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*Report of the Webinar on Sharing the finding of the Study on*  
**Strengthening Sustainable  
Aquatic Food Value Chains for Enhanced  
Food Security and Nutrition in Asia**

23 December 2025







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**Bay of Bengal Programme Inter-Governmental Organisation**  
**Webinar on sharing the findings of the study on**  
**“Strengthening Sustainable Aquatic Food Value Chain for**  
**Nutritional Security in Asia”**

**Venue: Chennai | Online**

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**Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)**

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## About the organizers



Food and Agriculture  
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### Food and Agricultural Organization of the United Nations (FAO)

FAO is a specialized UN agency founded in 1945 to combat global hunger and promote sustainable agricultural development. Headquartered in Rome, FAO works with governments and international organizations to improve food security, nutrition, and rural livelihoods. It plays a key role in fisheries and aquaculture governance, developing international agreements



### Department of Fisheries (DoF)

It is a governmental body responsible for the development, management, and regulation of fisheries and aquaculture in India. It plays a crucial role in formulating policies, implementing schemes, and promoting sustainable fisheries practices to enhance productivity, livelihoods, and food security. The DoF oversees the conservation and management of marine and inland fisheries resources, enforces regulatory frameworks. It also supports capacity-building initiatives, research, and technological advancements to strengthen India's fisheries sector.



### Bay of Bengal Inter Governmental Organisation (BOBP-IGO)

The BOBP-IGO is a regional fisheries advisory body with Bangladesh, India, Maldives and Sri Lanka as its contracting parties. It is mandated to enhance cooperation amongst its member countries and other countries (especially, Indonesia, Malaysia, Myanmar and Thailand) for sustainable fisheries management in the Bay of Bengal region. The BOBP-IGO Secretariat is located at Chennai. The Department of Fisheries, Government of India is the nodal agency from India and the hosting agency.

## **Preparation of Report**

This report of the **Webinar to on sharing the findings of the study on “Regional Workshop on Strengthening Sustainable Aquatic Food Value Chains for Enhanced Food Security and Nutrition in Asia”** has been prepared by the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO).

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## Acronyms

<b>BOBLME</b>	Bay of Bengal Large Marine Ecosystem
<b>BOBP-IGO</b>	Bay of Bengal Programme Inter-Governmental Organisation
<b>CBOs</b>	Community-Based Organisations
<b>CIFRI</b>	Central Inland Fisheries Research Institute
<b>CMFRI</b>	Central Marine Fisheries Research Institute
<b>CoM</b>	Co-Management
<b>DoF</b>	Department of Fisheries
<b>EAF</b>	Ecosystem Approach to Fisheries
<b>EAFM</b>	Ecosystem Approach to Fisheries Management
<b>EDF</b>	Environmental Defense Fund
<b>FAO</b>	Food and Agriculture Organization
<b>FADs</b>	Fish Aggregating Devices
<b>FIMSUL</b>	Fisheries Management for Sustainable Livelihoods
<b>FMUs</b>	Fisheries Management Units
<b>GOMBRT</b>	Gulf of Mannar Biosphere Reserve Trust
<b>ICAR</b>	Indian Council of Agricultural Research
<b>ICSF</b>	International Collective in Support of Fishworkers
<b>MFRA</b>	Marine Fisheries Regulation Act
<b>MSC</b>	Marine Stewardship Council
<b>MSSRF</b>	M. S. Swaminathan Research Foundation
<b>NFDB</b>	National Fisheries Development Board
<b>NGO</b>	Non-Governmental Organisation
<b>PMMSY</b>	Pradhan Mantri Matsya Sampada Yojana

## Executive Summary

Many countries in Asia continue to face persistent challenges in translating aquatic food production gains into improved nutrition outcomes, particularly for vulnerable populations. Food loss and waste (FLW), weak post-harvest systems, unequal access to markets, underutilisation of nutrient-rich small fish species, gender inequalities, and growing climate and resource pressures constrain the effectiveness and inclusiveness of aquatic food value chains.

To address these issues, FAO and the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) convened a Regional Workshop in Chennai (2–4 December 2025), followed by a validation webinar on 23 December 2025, bringing together national delegations from eleven Asian countries, regional institutions, researchers and development partners. A detailed regional analysis was presented at the webinar.

