the implications of these developments, a useful lens is the German philosophical concept of Gemeinwohlgefährdung-the endangerment of the common good. Though not originally coined in the context of fisheries, this concept aptly captures the current reality: IUU fishing is no longer a sector-specific issue but a broader societal threat that undermines governance, compromises security, and jeopardizes the collective well-being of fisheries and coastal communities.

### The BOB RPOA-IUU: A Framework for Collaboration

RPOA-IUU: A seven-year regional plan to combat IUU fishing through collaborative action, policy harmonization, and strengthened monitoring in the Bay of Bengal.

The BOB RPOA-IUU represents a pivotal step in the fight against IUU

fishing in the BOB. This voluntary instrument was developed through a consultative process involving member countries with technical assistance from the BOBP-IGO and FAO. It is aligned with key international frameworks, including the FAO Code of Conduct for Responsible Fisheries (CCRF) and the International Plan of Action to Prevent, Deter, and Eliminate IUU Fishing (IPOA-IUU). Its spans a seven-year period beginning in 2025, with periodical reviews to reflect changes in the sector and meet capacity development needs. All the member countries have deposited their instrument of endorsement and have expressed their commitment for the implementation of RPOA-IUU.

### Implementing the RPOA-IUU: Key Actions and Strategies

The successful implementation of the RPOA-IUU hinges on a multifaceted approach involving several key actions and strategies. These include:

- Establishing a regional vessel registry compatible with the FAO Global Record.
- Developing joint inspection protocols for transboundary enforcement.

- Expanding Vessel Monitoring System (VMS) and electronic catch documentation,
- Aligning policies and harmonizing MCS measures.
- Promoting regional cooperation in information sharing and joint patrolling.
- Building capacity for implementing national plans (NPOA-IUU).
- Strengthening port state measures to prevent illegally caught fish from entering the supply chain.

BOBP-IGO, acting as the Secretariat, is actively collaborating with organizations such as FAO, SEAFDEC, and UNODC to provide technical assistance, conduct training programs, and develop standard operating protocols (SOPs) for joint monitoring, inspection, and information sharing.

We have also taken note of the several innovations being piloted in the region to enhance the detection and deterrence of IUU fishing activities, including the use of the Al-powered tools for vessel tracking; Machine learning algorithms for flagging possible IUU transactions; Blockchain-based catch documentation for supply chain transparency; Drones for remote area surveillance; and Automated risk assessment models to predict and prevent illegal fishing activity.

BOBP-IGO: Catalysing regional cooperation by serving as a collaborative interface that translates policy into action to address IUU fishing in the Bay of Bengal.

The Plan seeks to leverage modern technologies such as AI-powered risk assessments, remote sensing, and automated compliance monitoring, empowering coastal communities as central actors in fisheries management and ocean governance. This is essential to support an organic and inclusive transition. Although the Plan is voluntary, it is expected to gradually close enforcement gaps and strengthen real-time data sharing among national agencies.

### Leveraging Partnerships and Projects

BOBP-IGO recognizes that combating IUU fishing requires strong partnerships with international agencies and is leveraging ongoing projects to support the implementation of the RPOA-IUU. The Bay of Bengal Large Marine Ecosystem Project Phase II (BOBLME-II), funded by GEF and NORAD, aims to reduce IUU fishing by 20 percent in the BOBLME region by 2028, compared to 2015 levels. It supports the RPOA-IUU through technical assessments, targeted studies, and capacitybuilding programs, including gender mainstreaming initiatives. In

addition, BOBP-IGO is collaborating with the Allen Institute for AI (AI2) to utilize its Skylight web portal for monitoring fishing activities in the region. BOBP-IGO has also partnered with the UNODC to deliver regular training programmes on Fishing Vessel Boarding Operations, and is working on the development of a Standard Operating Protocol. These efforts are complemented by support for establishing the IUU Secretariat within BOBP-IGO.

#### A Shared Vision for Sustainable Fisheries

BOB RPOA-IUU holds the promise of a new dawn for regional cooperation in combating IUU fishing in the Bay of Bengal. By working together, the member countries of BOBP-IGO can protect their shared marine resources, safeguard the livelihoods of coastal communities, and ensure the longterm sustainability of the region's fisheries. BOBP-IGO is committed to working with its member countries and partners to realize this vision and create a brighter future for the Bay of Bengal. This collaborative effort will pave the way for a more sustainable ocean, ensuring that its resources remain available for generations to come.

The success of the RPOA-IUU will rely on sustained political commitment, capacity-building for enforcement agencies, and continuous investment in MCS infrastructure



### Salient Programmes/Events

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#### Marine Fisheries Stakeholders in India Explore Port State Measures

As part of India's broader efforts to strengthen fisheries governance and combat Illegal, Unreported, and Unregulated (IUU) fishing, a National Sensitization Workshop on the Agreement on Port State Measures to Curb IUU Fishing (PSMA) was held in Kochi from 10-11 February 2025. Organized by the Department of Fisheries in collaboration with the FAO and the BOBP-IGO, the workshop kickstarted a larger national program aimed at implementing the PSMA.

The PSMA is the first legally binding international agreement aimed at denying port access to vessels involved in IUU fishing, thereby discouraging illicit seafood trade and promoting sustainable fishing practices. While India actively supported the development process of the PSMA, it has not yet become a party to the PSMA. BOBP-IGO is supporting the Government of India through policy and legal review as well as stakeholder engagement to help accelerate the process of accession to the PSMA.

The workshop was attended by international experts, government officials, researchers, industry representatives, and fisher community organizations. Dr. Matthew Camilleri and Ms. Alicia Mosteiro Cabanelas from FAO, along with Dr. Mohammed Koya, Fisheries Development Commissioner, Government of India, Dr. M. Karthikeyan, Director, MPEDA, and Dr. P. Krishnan, Director, BOBP-IGO, steered discussions on strengthening India's monitoring, control, and surveillance (MCS) mechanisms through PSMA. More than 40 participants, including fisheries officers from 11 states and 2 Union Territories, scientists, fisher organizations, INGOs, and traders, took part in the workshop.

The workshop highlighte BOBP-IGO's role in regional cooperation, capacity building, and policy advocacy, ensuring that India's accession to PSMA is well-informed by global best practices and regional priorities. Discussions centered on strengthening port-based enforcement, improving seafood traceability, and fostering South Asian collaboration to effectively combat







IUU fishing. The key takeaways from the workshop will shape India's long-term fisheries governance strategy and inform the decision-making in the high-level meeting in New Delhi, where policymakers will assess India's roadmap for PSMA accession.

#### Postgraduate Diploma in Fisheries Law & Policy (PGDFLP) Launched

As part of its ongoing efforts to strengthen fisheries governance and capacity building in the Bay of Bengal region, BOBP-IGO, in collaboration with the Tamil Nadu National Law University (TNNLU), officially launched a new Postgraduate Diploma in Fisheries Law and Policy during the National Sensitization Workshop on the PSMA in Kochi from (Feb 10-11, 2025).

This specialized diploma course is designed to equip professionals, policymakers, and researchers with an in-depth understanding of fisheries law and policy. It covers key aspects including international agreements, national regulations, fisheries management, and ocean governance. By integrating legal, economic, and environmental dimensions, the program aims to bridge critical knowledge gaps and support more effective fisheries governance in India, and the broader the Bay of Bengal region.

The launch event drew participation from government officials, legal scholars, fisheries researchers, and industry stakeholders, underscoring the growing demand for structured, interdisciplinary training in fisheries law and policy. The initiative aligns with BOBP-IGO's broader mandate to promote capacity building and regional



cooperation, particularly in advancing India's efforts toward PSMA implementation and the fight against IUU fishing.

Speaking at the event, Dr. P. Krishnan, Director of BOBP-IGO, emphasized the importance of robust legal and policy frameworks in ensuring sustainable fisheries management, and highlighted the diploma program as a step forward in preparing the next generation of fisheries professionals. Prof. Dr. Amirthalingam of TNNLU stressed the role of legal education in addressing evolving fisheries challenges and in promoting compliance with national and international legal instruments.

