REPORT OF
THE FIFTY-SIXTH MEETING OF THE COUNCIL
OF
THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

6–9 May 2024

(Tagaytay City, Philippines)

THE SECRETARIAT

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SEC/RM/152 JULY 2024

PREPARATION AND DISTRIBUTION OF THIS DOCUMENT

Report of the Fifty-sixth Meeting of the Council of the Southeast Asian Fisheries Development Center was prepared by Secretariat of the Southeast Asian Fisheries Development Center, in collaboration with its Departments namely, the Training Department (TD), the Marine Fisheries Research Department (MFRD), the Aquaculture Department (AQD), the Marine Fishery Resources Development and Management Department (MFRDMD), and the Inland Fishery Resources Development and Management Department (IFRDMD). The document is distributed to the SEAFDEC Member Countries and its Departments.

BIBLIOGRAPHIC CITATION

SEAFDEC. (2024). *Report of the Fifty-sixth Meeting of the Council of the Southeast Asian Fisheries Development Center*. Southeast Asian Fisheries Development Center, Bangkok, Thailand. 217 pp.

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REPORT OF THE FIFTY-SIXTH MEETING OF THE COUNCIL OF THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

(6–9 May 2024)

(Tagaytay City, Philippines)

INTRODUCTION

1. The Fifty-sixth Meeting of the Council (56CM) of the Southeast Asian Fisheries Development Center (SEAFDEC) was conducted from 6 to 9 May 2024 in Tagaytay City, Philippines at the invitation of the Department of Agriculture, Bureau of Fisheries and Aquatic Resources (DA-BFAR) of the Philippines.

2. The 56CM was attended by the Council Directors for Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam together with their respective delegations. Moreover, the 56CM was also attended by the SEAFDEC Secretary-General, SEAFDEC Deputy Secretary-General, and senior officials of the SEAFDEC Secretariat and Departments. Other attendees include representatives from the Food and Agriculture Organization of the United Nations/Regional Office for Asia and the Pacific (FAO/RAP) and the Network of Aquaculture Centres in Asia-Pacific (NACA) as observers. The list of participants appears in **Annex 1**.

INAUGURAL CEREMONY

3. The Inaugural Ceremony of the Fifty-sixth Meeting of the SEAFDEC Council was held on 6 May 2024, and officiated by the Undersecretary for Fisheries of the Department of Agriculture (DA) of the Philippines and SEAFDEC Council Director for the Philippines, *Ms. Drusila Esther E. Bayate*.

4. The Regional Director of BFAR Region IV-A, *Mr. Sammy A. Malvas*, delivered the Welcome Address. In his message, *Mr. Malvas* extended gratitude to SEAFDEC for its unwavering dedication to advancing the region's fisheries industry. He highlighted the alignment of the SEAFDEC programs and activities with the SEAFDEC Strategies Toward 2030. Particularly, Strategy II, which focuses on supporting the sustainable growth of aquaculture, not only complements fisheries but also significantly contributes to food security, poverty alleviation, and the livelihoods of the people across the region. He reiterated the partnership between AQD and the Bureau of Fisheries and Aquatic Resources (BFAR) as well as between AQD and the National Fisheries Research and Development Institute (NFRDI) as a testament to the shared vision for a more robust aquaculture. Emphasizing the core value of SEAFDEC to combat IUU fishing, he echoed the commitment of the Philippines to combat IUU fishing through improved monitoring, control, and surveillance (MCS) measures. His Welcome Address appears in **Annex 2**.

5. The Alternate Council Director for Myanmar, *Mr. Myint Zin Htoo*, on behalf of *Mr. Wai Lin Maung*, in his capacity as the Chairperson of SEAFDEC Council for the Year 2023–2024, welcomed the participants to the 56CM. He expressed appreciation on behalf of the SEAFDEC Council to the Government of the Philippines and BFAR for the warm hospitality and hosting of the 56CM. While emphasizing the importance of inland fisheries for human well-being and food security, he encouraged the Member Countries to pay attention to the management of inland fisheries for sustainable utilization. Citing several challenges in fisheries and aquaculture *e.g.* IUU fishing, environmental degradation, and climate change, which have significantly contributed to the decline of fishery resources and production, he underscored the important role of SEAFDEC in supporting the Member Countries to enhance their capacity to undertake the necessary measures for the sustainable utilization of fishery resources and aquaculture. This support aims to meet the growing demand for fisheries products and ensure long-term food security. In addition, he congratulated SEAFDEC for securing funds and working with partners to address several issues through the implementation of the new projects to commence this year. His Remark appears in **Annex 3**.

6. The Undersecretary for Fisheries of the Department of Agriculture (DA) of the Philippines and Council Director for the Philippines, *Ms. Drusila Esther E. Bayate*, delivered the Keynote Message. On behalf of the Department of Agriculture, the overseeing agency of BFAR programs, particularly in responsible and environment-friendly aquaculture production, including the development of priority

commodities, mariculture development, and feed formulation. BFAR is also committed to sustainable capture fisheries through sustainable management of resources, governance, and community development fostering both internal and international collaboration. *Ms. Bayate* reiterated the pledge of the DA to adhere to the SEAFDEC Strategies Toward 2030 which serve as guiding principles in the shared efforts to enhance the well-being of communities and preserve natural resources. She then extended gratitude to SEAFDEC for their dedication and tireless work, and expressed hope that the 56CM would cater fruitful discussions and collaborative endeavors toward a brighter future for the fisheries and aquaculture sector in the region. Her Keynote Message appears in **Annex 4**.

I. PROCEDURAL MATTERS

1.1 Opening of the Meeting

7. The Alternate Council Director for Myanmar, *Mr. Myint Zin Htoo*, on behalf of *Mr. Wai Lin Maung*, the Chairperson of the SEAFDEC Council for the Year 2023–2024 welcomed the participants to the 56CM. In his Opening Remarks, he reiterated his gratitude to SEAFDEC for the support extended to the Council Director for Myanmar during his term as Chairperson of the SEAFDEC Council from 2023 to 2024.

1.2 Election of the Chairperson for the Year 2024–2025

8. The Undersecretary for Fisheries of the Department of Agriculture of the Philippines and SEAFDEC Council Director for the Philippines, *Ms. Drusila Esther E. Bayate*, was unanimously elected as the Chairperson of the SEAFDEC Council for the Year 2024–2025, in accordance with Article 5, Paragraph 4 of the Agreement Establishing SEAFDEC.

9. *Ms. Drusila Esther E. Bayate* expressed her gratitude to the SEAFDEC Council for electing her as the Chairperson of the SEAFDEC Council for 2024–2025. She then expressed her appreciation to the Council Director for Myanmar for his excellent Chairpersonship during the year 2023–2024 as well as to the SEAFDEC Secretariat for supporting the Philippines in the preparation of the 56CM.

1.3 Adoption of the Agenda and Arrangements for the Meeting

10. Noting the proposal made by the Council Director for Singapore and Council Director for Indonesia for discussion under Agenda 8, the Council adopted the Agenda of the Meeting which appears as **Annex 5**.

II. REPORT OF SECRETARY-GENERAL

11. The Secretary-General of SEAFDEC, *Dr. Suttinee Limthammahisorn*, presented the draft SEAFDEC Annual Report 2023 highlighting the activities and major achievements of SEAFDEC from January to December 2023 in accordance with the SEAFDEC Strategies Towards 2030.

12. The Council Director for Malaysia commended SEAFDEC for its activities and achievements in 2023. Noting that there are some projects planned for 2023 but not able to proceed due to budgetary administrative process, he suggested that such a situation should be reflected in the Executive Summary of the Annual Report, and expressed hope for these projects to be implemented in 2024. Furthermore, he urged SEAFDEC to continue supporting the AMSs in promoting sustainable fisheries and aquaculture for food security. He also encouraged SEAFDEC to explore opportunities to increase projects aiming to build the capacity of the AMS in enhancing the trade compliance of the region's fish and fishery products to market requirements. Additionally, he emphasized the importance of addressing cross-cutting issues, such as labor, gender, and climate change, where related to international fisheries. This is due to growing international trade in fish and fishery products of the region, necessitating the AMSs to comply with new regulations. He then adopted the SEAFDEC Annual Report 2023 with a note on the amendment of the Executive Summary.

13. The Council Director for Myanmar conveyed his appreciation to the SEAFDEC Secretary-General for reporting the accomplishments made by SEAFDEC through its programs and projects in 2023 that are in line with the priorities expressed by the SEAFDEC Council and SEAFDEC Program Committee. Additionally, Myanmar recognized that the SEAFDEC Secretariat and Departments had been well managing

and providing the Member Countries technical support for sustainable fisheries development and supporting the ASEAN regional cooperation efforts. He therefore agreed to approve the SEADEC Annual Report 2023.

14. The Council Director for the Philippines extended congratulations to SEAFDEC for its comprehensive report on programs and activities in 2023, highlighting those relevant to the capacity-building program in aquaculture conducted by AQD. He requested SEAFDEC to continue implementing the capacity-building program, focusing on improving and enhancing aquaculture development and combating IUU fishing in the coming year. Finally, he approved the SEAFDEC Annual Report 2023 for publication.

15. The Council Director for Singapore expressed appreciation to SEAFDEC for its programs of activities in 2023. He acknowledged that the SEAFDEC Annual Report 2023 could serve as a valuable reference for the Member Countries, collaborative partners, and the public to have insight into SEAFDEC roles and achievements. Furthermore, he expressed appreciation to the SEAFDEC Secretary-General for the informative presentation and approved the SEAFDEC Annual Report 2023 for publication.

16. While supporting the SEAFDEC Annual Report 2023, the Council Director for Thailand expressed appreciation to SEAFDEC for the achievements of its programs and activities, particularly the various training initiatives that enhanced the capacity, knowledge, and expertise of the AMSs. He requested SEAFDEC to facilitate the transfer of technology, specifically the utilization of artificial intelligence (AI), to support technology implementation for small-scale fisheries. This includes the implementation of an AI system for MCS of fishing vessels, identification of aquatic animal species, the import-export of fish and fishery products and aquaculture.

17. The Council Director for Viet Nam expressed appreciation to SEAFDEC for implementing programs and activities in 2023. He informed the Council that Viet Nam developed its electronic catch documentation and traceability (eCDT) based on the eACDS demonstration by SEAFDEC. Additionally, the Department of Irrigation of Viet Nam adopted the lessons learned from fish passage programs in reservoirs in the country. He mentioned that Viet Nam is striving to decrease capture fisheries and increase aquaculture, as outlined in its Fishery Development Strategy to 2030, with a vision extending to 2045. Therefore, he requested SEAFDEC to facilitate initiatives related to marine aquaculture, coastal small-scale fisheries, and alignment with local tourism and climate change. Additionally, he suggested that the future SEAFDEC Annual Reports underscore the achievements of each Member Country.

18. The Council Director for Lao PDR expressed appreciation to SEAFDEC for its achievements in 2023 which contributed to sustainable fisheries management, food security, poverty alleviation, and improved livelihood for people in the region. After requesting SEAFDEC to consider extending more support to inland fisheries in 2024 particularly human resources capacity development programs, he approved the SEAFDEC Annual Report 2023.

19. The Council Director for Indonesia noted the SEAFDEC Annual Report 2023 depicting the performance and achievements of SEAFDEC in 2023. He informed the Council that Indonesia participated in most capacity-building activities of SEAFDEC in 2023 by assigning participants from the Ministry of Marine Affairs and Fisheries (MMAF) as well as engaging other Indonesian research institutions in activities held by MFRDMD on fisheries management strategies for pelagic fish. Moreover, Indonesia, through IFRDMD, hosted the Forty-sixth Meeting of SEAFDEC Program Committee (46PCM) and Twenty-sixth Meeting of the FCG/ASSP (26FCG/ASSP) in Bali in 2023. He then expressed appreciation for SEAFDEC activities in 2023 regarding gender mainstreaming and informed the Council that Indonesia through the MMAF encouraged women in implementing the country's Blue Economy program. Finally, he congratulated SEAFDEC for its achievements in 2023 and hoped that the activities scheduled in 2024 would be conducted in a timely manner and in-person mode.

20. The Council Director for Japan expressed appreciation to SEAFDEC for providing detailed information on the project and activities implemented in 2023 and supported the adoption of the SEAFDEC Annual Report 2023.

21. The Council Director for Brunei Darussalam expressed appreciation to SEAFDEC for implementing programs and activities in 2023. She also echoed the suggestion made by the Council Director

for Malaysia to explore opportunities for more activities to build the capacity of the AMSs in enhancing trade and compliance of the region's fish and fishery products to market requirements.

22. After providing views and comments on the programs and activities of SEAFDEC, the Council approved the SEAFDEC Annual Report 2023 for publication and dissemination to the Member Countries, relevant organizations, and the public.

III. NOTE OF THE CHAIRPERSON OF THE SEAFDEC PROGRAM COMMITTEE ON THE RESULTS OF THE FORTY-SIXTH MEETING

23. The Council took note of the results of the Forty-sixth Meeting of the Program Committee of SEAFDEC (**Annex 6**) which was held on 20–22 November 2023 in Bali, Indonesia, as presented by the SEAFDEC Secretary-General, *Dr. Suttinee Limthammahisorn*, in her capacity as Chairperson of the Program Committee. The Council then provided comments and suggestions for the improvement of the future programs of activities of SEAFDEC.

24. The Council Director for Malaysia commended SEAFDEC for its 2023 program initiatives, specifically acknowledging IFRDMD for conducting surveys to assess the status of inland fisheries at three locations in Malaysia. He anticipated the participation of Malaysia in the workshop on Special Area for Conservation and Fish *Refugia* (SPEECTRA) and emphasized the country's commitment to future inland fisheries management projects. Additionally, he expressed appreciation to SEAFDEC for accommodating the comments of Malaysia on the Regional Framework for Fishery Statistics in Southeast Asia (2024 Edition). He also reiterated the request of Malaysia to SEAFDEC during the 46PCM for technical assistance in transferring technologies for milkfish breeding as well as for other species.

25. The Council Director for Indonesia took note of the report of the 46PCM and appreciated SEAFDEC for implementing 2023 programs and activities. He proposed cooperation between SEAFDEC and the Member Countries to advance the Blue Economy, focusing on enhancing human resources in fisheries communities. The proposed initiatives include Vocational Goes to Actors (VOGA) and Smart Fisheries Villages (SFVs).

26. The Council Director for Myanmar expressed gratitude to the SEAFDEC Secretariat and Departments for providing technical assistance that aligns with the needs of Myanmar. He urged SEAFDEC to continue the project activities under the SEAFDEC Strategies emphasizing collaboration with the Member Countries.

27. The Council Director for Thailand noted the programs implemented in 2023 and the proposed programs to be implemented in 2024 as recommended by the SEAFDEC Program Committee.

28. In response to the clarification sought by the Chief of AQD regarding the request from Malaysia for support for milkfish culture, the Council Director for Malaysia informed the Council that Malaysia is focusing on milkfish production in Kedah and Johor and conveyed the interest in increasing aquaculture production. Malaysia requested AQD for assistance in developing milkfish culture and will communicate with AQD for further discussion.

29. In response to the request from Viet Nam for support on seaweed aquaculture and climate change adaptation techniques, the Council was informed by the representative from the SEAFDEC Secretariat of the upcoming project "Blue Horizon: Ocean Relief through Seaweed Aquaculture" starting in 2024 which will address these concerns comprehensively.

30. After the discussion, the Council approved the progress of the programs of activities implemented by SEAFDEC in 2023 and approved the proposed programs of activities for 2024, as well as the recommendations of the 46PCM. The Council then requested SEAFDEC to consider incorporating the recommendations of the Council at this 56CM in its future programs.

IV. NOTE OF THE CHAIRPERSON OF THE FISHERIES CONSULTATIVE GROUP (FCG) OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (ASSP) ON THE RESULTS OF THE TWENTY-SIXTH MEETING

31. The Council noted the results and recommendations of the Twenty-sixth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (26FCG/ASSP) which was held on 23–24 November 2023 in Bali, Indonesia (**Annex 7**) as presented by the Deputy Director-General of the Department of Livestock and Fisheries of Lao PDR, *Dr. Phanthavong Vongsamphanh*, representing *Dr. Kaviphone Phouthavong,* on behalf of the ASEAN Co-chair for the 26FCG/ASSP. The Council provided recommendations for improving the projects under the FCG/ASSP mechanism.

32. The Council Director for Indonesia informed the Council that Indonesia has conducted a series of national consultations to follow up on the development of the priority deliverables under the Strategic Plan of Action on ASEAN Cooperation on Fisheries, notably regional strategies for the implementation of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). Additionally, the country is in the progress of developing the document of Common Understanding and Initiative on Small-scale Aquaculture. He also added that Indonesia will conduct a regional online workshop regarding Small-scale Fisheries and Small-scale Aquaculture in June 2024 to gather inputs from the ASEAN Member States (AMSs) and finalize the document before the 32nd Meeting of ASEAN Sectoral Working Group on Fisheries (ASWGFi).

33. The Council Director for Myanmar expressed appreciation to SEAFDEC for providing technical support on policy matters and other issues crucial for the AMSs to implement the sustainable management and development of the fisheries sector in the respective countries. Recognizing the importance of the discussions during the 26FCG/ASSP on collaborative programs and other progress of works, he endorsed the results of the 26FCG/ASSP.

34. While endorsing the results and recommendations of the 26FCG/ASSP and noting that this would be reported to the 32nd Meeting of ASWGFi in 2024, the Council requested SEAFDEC to continue coordinating and cooperating with the ASEAN Secretariat in the implementation of the programs under the FCG/ASSP mechanism in the future.

V. POLICY CONSIDERATION ON IMPORTANT ISSUES

5.1 Fisheries Management

5.1.1 Efforts to Combat IUU Fishing

35. The Council took note of the SEAFDEC core activities conducted in the past and the outcomes of the Regional Workshop on the Project End of Strengthening Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia held in March 2024 which delineated nine priority areas for future actions aimed at supporting the AMSs in combating IUU fishing **(Annex 8)** as presented by the representative from TD.

36. The Council Director for Malaysia expressed gratitude to TD for providing technical assistance in the training on the electronic ASEAN Catch Documentation Scheme (eACDS) and hoped that TD continue offering technical support on eACDS. In this regard, he requested TD to collaborate with various organizations in providing technical assistance and foster close cooperation with the AMSs to harmonize regional strategies for combating IUU fishing.

37. The Council Director for Myanmar took note of the SEAFDEC core activities in the Regional Fishing Vessels Record (RFVR) Database, eACDS, and port State measures (PSM) to combat IUU fishing, including the outcomes of the Regional Workshop. Regarding vessel monitoring, he informed the Council of the installation of the vessel monitoring system (VMS) in all offshore commercial fishing vessels in Myanmar. Additionally, he highlighted the plans of the Department of Marine Administration to initiate the application of automatic identification system (AIS) for medium-scale fishing vessels. Nevertheless, he cited that Myanmar still requires capacity building for MCS across all fisheries and would collaborate with the other AMSs in sharing information on IUU fishing via the ASEAN Network for Combating IUU Fishing

(AN-IUU) interactive platform. He also underscored the issues of encroachment of foreign fishing vessels, strengthening catch documentation, estimating IUU losses, monitoring transshipment activities, and legal reforms for combating IUU fishing. Among the priority areas, Myanmar requested SEAFDEC for capacity building on MCS across all types of fisheries.

38. The Council Director for Viet Nam thanked SEAFDEC for continuing to provide regional platforms for information sharing to combat IUU fishing. In addition to the nine priority areas, he suggested that the region consider broader strategies such as reducing the number of fishing vessels, conducting stock assessment, regulating licensing, transitioning fisheries to other activities, and sharing good practices among the AMSs. He requested SEAFDEC to consider compiling a list of IUU fishing vessels from various sources which could help countries to prevent the landing of IUU fish and fishery products.

39. While expressing appreciation to TD for promoting efforts to combat IUU fishing to the AMSs and recognizing the implementation of international instruments, the Council Director for Japan informed the Council that Japan is assisting the AMSs in their efforts to combat IUU fishing in the region through the Japanese Trust Fund (JTF) and ASEAN- JICA projects. He requested SEAFDEC to enhance the coordination of these projects to avoid duplications and encouraged SEAFDEC to take further steps to combat IUU fishing by enhancing cooperation among the Member Countries and partner organizations.

40. The Council Director for Indonesia noted the progress of SEAFDEC core initiatives on combating IUU fishing and hoped that SEAFDEC would continue these activities, especially in enhancing the capacity of fisheries officers to implement the port State measures (PSM). He informed the Council that Indonesia hosted the 4th Meeting of the Parties for the PSMA in Bali on 8−12 May 2023, while the MMAF in collaboration with Regional Plan of Action to Promote Responsible Fishing Practices, including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU) and the Arafura and Timor Seas Ecosystem Action (ATSEA) Phase 2 conducted the Advance Regional Fisheries Intelligence Training (AFIT) in February 2024.

41. Moreover, while noting the outcomes of the combating IUU fishing workshop held in March 2024, the Council Director for Indonesia expressed the commitment of Indonesia to cooperate and actively engage in future activities, including RFVR and enhancing PSM activities through training. He also encouraged SEAFDEC to have close cooperation with the RPOA-IUU and AN-IUU to support the efforts in combating IUU fishing in the region.

42. While noting the outcomes of the combating IUU fishing workshop held in March 2024, the Council Director for Brunei Darussalam recognized the ongoing effort of TD to support the AMSs in combating IUU fishing and updating information on the RFVR Database. While urging the other Member Countries to sustain similar efforts to combat IUU fishing, she requested SEAFDEC to provide capacity building on PSM implementation in the region and identify artificial intelligence (AI) tools for enhanced MCS efficiency.

43. The Council Director for Thailand expressed appreciation to SEAFDEC and the Government of Japan for supporting efforts to combat IUU fishing in Southeast Asia. He emphasized that SEAFDEC projects and activities should take into account the needs of the Member Countries and follow the directions of relevant international regulations and standards. He added that SEAFDEC not only provides training for officials from the Member Countries but also monitors the operational progress to optimize project efficiency and effectiveness. He hoped that SEAFDEC would continue to develop projects and activities beneficial to the Member Countries in the future.

44. Furthermore, while reiterating the role of Thailand as the host of the AN-IUU interactive platform, the Council Director for Thailand encouraged the AMSs to leverage this platform effectively. He also urged the AMSs to exchange information on laws and regulations regarding IUU fishing through this platform, fostering collaboration and sharing best practices among the AMSs.

45. The Council Director for Thailand also requested SEAFDEC to enhance training under the MCS plan regarding the assessment of fishing vessel risks using innovative tools and technologies. This may include collaboration with experts or organizations such as the National Oceanic and Atmospheric Administration (NOAA), Australian Fisheries Management Authority (AFMA), and Global Fishing Watch.

Additionally, he requested SEAFDEC to assist the AMSs in implementing the FAO Voluntary Guidelines for Transshipment.

46. The Council Director for Cambodia appreciated the presentation made by TD and recognized the nine priority areas. He requested SEAFDEC to involve Cambodia in additional activities to be conducted by SEAFDEC in the future. He also added that Cambodia is in the process of revising the NPOA-IUU and that learning from the initiatives of other AMSs would be beneficial for the revision.

47. While expressing that the determination of the magnitude of IUU fishing in the region remains unclear, the Council Director for the Philippines suggested SEAFDEC explore ways to help the AMSs by conducting analysis and identifying practical tools to assess the magnitude of IUU fishing. In response, the Secretary-General of SEAFDEC informed the Council that SEAFDEC would consider including this request in its future programs.

5.1.2 Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region

48. The Council was informed of the progress of the Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region (RPOA-Neritic Tunas) (**Annex 9**) as presented by the representative from MFRDMD. Specifically, the Council noted the preliminary results of the stock and risk assessments of two seerfish species, namely: Indo-Pacific king mackerel (*Scomberomorus guttatus*) and narrow-barred Spanish mackerel (*S. commerson*), in the Southeast Asian Waters as an output of the Regional Training on Stocks and Risk Assessments for Two Seerfish Species in Southeast Asian Waters organized in December 2023.

49. The Council Director for Japan expressed appreciation to SEAFDEC for its efforts in promoting the sustainable utilization of neritic tuna resources in the region. He took note of economic and social values of neritic tuna species in Southeast Asia and hoped that the experience and knowledge in the implementation of the RPOA-Neritic Tunas would be shared and utilized among the AMSs.

50. The Council Director for Indonesia noted the activities carried out by MFRDMD particularly the preliminary results of the stock and risk assessments of two seerfish species. He then emphasized that based on such results, Indonesia will continue to support the sustainable utilization of neritic tuna resources in the Southeast Asian region.

51. While noting the preliminary results of stock and risk assessments of two seerfish species, the Council Director for Malaysia anticipated the timely completion and submission of the full assessment report to the 47th Meeting of SEAFDEC Program Committee in 2024 which would greatly benefit the AMSs in their management of neritic tunas. Additionally, he provided recommendations for advocating a holistic approach, including measures to limit the total catch of king mackerel and Spanish mackerel to ensure sustainability in the eastern and western Pacific Oceans. Consequently, he requested the ASEAN Secretariat to arrange specific discussions before the endorsement of the 33rd Meeting of ASWGFi in 2025.

52. The Council Director for the Philippines underscored the importance of stock management of neritic tunas in the region, emphasizing their sustainability, and acknowledged the results of stock and risk assessments. Additionally, he highlighted the significance of neritic tunas to small-scale fishers; thus, the strategies for limiting the catch of these species should also consider socioeconomic impacts in this sector.

53. The Council Director for Thailand commended SEAFDEC for arranging the Regional Training on Stocks and Risk Assessments for Two Seerfish Species in Southeast Asian Waters. He requested SEAFDEC to explore avenues for promoting the management of neritic tuna and tuna-like species among the AMSs.

5.1.3 Regional Contribution to Global Initiative on Aquatic Genetic Resources

54. The Council took note of the Regional Contribution to Global Initiative on Aquatic Genetic Resources (**Annex 10**) presented by the representative from the SEAFDEC Secretariat. Specifically, the SEAFDEC Member Countries were encouraged to participate in the regional workshop on "The application of AquaGRIS: FAO global information system, to build national registries of aquatic genetic resources"

scheduled on 6–7 June 2024 in Bangkok, Thailand, and start the process of creating national registries for AquaGRIS after the Workshop.

5.1.4 Revision of the Regional Framework for Fishery Statistics in Southeast Asia

55. The Council noted the progress of the Revision of the Regional Framework for Fishery Statistics in Southeast Asia (**Annex 11**) as presented by the representative from the SEAFDEC Secretariat.

56. The Council Director for Indonesia expressed appreciation to SEAFDEC for developing the Regional Framework for Fishery Statistics in Southeast Asia (2024 Revision), the draft of which was presented to the 46PCM. Furthermore, he hoped that SEAFDEC would consider providing support for the capacity building for the AMSs, especially in monitoring inland fisheries catch data in its future programs.

57. The Council Director for Viet Nam took note of the Regional Framework for Fishery Statistics in Southeast Asia (2024 Revision). He sought clarification on whether the methodology used by SEAFDEC for collecting statistics is similar to that of FAO. In response, the representative from the SEAFDEC Secretariat clarified that the questionnaires used by SEAFDEC and FAO are shared and based on the same standards, definitions, and classification. He then expressed the hope that SEAFDEC would conduct training to enhance the capacity of the AMSs in statistics data collection.

58. After consideration, the Council approved the revised Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition), set of questionnaires for compiling fishery statistics from the AMSs based on the regional framework and updated text of the "General Notes" of the Statistics Bulletin of Southeast Asia, which would be applied for compilation of regional fishery statistics data of 2024 onwards. The Council also took note of the updated members of the ASEAN Network on Fishery Statistics. Moreover, the Council supported the submission of the Regional Framework (2024 Edition) to the 32nd ASWGFi for endorsement under the ASEAN mechanism.

5.2 International Fisheries Related Issues

5.2.1 CITES-Related Issues

59. The Council took note of the updated information and insights from CITES-related meetings in 2023, ongoing regional initiatives of SEAFDEC, and key concerns and recommendations in relation to CITES issues (**Annex 12**) as presented by the representative from the SEAFDEC Secretariat.

60. Recognizing the efforts of SEAFDEC in organizing the regional workshop on the development of common positions for the 19th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES COP-19), the Council Director for Indonesia informed the Council that Indonesia developed the NPOA-Seahorses for 2016–2020. This document is utilized in developing non-detriment findings (NDFs) and conducting analyses to monitor seahorse resources in Indonesia. He encouraged SEAFDEC to further enhance the capacity of the Member Countries, particularly in monitoring critical species.

61. While reiterating the discussion on listing of sharks and rays at CITES-COP19 held in November 2022 where 54 species of sharks were listed in Appendix II of CITES, the Council Director for Japan reaffirmed the importance of working with the AMSs and the coordination by SEAFDEC toward future CITES meetings. He further expressed concern on the possibility of CITES using an approach to list a large number of species with a poor scientific basis using look-alike provisions in the future. He emphasized the importance of the common position of the Member Countries. In addition, noting the challenges faced by the region in implementing CITES provisions, *e.g.* species identification, data collection of catch, stock assessment, and traceability, he expressed the willingness of Japan to continue supporting SEAFDEC in relevant capacity-building and research surveys.

62. Moreover, the Council Director for Japan acknowledged the effort of SEAFDEC in arranging a side event during the CITES COP-19 and hoped that the efforts would be further accelerated toward the next CITES COP. He further informed the Council that the 33rd Meeting of the CITES Animals Committee will be organized on 12–19 July 2024, the agenda of which includes eels and criteria for listing the species in

CITES Appendices. In the end, he looked forward to continuing the cooperation with the AMSs to ensure the sustainable use of commercially exploited aquatic species based on scientific evidence.

63. While expressing concern on the preparation of the document on non-detriment findings (NDFs) for trading aquatic animals listed in CITES Appendix II, especially for transboundary migratory species, the Council Director for Thailand urged SEAFDEC to assist relevant Member Countries in developing regional NDFs, particularly for transboundary species. He also supported the ongoing initiatives of SEAFDEC, including platforms for seeking shared positions and for projects related to sharks, rays, and anguillid eels, which are crucial for addressing CITES concerns.

64. The Council Director for Myanmar supported the recommendations of SEAFDEC to continue submitting common positions on CITES through the ASWGFi mechanism while noting the updated information from CITES-related meetings in 2023 and ongoing regional initiatives of SEAFDEC. He also advocated for involving focal persons of the ASEAN Working Group on CITES and Wildlife Enforcement (AWG CITES and WE) in technical consultations to familiarize them with fisheries-related issues.

5.2.2 Global Biodiversity and Environmental Conservation Frameworks and Their Potential Implications for the Fisheries Sector of the Region

65. The Council took note of the new and upcoming global biodiversity and environmental frameworks and SEAFDEC initiatives aimed at supporting these frameworks for the sustainability of fishery resources (**Annex 13**) as presented by the representative from the SEAFDEC Secretariat. These include the Kunming-Montreal Global Biodiversity Framework; Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Treaty); Other effective area-based conservation measures (OECM); and new international legally binding instrument on plastic pollution, including in the marine environment (to be concluded in 2024).

66. The Council Director for Viet Nam noted the framework and emphasized that the fishery policy of Viet Nam prioritizes reducing capture fisheries through conservation efforts and promoting aquaculture. He informed the Council of the country's plans to increase the protection of species and reduce debris from both capture fisheries and aquaculture and urged the AMSs to participate in debris reduction. Moreover, he also stressed the declining biodiversity and potential loss of species in inland waters. He therefore encouraged SEAFDEC to address inland biodiversity issues and implement frameworks to protect endangered species.

67. Concerning the BBNJ Treaty, the Council Director for Japan informed the Council that the details of the management measures to be implemented in the future, such as area-based management tools including marine protected areas, are unclear at this stage. However, the management measures under the BBNJ Treaty should contribute to the stable supply of food and the development of local economies in accordance with the objectives of the Treaty. Therefore, it will be necessary for regional fisheries management organizations (RFMOs), national fisheries authorities, and intergovernmental organizations such as SEAFDEC to cooperate and follow discussion at relevant meetings while making use of our knowledge and experience in fisheries and fishery resource management.

68. Regarding the development of a legally binding instrument on plastic pollution during a series of Inter-governmental Negotiating Committee (INC) meetings since 2022, the Council Director for Japan stressed that it is important to ensure that provisions on fishing gear are practical and reasonable. Since this legally binding instrument deals with the entire life cycle of plastic products, it is not appropriate to single out fishing gear, which is just one factor among numerous factors causing plastic pollution. Moreover, as measures for fishing gear have been under development in specialized agencies, such as FAO, IMO, and some RFMOs; it is important to avoid duplications with these existing measures and ongoing efforts. Since the characteristics of fisheries and fishing gear are different among the regions and countries, it is important to allow each country to design specific measures for their fisheries. He added that many member States and NGOs at the INC meetings have been advocating for independent articles on fishing gear. With a view to making the provision on fishing gear practical and reasonable, he requested the AMSs to dispatch experts from the fisheries sector to the next INC5 meeting scheduled from 25 November to 1 December 2024 in

Busan, Republic of Korea as well as to actively take part in the intersessional work on this issue between the INC4 and INC5.

69. The Council Director for Indonesia noted the updates on Marine Biodiversity Policies for Sustainable Fisheries and international frameworks such as the Kunming-Montreal Global Biodiversity Framework, BBNJ under UNCLOS, and international legally binding instruments on plastic pollution. He encouraged SEAFDEC to support capacity-building activities and provide updated information regarding the implementation of these frameworks.

70. Moreover, the Council Director for Indonesia shared that marine debris management is a priority under the National Blue Economy Program in the Fisheries Sector of Indonesia. The program "Bulan Cinta Laut" (Love the Ocean Month) involves local fishers pausing fishing activities for a month to collect marine debris. He proposed the continued listing of marine debris as an agenda item and sustaining SEAFDEC capacity-building efforts and regional workshops.

5.3 Fisheries Post Harvest Technology

5.3.1 Development of the Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products

71. The Council took note of the status of the development of the draft Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products (**Annex 14**) as presented by the representative from MFRD. After the finalization of the Regional Guidelines, the Council noted that the final draft of the Regional Guidelines would be submitted to the 57th Meeting of the SEAFDEC Council in 2025 for approval.

72. The Council Director for Japan acknowledged the popularity of raw fish products, such as sashimi and sushi, in the Southeast Asian region. The development of the Regional Guidelines on Good Manufacturing and Handling Practices for Ready-to-Eat Raw Fish and Fishery Products is, therefore, expected to contribute to increasing consumption and safety of raw fish products in the region. He then reiterated the support for the works of MFRD.

73. The Council Director for Thailand took note of the status and plan for the finalization of the draft Regional Guidelines on Good Manufacturing and Handling Practices for Ready-to-Eat Raw Fish and Fishery Products.

74. The Council Director for Myanmar expressed gratitude to MFRD for providing technical support to the development of the Regional Guidelines and the Government of Japan for the funding support through the JTF. Noting that the Regional Guidelines are aligned with international standards, he emphasized that adopting best practices by local seafood processors would be beneficial for them to strengthen their capacity in quality assurance.

75. While supporting the draft Regional Guidelines, the Council Director for the Philippines informed the Council that the Philippines has an ongoing project focusing on the development of guidelines on the registration of transport vehicles for fish and fishery products which aims to enhance the handling of seafood and food safety during the transportation process.

76. While acknowledging the development of the Regional Guidelines, the Council Director for Viet Nam recalled that Viet Nam and other countries such as Thailand and Philippines implemented the "one town/village one product" initiative. In this context, he suggested that SEAFDEC organize a workshop to share knowledge or lessons learned on raw fish products to enhance such initiative. In response, the representative from the SEAFDEC Secretariat informed the Council that in the past decade, SEAFDEC undertook the program that came up with Regional Guidelines for the Promotion of "One Village, One Fisheries Product" (FOVOP) in the ASEAN Region and he will further explore ways on how this past initiative could be followed up.

VI. OTHER MATTERS

6.1. Japanese trust Fund 7 (2025–2029)

77. The Council took note of updated information on Japanese Trust Fund 7 (2025–2029) (**Annex 15**) as presented by the SEAFDEC Deputy Secretary-General and Japanese Trust Fund Program Manager.

78. The Council Director for Japan expressed appreciation to the SEAFDEC Secretariat and Departments for implementing a series of JTF projects effectively. He also commended SEAFDEC for playing a crucial role in ensuring sustainable fisheries development and food security in the Southeast Asian region. He explained that the JTF-7 is a new phase of the JTF which will be implemented from 2025 to 2029 to continue to assist the AMSs to promote sustainable fisheries based on the need in the Southeast Asian region.

79. Moreover, the Council Director for Japan stressed the importance of recognizing the contribution of the Government of Japan through the JTF in addressing various fisheries issues in the region. He added that the contribution of Japan through SEAFDEC was included in the Outcome of the Commemorative Summit for the 50th Year of ASEAN-Japan Friendship and Cooperation organized in December 2023. While expressing appreciation for the cooperation from the SEAFDEC Members Countries in recognizing SEAFDEC activities in the Southeast Asian region, he expressed the need to continue to enhance the recognition of SEAFDEC in ASEAN meetings. In this regard, he requested the AMSs to continue to voice the need for the contribution of Japan through SEAFDEC at the ASEAN Ministers on Agriculture and Forestry (AMAF) and Special Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry (SOM-AMAF) meetings.

80. The Council Director for Indonesia expressed appreciation to the Government of Japan for the continuous support to SEAFDEC through the JTF. He encouraged all SEAFDEC Departments to identify programs that will be proposed for JTF funding in 2025–2029. Moreover, he also encouraged IFRDMD to coordinate with the MMAF of Indonesia to identify programs and activities that can support the national fisheries sector while providing benefits at the national and regional levels.

81. The Council Directors for Malaysia, Myanmar, Thailand, Lao PDR, and Philippines also expressed gratitude to the Government of Japan for its continued support to SEAFDEC and the AMSs. They took note of the procedure for developing the project proposals and the timeframe of the JTF-7 from 2025 to 2029.

82. The Council Director for Singapore thanked the Government of Japan for its contribution to SEAFDEC. Noting that coastal waters are a key environment for fisheries and aquaculture production and recognizing the concerns of climate change impacts on food safety and security, there would be an increasing need for the region to build up the capacity for monitoring the coastal environment. He therefore suggested that MFRD could take on Singapore ongoing efforts on monitoring and managing its marine environment and work with other Member Countries to contribute to the sustainable development of fisheries and aquaculture for food security in the region.

83. The representative from NACA recognized the contribution from the Government of Japan to AQD that significantly contributed to aquaculture development in the region. While commending the pillars of JTF7, particularly Pillar 3 Improvement of sustainability and productivity in aquaculture with prospective subject on promotion of aquaculture technologies for emerging species, he expressed the view that with the concern on climate change and the need to sustain the production of aquaculture species, innovations such as nature-based aquaculture, climate-resilient solutions should be developed not only for new species but also important aquaculture species in the region that already established*, e.g. Penaeus monodon* and *P. vannamei*.

VII. COOPERATION WITH INTERNATIONAL/REGIONAL ORGANIZATIONS AND NON-MEMBER GOVERNMENTS

84. The representative from the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO/RAP), *Ms. Angela Lentisco,* on behalf of the Assistant Director General and Regional Representative of the FAO/RAP, *Mr Jong-Jin Kim*. In her statement, *Ms. Lentisco* expressed her appreciation to SEAFDEC for extending the invitation to FAO to attend the 56CM, and also to BFAR and the Government of the Philippines for the arrangement and warm hospitality. She underscored the growing recognition and significance of aquatic food systems in providing essential nutrition and addressing hunger challenges in the future, and aquaculture is acknowledged as the fastest-growing food production system and is poised for continued expansion. She emphasized that FAO has developed the Blue Transformation, which outlines three objectives 1) sustainable aquaculture intensification and expansion satisfies global demand for aquatic foods and distributes benefits equitably; 2) effective management of all fisheries delivers healthy stocks and secures equitable livelihoods; and 3) upgraded value chains ensure the social, economic, and environmental variability of aquatic food systems. She cited the ongoing collaborative areas of work between FAO and SEAFDEC *i.e.* stock assessment, aquatic genetic resources, and small-scale fisheries, as well as on issues related to fish trade and fishery support measures including two Global Environment Facility (GEF) projects " Bay of Bengal Large Marine Ecosystem project (BOBLME Phase II Project)" and "Promoting the Blue Economy and Strengthening Fisheries Governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries (GoTFish Project)" for sustainable fisheries and aquaculture in the region towards Blue Transformation. Her statement appears in **Annex 16**.

85. In response to the statement of FAO/RAP, the Council Director for Indonesia informed the Council that Indonesia plans to organize a Regional Workshop aimed at finalizing the Regional Strategies for the Implementation of the FAO Voluntary Guidelines on Small-scale Fisheries in June 2024. Indonesia will coordinate with the ASEAN Secretariat to request the circulation of invitation letters and draft Regional Strategies. The finalized Regional Strategies will be submitted and reported to the 32nd ASWGFi for approval. In response, the representative from FAO/RAP expressed appreciation to the AMSs and conveyed the commitment of FAO to continue to support and contribute to the development of Regional Strategies.