The regional analysis confirms that while total aquatic food supply and per capita availability have increased in most countries, nutrition outcomes remain uneven. Small indigenous fish species, which are rich in essential micronutrients, remain inadequately integrated into food security and nutrition strategies. At the same time, fish loss and waste, particularly at landing, handling, transport and primary processing stages, continue to erode availability, affordability and nutritional quality. Marine capture fisheries in many areas have reached or exceeded sustainable limits, while aquaculture growth is increasingly market-driven and not always aligned with nutrition objectives.

Gender disparities remain a structural weakness across value chains. Women play a dominant role in post-harvest processing and marketing but are largely confined to informal, low-paid and insecure employment, with limited access to assets, finance, technology and decision-making. Governance frameworks are generally well established, yet enforcement gaps persist, particularly in relation to IUU fishing, pollution control, cold-chain regulation and avoidable post-harvest losses. Climate change further compounds these challenges by increasing production risks, supply instability and vulnerability of small-scale actors.

At the same time, the analysis highlights promising practices across the region, including nutrition-sensitive promotion of small fish species, improved cold-chain technologies, digital traceability systems, by-product utilisation, ecosystem-based management approaches, and targeted social and gender-responsive interventions. The key challenge lies in scaling these initiatives beyond project-based efforts and embedding them within national policies and investment frameworks.

Strengthening aquatic food value chains in Asia requires a shift from a production-centric approach towards integrated, nutrition-sensitive, inclusive and climate-resilient strategies. Priority actions include reducing fish loss and waste through cold-chain upgrading and better handling practices; embedding nutrition objectives—particularly small fish utilisation—into fisheries, aquaculture and food policies; advancing gender-responsive value chain development; strengthening traceability, compliance and domestic market systems; and enhancing regional cooperation and knowledge exchange.

## Table of Contents

1.	Welcome .....	1
1.1.	BOBP-IGO: Dr Krishnan .....	1
1.2.	FAO – Angela Lentisco: .....	1
2.	Lead presentation by BOBP-IGO .....	2
3.	Country Perspectives .....	4
3.1.	Md Shamsuddin (Bangladesh) .....	4
3.2.	Dr Wenbo Zhang (Shanghai Ocean University, China) .....	5
3.3.	Dr. R. Ananda Raja (ICAR-CIBA, India).....	6
3.4.	Toni Rudi Hartanto (Ministry of Marine Affairs and Fisheries, Indonesia).....	6
3.5.	Mazniza Binti Othman (Department of Fisheries, Malaysia).....	6
3.6.	Charmaine Buitre (Philippines) .....	6
3.7.	Dalad Wattanasin (Department of Fisheries, Thailand) .....	6
3.8.	Angela Lentisco (FAO) .....	7
4.	Comments from Experts .....	7
4.1.	CM Muralidharan .....	7
4.2.	Sebastian Mathew .....	8
5.	Concluding remarks .....	9
6.	Annexure.....	11

## 1. Welcome

### 1.1. BOBP-IGO: Dr Krishnan

**Dr Krishnan** welcomed the delegates who had joined the webinar. He referred to the detailed discussions at the in-person workshop held in Chennai earlier in the month that helped to understand the significance of aquatic food chains, the complexities involved, and how value chain studies can be undertaken. He said that the webinar was to review country profiles that had already been shared with all the country delegates for their remarks.

He introduced Dr. A.G. Ponniah as the Chief Guest for the webinar. An eminent scientist for over 30 years, Dr Ponniah served in national and international organizations. He was a team lead in WorldFish and in India, led two national institutions, the National Bureau of Fish Genetic Resources and the Central Institute of Brackishwater Aquaculture, both premier national research institutions under the Indian Council of Agricultural Research.

Dr Krishnan said that the participants included delegations from 10 countries, and representatives from the FAO and SEAFDEC. He then requested Angela Lentisco to say a few words.

### 1.2. FAO – Angela Lentisco

**Ms Angela Lentisco** of FAO RAP welcomed the delegates and thanking them for active participation in the regional workshop held in Chennai just a few weeks earlier, from the 2nd to the 4th of December 2025. She said that their insights, country experiences, and constructive engagement were instrumental in shaping discussions and the initial findings of the report.