#### FAO-BOBP-IGO Stall at 14AFAF Expo

Mr. Rajiv Ranjan Singh, Hon'ble Minister of Fisheries, Animal Husbandry and Dairying, Govt. of India, along with Dr. Abhilaksh Likhi, IAS, Secretary (Fisheries), Dept. of Fisheries, Govt. of India, Dr. J. K. Jena, DDG (Fisheries), Indian Council of Agricultural Research and other senior officials from Government of India visited the BOBP Stall set up at the Expo organized on the sidelines of the 14th Asian Fisheries and Aquaculture Forum (14AFAF) The event was held at the National Agricultural Science Complex (NASC), New Delhi, from 12 -15 February 2025.

The Director of BOBP-IGO presented an overview of the organization's key initiatives focused on regional cooperation, data-driven fisheries management, and various partnership programs undertaken in collaboration with the FAO and the Government of India.

Dr. Matthew Camilleri and Dr. Alicia Mosteiro Cabanelas from FAO Rome, along with Dr. Rishi Sharma and Ms. Angela Lentisco from FAO-RAP, Bangkok, were also present at the BOBP–FAO joint exhibition to engage with visitors and stakeholders.

The 14th Asian Fisheries and Aquaculture Forum (14AFAF) is a premier scientific event organized every three years by the Asian Fisheries Society (AFS). It serves as a platform to examine global trends and address emerging challenges in the fisheries and aquaculture sectors. This year's theme, "Greening the Blue Growth in Asia-Pacific," emphasizes sustainable development and ecological stewardship in the region's aquatic food systems.



#### High-level Meeting on PSMA held at New Delhi

The high-level meeting on the Agreement on Post State Measures (PSMA) to assess the readiness of India to ratify the agreement was jointly organized by FAO and BOBP-IGO on February 13, 2025 at Krishi Bhavan, New Delhi.

The meeting was chaired by Secretary, Department of Fisheries and was attended by senior officials from key ministries and agencies including shipping, commerce, external affairs, navy and coast guard. Following the detailed presentation by Dr. Matthew Camilleri from FAO the delegation engaged in discussions on the issues and strategic pathways for India's potential accession to the PSMA.

The Secretary (Fisheries) and other Senior Officials reaffirmed India's strong commitment to combating IUU fishing, citing initiatives such as National Vessel Communication System and the Pradhan Mantri Matsya Sampada Yojana. Dr. Krishnan, Director, BOBP presented the key outcomes of the National Workshop held in Kochi highlightiing the benefits, processes, and practical implications of PSMA implementation.



Discussions during the meeting covered critical issues including port access, inspection protocols, legal considerations, and distinctions between the PSMA and Port State Control (PSC) mechanisms.

### **Key Recommendations and Way Forward:**

**Designation of National Focal Point (NFP):** Joint Secretary
(Marine) to serve as the nodal point for coordination with FAO and for managing GIES.

Formation of an Inter-Ministerial Steering Committee: To oversee the development of a National Action Plan, ensure coordination, and engage stakeholders.

**Notification of Ports:** Adoption of a phased approach with initial designation of two ports (one each on East and West coasts) under PSMA.

Capacity Assessment and Training: Evaluate readiness across ports and stakeholders; launch targeted training programs for enforcement agencies.

Legal and Regulatory Alignment: Conduct legal review and propose amendments to national legislation, notably the Maritime Zones of India Act (1981), to incorporate PSMA obligations.

#### Students from the College of Fisheries, Kishanganj visit BOBP-IGO

On 25 March 2025, twenty-two final-year students from the College of Fisheries, Bihar Animal Sciences University, Kishangani, visited BOBP-IGO. Dr. E. Vivekanandan and Mr. Rajdeep Mukherjee, on behalf of the Director, BOBP-IGO, welcomed the group and introduced them to the organisation's key activities, highlighting shared fish stock management and the vital role of Regional Fisheries Bodies. The students shared their aspirations and research interest in undertaking myriad research activities, espousing a promising future for sustainable fisheries development.



#### XIII Governing Council Meeting held in Maldives



The 13th Meeting of the Governing Council of the BOBP-IGO was successfully convened at Lankanfinolhu, Maldives, on 21 February 2025. Senior-level representatives from Bangladesh, India, Sri Lanka, and the Maldives, along with delegates from FAO, SEAFDEC and UNODC, participated in the meeting. The Governing Council is the highest decision-making body of the BOBP-IGO. It charting the policies, vision and work programmes of the Organisation during the annual meeting.

India and Sri Lanka were elected as the Chair and Vice-Chair, respectively, for the 13th Governing Council. Leading the Indian delegation, Dr. Abhilaksh Likhi, Secretary, Department of Fisheries, Government of India, reaffirmed India's strong commitment to enhancing regional cooperation in marine fisheries,

knowledge exchange, and sustainable fisheries development in the Bay of Bengal. He also assured that the Government of India would extend full support to the Organisation in achieving its objectives.

Dr. P. Krishnan, Director, BOBP-IGO, presented a detailed account of the Organisation's activities and accomplishments during 2023–24, along with proposals and plans for the coming years. Member countries commended the Organisation's progress despite operational challenges and highlighted the need to enhance support for its continued engagement in emerging regional priorities.

Observers from FAO, SEAFDEC and UNODC shared on their collaboration with BOBP-IGO and appreciated the support received, underscoring the strength of the collaborative approach.



#### **BOBP-IGO Marks its 22nd Foundation Day!**



Established on 26 April 2003 from the erstwhile BOBP, the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) celebrated 22 years of dedicated service to sustainable fisheries and coastal development.

BOBP-IGO Staff and their families gathered to honour the Organisation's remarkable journey, cherishing its rich contributions and the lasting bonds built over the years. Dr. P. Krishnan, Director, expressed his gratitude to the team and their families for their unwavering solidarity, dedication, and enduring support.

The evening program featured a special dinner and an art exhibition by Dr. S. Jayaraj — "Sand & Sea: An Abstract Journey through Landscapes and Seascapes" at the Tangerine Restaurant.

Padma Shri Dr. Thota Tharani, renowned artist, graced the occasion as the special guest. He congratulated the BOBP-IGO team and wished them for a successful year ahead.





### **BOBLME Project Updates**



# **Towards Shared Prosperity: BOBP-IGO Taking Forward the BOBLME Project**



The first few months of 2025 have been marked by significant progress and collaborative efforts under the Bay of Bengal Large Marine Ecosystem (BOBLME) Project Phase II. Spearheaded by the BOBP-IGO, these initiatives underscore a strong regional commitment to sustainable marine resource management, focusing on the crucial Ecosystem Approach to Fisheries Management (EAFM) and combating illegal fishing activities.

#### **Policymakers Discuss the Future of Small-Scale Fisheries**

Policymakers from Bangladesh, India, Maldives, and Sri Lanka, along with representatives from regional and international organizations and experts, congregated in Lankanfinolhu, Maldives, to address the challenges of drudgery in small-scale fisheries and explore whether an ecosystem approach can ensure the sustainability of the sector.

The high-level meeting titled "Policy Guidance for Mainstreaming the Ecosystem Approach to Fisheries Management (EAFM) in Small-Scale Fisheries," was organized by the Ministry of Fisheries & Ocean Resources, Government of the Maldives, and the







BOBP-IGO under the BOBLME-II Project. It was held from 20 - 22 February 2025.

Mr. Ahmed Shiyam, Minister of Fisheries & Ocean Resources, Government of the Maldives, inaugurated the meeting in the presence of Dr. Abhilaksh Likhi, Secretary, Department of Fisheries, Government of India; Mr. Sampath Manthrinayake, Secretary, Ministry of Fisheries, Aquatic and Ocean Resources, Sri Lanka; Mr. Md. Imam Uddin Kabir, Additional Secretary, Ministry of Fisheries and Livestock, Government of Bangladesh; and Dr. Hussain Sinan, Director General, Ministry of Fisheries & Ocean Resources, Government of the Maldives. Representatives from FAO, UNODC, and ICSF, and other dignitaries also participated. The inaugural ceremony was attended by the High Commissioners of India, Bangladesh, and Sri Lanka to the Maldives, underscoring regional solidarity on the issue.

The Director, BOBP-IGO, welcomed the delegates and set the stage with a presentation on the evolution of the

small-scale fisheries sector in the region, inter- and intra-sectoral challenges, and the need for greater policy attention. He also emphasized the necessity of a structured plan for managing fishing capacity in small-scale fisheries, complementing the EAFM framework—an idea that received profound appreciation from the participants. The meeting concluded with an exposition on tuna fisheries in the Maldives.