86. The representative from the Network for Aquaculture Centres in Asia-Pacific (NACA), *Dr. Eduardo Leaño,* informed the Council that NACA aims to promote rural development through sustainable aquaculture and aquatic resources management, and seeks to improve the livelihoods of rural people, reduce poverty, and increase food security for more than 30 years. Moreover, NACA has five Regional Lead Centres (RLC) across the Asia-Pacific region, and SEAFDEC/AQD is one of the RLC. He reiterated the recent collaboration of NACA and SEAFDEC/AQD together with the World Organization for Animal Health (WOAH; founded as OIE), Regional Representation for Asia and the Pacific (RRAP), and FAO to improve aquatic animal health management in Asia and the Pacific through and this network is the Asia Pacific Aquatic Animal Health Network (AP AquaNet). Furthermore, he cited the participation of SEAFDEC/AQD in the 2nd High-Level Meeting (HLM) for Aquaculture Transformation in the Asia-Pacific Region which provided a forum for government, private sector, and development partners to identify policy, innovation, and investment priorities for aquaculture transformation in the region by 2030 which led to the White Paper developed by NACA and FAO entitled "Aquaculture transformation: innovations and investment for sustainable intensification and expansion of aquaculture in Asia and the Pacific region" and came up with the White Paper that guides the translation of the global vision and targets for FAO's "Blue Transformation" into clear and workable strategies for transforming the aquaculture sector of the region. He also mentioned that other than SEAFDEC/AQD as RLC, the SEAFDEC Secretariat also regularly participates in the annual Governing Council Meeting of NACA. He expressed the will to keep working with SEAFDEC to improve aquaculture in Southeast Asia and the Asia-Pacific region and encourage collaboration in addressing important issues in the aquaculture industry including, but not limited to, emerging diseases, aquaculture biosecurity, AMU/AMR, and climate change impacts. His statement appears in **Annex 17**.

87. While acknowledging the statement of NACA, the Council Director for Myanmar informed the Council that Myanmar is a member of both SEAFDEC and NACA. He expressed appreciation to SEAFDEC and NACA for providing the technical support and requested their continued support for advanced aquaculture technology for economically important farmed aquatic animals in the future.

88. The Council Director for Indonesia expressed hope that the collaboration between SEAFDEC and NACA would be strengthened in the future, particularly on the sustainable utilization of aquaculture resources in the region.

89. The Mission Director of the United States Agency for International Development/Regional Development Mission for Asia (USAID/RDMA), *Dr. Steve G. Olive*, extended the gratitude of the U.S. Government to SEAFDEC for the opportunity to participate in the 56CM. He emphasized the longstanding partnership between USAID and SEAFDEC and Member Countries aimed at addressing IUU fishing and conserving marine biodiversity. In late 2023, USAID provided a PIO grant to SEAFDEC reflecting the commitment of the USAID Southeast Asia Fisheries Partnership to strengthen the leadership of SEAFDEC in promoting sustainable fisheries. USAID has also been collaborating with SEAFDEC through Sustainable Fish Asia (SuFiA) providing support to advance sustainable marine fisheries and ecosystems. Additionally, the U.S. Department of the Interior works with SEAFDEC to enhance capacity in planning marine research surveys and integrating climate change adaptation to improve fisheries management. Finally, he assured that USAID will continue to collaborate with SEAFDEC in the coming years. His Statement appears in **Annex 18**.

90. While acknowledging the statement of the USAID/RDMA, the Council Director for Viet Nam informed the Council that Viet Nam is undertaking the USAID project with the main components of strengthening the management of Phú Quốc Marine Protected Areas, establishing a network of locally managed marine areas, and exploring solutions to conserve and expand mangrove forests.

VIII. FUTURE DIRECTION REQUESTED BY THE COUNCIL

8.1. Proposal of Singapore

91. The Council Director for Singapore reiterated the setup of MFRD hosted by the Government of Singapore since the late 1960s with the current mandate on fisheries post-harvest technologies. Nevertheless, it is of the view that the development of fisheries post-harvest technology is already matured and could be driven by the industry, while the region is facing pressing concerns on climate change as well as other environmental challenges. He therefore proposed that the mandate of MFRD be focused and sharpened on food security and safety through sustainable production technologies. With this, the expertise of Singapore could be tapped to contribute to sustainable development and food security and safety of other SEAFDEC Member Countries.

92. The Secretary-General of SEAFDEC expressed the view that the proposed sharpening of the focus of MFRD requires the modification of its Plan of Operation and Program of Works, which require unanimous approval of the SEAFDEC Council in accordance with Article 7 of the Agreement Establishing SEAFDEC. Moreover, in refocusing the Plan of Operation of MFRD, the Plans of Operation of other SEAFDEC Departments need to be carefully looked into to ensure that there will be no duplication of functions. Specifically, she shared the view that climate change is a cross-cutting issue that affects several sectors, including marine fisheries, aquaculture, and food safety. Therefore, the demarcation of work with other Departments that also address climate change is important.

93. The Council Director for Malaysia expressed the concern that the issue of food safety in their respective countries is not under the agency responsible for fisheries but under the Ministry of Health. Therefore, the aspect of food safety undertaken by MFRD should be on the production part of the fisheries sector. On the other hand, the Council Director for Brunei Darussalam also highlighted that the food safety issue is under the jurisdiction of Brunei Darussalam Food Authority (BDFA)which is a separate statutory body. However, the Department of Fisheries Brunei Darussalam also works closely with BDFA in providing technical advice to ensure the safety of fish and fishery products; thus, any proposed programs would be attended by both agencies.

94. After the discussion and considering the comments from other Member Countries and SEAFDEC Secretary-General, the Council Director for Singapore informed the Council that Singapore will prepare the revised Plan of Operation and lay out the five-year plan of MFRD in consultation with the SEAFDEC Secretariat. The draft shall be circulated to other Member Countries to seek comments for improvement. It

is expected that the final draft Plan of Operation and Program of Work of MFRD will be tabled for discussion and approval at the 57th Meeting of the SEAFDEC Council in 2025.

95. The Council Director for Cambodia commended the proposal of Singapore in the view that there will be more activities implemented by MFRD such as workshops or training programs on post-harvest technology.

8.2. Proposal of Indonesia

96. The Council Director for Indonesia proposed the concept note entitled "Promoting Regional Cooperation in Vocational Education: Enhancing Skills in the Marine and Fisheries Sectors." Specifically, SEAFDEC was requested to consider establishing regional cooperation in vocational education within the marine and fisheries sector and to outline potential areas of collaboration and intervention.

97. The Secretary-General of SEAFDEC informed the Council that all SEAFDEC Departments are currently engaging with several educational institutions by providing capacity building including the development of curriculum. The required assistance could therefore be requested from the respective SEAFDEC Departments. She added that currently, TD has a list of training courses that could be provided to requesting AMSs; however, this would be through tailor-made arrangements where the requesting AMSs shoulder the cost. While the current training courses of SEAFDEC are supported mainly by the JTF, SEAFDEC will also explore the possibility of seeking support from other donor agencies to fulfill the requirements of the Member Countries. The Secretary-General of SEAFDEC further expressed the view that it is important to prioritize the activities considering the wide range of stakeholders requiring training, *e.g*. fisheries officers, fishers, and farmers, among others. She therefore suggested that the priority should at first focus on fisheries officers of the Member Countries who could later on train other groups of stakeholders in the country.

98. Noting the importance of collaboration on vocational education to ensure that we have the available workforce in the fisheries industry, the Council suggested Indonesia take into consideration the aforementioned comments and modify the concept note for further consideration by donors that have a common interest in this priority area in order to achieve the objectives.

8.3. Others

99. The Council Director for Viet Nam informed the Council that Viet Nam is currently exerting considerable effort into reducing fuel use and CO_2 emission from capture fisheries. He further inquired about the similar activities of SEAFDEC in these areas including improving feed conversion ratio (FCR) in aquaculture. In response, the Secretary-General of SEAFDEC informed the Council that this is one of the priorities of the forthcoming JTF-7. Additionally, AQD has several ongoing works on improving efficiency in aquaculture and the use of alternative protein sources.

IX. MANAGEMENT OF THE CENTER

9.1 Collaborative Arrangements between SEAFDEC and Other Organizations

100. The Council took note of the collaborative arrangements between SEAFDEC and other organizations (**Annex 19**) as presented by the representative from the SEAFDEC Secretariat, namely:

- Operational Partner Agreements (OPAs) between SEAFDEC and the Food and Agriculture Organization of the United Nations (FAO) for the implementation of the Project "Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities
- Letter of Agreement between FAO and SEAFDEC for provision of Information collection and capacity building to support FAO Members implement novel listings of aquatic species on CITES Appendix II
- Letter of Agreement between FAO and SEAFDEC for provision of "Support for strengthening regional capacity to monitor the status of management of aquatic genetic resources

- Public International Organization (PIO) Grant Agreement between USAID and SEAFDEC for the USAID Southeast Asia Fisheries Partnership Activity
- Extension 2 to the Memorandum of Understanding between the United States Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)
- Amendment 1 to Annex 1 of the MOU between the U.S. Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)
- Contract in Relation to the Provision of Services to Deliver a Women in Fisheries Workshop (Ref no. Reference Number: C13582) between SEAFDEC and Commonwealth of Australia represented by the Department of Agriculture, Fisheries and Forestry
- GEF Project Grant Agreement between World Wildlife Fund, Inc (WWF) and SEAFDEC for the Project "Blue Horizon: Ocean Relief through Seaweed Aquaculture."
- Extension of Arrangement for Scientific and Educational Cooperation between Japan Fisheries Research and Education Agency and SEAFDEC
- Memorandum of Agreement (MOA) between SEAFDEC/AQD and academes, namely:
    - West Visayas State University, Philippines
    - Iloilo Doctors' College, Philippines
    - Igbaras National High School, Philippines
    - Mindanao State University, Marawi, Philippines
- Memorandum of Commitment with Western Visayas Agriculture, Aquatic and Natural Resources Research and Development Consortium (WESVAARDEC), a West Visayas State University, Philippines base Office
- Memorandum of Agreement between DA-NFRDI, Philippines and SEAFDEC/AQD

9.2 Proposed Modification on the Rules for Paperless SEAFDEC Meetings

101. The Council took note of the proposed modification of the rules for paperless of SEAFDEC meetings (**Annex 20**) as presented by the representative from the SEAFDEC Secretariat.

102. After consideration, the Council approved the proposed modification by revoking Rule 1.3 One set of hardcopies of documents shall be provided to the Head Delegate of each Member Country attending the meetings; and Rule 1.4 For other participants who would like to obtain hard copies of the documents, such request shall be made to the SEAFDEC Secretariat at least two weeks before the meetings.

9.3 Operation of SEAFDEC Training and Research Vessels

103. The Council noted the Operation of SEAFDEC Training and Research Vessels (**Annex 21**) as presented by the representative from TD. Specifically, the Council noted the utilization of the M.V. SEAFDEC and M.V. SEAFDEC 2 in 2023 and approved the proposed plan for the utilization of the M.V. SEAFDEC 2 in 2024.

104. The Council Director for Viet Nam proposed utilizing M.V. SEAFDEC 2 for a research survey in Viet Nam waters from May to June 2025.

105. While expressing appreciation to TD for its efforts in utilizing its training and research vessels, the Council Director for Japan raised concerns regarding the utilization of M.V. SEAFDEC, emphasizing the high maintenance costs incurred annually which are mainly covered by the Government of Thailand, while the vessel has not been well utilized in the recent years. Additionally, he noted that the vessel is over 30 years old with increasing maintenance costs that would create budgetary pressure on TD. Moreover, the vessel is a large-scale vessel with its main configuration for purse seine fishing, which might not suit the recent needs of the AMSs. It is therefore necessary to consider the future direction of M.V. SEAFDEC.

106. For M.V. SEAFDEC 2, the Council Director for Japan informed the Council that the vessel is equipped with the state-of-the-art echosounder SIMRAD EK80 which is useful for conducting research activities. Moreover, *Dr. Koki Abe*, an expert on echosounder technique has been deployed from the Japan FRA to TD. He therefore encouraged the AMSs to participate in capacity building on echosounder techniques.

107. The Council Director for Malaysia appreciated TD for taking into consideration the request of Malaysia to use the M.V. SEAFDEC 2 for a research survey from June to July 2025. Malaysia would further discuss with TD the details of the survey.

108. The Council Director for Myanmar informed the Council that Myanmar is considering the use of M.V. SEAFDEC 2 for a fishery resources and marine environment survey in the Andaman Sea with depths up to 20 m in 2025. Additionally, he mentioned that the details of the survey will be discussed with TD once the conclusion is reached in the country.

109. The Council Director for the Philippines informed the Council that the Philippines has postponed the proposal for utilization of M.V. SEAFDEC 2 in 2023 due to administrative difficulties. However, he supported and took note of the plan to conduct shipboard training to enhance the capabilities of researchers in data collection using the SIMRAD EK80 and data analysis and interpretation.

110. The Council Director for Brunei Darussalam expressed appreciation to TD for collaboration on a cruise plan utilizing M.V. SEAFDEC 2 for research surveys in the waters of Brunei Darussalam. The survey includes the survey of demersal and pelagic fishery resources using bottom trawl, midwater trawl, and pelagic longline. She also informed the Council that Brunei Darussalam proposed to conduct the second phase of the survey in September 2025.

111. The Council Director for Thailand noted the planned utilization of M.V. SEAFDEC and M.V. SEAFDEC 2 in 2024.

9.4 Prospective Use of the Research and Training Vessels of TD

9.4.1. Prospective Use of the Research and Training Vessels of TD: M.V. SEAFDEC

112. The Council took note of the Prospective Use of the Research and Training Vessels of SEAFDEC Training Department and the Trend of Use of the Budget for M.V. SEAFDEC (**Annex 22**) as presented by the representative from TD.

113. The Council Director for Japan expressed gratitude to TD for developing the document in response to the concern raised by Japan at the 55th Meeting of the SEAFDEC Council in 2023. He emphasized the importance of SEAFDEC training and research vessels as the important driving force in carrying out training programs and research activities for fishery resources and the ocean environment, and that these vessels including their crew members are important assets of SEAFDEC. On the other hand, it is also essential to consider the future direction of these vessels from a long-term perspective, taking into account various factors, including actual utilization plan and maintenance costs. The document prepared by TD therefore serves as a good basis for the consideration of the future direction of M.V. SEAFDEC.

114. The Council Director for Thailand inquired about the source of the budget for maintenance of the M.V. SEAFDEC. In response, the Secretary-General of SEAFDEC informed the Council that the budget is provided by the Government of Thailand to TD as a lump sum budget for all expenditures. The Council Director for Thailand then expressed support for TD to develop a disposal plan for M.V. SEAFDEC considering its increasing maintenance cost. He urged TD to prepare the terms of reference (TOR) for acquiring new research and training vessels that are more suitable for the region. Finally, he requested the Government of Japan to consider providing funding support for the acquisition of the new research and training vessel for SEAFDEC.

115. Responding to the request from Thailand for funding for the new research vessel, the Council Director for Japan informed the Council that it was the first time that the request for a new vessel had been raised and, therefore he could not convey a specific viewpoint. He underscored the importance of identifying future needs based on the historical usage of M.V. SEAFDEC to understand its future direction. Stressing the necessity of taking a long-term perspective and evaluating expected benefits to the Member Countries alongside associated costs, the Council Director for Japan took note of the request made by Thailand.

116. While supporting the proposed disposal plan for M.V. SEAFDEC of TD as well as the request for the acquisition of a new research and training vessel, the Council Director for Brunei Darussalam suggested

that the new research and training vessel should be tailored for offshore activities, fishery resource management, marine environment surveys, and shipboard training for fisheries officers and researchers of the SEAFDEC Member Countries.

117. After consideration, the Council supported TD in developing a disposal plan for M.V. SEAFDEC and requested TD to develop the TOR for the acquisition of a new research and training vessel taking into consideration the aforementioned suggestions of the Council.

9.4.2. Prospective Use of the Research and Training Vessels of TD: M.V. SEAFDEC 2

118. The Council took note of the Prospective Use of the Research and Training Vessels of SEAFDEC Training Department and Trend of Use the Budget for M.V. SEAFDEC 2 (**Annex 23**) as presented by the representative from TD.

119. Considering the anticipated increase in cost for the operation and maintenance of M.V. SEAFDEC 2, the Council approved the increase of the amount of reserved budget from the MRC for the periodic maintenance of M.V. SEAFDEC 2 from USD 75,000 to USD 108,000 annually starting in 2025. This amount shall be allocated from the other budget line of the MRC, specifically item 1.4) Other Program, Sub-item 1.4.1 Priority area/activities required by the Member Countries. This would make the total amount of the budget to support M.V. SEAFDEC 2 increase from USD 150,000 to USD 183,000 annually starting in 2025.

9.5 Regional Fisheries Policy Network (RFPN) Program

120. The Council took note of the Proposal for Reactivation of the Regional Fisheries Policy Network (RFPN) Program (**Annex 24**) as presented by the representative from the SEAFDEC Secretariat. It was noted that this proposal was prepared in response to the directives of the SEAFDEC Council during its 55th Meeting in 2023 for SEAFDEC to explore alternative funding sources for reactivating the RFPN program, including the potential use of the accumulated unspent budget from the Minimum Regular Contribution (MRC).

121. While reiterating the position made by Malaysia during the 46PCM to support the reactivation of the RFPN program for either a six-month or one-year period, the Council Director for Malaysia sought clarification on SEAFDEC financial sustainability whether how long the RFPN program could be sustained under the proposed reactivation. Moreover, he inquired whether SEAFDEC would still have sufficient funds for contingency purposes, such as when SEAFDEC requested for consideration by the Council at the end of 2023 to use the lump sum budget under the component "Collaborative Programs" of the MRC together with some accumulated MRC to support the maintenance of the M.V. SEAFDEC 2.

122. In response to the inquiry of the Council Director for Malaysia, the SEAFDEC Secretary-General expressed the view that the 12-month period would be appropriate for the RFPN program to allow them to learn the activities of SEAFDEC during the whole annual cycle. She added that based on the proposed budget that covers the RFPN members from the 11 SEAFDEC Member Countries, the program could be sustained for five years. Moreover, on the requirement for using accumulated unspent MRC for contingency purposes, considering that the Council at this 56CM has already approved increasing the amount of reserved budget from the MRC for periodic maintenance of the M.V. SEAFDEC 2 starting from 2025, this reserved budget should be sufficient for maintenance of the vessel.

123. The Council Director for Myanmar expressed appreciation to SEAFDEC for preparing the proposal for the reactivation of the RFPN program. He agreed on the one-year term of the RFPN program, the revised TOR of the RFPN members, and the use of the unspent accumulated MRC to support the RFPN program starting from 2025.

124. While expressing support for the reactivation of the RFPN program, the Council Director for the Philippines emphasized the importance of this program as a regional platform for RFPN members to discuss common policies. He emphasized that the program not only fosters connections between the participating countries but also provides capacity-building opportunities through participation in regional fora. He also

supported the RFPN program to be continued on a year-by-year basis as well as the proposed TOR of the RFPN program.

125. The Council Director for Thailand agreed on the proposed modification of the TOR of the RFPN program as well as the proposed budget and duration of the program to be one-year basis. He suggested that a clear qualification of the RFPN member should be indicated, *e.g*. having a minimum of seven years of work experience, and the nominees shall undergo the selection process of SEAFDEC.

126. The Council Director for Cambodia supported the proposed reactivation of the RFPN program. He also supported the period of the RFPN program to be one year considering that it is difficult to seek approval from the Ministry of Agriculture of Cambodia for a six-month program.

127. The Council Director for Indonesia also supported the proposed reactivation of the RFPN program in 2025, the proposed modification of the TOR, and the estimated budget for the one-year term RFPN using the unspent accumulated MRC budget. He encouraged SEAFDEC to continue exploring potential donors to ensure the sustainability of the RFPN program and assess the performance of the program for effective implementation.

128. The Council Director for Lao PDR supported the proposal of SEAFDEC on the reactivation of the RFPN program. He also shared a similar concern as previously raised by the Council Director for Malaysia.

129. While acknowledging the proposal on the reactivation of the RFPN program, the Council Director for Viet Nam agreed on the use of the unspent accumulated MRC to support the RFPN program on a one-year term. Moreover, he suggested that, if possible, the duty station of RFPN members should rotate around the respective SEAFDEC Departments for 1–2 months to learn more about specific subjects.

130. After consideration, the Council approved the reactivation of the RFPN program for a one-year term starting from 2025 and the proposed modification of the TOR of the RFPN program. The Council also approved the use of the unspent accumulated MRC to support the RFPN program and agreed that the continuation of the RFPN program should be considered by the Council on a year-by-year basis subject to the financial status of the MRC.

X. FINANCIAL MATTERS

10.1 Adoption of Audited Financial Report for the Year 2022

131. In accordance with Article 6, Paragraph (ii) of the Agreement Establishing the Center, the Council approved the Audited Consolidated Financial Statements of the Center for the Year 2022 ending on 31 December 2022 including that of the SEAFDEC Secretariat and four Departments, namely: TD, AQD, MFRDMD, and IFRDMD (**Annex 25**) as audited by the official Auditor of the Center, *Mr. Phongsakorn Suwannasaksin*, from the P. Polymaths Audit Co., Ltd., Thailand.

10.2 Un-audited Financial Report for the Year 2023, and Status of the Financial Situation for the Year 2024

132. The Council took note of the Un-audited Financial Report for the Year 2023 and the Status of the MRC for the Year 2024 which appear in **Annex 26**.

133. While acknowledging that the agreed amount of the MRC from Viet Nam is USD 27,000 annually, the Council Director for Viet Nam sought the consideration of the Council that due to the country's current regulation, Viet Nam would be able to provide the MRC of USD 26,000 annually. After careful consideration, the Council approved the MRC from Viet Nam to be at USD 26,000 annually until further changes in the country's regulations. This will make the total MRC to SEAFDEC be at USD 499,000 annually.

10.3 Proposed Budgetary Requirements of the Center for the Year 2025

134. The Council approved the proposed budgetary requirements of the Center for the Year 2025 as shown in **Annex 27**.

10.4 Proposed for the New Audit Firms for Fiscal Years 2023-2027

135. The Council was informed of the list of new Audit Firms for 2023–2027 (**Annex 28**) as presented by the Finance Officer of the SEAFDEC Secretariat. The Council approved *Mr. Terakarn Watprapasak* of the Auditing Firm S.A.81 Audit Co., Ltd., Thailand as the auditor of the Consolidated Financial Statement and Financial Statements of the SEAFDEC Secretariat and TD; *Ms. Djole S. Garcia* from the Auditing Firm Sycip Gorres Velayo & Co. (SGV) as the auditor of the Financial Statement of AQD; and *Nik Ahmad Adib Bin Nik Ismail* from the Auditing Firm Adib Azhar & Co. as the auditor of the Financial Statement of MFRDMD. It was noted that the IFRDMD's Financial Statement would be audited by *Ir. Wahjudi Poerwanto, M.Ak*. from Indonesia Government Internal Audit (General Inspectorate III Division).

XI. CONCLUDING MATTERS

11.1 Adoption of the Report and Press Statement

136. The Council adopted the Report of the Fifty-sixth Meeting of the SEAFDEC Council and the Press Statement of the 56CM on 9 May 2024 as shown in **Annex 29**.

11.2 Date and Venue of the Fifty-sixth Meeting of the Council

137. In considering the date and venue of the Fifty-seventh Meeting of the SEAFDEC Council, the SEAFDEC Council Director for Singapore informed the Council that the Government of Singapore accepted the responsibility of hosting the next Council Meeting in Singapore in 2025.

11.3 Vote of Thanks to the Host Government

138. On behalf of the SEAFDEC Council Directors, the Council Director for Lao PDR expressed appreciation and compliments to the Government of the Philippines, particularly the Bureau of Fisheries and Aquatic Resources, for hosting the 56CM. He congratulated the Chairperson of the Council for the successful conduct of the 56CM to come up with policy directives for SEAFDEC. Moreover, he commended the staff from BFAR for their hard work and support that made the short stay of the participants in Tagaytay City comfortable and memorable. His message appears in **Annex 30**.

XII. CLOSING OF THE MEETING

139. The Chairperson of the SEAFDEC Council expressed appreciation to the Council Directors for their active participation in the discussions during the 56CM. She reiterated that this 56CM has achieved meaningful outcomes and has been instrumental in reaffirming the commitment of the Member Countries to advancing the sustainable development of fisheries and aquaculture in the region. She emphasized that the key highlight of the discussions was the unanimous agreement to continue supporting capacity-building programs, particularly in aquaculture, and to intensify the region's efforts in combating IUU fishing. Finally, she extended gratitude to all participants for their active engagement and invaluable contributions and to the SEAFDEC Secretariat for organizing the 56CM. With that note, she declared the 56CM closed. Her Closing Remarks appear in **Annex 31**.

Annex 1

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Annex 2

WELCOME REMARKS

By Mr. Sammy A. Malvas,
Regional Director, Bureau of Fisheries and Aquatic Resources (BFAR) Region IV-A

Ladies and gentlemen,
To our colleagues, and co-workers,
And to our esteemed Country Council Directors and development partners,

A very warm welcome to the 56th Meeting of the Council South-East Asian Fisheries Development Center (SEAFDEC).

First and foremost, I extend our deepest gratitude to SEAFDEC for its unwavering dedication to advancing our region's fisheries industry. The programs and activities implemented in 2022, along with the approved initiatives for 2023, align seamlessly with the SEAFDEC Strategies Toward 2030. Particularly, Strategy II, which focuses on supporting the sustainable growth of aquaculture, stands as a cornerstone in our collective efforts. This strategy not only complements our fisheries but also significantly contributes to food security, poverty alleviation, and the livelihoods of our people across the region.

In this regard, the partnership between the Bureau of Fisheries and Aquatic Resources (BFAR) and SEAFDEC in the realm of aquaculture deserves special mention. Together, we have embarked on numerous projects that have yielded promising results. Through around 16 Feasibility Studies on the establishment of Legislated Hatcheries, we have laid the groundwork for a more sustainable aquaculture industry. The assessment of eight additional sites, primarily in Iloilo, Negros Occidental, Dinagat Islands, and Antique, marks a significant step forward in our mission.

Moreover, the collaboration between SEAFDEC and the National Fisheries Research and Development Institute has led to the formulation of feeds that outperform existing commercial feeds, showcasing the potential for innovation in our industry. As we strive to revive the tiger prawn industry, the promotion of an environment-friendly grow-out culture and high-health quality shrimp post-larvae by SEAFDEC/AQD is truly commendable. The ongoing construction of a New Shrimp Broodstock Facility is a testament to our shared vision for a more robust aquaculture sector.

The SEAFDEC Aquaculture Department (SEAFDEC/AQD) has been instrumental in transferring technology and knowledge through its Training and Information Division. The courses on Fish Health Management, Fish Nutrition and Feed Development, Marine Fish Hatchery, and Community-Based Freshwater Aquaculture have empowered communities and individuals across Southeast Asia, paving the way for sustainable aquaculture practices.

Closer to home, BFAR's initiatives in aquaculture have also borne fruit. The establishment of additional satellite hatcheries under the Bangus Fry Sufficiency Program signifies our commitment to reducing dependency on fry importation. The Legislated Hatcheries Program aims to meet local requirements for aquaculture seed stocks, thereby reducing our reliance on imported fry and boosting the production of the aquaculture sector.

With shared core values of the Bureau, SEAFDEC combats Illegal, Unreported, and Unregulated (IUU) fishing. BFAR as the entrusted lead agency for the domestic acceptance of this agreement, has diligently worked alongside esteemed partners such as the USAID Fish Right Program and local government units to assess the extent of IUU fishing across the Philippines. Through improved monitoring, control, and surveillance measures, including patrol efforts in partnership with local government units and law enforcement agencies, we are committed to deterring IUU fishing of tuna and other pelagic species.

In conclusion, the 56th Meeting of the SEAFDEC Council is a gathering of minds and also a testament to our shared commitment to sustainable aquaculture and fisheries development. Together, let us continue to forge partnerships, innovate, and collaborate to ensure a sustainable future for our seas and our communities.

Once again, welcome to the 56th Meeting of the Council South-East Asian Fisheries Development Center. Thank you!

Annex 3

REMARKS

By Mr. Myint Zin Htoo,
Deputy Director-General of the Department of Fisheries of Myanmar
and SEAFDEC Alternate Council Director for Myanmar,
on behalf of Mr. Wai Lin Maung, the Chairperson of the SEAFDEC Council for the Year 2023-2024

Madam Drusila Esther E. Bayate, Undersecretary for Fisheries, Department of Agriculture, and the Council Director for the Philippines,
Distinguished Council Directors,
Dr. Suttinee Limthammahisorn, Secretary-General of SEAFDEC,
Dr. Tomoko Nakazato, Deputy Secretary-General of SEAFDEC,
Distinguished delegates from the SEAFDEC Member Countries;
Representatives from FAO and NACA
Guests, Ladies and Gentlemen;
Good Morning! Mingalar Bar!

On behalf of *Mr. Wai Lin Maung*, the SEAFDEC Council Director for Myanmar and the Chairperson of the Council, he is not able to attend this significant Meeting today, please allow me to welcome all of you to the Opening Ceremony of this Fifty-sixth Meeting of the SEAFDEC Council here in the beautiful Tagaytay City of the Philippines.

In the capacity as the Chairperson of the Council, on behalf of SEAFDEC and the Member Countries, I would like to express our sincere gratitude to the government of the Philippines through its Department of Agriculture and Bureau of Fisheries and Aquatic Resources for hosting this Meeting of SEAFDEC Council and warm hospitality.

We are here at Taal Lake, with a beautiful view of Volcano Island in the middle of the lake. It reminds me that, like in Myanmar, we also have Indawgyi Lake and Inle Lake, the two freshwater largest lakes of Myanmar, and I believe also other lakes or inland water bodies elsewhere in our region, which are home to important fish species, aquatic animals, habitats, and provide significant ecosystem services, are important for human well-being and source of food. Based on the SEAFDEC fishery statistic, in 2021, Myanmar inland fisheries provided a significant contribution to inland capture fishery production, accounting for 33% of the country's total production from capture fisheries, and contributing to 3.5% of the region's total fishery production. Protection of the inland and maintaining freshwater production would become an important priority for the livelihood of our people in the region. I, therefore, encourage the Member Countries to pay attention to the management of the inland fisheries and their ecosystems for sustainable utilization and exploitation. I appreciate SEAFDEC for the support to Myanmar to enhance our capacity such as EAFM, and co-management, to improve the livelihood of our small-scale and artisanal fishers, I think we can apply this knowledge to the inland fisheries.

Ladies and gentlemen,

As you are all aware of challenges of the fisheries and aquaculture sector, not just only pressure from fishing activities and IUU fishing in capture fisheries, but also the factors from environmental and climate changes to both capture fisheries and aquaculture that have been severely impacted by the decline of fisheries resources and production. Several international instruments and conventions have been developed as tools for the effective management of fisheries resources in capture fisheries and also for aquaculture development. I believe that the countries have made great efforts to manage and explore the appropriate actions for sustainable utilization of fisheries resources and aquaculture, to assure the growing demand for fisheries products and long-term food security.

Distinguished delegates, ladies and gentlemen,

In this regard, SEAFDEC plays a critical role in supporting the Member Countries to understand those issues and efforts for the implementation of activities to improve the efficiency and sustainability of the fisheries

and aquaculture sector. I would like to congratulate SEAFDEC for securing funds from various donors and working partners, to support the Member Countries in addressing several issues through the implementation of the new projects to commence within this year. I would like to express my gratitude to the government of Japan for continuing support to SEAFDEC for implementing several activities for the Southeast Asian region's fisheries development and management. I then would like to emphasize the importance of maintaining cooperation and partnership among Member Countries is essential to ensuring its sustainable development for future generations.

This gathering marks a pivotal event to discuss and approve the proposed programs and activities and provide policy guidance to SEAFDEC and its Technical Departments to support the Member Countries in achieving the goals for the management of fisheries sustainably and food security. I look forward to the continued guidance and support from the SEAFDEC Council Directors in these important deliberations.

Ladies and gentlemen, on behalf of the Council Director for Myanmar, I would like to express my sincere appreciation to SEAFDEC for supporting the roles of Myanmar during the Chairpersonship of the Council for 2023-2024.

Last but not least, once again I would like to reiterate our sincere gratitude to the SEAFDEC Secretary-General and her officials and officers of the Philippine Bureau of Fisheries and Aquatic Resources through the leadership and guidance of *Madam Drussila*, for the arrangements of this Meeting here in Tagaytay City.

Thank you very much, Salamat po!

Annex 4

KEYNOTE MESSAGE

By Ms. Drusila Esther E. Bayate,
Undersecretary for Fisheries of the Department of Agriculture (DA) of the Philippines
and SEAFDEC Council Director for the Philippines

Distinguished Council Directors,
Dr. Suttinee Limthammahisorn, Secretary-General of SEAFDEC,
Dr. Tomoko Nakazato, Deputy Secretary-General of SEAFDEC,
Esteemed participants,
Good morning/afternoon.

I am pleased to welcome you all to the 56th Southeast Asian Fisheries Development Center (SEAFDEC) Council Meeting. Your presence here as representatives of member states and development partners underscores our collective commitment to the sustainable development of fisheries and aquaculture in the Southeast Asian region.

On behalf of the Department of Agriculture, the overseeing agency of the Bureau of Fisheries and Aquatic Resources, I underscore our steadfast support of BFAR's programs, particularly in responsible and environment-friendly aquaculture production.

Our dedication spans a spectrum of initiatives, including the development of priority commodities, the implementation of the bangus fry sufficiency program, and the reinforcement of Broodstock Development and Fingerling Production and Distribution.

Moreover, we are actively engaged in mariculture development, feed formulation projects, and continuous policy formulation to propel aquaculture development forward.

The same commitment is evident in our programs for capture fisheries where sustainable management of resources, governance, and community development are intertwined, ensuring that Filipino stakeholders are also our active partners in protecting the country's marine and aquatic resources. Where fisheries productivity and conservation measures take root, robust law enforcement must also complement them. BFAR is consistently strengthening its policies and monitoring capabilities, fostering both internal and international collaboration in this regard.

These are aligned with the DA's overarching four-year plan to enhance agricultural productivity, lower food costs, ensure food security, and promote farming and fisheries as a sound and profitable investment in the Philippines. This has long been a part of the advocacy to impress upon the consciousness of Filipinos the impregnable economic potential of the agri-fishery industries.

I am resolute in bolstering our support for the fisheries sector. Together with our regional partners, we aim to strengthen our nation's fish sufficiency and contribute significantly to the broader regional programs on fisheries sustainability.

Our commitment to our development partners in the SEAFDEC is unwavering as we pledge to adhere to the six identified strategies for this year. These strategies — ranging from securing the sustainability of fisheries and aquaculture, to contributing to food security and the livelihood of people, to ensuring food safety and the quality of our fisheries products, to addressing cross-cutting issues that relate to international fisheries such as labor, gender, and climate change, to empowering the SEAFDEC's overall role in the region — serve as guiding principles in our shared efforts to enhance the well-being of our communities and preserve our natural resources.

I extend my gratitude to the SEAFDEC Council and to you all for your dedication and tireless work. May this meeting be marked by fruitful discussions and collaborative endeavors toward a brighter future for our fisheries and aquaculture sectors.

Para sa Masaganang Bagong Pilipinas…
Thank you very much.

Annex 5

AGENDA

Inaugural Ceremony

Agenda 1: Procedural Matters

1.1 Opening of the Meeting by Chairperson of SEAFDEC Council for the Year 2023–2024
1.2 Election of Chairperson for the Year 2024–2025
1.3 Adoption of the Agenda and Arrangements for the Meeting

Agenda 2: Report of the Secretary-General

Agenda 3: Note of the Chairperson of the SEAFDEC Program Committee (PCM) on the Results of the Forty-sixth Meeting of PCM

Agenda 4: Note of the Chairperson of the Fisheries Consultative Group (FCG) of the ASEAN–SEAFDEC Strategic Partnership (ASSP) on the Results of the Twenty-sixth Meeting of FCG/ASSP

Agenda 5: Policy Consideration on Important Issues

5.1 Fisheries Management
  5.1.1 Efforts to Combat IUU Fishing
  5.1.2 Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region
  5.1.3 Regional Contribution to the Global Initiative on Aquatic Genetic Resources Revision of the Regional Framework for Fishery Statistics in Southeast Asia
5.2 International Fisheries Related Issues
  5.2.1 CITES-related Issues
  5.2.2 Global Biodiversity and Environmental Conservation Frameworks and Their Potential Implications for the Fisheries Sector of the Region
5.3 Fisheries Post Harvest Technology
  5.3.1 Development of the Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products

Agenda 6: Other Matters

6.1 Japanese Trust Fund 7 (2025–2029)
6.2 Others

Agenda 7: Cooperation with International/Regional Organizations and Non-member Governments

Agenda 8: Future Direction Requested by the Council

Agenda 9: Management of the Center

9.1 Collaborative Arrangements between SEAFDEC and Other Organizations
9.2 Proposed Modification on the Rules for Paperless SEAFDEC Meetings
9.3 Operation of SEAFDEC Training and Research Vessels
9.4 Prospective Use of the Research and Training vessels of SEAFDEC/TD

9.4.1 Prospective Use of the Research and Training Vessels of SEAFDEC/TD: Trend of Use the Budget for M.V. SEAFDEC
9.4.2 Prospective Use of the Research and Training Vessels of SEAFDEC/TD: Trend of Use the Budget for M.V. SEAFDEC 2
9.5 Regional Fisheries Policy Network (RFPN) Program
9.6 Others

Agenda 10: Financial Matters

10.1 Adoption of Audited Financial Report for the Year 2021
10.2 Un-audited Financial Report for the Year 2023, and Status of the Financial Situation for the Year 2024
10.3 Proposed Budgetary Requirements of the Center for the Year 2025
10.4 Proposed the New Audit Firms for Fiscal Year 2023–2027
10.5 Other Financial Matters

Agenda 11: Concluding Matters

11.1 Adoption of the Report and Press Statement
11.2 Date and Venue of the Fifty-seventh Meeting of the SEAFDEC Council
11.3 Vote of Thanks to the Host Government

Agenda 12: Closing of the Meeting

Annex 6

EXECUTIVE SUMMARY OF THE FORTY-SIXTH MEETING OF THE PROGRAM COMMITTEE

The Forty-sixth Meeting of the Program Committee (46PCM) of the Southeast Asian Fisheries Development Center (SEAFDEC) was organized from 20 to 22 November 2023 in Bali, Indonesia, and hosted by the SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD). The Secretary-General of SEAFDEC, in her capacity as the Chairperson of the SEAFDEC Program Committee, chaired the Meeting which reviewed the programs implemented by SEAFDEC in 2023 and the programs to be implemented in 2024 to ensure that these have been formulated and implemented in line with the priorities and needs of the Member Countries. The list of SEAFDEC Programs and Projects in 2023 and those for implementation in 2024 appears in ***Appendix 1***.