Building on that momentum, the FAO and the BOBP-IGO had convened this follow-up webinar as an important next step in this process. The purpose of today's session was to present the consolidated regional findings emerging from the workshop, as well as to provide an opportunity for country-level feedback before finalizing the country and regional reports.

She welcomed their participation and said that the perspectives the delegates would share would help ensure that the final outputs are relevant and responsive to the country priorities, and also that they reflect the collective regional experience.

**Dr. Krishnan** thanked Angela for commissioning this study and for her overview. He said that as was decided during the physical workshop, ways forward had been put forth. A clear output in terms of the next studies had emerged, and plans had been made for pilot studies in India, at least, to have a comprehensive value chain analysis, and then identification of interventions, and taking it forward. He requested Dr Ponniah to take the floor and conduct the proceedings.

## 2. Lead presentation by BOBP-IGO

### Rajdeep Mukherjee

**Mr Rajdeep Mukherjee** made a detailed presentation, “**Strengthening Sustainable Aquatic Food Chain in Asia - Feeding the bottom billion**” from the perspective of the region. He said that the process was being taken forward from the original consultation that was held in Chennai a couple of weeks ago. As the information received from countries is being processed, and as the national reports shared with countries are being reviewed, a few critical issues that emerged during discussions and analysis are being flagged, and views are being sought on these points.

He said that looking ahead to 2050, which is a key milestone for many global initiatives, several concerns need to be highlighted. The average cost of a healthy diet is increasing steadily. At present, it stands at about USD 4.65 per person per day. Globally, around 2.6 billion people cannot afford a healthy diet in 2024. While this number has declined slightly compared to the previous year, it remains extremely high. He pointed to the fact that one of the most important issues identified was that the animal-source foods, including fish and other aquatic resources were the most expensive food.

About the eleven countries covered in the study, he said that by 2050, around 48 percent of the global population would be living in these countries. Examined more closely, several issues emerged as causes for concern, particularly when viewed through the lens of providing affordable, nutritious, and sustainable food solutions. Currently, about 481 million people are living below USD 1.20 per day, which is the poverty line for low- and middle-income countries. Although not all countries in this study fall into the low- or middle-income category (for example, Maldives and Malaysia are upper-middle-income countries), a significant proportion of people in all countries remains below this poverty threshold.

When this situation is combined with other trends, he indicated that the challenges become more pronounced. One such trend is population ageing across all countries. As populations age, employment opportunities decline, particularly for those above 60 years of age resulting in greater dependency on the productive age group, roughly between 15 and 60 years, increasing the burden on households to support food and nutrition needs.

Another issue identified was structural unemployment. While unemployment rates have declined in recent years, large number of people remain unemployed, further limiting access to adequate and nutritious food. Regarding the share of undernourished people, it was observed that both South and Southeast Asia have made significant progress, with declining undernourishment rates. However, given the large population sizes of these regions, even a 5 percent undernourishment rate would translate into a very large number of people in absolute terms.

In summary, he pointed to a situation in which large numbers of people remain malnourished or undernourished, driven by persistent poverty, ageing populations, and unemployment. Approaching the period leading up to 2050, these factors remain constants that must be addressed, and consideration is required regarding the role fisheries and aquatic foods can play in this context. It suggested that the focus needs to be placed not only on production but also on distribution.

Rajdeep explained that the framework used for the study followed the standard FAO framework with six dimensions which had been discussed extensively during the regional consultation, and many issues were identified. He said that while some of the issues had been summarized, the work remains ongoing.

In terms of fish supply, he observed that most countries have an adequate supply of fish. Total aquatic food supply has increased over time, while population growth is stabilizing in many countries. Per capita availability of fish had also increased. However, when nutrition outcomes are examined, it is found that most countries continue to face challenges. In India, for example, a large segment of the population is vegetarian, which affects effective fish consumption. Even in countries such as Bangladesh, Sri Lanka, the Philippines, Thailand, and Vietnam, inadequate protection against supply shocks was observed. Events such as pollution or natural disasters could significantly affect availability, as sufficient buffer capacity was lacking. In contrast, countries such as Maldives are characterized by a substantial surplus of fish relative to domestic requirements, with Malaysia having some margins. Many other countries operate with very narrow margins, making supply stability a concern.