# Advancing EAFM Implementation: Focus on Pichavaram Mangroves

March and April saw focused efforts on implementing EAFM at a specific site in India: the ecologically significant Pichavaram Mangrove Ecosystem in Tamil Nadu. This site was selected as a Fisheries Management Unit (FMU) under the BOBLME II project following a rigorous selection process.



## BOBP and FAO-RAP Team Visited Pichavaram

The BOBP-IGO Team comprising Dr. P. Krishnan, Dr. E. Vivekanandan, Dr S. Jayaraj and Dr. S. Anisha visited Pichavaram mangroves, Chidambaram, a candidate Fisheries Management Unit for implementing ecosystem approach to fisheries management (EAFM) under BOBLME II project.

The FAO RAP team led by Dr. Rishi Sharma, Lead Technical Officer, BOBLME-II, along with Mr. Chongguang Liao, Budget Holder, and Mr. Justin Giannolo, accompanied the BOBP-IGO team.



The Team interacted with TN Fisheries Department officials, women SHGs, researchers from Annamalai University and other stakeholders on the potential interventions to be implemented on the site for sustainable fisheries management.

The FAO team was carrying out an Implementation Support Mission to BOBP-IGO toward the execution of the BOBLME-II Project.



### **BOBLME Consultative Workshop on Preparing EAFM Plan** in Pichavaram

BOBP-IGO initiated the process to set up a Fisheries Management Unit (FMU) in Pichavaram Mangrove Ecosystem, Tamil Nadu, India, under the Bay of Bengal Large Marine Ecosystem (BOBLME) Project. BOBP-IGO is piloting the Ecosystem Approach to Fisheries Management (EAFM) in the region and plan to set up two FMUs in each member country: Bangladesh, India, Maldives and Sri Lanka based on EAFM principles and processes.

The consultative Workshop was attended by experts from ICAR-Central Marine Fisheries Research Institute (CMFRI), Centre of Advanced Study in Marine Biology, Annamalai University, and institutional stakeholders, including Department of Forests and Department of Fisheries,

Government of Tamil Nadu and M. S. Swaminathan Research Foundation (MSSRF) to review the current status of resources and management arrangements in the proposed FMU.

Dr. P. Krishnan, Director, BOBP-IGO, welcomed the participants and comoderated the workshop along with Dr. E. Vivekanandan, Senior Scientific Consultant, BOBLME Project. Dr. S. T. Balasubramanian, noted academician and renowned expert of Pichavaram Mangrove Ecosystem.





#### Key Takeaways from Pichavaram Consultative Workshop - April 11, 2025, Chennai

Site Suitability:	Pichavaram is an ideal, though complex, site for EAFM due to its ecological significance (Reserve Forest, Ramsar site) and the presence of marginalized fishing/tribal communities facing challenges.
Immediate Needs:	Improvements in resource management, livelihood enhancement (e.g., scaling up ornamental fish/polychaete culture), capacity building, and vocational training are crucial.
Governance:	Inclusive co-management involving all stakeholder groups is essential to address conflicts and ensure equitable governance.
Next Steps:	Develop a detailed EAFM scoping report and plan, leverage co-financing opportunities, and emphasize coordinated stakeholder action and scientific assessments

#### Strengthening Regional Capacity to Combat Illegal Fishing

Parallel to the EAFM initiatives, March also featured significant activities aimed at strengthening regional capacity to address Illegal, Unreported, and Unregulated (IUU) fishing. In collaboration with United Nations Office on Drugs and Crime (UNODC) BOBP-IGO organized several programmes to take the agenda forward.

### UNODC/BOBP-IGO Regional Training Programme on FVBO in Trincomalee, Sri Lanka

The Regional Training Programme on Fishing Vessel Boarding Operations (FVBO) for Maritime Law Enforcement Officers in the Eastern Indian Ocean Region was held from 06 January to 17 January 2025 in Trincomalee, Sri Lanka.

Organized by the Global Maritime Crime Programme of the United Nations Office on Drugs and Crime (UNODC) and the BOBP-IGO, this FVBO course focused on combating fisheries-related crimes through enhanced operational skills, legal knowledge, and practical exercises.

The training emphasized,

- Risk assessments for compliant & non-compliant boardings;
- Safe working procedures & proper boarding techniques; and
- Enforcing fisheries laws to ensure marine sustainability.

Twenty-three officers from the Navy, Coast Guard, Police, and Fisheries Departments of Bangladesh, India, Maldives, and Sri Lanka participated in this training.





# Discussion on International Fisheries Governance Frameworks in UNODC-BOBP FVBO Training Programme

In the second week of the UNODC and BOBP-IGO Training programme on "Fishing Vessel Boarding Operation", the BOBP-IGO team joined the event at Sober Island Resort in Trincomalee, Sri Lanka.

Dr. P. Krishnan and Mr. R Mukherjee familiarised the trainees on International Fisheries Agreements, regional cooperation, and recognition of fishers' rights.

During the interactive session, trainees shared their national-level experiences.

During the first week, Chief Instructor Mr. Stuart Melville, Global Maritime Crime Programme (GMCP), introduced the participants to the rules of engagement and boarding protocols and dealing with hostile situations.



Mr Kuban Ismailov, Country Head, Sri Lanka and Dr Aishath Shafina, Regional Coordinator, GMCP, Indian Ocean East, also joined the programme.

Both Organizations also discussed scaling up their engagement to address IUU fishing in the region.

The training programme concluded on 17th January 2025, equipping officers to safeguard the region's fisheries and combat fishing-related crimes.



# Building Capacity at Sea and in Court: BOBP-IGO Supports Regional Action Against Illegal Fishing

UNODC GMCP and BOBP-IGO joined hands to deliver two consecutive capacity-building activities in Colombo and Trincomalee, Sri Lanka, from 10 to 21 March 2025. The first programme titled, "Second Regional Training on Fishing Vessel Boarding Operations (FVBO)", brought

together officials from Navy, Coast Guard and Fisheries. The training focused on understanding modalities and build synergy to board a fishing vessel at sea and carry out inspections as per the national and international legal requirements.





The second programme, a scenario-driven tabletop exercise (TTX) on the interdiction and legal prosecution of illegal fishing vessels was organized from 19-21 March 2025.

Mr. Rajdeep Mukherjee, international consultant (IUU fishing), represented BOBP-IGO and led sessions on international fisheries laws and the rights of fishers.

This joint initiative strengthened South Asia's capacity to deliver a LEGAL FINISH in combating IUU fishing—integrating field actions with judicial process.

### Strengthening Project Coordination and Monitoring

Regular monthly online partners' meetings were organized by the BOBLME II Regional Coordination Unit based at IUCN Regional Office in Bangkok. These meetings served to summarize activities carried out by the partners and building synergies in their planning. BOBP-IGO actively participated in these meetings. Further, for ensuring the effective and integrated implementation of the BOBLME II project, a crucial BOBLME II Internal Technical Meeting on ITT & M&E System Development was held from March 6th to 7th, 2025, at the IUCN Asia Regional Office in Bangkok, Thailand, with options for hybrid participation. Representatives from the project's Executing Agencies (EAs), along with partners from SEI and FAO RAP, convened to refine the project's centralized Indicator Tracking Table (ITT) and the overall Monitoring & Evaluation (M&E) system. Key objectives included ensuring a shared understanding of the delivery approaches for each project component, reviewing gender-based indicators for the Gender Action Plan, and finalizing a user-friendly ITT to streamline data collection and reporting for FAO and GEF requirements. This meeting was instrumental in harmonizing efforts across different project components and establishing efficient mechanisms for tracking progress toward sustainable marine resource management.

#### BOBLME II Implementation Support Mission (ISM) - Meet at BOBP Secretariat

FAO fielded an implementation Support Mission comprising Dr. Rishi Sharma (Task team Leader), Mr. Liao Chongguang (Project Budget holder) and Mr. Justin Giannolo, FAO GEF Programme Support Specialist to BOBP-IGO from 11-14 March 2025. During the mission, technical and financial review meetings were convened to assess the current status of the project implementation, improve delivery and assess and mitigate risks. As part of the mission, the team also undertook a field visit to Pichavaram on March 13th (above).