The 46PCM noted **Programs under the FCG/ASSP mechanism**, which comprises 22 ongoing projects, 21 of which have been categorized under six (6) SEAFDEC Strategies: 1) Securing the sustainability of fisheries to contribute to food security, poverty alleviation and livelihood of people in the region; 2) Supporting the sustainable growth of aquaculture to complement fisheries and contribute to food security, poverty alleviation and livelihood of people in the region; 3) Ensuring the food safety and quality of fish and fishery products for the Southeast Asian region; 4) Enhancing trade and compliance of the region's fish and fishery products with market requirements; 5) Addressing cross-cutting issues, such as labor, gender and climate change, where related to international fisheries; and 6) Empowering SEAFDEC to strengthen its roles in the region and to improve its services to Member Countries; and one Special Project. In addition, the 46PCM also noted one Pipeline Project, of which SEAFDEC is under discussion with the prospective donor. After the deliberations, the 46PCM approved the implementation of the implementation of the projects in 2023 and those for implementation in 2024, and provided recommendations which could be summarized as follows:

Strategy I: Securing the sustainability of fisheries to contribute to food security, poverty alleviation and livelihood of people in the region

(1) Sustainable Utilization of Fisheries Resources and Resources Enhancement in Southeast Asia

- TD to consider incorporating the conduct of capacity-building activities related to climate change in the Project activities
- TD to organize a training course on the R statistical program, especially for advanced users in Thailand in order to enhance the abilities of fisheries officers to modify the software code for specific fishery resources unique to each country in Southeast Asia
- TD to provide technical assistance to Cambodia under the national program on resource enhancement by bringing back samples of juvenile blood cockles and snails to TD for identification
- TD to explore the possibility of including MFRDMD in Activity 5.2 Participation in national/regional/international meetings to disseminate fisheries geographic information system (FGIS) and remote sensing (RS)
- TD to consider including Myanmar in regional meetings on the utilization of geographic information system (GIS) and RS for effective fisheries management
- TD to organize training or seminars on the use of software for fisheries stock assessment and fisheries management

(2) Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region

- MFRDMD to continue conducting the activities on stock assessment of pelagic species after the completion of the Project in 2024
- TD to organize a training on neritic tuna stock assessment which would include sharing fishery resource data

(3) Management Scheme for Inland Fisheries in the Southeast Asian Region

- IFRDMD to organize training sessions on the utilization of scientific echo sounders for inland fisheries and consider Thailand as a pilot area for the exploration of freshwater fishery resources

- IFRDMD to organize a workshop on inland fisheries management, specifically incorporating SPEECTRA

(4) Harmonization and Enhancing Utilization of Fishery Statistics and Information

- SEAFDEC to continue providing regional platforms that facilitate the Member Countries to meet international requirements on fishery statistics as well as to harmonize and standardize data among the Member Countries
- SEAFDEC to follow up with Malaysia and Viet Nam on maps of marine sub-fishing areas and finalize the revised Regional Framework on Fishery Statistics of Southeast Asia for submission to SEAFDEC Council and ASWGFi

(5) Strengthening a Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia

- TD to include Cambodia in the proposed activities in 2024 and send technical staff to support national activities including national training on eACDS for researchers
- TD to continue supporting Myanmar and Malaysia in the implementation of eACDS
- TD to provide technical support to Myanmar to strengthen coordination with international organizations with regard to the WTO Agreement on Fisheries Subsidies

(6) ASEAN-JICA Capacity Building Project on IUU Fishing Countermeasures in Southeast Asia

- 46PCM took note of the status of the project in 2023
- TD to consider including the Philippines, Singapore, and Viet Nam in the training courses to be conducted under the project

(7) Small-scale Fisheries Management for Better Livelihood and Fisheries Resources

- TD to consider carrying out the activity to facilitate the exchange of knowledge of the management of small-scale fisheries among the Member Countries, *e.g*. national standards of capture fisheries and fish processing
- TD to carry out activities related to the promotion of the equity of vulnerable groups in the fishing sector, *e.g*. occupational safety, innovations to improve fishing gear for disadvantaged groups
- TD to continue implementing the activity on the fish processing group in Cambodia and the activities in community fisheries which should cover fish processing and the integration of gender equality and equity
- TD to provide technical assistance to the Philippines in the country's ongoing development of the national plan of action for small-scale fisheries with assistance from FAO
- TD to invite an expert from Japan to share lessons and key successes/challenges of the fishing rights system of Japan during the regional workshop on the compilation of lessons learned and key successes/challenges of EAFM implementation under Project Activity 1.1

(8) Responsible Fishing Technology and Practice

- TD to consider monitoring the greenhouse gas emissions not only during fishing operations but also at fishing ports
- TD to include Thailand in the training to disseminate knowledge on the use of the sherbet ice system to preserve catches from small-scale fisheries activities

(9) Regional Collaborative Research and Capacity Building for Monitoring and Reduction of Marine Debris from Fisheries in Southeast Asia

- SEAFDEC to incorporate in the Project a study to investigate the primary source of microplastics in order to prove whether or not the abandoned, lost or otherwise discarded fishing gears (ALDFG) is the main source of microplastics in aquatic animals and fishery products in the region
- SEAFDEC to organize activities to facilitate the exchange of ideas on the promotion of effective techniques for collecting data on the marine debris generated by fishing vessels, and to explore methods to collect marine debris data by the competent authorities without the engagement of fishers

(10) Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region

- Member Countries to continue monitoring the progress of the discussion on listing shark and ray species in the CITES Appendices

(11) Sustainable Utilization of Anguillid Eels in the Southeast Asian Region

- 46PCM took note of the progress of the project in 2023 and proposed activities in 2024

(12) Development of Stock Assessment Method for Strengthening of Resources Management Measures of Tropical Anguillid Eels in AMS

- SEAFDEC to include Thailand to take part in the regional meeting which will be organized at the end of the Project in 2025 to share among the Member Countries the catch and biological data, resource assessment methods, and information on tropical anguillid eels
- SEAFDEC to include Malaysia in Project Activities 2.1, 2.2, and 2.3 in 2024

(13) Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities

- TD to conduct a comprehensive review of the activities and indicators of the Project to ensure their alignment with the current situations of the participating countries, noting that the indicator will be submitted to the Project Steering Committee for final review and approval

(14) Promoting the Blue Economy and Strengthening Fisheries Governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries (GoTFish Project)

- 46PCM took note the updated information of the project in 2023

<u>Strategy II: Supporting the sustainable growth of aquaculture to complement fisheries and contribute to food security, poverty alleviation and livelihood of people in the region</u>

(15) Sustainable Aquaculture through Cost-Effective Culture Systems, and Prompt and Effective Aquatic Animal Health Management

- AQD to communicate with Malaysia and provide the progress of Activity 1.4 focusing on developing the breeding and seed production industry for Kawakawa, chopping scad, slipper lobster, and seahorse
- AQD to consider inviting participants from Myanmar for Activity on disease control in crustaceans and fishes, and development of husbandry techniques
- AQD to consider inviting participants from Lao PDR to join Activity 3.1 Community-based freshwater aquaculture in remote rural areas

(16) Blue Horizon: Ocean Relief through Seaweed Aquaculture

- 46PCM took note of the updated information of the project in 2023

(17) ASEAN Regional Technical Consultation on Aquatic Emergency Preparedness Response Systems for Effective Management of Transboundary Disease Outbreak Southeast Asia (Phase 2)

- 46PCM took note of the updated information of the project in 2023

<u>Strategy III: Ensuring the food safety and quality of fish and fishery products for the Southeast Asian region</u>

(18) Enhancing Food Safety and Competitiveness of Seafood Products

- MFRD to consider including either a case study or a critical process in GMP and GHP for the manufacturing of formulated feed for aquatic animals as annex in the Regional Guidelines on GMP and GHP
- MFRD to translate the Handbook on High Pressure Processing (HPP) of Fish and Fishery Products into the Thai and Vietnamese languages

Strategy IV: Enhancing trade and compliance of the region's fish and fishery products with market requirements

(19) ASEAN-JICA Food Value Chain Development Project

- SEAFDEC Secretariat to consider promoting eco-labeling as this could help add value to fishery products from artisanal fishers
- SEAFDEC Secretariat to discuss with Thailand to avoid possible duplication of the Project with the task of Thailand under the ASWGFi to develop Regional Guidelines for the ASEAN GAqP Certification Scheme

Strategy V: Addressing cross-cutting issues, such as labor, gender and climate change, where related to international fisheries

(20) Assistance for Capacity Building in the Region to Address International Fisheries-related Issues

- SEAFDEC Secretariat to consider providing a regional platform(s) for technical discussion to address fisheries-related issues in other platforms such as the Convention on Biological Diversity (CBD) and WTO Agreement on Fisheries Subsidies

Strategy VI: Empowering SEAFDEC to strengthen its roles in the region and to improve its services to Member Countries

(21) Fisheries Resource Survey and Operational Plan for the M.V. SEAFDEC 2

- SEAFDEC and Member Countries to consider enhancing the future utilization of M.V. SEAFDEC 2
- TD to consider the future utilization of M.V. SEAFDEC and what SEAFDEC needs to do with the vessel considering that maintenance of the vessel could be a burden to TD
- TD to communicate with the donor regarding the planned marine debris survey cruise in 2024 whether the Member Countries can participate, and to extend the invitation to the Member Countries accordingly

Special Project

(22) USAID Southeast Asia Fisheries Partnership Activity

- SEAFDEC Secretariat to consider extending a study visit to the institutions that are working on effective implementation of the U.S. Marine Mammals Protection Act (MMPA) for relevant staff from the Member Countries in addition to the SEAFDEC staff

The 46PCM noted the progress and achievement of the **Departmental Programs** implemented in 2023 and endorsed the proposed activities for 2024 which comprise nine (9) programs, five (5) of which were implemented by AQD, namely; 1) Quality Seed for Sustainable Aquaculture; 2) Healthy and Wholesome Aquaculture; 3) Maintaining Environmental Integrity through Responsible Aquaculture; 4) Meeting Social and Economic Challenges in Aquaculture; and 5) Collaborative Projects with the Philippine Government; and four (4) by TD, namely: 1) Promotion on Strengthening of SEAFDEC Visibility and Enhancing Human Capacity Building; 2) Improvement of Fisheries Technology and Reduction of the Impact from Fishing Activities; 3) USAID DOI International Technical Assistance Program (ITAP); and 4) Implementing the Lower Mekong Fish Passage Initiative in Cambodia, Thailand, and Viet Nam. The 46PCM then provided recommendations on these programs which could be summarized as follows:

1) Aquaculture Department

- AQD to provide technical assistance to Malaysia with a focus on breeding technology for tropical eels
- AQD to assist Malaysia in transferring the milkfish breeding technology through training programs at AQD or a visit of AQD researchers to Malaysia
- The Member Countries to contact AQD directly, and include the SEAFDEC Secretariat in the correspondence, for an exchange of knowledge of aquaculture technologies for grouper, seabass, and milkfish

- AQD to disseminate the results of the research under its Projects to the Member Countries, with TD to organize relevant training courses and study visits to AQD
- AQD to support Viet Nam on aquaculture transformation and share expertise in seaweed aquaculture and techniques for coping with the impacts of climate change on aquaculture

2) Training Department

- TD to assist Thailand by supporting a specialist as a resource person for the implementation of the project "Compilation of Inland Fishing Gear and Methods in Thailand"
- TD to organize for Cambodia a training course on fishing gear classification
- TD to support the conduct of training on the development and application of advanced fisheries technology applications for the Member Countries
- TD to share knowledge with Brunei Darussalam on the development of database to support fisheries socioeconomic and small-scale fisheries
- TD to provide similar training to the Member Countries, under the "USAID DOI International Technical Assistance Program (ITAP)," especially for Sub-activity 1.1 Training and field practice on socioeconomic monitoring (SOCMON) for coastal and small-scale fisheries management in Southeast Asia and Sub-activity 2.1 Training course on the monitoring of fish stock life history parameters for observing the effect of climate change in the Southeast Asian region

Under the **Other Program,** the 46PCM took note of the status of activities on the Seminar-Workshop on Aquaculture Development in Southeast Asia (ADSEA) and approved the proposed activities for 2024 which will be implemented by AQD. The 46PCM then provided recommendations on is program which could be summarized as follows:

- AQD and JTF to consider supporting the participation of the Member Countries in the ADSEA
- JTF to consider in the new phase of the JTF supporting the activities on aquaculture development including a similar workshop
- JTF to consider giving more support to aquaculture development in future projects

The 46PCM also took note of the status of the one **Pipeline Project** on **"Implementation and Assessment of the ASEAN Regional Plan of Action for the Management of Fishing Capacity"** that MFRDMD submitted the revised Project proposal to the JAIF, and it is expected that the Project will be approved and start its implementation in January 2024. Once the project is operationalized, the Project will be placed under the ASEAN-SEAFDEC Strategic Partnership mechanism.

The 46PCM took note of the cooperation between SEAFDEC and international/regional organizations, namely: the Food and Agriculture Organization of the United Nations/Regional Office for Asia and the Pacific (FAO/RAP), and the United States Agency for International Development/Regional Development Mission for Asia (USAID/RDMA).

While expressing gratitude to the Government of Japan for its longstanding support to SEAFDEC, the 46PCM noted the Outline of the Japanese Trust Fund 7 (JTF-7) with the theme "Enhanced Capability of Fisheries and Aquaculture in Southeast Asia" which is expected to be implemented from 2025 to 2029.

With regards to the outlook on the Regional Fisheries Policy Network (RFPN) program, the 46PCM provided views and recommendations to the SEAFDEC Secretariat for further preparation of a proposal on the RFPN program for consideration by the SEAFDEC Council in 2024.

The 46PCM supported the revision of the Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition) and agreed with the data sharing between SEAFDEC and FAO to reduce the burden of the AMSs on the multiple submissions of statistical data. In addition, the 46CPM expressed the need for SEAFDEC to continue enhancing the capacity of fisheries statistics officers by conducting in-person activities in the future.

The Program Committee adopted the Report of the 46th Meeting of the SEAFDEC Program Committee for submission to the 56th Meeting of the SEAFDEC Council, and to the ASEAN through the 26th Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP).

Appendix 1 of Annex 6

SEAFDEC Programs and Projects for the Year 2023–2024

I. Programs of Activities under FCG/ASSP Mechanism

Ongoing Projects

Strategy/Project Title	Lead Department	2023	2024
Strategy I: Securing the sustainability of fisheries to contribute to food security, poverty alleviation and livelihood of people in the region			
1. Sustainable Utilization of Fisheries Resources and Resources Enhancement in Southeast Asia	TD	Y	Y
2. Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region	MFRDMD	Y	Y
3. Management Scheme for Inland Fisheries in the Southeast Asian Region	IFRDMD	Y	Y
4. Harmonization and Enhancing Utilization of Fishery Statistics and Information	SEC	Y	Y
5. Strengthening a Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia	TD	Y	Y
6. ASEAN-JICA Capacity Building Project on IUU Fishing Countermeasures in Southeast Asia	TD	Y	Y
7. Small-scale Fisheries Management for Better Livelihood and Fisheries Resources	TD	Y	Y
8. Responsible Fishing Technology and Practice	TD	Y	Y
9. Regional Collaborative Research and Capacity Building for Monitoring and Reduction of Marine Debris from Fisheries in Southeast Asia	TD	Y	Y
10. Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	MFRDMD	Y	Y
11. Sustainable Utilization of Anguillid Eels in the Southeast Asian Region	IFRDMD	Y	Y
12. Development of Stock Assessment Method for Strengthening of Resources Management Measures of Tropical Anguillid Eels in AMS	SEC	Y	Y
13. Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities	TD	Y	Y
14. Promoting the Blue Economy and Strengthening Fisheries Governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries (GoTFish Project)	TD	Y	Y
Strategy II: Supporting the sustainable growth of aquaculture to complement fisheries and contribute to food security, poverty alleviation and livelihood of people in the region			
15. Sustainable Aquaculture through Cost-Effective Culture Systems, and Prompt and Effective Aquatic Animal Health Management	AQD	Y	Y
16. Blue Horizon: Ocean Relief through Seaweed Aquaculture	AQD	Y	Y
17. ASEAN Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia (Phase 2)	AQD	Y	Y
Strategy III: Ensuring the food safety and quality of fish and fishery products for the Southeast Asian region			
18. Enhancing Food Safety and Competitiveness of Seafood Products	MFRD	Y	Y

Strategy/Project Title	Lead Department	2023	2024
Strategy IV: Enhancing trade and compliance of the region's fish and fishery products with market requirements			
19. ASEAN-JICA Food Value Chain Development Project	SEC	Y	Y
Strategy V: Addressing cross-cutting issues, such as labor, gender and climate change, where related to international fisheries			
20. Assistance for Capacity Development in the Region to Address International Fisheries-related Issues	SEC	Y	Y
Strategy VI: Empowering SEAFDEC to strengthen its roles in the region and to improve its services to Member Countries			
21. Fisheries Resource Survey & Operational Plan for M.V. SEAFDEC 2	TD	Y	Y
Special Project			
22. USAID Southeast Asia Fisheries Partnership Activity	SEC and Department	Y	Y

Y = Program implemented during the year
N = Program not implemented during the year

II. Departmental Programs

Program Title	Lead Departments
1. Quality Seed for Sustainable Aquaculture	AQD
2. Healthy and Wholesome Aquaculture	AQD
3. Maintaining Environmental Integrity through Responsible Aquaculture	AQD
4. Meeting Social and Economic Challenges in Aquaculture	AQD
5. Collaborative projects with the Philippine Government	AQD
6. Promotion on Strengthening of SEAFDEC Visibility and Enhancing Human Capacity Building	TD
7. Improvement of Fisheries Technology and Reduction of the Impact from Fishing Activities	TD
8. USAID DOI International Technical Assistance Program (ITAP)	TD
9. Implementing the Lower Mekong Fish Passage Initiative in Cambodia, Thailand, and Viet Nam	TD

III. Other Programs

Program Title	Lead Departments	Period
1. Seminar-Workshop on Aquaculture Development in Southeast Asia (ADSEA)	AQD	2024

IV. Pipeline Project

Program Title	Lead Departments
1. Implementation and Assessment of the ASEAN Regional Plan of Action for the Management of Fishing Capacity	MFRDMD

Annex 7

EXECUTIVE SUMMARY OF THE TWENTY-SIXTH MEETING OF THE FISHERIES CONSULTATIVE GROUP (FCG) OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (ASSP)

1. The Twenty-sixth Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) or the 26FCG/ASSP was organized in Bali, Indonesia from 23 to 24 November 2023, and was co-chaired by the representative from Lao PDR as the Chairperson of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) and the Secretary-General of SEAFDEC to take note of the programs of activities implemented in 2023 and endorse the programs proposed for 2024 under the FCG/ASSP mechanism that had been reviewed by the Forty-sixth Meeting of the SEAFDEC Program Committee (46PCM). The 26FCG/ASSP also noted the implementation and provided guidance on the policy documents under the FCG/ASSP mechanism as well as other issues that are important to the fisheries sector of the ASEAN-SEAFDEC Member Countries. The 26FCG/ASSP was attended by the representatives from the ASEAN-SEAFDEC Member Countries, the representative from the ASEAN Secretariat, as well as the SEAFDEC Secretary-General and Deputy Secretary-General, and senior officials of the SEAFDEC Secretariat and Departments.

2. The 26FCG/ASSP took note of the "Follow-up Actions to the Directives Given at the Fifty-fifth Meeting of the SEAFDEC Council and the Twenty-fifth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership." The 26FCG/ASSP made a specific recommendation as follow:

- In following up on the Regional Workshop for Asia on the 2022 FAO Voluntary Guidelines for Transshipment which was organized by the Food and Agriculture Organization of the United Nations (FAO) on 23–27 October 2023, Cambodia inquired about the plan for the development of regional guidelines to facilitate capacity building and support national implementation of the FAO Guidelines. In response, the 26FCG/ASSP was informed that as the regional guidelines is expected to be developed by FAO, once it is available, SEAFDEC will work with FAO and other partners to support the ASEAN Member States (AMSs) by conducting appropriate capacity-building activities.

3. On the "Follow-up Actions to the Directives Given by the ASEAN Bodies Related to Fisheries during 2023," the 26FCG/ASSP noted the outcomes of the ASEAN relevant to fisheries cooperation, including: i) the 31st Meeting of the ASEAN Sectoral Working Group on Fisheries (31st ASWGFi) held virtually on 26−27 July 2023; ii) the Special Senior Official Meeting of the 44th Meeting of the ASEAN Ministers on Agriculture and Forestry (SSOM-44th AMAF) held virtually on 22 August 2023; iii) the 45thMeeting of the ASEAN Ministers on Agriculture and Forestry (45th AMAF) held virtually on 4 October 2023; and iv) the 42nd and 43rd ASEAN Summit held on 10–11 May 2023 and 5–7 September 2023, respectively. The 26FCG/ASSP made discussions which could be summarized as follows:

- Noting the efforts of SEAFDEC in capacity building related to combating IUU fishing through regional technical consultations as well as the willingness of SEAFDEC to collaborate closely with ASEAN on combating IUU fishing activities, the ASEAN Secretariat will coordinate with the Chair of the AN-IUU when organizing the meeting to issue an invitation letter to SEAFDEC.
- Several initiatives of Indonesia were noted, including the internal discussion on the ASEAN-Australia Workshop on the Use of Technology for Sustainable Aquaculture, the online workshops to discuss and finalize the Regional Strategies to Encourage the Implementation of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, as well as a series of national workshops to discuss and develop documents on Common Understanding and Initiative on Sustainable Small-Scale Aquaculture.
- Considering that Viet Nam recently started introduction of the circular economy in the fisheries sector and is now seeking a model to promote this approach, SEAFDEC was requested to explore how to support the promotion of circular economy and nature-based solution initiative in the region. In this connection, the ASEAN Secretariat welcomed initiative on circular economy and requested that the proposal be sent to the ASEAN Secretariat for possible support from ASEAN Dialogue Partners.

4. On the "FCG/ASSP Collaborative Programs for the Year 2023–2024," the 26FCG/ASSP noted the progress and achievements of the projects implemented by SEAFDEC in 2023, and endorsed the proposed

projects and activities for 2024. These include 22 ongoing projects which would be continued in 2024. The 26FCG/ASSP provided recommendations as follows:

- With regards to the development of the Regional Guidelines on Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) for Ready-to-Eat Raw Fish and Fishery Products, Thailand suggested incorporating a case study or a critical process in GMP and GHP for the manufacturing of formulated feed for aquatic animals.
- Indonesia requested SEAFDEC to consider conducting capacity-building programs for fisheries extension officers, focusing on inland fisheries, enhancing the capacity of officers to assist fishers and fish farmers in improving their livelihoods aligning with the program activities of IFRDMD.

5. The 26FCG/ASSP noted the "Progress of SEAFDEC-Related Activities/Proposals Under the ASEAN-Related Bodies" including the relevant recommendations:

- Progress of activities under the ASEAN Steering Committee on Climate Change: Agriculture and Forestry towards Food Security, particularly the 12th Meeting of the ASEAN Steering Committee on Climate Change and Food Security held via videoconference on 14 August 2023:
  - SEAFDEC and the AMSs were requested to explore additional initiatives and foster collaborations in addressing the intersection of climate change and food security, particularly in adapting to rising sea levels, as outlined in the FAO Blue Transformation Roadmap 2022–2030.
- Results of the 15th Meeting of the ASEAN Fisheries Consultative Forum (AFCF) held via videoconference on 25 July 2023:
  - Myanmar requested Indonesia to share information, once the final official version is available, on the program undertaken by Indonesia to protect marine mammals, especially on mitigation and filling in the gap in the comparability findings process of the United States Marine Mammal Protection Act (U.S. MMPA).
  - The plan of SEAFDEC to undertake activities that address the issue of the U.S. MMPA in 2024 was noted.
- Progress of the implementation of the Strategic Plan of Action on ASEAN Cooperation on Fisheries (SPA-Fisheries) 2021–2025.
- Progress of the ASEAN Roadmap on Combating Illegal, Unreported and Unregulated Fishing.
  - Malaysia looked forward for SEAFDEC to continue supporting Malaysia in the implementation of electronic ASEAN Catch Documentation Scheme in the future.
- Outcomes of the 3rd Meeting of the ASEAN Network for Combating Illegal, Unreported, and Unregulated Fishing held via videoconference on 13 June 2023.
- Progress of activities carried out by the ASEAN Shrimp Alliance (ASA), including the results of the 13th Meeting of the ASA which was held online on 24 July 2023:
  - Thailand is revising two project proposals "Regional Collaboration for Long-term Genetic Improvement of Growth, Robustness, and Resistance to Early Mortality Syndrome in White Shrimp" and "ASEAN Awareness Building on Implementing Traceability System and Aquaculture Certification."; Once the proposals are finalized, Thailand will update the ASEAN Secretariat.
  - Thailand will conduct a 5-day training on broodstock management, including breeding and artificial dissemination techniques, for aquaculture species mainly cultured in the AMSs.

6. With regards to the "Policy Consideration on Important Issues," the 26FCG/ASSP took note of the implementation of relevant initiatives and provided the following recommendations:

- Combating IUU Fishing
  - Noting that FAO is planning to develop the regional guidelines for the implementation of the FAO Voluntary Guidelines for Transshipment (VGT), SEAFDEC was requested to organize a regional technical consultation to discuss on the draft regional guidelines.
- Promotion on Sustainable Fisheries and Aquaculture in ASEAN Region
  - The results of the genetic population study and age composition analysis for *Euthynnus affinis*, and the plan of MFRDMD to conduct the Fifth Regional Practical Workshop on the Stock and Risk Assessment of Two Seerfish Species in December 2023 were noted; while the AMSs were encouraged to consider bringing important findings and submit them to relevant management authority in the future.

- The approach to mixed-stock fisheries management, including the plan of SEAFDEC for organizing the Regional Capacity Building Network Program (RECAB) focusing on stock assessment in 2024, was noted.
- The status of the development of the Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products was noted. It is expected that the final draft Guidelines will be submitted to the 57th Meeting of the SEAFDEC Council in 2025 for approval.

• Fish Trade-related issues
  - On CITES related-issues, the updated information on CITES-related meetings and ongoing regional initiatives implemented by SEAFDEC in 2023 were noted.
  - SEAFDEC was requested to explore possibilities to support the AMSs in building capacity in species identification, especially for parts of commercially exploited aquatic species (CEAS). Moreover, SEAFDEC was requested to establish a regional platform to facilitate the development of non-detriment findings (NDF) for sharks and rays, as needed to gather data and assist the AMSs in future management.
  - SEAFDEC was requested to continue submitting the common position on CITES through the ASWGFi mechanism as well as consider inviting the ASEAN Working Group on CITES and Wildlife Enforcement Focal Points when conducting technical consultations to familiarize themselves with the issues.
  - The summary of the discussion at the 19th session of the Committee on Fisheries Sub-committee on Fish Trade of the Food and Agriculture Organization (FAO) (19COFI:FT) which was organized from 11 to 15 September 2023 was noted.
• Others/Emerging Issues
  - The newly established international marine biodiversity policies, particularly the Kunming-Montreal Global Biodiversity Framework (GBF) and the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of areas beyond national jurisdiction (BBNJ) Treaty, were noted.
  - On the ongoing international negotiations addressing plastic pollution under UNEP framework to formulate a legally binding instrument, the AMSs were requested to consider involving experts from the fisheries sector in the upcoming the 4th Intergovernmental Negotiating Committee Meeting in April 2024, Canada.
  - SEAFDEC was requested to assist the AMSs in obtaining updated information and understanding on the GBF and BBNJ Treaty; and support the integration of relevant provisions in regional policies and later on in national policies of the AMSs.
  - SEAFDEC was requested to provide technical assistance and support to the AMSs in carrying out activities on Aquatic Genetic Resources (AqGR), *e.g*. data entry and validation into AquaGRIS, usage of AquaGRIS, capacity-building programs to ensure data accuracy and smooth running of the system.
  - SEAFDEC was requested to propose to ASEAN the development of the AqGR plan in which SEAFDEC could provide technical assistance and support to the AMSs.
  - The establishment of the FAO Sub-Committee on Fisheries Management, the First Session of which is scheduled on 15–18 January 2024, was noted.

7. Under Other Matters, the 26FCG/ASSP took note of the information and the progress of related activities:

• On monitoring and evaluation of the implementation of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030), the Report of the Monitoring and Evaluation of the Implementation of the RES&POA-2030 (2021 Baseline Information) was approved by the 55th Meeting of the SEAFDEC Council, and endorsed by the 31st ASWGFi Meeting and subsequently approved by the SOM-AMAF and AMAF in 2023.
• Thailand is planning to utilize the information in the Report of the Monitoring and Evaluation of the Implementation of the RES&POA-2030 (2021 Baseline Information), particularly the gaps and challenges, to develop a questionnaire to assess the training needs of the AMSs as part of the activity under the SPA-Fisheries on "Training Needs Assessment to Identify the Current Demand for Knowledge and Skill Needed for Sustainable Fisheries Development."

- The 26FCG/ASSP noted the progress of updating the Regional Framework for Fishery Statistics of Southeast Asia developed since 2008 which came up with the draft Revised Regional Framework (2024 Edition).

8. The Report of the 26FCG/ASSP was adopted on 24 November 2023.

Annex 8

EFFORTS TO COMBAT IUU FISHING

I. EXECUTIVE SUMMARY

Illegal, Unreported, and Unregulated (IUU) fishing poses a significant threat to sustainable development and management of fisheries resources in Southeast Asia, jeopardizing food security, livelihoods, and the viability of fish stocks. This includes factors such as reproductive rates, population size, ecological balance, and resilience to external pressures, including fishing pressure or environmental changes. The dedicated efforts of SEAFDEC over the years have a crucial role in combating IUU fishing through collaboration with key partners and Member Countries.

SEAFDEC collaborates with regional and international partners such as FAO, ASEAN AN-IUU, RPOA-IUU to support ASEAN Member States (AMSs) in combating IUU fishing. This collaboration strengthens regional efforts to combat IUU fishing through a range of programs. Years of SEAFDEC's dedicated work have delivered significant outcomes, including:

- **Established the Regional Fishing Vessel Record (RFVR)**
  This database exclusively shares among AMSs regarding fishing vessels exceeding 24 meters in length, serving as a "white list" to deter illegal fishing activities.
- **Launched the electronic ASEAN Catch Documentation Scheme (eACDS)**
  In response to Member Countries' needs for national traceability systems, eACDS enhances traceability and streamlines verification of fish and fishery products, ensuring their legal source of origin.
- **Enhanced national capacities in Port State Measures (PSM)**
  Through comprehensive training programs, SEAFDEC empowers Member Countries to conduct effective inspection of foreign fishing vessels upon entering into their respective designated fishing ports, pivotal measures in combating IUU fishing.

The Regional Workshop on the Project End of Strengthening Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia was held by SEAFDEC in March 2024, with financial support from JTF. The Workshop prioritized nine priority areas for future action to combat IUU fishing in Southeast Asia, as follows:

1. **Vessel monitoring**
   - VMS system
   - Sharing VMS information between AMS
   - Application on VMS (AIS/GSM) for middle-scale and small-scale fishing vessels

2. **Strengthening MCS for commercial scale, small-scale fisheries and community-based fisheries**
   - Enhancing monitoring, control and surveillance
   - Capacity building on MCS
   - Identification of IUU fishing vessels (no/expired license, destructive practices, and gears, fake registration, illegal joint ventures, encroachment)
   - Conduct risk assessments on key IUU areas
   - Introduction of new technology for support MCS
   - Capacity building on enforcement approaches
   - Capacity building on application of PSM (port inspections, transshipment monitoring, port monitoring)

3. **AMS/regional cooperation on IUU information**
   - Cooperation from other countries on information sharing
   - Sharing the IUU information among members via AN-IUU interactive platform
   - Sharing best practices on laws and policies to combat IUU
   - Expand and strengthen regional/bilateral dialogues between neighbors around shared IUU issues

4. **Encroachment of foreign vessels (enforcement control issue and registration)**
   - Medium and large-scale foreign vessels
   - Small-scale fisheries base crossing Maritimes transboundary & conducting illegal fishing in neighboring countries
   - Small-scale fishing boat registration and controls
   - Enforcement

5. **Strengthening catch documentation**
   - Study and communicate the market state requirements, align to global standards (such as FAO guidelines on CDS), and additional work on how to incorporate SSF
   - Strengthen port landing information, catch landing sources
   - Improve functionality of eACDS system to align with market state
   - Capacity building Use of CDS and/or the eACDS

6. **Development of national/regional estimation of IUU losses**
   - Information sharing among the key stakeholders on IUU fishing.
   - Estimation of losses due to IUU fishing
   - Sharing on estimation methods for IUU losses (*e.g.* I-FIT)
   - Provide knowledge on fishery intelligence to Member Countries as it is an effective tool to attribute to eliminate IUU fishing
   - Linkage to stock assessment to assess impacts
   - Improve information on transboundary species and harmonize framework
   - Provide the argument for improved resourcing and political support

7. **Strengthening evidence and procedures prosecution to improve the deterrence effect**
   - Raise awareness within and across the agencies
   - Improve the efficiency of the use of maritime MCS/patrols
   - Coordination in CDS (in port, on board, etc.), between competent authorities

8. **Monitor Transshipment Activity**
   - Understanding carrier vessels (smaller size activity) scale and frequency
   - Tools to address activity (CDS, port monitoring)

9. **Legal Reform**
   - Updating and/or amending national legal frameworks
   - Development/Updating of NPOA-IUU

II. REQUIRED CONSIDERATION BY THE COUNCIL

- Take note on SEAFDEC's core activities conducted in the past and the outcomes related to priority areas for future actions aimed at supporting AMSs in combating IUU fishing.
- Provide policy directives and recommendations on additional aspects of combating IUU fishing, considering the priority areas identified during the March Workshop and identifying any other key areas that may have been overlooked.

EFFORTS TO COMBATING IUU FISHING

CHAPTER I: SEAFDEC'S ACTIVITIES SUPPORTING COMBAT IUU FISHING IN SOUTHEAST ASIA

IUU fishing poses a serious threat to the future of Southeast Asian fisheries, jeopardizing food security and livelihoods, undermining efforts to conserve fish stocks. SEAFDEC stands as a crucial player in combating this challenge. Through collaboration with key partners including FAO/HQ, FAO/RAP, ASEAN Network to Combat IUU Fishing (AN-IUU), RPOA-IUU, and ASEAN Member States, SEAFDEC demonstrates its competence. This is evident in high-level consultations in 2016 and a current project (2020-2024) funded by the JTF Project. The project focuses on strengthening regional cooperation and national capacities to tackle IUU fishing. Key initiatives include developing and implementing the Regional Fishing Vessel Record (RFVR) for fishing vessels exceeding 24 meters in length, promoting the electronic ASEAN Catch Documentation Scheme (eACDS) for fish and fishery product traceability, and enhancing national capacities in Port State Measures (PSM). Through these efforts, SEAFDEC plays a vital role in ensuring the sustainable management of fisheries resources and the well-being of Southeast Asian communities.

SEAFDEC focuses its efforts on several key areas to combat IUU fishing as follows:

1.1 Strengthening regional frameworks and cooperation

- **Collaboration with ASEAN and key partners**
  SEAFDEC collaborates with various organizations, including the FAO/HQ, FAO/RAP, ASEAN AN-IUU, RPOA-IUU, and IMCS Network. These collaborations ensure close cooperation with ASEAN Member States (AMSs) to harmonize efforts and implement regional strategies to combat IUU fishing.
- **Promoting regional guidelines**
  SEAFDEC actively supports the development and implementation of regional measures to combat IUU fishing. This includes initiatives on the ASEAN Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain[1].

1.2 Capacity Building and Technical Assistance:

- **Regional Fishing Vessel Record (RFVR)**
  SEAFDEC/TD supports AMSs in setting up and maintaining the RFVR database. This regional database records and share among AMSs fishing vessels exceeding 24 meters in length. By functioning as a "white list", the RFVR allows AMSs to share information and identify authorized fishing vessels, potentially deterring illegal fishing activities.
- **Electronic ASEAN Catch Documentation Scheme (eACDS)**
  SEAFDEC/TD plays a key role in introducing a traceability system so-called "electronic Catch Documentation Scheme (eACDS)" for fish and fishery products, and implementing the eACDS based upon the request from AMSs. This program, endorsed by ASEAN, provides technical assistance to AMSs. The eACDS focuses on developing electronic catch documentation systems and issuing the electronic catch certification to improve the traceability of fish and fishery products in the respective countries in Southeast Asia. This traceability helps to combat IUU fishing by allowing authorities to track the origin of fish and verify that they were caught legally.
- **Training and workshops**
  SEAFDEC/TD, along with its partners, delivers workshops and training programs for AMSs. These programs serve two objectives: providing regional platforms for information sharing on IUU fishing; and strengthening national capacities in Port State Measures (PSM). PSM training equips officials with the skills to effectively inspect foreign fishing vessels entering their ports, a crucial step in combating IUU fishing.

1.3 Knowledge sharing and awareness raising:

- **Participation in regional meetings**
  SEAFDEC actively participates in regional meetings on IUU fishing, sharing their expertise and progress on combating IUU fishing in Southeast Asia.

[1] Annex_A1_ASEAN Guidelines IUU for Final Endorsement by 23ASWGFi_23May15_JTF logo.doc

CHAPTER 2: PRIORITY AREAS AND REGIONAL ACTIONS FOR COMBATING IUU FISHING IN SOUTHEAST ASIA

To identify priority areas for future programs tackling IUU fishing in Southeast Asia, SEAFDEC convened a regional workshop on the Project End of Strengthening Regional Cooperation and Enhancing National Capacities to Eliminate IUU Fishing in Southeast Asia on 20-21 March 2024. The workshop was built upon experiences from the JTF project (2020-2024) and collaboration with key partners including FAO, ASEAN AN-IUU, and RPOA-IUU. By gathering information and considering the priorities of ASEAN member states, the workshop identified the following key areas for future action.

2.1 Vessel monitoring

Priority areas
- VMS system
- Sharing VMS information between AMS
- Application of VMS (AIS/GSM) for middle-scale/small-scale fishing vessels

Regional actions
- Develop SOP/Guideline on VMS information sharing [*Criteria: share information about the vessel suspected to be encroached EEZ of the coastal state (bilateral agreement*)]
- Explore appropriate application/system for small-scale fisheries (SSF is not required to have licensing in some countries)

2.2 Strengthening MCS capabilities for commercial, small-scale, and community-based fisheries

Priority areas
- Enhancing monitoring, control, and surveillance
- Capacity building on MCS
- Identification of IUU fishing vessels (no/expired license, destructive practices, and gears, fake registration, illegal joint ventures, encroachment)
- Conduct risk assessments on key IUU areas
- Introduction of new technology for MCS
- Capacity building on enforcement approaches
- Capacity building on application of PSM (port inspections, transshipment monitoring, port monitoring)

Regional actions
- Capacity building on monitoring
  - Stock assessment (such as transboundary species, national fish stock, etc.)
  - Taxonomy
- Capacity building on control
  - International fishery instrument
  - PSM
  - Application of observer onboard
  - Explore alternative application/system to observe fishing activities
  - Fishing gear methods
  - Identification of IUU fishing vessels
- Capacity building on Surveillance
  - Joint patrols
  - Risk assessment
  - Container inspection
  - Apply unman surveillance system
- Identification of IUU fishing vessels to avoid double flag
  - Modernization of fishing vessels by using a General Arrangement (GA) plan
  - Encourages commercial fleet to use IMO number

2.3 AMS/regional cooperation on IUU information sharing

Priority areas
- Cooperation from other countries on information sharing
- Sharing IUU information via AN-IUU platform
- Sharing best practices on laws and policies to combat IUU
- Expand and strengthening regional/bilateral dialogues between neighbors around shared IUU issues

Regional actions
- Explore the willingness of countries to establish hotlines
- Strengthening the AN-IUU platform to share information about the suspension vessels (*e.g.* ensure active and responsive focal points)
- Awareness raising through physical training getting the focal points together and learning how to use the AN-IUU Network
- Sharing experience or success of the regional mechanism on information sharing on IUU information through SEAFDEC regional platform
- Coordination with ASEAN on how SEAFDEC can support sharing experiences
- SEAFDEC to organize the workshop on strengthening understanding of global instruments and their application (VG for transshipment, PSMA, C188, CDS, subsidies, etc.) in cooperation with FAO, IMO, ILO
- SEAFDEC to explore cooperation with IMCS Network to provide information on fishery intelligence data joint analytical cell with IMCS Network for enforcement
- Cooperation with RPOA-IUU and provide technical support to Member Countries
- Encouragement AMSs to update information on RFVR database
- Strengthening cooperation between RFVR focal points via annual meeting for RFVR focal point
- Continue to develop RFVR database smaller than 24 meters in length in focus of carrier vessels for utilization between neighboring country

2.4 Encroachment of Foreign Vessels

Priority areas
- Medium and large-scale foreign vessels
- Small-scale fisheries base crossing maritime boundaries and conducting illegal fishing in neighboring countries
- Small-scale fishing vessels registration and controls
- Enforcement

Regional actions
- Under the RPOA-IUU, sharing information of best practices at sub-regional levels.
- SEAFDEC to organize the regional workshop on the sharing information of best practices on actions against encroachment of foreign vessels
- SEAFDEC to organize the workshop for SSF and IUU fishing relevant to VG SSF
- SEAFDEC to organize the workshop on flag state responsibility

2.5 Strengthening catch documentation

Priority areas
- Study and communicate the market state requirements, align to global standards (such as FAO guidelines on CDS), and additional work on how to incorporate SSF
- Strengthen port landing information, catch landing sources
- Improve functionality of eACDS system to align with market state
- Capacity building Use of CDS and/or the eACDS

Regional actions
- SEAFDEC to organize the workshop or Capacity building on the market requirements (private sector) such as US, EU, Japan CDS
- Study how the eACDS alignment with FAO CDS Guidelines (and in response to the market state requirements)

- Continuing support the capacity-building on the use of CDS and/or the eACDS
- SEAFDEC to organize the workshop to share experiences on the implementation of the national CDS

2.6 Develop national/regional estimation of IUU losses

Priority areas
- Information sharing among the key stakeholders on IUU fishing.
- Estimation of losses due to IUU fishing
- Sharing on estimation methods for IUU losses (*e.g*. I-FIT)
- Provide knowledge on fishery intelligence to Member Countries as it is an effective tool to attribute to eliminate IUU fishing
- Linkage to stock assessment to assess impacts
- Improve information on transboundary species and harmonize framework
- Provides the argument for improved resourcing and political support

Regional actions
- Formulation of ASEAN guideline on how to estimate IUU losses (such as transboundary species, national water)
- Conduct national assessment of estimation of IUU loss (such as transboundary species, national water)
- Share the results of the assessment of IUU loss in the annual meeting of AN-IUU
- Inform policy maker about the results of IUU loss through AN-IUU, ASWGFi, SOM-AMAF and AMAF

2.7 Strengthening evidence and procedures for improved deterrence effect

Priority areas
- Raise awareness within and across the agencies
- Improve the efficiency of the use of maritime MCS/patrols
- Coordination in CDS (in port, on board, etc.), between competent authorities

Regional actions
- SEAFDEC to organize the workshop to share information on the evidence and procedures and secure effective prosecutions to improve the deterrence effect (IMCS Network, INTERPOL, etc.)