A paradox is observed in this context: even in countries with high fish supply, child stunting and malnutrition persist. This brings the focus back to distribution and access, raising questions as to why certain populations are unable to consume fish despite overall availability. These barriers will need to be addressed going forward.

Rajdeep referred to some best practices that had been identified, such as the promotion of small indigenous species for nutrition in Bangladesh and Cambodia, including school-level interventions. While these initiatives are promising, the impact of such programs will take time to assess.

From a production perspective, it is noted that most fish in the region originate from the Pacific and Indian Oceans. Marine capture fisheries are approaching or have reached peak production, particularly in the Indian Ocean. It is considered unlikely that marine capture production will increase significantly, even as demand continues to grow. Aquaculture is expanding rapidly and has become a major source of fish supply. However, aquaculture production is largely market-driven and characterized by higher productivity than capture fisheries. This raises questions regarding the extent to which aquaculture production can effectively reach nutritionally vulnerable populations.

Stock status across countries remains a concern. Coastal stocks in Bangladesh appear to be overexploited due to fishing pressure and pollution. Similar pressures are observed in Cambodia, Indonesia, China, the Philippines, India, and Sri Lanka. Countries dependent on shared stocks, such as tuna, face additional risks, particularly with respect to food security in countries like Maldives.

Another important trend observed is the transformation of fishing fleets. The number of fishing vessels in Asia has declined overall, mainly due to restructuring in China. In other countries, vessel numbers are either stable or declining, accompanied by a shift toward motorized boats. This trend reflects declining catch per unit effort and increasing pressure on fish stocks. This transition also has implications for employment. Traditional artisanal fisheries often involved entire families, whereas mechanized fisheries reduce employment opportunities and become more market-oriented. As a result, concerns are raised regarding local availability of fish and household nutrition.

Fish loss and waste remain significant issues. Losses are caused by poor handling practices, inadequate cold chain infrastructure, and inefficient landing operations. Ghost fishing resulting from abandoned or lost gear further exacerbates these losses. Given declining stocks and catch rates, such losses are considered particularly serious. Several countries, including India, have introduced technologies aimed at reducing bycatch and post-harvest losses. While these initiatives appear promising, their effectiveness has yet to be fully evaluated.

From a governance perspective, it is observed that most countries have reasonably strong legal frameworks, although enforcement remains uneven. Key gaps are noted in pollution control, illegal, unreported and unregulated (IUU) fishing, and the regulation of avoidable fish loss and waste. There is scope to consider legal measures to penalize preventable losses, such as the discarding of fishing gear.

Comparative analysis of countries such as Sri Lanka and Bangladesh reveals similar challenges, including high fish loss and waste, environmental sustainability issues, affordability constraints, climate vulnerability, and persistent gender inequalities. Women's participation in fisheries is substantial but remains largely informal, characterized by wage gaps, limited access to technology, and weak social protection. Even large producers such as China, India, and Indonesia face comparable issues. Despite high levels of production, nutritional deficiencies persist, indicating that increased production alone is insufficient to address malnutrition.

In conclusion, Rajdeep said that the key challenges are clearly evident. Countries with high fish production are consistently failing to translate production gains into improved nutritional outcomes, particularly for the most vulnerable populations. Production growth is nearing its limits, while demand continues to rise. Climate stress, stock depletion, infrastructure gaps, and persistent gender inequality remain major constraints. At the same time, positive interventions and innovations are being observed across countries, including conservation measures with compensation, improved cold chain systems, digital traceability, and enhanced utilization of fish waste for human consumption. The key challenge lies in scaling these initiatives sustainably beyond project-based and public funding models.

### **3. Country Perspectives**

#### **3.1. Md Shamsuddin (Bangladesh)**

He thanked FAO and BOBP-IGO for organizing this follow-up webinar, especially following the very successful workshop held two weeks ago. He said that he had reviewed the entire Bangladesh country document and begun a detailed review. He would share his feedback by the coming week, as there were a few data gaps between this document and their national records.

Regarding today's workshop, he said that Bangladesh strongly values the evidence-based synthesis drawn from regional experiences, particularly the best practices highlighted during the Chennai workshop. These findings were highly relevant to their national fisheries and aquaculture context. He said that the fisheries sector plays a vital role in Bangladesh's food security and nutritional balance and is central to livelihoods, with around 20 million people directly involved. They especially welcomed the emphasis on nutrition-sensitive aquatic food value chains. Bangladesh has around 145 small indigenous fish species, which are highly nutrient-rich and critical for child growth and for supporting vulnerable and marginalized populations.