#### Progress Summary (Jan-Apr 2025)

Component/Outcome	Key Progress / Achievements (Jan-Apr 2025 Focus)	Next Steps / Ongoing Activities
1.1 EAFM Institutionalization	<ul> <li>High-Level Meeting on EAFM Policy (Maldives, Feb 20)</li> <li>Pichavaram EAFM Scoping Visits (Mar 3-4, Mar 11-14)</li> <li>Pichavaram Consultative Workshop &amp; Plan Initiation (Apr 11)</li> <li>EAFM Legal Assessment (India) completed (pre-2025)</li> <li>Preparation of guideline for gender inclusiveness</li> </ul>	<ul> <li>Develop Pichavaram EAFM Scoping Report &amp; Plan</li> <li>Conduct Coringa EAFM Scoping Study</li> <li>Conduct Jaffna and Puttalam EAFM Scoping Study</li> <li>Carry out capacity building programme on EAFM in Sri Lanka</li> <li>Finalize EAFM site selection (India, Maldives)</li> <li>Develop/Implement EAFM plans for other selected sites</li> </ul>
1.2 IUU Reduction	<ul> <li>RPOA-IUU Endorsed (Bangladesh, India, Maldives, Sri Lanka)</li> <li>Joint UNODC Capacity Building (FVBO/TTX, Mar 10-21)</li> <li>Regional Legal Conference participation (Mar 17-19)</li> </ul>	<ul> <li>Implement RPOA-IUU &amp; NPOAs</li> <li>Develop NPOA-Capacity</li> </ul>
3.1 Pollution/Waste Management	<ul> <li>Guidelines development ongoing (Desk survey)</li> <li>Ghost gear/waste reduction initiatives underway (desk survey)</li> </ul>	<ul> <li>Conducting regional study</li> <li>Finalize guidelines</li> <li>Implement gear marking action plans</li> <li>Address vessel disposal &amp; circular economy</li> </ul>
5.1 & 5.2 Regional Coordination, M&E, Comms	<ul> <li>Internal Technical Meeting on ITT &amp; M&amp;E (Bangkok, Mar 6-7)</li> <li>FAO Implementation Support Mission (Chennai, Mar 11-14)</li> <li>ITT refinement ongoing</li> <li>Addressed financial/ operational challenges</li> </ul>	<ul> <li>Finalize ITT &amp; M&amp;E System</li> <li>Establish central reporting repository</li> <li>Improve financial processes</li> <li>Enhance communication/ lesson sharing</li> </ul>

#### **Looking Ahead**

The activities undertaken in the first quarter of 2025 reflect BOBP-IGO's unwavering commitment, alongside its member countries and partners, to implementing the BOBLME Phase II Strategic Action Programme. Through high-level policy dialogue, targeted EAFM implementation at sites like Pichavaram, and dedicated capacity building to combat IUU fishing, the project is making tangible strides towards ensuring the long-term health of the Bay of Bengal ecosystem and securing shared prosperity for its coastal communities. In the upcoming quadrimester, BOBP-IGO will continue its activities in India with a scheduled visit and workshop in Kakinada, Andhra Pradesh pertaining to the Coringa

Mangrove Forest. The team will then visit Sri Lanka to carry out scoping work in identified EAFM sites: Jaffna and Puttalam, and conduct a capacity building programme in collaboration with the Ministry/Department of Fisheries and Aquatic Resources, Government of Sri Lanka and National Aquatic Resources Research and Development Agency (NARA).



#### **Upcoming Events**

# Regional Workshop on the WTO Agreement on Fisheries Subsidies

### 15–16 May 2025 | Fortune Beach Resort, Chennai

This workshop will bring together fisheries and trade officials from Bangladesh, India, Indonesia, Maldives, Malaysia, Sri Lanka, and Thailand to deliberate on the accession and implementation of the WTO Agreement on Fisheries Subsidies (AFS). Co-hosted by the Department of Fisheries, Government of India, in collaboration with BOBP-IGO, IISD, and Rise Up, the event aims to enhance regional understanding of the AFS and foster dialogue on its implementation.

#### Visit to Sri Lanka for Scoping and Capacity Building in EAFM 14 – 23 May 2025

The BOBLME Project team will visit Sri Lanka from 14th May 2025 to carry out scoping studies in Jaffna and Puttalam, the sites identified for piloting EAFM in Sri Lanka. They will be also conducting a training programme

on Essential EAFM in Colombo. The Training programme is expected to benefit scientists from NARA and NAQDA, fisheries officers and academic partners.

#### Regional Capacity Building Workshop on Strengthening Global Fish Stock Status Reporting

#### 29-31 May 2025 | Four Points by Sheraton, Kochi

This national workshop will aim to align academic research with the needs of national marine fisheries resource assessments. Targeting faculty from Fisheries Resource Management (FRM) divisions of fisheries colleges across India's coastal states, the event will focus on capacity development initiatives to enhance the role of academic institutions in fisheries data collection, assessment, and reporting practices. The initiative supports India's efforts to meet Sustainable Development Goal (SDG) 14 targets.

# Strengthening Cooperation



#### Strategic Partnership in Maritime Law and Ocean Governance

BOBP-IGO signed a Memorandum of Understanding (MoU) with Gujarat National Law University (GNLU) and Gujarat Maritime University (GMU) to promote sustainable ocean governance and the blue economy in the Bay of Bengal region.

The MoU was signed by Dr. P. Krishnan on behalf of the BOBP-IGO and Dr. Sanjeevi Shanthakumar, Vice Chancellor of GNLU and GMU. Speaking on the occasion, the VC expressed hope that the partnership would open new avenues for joint research and capacity development in the field of maritime law and ocean governance.

The signing took place of the International Conference on "Advancing Ocean Governance for a Sustainable Future", held at Gandhi Nagar from 28-29 March 2025.





### Meetings/Events Participated



Dr. P. Krishnan, Director, BOBP-IGO, participated as a panelist at a side event during the Honiara Summit 2025 in Honiara, Solomon Islands, focusing on the impacts of climate change on fisheries. The side event, co-hosted by the Forum Fisheries Agency (FFA) and the Food and Agriculture Organization of the United Nations (FAO), served as a platform to explore the challenges and emerging solutions for sustainable fisheries management in the face of a changing climate.

Dr. Krishnan's delivered a presentation, titled "Climate Change and Fisheries: Impacts and Innovative Solutions -A Case of the Bay of Bengal Region," addressed the complex interaction between climate change and fisheries in the Bay of Bengal region. He highlighted the impact of climate change on fish and fisheries in the region, underscoring the urgent need for intervention. Dr. Krishnan pointed out that while significant research is dedicated to problem definition and calls for action, there is a relative lack of focus on technological solutions, indicating a need to balance research efforts.

### **Key Recommendations and Way Forward:**

- Range-shift studies need to be intensified to understand how climate change affects the fish stocks.
- Adaptation strategies through the development of climate-smart value chains that minimize quality loss, reduce scouting time, and enhance incomes for fisheriesdependent communities.
- Ecosystem approach to fisheries is to be mainstreamed by promoting awareness and engagement.

Using the Case of Mackerel war from the north-east Atlantic as an illustration, the need for cooperation and collaboration in managing resources such as shared stocks was highlighted.

Distinguished fellow panellist include H.E. Mr. Odo Tevi, Chair, Pacific Small Island Developing States & Permanent Representative of Vanuatu to the UN; Dr. Tarub Bahri, Fisheries Resources Officer, FAO, Rome; Mr. Sefanaia Nawadra, Director-General, Secretariat of the Pacific Regional Environment Programme (SPREP), Samoa and Mr. Marc Sadler, Manager, Environment and Climate Change, East Asia & Pacific Region, World Bank.

Dr. Krishnan reiterated BOBP-IGO's commitment to fostering regional collaboration to address these challenges and promote climate-smart fisheries management in the Bay of Bengal region. Ongoing initiatives includes promoting climate resilient fishing practices, supporting research on climate impacts, and developing regional strategies for adaptation. The session underscored the importance for stronger regional and international partnerships to combat climate-related fisheries challenges.





# Honiara Summit 2025: BOBP-IGO Champions Regional Collaboration for Sustainable Fisheries

Dr. P. Krishnan represented BOBP-IGO at the Honiara Summit 2025 in the Solomon Islands, a key international forum dedicated on advancing Sustainable Development Goal 14 (Life Below Water). Participating as a panellist in the Session on the role of RFBs in supporting the implementation of SDG 14.4 targets, Dr. Krishnan delivered a compelling address highlighting the pivotal role of Regional Fisheries Bodies (RFBs) in facilitating collaborative solutions to complex challenges facing South Asia's fisheries sector.