2.8 Monitor transshipment activity

Priority areas
- Understanding carrier vessels (smaller size activity) scale and frequency
- Tools to address activity (CDS, port monitoring)

Regional actions
- Strengthen port inspection at both coastal states and flag states (Bilateral arrangement)
- To establish bilateral arrangements to understand carrier vessels
- To implement the certification form for transshipment developed by FAO (transshipment guideline)
- Share the best practices on carrier vessels
- Regional review on carrier definition in AMS
- Apply international fish and fishery product certification scheme, *e.g* MSC, national traceability system, ASEAN-Tuna ecolabelling system (reactivated in 2022)

2.9 Legal reform

Priority areas
- Updating and/or amending national legal frameworks
- Development/Updating of NPOA-IUU

Regional actions

- SEAFDEC to organize the workshop on sharing best practices on laws and policies
- SEAFDEC to organize the workshop to share information and best practices in development of the comprehensive NPOA-IUU

CONCLUSIONS AND WAY FORWARD

While it is crucial to emphasize the importance of future actions and resource allocation for combating IUU fishing, with particular emphasis on setting target timeframes for each action, the March 2024 Workshop underscored the necessity for overarching recommendations from the Council of SEAFDEC. These suggestions are crucial for maintaining momentum in information sharing and collaborative efforts to combat IUU fishing among AMSs. During the Workshop, consensus was reached on the significance of ongoing regional information-sharing initiatives, including the utilization of the RFVR database and eACDS. Participants of the Workshop also highlighted the potential expansion of these platforms to include records for small- and medium-scale fish carriers involved in landing catches across various countries. Furthermore, the Workshop requested SEAFDEC to continue providing capacity-building support to ASEAN Member States in key areas related to combating IUU fishing.

In conclusion, participants of the Workshop requested SEAFDEC to continue providing technical assistance to ASEAN Member States. They emphasized the importance of integrating recommendations from the Workshop into future programs and activities of SEAFDEC.

Annex 9

REGIONAL PLAN OF ACTION FOR SUSTAINABLE UTILIZATION OF NERITIC TUNAS IN THE ASEAN REGION

I. INTRODUCTION

To foster the sustainable exploitation of neritic tuna resources in the Southeast Asian region, collaborative efforts between SEAFDEC and the ASEAN Member States (AMSs) commenced in 2013, with the establishment of the Regional Plan of Action for Sustainable Utilization of Neritic Tunas (RPOA-Neritic Tunas) in the ASEAN Region. Following on that, the establishment of the Scientific Working Group (SWG) on Neritic Tuna Stock Assessment in Southeast Asian Waters (SWG-Neritic Tunas) took place in 2014. This initiative received formal endorsement from the SEAFDEC Council and the ASEAN mechanism in 2015. Funding for SWG-Neritic Tunas was initially provided by the SEAFDEC-Sweden Project from 2015 to 2019, followed by continued support through the JTF6 Phase 2 project from 2020 to 2024, under the project on "Fisheries Management Strategies for Pelagic Fish Resources in Southeast Asian Region" under the second objective, implemented by MFRDMD. The key function of the SWG-Neritic Tunas is to offer technical and scientific insights into the present condition of neritic tuna fisheries resources and to provide policy recommendations to the SEAFDEC Council for the sustainable utilization and enhancement of fisheries management for neritic tunas in Southeast Asia.

The SWG-Neritic Tunas conducted a series of stock and risk assessments on neritic tuna and tuna-like species through regional training from 2016 until 2023. The SWG also conducted a series of stock and risk assessments on neritic tunas and tuna-like species in Southeast Asia waters namely for longtail tuna (*Thunnus tonggol*) and kawakawa (*Euthynnus affinis*), as well as for narrow-barred Spanish mackerel (*Scomberomorus commerson*) and Indo-Pacific king mackerel (*S. guttatus*), the results of which were reported to SEAFDEC Council Meetings for approval. Previously, this regional training focused on the stock and risk assessments using A Stock-Production Model Incorporating Covariates (ASPIC) software. However, starting in 2023, the regional training no longer used this software; instead, it manually calculated the ASPIC model. Based on the discussions at the SWG-Neritic Tunas, it was suggested that the stock and risk assessments of these species should be done at least once every three years or once every two years if the stocks are worsened.

II. STUDY ON STOCKS AND RISKS ASSESSMENTS FOR TWO SEERFISH SPECIES IN SOUTHEAST ASIAN WATERS

In December 2023, SEAFDEC/MFRDMD organized the *Regional Training on Stocks and Risks Assessments for Two Seerfish Species in the Southeast Asian Waters* in Subang Jaya, Malaysia. This training aims to expose AMSs and SEAFDEC staff to the manual calculation of ASPIC and to identify the current stocks and risks assessment status for two seerfish species (*S. commerson* and *S. guttatus*) in the South China Sea (Western Pacific Ocean) and Andaman Sea (Eastern Indian Ocean) off Southeast Asian Waters.

Summary of the Results of the Study

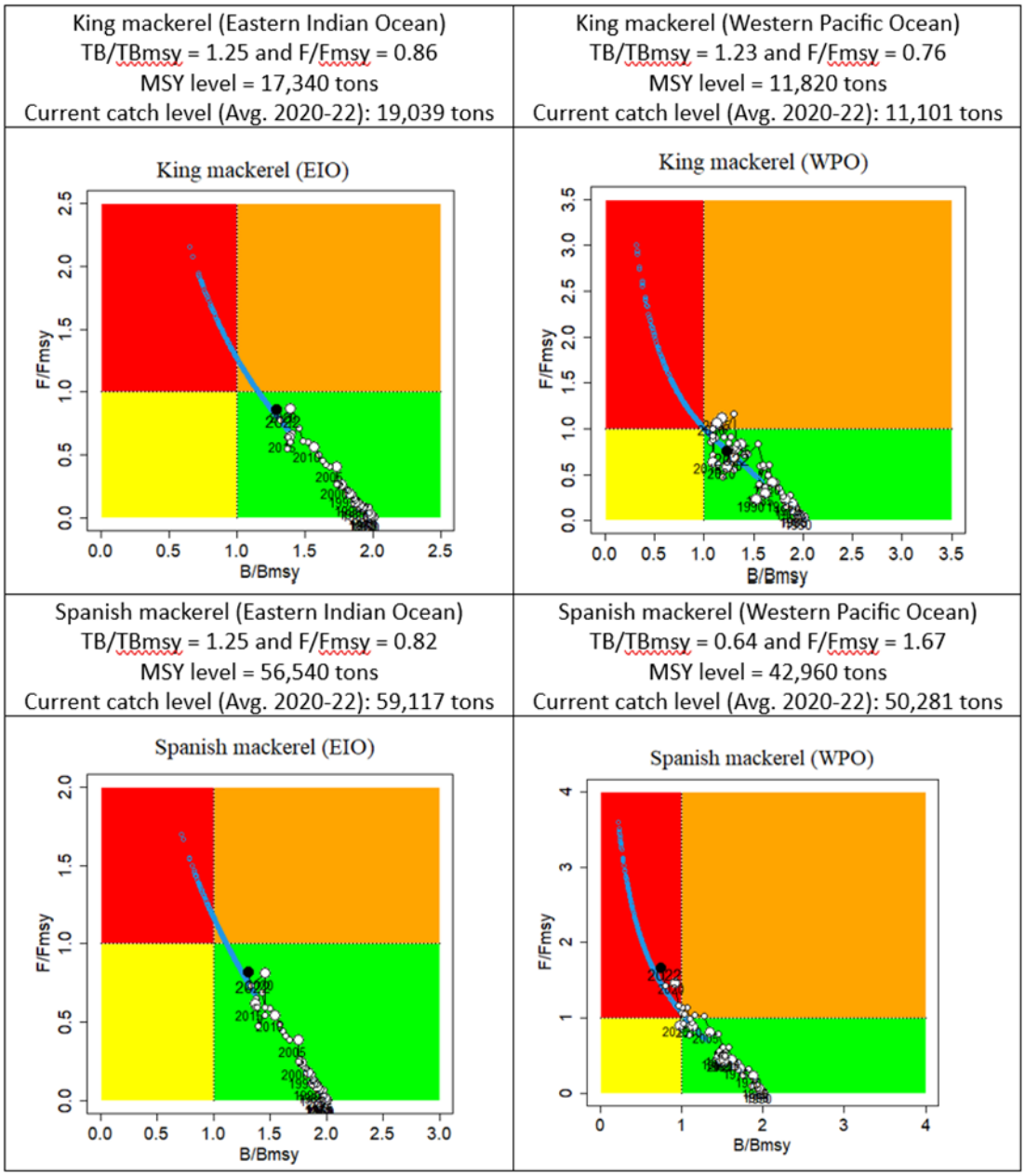
Based on the analysis, the stock status of Indo-Pacific king mackerel (KM: *S. guttatus*) and Narrow-barred Spanish mackerel (SM: *S. commerson*) resources in the Southeast Asian region were forecasted. The ASPIC 5 software and R package were used for the analysis. Furthermore, Microsoft Excel is also used for data sorting, compiling, and graft plotting. In the analysis, the published catch data till 2022 was obtained from several sources such as the Fisheries *Refugia* website, data sets from SEAFDEC Member Countries, the Indian Ocean Tuna Commission (IOTC), and Fisheries Food and Agriculture Organization (FAO)-FishStatJ for the Eastern Indian Ocean and Western Pacific Ocean, respectively.

As a result, the stock status for KM in the Eastern Indian Ocean was in a safe situation (green zone). Based on the risk assessment results, the current catch (19,000 tons) needs to be reduced by 10% (1,900 tons). Next, SM stock status in the Eastern Indian Ocean was also in the safe situation (green zone). To summarize from the risk assessment results, the current catch (59,000 tons) needs to be reduced by 10% (5,900 tons). Although the stock's status of these two in this water was in the green zone, the current catches (2022) were

still higher than the MSY levels. Therefore, catch reduction needs to be implemented even though the stock status is safe.

Besides, KM stock status in the Western Pacific Ocean was safe (green zone). Based on the risk assessment results, the current catch (11,000 tons) should be maintained. The current catch is less than the MSY level. Lastly, SM stock status in the Western Pacific Ocean shows an overfished situation (red zone). Based on the risk assessment results, the current catch (50,200 tons) strictly needs to be reduced by 20% (10,000 tons). Therefore, the action of reducing the catch needs to be implemented.

The catches of pelagic fisheries in the Southeast Asian region comprise multiple species. Since the stocks of these species are widely distributed and homogeneously mixed, implementing the total allowable catch (TAC) for single species in this region could not be possible. However, in consideration on the needs in the fisheries management in this region, the holistic approach in terms to limit the total catch from some gears could be possible. Indo-Pacific king mackerel and Narrow-barred Spanish mackerel are among the most important fisheries resources in the SEAFDEC Member Countries. Thus, stock and risk assessments need to be updated at least every three years or two years for the stocks in the unhealthy status.



Ways forwards

- MFRDMD will complete the full report of the Stocks and Risks Assessments for Two Seerfish Species in Southeast Asian Water.
- The final version of the full report will be submitted to the 47th Meeting of SEAFDEC Program Committee and the 27th Meeting of Fisheries Consultative Group/ASEAN-SEAFDEC Strategic Partnership (27FCG/ASSP) in November 2024 (tentatively), subsequently will be submitted to the Council during the 57th Meeting of SEAFDEC Council in 2025 for approval, and the 33rd ASWGFi in 2025 for the endorsement.

III. REQUIRED CONSIDERATION BY THE COUNCIL

- Take note of the summary results of the Stocks and Risks Assessments for Two Seerfish Species in the Southeast Asian Water, which was organized in December 2023.

Annex 10

REGIONAL CONTRIBUTION TO GLOBAL INITIATIVE ON AQUATIC GENETIC RESOURCES

I. INTRODUCTION

During the Eleventh Session of the Commission on Genetic Resources for Food and Agriculture in 2007, the Food and Agriculture Organization of the United Nations (FAO) agreed to lead a process towards production of the report on *The State of the World's Aquatic Genetic Resources for Food and Agriculture* (SoW-AqGR)[1] recognizing the importance and vulnerability of aquatic genetic resources for food and agriculture (AqGR),[2] their roles in an ecosystem approach to food and agriculture, and their contributions to meeting the challenges presented by climate change. Subsequently in 2019, to maintain momentum following the preparation of the SoW-AqGR, FAO was requested to prepare a draft "Global Plan of Action for Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture" in consultation with the regions and in collaboration with the FAO Committee on Fisheries (COFI) and its relevant subsidiary bodies. The Global Plan of Action[3] was finally adopted at the 168th session of the FAO Council in 2021.

II. GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF AqGR

The "Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture" responds to the needs and challenges identified in the global assessment and represents international consensus based upon extensive consultation. This comprehensive Global Plan of Action aims to optimize the contribution of AqGR to food security and alleviation of poverty, at local, national, and international scales. It recognizes that the aquaculture sector is at a relatively initial stage in its development and lags behind terrestrial farming systems in terms of its sustainable use and development of genetic resources. It also recognizes and reflects the distinctive properties and characteristics of AqGR. Although voluntary and non-binding, it guides countries on how to best manage the AqGR used in aquaculture, particularly aquaculture species, and their farmed types[4] and wild stocks.

The Global Plan of Action encompasses four priority areas, as follows:

- **Priority Area 1. characterization, inventory and monitoring** -- Establish and strengthen national and global characterization, monitoring and information systems for AqGR
- **Priority Area 2. conservation and sustainable use** -- Promote the conservation and sustainable use of cultured and wild relative AqGR
- **Priority Area 3. development of AqGR for aquaculture** -- Accelerate the development and uptake of genetic improvement of aquaculture farmed types, with a focus on the expansion of selective breeding programmes
- **Priority Area 4. policies, institutions, capacity building and cooperation** -- Promote the development of AqGR-related policies, support the development of stakeholder institutions and build capacity to support the management of AqGR

III. IMPORTANCE OF AqGR IN THE SOUTHEAST ASIAN REGION CONTEXT

For the Southeast Asian region, the importance of the AqGR and its contribution to food security, livelihoods, and biodiversity conservation is widely recognized. On 8 August 2023, the SEAFDEC Secretariat organized a webinar on "Aquatic Genetic Resources for Food and Agriculture" with the

[1] https://www.fao.org/3/CA5256EN/CA5256EN.pdf
[2] Aquatic genetic resources refers to molecular sequences, genes, chromosomes, tissues, gametes, embryos and other early life history stages, individuals, farmed types, wild stocks and communities of organisms of actual or potential value for food and agriculture.
[3] https://www.fao.org/3/cb9905en/cb9905en.pdf
[4] The term "farmed type" is a descriptor applied to farmed aquatic organisms at a level below species, including strain, variety, hybrid, triploid, monosex group, other genetically altered forms or wild-sourced.

resource persons from FAO. The discussion during the webinar highlighted the crucial role of potential future technical cooperation programs and collaborations between FAO and regional organizations, including SEAFDEC, to promote effective AqGR management. Subsequently, the Twenty-sixth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in November 2023 further suggested that SEAFDEC initiate efforts to foster close cooperation among FAO National Focal Points (NFPs) of AqGR within the AMSs, as well as regional initiative on the usage of the AquaGRIS, which includes capacity-building programs to ensure data accuracy and smooth running of the system.

IV. REGIONAL CONTRIBUTION TO THE AQUAGRIS

One of the priority areas of the Global Plan of Action is *"characterization, inventory and monitoring"* which specifically refers to the need to establish and strengthen national and global characterization, monitoring and information systems for AqGR. To support the implementation of this priority area, and recognizing the lack, at national, regional and global levels, of in-depth knowledge of what genetic resources are farmed, their characteristics, and the status of their management, FAO has developed the "Aquatic Genetic Resources Information System" or AquaGRIS, which is a global information system hosted and run by FAO.

AquaGRIS is an authoritative tool through which countries, on a voluntary basis, will regularly report to FAO information on the AqGR within their national jurisdictions. It is expected that AquaGRIS will not only make information on AqGR publicly available but, in the future, will also allow countries to monitor, over time, the status of conservation, sustainable use and development of these resources through a set of purposely-developed indicators. After the development of AquaGRIS, FAO has entered a new phase aiming to widely build countries' capacity to use AquaGRIS and start national and regional activities for the creation of national registries.

Currently, only a few Southeast Asian countries have initiated the process of contributing their national registries to AquaGRIS. However, it is strongly encouraged that all countries in the region establish their national registries within the system. This will enable the AqGR information to be readily accessible and beneficial for various stakeholders, including:

- Policymakers and resource managers: Utilize the information as a basis for policy and strategy development, as well as to monitor their implementation;
- Producers: Access information about available resources, their characteristics, and available locations, facilitating informed decision-making; and
- Academics and breeders: Utilize AquaGRIS to inform and prioritize their research and development activities, as well as to communicate about newly developed farmed types entering commercial production.

V. SEAFDEC ACTIVITIES TO SUPPORT REGIONAL CONTRIBUTION TO AQUAGRIS

Following the successful "Webinar on Aquatic Genetic Resources for Food and Agriculture (AqGR)" held on 8 August 2023, FAO and SEAFDEC have entered into a cooperative partnership through the Letter of Agreement (LOA) between FAO and SEAFDEC for provision of "Support for strengthening regional capacity to monitor the status of management of aquatic genetic resources." This agreement is set to remain in effect until 30 September 2024. Within the specified timeframe, SEAFDEC and FAO will jointly organize a two-day regional workshop on "The application of AquaGRIS: the FAO global information system, to build national registries of aquatic genetic resources". The workshop is scheduled to take place on 6–7 June 2024 in Bangkok, Thailand.

The objectives of the regional workshop are as follows:

1. To enhance the awareness on the importance of having a good information baseline on the aquaculture species and related farmed types and wild stocks in order for a country/region to make information-based decisions on AqGR management and the sustainable development of the aquaculture sector;

2. To enhance participants' understanding of AquaGRIS and their capacity to create national registries through it; and
3. To develop a strategy and plan for the creation and long-term maintenance of AqGR registries in the region and start, after the workshop, the process of creating national registries in a group of countries that will be selected during the workshop.

The invitation letter has been issued to the SEAFDEC Member Countries, namely: Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. It is expected that one of the representatives should wherever possible be the AqGR NFP[5], while the other representatives should possibly be those who in the future will support the NFP in the data entry into AquaGRIS and should be experts with knowledge of farmed and wild genetic resources. Importantly, it should be noted that the representatives are required not only to attend the workshop session but also to consider starting the process of creating the national registries, the outcomes of which are to be reported to SEAFDEC within three months after the Workshop.

It is envisaged that this regional workshop would enhance the awareness and knowledge of the SEAFDEC Member Countries on AqGR management and AquaGRIS, as well as provide capacity building, initiating the creation of national registries in the region, supported by FAO and AqGR experts. This would contribute to the overarching objective for sustainable aquaculture production at the national, regional, and global levels in the future.

VI. REQUIRED CONSIDERATION BY THE COUNCIL

- The Council is requested to take note of SEAFDEC's plan to organize the regional workshop on "The application of AquaGRIS: the FAO global information system, to build national registries of aquatic genetic resources."
- The ASEAN-SEAFDEC Member Countries are encouraged to take part in the regional workshop scheduled for June 2024; and start the process of creating national registries for AquaGRIS after the workshop.

[5] https://www.fao.org/3/bs238e/bs238e.pdf

Annex 11

REVISION OF REGIONAL FRAMEWORK FOR FISHERY STATISTICS OF SOUTHEAST ASIA

I. BACKGROUND

Since 1978, SEAFDEC has been undertaking initiatives in compiling fishery statistics from the Member Countries bordering the South China Sea Area. Considering that the harmonization of data is crucial in facilitating the exchange and compilation of fishery statistics at regional and international levels, while there were changes in coverage of SEAFDEC members; in the mid-2000s, SEAFDEC in consultation with the ASEAN Member States (AMSs) started developing the Regional Framework for Fishery Statistics of Southeast Asia including the "standard definitions and classifications" harmonized with the international standards and "area of coverage" consistent with the areas of competence of SEAFDEC. The framework was approved by the SEAFDEC Council in 2008 and applied for the compilation of fishery statistics from the AMSs starting from 2008 onwards.

Nevertheless, after 2008, several new global statistical standards were developed and updated by the FAO Coordinating Working Party on Fishery Statistics (CWP). In 2017, SEAFDEC organized the Regional Technical Consultation (RTC) on Fishery Statistics and Information in Southeast Asia to update the Southeast Asian countries on the recent developments made by the CWP. It was agreed during the RTC in 2017 that after the adoption of the new CWP standards (*i.e.* at the 26th Session of the CWP in 2019), SEAFDEC should organize a meeting among the members of the ASEAN Network on Fishery Statistics to revise the Regional Framework for Fishery Statistics of Southeast Asia. Other areas for improving regional fishery statistics, *e.g.* inclusion of statistics on fish trade and fish processing, should also be discussed.

From 2021 to 2023, SEAFDEC, therefore, organized a series of RTCs (*i.e.* the first RTC on 21–22 September 2021, online; the second RTC on 23–26 August 2022 in Pattaya, Thailand; and the third RTC on 22–24 August 2023 in Chiang Mai, Thailand) with the participation of all AMSs to review the Regional Framework for Fishery Statistics of Southeast Asia and came up with the Final Draft Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition). The Final Draft Regional Framework (2024 Edition) was submitted to the 46th PCM for consideration and comments. After accommodating comments from the SEAFDEC Member Countries, confirmation on the final text of the Regional Framework (2024 Edition) would be further submitted to the 56th Meeting of SEAFDEC Council for approval, and subsequently to the 32nd Meeting of the ASWGFi for notation. The Regional Framework (2024 Edition) would also be disseminated to the Member Countries, ASEAN Network on Fishery Statistics, partner organizations, fisheries institutions, and libraries, while the electronic format was made available at the SIR for free download.

It should be noted that the continued revision of the Regional Framework is in line with the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 which was adopted in 2020, specifically the provision on the need to "*Enhance regional fishery information systems and mechanisms to facilitate sharing, exchange and compilation of statistics and information required at the sub-regional and regional level, and apply where appropriate, regionally standardized definitions and classifications for statistical data to facilitate regional compilation, analysis, and data exchange*."

II. REGIONAL FRAMEWORK FOR FISHERY STATISTICS OF SOUTHEAST ASIA (2024 EDITION)

The Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition) was developed based on the Regional Framework for Fishery Statistics of Southeast Asia approved by the SEAFDEC Council in 2008 by further harmonizing the standards, definitions and classifications of the fisheries statistics of Southeast Asia with the updated international standards, definitions and classifications and adding some additional statistics items with a view to enhance the usability of the statistics by providing a better understanding and clearer picture of the fisheries sector of the region. Through the first, second and third RTCs, the major revision of the Regional Framework (2024 Edition) are as follows:

- Revision of Geographical Coverage
  - Updating "Sub-areas" of the Southeast Asian countries
- Revision of Statistics on Marine Capture Production
  - Adding production by the "scale of fishing activities" (small-scale and commercial fisheries), with updated definition of small-scale and commercial fisheries of the respective countries
- Revision of Statistics on Inland Capture Production
  - Updating production by "type of fisheries" (*i.e* by scales, by seasonality or fishing rights/license, and by types of fishing gears)
- Revision of Statistics on Aquaculture
  - Updating production by "aquaculture facility"
  - Providing selected examples of aquaculture and capture fisheries practices
- Revision of Statistics on Fishers and Fish Farmers
  - Adding classification of fishers and fish farmers by "nationality" and "gender"
- Revision of Statistics on Producer Price
  - Separation of Producer Price from "capture fisheries" and from "aquaculture"
- Addition of Statistics on Fish Processing
- Addition of Statistics on Exports and Imports of Fishery Commodities
- Addition of Statistics on Per Capita Fish Consumption

The final draft of the Regional Framework (2024 Edition) agreed by the third RTC in 2023 and accommodating comments by the 46th PCM appear as **Appendix 1**. The structure of the Regional Framework (2024 Edition) is as follows:

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During the third RTC in 2023, it was also agreed that the Final Draft Regional Framework (2024 Edition) should be submitted for consideration and approval by the SEAFDEC Council at its 56th Meeting in 2024, and subsequently to the ASWGFi for notation of the revision. The workplan and timeframe for seeking approval of the Regional Framework (2024 Edition) are as follows:

Timeline	Activities
2nd quarter of 2024	56th Meeting of the SEAFDEC Council • **SEAFDEC/SEC:** Seek approval of the Council on the "Regional Framework (2024 Edition), set of Questionnaires, and process for submission of statistics to SEAFDEC and FAO
2nd quarter of 2024	32nd Meeting of the ASWGFi • **SEAFDEC/SEC:** Inform on the Regional Framework (2024 Edition) for notation by the ASWGFi
2025	• **SEAFDEC/SEC and AMSs:** Start using the Regional Framework (2024 Edition) and Questionnaires to request inputs from the AMSs (for statistics data in 2024)

III. STATISITCS QUESTIONNAIRE AND HARMONIZED PROCESS FOR SUBMISSION OF STATISTICS FROM COUNTRIES TO SEAFDEC AND FAO

In addition to the Final Draft Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition), the third RTC in 2023 also agreed on a set of Questionnaires for compiling statistics submitted from the Southeast Asian countries to SEAFDEC and FAO corresponding to the Regional Framework (2024 Edition) as follows:

Questionnaire	Title	Issued by
Q1	Fishery production by sub-sector	SEAFDEC
Q2	Capture production by species and SEAFDEC sub-areas	FAO (Q2-STAT)
Q3	Marine capture fishery production by the scale of fishing activities (new)	SEAFDEC
Q4	Marine capture fishery production by type of fishing gear and by species	SEAFDEC
Q5	Number of fishery vessels by type and tonnage	SEAFDEC
Q6	Number of fishing units by type/size of fishery vessels and type of fishing gear	SEAFDEC
Q7	Inland capture fishery production by type of water bodies	SEAFDEC
Q8	Inland capture fishery production by the scale of fishing activities (new)	SEAFDEC
Q9	Inland capture fishery production by type of fishing gear and by species (new)	SEAFDEC
Q10	Aquaculture production by species, environment, and fishing areas	FAO (Q8-AQ-NS 1 and 9)
Q11	Aquaculture production of ornamental aquatic species by species	SEAFDEC
Q12	Seed production from aquaculture by species	SEAFDEC
Q13	Production by aquaculture facilities (new)	FAO (FISHSTAT-AQ)
Q14	Number of fishers and fish farmers by sub-sector and working status	FAO (FISHSTAT-FM)
Q15	Number of fishers and fish farmers by sub-sector, nationality, and gender (new)	SEAFDEC
Q16	Producer price for capture fishery production by species	SEAFDEC
Q17	Fish Processing Establishment and Production	SEAFDEC
Q18	Export by commodities	SEAFDEC
Q19	Export to major countries of destination and by major commodities	SEAFDEC
Q20	Import by commodities	SEAFDEC
Q21	Import to major countries of origin and by major commodities	SEAFDEC
Q22	Per capita fish consumption	SEAFDEC

The streamlined process for requesting/submitting statistics from the countries to SEAFDEC and FAO were also confirmed as follows:

Timeline	Process
End of May	**SEAFDEC** to issue letters with Questionnaires to the AMSs (cc. to the ASEAN Networks on Fishery Statistics) requesting the AMSs to provide the statistics of the previous year (*e.g.* by the end of May 2025 to send letter requesting for statistics of 2024) indicating timeline for AMSs to return the completed Questionnaires by 31 August 2025
End of July	**FAO** to issue letters with Questionnaires to the AMSs
End of August	**AMSs:** to submit the completed Questionnaires to FAO and SEAFDEC
After receiving data	**FAO:** to further share data submitted through FAO Questionnaires to SEAFDEC

Moreover, during the first RTC in 2021, the RTC also agreed on modification of the "General Notes" of the Statistics Bulletin of Southeast Asia, which provide the basis for compiling statistics from the Southeast Asian countries into the "Fishery Statistics Bulletin of Southeast Asia" published annually by SEAFDEC. The Updated text of the "General Notes" appears as **Appendix 2**, and it is expected that this should be used when SEAFDEC start compiling statistics from the AMSs based on the Statistics Framework (2024 Edition). This "General Notes" shall also be submitted to the SEAFDEC Council for approval.

IV. ASEAN NETWORK ON FISHERY STATISTICS

As part of the Regional Framework (2024 Edition), the Terms of Reference of the ASEAN Network on Fishery Statistics *(As of establishment in 2004)* were confirmed as follows:

- To act as the national focal point in supporting and providing national inputs for the compilation of fishery statistics at regional and international levels;
- To involve in developing regional standards, definitions, and classification of fishery statistics;
- To involve in planning and implementation of regional programs/projects on fishery statistics and information; and
- To supervise and manage all required activities and ensure regular communication with SEAFDEC Secretariat according to the volume of work envisaged within the determined timeframe.

The Members of the ASEAN Network on Fishery Statistics were also updated by the countries through the official nomination by the SEAFDEC Council Director of the respective countries, as well as by the ASEAN Secretariat and SEAFDEC. The members of the Network *(as of November 2023)* are as follows:

Country	Representatives
Brunei Darussalam	**Name: Ms. Zuliza Jolkifli** Position: Acting Senior Fisheries Officer, Head of Policy and Planning Division Address: Department of Fisheries, Ministry of Primary Resources and Tourism Muara Fisheries Complex, Spg 287-53, Jln Peranginan Pantai Serasa, Muara BT1728, Brunei Darussalam Tel: +673 277 0066 E-mail: zuliza.jolkifli@fisheries.gov.bn
Cambodia	**Name: Dr. Em Puthy** Position: Deputy Director of Planning Address Fisheries Administration 186, Norodom Blvd., P.O.Box 582, Phnom Penh, Cambodia Tel: +855 168 50003 Fax: +855 215 470 E-mail: emputhy@yahoo.com

Country	Representatives
Indonesia	**Name: Ms. Rennisca Ray Damanti** Position: Team Leader for Data and Information Working Group, Center for Data, Statistics, and Information Address: Center for Data, Statistics, and Information, Ministry of Marine Affairs and Fisheries Jl. Medan Merdeka Timur No.16, Gedung Mina Bahari II 16th floor, Jakarta 10110, Indonesia Tel: +622 135 19070 Fax: +622 135 20351 E-mail: rennisca@kkp.go.id
Lao PDR	**Name: Mr. Phanthavong Vongsanphanh** Position: Deputy Director-General Address: Department of Livestock and Fisheries P.O. Box 811, Vientianae, Lao PDR Tel: +856 212 15242 to 3 Fax: +856 212 15141 E-mail: ptvkivor@yahoo.com
Malaysia	**Name: Ms. Marlinda Anim binti Marham** Position: Head of Data Collection Section Address: Department of Fisheries Malaysia Precinct 4, Federal Government Administration Centre 62628 Putrajaya, Malaysia Tel: +63 888 92498 Fax: +63 887 04001 E-mail: marlinda@dof.gov.my
Myanmar	**Name: Mr. Win Myint Saw** Position: Deputy Director, Head of Planning and Statistics Section Address: Department of Fisheries, Administration and Budget Division Naypyidaw, Myanmar Tel: +95 673 418533 Fax: +95 673 418475 E-mail: planstatisticsdof@gmail.com
Philippines	**Name: Ms. Maria Abegail A. Albaladejo** Position: Chief of Planning Officer Address: Fisheries Planning and Economic Division (PFED) Bureau of Fisheries and Aquatic Resources Fisheries Building Complex, BPI Compound, Visayas Ave., Quezon City 1103, Philippines Tel: + 63 908 8208113 E-mail: mariaabegail11@yahoo.com **Name: Ms. Reinelda P. Adriano** Position: Chief Statistical Specialist Address: Philippine Statistics Office (PSA) 9/F EDSA Grand Residences No. 75 Corregidor St cor. EDSA. Brgy Ramon Magsaysay, Quezon City 1105 Tel: +63 917 5401245 E-mail: r.adriano@psa.gov.ph

Country	Representatives
Singapore	**Name: Mr. Huang Juejing** Position: Director, Data Governance & Transformation Department Address: Singapore Food Agency, 52 Jurong Gateway Road # 14-01 Singapore 608550 E-mail: HUANG_Juejing@sfa.gov.sg **Name: Ms. Alice Lee** Position: Assistant Director, Data Governance & Transformation Department Address: Singapore Food Agency, 52 Jurong Gateway Road # 14-01 Singapore 608550 E-mail: Alice_LEE@sfa.gov.sg
Thailand	**Name: Ms. Prompan Hiranmongkolrat** Position: Statistician Address: Department of Fisheries, Fishery Development Policy and Planning Division, 5 Flr., Preda Karnasuta Building, Kasetsart Klang, Phaholyotin Rd, Bangkok 10900 Tel: +662 562 0600 Ext. 13517 E-mail: prompan.hiranmongkolrat@gmail.com
Viet Nam	**Name: Mr. Ha Le** Position: Director Address: Centre for Information Technology and Statistics Ministry of Fisheries 10 Nguyen Cong Hoan st., Ba Dinh Dist., Hanoi, Vietnam Tel: +84 477 16578, 8343182 Fax: +84 477 16578

ASEAN and SEAFDEC Focal Persons

ASEAN	Representative(s)
ASEAN Secretariat	**Name: Mr. Joseph Arbiol** Position: Senior Officer Address: Food Agriculture and Forestry Division The ASEAN Secretariat Jalan Sisingamangaraja 70A, Jakarta 12110, Indonesia E-mail: Joseph.arbiol@asean.org **Name: Rifdan Firmansyah** Position: Tecchnical Officer Address: Food Agriculture and Forestry Division The ASEAN Secretariat Jalan Sisingamangaraja 70A, Jakarta 12110, Indonesia E-mail: rifdan.firmansyah@asean.org
SEAFDEC	**Representative**
SEAFDEC Secretariat	**Name: Ms. Saivason Klinsukhon** Position: Senior Information Officer Address: SEAFDEC Secretariat P.O. Box 1046 Kasetsart Post Office, Bangkok 10903, Thailand Tel: +662 940 6326 Fax: +662 940 6336 E-mail: saivason@seafdec.org

V. REQUIRED CONSIDERATION BY THE COUNCIL

- To take note of the process in revision of the Regional Framework for Fishery Statistics of Southeast Asia
- To approve the documents as follows:
  a. Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition),
  b. Questionnaires for compiling statistics from AMSs based on the Regional Framework and
  c. Updated text of the "General Notes" of the Statistics Bulletin of Southeast Asia, which would be applied for statistics data of 2024 onwards
- To support the submission of the Regional Framework (2024 Edition) to the 32nd ASWGFi for approval under the ASEAN mechanism; and
- To take note of the updated members of the ASEAN Network on Fishery Statistics

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REGIONAL FRAMEWORK FOR FISHERY STATISTICS OF SOUTHEAST ASIA (2024 EDITION)

(Draft)

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Preparation and Distribution of this Document

The Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition) was prepared by the Secretariat of the Southeast Asian Fisheries Development Center (SEAFDEC) in consultation with the ASEAN Member States and approved by SEAFDEC Council during its 56th Meeting and noted by the 32nd Meeting of the ASWGFi in 2024. The document is distributed to the SEAFDEC Member Countries, Departments, concerned institutions, and public to serve as a reference material to support the Member Countries in the improvement of their national fishery statistics and preparation of their inputs to the Fishery Statistical Bulletin of Southeast Asia.

Citation
SEAFDEC. (2024). Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition). Southeast Asian Fisheries Development Center. Bangkok, Thailand. URL in SEAFDEC Repository

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I. BACKGROUND

In Southeast Asia, fishery statistics have been widely accepted as an important tool in providing the basic foundation for the formulation of national fisheries policies and management frameworks and actions as well as in understanding the status of fishery resources. As basic structures to facilitate development planning and management of fisheries, however, the fishery statistical items and datasets collected by the respective ASEAN Member States (AMSs) vary based on their priority and objectives. In addition, the complexity or extent of the national fishery statistical systems including the frameworks for collecting national fishery statistics of the respective AMSs also depend on available resources, *i.e*. financial, institutional, and human capacity.

The need to improve and strengthen the national fishery statistics has been highlighted in the regional policy of the ASEAN and SEAFDEC, *i.e.* the Resolution and Plan of Action on Sustainable Fisheries for Food Security in the New Millennium (RES&POA) developed in 2001, the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 (RES&POA-2020), and the subsequent Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030). SEAFDEC considered that it is necessary to address the common issues, problems, and constraints through regional cooperation and collective actions under a regional framework to enhance the collection and compilation of fishery statistics. SEAFDEC, therefore, initiated the development of the Regional Framework that comprises minimum requirements that would harmonize the national statistical systems among the countries and facilitate the efficient collection and compilation of fishery statistics and information by the countries in the region.

Since 1978, SEAFDEC regularly pursued the compilation of fishery statistics in Southeast Asia initially through the publication of "Fishery Statistical Bulletin for the South China Sea Area." However, the escalating situation in fisheries practices in the region and the establishment of a new geopolitical setup of the ASEAN made it necessary to come up with the new Regional Framework for Fishery Statistics in Southeast Asia. In accordance with the policy directives given at the 36th Meeting of the SEAFDEC Council in 2004, the SEAFDEC Secretariat organized a series of Regional Technical Consultations (RTC) with the ASEAN Member States to develop a new framework for fishery statistics of Southeast Asia; and the new Regional Framework was endorsed by the SEAFDEC Council at its 37th Meeting in 2005.

The ASEAN Member States Countries supported and agreed to adopt the new Regional Framework at the RTC on Fishery Statistics and Information in 2007. Subsequently, the new Regional Framework was endorsed by SEAFDEC Council at its 40th Meeting in April 2008, and it was also endorsed by the ASEAN Sectoral Working Group on Fisheries (ASWGFi) at its 16th Meeting in May 2008. The new Regional Framework included major changes which were consistent with the areas of competence of SEAFDEC as well as with the current regional requirements, and was also harmonized with the international standards. Accordingly, the new Regional Framework played a crucial role in enhancing the national fishery statistics of the countries in the region, facilitating the wider sharing of data and information as well as the efficient provision of the necessary inputs to the Fishery Statistical Bulletin of Southeast Asia produced by SEAFDEC starting in 2008 that replaced the Fishery Statistical Bulletin for the South China Sea Area which was produced from 1978 to 2007.

After the adoption of the Regional Framework in 2008, however, there have been several changes in global frameworks and standards related to fishery statistics as well as a need for the inclusion of additional statistics to enhance the usability of the Fishery Statistical Bulletin. From 2021 to 2023, the Regional Framework was reviewed and revised during a series of RTC with the AMSs. The revision of the Regional Framework developed in 2008 was in line with the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 which was adopted in 2020 and included the provision on the need to "*Enhance regional fishery information systems and mechanisms to facilitate sharing, exchange and compilation of statistics and information required at the sub-regional and regional level, and apply where appropriate, regionally standardized definitions and classifications for statistical data to facilitate regional compilation, analysis, and data exchange*." Consequently, the Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition) was approved by the SEAFDEC Council at its 56th Meeting and noted by the 32nd Meeting of the ASWGFi in 2024.

II. PURPOSE

The Regional Framework (2024 Edition) was streamlined by harmonizing the definitions and classifications of the fisheries of Southeast Asia with international standards such as those of the SEAFDEC and FAO that would facilitate the efficient data compilation, analysis, and exchange of fishery statistics and information not only within the region but also globally. Moreover, additional statistics were included in the Regional Framework (2024 Edition) which would enhance the usability of the Fishery Statistical Bulletin by providing a better understanding and clearer picture of the fisheries sector of the region to support policy planning and management of fisheries toward sustainability. It should be noted that the Regional Framework (2024 Edition) continued to focus on the minimum requirements that can be accomplished by the countries in the region without putting much burden on the agencies responsible for the collection and compilation of fishery statistics. It is envisaged that the adoption of the Regional Framework (2024 Edition) would provide multifold benefits for the countries in the region, namely:

1) Minimum Requirements for Fishery Statistics of Southeast Asia

Since the Regional Framework is considered as the "Minimum Requirement for Fishery Statistics of Southeast Asia," its adoption would be beneficial to the countries in the region as it could serve as a guide that facilitates a long-term improvement of their fishery statistics at the national level, provides better understanding and clear picture of the fisheries sector specifically in terms of the minimum requirements of fishery statistics, and advocates the harmonized standards and definitions in order to correspond to regional requirements and conform with international standards.

2) Frameworks of Inputs for the Development of International Norms and Standards

As the Regional Framework contains the minimum requirements for the compilation of fishery statistics as well as the standards embodying the regional requirements, it could also be used in supporting the international development of norms and standards for fishery statistics. Harmonization of standard definitions and classifications reflecting the multi-species/gear tropical fisheries nature of Southeast Asia would facilitate the sharing of fishery statistics and information in the region as well as contribute to similar development at the global level.