They also appreciated the focus on reducing fish loss and waste and on transforming waste into value-added products. In addition, they strongly welcomed the attention to gender inclusion. He said that while many women are actively engaged in the fisheries sector, their contributions are often under-recognized due to income and socio-economic constraints.

He said that they saw strong potential to adapt insights from the regional workshop and incorporate them into their national targets, capacity development efforts, and policy alignment. He said that Bangladesh welcomes the replication and adoption of regional best practices and appreciates the proposed strategic roadmap. They looked forward to continued collaboration with FAO, BOBP-IGO, and regional partners and would soon provide constructive feedback on the country profile.

#### **3.2. Dr Wenbo Zhang (Shanghai Ocean University, China)**

Dr Wenbo Zhang said that China has implemented a total allowable catch system for marine fisheries to reduce overexploitation. Marine capture production has been reduced from approximately 13 million tonnes to about 10 million tonnes. They had strengthened inland fisheries resource protection, including a 10-year fishing moratorium in the Yangtze River Basin. As a result, inland capture fisheries production had reduced by nearly 50%. At the same time, they were promoting aquaculture development through integrated systems, including deep-water and recirculating aquaculture systems, and replacing traditional feed with more sustainable alternatives to reduce environmental impacts.

China was also actively addressing food loss and waste. They have national statutory guidelines and initiatives aimed at reducing food loss along the entire value chain. An action plan for conservation and waste reduction was currently being implemented, alongside national training initiatives.

Overall, they were working to make aquatic food systems more resilient, ecological, and sustainable, while also promoting gender equality and training programs for rural fishers. They welcomed this workshop and looked forward to continued engagement and participation in future activities.

### **3.3. Dr. R. Ananda Raja (ICAR-CIBA, India)**

Dr Ananda Raja added a point on traceability. He said that ICAR-CIBA has developed a traceability tool involving the design and implementation of an IoT-enabled, blockchain-based traceability system for shrimp supply chain management. This system has been patented and developed as a prototype, which has also been field-tested for a single commodity, shrimp, across the entire value chain, with a built-in feedback mechanism. The system is QR-code based, operates on an open platform, and can be customized for different fish and fishery products. He requested that this initiative be included in the Indian country profile.

### **3.4. Toni Rudi Hartanto (Ministry of Marine Affairs and Fisheries, Indonesia)**

Mr Hartano said that the Chennai workshop provided valuable insights into strengthening aquatic food value chains through sustainability, innovation, and cross-sectoral collaboration. Key challenges such as environmental sustainability, inclusive livelihoods for small-scale fishers, and the need for better integration from production to markets had been discussed. One of the main outcomes was a shared commitment among participating countries to promote responsible fisheries and aquaculture practices.

The workshop emphasized improving value addition, reducing post-harvest loss and waste, and enhancing market access, especially for small and medium enterprises. For Indonesia, he said these lessons will support national efforts to develop sustainable, resilient, competitive, and environmentally friendly aquatic food systems. They looked forward to applying these best practices and strengthening regional cooperation.

### **3.5. Mazniza Binti Othman (Department of Fisheries, Malaysia)**

Ms Mazniza said that the presentation by BOBP effectively captured the key points discussed during the workshop held in Chennai from 2 - 4 December. Regarding the Malaysian country paper circulated to delegates, they had identified several areas requiring updates, particularly related to data. They would submit revised inputs to the Secretariat as soon as possible, likely during the first week of January.

### **3.6. Charmaine Buitre (Philippines)**

Ms Charmaine Buitre said that the workshop provided an excellent platform for sharing knowledge, experiences, and good practices that participating countries could adapt to their national contexts. Regarding the Philippines country profile, they had already submitted feedback, particularly inputs from the National Nutrition Council, which is an important component of the profile. She said that the fully revised and consolidated profile would be submitted after the New Year.

### **3.7. Dalad Wattanasin (Department of Fisheries, Thailand)**

As a fisheries inspector, she said that her perspective had traditionally focused on exports. However, the Chennai workshop significantly broadened her understanding, helping her see the importance of domestic value chains and how aquatic food systems affect people across the region.