He emphasized the unique context of BOBP-IGO member countries (Bangladesh, India, Maldives, and Sri Lanka), marked by the dominance of small-scale fisheries and high vulnerability to climate change. Dr. Krishnan framed RFBs as vital "solution exchange platforms" and "knowledge aggregators," particularly through their science and technical committees. The speech acknowledged the challenges faced by RFB including limited funding, enforcement constraints, fragmented data sharing, uneven institutional capacities amoung member states.

Dr. Krishnan showcased BOBP-IGO's proactive leadership in regional fisheries governance through the development of thematic knowledge networks, notably: BOBSAN (BOBP Stock Assessment Network), BIMREN (BIMSTEC India Marine Research Network)

Dr. Krishnan stated that under the BIMREN platform, regional twinning research projects are commissioned and currently over 40 researchers are collaborating to tackle shared issues such as climate impacts on transboundary fishery resources.



He also highlighted BOBLME II project, implemented by FAO and executed by BOBP-IGO, as a model of a regional cooperative framework. "Leveraging the BOBLME project, BOBP-IGO is partnering with FAO to review national legislations using the FAO's EAF Diagnostic Tool, develop regional scenarios, document case studies on EAF performance, and pilot the FAO's EAF Implementation Monitoring Tool", he said.

Dr. P. Krishnan further emphasized the crucial role of RFBs in implementing the new Biodiversity Beyond National Jurisdiction (BBNJ) agreement, highlighting BOBP-IGO's active involvement through workshops and plans for reviewing legal and institutional frameworks in member countries.

In his conclusion. Dr. Krishnan called for the integration of RFBs into national strategies and effectively communicating the need for cooperation and the shared nature of marine ecosystems. BOBP-IGO's participation in the Honiara Summit underscored its commitment to advancing regional collaborative for a sustainable future for South Asia's fisheries.

The session was facilitated by Dr. Alice McDonald, Secretary of COFI and interim Secretary of RSN, and Dr. Darius Campbell, Secretary of NEAFC and Chair of RSN.





#### **RSN Special Session held in Honiara**

The special session of the Regional Fisheries Bodies Secretariat Network (RSN) was held on 24 February 2025 on the sidelines of the Honiara Summit 2025 organized in the Solomon Islands.

The meeting took place at the Secretariat of the Pacific Forum Fisheries Agency (FFA). Senior officials from FAO and heads of the RFBs from different regions participated.

Dr. P. Krishnan, Director, BOBP-IGO, who serves as vice-chair of RSN participated in this special



meeting which was convened to discuss the strategy document and plan the side event of RSN at the upcoming United Nations Ocean Conference (UNOC-2025).

# ICSF-FSSF Workshop on Strengthening Collaboration and Capacity-Building in Small-Scale Fisheries

The Bay of Bengal Programme Inter-Governmental Organisation participated in the international workshop on "Strengthening Collaboration and Capacity-Building in Small-Scale Fisheries", organized by the International Collective in Support of Fishworkers (ICSF) in partnership with the Forum for Small-scale Fisheries (FSSF), Sri Lanka from February 24-26, 2025 at the Tamarind Tree Garden Resort, Katunayaka, Sri Lanka. The workshop brought together 61 participants from various fisher organisations and those supporting fishers in Asia, Africa, Latin America, the Caribbean, and Europe.

Mr. Rajdeep Mukherjee, Project Coordinator and IUU Fisheries Consultant, BOBLME Project, BOBP-IGO, participated in the event, contributing

to critical discussions on transboundary fisheries governance and regional collaboration. Mr. Mukherjee contributed to the workshop's high-level discussions on inclusive governance, institutional support, and policy alignment to protect SSF interests in a rapidly changing marine economy.

In delivering the inaugural address, Mr. Dhammika Ranatunga, Additional Secretary, Ministry of Fisheries, Aquatic and Ocean Resources, Sri Lanka and Chair of the BOBLME Project, highlighted that SSF communities are indispensable to food security, livelihoods, and cultural identity, yet they continue to face policy neglect and marginalization compared to industrial fisheries.



# Training Programme on "Geo-Spatial Technologies for Agriculture" Organized By ICAR-NAARM, Hyderabad

Mr. M. Krishna Mohan and Dr. T. Velumani, staff members of BOBP-IGO participated in a training programme on Geo-spatial Technologies for Agriculture at ICAR-NAARM, Hyderabad, from February 17 to 21, 2025.

The training sessions provided valuable exposure to geo-spatial tools and techniques relevant to fisheries and coastal resource management. Core topics covered included database management systems, GIS and remote sensing fundamentals, suitability analysis, mapping, river network and catchment area delineation, IoT applications, drone-based data collection, and geo-spatial analysis using R software and other opensource tools.

The knowledge and skills gained will aid in habitat mapping, stock assessment, monitoring fishing efforts, and analyzing environmental impacts on marine and inland water resources.





#### Workshop on Structural Dynamics & Challenges of FRP Boats

Dr. S. Jayaraj, Publication Officer, BOBP-IGO, participated in the workshop on Structural Dynamics & Challenges of Fibreglass Reinforced Plastics (FRP) held on 17th March 2025 at CMST, M.S. University, Kanniyakumari. The event convened 35 participants, including fishers, boatbuilders, community organisations, vessel communication experts, and University students.

Organized by IEEE ADSF SIGHT, CriTech, CMST & CIFT, the workshop addressed quality standards, safety protocols, and proper FRP boat construction. Discussions also focused on the reuse of abandoned FRP boats to protect marine ecosystems. Prof. Udayakumar from St. Joseph's Engineering College presented recent technologies for monitoring fishing vessels. The event emphasized the importance of sustainable boatbuilding practices, that ensures safety and environmental stewardship in fishing communities.



#### **BOBP-IGO at FIFO Inauguration in Nagercoil**

Dr. S. Jayaraj, Publication Officer, BOBP-IGO, attended the inauguration of the Federation of Indian Fisher Organizations (FIFO) on 18th March 2025 in Nagercoil. Spearheaded by key stakeholders, FIFO seeks to unite fisher organizations, promote sustainable fisheries, economic growth, and social inclusion, and address sectoral challenges through collaboration, advocacy, and innovation. Focus areas include climate resilience, sea safety, fisher empowerment, and academic partnerships for capacity building.





#### **BOBP-IGO Art Works Showcased at Sangamitra 2025**

Rotary District 3234 hosted 'Sangamitra 2025', a vibrant and exciting event at the Chennai Trade Centre on 1st and 2nd March 2025. Attended by over 3000 families, the event brought together a esteemed gathering of Rotarians, fostering community spirit, cultural exchange, and appreciation for heritage.

During this grand celebration, the Bay of Bengal Programme (BOBP) showcased its exquisite penand-ink sketches of Traditional Fishing Crafts of the Bay of Bengal. This unique exhibit captivated the high-profile audience, offering a window into the region's rich maritime heritage and the craftsmanship of traditional fishing vessels. The exhibition not only celebrated the artistry and resilience of coastal communities but also emphasized to need to preserve this invaluable cultural legacy for future generations.





# Strengthening Legal Responses to Illegal Fishing: Emphasized during Regional Legal Conference in Colombo

From 17–19 March, Dr. P. Krishnan, Director, BOBP-IGO, participated in the Regional Legal Conference on Addressing Illegal Fishing in South Asia, co-organised by UNODC GMCP, IORA, and BOBP-IGO in Colombo, Sri Lanka.

The conference convened distinguished group of legal experts, prosecutors, and fisheries officials from Bangladesh, Maldives, and Sri Lanka, along with regional and international organizations and legal experts, to discuss prosecution strategies, jurisdictional challenges, and human rights-based enforcement.

Dr. Krishnan contributed to a high-level roundtable session on the South Asian IUU fishing landscape, offering insights into the ongoing implementation of the Regional Plan of Action (RPOA-IUU) by the BOBP-IGO with support from FAO, UNODC and its membercountries.

The organization of the event was funded by the United Kingdom's Foreign, Commonwealth and Development Office (FCDO).