3) Enhanced Sharing of Fishery Information

The standardized definitions and classification of fishery statistics under this Regional Framework could facilitate the sharing and exchange of fishery statistics and information among the countries in the region. Many countries in the region may have already established their respective national fishery statistical standards; or the standards may have been reviewed and improved to conform to the standards, definitions, and classifications of fishery statistics at the international and regional levels. However, for some other countries, harmonization of the varying systems is deemed necessary as this would eventually lead to the sharing of fishery statistics and information in the region, thus, contributing to the global effort of establishing the picture on the status and trends of fisheries at the global level.

III. COVERAGE

3.1 Statistical Coverage

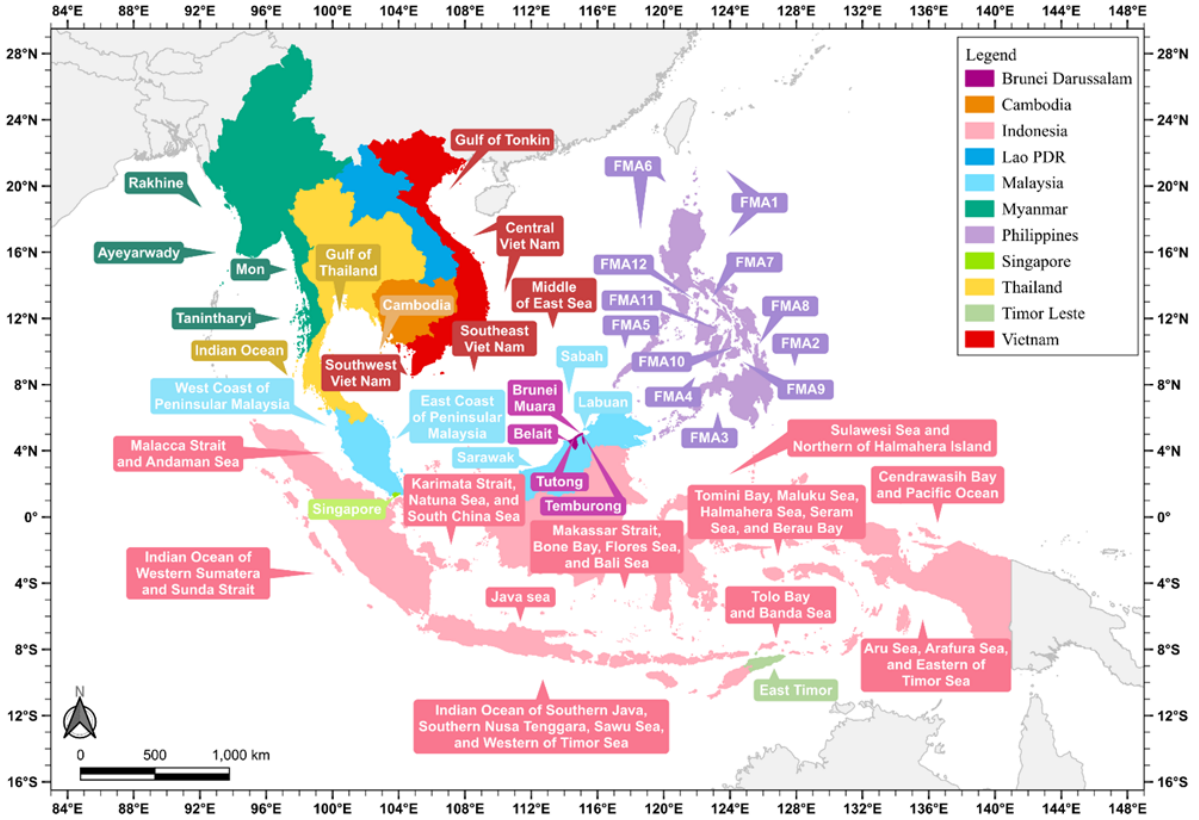
The Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition) covers the fishery statistics on Production; Fishing Vessels; Fishing Units; Fishers and Fish Farmers; Fish Price; Fish Processing; and Fish Trade. Production cover fishes, crustaceans, molluscs, seaweeds, and other aquatic animals and plants taken for all purposes (marine and inland capture fisheries and aquaculture) by all classes of fishing units and aquaculture activities operating in the marine, brackishwater and freshwater areas, in appropriate geographical categories. Moreover, statistics on per capita fish consumption were also included.

3.2 Geographical Coverage

The geographical areas of the statistics data cover all production by commercial and small-scale fisheries and aquaculture activities in freshwater, brackishwater, and marine waters from the designated FAO Fishing Area 57 (Indian Ocean, Eastern), 71 (Pacific, Western Central), 61 (Pacific, Northwest), and 04 (Asia, Inland Water). The countries and sub-areas to be used in statistics are shown in the table and map below. The sub-areas used in the Regional Framework are established consistent with the FAO Fishing Areas, as shown in the map and description in **Appendix 1**.

Countries	Sub-areas
Brunei Darussalam	Brunei Muara
	Belait
	Tutong
	Temburong
Cambodia	
Indonesia	Malacca Strait and Andaman Sea
	Indian Ocean of Western Sumatera and Sunda Striat
	Indian Ocean of Southern Java, Southern Nusa Tenggara, Sawu Sea, and Western of Timor Sea
	Karimata Strait, Natuna Sea and South China Sea
	Java Sea
	Makassar Sea, Bone Bay, Flores Sea and Bali Sea
	Tolo Bay and Banda Sea
	Tomini Bay, Maluku Sea, Halmahera Sea,Seram Sea and Berau Bay
	Sulawesi Sea and Northern of Halmahera Island
	Cendrawasih Bay and Pacific Ocean
	Aru Bay, Arafuru Sea and Eastern of Timor Sea
Lao PDR	-
Malaysia	West Coast of Peninsular Malaysia
	East Coast of Peninsular Malaysia
	Sarawak
	Sabah
	Labuan
Myanmar	Tanintharyi
	Mon
	Rakhine
	Ayeyarwady
Philippines	FMA-01
	FMA-02
	FMA-03
	FMA-04
	FMA-05
	FMA-06
	FMA-07
	FMA-08
	FMA-09
	FMA-10
	FMA-11
	FMA-12
Singapore	-
Thailand	Gulf of Thailand
	Indian Ocean
Timor Leste	-
Viet Nam	Gulf of Tonkin
	Central Viet Nam
	Southwest Viet Nam

Countries	Sub-areas
	Southeast Viet Nam
	Middle of East Sea



Sub-areas for marine fishery statistics of Southeast Asian Countries

3.3 Fishery Structure

In line with the structure of fisheries in the Southeast Asian region, the statistics are divided into two main sectors, namely: 1) capture fisheries; and 2) aquaculture. **Capture fisheries** refer to economic activities in marine and inland waters to catch or collect aquatic organisms which grow naturally in public waters and are not the property of any person, whereas **aquaculture** refers to economic activities in marine, brackishwater, and freshwater environments to rear young aquatic organisms such as fry, fingerlings, oyster seeds, etc. to commercial size. Unlike in capture fishery, aquatic organisms uner aquaculture operations are the property of a specific person or group of persons who manage them until they grow to commercial size.

3.3.1 Statistics on Capture Fisheries

With concerns on the different environments of fishery resources and other components of capture fisheries, the statistics on capture fisheries are classified into two sub-sectors, namely: 1) marine capture fishery; and 2) inland capture fishery. Statistics on production including nominal landings or nominal catch (quantity and value), fishing gear, fishery vessels, fishing units, scale of fishing activities, etc., shall be collected and compiled under each sub-sector.

Ideally, the AMSs should strive toward reporting statistics on marine capture fishery based on nominal landings except indicated otherwise *e.g.* nominal catch. The definitions of nominal landings and nominal catch are as follows:

- **Nominal landings** are total landings (including quantities landed in port as transhipments at sea) converted to live weight equivalent, also expressed in some national publications as
  - landings on a round, fresh basis;

- landings on a round, whole basis;
- landings on an ex-water weight basis.

• **Nominal catch** represents the nominal landings, plus the component of the catch discarded dead, and post-release mortality of fish discarded alive. It approximates the concept of 'total catch' (*i.e*. the quantity of biomass removed).

3.3.1.1 Marine Capture Fishery

a. Coverage and Definition

Marine capture fishery is divided into two categories based on the scale of fishing activities, namely: 1) small-scale fishery (including subsistence, artisanal, and traditional fishery); and 2) commercial fishery. As it is impossible to establish a common definition of these two categories in the region, the national distinction between small-scale and commercial fisheries of countries in the region is given in **Appendix 2**. The data on marine capture fishery excludes sport fishing, recreation, and research.

b. Marine Capture Fishery Production

The statistics on marine capture fishery production represent the data on nominal landings or nominal catch of aquatic organisms from marine and brackish waters that are killed, caught, trapped, or collected for subsistence and commercial purposes. The statistics in terms of quantity will be used as an index to reveal the status and trend of the fishing industry and to assess the stock of marine organisms to disclose the sustainability of the fishing industry; while the statistics in terms of value will be used to compare the economics of the fisheries industry with those of other sectors.

b.1 Unit of Measurement

1) Production in quantity

Production in quantity represents the live weight equivalent of the nominal landings or nominal catch. Production in quantity should be reported in tonnes, except those expressed in numbers or in kilograms. If production is reported in kilograms, this should be converted into tonnes and estimated by rounding off to the nearest hundredths. The production of ornamental aquatic organisms should be reported in numbers.

There are many instances where the catches onboard fishing vessels are gutted, filleted, salted, dried, etc., or reduced to meals, oil, etc. The data on the nominal landings or nominal catch of such species and products require conversion by accurate yield rates (conversion factors) to establish the live weight equivalents (nominal landings or nominal catch) at the time of their capture.

2) Production in value

Production in value represents the value of products equivalent to the nominal landings or nominal catch. It is generally estimated by multiplying the quantity of production by the producer price (average monthly weighted value, where available). In reporting production in value, the value reported in the national currencies should be converted to US Dollars.

b.2 Statistics on Marine Capture Fishery Production

1) Production by species

Marine capture fishery production covers the production from small-scale and commercial fisheries broken down by species (at the species, genus, family, or higher taxonomic levels) into statistical category called species items.

Such statistical categories should be reported by using the SEAFDEC code and the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) (3-alpha code, scientific name, and English name). Refer to the updated List of Aquatic Animals and Plants in Southeast Asia for SEAFDEC

code and national/local name of the species and **Appendix 3** for the category of aquatic animals and plants based on ISSCAAP.

2) Production by the scale of fishing activities

The statistics on marine capture fishery production should be classified into: 1) production from small-scale fisheries; and 2) production from commercial fisheries.

To report the statistics on production by the scale of fishing activities, the definition of small-scale fisheries and commercial fisheries of the respective countries in the region (**Appendix 2**) should be referred to.

3) Production by type of fishing gear

The production from marine capture fisheries, where possible, should be further classified into detailed types of fishing gear for each category based on the International Standard Statistical Classification of Fishing Gear (ISSCFG) as shown in **Appendix 4**.

c. Fishery Vessels

Fishery vessels can also be called in various terms including fishing boats, fishing fleets, or fishing crafts. Fishery vessel means any vessel, boat, ship, or other craft that is equipped and used for fishing or in support of fishing activity.

Statistics on fishery vessels will be used to clarify the capital invested in a fishery corresponding to the size of the fishery vessel. Such statistics can also be used as inputs to the economic analysis and measure of the material input productivity of the fishing industry, and as a rough estimation of fishing effort considering the size of the fishery vessel.

c.1 Coverage of Fishery Vessels

The statistics should cover the annual data on fishery vessels that operate in marine waters. All fishery vessels, whether registered with the government or not, should be included.

c.2 Classification of Fishery Vessels

Based on the characteristics of marine capture fisheries in the Southeast Asian region, one fishery vessel can operate various types of fishing gear and catch several target species. Therefore, the regional classification of fishery vessels (**Appendix 5**) should be based on the general characteristics of fishery vessels of the countries in the region to present the specific marine capture fishery situation, which is not aligned with the classification developed by the FAO Coordinating Working Party on Fishery Statistics (CWP).

The size of fishery vessel is expressed uniformly in the gross tonnage (GT). Although the method of measurement of the size of fishery vessels varies from country to country, statistics should be based on national measurement standards. When a unit other than GT is used to measure the size of the vessel, this should be converted into GT.

d. Fishing Unit

Fishing unit means the smallest unit in a fishing operation, which are generally counted according to types and sizes of fishery vessels, types of fishing gear, and number of fishers. The statistics on the fishing unit are mainly used for fisheries management by considering the limitation of the number of fishing units.

In cases where two fishery vessels are jointly operated in fishing such as the pair trawler or two-boat purse seiner, these two fishery vessels are regarded as one fishing unit. A fishery vessel may be counted as two or more fishing units in the same year if it uses different types of fishing gear in separate seasons. For instance, in cases where a fishery vessel operates trawl fishing for a half year and gillnet fishing during the other half of the year, the fishery vessel is regarded as two fishing units.

Statistics on fishing unit, including the number of fishery vessels by gear and size, should be included in the national statistical system.

d.1 Coverage of Fishing Units

The statistics should cover the annual data on the number of fishing units operating in marine waters. Fishing units operating without fishery vessels or non-powered fishery vessels are excluded.

d.2 Classification of Fishing Units

Fishing units should be reported based on the types and sizes of fishery vessels (**Appendix 5**) as well as types of fishing gear (**Appendix 4**). In cases where a fishing unit operates more than two fishery vessels such as the pair trawl and two-boat purse seine, the size is represented by the gross tonnage of the major single fishery vessel among the vessels employed.

3.3.1.2 Inland Capture Fishery

a. Coverage and Definition

Inland capture fishery refers to any activity involving the catching or collection of aquatic organisms which grow naturally in inland water bodies for food security and economic purposes. The statistics cover the annual data of subsistence and commercial operations for catching or collecting and landing production of all aquatic animals from inland water bodies.

The statistics on inland capture fishery cover all production within the FAO Fishing Area 04 (**Appendix 1**).

b. Inland Capture Fishery Production

The statistics on inland capture fishery production represent the catch of organisms from inland water bodies that are killed, trapped, caught, or collected for commercial and subsistence purposes.

b.1 Unit of Measurement

1) Production in quantity

Production in quantity represents the live weight equivalent of organisms caught and collected from inland water bodies, which should be reported in tonnes, except those expressed in numbers or in kilograms. If production is reported in kilograms, this should be converted into tonnes estimated by rounding off to the nearest hundredths.

2) Production in value

Production in value represents the value at the first point of sale, indicating seasonal variations in the average total value, where available, including inland aquatic organisms for subsistence and commercial purposes. In reporting production in value, the amount reported in national currencies should be converted to US Dollars.

b.2 Statistics on Inland Capture Fishery Production

1) Production by species

Inland capture fishery production covers all animals and plants in inland water bodies broken down by species (at the species, genus, family, or higher taxonomic levels) into statistical categories called species items.
Such statistical categories should be reported by using the SEAFDEC code and the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) (3-alpha code, scientific name, and English name). Refer to the updated List of Aquatic Animals and Plants in Southeast Asia for SEAFDEC

code and national/local name of the species; and **Appendix 3** for the category of aquatic animal and plants based on ISSCAAP.

2) Production by type of water bodies

Statistics on inland capture fishery production should be presented in accordance with the following types of water bodies:

a) Lakes: non-flowing, naturally enclosed bodies of water, including regulated natural lakes but excluding reservoirs
b) Rivers: running water bodies such as rivers, drainage canals, and irrigation canals which also cover creeks, streams, and other linear water bodies
c) Floodplains/rice fields/swamps: seasonally flooded areas including paddy fields
d) Reservoirs: artificial impoundments of water used for irrigation, flood control, municipal water supplies, recreation, hydroelectric power generation, and so forth including fish pits, deep pools, ex-mining pools,
e) Lagoons: take the form of lakes separated from the sea by a sand bar and often associated with river estuaries or coastal deltas
f) Others: any water bodies other than the above; peri-urban wetland is included

3) Production by type of fisheries

Inland capture fishery is diverse in terms of the scale of fishing activities, seasonality, fishing rights/license, fishing gear, and fishery vessels. As available records would allow, the statistics should attempt to reflect the following categories.

a) Scale of fishing activities
   - Small-scale (household occasional fishing, artisanal, traditional, subsistence)
   - Commercial
b) Seasonality or fishing rights/license
   - "On-farm" fishing, fishing in rice fields, etc.
   - Community fisheries and other rights-based fisheries at the community level
   - Fishing lots, leasable fisheries, and other types of licensed fisheries and/or areas for (commercial) fishing
   - Dai fisheries (term used to exemplify the national/regional importance of the specific type of fisheries)
c) Types of fishing gear (refer to **Appendix 4**)
   - Surrounding nets
   - Seine nets
   - Trawls
   - Dredges
   - Lift nets
   - Falling gears
   - Gillnets
   - Traps
   - Hook and lines
   - Miscellaneous gear
   - Gear not known

3.3.2 Statistics on Aquaculture

a. Coverage and Definition

Aquaculture is the farming of aquatic organisms: fish, molluscs, crustaceans, aquatic plants, crocodiles, alligators, turtles, and amphibians. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators. Farming also implies individual or corporate ownership of the stock being cultivated. For statistical purposes, aquatic organisms which are harvested by an individual or corporate body which has owned them throughout their rearing period contribute to aquaculture, while aquatic organisms which are exploitable by the public as a common property resource, with or without appropriate licenses, are the harvest of capture fisheries. The classification of aquaculture and capture fisheries practices applicable to the region is provided in **Appendix 6**.

Considering the different ecology and resources in aquaculture, the statistics on aquaculture should be classified based on three types of culture environments, namely: 1) freshwater culture, 2) brackishwater culture, and 3) mariculture, which are based on salinity levels of the environment. Considering that some aquatic species can be cultured in various environments, the production of those species could be reported in more than one type of culture environment, *e.g.* Java barb, tilapia, milkfish, and others.

1) Freshwater culture

The farming or growing out of aquatic organisms takes place in lakes, reservoirs, rivers, rice fields, small farm impoundments, or in freshwater ponds where the salinity is constantly neglectable.

2) Brackishwater culture

The farming or growing out of aquatic organisms takes place in estuaries, river mouths, or mangrove lagoons where the salinity undergoes continuous periodic fluctuations due to the influx of freshwater or seawater, or in ponds with seawater.

3) Mariculture

The farming or growing out of aquatic organisms takes place in marine waters where salinity is always high and appreciable.

b. Aquaculture Production

b.1 Unit of Measuremen

1) Production in quantity

Production in quantity represents the weight at the farm gate. Production in quantity should be reported in tonnes, except those expressed in numbers or in kilograms. If production is reported in kilograms, this should be converted into tonnes estimated by rounding off to the nearest hundredths.

2) Production in value

Production in value represents the producer price at the farm gate. It is generally estimated by multiplying the quantity of production by the farm gate price by species. In reporting production in value, the amount reported in the national currencies should be converted to US Dollars.

b.2 Statistics on Aquaculture Production

Aquaculture production means the output of farmed aquatic organisms either for final consumption or as raw materials for transformation into other products or for trade. It includes commodities quantified by numbers rather than by weight such as ornamental fishes and hatchery output. The statistics on production should be classified into the following categories:

1) Production by culture environment

The statistics on production should be based on the types of culture environments where the aquatic organism was cultivated, *i.e.* freshwater culture, brackishwater culture, and mariculture. One species can be reported in more than one type of culture environment depending on its salinity tolerance and categories defined by the respective countries.

2) Production by species

Production from aquaculture from all types of culture environments should be broken down by species. The list of species is provided in **Appendix 3**.

3) Production by aquaculture facility

To facilitate aquaculture management, the aquaculture production statistics should be reported by aquaculture facility as described below.

a) **Ponds** are natural and/or artificial structures on land that are capable of retaining water for the rearing of stock. Earthen ponds (including community ponds), concrete ponds (under or partially under the ground level), plastic-lined ponds, ditches, flood plain depressions, derelict mining pools, and similar structures are included under this category.

b) **Tanks and raceways** are artificial units of structure capable of holding and interchanging water and are generally built above ground level and made of various materials in various shapes and sizes.

c) **Pens and enclosures** refer to areas of water bodies that are fenced using structures fixed to the bottom permitting free water exchange. A pen generally encloses a large volume of water; while enclosures refer to natural water areas, where the shoreline forms all but one site, confined by a net and other barriers allowing free water interchange and distinguished by the fact that enclosures occupy the full water column between substrate and surface.

d) **Cages** refer to open or covered enclosed structures constructed with net, mesh, wooden, or porous materials allowing natural water interchange. These structures may be floating, suspended, or fixed to the substrate but still permit water interchange from below.

e) **Rice-fish culture** refers to paddy fields used for the culture of rice and aquatic organisms including both concurrent culture of aquatic organisms with rice plantation and seasonal rotation of fish and rice crop in the same paddy field; rearing them in rice paddies to any marketable size

f) **Culture methods for shelled molluscs** refer to methods commonly practiced on off-bottom and on-bottom techniques. Off-bottom systems are structures like trestles and long lines installed on stakes impaled in the seabed or intertidal zone or suspended structures as rafts built of wood, bamboo and long lines normally equipped with floats and safely anchored in a sheltered coastal area. On-bottom systems refer to the farming of shelled molluscs directly seeded on muddy or sandy areas in the inter-tidal zone or on the seabed.

g) **Culture methods for seaweeds (marine macroalgae)** refer to the culture of macroalgae or seaweeds in open waters using on-bottom and off-bottom techniques
   - longline ropes (suspended horizontally or vertically in the sea) with anchors and buoyance web or net of ropes fixed on stationery racks or poles typically in intertidal areas
   - rafts or floating racks (with seeded ropes for culture attached)
   - floating baskets (chained with ropes; seaweeds protected from grazing animals)
   - sleeve-shaped long net bags (seaweed seedling held inside)
   - suspended net trays (mostly for sea grapes)

h) **Recirculation aquaculture systems (RAS)** refers to a technology for farming fish or other aquatic organisms by reusing the water in production. The technology is based on the use of mechanical and biological filters, and the method can in principle be used for any species grown in aquaculture such as fish, shrimps, clams, etc. Recirculation technology is however primarily used in fish farming

i) **Others** refer to facilities other than the above; or production from unspecified facilities of culture.

c. Production of cultured ornamental aquatic species

Statistics on the production of cultured ornamental aquatic species include ornamental aquatic animals and plants. Production should be broken down by species; while species in different sizes, life stages, etc. could be reported as separate items. In reporting the production in quantity, the production of ornamental aquatic animals should be reported in pieces, while ornamental aquatic plants should be reported in units (*e.g.* bundle). In reporting the production in value, national currencies should be converted to US Dollars.

d. Seed Production

The statistics on seed production will be utilized to assess the recruitment in aquaculture and facilitate management purpose. Production should be broken down by species in terms of the number of larvae, fingerlings, juveniles, among others, that are used for two main objectives, such as for wild stock enhancement and aquaculture practices. As part of wild stock enhancement, production covers both the number released to a controlled environment and to the wild whereas production for aquaculture practices covers seed stocks for freshwater culture, brackishwater culture, and mariculture.

e. Aquaculture Unit

Aquaculture unit refers to a management unit which operates aquaculture in freshwater, brackishwater, and marine water areas. The term covers both economic units (companies) and households conducting activities in culturing aquatic organisms. In Southeast Asian countries, the use of this term varies from country to country, *e.g.* fishing establishments in Indonesia, farms in Singapore and Thailand.

f. Area under Culture

Area under culture can be referred to as the net area (water surface area) and gross area. Net area refers to the areas of the culture facilities but is limited to the water surface area, whereas gross area refers to the areas of the culture facilities including not only the water surface area but also the area of the dike surrounding the water area. For ponds and cages, the area under culture will be reported both in net area and gross area while other aquaculture facilities could be reported only as net area. The number of aquaculture facilities should be also reported in order to facilitate aquaculture management.

3.3.3 Statistics on Fishers and Fish Farmers

a. Coverage and Definition

The statistics on fishers and fish farmers could be obtained from various sources (*e.g.* surveys, registration/licensing databases, national fishery/agricultural census, among others of the respective countries).

For fishers, the statistics should cover the number of persons who are involved in fishing activities such as catching and gathering aquatic animals (including reptiles) and plants from the marine water, brackishwater, and freshwater areas. The statistics should exclude sport or recreational fishers and crew of state-operated fishery research and survey vessels, patrol vessels, fishery training vessels, and vessels supporting fishing-related activities.

For fish farmers, the statistics should cover the number of persons who are engaged in aquaculture activities such as breeding, raising, and cultivating aquatic organisms in fish farms and hatcheries, as well as persons who are employed to undertake aquaculture operations such as maintenance of aquaculture facilities, water supply, feeding, among others.

b. Statistics on Fishers and Fish Farmers

1) Fishers and fish farmers by sub-sector and working status

Statistics on the number of fishers and fish farmers shall be categorized by fisheries sectors (*i.e.* fishers for capture fisheries divided into sub-sectors including marine and inland capture fisheries; and fish farmers for

aquaculture), and by working status categorized into full-time fishers/farmers, part-time fishers/farmers, occasional fishers/farmers, and unspecified. Definitions of working status are as follows:

- **Full-time fishers/farmers** receive at least 90 % of their livelihood from fishing/aquaculture, or spend at least 90 % of their working time in that occupation.
- **Part-time fishers/farmers** receive at least 30 % but less than 90 % of their livelihood from fishing/aquaculture, or spend at least 30 % but less than 90 % of their working time in that occupation.
- **Occasional fishers/farmers** receive under 30 % of their livelihood from fishing/aquaculture, or spend under 30 % of their working time in that occupation.
- **Unspecified** are workers with unknown working status

Under each category of working status, the statistics should be sex-disaggregated, *i.e.* for male "M", female "F", or unspecified sex "U." For the detailed classification of the fishers and fish farmers by sub-sector and working status, please refer to **Appendix 7 (a)**.

2) Fishers and fish farmers by nationality

Statistics on the number of fishers and fish farmers shall be categorized by fisheries sectors (*i.e.* fishers for capture fisheries divided into sub-sector including marine and inland capture fisheries; and fish farmers for aquaculture), and by nationality categorized into national, foreign, and unspecified. Under each category of nationality, the statistics should be sex-disaggregated *i.e.* for male "M", female "F", or unspecified sex "U." For the detailed classification of the fishers and fish farmers by nationality, please refer to **Appendix 7 (b)**.

3.3.4 Statistics on Producer Price

a. Coverage of Producer Price

Statistics on producer price cover aquatic organisms from capture fisheries and aquaculture, in fresh form only, which includes marine and freshwater species but excluding processed forms of the species.

b. Definition of Producer Price

Statistics on producer price refer to the price of the products, considered as the average weighted price which is realized at wholesale markets or in landing centers for capture fisheries and on-farms/farm gates for aquaculture where producers sell their catches and harvests, as applicable. The price is determined (there) by means of auction, negotiation between producers and wholesalers and middle persons, etc., which can also be used to estimate the total production in value.

c. Unit of Measurement

The producer price should be given in US Dollars per kilogram of aquatic species in fresh form. The figure should include two digits after the decimal point by rounding off to the nearest hundredths.

d. Statistics on Producer Price

1) Producer price from capture fisheries

Statistics on producer price should be broken down by species of aquatic organisms from capture fisheries production.

2) Producer price from aquaculture

Statistics on producer price should be broken down by species of aquatic organisms from aquaculture production.

3.3.5 Statistics on Fish Processing

a. Coverage and Classification

Fish processing statistics cover the processing establishments and their productions, of all aquatic animals and plants produced in freshwater, brackishwater, and marine water, using raw materials from domestic or imported products.

The statistics on processing establishments and productions should include companies, cooperatives households, etc., which preserve and process aquatic animals, regardless of the size of the operation. However, a household that processes products exclusively for own consumption is excluded, while only those households that process products for sale are included.

The statistics classification on fish processing should be based on 15 types of commodities as follows:

1. Frozen
2. Chilled
3. Dried
4. Salted
5. Smoked
6. Boiled
7. Canned
8. Fermented (including fish sauce)
9. Minced
10. Surimi (*e.g*. fish ball, fish cake, crab stick)
11. Cracker
12. Extraction
13. Fish meal
14. Fresh microalgae
15. Others

b. Fish Processing Establishments and Production

b.1 Unit of Measurement

1) Number of processing establishments

The data on processing establishments is expressed in number. The number of establishments is generally classified by commodities. Therefore, for a processing establishment that processes more than one commodity, the establishment is counted by the number of each commodity produced. The total number of establishments is obtained as results of an accumulation of the number counted for each commodity. This means that the total number does not necessarily reflect the actual number of establishments.

2) Production of processed fishery commodities

The production of processed products is expressed in net weight of final products in tonnes. The production is generally recorded by summing up the total production from all processing establishments, classified by commodities.

b.2 Statistics on Fish Processing Establishments and Production

1) Number of processing establishments

The data on processing establishments is expressed in number, and broken down by types of processed fishery commodities.

2) Production of processed fishery commodities

The production of processed products is expressed in tonnes, and broken down by commodities.

3.3.6 Statistics on Exports and Imports of Fishery Commodities

a. Coverage and Classification

The statistics cover the quantities and values of annual exports and imports of all fishery commodities ranging from live fish to preserved and processed commodities. In accordance with the internationally recommended practice, export statistics include exports of aquatic animals and plants caught or collected by domestic fishery vessels, whether or not processed onboard, or landed in foreign ports; while import statistics include imports of aquatic animals and plants caught (or collected) by foreign fishing vessels, whether or not processed onboard, landed in domestic ports.

The statistics classification of fish trade should be based on the 12 Divisions of the "FAO International Standard Statistical Classification of Fishery Commodities (ISSCFC)" as follows:

1) Live fish
2) Fish, fresh or chilled excluding fillets and other fish meat
3) Fish, frozen excluding fish fillets and other fish meat
4) Fish fillets and meats, fresh or chilled
5) Fish fillets and meat, frozen
6) Fish, dried, salted or in brine; smoked fish
7) Crustaceans live, fresh, chilled, frozen, salted, in brine or dried, smoked
8) Molluscs live, fresh, chilled, frozen, salted, in brine or dried, smoked
9) Fish, crustaceans, molluscs and other aquatic invertebrates, prepared or preserved
10) Meals, solubles and similar animal feed stuffs, of aquatic animal origin
11) Aquatic animals, oils and fats
12) Seaweeds and aquatic plants products thereof

The statistics based on the "Divisions" should be classified further based on their respective "Groups" with reference to the "Harmonized Commodity Description and Coding System (HS)" of the World Customs Organization, attached as **Appendix 8**.

The export and import statistics are generally obtained from reports on foreign trade statistics compiled by respective national customs agencies. To prevent errors in the collection and grouping during the compilation of the statistics on fishery commodities, concerned staff should take note that the reports on foreign trade statistics cover not only the fishery commodities but also all kinds of other fishery commodities, and that the classification system used is based on the Brussels Tariff Nomenclature, which is different from that of the ISSCFC.

b. Exports of Fishery Commodities

b.1 Unit of Measurement

1) Exports by fishery commodities

Statistics on exports by fishery commodities should be expressed in volume (tonnes) and value (USD 1,000).

2) Exports to major countries of destination and by major fishery commodities

Statistics on exports to major countries of destination and by major commodities should be expressed in value (USD 1,000).

b.2 Statistics on Exports of Fishery Commodities

1) Exports by fishery commodities

The statistics on exports by commodities (at Division and Group levels based on the ISSCFC) is recorded by summing up the total annual exports of each fishery commodity.

2) Exports to major countries of destination and by major commodities

Statistics on exports to major countries of destination and by major commodities is generally recorded by summing up the value of annual exports to major countries of destination (maximum 20 countries), and is then broken down by major commodities (maximum 10 commodities). The total export of each major commodity should be also recorded.

In reporting the statistics on exports by major commodities, each country can choose the appropriate commodities or commodity groups, *e.g*. based on 6-digit HS code, or others as applicable and appropriate.

c. Imports of Fishery Commodities

c.1 Unit of Measurement

1) Imports by fishery commodities

Statistics on imports by commodities is expressed in volume (tonnes) and value (USD 1,000).

2) Imports from major countries of origin and by major commodities (USD 1,000)

Statistics on imports from major countries of origin and by major commodities is expressed in value (USD 1,000).

c.2 Statistics on Imports of Fishery Commodities

1) Imports by fishery commodities

The statistics on imports by commodities (at Division and Group levels based on the ISSCFC) is recorded by summing up the total annual imports of each fishery commodity.

2) Imports from major countries of origin and by major fishery commodities

Statistics on imports from major countries of origin and by major fishery commodities is generally recorded by summing up the value of annual imports from major countries of origin (maximum 20 countries), and is then broken down by major fishery commodities (maximum 10 commodities). The total import of each major commodity is also recorded.

In reporting the statistics on imports by major fishery commodities, each country can choose the appropriate commodities or commodity groups, *e.g*. based on 6-digit HS code, or others as applicable and appropriate.

3.3.7 Statistics on Per Capita Fish Consumption

a. Coverage and Definition

Per capita fish consumption refers to the weight of fish and other aquatic organisms (live weight equivalent) consumed by each person over a calendar year. The estimation of per capita fish consumption is subject to the methods of the respective countries. Per capita fish consumption could be estimated by dividing the total food fish supply for human consumption by the total population.

b. Unit of Per Capita Fish Consumption

Per capita fish consumption should be reported in kilograms, and the numerical value should include one digit after the decimal point by rounding off to the nearest hundredths.

Appendix 1

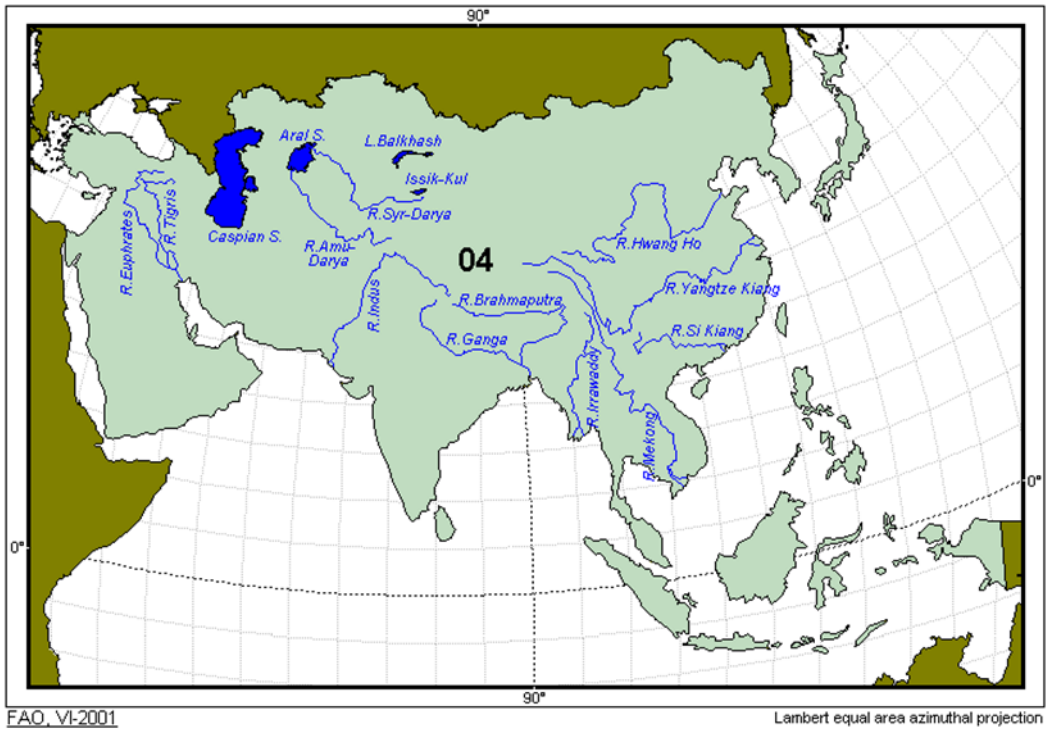
CLASSIFICATION OF FISHING AREAS

The fishing areas of the Southeast Asian region, established for fishery statistical purposes, consist of marine and inland fishing areas, which are consistent with the definition and classification of the capture fisheries sub-sector. These are standardized in accordance with the FAO Major Fishing Areas, the boundaries of which were determined in consultation with international fishery agencies taking into account various considerations, including:

(i) the boundary of national regions and the natural divisions of oceans and seas;
(ii) the boundaries of adjacent statistical fisheries bodies already established in intergovernmental conventions and treaties;
(iii) existing national practices;
(iv) national boundaries;
(v) the longitude and latitude grid system;
(vi) the distribution of the aquatic fauna; and
(vii) the distribution of the resources and the environmental conditions within an area.

1. Inland Fishing Areas

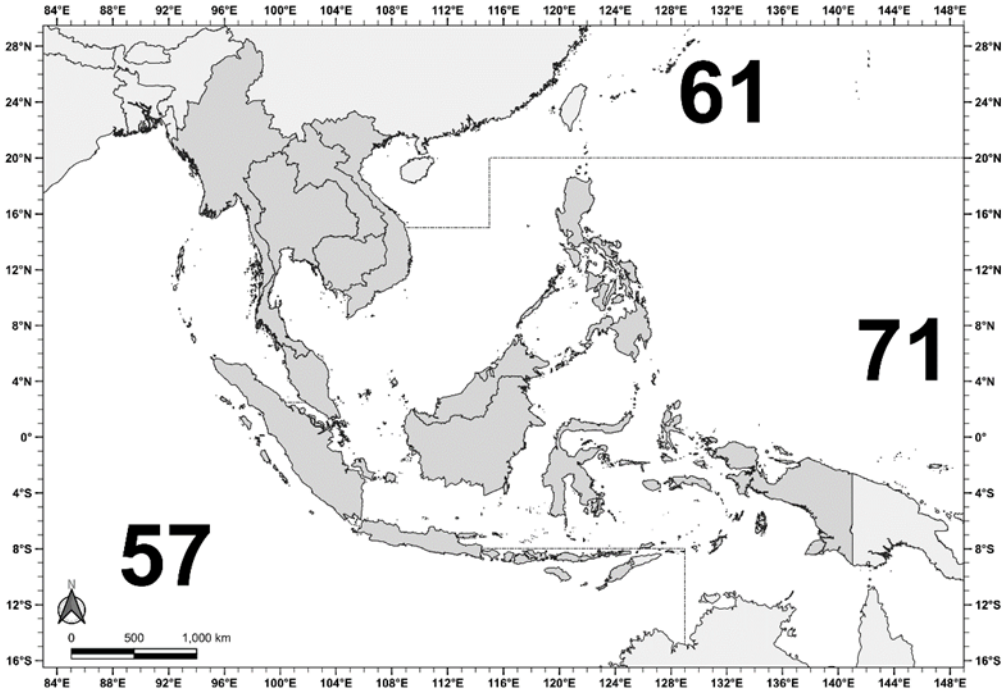
All inland waters of the Southeast Asian countries are identified under Area 04 (Asia, Inland Water). There is no sub-area for Asia (Fishing Area 04) that is recognized for the collection of catch and effort data for the Southeast Asian region. The data presented by Lao PDR, which is the sole landlocked country in the region, are therefore reported under Area 04 only.