Regarding the country report, she had reviewed and shared inputs with the team. While much of the information is already included, she had noticed that some data were outdated. She said that she would submit updated comments and data in January.

### **3.8. Angela Lentisco (FAO)**

Angela Lentisco appreciated BOBP's presentation saying that it was a very good overview of the report, effectively integrating findings from the regional perspectives and clearly identifying shared gaps across countries. This was very useful for them, as it helped indicate where greater attention had to be given, especially while planning for the next biennium and intentions to increase their engagement in the region.

Regarding the countries that are still reviewing their reports, she hoped that it would be possible to receive comments by the first week of January. While this was a challenging period, it would be helpful to have the reports updated as soon as possible so that we can move forward.

## **4. Comments from Experts**

### **4.1. CM Muralidharan**

Muralidharan commended the way the workshop was conducted two weeks earlier and also appreciated the consolidated report presented at this webinar. He highlighted four key points that merit particular attention.

First was the balance between domestic and export requirements. This is a significant challenge for many countries. While exports are important for economic growth, domestic and local markets are critical from a nutrition and food security perspective. He said that how to strike this balance was an issue that deserves focused attention.

Second, when discussing value-added products, skill development and technology for value addition are often addressed, but market linkages are frequently overlooked. Over the years, they had seen many cases where value-added products were developed but failed to succeed due to weak market promotion. This applies even to products developed by self-help groups, cooperatives, and small enterprises. Good examples, such as those shared by Thailand during the workshop, on how value-added products are both developed and successfully marketed, offer useful lessons that could be adapted by other countries.

Third, there is a need to strengthen awareness of what the cold chain truly means. Many stakeholders still perceive the cold chain as beginning only after harvest, during post-harvest handling and marketing. In reality, the cold chain starts at the pond, the landing site, or on the fishing vessel itself. Building awareness and capacity around this concept is a major challenge that needs to be addressed.

Fourth, it was necessary to explore innovative ways to integrate fish and other aquatic foods into national food security and nutrition strategies. This is particularly relevant in contexts such as India, where a significant proportion of the population follows vegetarian diets. Identifying culturally

appropriate and innovative approaches is essential. Some useful examples were shared by the Philippines during the workshop, and these can serve as valuable references.

## 4.2. Sebastian Mathew

Sebastian appreciated seeing all eleven national reports presented together. He said that it was particularly interesting as to how differently countries approach the value chain concept. For example, China places a strong emphasis on moving towards sustainability, whereas several developing countries are still primarily focused on increasing production. This highlights the need to examine not only the balance between domestic and export markets, as mentioned earlier, but also the trade-offs between small-scale and large-scale systems, and between inland and marine fisheries.

The Chinese case was especially instructive. While fleet size and employment in marine fisheries are declining, there has been a rapid increase in vessels and activity in the inland sector over the past five years. This raises important questions about the kinds of trade-offs countries are making and how these shape value chain strategies.

Another critical issue was in identifying which nodes of the value chain that are being engaged with. If the objective is to promote gender inclusion, then greater focus may be required on post-harvest activities, where women are often more actively involved. If poverty reduction is the priority, then attention must be paid to employment generation and income across specific segments of the value chain.

When synthesizing findings into a regional report, different configurations will be required, he said. Depending on national priorities, countries may need to focus on particular nodes of the value chain. Rather than fragmenting the value chain further, the challenge is to identify meaningful syntheses. For example, if women's participation in post-harvest activities is a common theme across several countries—such as Bangladesh, India, and Sri Lanka—then a targeted regional strategy could be developed. At the same time, different approaches may be required for countries such as China or Indonesia.

This kind of analysis can help clarify whether the focus is on markets, production, processing, or other stages of the value chain. One element that he saw missing from many presentations, was culture. He said that value chains must also reflect the cultural contexts of fishing communities. Greater attention should be given to indigenous and tribal communities, across both inland and marine sectors, and to the cultural values that can be highlighted through value chain analysis.

Overall, he believed this approach could provide a more balanced perspective by focusing on the people involved in the value chain and examining how value chain development contributes to employment, income, food security, and the cultural heritage of traditional fishing communities.