#### **Graduate Students Urged to Research on Fisheries Geopolitics**

Dr. P. Krishnan delivered the lead talk and participated in the panel discussion conducted during the launch event of Converse & Conquer, a stimulating conversation series on fisheries, at ICAR-CIFE on 10 March 2025, Mumbai. The series conceived by the Indian Fisheries Association (IFA) and the Postgraduate School Students Union (PGSSU-CIFE), aims at engaging the movers and shakers

of Indian and global fisheries to enlighten, and inspire the next generation of fisheries professionals and scholars.

An alumnus of CIFE, Dr. P. Krishnan, Director, BOBP-IGO & CIFE alumnus, delivered a thought-provoking session on Breaking Myths & Building Perspectives in Fisheries Management. He illustrated how fisheries governance is



as much a social science as it is a biological science, urging scholars to adopt a broader perspective that includes social, economic, and political factors. Additionally, he discussed the geopolitical dimensions of fisheries, advocating for their inclusion in academic studies. He called upon the students to engage in open discussions on fisheries governance and contemporary policy issues.

Amb. CSR Ram, Joint Secretary (BIMSTEC & SAARC), Ministry of External Affairs, GoI, emphasized the importance of regional collaboration in the Indian Ocean Region. He highlighted the role of BIMReN (BIMSTEC-India Marine Research Network) in bringing together diverse stakeholders, regionally, to explore new avenues for fisheries development and cooperation. He stressed the need for innovative approaches in fisheries governance, ensuring that international partnerships contribute to sustainable development. He underlined the potential for knowledge exchange that would have a lasting impact on fisheries science and management worldwide by creating opportunities for foreign students to engage in fisheries studies in India.





#### **BOBP-IGO Commits to Combat IUU in South Asia**

Dr. P. Krishnan, Director, BOBP-IGO participated in the Regional Legal Conference on Addressing Illegal Fishing in South Asia held during 17-19 March 2025 at Colombo, Sri Lanka). He highlighted the BOBP-IGO's initiatives to combat Illegal, Unreported, and Unregulated (IUU) fishing in the Region.

Discussing the serious challenges in the region including the high number of fishing vessels, weak enforcement mechanisms, overfishing of shared stocks and economic loss due to IUU fishing, Dr. Krishnan emphasized BOBP-IGO's commitment to strengthening regional cooperation, improving Monitoring, Control, and Surveillance (MCS), operationalizing the Regional Plan of Action on IUU (RPOA-IUU), recently endorsed by the members and aligning National Plans of Action (NPOAs) with the (RPOA-IUU). He also stressed the need for a harmonized legal framework, joint cross-border surveillance and enforcement efforts to ensure the long-term sustainability of fisheries in the region.

Dr. Krishnan called for collective action, urging all stakeholders to join hands in strengthening regional cooperation and securing a sustainable future for our oceans.





#### Regional Workshop on Small-scale Fisheries in Asia held at Bangkok

The Regional workshop on "Smallscale fisheries (SSF) in Asia: Building on a decade of the SSF Guidelines for a sustainable future", organized by SEAFDEC and FAO was held in Bangkok from 26-27th March 2025. The two-day workshop brought together experts, policymakers, and stakeholders to discuss the progress, challenges, and future strategies for sustainable small-scale fisheries in Asia. Approximately 60 stakeholders from nine countries and six regional, organizations attended the Workshop, which aimed to assess the uptake and execution of the VG-SSF in the Asian region, identify critical policy processes, and engage with stakeholders supporting small-scale fishers.

Dr. P. Krishnan, Director, BOBP-IGO served as a panellist in two thematic discussions. He delivered a talk on "Implementation of Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries: Progress in BOB Region". He discussed small-scale fisheries' challenges and progress post-VG-SSF, emphasizing sustainable practices, policy reforms, and social protections to address challenges like climate change and labour rights. He highlighted success stories from the BOBP member countries and highlighted the commitment given by the countries for developing a National Plan of Action for SSF (NPOA-SSF) during the high-level meeting held under the aegis of BOBLME project.

Participating in the panel discussion on disaster and climate change, Dr. Krishnan presented a talk on "Disaster Risks and Climate Change in BOB Region: Priority Actions to Integrate Climate Resilience & DRM in Small-Scale Fisheries". He underscored the vulnerability of small-scale fisheries to climate change in the Bay of Bengal region. He emphasized the need for climate-resilient measures, such as early warning systems, mangrove restoration, and disaster-resilient infrastructure to safeguard fisheries and coastal communities.

The workshop concluded with a closing ceremony, featuring presentations of key outcomes and recommendations along with final remarks from regional fisheries agencies and partner organizations.







# Harmonized Legal Frameworks for Sustainable Fisheries In Blue Economy Framework

The International Conference on "Advancing Ocean Governance for a Sustainable Future", co-organized by the Centre for International and Trade law (CTIL), Gujarat Maritime University (GMU), Gujarat National Law University (GNLU) and Plymouth University was held at Gandhi Nagar during 28-29 March 2025.

The Director, BOBP-IGO participated as a panelist in the session on "Blue Economy, Sustainability, and Conservation", which explored the integration of fisheries into the Blue Economy (BE) framework while addressing governance challenges.

Dr. P. Krishnan emphasized the critical role of fisheries as a highly interconnected sector within Blue Economy, highlighting their transboundary nature and the need for cooperative management. He outlined the challenges in the implementation of the United Nations Convention on the Law of the Sea (UNCLOS), including gaps in legal provisions for shared resources, inconsistencies in scientific evidence, and inadequacies in addressing climate change impacts.

Drawing on case studies such as Iceland's Cod Wars and Gulf



of Maine fisheries management, he illustrated how national interests can conflict with regional sustainability goals. He advocated for harmonized legal frameworks across nations to manage shared fish stocks effectively. Bilateral and multilateral agreements were proposed as essential tools for fostering cooperation among countries in the Bay of Bengal region.

Dr. Krishnan also addressed the effects of climate change on fisheries, noting shifting migration patterns and stock distribution that

complicate resource assessments. He emphasized the importance of adopting international best practices and collaborative measures including joint surveys and data sharing to ensure sustainable management.

His remarks underscored BOBP-IGO's commitment to advancing regional cooperation and sustainable fisheries governance, aligning with global efforts to safeguard ocean resources for future generations.



#### Other Events/Meetings Attended by BOBP-IGO Staff

#### Dr. P. Krishnan, Director

- Meeting organized by the Department of Fisheries, Government of India to discuss the report and management plans on purse seine fishing and their implementation, on 02 January 2025.
- Meeting convened by Department of Fisheries, Government of India on 06 February 2025 to discuss the follow up on Investors in Fisheries & Aquaculture in UT of Andaman & Nicobar Islands and development of Fisheries in UT of Lakshadweep.
- Presented a talk on science communication during the training programme on "Strategic Science Communication for Extension Professionals" organized by ICAR-National Academy of Agricultural Research Management (NAARM) on February 28, 2025.
- Research Advisory Council (RAC) meeting of the Tamil Nadu J. Jayalalithaa University (TNJFU) as its expert member on 08 April 2025.
- International Conference on Emerging Trends in Maritime Laws organized by Tamil Nadu Dr. Ambedkar Law University (TNDALU) on 04 April 2025. Presented a Lead Talk on "Blue economy in the Indian Ocean: Governance perspectives for sustainable development in the region"
- Monthly BOBLME Project (Phase II) Partners meetings to review progress and discuss work plans.
- Periodic Meetings of the Expert Committee constituted by DoF, GoI to review the ban period duration and discuss measures to strengthen conservation and management aspects.
- Periodic Virtual Meetings with SEAFDEC and FAO discuss preparations for the Regional Workshop on Small-Scale Fisheries scheduled for March 26-27, 2025.
- Biweekly virtual meetings with the International Institute for Sustainable Development (IISD) to discuss
  preparations for the Regional Workshop on the WTO Agreement on Fisheries Subsidies scheduled for
  May 2025.



### **Perspective**



In this section, policy options to address specific issues are presented based on analysis based on regional fisheries scenario.