Area 04, Asia-Inland Waters

2. Marine Fishing Areas

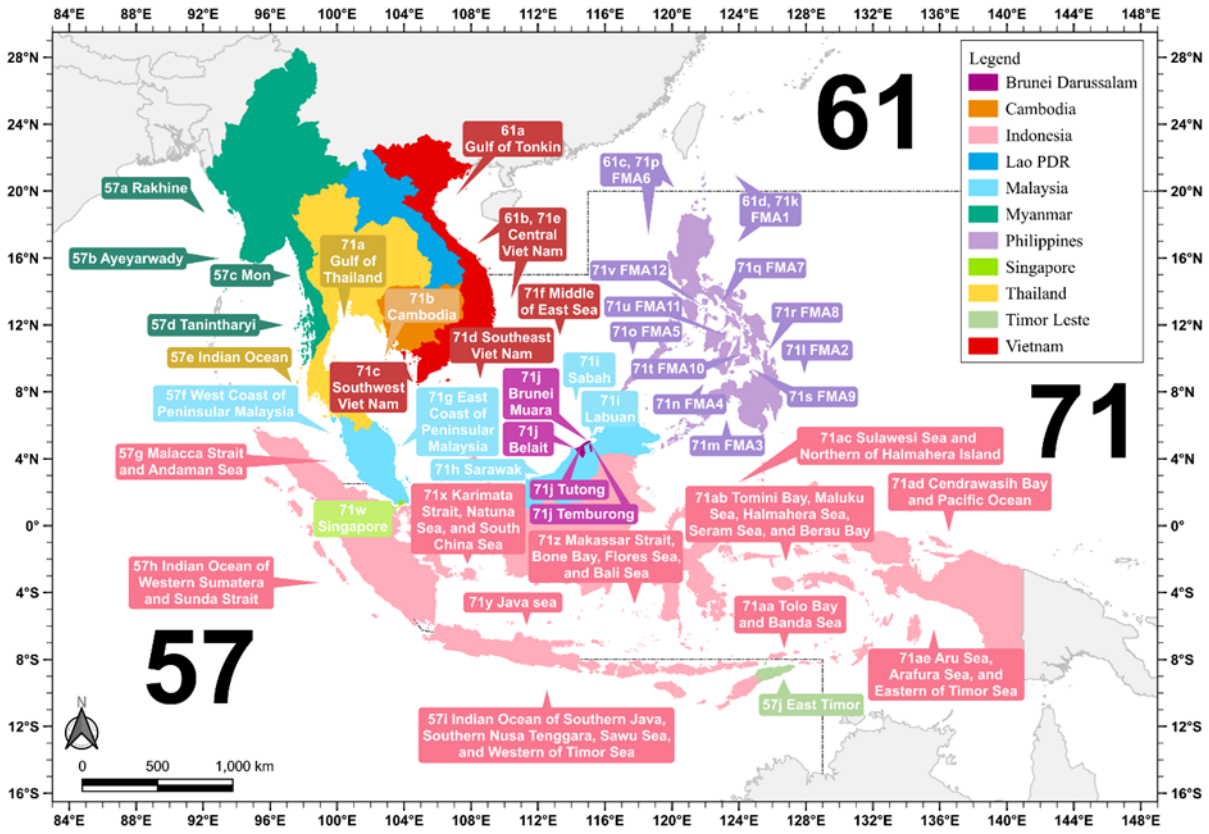
The marine fishing areas of the Southeast Asian countries are identified under Area 57 (Indian Oceans, Eastern), Area 71 (Pacific, Western Central), and Area 61 (Pacific, Northwest). Countries and their sub-areas to be used in marine fishery statistics are as follows:



Marine Fishing area 57, 71 and 61

Countries	Sub-areas	FAO Marine Fishing Area	SEAFDEC Sub-areas
Brunei Darussalam		71	71j
	Brunei Muara	71	71j
	Belait	71	71j
	Tutong	71	71j
	Temburong	71	71j
Cambodia		71	71b
Indonesia		57, 71	
	Malacca Strait and Andaman Sea	57	57g
	Indian Ocean of Western Sumatera and Sunda Strait	57	57h
	Indian Ocean of Southern Java, Southern Nusa Tenggara, Sawu Sea, and Western of Timor Sea	57	57i
	Karimata Strait, Natuna Sea and South China Sea	71	71x
	Java Sea	71	71y
	Makassar Sea, Bone Bay, Flores Sea and Bali Sea	71	71z
	Tolo Bay and Banda Sea	71	71aa
	Tomini Bay, Maluku Sea, Halmahera Sea,Seram Sea and Berau Bay	71	71ab
	Sulawesi Sea and Northern of Halmahera Island	71	71ac

Countries	Sub-areas	FAO Marine Fishing Area	SEAFDEC Sub-areas
	Cendrawasih Bay and Pacific Ocean	71	71ad
	Aru Bay, Arafuru Sea and Eastern of Timor Sea	71	71ae
Malaysia		57, 71	
	West Coast of Peninsular Malaysia	57	57f
	East Coast of Peninsular Malaysia	71	71g
	Sarawak	71	71h
	Sabah	71	71i
	Labuan	71	71i
Myanmar		57	
	Rakhine	57	57a
	Ayeyarwady	57	57b
	Mon	57	57c
	Tanintharyi	57	57d
Philippines		71	
	FMA-01	71	71k and 61d
	FMA-02	71	71l
	FMA-03	71	71m
	FMA-04	71	71n
	FMA-05		71o
	FMA-06		71p and 61c
	FMA-07		71q
	FMA-08		71r
	FMA-09		71s
	FMA-10		71t
	FMA-11		71u
	FMA-12		71v
Singapore		71	71w
Thailand		57, 71	
	Gulf of Thailand	71	71a
	Indian Ocean	57	57e
Timor Leste		57	57j
Viet Nam		61, 71	
	Gulf of Tonkin	61	61a
	Central Viet Nam	61	61b and 71e
	Southwest Viet Nam	71	71c
	Southeast Viet Nam	71	71d
	Middle of East Sea	71	71f



Sub-areas for marine fishery statistics of Southeast Asian Countries

Area 57 (Indian Ocean, Eastern)

Under fishing area 57, marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone[1] (EEZ) of each country.

To facilitate the reporting of the fishery statistics by each concerned country, the fishing area 57 in the Southeast Asian region can be divided into 10 sub-areas, which correspond to the existing EEZs of Myanmar, Thailand, Malaysia and Indonesia. The sub-areas under area 57 are as follows:

Sub-area 57 a: Marine fishing area of Myanmar (Rakhine)
Sub-area 57 b: Marine fishing area of Myanmar (Ayarwaddy)
Sub-area 57 c: Marine fishing area of Myanmar (Mon)
Sub-area 57 d: Marine fishing area of Myanmar (Tanintharyi)
Sub-area 57 e: Marine fishing area of Thailand (Indian Ocean)
Sub-area 57 f: Marine fishing area of Malaysia (West Coast of Peninsular Malaysia, Indian Ocean)
Sub-area 57 g: Marine fishing area of Indonesia (Malacca Strait and Andaman Sea)
Sub-area 57 h: Marine fishing area of Indonesia (Indian Ocean of Western Sumatera and Sunda Strait)
Sub-area 57 i: Marine fishing area of Indonesia (Indian Ocean of Southern Java, Southern Nusa Tenggara, Sawu Sea, and Western of Timor Sea)
Sub-area 57 j: Marine fishing area of East Timor

[1] Exclusive Economic Zone (EEZ) is; (1) a zone under national jurisdiction (up to 200-nautical miles wide) declared in line with the provisions of the 1982 United Nations Convention on the Law of the Sea, within which the coastal State has the right to explore and exploit, and the responsibility to conserve and manage the living and non-living resources; and (2) the area adjacent to a coastal State which encompasses all waters between (a) the seaward boundary of that State, (b) a line on which each point is 200 nautical miles (370.40 km) from the baseline of which the territorial sea of the coastal State is measured (except when other international boundaries need to be accommodated), and (c) the maritime boundaries agreed between that State and the neighboring states

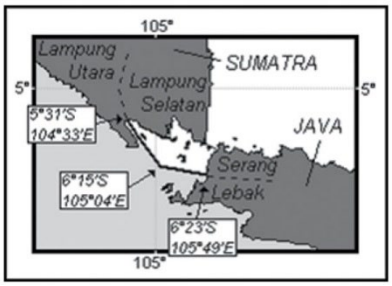
Area 71 (Pacific, Western Central)

Under fishing area 71, marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone (EEZ) of each country. There are 8 Southeast Asian countries identified under fishing area 71 covering Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Viet Nam. To facilitate reporting of the fishery statistics by each concerned country, the fishing area can be divided into 31 sub-areas corresponding to the existing EEZ of these countries. The sub-areas under area 71 are as follows.

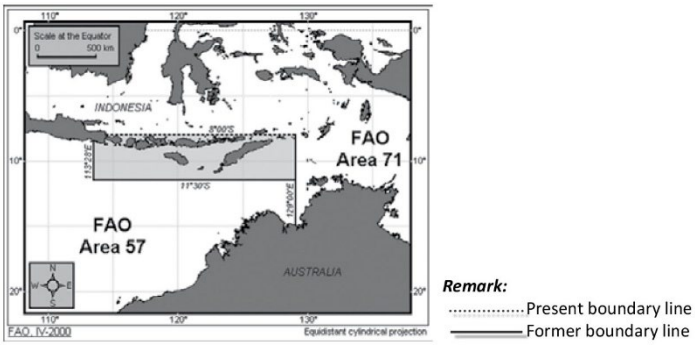
Sub-area 71 a: Marine fishing area of Thailand (Gulf of Thailand)
Sub-area 71 b: Marine fishing area of Cambodia
Sub-area 71 c: Marine fishing area of Viet Nam (Southwest Viet Nam)
Sub-area 71 d: Marine fishing area of Viet Nam (Southeast Viet Nam)
Sub-area 71 e: Marine fishing area of Viet Nam (Central Viet Nam)
Sub-area 71 f: Marine fishing area of Viet Nam (Middle of East Sea)
Sub-area 71 g: Marine fishing area of Malaysia (East Coast of Peninsular Malaysia)
Sub-area 71 h: Marine fishing area of Malaysia (Sarawak)
Sub-area 71 i: Marine fishing area of Malaysia (Sabah and Labuan)
Sub-area 71 j: Marine fishing area of Brunei Darussalam (Muara, Belait, Tutong, Temburong)
Sub-area 71 k: Marine fishing area of the Philippines (FM-01)
Sub-area 71 l: Marine fishing area of the Philippines (FMA-02)
Sub-area 71 m: Marine fishing area of the Philippines (FMA-03)
Sub-area 71 n: Marine fishing area of the Philippines (FMA-04)
Sub-area 71 o: Marine fishing area of the Philippines (FMA-05)
Sub-area 71 p: Marine fishing area of the Philippines (FMA-06)
Sub-area 71 q: Marine fishing area of the Philippines (FMA-07)
Sub-area 71 r: Marine fishing area of the Philippines (FMA-08)
Sub-area 71 s: Marine fishing area of the Philippines (FMA-09)
Sub-area 71 t: Marine fishing area of the Philippines (FMA-10)
Sub-area 71 u: Marine fishing area of the Philippines (FMA-11)
Sub-area 71 v: Marine fishing area of the Philippines (FMA-12)
Sub-area 71 w: Marine fishing area of Singapore
Sub-area 71 x: Marine fishing area of Indonesia (Karimata Strait, Natuna Sea and South China Sea)
Sub-area 71 y: Marine fishing area of Indonesia (Java Sea)
Sub-area 71 z: Marine fishing area of Indonesia (Makassar Sea, Bone Bay, Flores Sea and Bali Sea)
Sub-area 71 aa: Marine fishing area of Indonesia (Tolo Bay and Banda Sea)
Sub-area 71 ab: Marine fishing area of Indonesia (Tomini Bay, Maluku Sea, Halmahera Sea, Seram Sea and Berau Bay)
Sub-area 71 ac: Marine fishing area of Indonesia (Sulawesi Sea and Northern of Halmahera Island)
Sub-area 71 ad: Marine fishing area of Indonesia (Cendrawasih Bay and Pacific Ocean)
Sub-area 71 ae: Marine fishing area of Indonesia (Aru Bay, Arafuru Sea and Eastern of Timor Sea)

Boundaries between Areas 57 and 71

1. At the Strait of Malacca, the areas bounded by a line commencing from East Sumatra and across the strait at 2˚30´N latitude to meet the West Coast of Peninsular Malaysia.
2. At the marine waters between Sumatra and Java, the areas bounded by a line commencing on the coast of Sumatra at the boundary between the District of Lampung Utara and the District of Lampung Selatan at 5˚31´S latitude, 104˚33´E longitude. The boundary is running along a rhomb line between Cape Tjuku Redak on the mainland of Sumatra and Cape Batu Kebucung on the Island of Tebuan to the position 6°15'S latitude, 105°04'E longitude; then along a rhomb line between Cape Parat on the Island of Panaitan and the southeastern tip of the Island of Rakarta to the western coast of Java at the boundary between the District of Lebak and the District of Serang at 6°23'S latitude, 105°49'E longitude.
3. At the marine waters of Java and Bali-Nusa Tenggara, the areas bounded by a line commencing from 8°00'S latitude starting from the coast of South Java at Surabaya and running east to meet at 129°00'E longitude; thence running due south until meeting Northern coast of Australia. The area under the line is recognized as the fishing area 57 whereas those above the line are accepted as part of fishing area 71.



Boundary line for the Areas 57 and 71 at the marine waters between Sumatra and Java



Boundary line for the Area 57 and 71 at the marine waters of South Java and Bali-Nusa Tenggara

Area 61 (Pacific, Northwest)

Under fishing area 61, the marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone (EEZ) of each concerned country, although here, there is only one country identified under fishing area 61, which is Viet Nam. The fishing area 61 can be divided into 4 sub-areas as follows:

Sub-area 61 a: Marine fishing area of Viet Nam (Gulf of Tonkin)
Sub-area 61 b: Marine fishing area of Viet Nam (Central Viet Nam)
Sub-area 61 c: Marine fishing area of the Philippines (FMA-06)
Sub-area 61 d: Marine fishing area of the Philippines (FMA-01)

Appendix 2

Classification of Small-scale and Commercial Fisheries

Due to different legal definitions used by each country, the following table shows the classification of small-scale and commercial fisheries of countries in the region.

Country	Small-scale fisheries	Commercial fisheries
Brunei Darussalam	Operating in Zone 1A (0–3 nm) and Zone 1B (3.1–7 nm). Fishers generally use fiberglass fishing boats propelled by one or two units of outboard engines to reach their fishing destinations and operate small-scale fishing gears such as trammel nets, hooks and lines, as well as pots.	Trawlers, seiners, and long liners: a) 60 GT; 350 Hp operating in Zone 2 b) 60.1–150 GT; 350.1–600 Hp operating in Zone 3 c) 150.1–230 GT; 600.1–800 Hp operating in Zone 4
Cambodia	Marine capture fishery: Coastal fisheries: small-scale fisheries with/without engine (from 5-50 Hp) operating in Zone 1.	Marine fishery: Commercial fisheries: more than 50 Hp operating in Zone 2.
Indonesia	Fisheries that its operation without using boats, using non-power boats, using outboard motor size < 5 GT or inboard motor size < 5 GT	a) Fisheries that its operation using outboard motor size 5–30 GT or inboard motor size 5–30 GT b) Fisheries that its operation using outboard motor size ≥ 30 GT or inboard motor size ≥ 30 GT
Lao PDR	Fisheries are small-scale	Not applicable
Malaysia	Traditional fisheries: Small-scale fisheries using traditional fishing gears (*i.e*. other than trawls and purse seines) with vessels less than 40 GRT operating in Zone 1 (Zone A 0–300 Hp)	Commercial fisheries: Medium and large-scale fisheries using commercial fishing gear such as trawls and purse seines a) With vessels less than 40 GRT operating in Zone 2 (Zone B < 300 Hp) b) With vessels from 40–70 GRT operating in Zone 3 (Zone C < 500 Hp) c) With vessels above 70 GRT operating in Zone 4 (Zone C2 no horsepower limit)
Myanmar	Inshore/coastal fisheries: a) Vessels of less than 40 ft or using less than 50 Hp engines operating in Zone 1. b) 10 nm from shore (Ayeyarwaddy, Rakhine coastal region and Taninthayi region)	Industrial fisheries: Vessels more than 40 ft or using more than 50 Hp engines operating in Zone 2. (Outer limit of inshore fishing zone to the EEZ)
Philippines	Municipal fisheries: a) Up to 15 km from shore, or equidistant between two adjacent municipalities. b) Small-scale fisheries with vessels of less than 3 GT operating in Zones 1 and 2.	Commercial fisheries: a) Small-scale commercial fisheries: from 3.1-20.0 GT vessels operating in Zone 2; can also operate within 10.1–15.0 km (within Zone 1) if authority is granted by the concerned local government unit (LGU). b) Medium-scale commercial fisheries: from 20.1–150.0 GT operating in Zone 2; can also operate within 10.1-15.0

		km (within Zone 1) if authority is granted by the concerned local government unit (LGU). c) Large-scale commercial fisheries: more than 150 GT operating in Zone 2.
Singapore	Small-scale fisheries with vessels of less than 3 GT operating in Zone 1	Small-scale commercial fisheries: Inboard engine less than 50 GT operating in Zone 2
Thailand	Small-scale fisheries: Vessels of less than 10 GT operating in Zone 1; except highly efficient fishing gear (trawls, purse seines, and dredges).	Large-scale fisheries: Vessels of more than 10 GT operating in Zone 2.
Viet Nam	No legal definition of small-scale fisheries as of August 2023	No legal definition of commercial fisheries as of August 2023

Fishing Zones of Countries in Southeast Asia

Country	Fishing Zone 1	Fishing Zone 2	Fishing Zone 3	Fishing Zone 4
Brunei Darussalam	Zone 1A: From shoreline to 3 nm Zone 1B: From 3.1 to 7 nm	From 7.1 nm to 20 nm	From 20.1 nm to 45 nm	From 45.1 nm to EEZ limit
Cambodia	From shoreline to 20 m depth	From 20 m depth to EEZ limit		
Indonesia	From shoreline out to 4 nm	From the outer limit of first fishing zone to 12 nm from shore	From the outer limit of second fishing zone to EEZ limit	
Malaysia	From shoreline to 5 nm	From 5 nm to 12 nm	From 12 nm to 30 nm	From 30 nm to EEZ limit (including the Indian Ocean)
Myanmar	From shoreline to 10 nm in the northern area, 10 nm in the Southern area	From outer limit of first fishing zone to EEZ limit		
Philippines	From shoreline to 15 km	From 15 km to EEZ limit		
Singapore	From shoreline to within port limits	From 12 nm to EEZ limit		
Thailand	From shoreline to 12 nm	From 12 nm to EEZ limit		
Viet Nam	Coastal zone: Delimited by the waterline along the coast and coastal route. For islands, coastal zone is the waters extending up to 6 nm from the average line of tide in multiple years around the coast of the island	Inshore zone: Delimited by the coastal route and inshore route	Offshore zone: Delimited by the inshore route and outer boundary of the exclusive economic zone of Viet Nam waters	

Appendix 3

List of Aquatic Animals and Plants

For the statistics on production from capture fisheries and aquaculture in the region broken down into species, the International Standard Classification of Aquatic Animals and Plants (ISSCAAP) should be used as the basis to report the species of aquatic animals and plants.

For capture fisheries production, since some diadromous species may be caught in both marine and inland waters, the statistics will be reported in two categories of capture fisheries (*i.e.* marine capture fishery and inland capture fishery). For aquaculture production, since some aquatic species can be cultured in more than one environment, production can then be reported based on the environment where the species are cultured.

The ISSCAAP applied for the region is as follows:

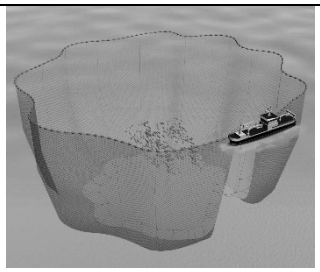
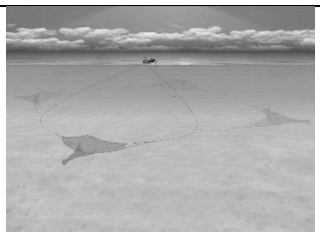
Division	Code	Group of species
1	1	Freshwater fishes
	11	Carps, barbells, river suckers
	12	Loaches and hillstream loaches
	13	Tilapias and other cichlids
	14	Freshwater catfishes
	15	Freshwater perches and basses
	16	Snakeheads
	17	Characins
	18	Swamp eels and spiny eels
	19	Miscellaneous freshwater fishes
2	2	Diadromous and euryhaline fishes
	21	Sturgeons, paddlefishes
	22	Anguilla eels
	23	Salmons, trouts, smelts
	25	Milkfish, mullets
	26	Euryhaline puffer fishes
	27	Miscellaneous diadromous and euryhaline fishes
3	3	Marine fishes
	31	Flounders, halibuts, soles and other flat fishes
	32	Cods, hakes, haddocks
	33	Miscellaneous coastal fishes
	34	Miscellaneous demersal fishes
	35	Herrings, sardines, anchovies
	36	Tunas, bonitos, billfishes
	37	Miscellaneous pelagic fishes
	38	Sharks, rays, chimaeras
	39	Marine fishes not identified
4	4	Crustaceans
	41	Freshwater shrimps and prawns
	42	Freshwater crayfishes
	43	Miscellaneous freshwater crustaceans
	44	Marine crabs, sea-spiders
	45	Lobsters, spiny-rock lobsters
	46	King crabs, squat-lobsters
	47	Marine shrimps and prawns
	48	Krill, marine planktonic crustaceans
	49	Miscellaneous marine crustaceans
5	5	Molluscs
	51	Freshwater molluscs
	52	Abalones, winkles, conchs, and other sea snails

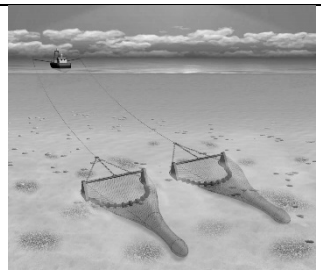
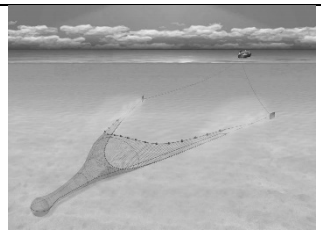
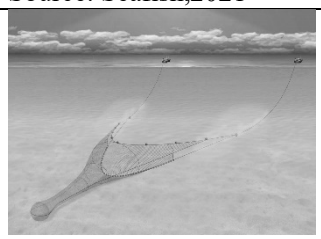
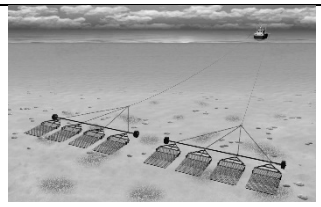
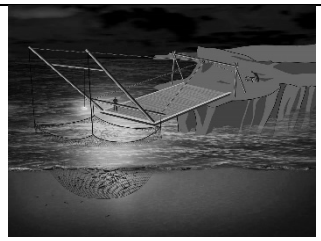
Division	Code	Group of species
	53	Oysters
	54	Sea mussels
	55	Scallops, pectens
	56	Clams, cockles, arkshells and other bivalves
	57	Squids, cuttlefishes, octopus
	58	Miscellaneous marine molluscs
7	7	Miscellaneous aquatic animals
	71	Frogs, salamanders and other amphibians
	72	Turtles
	73	Crocodiles, alligators, and caimans
	74	Sea-squirts and other tunicates
	75	Horseshoe crabs and other arachnoids
	76	Sea-urchins and other echinoderms
	77	Sea cucumbers
	78	Marine worms
	79	Miscellaneous aquatic invertebrates
8	8	Miscellaneous aquatic animal products
	81	Marine pearls, mother-of-pearls, shells
	82	Corals
	83	Sponges
9	9	Aquatic plants
	91	Brown algae
	92	Red algae
	93	Marine macro green algae
	94	Aquatic Cyanobacteria (blue-green algae)
	95	Miscellaneous aquatic micro-algae
	96	Aquatic macrophytes

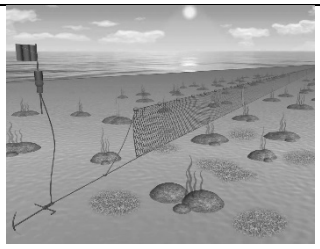
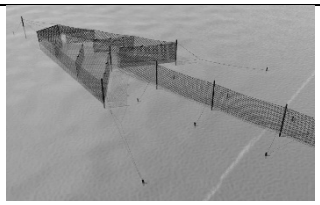
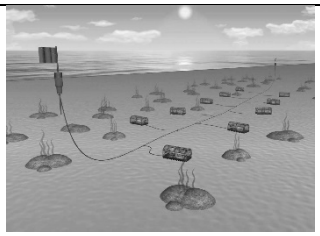
Appendix 4

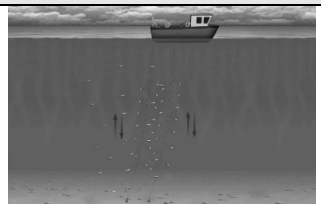
Classification of Fishing Gear

In reporting the statistics on production from capture fisheries by types of fishing gear, the classification of fishing gear based on the International Standard Statistical Classification of Fishing Gear (ISSCFG) should be applied to the region as follows:

Code	Category and type	Illustration	Description
01	Surrounding nets		
01.1	Purse seine • *Anchovy purse seine* • *Fish purse seine*	 Source: Seafish, 2021	Purse seines are the most efficient gear for catching small and large pelagic species that are shoaling. The gear is made of a long wall of netting framed with floatline and leadline (usually, of equal or longer length than the former) and has purse rings hanging from the lower edge of the gear, through which runs a purse line made from steel wire or rope which allow the pursing of the net.
01.9	Surrounding nets (*nei*)		
02	Seine nets		
02.1	Beach seines	 Source: Seafish, 2021	Beach seines are operated from the shore. The gear is composed of a bunt (bag or lose netting) and long wings often lengthened with long ropes for towing the seine to the beach. The headrope with floats is on the surface, the footrope is in permanent contact with the bottom, and the seine is, therefore, a barrier that prevents the fish from escaping from the area enclosed by the net.
02.2	Boat seines	 Source: Seafish,2021	Boat seines consist basically of a conical netting body, two relatively long wings, and a bag. The wings are frequently longer than on trawls. The long ropes extending from the wings, which are used to encircle a large area are an important component of the capture efficiency. The groundrope is usually a fairly heavy rope weighted with lead rings or hanging lead ropes. The seine ropes are made from synthetic fiber ropes with a lead core or from a combination of ropes.
02.9	Seine nets (*nei*)		

Code	Category and type	Illustration	Description
03	Trawls		
03.11	Beam trawl	 Source: Seafish,2021	Beam trawls consist of a cone-shaped body ending in a bag or codend which retains the catch. The horizontal opening of the net is provided by a beam, made of wood or metal, which is up to 12 m long. The vertical opening is provided by two hoop-like trawls mostly made from steel. No hydrodynamic forces are needed to keep the gear open.
03.12	Single boat bottom otter trawls	 Source: Seafish,2021	Single boat bottom otter trawls are the most common type of trawls and are often called “bottom otter trawl,” “otter trawl,” or “bottom trawl.” The gear is a cone-shaped trawl towed on the seabed by one boat with its horizontal spread maintained by a pair of otter boards.
03.15	Bottom pair trawls	 Source: Seafish,2021	Bottom pair trawls consist of a cone-shaped body, normally made of two or four (and sometimes more) panels, closed by a codend and with lateral wings extending forward from the opening.
03.9	Trawls (*nei*)		
04	Dredges	 Source: Seafish,2021	Dredges are dragged along the bottom to catch shellfish. The gear consists of a mouth frame to which a holding bag constructed of metal rings or meshes is attached.
04.9	Dredges (*nei*)		
05	Lift nets	 Source: FAO, 2021	Lift nets are horizontal netting panels or bags shaped like a parallel-piped pyramid or cone with the opening facing upwards which are submerged at a certain depth, left for a while, the time necessary for light or bait to attract fish over the opening, then lifted out of the water.
05.9	Lift nets (*nei*)		

Code	Category and type	Illustration	Description
06	Falling Gear		
06.1	Cast nets	 Source: FAO, 2021	Cast nets are cast by fishers to catch fish. The gear is constructed from a series of tailored netting sections joined together to produce a cone-shaped net with weights and a drawstring attached to the perimeter. Netting at the funnel end may be arranged such that the net hangs in a series of sculpted pockets to aid in the retention of fish. The line attached to the apex of the cone is used to assist in casting and retrieval of the net allowing the brail lines to be tightened.
0.6.9	Falling gear (*nei*)		
07	Gillnets and entangling nets	 Source: Seafish,2021	Gillnets and entangling nets are strings of single, double, or triple netting walls, vertical, near by the surface, in midwater, or at the bottom, in which fish will gill, entangle, or enmesh. The gear can set, anchored to the bottom or left drifting, free or connected with the vessel which have floats on the upper line (headrope) and, in general, weights on the ground-line (footrope).
07.9	Gillnets and entangling nets (*nei*)		
08	Traps		
08.1	Stationary uncovered pound nets	 Source: Seafish, 2021	Stationary uncovered pound nets consist usually of net walls anchored or fixed on stakes, reaching from the bottom to the surface. The nets are open at the surface and include various types of fish herding and retaining devices. The gear is mostly divided into chambers closed at the bottom by netting.
08.2	Pots	 Source: Seafish, 2021	Pots are designed in the form of cages or baskets, small or large (with dimensions ranging from around half a meter to two), made from various materials (wood, wicker, metal rods, wire netting, plastic, etc.). Most of the pots are set on the bottom, while a few models are designed to be in mid-water. Pots are frequently set in rows and used with or without bait, depending on the target species. The bait is usually pieces of fish or artificial flourished baits. The gear might have one or more openings or entrances.
08.9	Traps (*nei*)		

Code	Category and type	Illustration	Description
09	Hook and lines	 Source: Seafish,2021	Hook and lines attract fish by a natural or artificial bait (lures) placed on a hook fixed to the end of a line or snood, on which they get caught. Hooks or metallic points (jigs) are also used to catch fish by ripping them when they pass in its range of movement. Hook and line units may be used singly or in large numbers.
09.9	Hook and lines (*nei*)		
10	Miscellaneous gear		
10.5	Pushnets	 Source: FAO,2021	A pushnet is a bag-shaped net with two sides fixed to scissor-like crossed poles and pushed by a fisher wading in water or from a boat in shallow waters. The poles are made from bamboo, wood, plastic, aluminum, or steel.
10.6	Scoopnets	 Source: FAO,2021	Scoopnets are operated by wading in shallow water, from rocks in a river, or from a boat. The gear is usually operated by hand, by one or more people to scoop or sieve the catch from the water. The net is held open by metal, plastic, or wooden frame, with or without handles.
10.9	Gear *nei*		
99	Gear not known		

Appendix 5

Classification of Fishery Vessels

To compile the statistics on fishing units, the regional classification of fishery vessels should be referred to as follows:

Vessel type		**Size (GT)**
Category	**Sub-category**	
1. Non-powered vessel		
2. Powered vessel		
	2.1. Out-board powered vessel	
	2.2. In-board powered vessel	Less than 5
		5–9.9
		10–19.9
		20–49.9
		50–99.9
		100–199.9
		200–499.9
		More than 500

Appendix 6

Selected Examples of Aquaculture and Capture Fisheries Practices

Production from	Designation	
	Aquaculture	Capture fisheries
Hatcheries	*	
Ponds (including intertidal ponds)	*	
Tanks	*	
Raceways	*	
Cages	*	
Pens	*	
Integrated culture production	*	
Stocked lakes, reservoirs, barrages, and rivers		
• with other enhancement (predator control and/or fertilization)		*
• modification with "exploitation rights"	*	
• no other intervention without "exploitation rights"		*
Lakes, coastal lagoons, reservoirs and rivers without stocking		
• open capture fisheries without any control and exploitation rights		*
• with enhancement (fertilization and/or predator control, habitat modification), with "exploitation rights" presence of fish barriers (*e.g.* lavorieri; dajlan; bordigue)	*	
Rice-fish culture	*	
Finfish and other animals harvested from brush parks:		
• managed over time and with other enhancement rights		*
• harvested on an install and harvest basis		*
Finfish and other animals harvested from fish aggregating devices and/or artificial reefs		*
Finfish or other organisms reared in captivity from wild captured seeds, including postlarval capture and culture (PCC):		
• quantities of wild seeds captured		*
• the remaining quantity of harvest	*	
Shellfish		
• from managed grow-out site (*e.g.* poles, ropes, net bags)	*	
• from areas not managed but sown with cultured seeds		*
• subject to harvest with "exploitation rights"		*
• subject to open fisheries		*
Aquatic plants and seaweeds		
• harvest of planted and suspended aquatic plants	*	
• from enhanced areas (implanting, predator control, and/or habitat modifications		*
• harvest of natural aquatic plants		*
Aquatic organisms caught in open waters		*

Appendix 7

Classification of Fishers and Fish Farmers

To compile statistics on the number of fishers and fish farmers, the classification of fishers and fish farmers will be used as follows:

a. Fishers and fish farmers by sub-sector and working status

Category	Sub-sector	Working status	Sex
1. Fishers	1.1. Marine capture fisheries	Full-time fishers	Male (M)
			Female (F)
			Unspecified (U)
		Part-time fishers	Male (M)
			Female (F)
			Unspecified (U)
		Occasional fishers	Male (M)
			Female (F)
			Unspecified (U)
		Status unspecified	Male (M)
			Female (F)
			Unspecified (U)
	1.2. Inland capture fisheries	Full-time fishers	Male (M)
			Female (F)
			Unspecified (U)
		Part-time fishers	Male (M)
			Female (F)
			Unspecified (U)
		Occasional fishers	Male (M)
			Female (F)
			Unspecified (U)
		Status unspecified	Male (M)
			Female (F)
			Unspecified (U)
2. Fish farmers	Aquaculture	Full-time fish farmers	Male (M)
			Female (F)
			Unspecified (U)
		Part-time fish farmers	Male (M)
			Female (F)
			Unspecified (U)
		Occasional fish farmers	Male (M)
			Female (F)
			Unspecified (U)
		Status unspecified	Male (M)
			Female (F)
			Unspecified (U)

b. Fishers and fish farmers by sub-sector and nationality

Category	Sub-sector	Nationality	Sex
1. Fishers	1.1. Marine capture fisheries	National	Female
			Male
			Unspecified
		Foreign	Female
			Male
			Unspecified
		Unspecified	Female
			Male
			Unspecified
	1.2. Inland capture fisheries	National	Female
			Male
			Unspecified
		Foreign	Female
			Male
			Unspecified
		Unspecified	Female
			Male
			Unspecified
2. Fish farmers	Aquaculture	National	Female
			Male
			Unspecified
		Foreign	Female
			Male
			Unspecified
		Unspecified	Female
			Male
			Unspecified

Appendix 8

List of Fishery Commodities for Export and Import Statistics

Division	Group	ISSCFC Code	HS Code	Commodities
1. Live fish (034.1.1)	11. Ornamental fish	034.1.1.1.19	0301.19	Ornamental fish *nei*
		034.1.1.2.90	0301.99	Fish for culture incl. fingerlings
	12. Other live fishes	034.1.2.1.20	0301.92	Eels
		034.1.2.1.10	0301.93	Carps
		034.1.2.1.90	0301.99	Others
2. Fish, fresh or chilled excluding fillets and other fish meat (034.1)	21. Freshwater fishes	034.1.3.1	0302.73	Carps, barbells and other cyprinids
		034.1.3.2	0302.71	Tilapias and other cichlids
		034.1.3.9.30	0302.72	Catfishes
		034.1.3.9.90	0302.89	Freshwater fishes *nei*
	22. Diadromous fishes	034.1.4.3	0302.19	Salmons, trouts, smelts
		034.1.4.5.10	0302.89	Milkfish
		034.1.4.5.20	0302.89	Barramundi
	23. Marine fishes	034.1.5.1	0302.29	Flounders, halibuts, soles
		034.1.5.5	0302.89	Herrings, sardines, anchovies
		034.1.5.6	0302.89	Tunas, bonitos, billfishes
		034.1.5.7.69	0302.44	Mackerels *nei*
		034.1.5.8	0302.89	Sharks, rays, chimaeras
		034.1.5.8.90	0302.89	Marine fish *nei*
3. Fish, frozen excluding fish fillets and other fish meat (034.2)	31. Freshwater fishes	034.2.3.1	0303.89	Carps, barbells and other cyprinids
		034.2.3.2	0303.23	Tilapias and other cichlids
		034.2.3.9.30	0303.24	Catfishes
		034.2.3.9.90	0303.89	Freshwater fishes *nei*
	32. Diadromous fishes	034.2.4.3	0303.19	Salmon and trouts
		034.2.4.5.10	0303.89	Milkfish
		034.2.4.5.20	0303.89	Barramundi
	33. Marine fishes	034.2.5.1	0303.89	Flounders, halibuts, soles
		034.2.5.5	0303.89	Herrings, sardines, anchovies
		034.2.5.6	0303.89	Tunas, bonitos, billfishes
		034.2.5.7.69	0303.54	Mackerels *nei*
		034.2.5.8	0303.81	Sharks, rays, chimaeras
		034.2.5.9.90	0303.89	Marine fish *nei*
4. Fish fillets and meats, fresh or chilled (034.3)	41. Freshwater fishes	034.3.1.3.1	0304.39	Carps, barbells and other cyprinids
		034.3.1.3.2	0304.31	Tilapias and other cichlids
		034.3.1.3.9.30	0304.32	Catfishes
		034.3.1.3.9.90	0304.49	Freshwater fishes *nei*
	42. Diadromous fish	034.1.4.3	0304.49	Salmon, trouts, smelts
	43. Marine fishes	034.3.1.5.1	0304.43	Flounders, halibuts, soles
		034.3.1.5.5	0304.49	Herrings, sardines, anchovies
		034.3.1.5.6	0304.49	Tunas, bonitos, billfishes
		034.3.1.5.8	0304.49	Sharks, rays, chimaeras
		034.3.1.5.9.90	0304.49	Marine fish *nei*
5. Fish fillets and meat, frozen (034.4)	51. Freshwater fishes	034.4.1.3.2	0304.89	Tilapias and other cichlids
		034.4.1.3.9.30	0304.62	Catfishes
		034.4.1.3.9.90	0304.89	Freshwater fishes *nei*

Division	Group	ISSCFC Code	HS Code	Commodities
	52. Diadromous fish	034.4.1.4.3	0304.89	Salmon, trouts, smelts
	53. Marine fishes	034.4.1.5.1	0304.83	Flounders, halibuts, soles
		034.4.1.5.5	0304.89	Herrings, sardines, anchovies
		034.4.1.5.6	0304.89	Tunas, bonitos, billfishes
		034.4.1.5.7.69	0304.89	Mackerels *nei*
		034.4.1.5.8	0304.88	Sharks, rays, chimaeras
		034.4.1.5.9.90	0304.89	Marine fish *nei*
6. Fish, dried, salted or in brine; smoked fish (035)	61. Freshwater fish dried whether or not salted, not smoked	035.02.1.3	0305.59	
	62. Diadromous fish dried whether or not salted, not smoked	035.02.1.4	0305.59	
	63. Marine fishes dried whether or not salted, not smoked	035.02.1.5.1	0305.59	Flounders, halibuts, soles
		035.02.1.5.5	0305.59	Herrings, sardines, anchovies
		035.02.1.5.6	0305.59	Tunas, bonitos, billfishes
		035.02.1.5.7.69	0305.54	Mackerels *nei*
		035.02.1.5.8	0305.59	Sharks, rays, chimaeras
		035.02.1.5.9.90	0305.59	Marine fish *nei*
	64. Freshwater fish salted and in brine	035.02.2.3	0305.69	
	65. Diadromous fish salted and in brine	035.02.2.4	0305.69	
	66. Marine fish salted and in brine	035.02.2.5.1	0305.69	Flounders, halibuts, soles
		035.02.2.5.5	0305.69	Herrings, sardines, anchovies
		035.02.2.5.6	0305.69	Tunas, bonitos, billfishes
		035.02.2.5.7.69	0305..69	Mackerels *nei*
		035.02.2.5.8	0305.69	Sharks, rays, chimaeras
		035.02.2.5.9.95	0305.69	Marine fish *nei*
	67. Freshwater fish, smoked	035.03.3	0305.49	
	68. Diadromous fish, smoked	035.03.4	0305.49	
	69. Marine fish, smoked	035.03.5.1	0305.49	Flounders, halibuts, soles
		035.03.5.5	0305.49	Herrings, sardines, anchovies
		035.03.5.6	0305.49	Tunas, bonitos, billfishes
		035.03.5.7.69	0305.49	Mackerels *nei*
		035.03.5.8	0305.49	Sharks, rays, chimaeras
		035.03.5.9.95	0305.49	Marine fish *nei*
7. Crustaceans live, fresh, chilled, frozen, salted, in brine or dried, smoked (036)	71. Crustaceans live, fresh or chilled	036.0.1.3.1.50	0306.36	Freshwater shrimps and prawns
		036.0.1.3.2	0306.33	Crabs
		036.0.1.3.3	0306.31	Lobsters, spiny-rock lobsters, etc
		036.0.1.3.5	0306.36	Shrimps, prawns, etc.
	72. Crustaceans frozen	036.0.1.4.1.50	0306.17	Freshwater shrimps and prawns
		036.0.1.4.2	0306.14	Crabs and crab meat
		036.0.1.4.3	0306.11	Lobsters, lobster meat
		036.0.1.4.5	0306.17	Shrimps, prawns, etc.

Division	Group	ISSCFC Code	HS Code	Commodities
	73. Crustaceans, dried, salted or in brine, smoked	036.0.1.5	0306.99	
8. Molluscs live, fresh, chilled, frozen, salted, in brine or dried, smoked (036.0.2)	81. Molluscs live, fresh or chilled	036.0.2.3.3	0307.11	Oysters
		036.0.2.3.4	0307.31	Mussels
		036.0.2.3.7.40	0307.42	Cuttlefishes and squids
		036.0.2.3.9.91	0307.91	Molluscs *nei*
	82. Molluscs frozen	036.0.2.4.2.10	0307.83	Abalone
		036.0.2.4.3	0307.12	Oyster
		036.0.2.4.4	0307.32	Mussels
		036.0.2.4.7.40	0307.43	Cuttlefishes and squids
		036.0.2.4.9.91	0307.92	Molluscs *nei*
	83. Molluscs, dried, salted or in brine, smoked	036.0.2.5.2.10	0307.87	Abalone
		036.0.2.5.3	0307.19	Oysters
		036.0.2.5.4	0307.39	Mussels
		036.0.2.5.7.40	0307.49	Cuttlefishes and squids
		036.0.2.5.9.91	0307.99	Molluscs *nei*
9. Fish, crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (037)	91. Fish prepared or preserved	037.1.1.6.94	1604.19	Fish not minced, prepare or preserve in airtight containers
		037.1.1.6.95	1604.19	Fish not minced, prepare or preserve not in airtight containers
	92. Crustaceans, molluscs, and other aquatic invertebrates prepared or preserved	-	-	Crustacean and mollusc preparations in airtight containers
		037.2.3.9.91	1605.40	Crustacean and mollusc preparations, not in airtight containers
10. Meals, solubles and similar animal feedingstuffs, of aquatic animal origin (081)		081	2301.20	
11. Aquatic animals, oils and facts (411)		411	1504.10	
12. Seaweeds and aquatic plans products thereof		292.9.1	1212.29	

Appendix 9

ASEAN Network on Fishery Statistics

Terms of Reference *(As of establishment in 2004)*

- To act as the national focal point in supporting and providing national inputs for the compilation of fishery statistics at regional and international levels;
- To involve in developing regional standards, definitions, and classification of fishery statistics;
- To involve in planning and implementation of regional programs/projects on fishery statistics and information; and
- To supervise and manage all required activities and ensure regular communication with SEAFDEC Secretariat according to the volume of work envisaged within the determined timeframe.