Taken together, this offered a very promising analytical framework. The key is to ensure that while examining all segments of the value chain, the analysis was not fragmented, instead arriving at a clear, holistic, and coordinated perspective across countries and contexts.

**Dr Krishnan** thanked all the national delegates. He said that some of the comments suggest that there may be a need for an additional document and requested national teams to incorporate amendments directly into the document using track change mode. He said that the the suggestion to include cultural dimensions was a good one as even within a single country like India, there are significant cultural variations. While capturing all micro-level details is challenging for the BOBP Secretariat, these inputs were strongly valued.

He requested all national delegates to contribute case studies, government interventions, or interesting practices related to specific fisheries. These could be inserted directly into the document or shared as leads for further exploration.

He said that looking at World Bank and national inflation data, it appeared that fish and fish product prices are rising faster than prices in other food categories. He wanted to know from the participants if they were seeing such a trend at the local level. Especially for Bangladesh, Indonesia, the Philippines, and Malaysia, he asked if fish prices were increasing faster than staple foods such as rice, vegetables, and other food products? He said that the concern was that fish may be becoming increasingly unaffordable, and wanted to know ground realities.

**Angela Lentisco** said that it would be an excellent question for InfoFish, as they monitor fish prices closely. It was also a complex question, as it depended on which species and which value chain was being referred to. Still, it would be useful to hear an overall assessment from the countries.

## 5. Concluding remarks

**Dr Ponniah** said that despite concerns around affordability, analysis clearly shows that fish remains one of the most cost-effective sources of protein. From a human capital perspective, protein is essential, and fish offers a relatively affordable and environmentally sustainable option compared to other animal-source foods. When considering energy costs and environmental impact, fish performs particularly well. This is an important talking point when advocating for fisheries investment, especially when competing for funding with other sectors. Fish is a diverse commodity, ranging from high-value species like tuna to low-cost species such as sardines. Small indigenous species, in particular, are critical for the poorest populations and deserve special attention in the study. Fish will continue to play a vital role in building human capital. The value chain concept is especially useful because it allows us to communicate with non-fisheries stakeholders—whether the focus is sustainability, poverty reduction, or women’s empowerment. Fisheries offer significant opportunities in all these areas.

The six-dimensional framework enables meaningful comparisons across countries and highlights areas such as post-harvest loss, where targeted interventions are urgently needed. He also noted examples such as the incorporation of fish into school feeding programs. Indonesia is experimenting with this approach, although in India this remains challenging due to policy and cultural constraints. Nevertheless, domestic fish markets are expanding, particularly since COVID-19, and opportunities vary widely even within a single country.

The value chain approach also encourages production-focused scientists to think more about markets, which is often overlooked. Market orientation is one of the major strengths of this framework.

Finally, there are many successful case studies worth sharing. For example, in Cambodia, simply providing ice boxes reportedly led to a 300% increase in fishermen’s income. On-board freezing facilities in tuna fisheries have similarly improved returns. Such interventions could be included as annexes to highlight practical lessons and programs that other countries could replicate.

**Dr Krishnan** thanked the chair and said that it had been a very productive discussion. With expertise from so many countries and institutions, he was confident that this analysis would help strengthen and streamline value chain work in fisheries.

## 6. Annexure

### PROSPECTUS

#### 1.0 Background

Asia accounts for over 60 percent of global fisheries and aquaculture production and remains central to global food security, nutrition, employment, and livelihoods. However, the region continues to face persistent structural challenges across aquatic food value chains, including food loss and waste, uneven access to markets, weak post-harvest systems, under-utilisation of nutrient-rich species, gender-based constraints, and fragmented compliance and trade frameworks.

To address these challenges, the **Food and Agriculture Organization of the United Nations (FAO)** and the **Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)** co-organised a **Regional Workshop on “Strengthening Sustainable Aquatic Food Value Chains for Enhanced Food Security and Nutrition in Asia”**, hosted by the **Government of India** from **2–4 December 2025 in Chennai**.

The physical workshop brought together national delegations and technical experts from **eleven countries**—Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Maldives, Philippines, Sri Lanka, Thailand, and Viet Nam—along with regional and global institutions. Participants reviewed national value chain profiles prepared using harmonised FAO methodologies, exchanged technical experiences, and identified shared constraints and opportunities.