# Value Beyond Volume: Rethinking Tuna Export Strategies in the Bay of Bengal

Rajdeep Mukherjee and P. Krishnan

Between 2019 and 2022, Thailand exported nearly 2.2 million tonnes of tuna, earning nearly USD 9 billion. The four Bay of Bengal countries - India, Sri Lanka, Maldives, and Bangladesh - collectively exported around 506,000 tonnes, generating just over USD 1.4 billion. But this disparity is not merely in volume but significantly in export. Thailand's dominance stems from its worldclass processing infrastructure, efficient cold chain systems, and deep market access to the EU, Japan, and the USA. In contrast, most BOBP exports predominantly falls in lower-value segments such as whole frozen tuna. Had BOBP countries matched Thailand's level of export readiness, they could have potentially generated an additional USD 922 million in export value -Maldives stood to gain USD 536 million, and India nearly USD 387 million. In the global tuna economy, the real competition begins during and after the fish is caught.

This paper presents a comparative analysis of tuna and tuna-like species exports from four Bay of Bengal Programme (BOBP) countries – India, Bangladesh, Maldives, and Sri Lanka – alongside Thailand, which serves as a regional benchmark, over the period 2019 - 2022.

It presents the opportunity for the BOBP countries to generate additional export value without increasing fishing pressure – making the tuna sector not just more profitable, but also more sustainable.

#### Methodology

Product-Market Analysis: The first step disaggregates export data by product category (e.g., Skipjack Tuna, Yellowfin Tuna, Swordfish) and processing level (e.g., Frozen Whole, Fresh/Chilled, Loin/Fillet, Canned/Prepared), analyzing export volume, value, and average price (USD/tonne) across destination markets. This grouping enables an understanding of each country's product specialization and market orientation. The average price is computed as a weighted mean using export volume, and the diversity of destination markets is examined to assess market access.

#### **Evaluation of export readiness:**

The analysis is structured around two composite indices: Production & Market Presence and Diversity & Price Efficiency, designed to capture distinct but complementary dimensions of export readiness.

Production & Market Presence (weighted at 55%) measures the scale and economic contribution of tuna exports. It integrates two normalized components: (a) Export Volume (tonnes, weighted 30%), reflecting logistical capacity and production capabilities; and (b) Export Value (USD, weighted 25%), capturing market demand and economic impact. Diversity & Price Efficiency (weighted at 45%) assesses market strategy effectiveness, combining productmarket diversification and price competitiveness. This index integrates three normalized components: (a) Number of unique destination countries (20%) showing market spread; (b) Number of unique product-category × processing-level combinations (15%) - showing technology and also a proxy for infrastructure, and (c) Normalized weighted average export price (10%), showing competitiveness.



Table 1. Overall export performance of BOBP countries and Thailand during 2019-22

Country	Total exported including re-export (Tonnes)	Export value (USD 1000)	Average of product- wise export prices (USD/Tonne) <sup>1</sup>
Bangladesh	12.00	5.53	460.83
India	1,72,945.00	2,85,838.63	4,175.48
Maldives	2,85,306.00	5,92,582.84	3,719.62
Sri Lanka	47,575.00	5,22,886.58	11,308.75
Thailand	21,96,795.59	89,62,157.24	4,408.14
Grand Total	27,02,633.59	1,03,63,470.82	5,704.84

Table 1A: Minimum, Maximum, Average and Weighted Average export Prices by Country (2019–2022) in USD/Tonne

Country	Min of export prices	Unweighted average export price	Max of export prices	Weighted average export price
Bangladesh	460.83	460.83	460.83	460.83
India	292.50	4,175.48	29,200.00	1,652.00
Maldives	10.00	3,719.62	88,145.00	2,077.00
Sri Lanka	1,030.00	11,308.75	45,973.33	10,990.00
Thailand	0.00	4,408.14	62,000.00	4,079.00

Table 2: Major tuna processing types in the region based on export value during 2019-22

County/ Processing	Canned/ Prepared	Fresh/ Chilled	Frozen Whole	Loin/ Fillet	Others	Grand Total
Bangladesh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
India	0.04%	0.05%	2.36%	0.31%	0.00%	2.76%
Maldives	1.12%	0.28%	2.98%	1.05%	0.28%	5.72%
Sri Lanka	0.00%	1.72%	3.05%	0.28%	0.00%	5.05%
Thailand	83.86%	0.09%	1.50%	1.04%	0.00%	86.48%
Grand Total	85.03%	2.14%	9.89%	2.67%	0.28%	100.00%

Raw metrics were normalized to a 0–100 scale using minmax normalization, ensuring comparability across different scales. The final Export Readiness Score for each country is calculated as a weighted sum of these two composite indices: Export Readiness Score = (0.55 × Production & Market Presence) + (0.45 × Diversity & Price Efficiency)

This approach minimizes redundancy and double counting, as confirmed through correlation analysis. The revised framework effectively balances scale, diversity,

and market competitiveness, providing robust insights into export strategies and identifying key areas for improvement among the analyzed countries.

# Product-Market Analysis: Export Specialization and Value Realization

An initial scan of the export data from 2019 - 2022 reveals stark contrasts in the product and market profiles of the five countries studied (Table 1 and Table 1A).

Thailand emerges as a global processing hub, with more than 80% of its tuna exports in the Canned/Prepared category, primarily from Skipjack Tuna (Table 2). This specialization is reflected in both volume and value – Thailand exported nearly 2.2 million tonnes of tuna and tuna-like species, earning an average of USD 4,408 per tonne, with premium prices realized in Japan, Italy, and Germany.

In contrast, BOBP countries exhibit a strong orientation toward Frozen Whole exports, particularly from India, Maldives, and Sri Lanka. While India shows some product diversification with Swordfish and Yellowfin Tuna loins and fillets to the USA and Japan (commanding prices above USD 7,000/tonne), such value-added segments represent only a minor share of its total volume. Maldives, despite its historical association with pole-andline tuna fishing, continues to export nearly all its tuna as Frozen Whole to lower-value markets like Thailand and Viet Nam for reprocessing, resulting in an average price of just USD 1760.39/ tonne.

The comparison between simple and weighted average export prices (Table 1A) reveals important insights into the structure and efficiency of tuna exports from the Bay of Bengal countries and Thailand. For India and the Maldives, the simple average export price is significantly higher than the weighted average, indicating that while these countries do export some high-value tuna products – such as loins or fresh/chilled fish to premium markets – these account

<sup>1</sup> The "average export price" presented in product-wise tables is calculated by first deriving the unit price (USD/tonne) for each product-process combination and then computing a simple (unweighted) average across these combinations. This may differ from the national-level average export price, which is computed by dividing the total export value by the total export volume, as the latter reflects volume-weighted pricing. The difference arises because higher- or lower-value products may account for a disproportionate share of total volume, influencing the overall earnings but not affecting a simple average of unit prices.

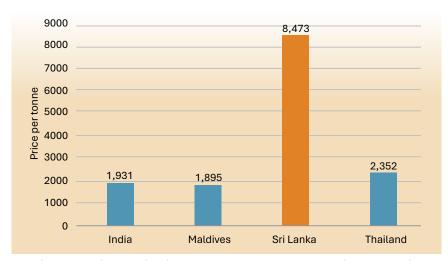


Figure 1. Price realization from frozen whole yellowfin tuna during 2019-22

for only a small share of the overall volume. Most of their exports remain concentrated in lower-value categories like frozen whole fish to price-sensitive markets, which drags down the weighted average. In contrast, Sri Lanka and Thailand show a close alignment between their simple and weighted average prices, suggesting that their highor mid-value products dominate both value and volume. Sri Lanka, in particular, demonstrates strong price realization across its portfolio, benefiting from access to highstandard markets and a focus on quality exports. Thailand, with its vast processed tuna industry, reflects stable, mid-tier pricing achieved at scale. This comparison underscores that for India and the Maldives, the challenge is not the absence of high-value exports, but rather the inability to scale them - pointing to a strategic need for investment in processing, quality control, and market access to shift more volume toward premium segments. The analysis also reveals a concentration-risk problem: Maldives sends more than 80% of its tuna exports to just two countries, while Thailand exports to over 50 destinations. Countries with broader destination bases and value-added products (like Thailand and, to a lesser extent, India) are more resilient and capable of commanding higher prices.

In summary, the basic productmarket analysis shows that:

- Processing level and product form are key determinants of price realization.
- Destination diversity and access to high-standard markets significantly influence value.
- The current export mix of BOBP countries is weighted toward low-value products and pricesensitive destinations, limiting economic returns despite significant fisheries potential.