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ASEAN and SEAFDEC Focal Persons *(As of August 2023)*

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Appendix 2 of Annex 11

"GENERAL NOTES" OF THE STATISTICS BULLETIN OF SOUTHEAST ASIA

(Updated text, agreed during the 1st RTC on Fishery Statistics and Information in Southeast Asia, 21–22 September 2021, online)

1. GENERAL NOTES

1.1 Data Sources

Data and information available from various sources could be used as inputs for the Fishery Statistical Bulletin. These include the data collected through statistical surveys, as well as records from government and semi-governmental organizations. In addition, data and information derived from new statistical techniques or small-scale surveys could also be used to provide inputs to the Fishery Statistical Bulletin.

1.2 Incomplete Data

Although it is desirable that standardized and complete data be supplied for the Fishery Statistical Bulletin; data that may not be entirely compatible with the coverage, definition and classification but could be useful should also be reported by the countries, provided that the extent of incompleteness is indicated as a footnote.

1.3 Time Reference

The reference period unit normally used in fishery statistics that will be compiled annually is the calendar year, the period between 1 January and 31 December of the reporting year. In cases where a country is unable to supply the statistics of the reporting year by the timeline as indicated, the latest data available may be given, provided that the year to which the data belongs is indicated in the space provided.

1.4 Unit of Measurement

Unit of measurement used in the Bulletin are standardized as follows:

- Fishery production statistics in quantity are reported in tonnes, except ornamental fish, and reptiles which are reported in pieces or numbers.
- Fishery production statistics in value are reported in USD 1,000. [1]
- Fish prices are reported in USD/kg

1.5 Standard Symbols and Abbreviations

The following standard symbols and abbreviations are used throughout the tables in the Fishery Statistical Bulletin:

…	=	Not available
-	=	Magnitude is zero or not applicable
0	=	Magnitude is insignificant, *i.e.* less than half of the measurement
t	=	tonnes
USD 1,000	=	1,000 dollars in U.S. currency
No.	=	Number
Q	=	Quantity
V	=	Value

[1] In reporting production in value, the amount reported in the national currencies should be converted to USD. Reference on the conversion from local currencies to a common standard should be based on the "International Monetary Fund (IMF)."

Annex 12

CITES–RELATED ISSUES

I. INTRODUCTION

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an internationally legally binding agreement between governments (Parties). It was signed on 3 March 1973 and entered into force on 1 July 1975, with the aim to ensure that international trade in specimens of wild animals and plants does not threaten their survival in the wild. Almost all countries in the world are Parties to the Convention. As of February 2023, CITES regulates international trade in over 40,900 species of animals and plants, including their products and derivatives, ensuring their survival in the wild, and providing benefits for the livelihoods of local people and the global environment. The species are grouped in the Appendices (I, II, and III) based on the degree to which they are threatened by international trade.

The listing of CEAS, including various sharks species, in the CITES Appendices could have significant impacts on fisheries and aquaculture in Southeast Asia. The following are the potential effects of these CITES-related issues in Southeast Asia.

Impact on fisheries management: the inclusion of CEAS in the CITES Appendices would lead to increased regulation of international trade in these species. This could affect the management strategies of fisheries in Southeast Asian countries, as regulations may impose quotas, restrictions, or other measures to ensure sustainable exploitation of the CEAS. Fisheries management authorities in the countries may need to adjust their policies and practices accordingly.

Economic implications: many Southeast Asian countries heavily rely on the export of fish and fishery products for economic growth and livelihoods. The inclusion of CEAS in the CITES Appendices could affect the volume and profitability of trade in these species, impacting the economies of the countries. Restrictions on trade could lead to reduced income for fishing communities and seafood industries.

Challenges in implementation: implementing CITES provisions effectively requires capacity building and resources. Southeast Asian countries may face challenges in enforcing regulations, monitoring trade, and ensuring compliance with CITES requirements. Additional investment in infrastructure, training, and enforcement mechanisms may be necessary to meet these challenges.

Trade of look-alike species: CITES regulations not only apply to the listed species but also to look-alike species and their products. This could affect the trade of non-listed species that resemble CEAS, leading to potential disruptions in markets and supply chains for fisheries and aquaculture products in Southeast Asia.

Collaborative efforts and capacity building: SEAFDEC plays a crucial role in supporting Southeast Asian countries in addressing CITES-related issues. Through data collection, capacity-building initiatives, and regional forums, SEAFDEC can help countries enhance their understanding of CITES requirements and improve their ability to comply with regulations.

Over the years, SEAFDEC has consistently supported the AMSs in addressing trade-related issues, particularly those concerning CITES, while also promoting the AMSs' efforts in collecting data on internationally concerning aquatic species. These species encompass a wide range, including marine turtles, sharks and rays, sea cucumbers, tunas, anguillid eels, among others. SEAFDEC has provided regional forums aimed at promoting discussions on the development of common or coordinated positions based on scientific evidence. These positions are designed to assist the fisheries and CITES authorities of the respective countries in effectively voicing their concerns during CITES CoP meetings.

In addition, SEAFDEC also obtained the technical concerns as expressed by the Member Countries during the SEAFDEC Regional Technical Consultation on Development of the ASEAN SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices, which was organized in 2022. The challenges and concerns were for example: unclassified to species level in fishing logbooks, and difficult in identify species, especially in form of meat, cartilage, skin, and oil

products, no routine data available for Carcharhinidae spp., and difficult to develop "non–detriment findings" (NDFs) while lacking data on resource surveys, exploitation, trade, and export.

Following the 19th Meeting of the Conference of the Parties to CITES (CoP19), which took place in Panama in November 2022, several Commercially Exploited Aquatic Species (CEAS) including 54 species of requiem sharks were listed in the CITES Appendix II of the Convention, while previously the Oceanic whitetip shark (*Carcharhinus longimanus*) and the Silky shark (*Carcharhinus falciformis*) were listed in Appendix II, and came to effect in 2014 and 2017, respectively. As of 25 November 2023, **146 species** of sharks and rays are included in Appendix II (CITES website,2024)

This paper provides current insights into CITES-related meetings and ongoing regional initiatives led by SEAFDEC to enhance the capacities of the AMSs in 2023.

II. UPDATE INFORMATION ON CITES-RELATED MEETINGS

- **32nd Meeting of Animals Committee of CITES relevant to CEAS**

After the COP19, the 32nd Meeting of Animals Committee (AC32) of CITES was held in June 2023, in Geneva, Switzerland. AC32 focused on CITES trade regulations and compliance, capacity building, and species-specific matters related to animals listed in the CITES Appendices, including aquatic species such as sharks and rays, eels, sea cucumbers, seahorses, marine ornamental fishes, among others. *In-session* working groups were established during AC32 to discuss specific topics including captive breeding of stony corals, sharks, nomenclature, and Review of Significant Trade. The AC32 approved the inclusion of species/country combination in stage 2 of Review of Significant Trade (RST)[1], including all mobula ray species in Sri Lanka; great hammerhead sharks in Mexico; scalloped hammerhead sharks in China, Indonesia, Kenya, Mexico, Nicaragua, Oman, Sri Lanka, and Yemen; and oceanic whitetip sharks in Kenya, Oman, Senegal, and Yemen. The AC32 also established five *intersession* working groups to work after the AC32 and report to the next AC33 in July 2024 to discuss relating to seahorses, stony corals, eels, nomenclature, and the role of CITES in reducing the risk of future zoonotic disease emergence associated with international trade.

Furthermore, during AC32, SEAFDEC participated as one of the panelists at the side event organized by FAO titled "Needs and Solutions to Enable Parties to Service CITES Provisions for CoP19 Listed Commercially Exploited Aquatic Species" on 19 June 2023. SEAFDEC shared information on measures implemented by the Southeast Asian countries in the management and conservation of shark resources and fisheries, as well as provided an overview of the current status of shark and ray management and conservation efforts in the region. Additionally, SEAFDEC highlighted regional needs regarding capacity building and financing to address these challenges effectively.

- **77th Meeting of Standing Committee of CITES relevant to CEAS**

The 77th Meeting of CITES Standing Committee (SC77) was convened on 6–10 November 2023, in Geneva, Switzerland. In specific to aquatic species, the SC77 discussed eels, sharks and rays (agenda item 67), where the summary of the discussion is available on the CITES website[2]. In particular to sharks and rays, the SC77 discussed on issue on the possible extent of Illegal, Unregulated, and Unreported (IUU) fishing, and trade may not be in full compliance with CITES of the Oceanic Whitetip Shark (*Carcharhinus longimanus),* which was listed into CITES Appendix II in 2013 and entered into force in 2014. The SC77 discussed on updating the guidelines for the preparation and submission of CITES annual and illegal reports to include explicit guidance on reporting on specimens taken from areas beyond national jurisdiction and report to the SC78.

[1] https://cites.org/eng/imp/sigtradereview
[2] https://cites.org/sites/default/files/documents/E-SC77-Sum-07-R1_0.pdf

Upcoming CITES Events

33rd Meeting of the Animals Committee	12–19 July 2024, Geneva, Switzerland
78th Meeting of Standing Committee	3–8 February 2025, Geneva, Switzerland.
20th CITES CoP	Second half of 2025

- **ASEAN Working Group on the Convention on International Trade in Endangered Species of Wild Fauna and Flora and Wildlife Enforcement (AWG-CITES and WE)**

In addition, SEAFDEC participates in the annual meetings of the ASEAN Working Group on the Convention on International Trade in Endangered Species of Wild Fauna and Flora and Wildlife Enforcement (AWG-CITES and WE), which is the ASEAN working group is mandated to establish and implement measures to improve collaboration, cooperation and information exchange between and among law enforcement agencies and CITES management authorities. SEAFDEC is one of the partners among others, and a channel where SEAFDEC can report the works of CITES-related issues and outcomes of the common positions of CEAS from fisheries points of view for the AWG-CITES and WE consideration.

III. SEAFDEC ONGOING INITIATIVES

SEAFDEC has maintained its commitment to support to the AMSs through the implementation of regional projects aimed at enhancing their capacities. These projects are specifically designed to enhance data collection efforts concerning aquatic species of international concern, including those vulnerable species that may fall under CITES regulations. Additionally, they cover various other areas such as species identification, data collection on catch and landings, stock assessment, socioeconomic assessment, non-detriment findings, aquaculture, and stock enhancement of these species. Currently, ongoing projects are being carried out by the SEAFDEC Secretariat and Departments as follows:

Table 1: List of SEAFDEC Projects and key expected outcomes/deliverables

Project Titles	Duration	Responsible Department/Funding	Main expected outcomes/ deliverables
Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	2020–2024	MFRDMD/JTF	• Stock assessments and management advice for Sharks and Rays in the Southeast Asia region • Enhanced capacity development on taxonomy, new species/record identification, and management of major shark species • confirmation of stock structures for selected common species and CITES-listed species of sharks and rays • development of socio-economic studies in selected sites using multifactor partitioning analysis. • continue to support landing data collections in the selected participating countries.

Project Titles	Duration	Responsible Department/Funding	Main expected outcomes/ deliverables
Development of Stock Assessment Methods and Strengthening of Resources Management Measures for Tropical Anguillid Eel in Southeast Asia	2020–2025	SEC/JAIF	• collection of catch data and biological/ecological information for the estimation of eel stocks • development of mathematical/statistical methods for estimating tropical anguillid eel stocks that could be used for the formulation of effective management measures
Sustainable Utilization of Anguillid Eels in the Southeast Asian Region	2020–2024	IFRDMD/JTF	• standardization of data collection systems in Southeast Asia • mapping the genetic population structure of tropical eels in Southeast Asia based on mtDNA approach.
Assistance for Capacity Development in the Region to Address International Fisheries-related Issues	2020–2024	SEC/JTF	• development of the common positions on the proposed listing of commercially exploited aquatic species (CEAS) to CITES Appendices
Information Collection and Capacity Building to Support FAO Members Implementing Novel Listings of Aquatic Species on CITES Appendix II	Jan–July 2024	SEC/FAO	• updated information on the conservation and management of sharks and rays • country needs of fishery authorities for shark management support

Japanese Trust Fund (JTF)
Japan-ASEAN Integration Fund (JAIF)

According to Table 1, the main expected outcomes/deliverables resulting from regional activities conducted by SEAFDEC can be categorized as follows:

1. Stock Assessment for Fisheries Management
   - Stock assessments and management advice for Sharks and Rays in the Southeast Asia region.
   - Confirmation of stock structures for selected common species and CITES-listed species of sharks and rays.
   - Collection of catch data and biological/ecological information for the estimation of eel stocks.
   - Development of mathematical/statistical methods for estimating tropical anguillid eel stocks that could be used for the formulation of effective management measures.

2. Capacity Development
   - Skill in taxonomy improved, new species/record identification for management of major shark species.
   - Standardization of data collection systems in Southeast Asia.
   - Mapping the genetic population structure of tropical eels in Southeast Asia based on the mtDNA approach.

3. Socio-Economic Studies
   - Development of socio-economic studies in selected sites using multifactor partitioning analysis.

4. Supporting Data Collection
    - Landing data collections in the selected participating countries.
    - Information were updated on the conservation and management of sharks and rays.
    - Country needs of fishery authorities for shark management support.

5. Regional Policy Development
    - Development of common positions on the proposed listing of commercially exploited aquatic species (CEAS) to CITES Appendices.

IV. RECOMMENDATIONS FROM 26FCG/ASSP

During the 26th Meeting of the Fisheries Consultative Group/ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in November 2023, recommendations can be summarized as follows:

- SEAFDEC explore possibilities to support the AMSs in. enhancing their capacity for species identification, especially focusing on parts of commercially exploited aquatic species (CEAS), given the existing expertise gap in this area.
- SEAFDEC to establish a regional platform to facilitate the development of NDF for sharks and rays, recognizing the need for data gathering to assist AMSs in future management efforts.
- AMSs are encouraged to issue a stronger collective statement from Asia and continue close attention to this matter, emphasizing the importance of making decisions based on scientific evidence.
- SEAFDEC to explore existing mechanism such as the ASWGFi and AWG CITES & WE to coordinate fisheries-related common positions to CITES.
- SEAFDEC to continue submitting common positions on CITES through the ASWGFi mechanism and will involve AWG CITES & WE Focal Points in technical consultations to familiarize them with relevant issues.

V. REQUIRED CONSIDERATION BY THE COUNCIL

- To take note of the updated information and insights from CITES-related meetings in 2023 and SEAFDEC ongoing regional initiatives and key concerns and recommendations
- To provide policy directives to SEAFDEC and Member Countries regarding the implementation of regional and national initiatives related to CITES-listed CEAS

Annex 13

GLOBAL BIODIVERSITY AND ENVIRONMENTAL CONSERVATION FRAMEWORKS AND THEIR POTENTIAL IMPLICATIONS FOR THE FISHERIES SECTOR OF THE REGION

I. INTRODUCTION

In fisheries, various forms of international agreements/instruments/ such as the United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Fish Stocks Agreement (UNFSA), and those agreements/conventions/plan of actions, of FAO, with the aims mainly focus on management and restoration fish stocks for the long-term sustainability of marine resources. However, threats such as environmental degradation, pollution, overcapacity (including illegal and destructive fishing), and rising sea temperature are considered significant challenges for marine ecosystems and biodiversity, fisheries, and aquatic ecosystems. These issues threaten the sustainability of fisheries resources and the livelihoods of the millions of people who depend on these resources. Several international policies have been addressed for the protection and conservation of marine ecosystems including the 2030 Agenda for Sustainable Development Goals. Fisheries are focusing on implementing actions to address SDG14, emphasizing the importance of conserving and sustainably using oceans, seas, and marine resources.

This document presents the latest international policies/frameworks and its relevance to the fisheries sector, and the regional activities undertaken by SEAFDEC.

II. DEVELOPMENT INTERNATIONAL FISHERIES-RELATED POLICIES/ FRAMEWORKS

1) Kunming-Montreal Global Biodiversity Framework (2022)

The Kunming-Montreal Global Biodiversity Framework (GBF) is a new global policy framework for biodiversity, encompassing a range of services that it provides for people, including livelihoods, nutrition, and addressing climate change. It was adopted at the 15th Conference of Parties (COP15) to the Convention on Biological Diversity (CBD) on 19 December 2022. The new GBF was built upon the Strategic Plan for Biodiversity 2011–2020, its achievements, gaps, and lessons learned, as well as the experience and achievements of other relevant multilateral environmental agreements. It sets out an ambitious plan to implement broad-based actions to transform societies' relationship with biodiversity by 2030, in alignment with the 2030 Agenda for Sustainable Development Goals. The framework aims to ensure that, by 2050, the shared vision of living in harmony with nature is realized. The vision of the GBF is a world where "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

The GBF comprises four (4) goals for 2050 and twenty-three (23) action-oriented global targets towards achievement in 2030. The final text is available at https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222.

2) Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Treaty) (2023)

Since 2018, a series of meetings have been organized by the United Nations for the development of the new legally binding instrument, the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, often referred to as "BBNJ Agreement.[1]" This instrument is designed to promote the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. The Agreement was finally adopted on 19 June 2023 and opened for signature from 20 September 2023 until 20 September 2025[2]. The new Agreement will support the achievement of global goals *i.e.* 2030 SDGs and GBF for Biodiversity, to protect 30% of terrestrial, inland water, and coastal and marine areas by 2030 (UN,

[1] https://documents-dds-ny.un.org/doc/UNDOC/LTD/N23/177/28/PDF/N2317728.pdf?OpenElement
[2] https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXI-10&chapter=21&clang=_en

2023[3]). It addresses the conservation and sustainable use of marine BBNJ; marine genetic resources, benefit-sharing; area-based management tools such as marine protected areas; environment impact assessments; capacity building; and the transfer of marine technology, in high seas. The BBNJ Agreement would safeguard marine species including fish and enhance biodiversity in the high seas by establishing MPAs on the high seas. Under this Agreement, the collaboration among regional seas organizations and regional fisheries management organizations would be strengthened.

For Southeast Asian countries are under consultation with relevant agencies to consider the advantages and disadvantages of ratifying the BBNJ Agreement.

3) Other effective area-based conservation measures (OECM)

Other effective area-based conservation measures (OECM), which is the conservation and management approach, is defined as: *"a geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socioeconomic, and other locally relevant values"* as agreed at the 14th Conference of Parties of the Convention on Biological Diversity (CBD) in 2018. The recent Global Biodiversity Framework (GBF), set out target 3 to increase protected areas and OECMs to at least 30 percent of land and ocean by 2030 to achieve positive outcomes for biodiversity[4].

FAO produced "A handbook for identifying, evaluating and reporting other effective area-based conservation measures in marine fisheries[5]", which provides practical guidance on issues related to Fisheries OECMs, describes key characteristics of Fisheries OECMs. FAO defines OECM in the fisheries context, as "established, spatially defined management and/or conservation measures other than protected areas, which produce positive, long-term, and in situ biodiversity outcomes, in addition to the intended fishery outcomes" The Handbook outlines a systematic process for identifying, evaluating, and reporting OECMs in marine fisheries (FAO, 2022).

The benefits of OECMs could contribute enhancement of fisheries resources and conservation the habitats and biodiversity, as well as to the human well-being in fisheries at the site level, in a country, or in a region. The Fisheries OECMs are important and would also contribute to meeting other goals not just only the CBD, but also in achieving SDG 14 (Life Below Water).

To support the FAO members and partners, FAO organized several workshops to introduce the OECM concept and enhance the capacity for the fisheries sector to contribute to international commitments and global targets. Recently, FAO organized the "**Workshop on other effective area-based conservation measures in areas under the jurisdiction of Regional Fisheries Bodies"** in January 2024. The Workshops discussed the role of Regional Fisheries Bodies in the Kunming-Montreal Global Biodiversity Framework with a focus on achieving Target 3. Target 3 aims to conserve at least 30% of all ecosystems in protected areas or OECMs by 2030 and explore how regional fisheries bodies can support their respective Member Countries in the identification, evaluation, and reporting of OECMs in waters under national jurisdiction.

4) A new international legally binding instrument on plastic pollution, including in the marine environment (to be concluded in 2024)

Another new proposed global treaty under the UN Environment Assembly (UNEA) on "International legally binding instrument on plastic pollution, including in the marine environment," which is an ongoing process of negotiations since 2022, will be concluded in December 2024. This new treaty aims to call for the actions by stakeholders towards the ending of plastic pollution in marine and other environments and to avoid detriment from plastic pollution to ecosystems and the human activities dependent on them. The Intergovernmental Negotiating Committee (INC) has been established and tasked to develop the new instrument since 2022. The INC sessions were convened already three sessions during 2022−2023, while the remaining 4th and 5th sessions have been scheduled to be held on 23−29 April 2024, in Canada and on

[3] https://www.un.org/sustainabledevelopment/wp-content/uploads/2023/08/Marine-Biodiversity_Explainer.pdf
[4] https://www.cbd.int/gbf/targets/3/
[5] https://doi.org/10.4060/cc3307en

25 November−1 December 2024 in the Republic of Korea, respectively. For the content of the current zero draft (as of INC−3/2023[6]), the abandoned, lost or otherwise discarded fishing gear (ALDFG) is included, stating the effective management measures of ALDFG towards safe disposal and shall be reflected in the national plan. Thus, it was encouraged that fisheries experts of states to explore the possibility of taking part in the remaining session of the negotiations, to ensure that practical and reasonable provisions on fishing gear.

Source: https://www.genevaenvironmentnetwork.org/resources/updates/international-cooperation-on-plastic-pollution/

Several other international agreements also addressed plastic pollution from fishing operations, including the UN Convention on the Law of the Sea (UNCLOS), which states "prevent, reduce and control pollution of the marine environment by dumping", the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), specifically to the Annex V, ban the disposal into the sea of all forms of plastics.

In 2018, the Voluntary Guidelines on Marking of Fishing Gear[7] was endorsed by the FAO members at the 33rd Session of COFI (FAO, 2019). It is a tool to contribute to sustainable fisheries, to improve the state of the marine environment, and to enhance safety at sea by combatting, minimizing and eliminating abandoned, lost or otherwise discarded fishing gear (ALDFG) and facilitating the identification and recovery of such gear. The Guidelines address the purpose and principles, the scope of application and the implementation of a gear marking system and its associated components, including reporting, recovery, and disposal of ALDFG or unwanted fishing gear and commercial traceability of fishing gear.

III. HOW THE SOUTHEAST ASIAN REGION RESPONDS TO THE BIODIVERSITY AND ENVIRONMENTAL CONSERVATION FRAMEWORKS AND RELEVANCE TO THE FISHERIES SECTOR

At the regional level, the ASEAN Member States have been in progress in proactive actions in response to those newly adopted international policies into regional and national actions, contributing to SDGs, and GBF, among others. For fisheries specific, a regional policy framework, the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030), set out priorities actions in addressing the management approach considering rehabilitation of the critical habitats and environment concerns that also in line with the international agreements. The adopted GBF contributes to the achievement of the 2030 Agenda for Sustainable Development, and RES&POA-2030 shares the same goal. The 23 targets of GBF are relevant to regional efforts aimed at sustainable fisheries, with due consideration given to the social (gender) aspect, poverty alleviation, and food security.

With regard to plastic pollution, for the Southeast Asian region, senior officials of the ASEAN adopted regional policy frameworks, including the *Bangkok Declaration on Combating Marine Debris in the ASEAN*

[6] https://wedocs.unep.org/bitstream/handle/20.500.11822/43239/ZERODRAFT.pdf
[7] https://www.fao.org/3/ca3546t/ca3546t.pdf

Region (2019), *ASEAN Framework of Action on Marine Debris* (2019), *Strategic Plan of Action for ASEAN Cooperation on Fisheries* (SPA-Fisheries) 2021–2025 (2019), and *Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030* (2020).

In November 2023, the 26th Meeting of the Fisheries Consultative Group/ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP), the Meeting provided the recommendations to address the issues as follows:

- **BBNJ Agreement**: "Although the specific management measures to be taken through the BBNJ Treaty are unclear at this stage, the management measures should contribute to the stable supply of food and the development of local economies in accordance with the objectives of the tools as stipulated in Article of the BBNJ Treaty. the RFMOs, national fisheries authorities, and intergovernmental organizations to cooperate while drawing on their knowledge and experience in fishery resource management."
- **New international legally binding instrument on plastic pollution, including in the marine environment:** Only a limited number of participants from the fisheries sector were present at the Intergovernmental Negotiating Committee (INC) in 2022. The concern was expressed on the establishment of uniform and impractical regulations for fishing gear without considering the reality and diversity of fisheries. To ensure practical and reasonable provision on fishing gear, the AMSs to consider involving experts from the fisheries sector in the negotiation meetings.
- SEAFDEC was requested to play a crucial role in participating in the events to assist the AMSs in obtaining updated information and understanding on these provisions; and support integration in regional policies and later on in national policies.

IV. SEAFDEC ACTIVITIES IN SUPPORT OF THE BIODIVERSITY AND ENVIRONMENTAL CONSERVATION FRAMEWORKS FOR SUSTAINABILITY OF FISHERIES RESOURCES

The possible areas of works of SEAFDEC in response to the global biological policies:

i. Strengthen Regional Collaboration: foster stronger partnerships with regional fisheries organizations, Member Countries, and stakeholders to enhance cooperation in sustainable fisheries management. Collaborate on research initiatives, data sharing, and capacity-building programs focused on improving the health and resilience of marine ecosystems.

ii. Sustainable Fisheries Programs: there is a need to develop and implement targeted programs that promote sustainable fisheries practices within SEAFDEC Member Countries. These programs consider align with the GBF by emphasizing responsible fisheries management, bycatch reduction, and the protection of critical marine habitats.

iii. Data Collection and Monitoring: promotional works of SEAFDEC regarding the enhancement of fisheries data collection and monitoring capabilities of the Member Countries to better assess the impact of fisheries on marine and coastal biodiversity should be further strengthened. Implementing and promoting the use of innovative technologies and methodologies for sustainable fisheries data collection, analysis, and reporting should also be accommodated in the current or future programs/activities.

iv. Policy Advocacy: efforts to influence regional and national fisheries policies in line with biodiversity conservation goals are potential areas of future work. Work with Member Countries to develop and update fisheries policies and regulations that prioritize sustainability and the protection of marine biodiversity.

v. Capacity Building: expand the capacity-building initiatives of SEAFDEC in the future to include training and education programs specifically tailored to sustainable fisheries management and biodiversity conservation. Collaborate with partners to provide technical assistance and knowledge-sharing platforms for fisheries professionals in the region.

As stated above, SEAFDEC has been undertaking several ongoing programs and activities in alignment with the biodiversity and environmental conservation frameworks in achieving the sustainable use of fisheries resources and enhancing marine biodiversity, as in Table 1.

Table 1: SEAFDEC ongoing projects and new projects in addressing the biodiversity and environmental conservation frameworks for the sustainability of fisheries resources

International Policy Framework	Subjects	SEAFDEC Projects
• GBF • OECM	• Integration of habitats and fisheries management • Ecosystem Approach to Fisheries Management (EAFM) • SSF, indigenous people and communities	**Ongoing projects** • Sustainable Utilization of Fisheries Resources and Resources Enhancement in Southeast Asia • Management Scheme for Inland Fisheries in the Southeast Asian Region • Small-scale Fisheries Management for Better Livelihood and Fisheries Resources • Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities (BOBLME Phase 2) **New Project** • Promoting the Blue Economy and Strengthening Fisheries Governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries (GoTFish Project)
• GBF	• Climate change resilience	**Ongoing project** • USAID Southeast Asia Fisheries Partnership Activity **New project** • Blue Horizon: Ocean Relief through Seaweed Aquaculture
• GBF • Upcoming legally binding instrument on Plastic Pollution	• Plastic pollution, including the abandoned, lost or otherwise discarded fishing gear (ALDFG)	**Ongoing projects** • Responsible Fishing Technology and Practice • Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities (BOBLME Phase 2) • USAID Southeast Asia Fisheries Partnership Activity **New project** • Regional Collaborative Research and Capacity Building for Monitoring and Reduction of the Marine Debris from fisheries in Southeast Asia

In addition, SEAFDEC also provided the knowledge and took part in several international events to address global biodiversity policies that include:

- SEAFDEC provided the knowledge of the BBNJ Agreement during the **"**Regional Training Course on the United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982) in Fisheries Perspective" on 6–9 November 2023 in Bangkok, Thailand.
- Support and enhance the Member Countries' relevant knowledge, build capacity, and transfer practical experiences for data collection and analysis of marine debris, microplastics, and ALDFG as well as promotion of the VG on Marking fishing gear. In addition, TD organized Regional Technical Meeting on Responsible Fishing: The Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG) and Marking of Fishing Gear" was organized by TD on 15–17 November 2023
- Enhancing the networks and collaboration with international partners through participation in international events to obtain knowledge of the new biodiversity policies for example:
  - The 3rd Meetings of the Sustainable Ocean Initiative (SOI) Global Dialogues, hosted by the Convention on Biological Diversity (CBD) on 25–28 October 2022
  - The virtual Intersessional Workshop of the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies on 1–3 August 2023
  - The Sustainable Ocean Initiative (SOI) Regional Capacity Building Workshop for East, South and South-East Asia, hosted by CBD on 5–8 September 2023
  - The FAO Workshop on other effective area-based conservation measures in areas under the jurisdiction of Regional Fisheries Bodies" on 22–24 January 2024
  - The RegLitter Inception Meeting and GloLitter Asia Regional Task Force Workshop on 4–8 March 2024 in Viet Nam

Upcoming events

- Webinar on fisheries OECM, to raise awareness of national fisheries officers who work in inland and marine capture fisheries and identify the capacity-building needs.
- Regional Workshop on Microplastic Pollution and Implications for Seafood Safety in ASEAN (tentatively in June 2024).
- SEAFDEC will participate in the 4th Meeting of SOI Global Dialogue to be organized by CBD on 11–14 June 2024.

V. REQUIRED CONSIDERATION BY THE COUNCIL

- Take note of the new and upcoming global biodiversity and environmental frameworks, and SEAFDEC's initiatives aimed at supporting biodiversity and environmental conservation frameworks for ensuring the sustainability of fisheries resources
- Provide policy directives regarding areas of capacity building/support needs by the Member Countries to enhance understanding and implementation in support to the fisheries context

Annex 14

DEVELOPMENT OF THE REGIONAL GUIDELINES ON GOOD MANUFACTURING AND HANDLING PRACTICES (GMP & GHP) FOR READY-TO-EAT RAW FISH AND FISHERY PRODUCTS

I. INTRODUCTION

In today's fast-moving world including the ASEAN region, consumers increasingly demand for quick and easy Ready-to-Cook (RTC) foods, or even Ready-to-Eat (RTE) meals. Many consumers are drawn to consuming seafood, because of its high nutritional value, along with its versatility in preparation. Quick and easy-to-prepare RTE seafood dishes include sushi and sashimi, shucked shellfish, and RTC seafood in sauce. However, the minimally processed or raw nature of these foods puts them at high microbiological risk. To mitigate the high microbiological risk while retaining the high nutritional content, it is essential that these foods are prepared under Good Manufacturing and Handling Practices (GMP & GHP) and with reputable technologies such as High-Pressure Processing (HPP) to improve the value, safety, and quality of seafood products. Hence, the project adopted one of a two-pronged approach to enhance the safety and competitiveness of seafood products. This involved developing guidelines for handling and manufacturing raw RTE seafood products, as well as introducing HPP as a novel non-thermal technology.

II. STATUS OF THE DEVELOPMENT

With the goal to strengthen regional capabilities in the safe handling of high-risk seafood, the Regional Guideline on Good Manufacturing and Handling Practices (GMP & GHP) For Ready-To-Eat Raw Fish And Fishery Products is being developed by SEAFDEC/MFRD. This is part of the project, entitled "Enhancing Food Safety and Competitiveness of Seafood Products" funded by the Japanese Trust Fund. This guideline will serve as a guide in the development of national standards for GMP & GHP for Ready-to-Eat raw fish and fishery products. The main content of the guideline comprises of process flow for Ready-to-Eat raw fish and fishery products preparation, good manufacturing and handling practices, and verifications. This guideline applies to the handling, processing, storage, transportation, and retail of ready-to-eat raw fish and fishery products, that are intended for human consumption. By following these guidelines which are aligned to international standards, local seafood processers adopt best practices for quality assurance. The draft guideline is in **Appendix 1**.

SEAFDEC/MFRD then presented the draft Regional Guidelines on Good Manufacturing and Handling Practices (GMP & GHP) for Ready-To-Eat Raw Fish and Fishery Products during the 26th Meeting of the Fisheries Consultative Group/ASEAN-SEAFDEC Strategic Partnership (26FCG/ASSP), which was organized on 23–24 November 2023, in Bali, Indonesia. While noting on the status and its timelines of the development of the Regional Guidelines, the Meeting was suggested that the Regional Guidelines should be applicable not only to raw marine fish and fishery products but also to raw freshwater fish and fishery products. MFRD's assessment is that the regional guidelines focus on the downstream processes from post-harvest and are applicable for all fish and fishery products in general, including both inland and marine fish and fisheries. One of the key emphases of the draft guideline is for the products to be of consistent food safety and quality requirements. In addition, it was also noted that the Regional Guidelines should serve as reference material, especially for stakeholders in the fish processing industry.

At present, SEAFDEC/MFRD worked with a local consultant to write the recommendations, with inputs from the Member Countries incorporated and have considered the suggestions from 26FCG/ASSP. The guideline is anticipated to be finalized in the third quarter of 2024.

The completed guideline will be submitted to the SEAFDEC Council for approval in 2025 and subsequently for further consideration to be endorsed under the ASEAN Mechanism, respectively. The timeline for developing the Regional Guidelines is shown in **Table 1**.

Table 1 Tentative timeline for development of the Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products

October 2020	Virtual Inception Meeting where MCs discussed the scope and implementation plan of the project activities.
July 2021 – December 2021	Development of GMP & GHP training materials where MFRD collaborated with a local consultant to develop training materials for RTE fish and fishery products.
April 2022	Virtual Training Workshop on GMP & GHP held by MFRD. All MCs attended the training workshop. It was conducted by a local consultant technical expert to prepare the MCs for the pilot trial.
June 2022–May 2023	1-year pilot trial conducted by the various MCs and survey of the industry practices on GMP & GHP.
June 2023	Mid-term review meeting in Singapore on the results of the findings and experiences on implementing GMP & GHP for fish and fishery products in the Member Countries. Draft Regional Guidelines was developed and deliberated with MCs to improve the draft Regional Guidelines.
November 2023	Present the draft Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products to the Member Countries through the FCG/ASSP to update on the project status and plans.
November 2023–March 2024	Review and compile the necessary inputs from the Member Countries to the draft Regional Guidelines.
6–9 May 2024	Submission of first draft Guidelines to the 56th Meeting of the SEAFDEC Council for consideration and suggestion.
September 2024	End-of-Project Meeting and finalization of the draft Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products.
November 2024	Report the progress on the development and submission of the final draft Regional Guidelines at the 47PCM and 27FCG/ASSP.
April 2025	Submission of the final draft Regional Guidelines to the 57th Meeting of the SEAFDEC Council for approval and seek approval for further submission to the ASEAN mechanism.

III. REQUIRED CONSIDERATION BY THE COUNCIL

- Take note of the status of development and plan to finalize the draft Regional Guidelines on Good Manufacturing and Handling Practices (GMP&GHP) for Ready-to-Eat Raw Fish and Fishery Products

REGIONAL GUIDELINES ON GOOD MANUFACTURING AND HANDLING PRACTICES (GMP & GHP) FOR READY-TO-EAT RAW FISH & FISHERY PRODUCTS

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Section 1. General Introduction

1.1 Purpose

Track II of the new JTFVI Phase II Project on "Enhancing Food Safety and Competitiveness of Seafood Products", focuses specifically on ready-to-eat raw fish and fishery products, which are minimally processed or raw nature foods which are high microbiological risk products. The importance of good manufacturing and handling practices for seafood due to its perishable nature and susceptibility to spoiling because of poor temperature control along the supply chain could be accentuated. The microbiological status of ready-to-eat raw fish and fishery products such as…reflects the microbiology of materials used for their preparation. The detection of *Vibrio spp*. is indeed related to the fish and shellfish products used (Giuffrida and Panebianco, 2008), while *B. cereus* has been reported in plant foods (especially rice) (Eglezos et al., 2010). *Salmonella spp*. and *L. monocytogenes* can occur in vegetables and dairy products (cheese), while the finding of *S. aureus* is evidence of human contact during the preparation of food (Nogara et al., 2004).

Most fish sold at the general markets and fishery ports are not intended for raw consumption. Depending on the quality of the waters in which they were bred in, harvested from, or transported in, fish could carry a number of parasites or naturally occurring bacteria. Retail food establishments should consider the following when purchasing fish intended for raw consumption.

The objective of this project is to strengthen regional capabilities in handling high-risk seafood products, such as ready-to-eat raw fish and fishery products, ensuring these products are consistently produced and controlled according to quality and safety standards.

1.2 Scope

This regional guideline applies to the handling, processing, storage, transportation and retail of ready-to-eat raw fish and fishery products, that are intended for human consumption. By following these guidelines which are aligned to international standards, local seafood processers adopt best practices for quality assurance.

1.3 *General Definition

Biotoxins Poisonous substances naturally present in fish and fishery products or accumulated by the animals feeding on toxin-producing algae or in water containing toxins produced by such organisms.

Chilling The process of cooling fish and shellfish to a temperature approaching that of melting ice, with internal core temperature to reach below 4 ºC.

Cleaning The removal of soil, food residues, dirt, grease or other objectionable matter.

Contaminant Any biological or chemical agent, foreign matter or other substances not intentionally added to food that may compromise food safety or suitability.

Contamination The introduction or occurrence of a contaminant in fish, shellfish and their products.

Control measure Any action and activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Corrective action Any action to be taken when the results of monitoring at the CCP indicate a loss of control.

Critical control point (CCP) A step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Critical limit A criterion that separates acceptability from unacceptability.

Disinfection The reduction by means of chemical agents and/or physical methods in the number of micro-organisms in the environment to a level that does not compromise food safety or suitability.

Facility Any premises where fish and fishery products are prepared, processed, chilled, frozen, packaged or stored.

Fish Any of the cold-blooded (ectothermic) aquatic vertebrates.

Good hygiene practices (GHP) cover the system/ measures for maintaining hygiene and sanitation, which includes personal hygiene and employee health conditions, maintenance of plant and equipment hygiene including food contact surfaces, pest control, waste disposal, water quality, toilet and hand washing facilities to prevent cross-contamination.

Good manufacturing practices (GMP) include manufacture and process controls which covers supplier control, specifications, calibration equipment, traceability and recall, equipment designs where conditions for food safety can be achieved, maintained and monitored, lighting and ventilation systems, storage conditions and control of operations.

Hazard A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.

Hazard analysis The process of collecting and evaluating information on hazards and conditions leading to their presence in order to decide which are significant for food safety and, therefore, should be addressed in the HACCP plan.

Hazard Analysis and Critical Control Point (HACCP) A system that identifies, evaluates and controls hazards that are significant for food safety.

Monitor The act of conducting a planned sequence of observations or measurements of control parameters to assess whether a CCP is under control.

Prerequisite programme/ control A programme that is required prior to the application of the HACCP system to ensure that a fish and shellfish processing facility is operating according to appropriate food safety legislation.

Raw materials Fresh and frozen fish, shellfish and/or their parts that may be utilized to produce fish and shellfish products intended for human consumption.

Ready-to-eat food (RTE) is food intended by the producer or the manufacturer for direct human consumption without the need for cooking or other processing effective to eliminate or reduce to an acceptable level micro-organisms of concern (Regulation (EC) No. 2073/2005)

Shelf-life The period during which the product maintains its microbiological and chemical safety and sensory qualities at a specific storage temperature. It is based on identified hazards for the product, heat or other preservation treatments, packaging method and other hurdles or inhibiting factors that may be used.

Validation Obtaining evidence that the elements of the HACCP plan are effective.

Verification The application of methods, procedures, tests and other evaluations, in addition to monitoring to determine compliance with the HACCP plan.