Following the workshop, country inputs were refined and consolidated into a **Regional Analysis**, synthesising cross-country evidence and policy-relevant insights on aquatic food value chains, nutrition outcomes, loss and waste reduction, gender inclusion, and trade and compliance considerations.

This **follow-up webinar** is convened to formally present the **Regional Analysis**, reflect on key messages emerging from the Chennai workshop, and articulate a **strategic roadmap** for advancing sustainable, nutrition-sensitive aquatic food value chains across Asia.

#### 2.0 Objective

This webinar aims to **advance the post-workshop consolidation process** following the Regional Workshop held in Chennai (2–4 December 2025) by presenting the Regional Analysis and facilitating structured country feedback, which will help in the finalisation of country and regional outputs.

The specific objectives of the webinar are to:

1. **Present the Regional Analysis:** Share the consolidated findings emerging from national reports and technical deliberations during the Chennai workshop, highlighting cross-cutting trends, constraints, and opportunities across Asian aquatic food value chains.
2. **Interpret Policy-Relevant Insights:** Translate analytical findings into clear messages on nutrition-sensitive value chain development, food loss and waste reduction, small fish utilisation, gender inclusion, and trade and compliance frameworks, aligned with FAO’s sustainable food value chain approach.
3. **Provide a Strategic Roadmap:** Outline priority strategic directions and entry points for countries and partners to strengthen sustainable aquatic food value chains as a pathway to enhanced food security and nutrition in Asia.

4. **Enable Country Reflections and Alignment:** Provide an opportunity for participating countries and regional partners to reflect on the findings, validate key messages, and align future national and regional actions.
5. **Set the Basis for Follow-up Engagement:** Identify areas for continued collaboration, technical assistance, and policy dialogue under FAO- and BOBP-IGO-supported initiatives.

## Key Deliverables

The webinar will contribute to the following deliverables:

1. **Consolidated Technical Feedback from Countries** Compilation of country comments, corrections, and supplementary inputs on the draft country reports and regional synthesis presented during the webinar.
2. **Revised Country Reports (Post-Webinar)** Updated national aquatic food value chain reports incorporating feedback received during the webinar and through subsequent written submissions by governments.
3. **Refined Regional Analysis Report** A strengthened regional synthesis reflecting cross-country inputs, emerging priorities, and agreed technical directions, to be finalised after due consideration of country feedback.
4. **Roadmap for Final Validation and Dissemination** A clear process and timeline for final endorsement, publication, and dissemination of the regional report, respecting national review procedures and approval requirements.

## 3.0 Participants

Participation in the webinar will be **by nomination and invitation**. The webinar will bring together:

- **Participants from the Regional Workshop on *Strengthening Sustainable Aquatic Food Value Chains for Enhanced Food Security and Nutrition in Asia*** held in Chennai from 2–4 December 2025, including members of national delegations and technical experts who contributed to the workshop deliberations; and
- **Additional participants nominated by Governments**, including relevant officials, experts, or practitioners, who may contribute substantively to the refinement, validation, or finalisation of the Regional Analysis and associated recommendations.

This approach ensures **continuity between the physical workshop and the follow-up webinar**, while allowing Governments the flexibility to include additional contributors with relevant expertise or policy responsibilities.

## 4.0 How to Join

**Topic: Webinar on Strengthening Sustainable Aquatic Food Value Chains for Enhanced Food Security and Nutrition in Asia**

Date: Tuesday, 23 December 2025

Time: 14:30 hours (Chennai time)/ 16:00 hours (Bangkok time)

**Join Zoom Meeting:**

<https://us02web.zoom.us/j/83228429960?pwd=kkDJQvy6iJUHKRpiNx9Nren1DaFV7k.1>

Meeting ID: 832 2842 9960

Passcode: 838401

Participants are requested to join the meeting **10 minutes in advance** to facilitate a timely start.

## **5.0 Expected Outcomes**

- Shared understanding of regional patterns and priority challenges in aquatic food value chains across Asia
- Clear articulation of strategic directions for nutrition-sensitive, inclusive, and sustainable value chain development
- Strengthened regional coherence and momentum following the December 2025 physical workshop
- Agreed areas for technical follow-up and cooperation among countries and partner institutions



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