The export volume distribution of tuna and tuna-like species from BOBP countries (India, Bangladesh, Maldives, Sri Lanka) and Thailand (2019–2022) (Table 3) reveals a heavy reliance on Skipjack Tuna (67.65%) and the "Other" category (26.92%), together comprising 94.57% of total exports, primarily driven by Thailand's high-volume Canned/Prepared products and Maldives' Frozen Whole shipments. The United States (22.47%), Japan (8.37%), and Australia (6.76%) are the top destinations, with the USA absorbing significant Skipjack Tuna (13.12%) and Other (8.83%) volumes, reflecting demand for value-added products from Thailand and niche Swordfish exports from India. Middle Eastern markets like Egypt (6.32%), Libya (4.74%), and Saudi Arabia (4.51%) focus on low-value Skipjack Tuna, likely from Maldives, while EU countries (Germany, France, Italy, Netherlands, 5.33% combined) import value-added Yellowfin Tuna and Swordfish from India and Sri Lanka. The top 10 destinations account for 66.59% of exports, indicating moderate concentration, but 18 markets exceed 1% share, showing diversity led by Thailand's broad reach. Thailand dominates due to its processing capabilities, India excels in high-value Swordfish and Yellowfin to premium markets, and the Maldives and Bangladesh lag due to limited processing and market access. Strategic recommendations include Maldives

Table 3. Top product-market combination during 2019-2022 (in %)

Country/Product	Bigeye Tuna	Other	Skip- jack Tuna	Sword fish	Yellow- fin Tuna	Grand Total
United States of America	0.00	8.83	13.12	0.02	0.50	22.47
Japan	0.00	5.24	2.82	0.01	0.30	8.37
Australia	0.00	1.59	5.17	0.00	0.00	6.76
Egypt	0.00	0.19	6.13	0.00	0.00	6.32
Canada	0.00	1.76	3.08	0.00	0.12	4.96
Libya	0.00	0.90	3.84	0.00	0.00	4.74
Saudi Arabia	0.00	0.48	4.02	0.00	0.00	4.51
Thailand	0.01	0.02	2.37	0.00	0.54	2.94
United Arab Emirates	0.00	0.57	2.29	0.00	0.02	2.89
Israel	0.00	0.07	2.30	0.00	0.27	2.64
Sub Total	0.01	19.65	45.15	0.03	1.74	66.59
Next 171 countries	0.06	7.27	22.50	0.59	2.98	33.41

Table 4. Average Export Price (USD/Tonne) for different product-process combinations, 2019-22

Product/ Process	Canned/ Prepared	Fresh/ Chilled	Frozen Whole	Lion Fillet	other	Grand Average
Albacore		5,255.59	2,702.13			3,066.91
Bigeye Tuna		12,191.09	2,319.97			6,550.45
Bonito				6,509.84		6,509.84
Other	4,553.56	6,942.72	7,389.70	5,017.88	2,777.50	5,694.87
Skipjack Tuna	3,798.33	8,884.71	1,400.48	6,884.99		4,200.92
Swordfish		10,029.89	4,778.58	8,741.41		7,742.91
Yellowfin Tuna		9,235.22	6,534.51			7,786.34
Grand Average	4,063.10	9,001.76	5,807.06	6,764.16	2,777.50	5,704.84

and Bangladesh investing in processing to target high-standard markets like the USA and Japan, India and Sri Lanka expanding Swordfish and Yellowfin exports, and Thailand diversifying into higher-margin products, leveraging certifications to enhance market access and reduce reliance on key destinations.

Fresh/Chilled exports command the highest overall prices, averaging USD 9,001.76/tonne, followed by Loin/ Fillet products at USD 6,764.16/ tonne, and Canned/Prepared at USD 4,063.10/tonne. In contrast, Frozen Whole exports average just USD 5,807.06/tonne, while unclassified "Other" processing trails at USD 2,777.50/tonne (Table 4).

#### **Export Competitiveness**

Table 5 and figure 2 show the summary of the export profile of the countries.

The analysis reveals wide disparities in the export readiness of Bay of Bengal countries when compared to Thailand, a global hub in tuna trade (Figure 2). Considering the composite Export Readiness Score – which reflects market penetration, diversity and price competitiveness, Thailand is way ahead of the BOBP member-countries.

Among the BOBP countries, Sri Lanka emerges as the best performer due to its diversified export portfolio and access to high-standard markets. While Maldives has built a reputation for sustainable tuna, most exports

Table 5. Summary of export profile of the countries

Country	Unique Markets	Unique Product-Process Mix
Bangladesh	1	1
India	73	15
Maldives	54	16
India	55	14
India	175	16

As the export market of Bangladesh for tuna/tuna-like species is small, it is not considered further for the analysis.

Figure 2. Tuna export markets of selected countries during 2019-22

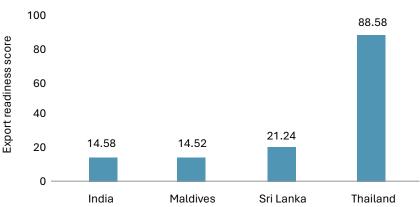








Figure 3. Export Readiness Score (Scaled to 100) for 2019-22



Export readiness is estimated through a composite index as mentioned earlier and summarized below (Table 6).

Table 6. Component and weights in export readiness index

Component	Description	Weight
Export Volume (Tonnes)	Measures production/logistics capacity	30%
Export Value (USD)	Reflects market demand and value creation	25%
Market Diversity	Number of unique destination countries	20%
Product Diversity	Number of unique product-category × processing-level combinations	15%
Price Efficiency	Normalized weighted average export price	10%

Table 7. Access to high value tuna markets of the BOBP countries and Thailand

Country	Total Export Value (USD)	High-Value Market Export (USD)	High-Value Market Share (%)
Bangladesh	5,530	0	-
India	28,58,38,630	2,93,29,330	10.26
Maldives	59,25,82,840	17,96,91,740	30.32
Sri Lanka	52,28,86,580	30,15,80,660	57.68
Thailand	8,96,21,57,240	3,23,72,76,190	36.12

remain in low-processed forms like frozen-whole to re-processing hubs leading to its low score. In the case of India, poor handling and lack of access to high-value market limits its competitiveness in value-added segments (Table 7).

#### Conclusion

This analysis underscores a critical reality: export success in the tuna sector is determined less by catch volume and more by what countries do after the fish is landed. The Bay of Bengal region, despite its abundant tuna resources, lags behind in terms of export readiness and value capture. Thailand's export profile

demonstrates that investments in processing, cold chain systems, and diversified market access are decisive in maximizing returns.

Among the BOBP countries, Sri Lanka leads in export readiness, benefitting from product diversity and access to premium markets. India shows promise, particularly in high-value segments like Swordfish and Yellowfin loins, but structural issues in handling and market compliance limit its performance. The Maldives, while globally recognized for sustainable poleand-line fisheries, remains locked

into low-value frozen exports with narrow market reach. Bangladesh, meanwhile, is yet to emerge meaningfully in the tuna export economy.

The Export Readiness Index developed in this paper identifies where each country stands and what levers they can pull to improve competitiveness. It highlights four strategic imperatives:

- Upgrade product offerings toward chilled and processed forms that command higher prices.
- Improve handling and logistics, especially to meet standards for high-end markets like the EU, Japan, and the USA.
- Expand destination portfolios to reduce dependence on low-value or single markets.
- Adopt quality and sustainability certifications to enhance market access and credibility.

If BOBP countries close this readiness gap, back of the envelope estimates show that they could generate over USD 900 million in additional export value without increasing fishing pressure – making the tuna sector not just more profitable, but also more sustainable. The next frontier for the Bay of Bengal is not more catch – it is smarter, higher-value exports.



### **Visitors**



Dr. K. Dinesh Registrar and Dean, KUFOS



Dr. Rishi Sharma, Senior Fishery Officer, FAO



**Dr. Grinson George,** *CMFRI Director and* **Dr. K. Mohammed Koya,** *FDC, India* 



Ms. Archana Chatterjee, Program Manager, IUCN India



Dr. Bijay Kumar Behera, CE, NDFB



Mr. Justin Giannolo & Mr. Chongguang Liao, FAO



Ms. Marguerite Salles and Prof. Manell Zakharia



Dr. C. K. Murthy, Former Executive Director NFDB





**Bay of Bengal Programme** Inter-Governmental Organisation