Whole fish (or round fish) Fish as captured, ungutted.

1.4 Ready-to-Eat (Fish & Fishery) Products

Ready-to-eat fish and fishery products in the ASEAN region have gained significant popularity due to their convenience, diverse flavours, and cultural significance. These products cater to the busy lifestyles of consumers who seek quick and convenient meal solutions without compromising on taste and nutrition.

Here are some examples of ready-to-eat fish and fishery products in the region:

Sushi and Sashimi: Sushi and sashimi are traditional Japanese delicacies that have become internationally renowned. Ready-to-eat sushi and sashimi packs offer a variety of fresh fish, such as tuna, salmon, and mackerel, served with rice or as raw fish slices.

Raw Fish Salad (Yam Pla): This traditional Thai dish features raw fish, typically white fish or seafood like shrimp or squid, marinated in lime juice, fish sauce, chili, and other seasonings.

Ceviche: Ceviche is a popular raw fish dish found in several ASEAN countries, including the Philippines, Indonesia, and Vietnam. It consists of raw fish or seafood marinated in citrus juice, such as lime or calamansi, which chemically "cooks" the fish.

Fish Tartare: Fish tartare is a raw fish preparation finely chopped or minced and mixed with various seasonings, and is typically served as an appetizer or part of a seafood platter, accompanied by bread or crackers.

Kinilaw: Kinilaw is a traditional Filipino dish that showcases raw fish or seafood marinated in vinegar or citrus juice, such as calamansi or kalamansi.

Indonesian Rujak: Rujak is a traditional Indonesian fruit salad that occasionally features thinly slices or finely chopped raw fish or seafood.

Section 2. Process Flow for ready-to-eat raw fish and fishery products Preparation

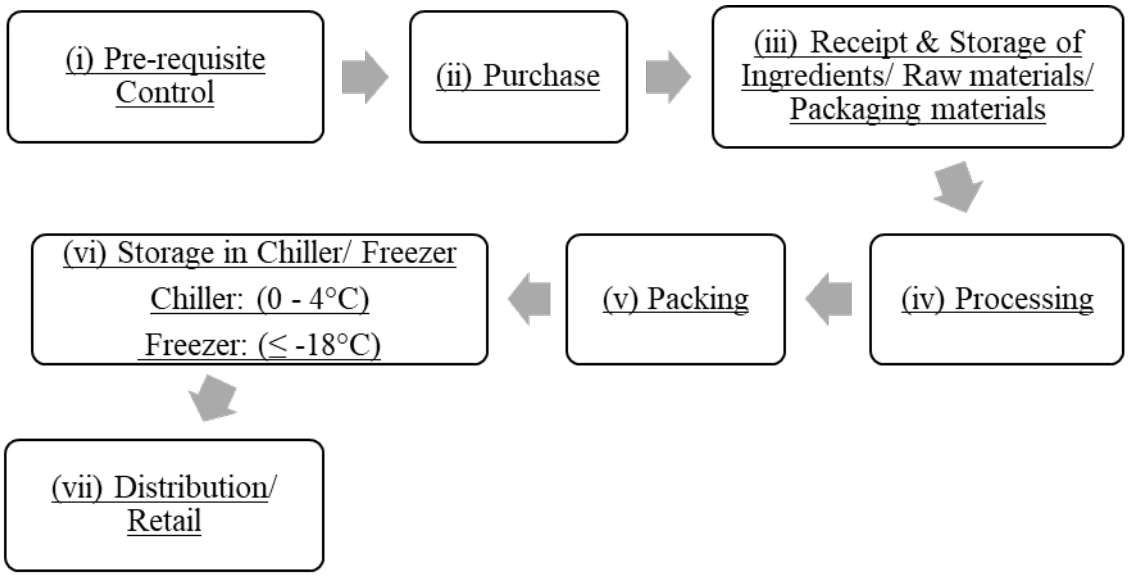
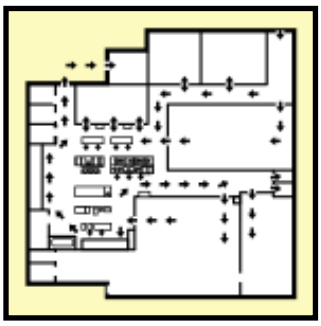


Figure 1: Flow Diagram of ready-to-eat raw fish and fishery products

Section 3. Good Manufacturing & Handling Practices

(i) Pre-Requisite Controls

a. Good personal hygiene



b. Proper facility

c. Choose suppliers and develop supplier specifications

d. Proper cleaning and sanitation

e. Appropriate equipment maintenance

f. Training

Figure 2. Examples of Pre-Requisite Controls

(a) Good Personal Hygiene

The potential effects of harvesting and handling of products, on-board vessel handling or in-plant production activities on the safety and suitability of fish, shellfish and their products should be always considered. This includes all points where contamination may exist and taking specific measures to ensure the production of a safe and wholesome product. The type of control and supervision needed will depend on the size of the operation and the nature of its activities. Schedules should be implemented to:

- protect the fish, shellfish and their products from contamination;
- dispose of any rejected material in a hygienic manner,
- monitor personal hygiene and health standards.

Personal Hygiene

i. Production operation workers should wear full personal protective clothing, always maintain cleanliness of their gloves, and wash their hands regularly when handling food. This is to prevent contamination of food by foreign matter such as the hair, saliva or mucus of production operation workers. It also maintains food safety and hygiene of food.
ii. Production operation workers should always keep their nails clean and well-trimmed.
iii. All accessories such as watches and rings should be removed during food preparation.
iv. Personal protective clothing such as face masks, hair nets, aprons, gloves and boots should be worn during the preparation and serving of food.
v. Personal protective clothing should be washed or replaced when dirty to prevent contamination of food.
vi. All personal protective clothing worn during food preparation should be removed when leaving the food preparation area.

vii. Production operation workers should avoid direct contact with ready-to-eat raw fish and fishery products without gloves on. Clean chopsticks or tongs can be used instead.
viii. Hands should be frequently washed with soap and water and sanitised, especially before food preparation and after going to the toilet, handling raw food and coming into contact with non-food items and surfaces.
ix. Production operation workers should not smoke, spit, drink, eat or touch their hair, body and clothing when preparing or serving food.
x. Disposable gloves (such as vinyl, nitrile, polyvinyl, chloroprene, or polyethylene gloves) or single-use gloves should be used for one continuous task only. Change of gloves should be done regularly to prevent cross-contamination between different types of food or surfaces.
xi. Gloves should be removed and thrown away before production operation workers go to the toilet, smoke, eat, drink or touch their hair, scalp or body.
xii. Gloves cannot be reused once removed.

Health Status, Illness & Injuries

i. Personnel known or suspected to be ill or carrying a disease likely to be transmitted through food should not enter any food handling area if there is a likelihood of them contaminating food. Any person so affected should immediately report illness or symptoms of illness to the management. It may be appropriate for personnel to be excluded for a specific time after symptoms resolve or, for some illnesses, to get medical clearance before returning to work.
ii. Personnel with cuts and wounds should, where necessary, be assigned to work in areas where they will have no direct contact with food. Where personnel are permitted to continue working, cuts and wounds should be covered by suitable waterproof plasters and, where appropriate, gloves. Appropriate measures should be applied to ensure plasters do not become a source of contamination (*e.g.* plasters of contrasting colour compared to the food and/or detectable using a metal detector or X-ray detector).
iii. Production operation workers should not handle food when sick/suffering from vomiting, diarrhoea or fever or when they have open wounds on their fingers and hands.

(b) Proper Facility

i. The facility should include a product flow-through pattern that is designed to prevent potential sources of contamination, minimize process delays (which could result in further reduction in essential quality), and prevent cross-contamination of finished product from raw materials. Therefore, the facility should be designed to facilitate rapid processing and subsequent storage. [include a sample floor plan – "I", "L", "U"]
ii. I-shaped product flow and L-shaped product flow, also known as through flow, provides larger sorting and storage areas for both shipping and receiving docks as well as allowing for isolated monitoring of each function.
iii. A U-shaped product flow is the most common type of layout, offers shared utilization of dock resources such as personnel and material handling equipment. This layout also minimizes product handling.

(a) I-shaped flow (b) L-shaped flow (c) U-shaped flow

iv. The design and construction of a facility should take into consideration the ease of cleaning and disinfection. The surfaces of walls, partitions and floors should be made of impervious, nontoxic materials. All surfaces with which fish, shellfish and their products might come into contact should be of corrosion-resistant, impervious material that is light-coloured, smooth and easily cleanable.
v. Adequate facilities should be provided for the handling and washing of products and should have an adequate supply of cold potable water for this purpose.
vi. Monitor the Pest Control Programme

(c) Choose suppliers and develop supplier specifications

i. Consistent with food safety and quality requirements, ingredients should be purchased from known or approved sources under the control of competent health authorities.

ii. Retail operators should develop and use written purchase specifications designed to ensure food safety and desired quality levels.

iii. Verification of supplier's programme or supplier's quality audit should be established to control quality of supplies of raw fish and fishery.

(d) Proper Cleaning & Sanitation

i. Cloths with prepared disinfectant or bleach solution should be soaked and used to wipe all frequently touched areas.

ii. A steady wiping motion should be applied when cleaning either floors or horizontal surfaces, to prevent the creation of aerosols or splashing.

iii. An appropriate contact time, temperature should be adopted for complete penetration of the disinfectant/ sanitiser into the filth (according to manufacturer's instructions).

iv. Cleaning tools should be colour-coded or labelled to enable users to differentiate the tools used for the different areas, to prevent cross-contamination.

v. All accessible surfaces should be cleaned.

vi. Equipment used should be easily dissembled for cleaning and maintenance.

vii. Cleaning tools should be maintained and stored in clean and hygienic conditions.

viii. The effectiveness and suitability of different cleaning methods/ chemicals should be critically assessed and verified.

ix. Monitor cleaning and disinfecting programmes.

x. Monitor the quality and safety of water and ice supplies.

(e) Appropriate Equipment Calibration and Preventive Maintenance

i. Where appropriate, equipment should be cleaned and stored in a place to protect it from contamination.

ii. Where appropriate, equipment (*e.g.* thermometers) should be calibrated regularly.

iii. The food-contact surfaces of the equipment must be made of waterproof, non-toxic materials and should not be corroded or damaged in any way.

iv. All equipment and food contact surfaces used in the packing of ready-to-eat raw fish and fishery products must be clean and well maintained.

v. The condition of the equipment and utensils should be such that it minimizes the build-up of residues and prevents them becoming a source of contamination.

vi. The design and construction equipment and utensils should take into consideration the ease of cleaning and disinfection.

vii. Equipment should be durable and movable and/or capable of being disassembled to allow for maintenance, cleaning, disinfection and monitoring.

viii. Equipment, containers and utensils coming into contact with fish, shellfish and their products should be designed to provide for adequate drainage and constructed to ensure that they can be adequately cleaned, disinfected and maintained to avoid contamination.

ix. Equipment and utensils should be designed and constructed to minimize sharp inside corners and projections and tiny crevices or gaps in order to avoid dirt traps. The food contact surfaces must be smooth.

x. Tools and utensils ought to be cleaned, sanitised and stored away (whenever appropriate).

(f) Training

i. Fish or shellfish hygiene training is of fundamental importance. All personnel should be aware of their role and responsibility in protecting fish or shellfish from contamination and deterioration.

ii. Handlers should have the necessary knowledge and skill to enable them to handle fish or shellfish hygienically.

iii. Those who handle strong cleaning chemicals or other potentially hazardous chemicals should be instructed in safe handling techniques.

Each fish and shellfish facility should ensure that individuals have received adequate and appropriate periodic training in the design and proper application of a robust food safety system and process control.

(g) Quality of ice/water

i. Water, as well as ice made from water, should be fit for its intended purpose based on a risk-based approach.

ii. Control of ice/ water quality to minimize the presence of many potential hazards (*e.g.* biological, chemical, physical).

iii. Water and ice should be stored and handled in a manner that does not result in their becoming contaminated.

iv. If water is used as the thawing medium, then it should be of potable quality.

v. If re-circulated water is used, then care must be taken to avoid the build-up of microorganisms.

vi. An adequate supply of clean seawater or potable water should be available for the washing of product during and after skinning.

vii. Where water is used to cool crustaceans for immediate shucking, it should be potable water or clean seawater. The same water should not be used for cooling more than one batch.

(ii) Purchase

(a) Purchase from suppliers who can show the quality of the fish, *e.g*. by providing a health certificate (or HACCP certificate/equivalent) by the relevant authority of the country of origin. Ready-to-eat raw fish and fishery products must be obtained from regulated and reputable sources with temperature monitoring records available to verify the freshness of fish.

(b) Fish to be consumed raw should be packed in a clean and hygienic environment to avoid cross-contamination.

(c) Transportation of raw fish should be chilled between 0 and 4 °C.

(d) Upon receipt, check the temperature of the fish using a temperature gauge/temperature gun and that the fish remains fresh, wholesome and of good quality. Indications to look out for in fish may include firm, shiny flesh with no discolouration, clear eyes, bright red gills free from slime and lack of fishy odour.

In short, all ingredients, raw materials and packaging material should be obtained from licensed and approved sources. Relevant licenses and certificates, product specifications and certificates of analysis should be made readily available.

(iii) Receipt & Storage of Ingredients/ Raw materials/ Packaging materials

(a) Dry Ingredients

i. Typical ingredients used for the manufacturing of include salt, sugar, vinegar, acidulants and other permitted additives. These ingredients are usually stored at room temperature. The ingredients are added during the seasoning step to enhance the texture, taste and flavour of the finished products.

ii. Storage of ingredients in a clean and dry environment is necessary to prevent pest infestation (*e.g.* rats, cockroaches) and microbial growth (*e.g.* mould) which thrive in dirty and damp environments.

iii. The packaging of these ingredients shall be intact, undamaged and properly labelled. Ingredients should be stored above the floor in a clean and dry room with proper housekeeping away from areas with any contaminants.

(b) Fresh/ Chilled/ Frozen Raw Materials

i. The raw materials used will include chilled or frozen fish that may or may not be degutted. Frozen fish are usually filleted.

ii. Raw fish received in the whole or filleted form should be appropriately labelled and packaged. Raw fish and fishery products should not be subjected to temperature abuse prior to and after receipt.

iii. Good cold storage practices after receipt of raw fish, especially sashimi, must be maintained at a required temperature zone.

iv. Cross-contamination between raw fish and fishery products and other raw or cooked ingredients must be avoided during cold storage.

v. Ready-to-eat raw fish and fishery products are high-risk food prone to attack by foodborne pathogens. If stored under inappropriate cold storage condition, pathogens can easily grow to an unsafe limit. These pathogens can cause food poisoning when consumed due to the lack of heat treatment before consumption.

vi. The fish should also be subjected to a process to control any parasites *e.g.* candling, trimming belly flaps and/ or physically removing the parasite cysts. Regularly monitor fish for any signs of parasite infestation, such as unusual behaviour, visible parasites, or physical symptoms. Early detection allows for timely intervention and treatment to prevent the spread of parasites and minimize their impact on fish health.

vii. Whole and filleted fish shall be properly labelled with the weight of fish, country of origin, species of fish, date of harvest etc. Whole fish shall be packaged in a Styrofoam box and iced. Filleted fish should be vacuum packed and packaged in a Styrofoam box and iced.

viii. In order to maintain optimum fish quality, fish, once caught should be chilled to 0ºC as quickly as possible. Ice chills fish by surface heat transfer either by direct contact between fish and ice or by cold melt water running over the fish surface. Hence, the more ice in contact with the fish the quicker the cooling rate. Even quicker cooling can be achieved by immersing the fish in a mixture of iced water which allows maximum surface heat transfer.

ix. Temperature of fish should be in the range of 0-4°C for chilled fishes and ≤ -18°C for frozen fishes. Temperature ought to be monitored and recorded. Temperature monitoring device must be calibrated at least once a year by accredited companies.

x. Raw fish and fishery products must be adequately covered with the packaging intact during receipt and stored in a refrigerator (for chilled fish) or freezer (for frozen fish). Raw fish and fishery products should be unloaded from the chilled transport vehicle and transferred to the inhouse cold storage room as quickly as possible to minimise exposure to room temperature.

xi. Extensive handling by production operation workers and no heat treatment are involved to process raw fish and fishery products.

xii. There is a high risk of microbial proliferation if raw fish and fishery products are subjected to temperature abuse or a break in cold chain, as most foodborne pathogens thrive in the temperature range of 5-60°C. Bacteria present on uncooked fish or meat can be transferred onto ready-to-eat raw fish and fishery products and cooked ingredients.

xiii. Ready-to-eat raw fish and fishery products must be stored separately from uncooked and cooked ingredients, in separate chillers or freezers if possible. If stored in the same chiller or freezer, uncooked and cooked ingredients as well as ready-to-eat raw fish and fishery products must be segregated and stored in clean, food grade, containers which are completely sealed.

xiv. These ready-to-eat raw fish and fishery products and cooked ingredients should be stored above uncooked ingredients in the same chiller or freezer to prevent raw liquids from uncooked food such as meat from dripping onto ready-to-eat and cooked food.

xv. When packaging is compromised, the ingredient within will either be contaminated by the external environment or leak out. The stored ingredient will be in contact with foreign matter such as dirt and dust, become more prone to insect infestation and may increase its likelihood of spoilage. Wastage occurs and insufficient ingredients might be available. Ingredient storage rooms should be situated away from toilets, sources of dust, smoke, odours and other contaminants.

xvi. Usage of ingredients should be based on a First-In-First-Out (FIFO) or First-Expired-First Out (FEFO) principle to facilitate stock rotation. This prevents wastage and eliminates the risk of tainting food with unwholesome ingredients that have passed their use-by date.

(c) Packaging Materials and labelling

i. Packaging material (in direct contact with fish and fishery products) must be food-grade and non-toxic to prevent chemicals from packaging from leaching into food.

ii. Materials such as polyethylene (PE) and polypropylene (PP) bags are commonly used to vacuum-pack fish after they have been processed before being packed in styrofoam boxes to be distributed to the respective retail outlets.

iii. Cling wraps are also commonly used to wrap food in contact with ready-to-eat raw fish and fishery products sushi rice to keep them always covered. They should be stored under clean and dry conditions to avoid any form of contamination.

iv. Packaging is responsible for protecting the final product from any external contamination during delivery and retail. Damaged or dirty packaging can cause the product to be contaminated.

v. The packaging storage room should be located away from food handling areas to reduce risk of contamination.

vi. Labelling is mandatory to correctly identify the source, composition and use-by date of the ingredient. Labelling facilitates easy identification, traceability and storage of fish according to date of receipt. The following information should be printed on packaging labels of the ingredients:

- Name of ingredient
- Name and address of manufacturer or importer
- Country of origin
- Net Weight
- Expiry date/ use-by date
- Other relevant requirements for labelling stipulated under the Food Regulations in the respective countries.
- Batch numbers or any other means of identification should ideally also be printed for traceability reasons.
- List allergens

vii. Regular housekeeping must be carried out to eliminate possible sources of contamination of the ingredients for effective pest management. All unused items in storage room should be removed to prevent it from becoming a breeding ground for pests.

(iv) Processing of raw fish

Low temperature conditions are required to limit proliferation of foodborne pathogens in ready-to-eat raw fish and fishery products sashimi. Prolonged exposure to air will also accelerate the microbial growth. Dirty and/ or poorly maintained equipment may become a source of contamination for the products.

(a) Scaling and Degutting of raw fish

i. Scales should be removed thoroughly, otherwise it will be a source of physical contamination to the product.
ii. Fish should be degutted and washed thoroughly (both outside and inside) to prevent the acceleration of the growth of spoilage microorganisms. Hence chilled fish should be scaled and be degutted before they are further processed.
iii. Wash water to be kept chilled and is potable.
iv. Scaling and degutting processing should be done in batches at low temperatures.
v. All equipment and surfaces used in the scaling and degutting process such as the knife, scaler, trays, chopping board and tabletop must be kept clean and well-maintained.

(b) Portioning of raw fish

i. Cutting the pieces of the fish into smaller portions to suit the demand of the retail restaurants must be done in a clean work environment.
ii. Portioning process should be carried out at low temperatures with minimum delays. Portioning processing should be done in batches.
iii. The equipment must be washed and sanitized at the end of each processing day and whenever appropriate.
iv. Equipment for raw and cooked food items must be kept and used separately.

(v) Packing

i. Packing of raw fish and fishery products must be done at low temperatures and with minimal delay to minimise any possibility of cross-contamination and microbial growth. Low temperature conditions are required to limit proliferation of foodborne pathogens in raw fish and fishery products.
ii. Prolonged exposure to air will also accelerate the microbial growth.
iii. Well-insulated fish containers such as Expanded Polystyrene (EPS) or Styrofoam boxes should be used for tertiary packaging.
iv. Suitable ice or gel packs should be added to the fish container (tertiary packaging) to improve the cooling capacity of the container.
v. Packaging should be properly labelled to ensure traceability of raw fish and fishery products. (It is recommended to pack the vacuumed packed raw fish and fishery products into containers that are well designed with drainage vents to allow the melt water to be efficiently removed.)

(vi) Storage in Chiller/ Freezer

i. Storage of the sealed fishes in a non-designated open area in a haphazard manner may increase risk of contamination by pests, chemicals and foreign objects (*e.g.* dust, dirt, sand etc). It should be stored in the chiller / freezer room at appropriate temperatures to prevent microbial growth and quality deterioration.

ii. Temperature monitoring device must be calibrated at least once a year by accredited companies.

(vii) Distribution/ Retail

i. The deliveries of the packed fish in containers (*e.g.* Styrofoam box) are taken to the loading bay to be transferred into (pre-cooled) delivery trucks which has a temperature-controlled compartment. Delivery trucks send the consignments to various retail outlets and clients such as hotels.

ii. The packaging for raw fish and fishery products should always be intact and should not be compromised during distribution to prevent their exposure to the external environment.

iii. The raw fish and fishery products should be delivered in clean, well-maintained and refrigerated enclosed trucks to protect them from contamination by dust, dirt or fumes from vehicles.

iv. Retail chillers should be maintained at temperatures 0 - 4°C.

Section 4. Verifications

(i) Microbiological Testing of Ready-to-Eat Products

A microbiological testing schedule should be established and followed to ensure food safety of raw fish and fishery products.

The amount of Enterobacteriaceae (including *Escherichia coli* of any strain) detected in any ready-to-eat food, must be less than 10,000 colony forming units per gram. The amount of *Escherichia coli* of any strain detected must be less than 100 colony forming units per gram. *Clostridium perfringens* and *Coagulase-positive Staphylococcus aureus* must be less than 100 colony forming units per gram, whereas *Bacillus cereus* must be less than 200 colony forming units per gram. No pathogen, including *Listeria*, *Salmonella, Vibrio* and any parasites or worms should be detected in all ready-to-eat raw fish and fishery products Sushi and Sashimi.

(ii) Verification of Sanitation Efficacy

A visual inspection is a common method to check that the cleaning has been completed. It is necessary to check that chemicals have been used at the required doses and contact time, hot water is at the correct temperature and food handlers have been adequately trained in cleaning procedures.

With any type of cleaning there needs to be some type of verification process in place. What this means is one needs to:

- Check that the cleaning has been completed
- Check that the cleaning has been effective

The most common methods used in verification are microbiological swabbing, Adenosine Triphosphate (ATP) swabbing, allergen swabbing or finished product testing for key hazards.

- Microbiological Swabbing

i. The sterile swab stick shall be dipped into 5mL of sterile BPW for 5-10 seconds
ii. The area of interest shall be swabbed by rolling the cotton bud on the surface horizontally and then vertically – ensuring the entire surface is covered:

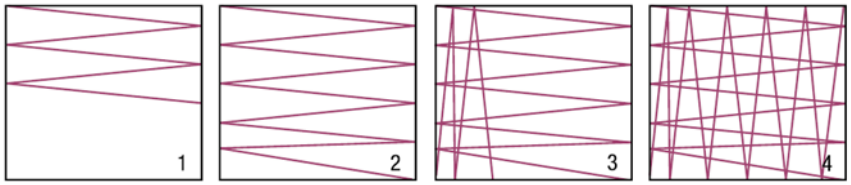


Figure 3: Directions for microbiological swabbing on surface

iii. The swab stick is then placed back into the sterile diluent then plated on the appropriate agar dish.

- ATP Swabbing

i. The sterile swab stick shall be used to swab the area using the rolling method.
ii. The swab stick is placed back into the designated holder.
iii. The solution vial shall be snapped to release the solution into the swab stick.
iv. The holder shall be thoroughly mixed (by moving left and right) for at least 5 secs.
v. The swab stick is inserted into the ATP reader for the Relative Light Unit (RLU) values.

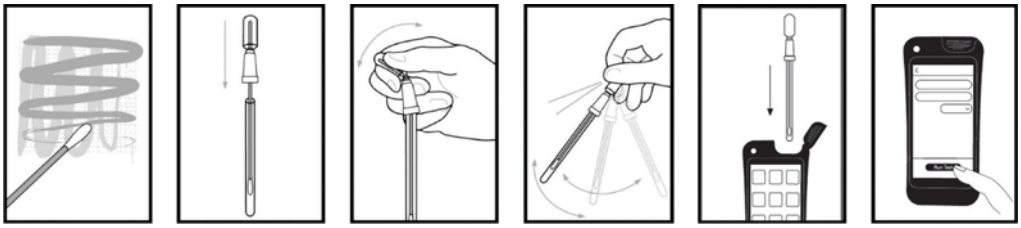


Figure 4: Directions for ATP swabbing and measurement

(iii) Documentaion & Records Keeping

- Documentation should be maintained to allow traceability from harvest/ purchase to distribution, in accordance with the jurisdictional requirements.
- Documentation concerning all procedures and records appropriate to processes should be established.
- A current, accurate and concise record-keeping system will greatly enhance the effectiveness of any food safety management programme and facilitate the verification process.
- Appropriate records for the business operation should be retained for a period that exceeds the shelf-life of the product or as determined by the competent authority.
- Section 5. ReferencesJoint FAO/ WHO Food Standards Programme, Codex Alimentarius Commission – Code of Practice for Fish and Fishery Products
- Joint FAO/ WHO Food Standards Programme, Codex Alimentarius Commission – General Principles of Food Hygiene CXC 1-1969
- Food and Agriculture Organization of the United Nations (Regional Office for Asia and the Pacific Bangkok) A Regional Guidance on Criteria for Good Manufacturing Practices/ Hazard Analysis and Critical Control Point (GMP/ HACCP) for Asian Countries, 2014.

Annex 15

JAPANESE TRUST FUND 7 (2025–2029)

EXECUTIVE SUMMARY

The Government of Japan has provided SEAFDEC with the Japanese Trust Fund (JTF) since 1998 for about 25 years already. Currently, the JTF is on its 6th Phase 2 Program (JTF6-2) under the title 'Promotion of Sustainable Fisheries in Southeast Asian Region', which started in 2020 and will finish in 2024 (SEAFDEC fiscal year). As it is expected that new projects under JTF will start in 2025 for 5 years, SEAFDEC submitted "the outline of Japanese Trust Fund 7" to the Fisheries Agency of Japan in February 2023 for their consideration and as a reference during the national budget request process.

Considering "The outline of Japanese Trust Fund 7" submitted by SEAFDEC, the Government of Japan considered and decided on the budget of JTF for 2025 (SEAFDEC fiscal year). The Japanese Diet approved the fiscal budget of the project proposals on March 28, 2024.

Thus, the JTF7 (2025–2029) could be titled "Enhanced Capability of Fisheries and Aquaculture in Southeast Asia", and will consist of around 10 projects mainly based on the project proposals under the following three (3) pillars.

1) Strengthened collaboration and capacity building on common issues in Southeast Asia
2) Enhanced national and regional research capacities to manage fisheries resources including small-scale fisheries
3) Improved of sustainability and productivity in Aquaculture

In 2024, SEAFDEC Secretariat and Departments namely TD, MFRD, AQD, MFRDMD, and IFRDMD will identify the expected outcomes and outputs of new projects for 5 years (2025–2029) including the indicators, and develop the draft 2025 annual plans with 5-year master plans. Then, SEAFDEC will submit these draft new annual plans for JTF7 to the next PCM in 2024 for confirmation, approval, and endorsement.

REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note of the procedure ad planning schedule of the Japanese Trust Fund 7 (2025–2029)

The Outline of JTF-7

Program Title: Enhanced Capability of Fisheries and Aquaculture in Southeast-Asia

Term of Program: 2025–2029 (for five years)

Objectives: JTF7 aims to respond to recent concerns in the Southeast Asian region as expressed in the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030) and adheres to other crucial international policy frameworks.

Focused on:
- Improvement of the reliability of fishery stock assessment of each AMS through sharing good practices and methods in collaboration with SEAFDEC departments and AMSs.
- Dissemination of updated aquaculture technology in collaboration with SEAFDEC departments and AMSs.

Three (3) Pillars and prospective subjects of projects

Pillar 1. Strengthened collaboration and capacity building on common issues in Southeast Asia
Prospective subjects
• Enhancement of Regional Cooperation and Human Resource Development to eliminate IUU fishing
• Digital transformation of Regional Fisheries and Enhanced Utilization of Fishery Statistics and Information
• Research and dissemination of sustainable fishing technology
• Enhancing Regional Responses to Emerging International Fisheries-related issues
Pillar 2. Enhanced national and regional research capacities to manage fisheries resources including small scale fisheries
Prospective subjects
• System design and construction of bio-research for good marine fishery resources (small pelagic/neritic tuna)
• Capacity building on marine environment change monitor and estimation impact to fishery resources
• Capacity building for estimation fishery biomass with scientific hydroacoustic survey
• Research capacities for sustainable utilization and management of Sharks and Rays
• Research capacities for sustainable utilization and management of eel and other inland fisheries resources
• Improving fisher's livelihood and fisheries co-management in inland and coastal small-scale fisheries
Pillar 3. Improved sustainability and productivity in Aquaculture
Prospective subjects
• Promotion of aquaculture technologies for emerging species through good aquaculture practices (GAqP)
• Capacity building utilization of certification schemas for safety aquaculture seafoods

Reference:

A chronological list of Program Titles of Japanese Trust Fund Project

	Period	Title
JTF-1	1998–2003	Promoting Establishment of Regional Fisheries Policy in Southeast Asia
JTF-2	2002–2013	Promotion of Sustainable Use of Shared Stocks in Southeast Asia
JTF-3	2003–2006	Project for Supporting Establishment of Sustainable Regional Fisheries Systems in Southeast Asia
JTF-4	2004–2009	Environment -friendly Regional Development in Southeast Asia
JTF-5	2010–2014	Promotion of Sustainable Aquaculture and Resource Enhancement in Southeast Asia
JTF-6-1	2014–2019	Promotion of Sustainable Fisheries in Southeast Asia
JTF-6-2	2020–2024	Promotion of Sustainable Fisheries in Southeast Asia

Annex 16

STATEMENT

By Ms. Angela Lentisco,
Fishery and Aquaculture Officer of Food and Agriculture Organization of the United Nations,
Regional Office for Asia and Pacific (FAO/RAP)

Chairperson of the SEAFDEC Council,
Secretary-General and Chief of the Training Department, *Dr. Suttinee Limthammahisorn*,
Distinguished SEAFDEC Council members,
SEAFDEC colleagues,
Delegates from regional organizations and arrangements.

On behalf of the Regional Office for Asia and the Pacific of the Food and Agriculture Organization of the United Nations, FAO would like to express gratitude to SEAFDEC for the opportunity to present a statement on areas of cooperation and coordination between FAO, SEAFDEC, and Member Countries.

Allow me to begin by underscoring the growing recognition and significance of aquatic food systems in providing essential nutrition and addressing hunger challenges in the future. Aquatic food systems already contribute to 17% of the total animal protein consumption, with this figure exceeding 50% in several Asia-Pacific countries. These foods supply crucial macronutrients and amino acids for improved nutrition, while their production emits lower Greenhouse Gas emissions, making them more efficient than land-based animal production systems in converting feed to flesh. This becomes especially pertinent due to increased demand driven by population growth, economic factors, urbanization, and changing dietary patterns.

While the prospects for increasing the volume of capture fisheries are limited due to the status of fish stocks (fully exploited or overexploited, necessitating improvements in management systems), aquaculture is acknowledged as the fastest-growing food production system and is poised for continued expansion.

To support these evolving trends in the production and consumption of aquatic foods, FAO has developed the Blue Transformation, which outlines our vision for work on aquatic systems, encompassing three clear objectives:

- **Objective 1** – Sustainable Aquaculture intensification and expansion satisfies global demand for aquatic foods and distributes benefits equitably.
- **Objective 2** – Effective management of all fisheries delivers healthy stocks and secures equitable livelihoods
- **Objective 3** – Upgraded value chains ensure the social, economic and environmental variability of aquatic food systems

Our work will focus on these three main objectives.

Under aquaculture, we are promoting for the implementation of the Aquaculture Transformation Roadmap, emphasizing priority actions for aquaculture in the Asian region. This includes promoting sustainable intensification of production, enhancing sustainability and circularity, and mitigating environmental impacts by reducing the footprint and usage of water, feeds, and space. Additionally, we expect to boost market access. In countries where aquaculture is less developed, this will require sector promotion through innovation and investment, fostering the expansion of domestic and regional markets, and addressing existing barriers.

Regarding the second pillar of the Blue Transformation agenda, focused on the **sustainable management of marine and inland fisheries**, there is a pressing need to enhance capacity for effective data collection, stock assessment, and fisheries management systems, particularly in regions or areas where these are lacking. Efforts will be directed towards managing overcapacity, reducing overfishing, combating illegal, unreported, and unregulated (IUU) fishing, and rebuilding stocks.

We also aim to support the fisheries and aquaculture sectors by integrating climate change adaptation and disaster risk reduction (DRR) into flexible and adaptive management systems.

Furthermore, we remain committed to assisting countries in combating illegal, unreported, and unregulated (IUU) fishing through the Port State Measures Agreement (PSMA) and by promoting the implementation of the Voluntary guidelines in support of small-scale fisheries (SSF) – and allow me to pause here for a reminder that this year we commemorate the 10th anniversary of the adoption SSF guidelines, marking a significant milestone in global efforts to support small-scale fisheries.

As for **the third pillar** of Blue Transformation, focusing on the **value chains of aquatic foods**, we recognize the multitude of activities and stakeholders involved in producing, transforming, and delivering products to consumers. Our goal is to foster more efficient, inclusive, lower-emission, and resilient value chains.

To achieve this, several key actions are necessary – including reducing loss and waste along the value chain, improving access to markets, supporting value addition and technological innovations, such as utilizing by-products, ensuring the health and safety standards of aquatic foods, and increasing awareness of the significance of aquatic foods in food security and nutrition.

These are all areas in which we look forward to continuing and expanding our excellent collaboration with SEAFDEC and its members. Some ongoing examples of this collaboration include our regional workshops on stock assessment, on aquatic genetic resources, on support to small-scale fisheries, as well as on issues related to fish trade and fishery support measures. In addition, we are also collaborating on two GEF Large Marine Ecosystem (LME) fisheries projects (the GoTFish and the BOBLME projects).

Thank you again for providing this opportunity for FAO to highlight some of our ongoing and future cooperative activities for promoting sustainable fisheries and aquaculture in the region towards Blue Transformation.

Lastly, I would like to thank our hosts the Burau of Fisheries and Aquatic Resources (BFAR) and the Government of the Philippines, for their excellent arrangements and warm hospitality for this 56th Meeting of the SEAFDEC Council.

Thank you.

Annex 17

STATEMENT

By Dr. Eduardo M. Leaño,
Director General, Network of Aquaculture Centres in Asia-Pacific (NACA)

Dr. Suttinee Limthammahisorn, Secretary General of SEAFDEC, *Dr. Nakazato Tomoko*, Deputy Secretary General of SEAFDEC, distinguished officers of the different SEAFDEC Departments and the Secretariat, delegates of SEAFDEC Member Countries, BFAR staff headed by *Mr. Isisdro Velayo, Jr* (the host and organizers of this meeting), representatives of international and regional organisations, ladies and gentlemen.

On behalf of the Network of Aquaculture Centres in Asia-Pacific (NACA), I would like to thank SEAFDEC for inviting us to participate in this year's 56th Council Meeting.

NACA, with 20 member governments in the Asia-Pacific region, has been in existence for more than 30 years of successful networking. It continues to promote rural development through sustainable aquaculture and aquatic resources management, and seeks to improve the livelihoods of rural people, reduce poverty and increase food security. NACA works under five thematic work programmes namely:

- Productivity & Sustainability
- Health & Biosecurity
- Genetics & Biodiversity
- Food Safety & Security
- Emerging Regional & Global Issues

NACA implements activities on these thematic programmes through four cross-cutting programmes including: Education and Training; Information and Networking; Strategy and Governance; and, One Community.

With Headquarters based in Bangkok, Thailand and hosted by the Royal Thai Department of Fisheries, NACA has five Regional Lead Centres (RLC) across the Asia-Pacific region, including the SEAFDEC Aquaculture Department (AQD) in the Philippines. As RLCs, these institutions shall function as centres of expertise for the network in designated fields of research, through:

- Provision of technical advice to NACA member governments and affiliated R&D centres;
- Conducting scientific and technical training for personnel from NACA Member Countries;
- Organisation of scientific meetings, training courses and workshops on behalf of NACA;
- Publication and dissemination of research results, training manuals, extension materials and other information that may be useful to NACA members;
- Development and coordination of joint research projects in association with other NACA centres that contribute to the NACA Work Programme;
- Coordination of scientific and technical studies in collaboration with other NACA centres;
- Placement of expert consultants at the disposal of NACA; and,
- Provide an annual report of R&D activities to the NACA Secretariat.

For SEAFDEC AQD, most of the NACA's work programmes are also in line with their current research programmes. For example: NACA's Health and Biosecurity to AQD's Healthy and Wholesome Aquaculture; and, NACA's Productivity and Sustainability to AQD's Sustainable Aquaculture and Quality Seeds for Sustainable Aquaculture. Thus, several collaborations and exchanges have been made between NACA and SEAFDEC AQD in the past several years.

For Health and Biosecurity Programme, the Fish Health Section (FHS) of SEAFDEC AQD is a member of NACA's Asia Regional Advisory Group on Aquatic Animal Health (AG), which meets annually to discuss current and related issues on aquatic animal health management in the region including trends in disease and emerging threats, identification of developments in global disease issues and standards, evaluating the Aquatic Animal Disease Reporting Program, and providing guidance on regional strategies to improve aquatic animal health management. The last AG Meeting was held virtually on 6–7 November 2023, wherein

Dr. Leobert dela Peña (concurrent Head of Research Division and Fish Health Section) served as the Vice-chairperson of the group, and presented updates on the "Oplan Balik Sugpo" or "Operation Black Tiger Shrimp Revival", emphasizing importance of proper implementation of farm-level biosecurity measures. Other topics discussed during the meeting include:

- Progress on NACA's Asia Regional Aquatic Animal Health Programme.
- Updates on WOAH Aquatic Animal Health Standards Commission.
- Updates on FAO's Progressive Management Pathway for improving Aquaculture Biosecurity (PMP/AB).
- Farm-level aquaculture biosecurity: From a tilapia parasites perspectives.
- Updates on WOAH Asia-Pacific Network on Aquatic Animal Health.
- Updates on regional disease reporting and disease list.

Report of the Meeting is published at NACA website for public access (https://enaca.org/?id=1329)

In collaboration with the World Organisation for Animal Health (WOAH; founded as OIE) – Regional Representation for Asia and the Pacific (RRAP), NACA and SEAFDEC AQD together with the Food and Agriculture Organisation of the United Nations (FAO) are supporting the Asia Pacific Aquatic Animal Health Network (AP AquaNet), formerly known as the Regional Collaboration Framework for Aquatic Animal Health in Asia and the Pacific. The last Steering Committee Meeting was held in Busan, South Korea on 29 June 2023. Progress and output of the flagship activities (2020 – 2023) were presented during the meeting, including: (1) aquaculture biosecurity in small-scale farms, (2) evaluation of the existing AHPND diagnostic methods, and (3) regional collaboration to respond to emerging diseases of aquatic animals. Three new activities were identified and endorsed by the members: (1) a response exercise to examine regional coordination and response to emerging diseases, (2) assessment of on-farm biosecurity in aquaculture, and (3) improving Aquatic Animal Diseases Reporting in Asia and the Pacific. The activities will be led by Experts from different WOAH Reference laboratories, regional partners, WOAH HQ and RRAP. In addition, awareness programme on AMU/AMR in aquaculture will be conducted to support the implementation of WOAH Aquatic Animal Health Strategy.

Representatives of the SEAFDEC Secretariat and AQD participated in the 2nd High Level Meeting (HLM) for Aquaculture Transformation in the Asia-Pacific Region, held in Bangkok, Thailand on 8–9 November 2023. This was a follow-up activity for the 1st HLM which was held virtually on 22–23 November 2022. These HLMs provided a forum for government, private sector and development partners to identify policy, innovation and investment priorities for aquaculture transformation in the region by 2030. This was rooted on the White Paper developed by NACA and FAO entitled "Aquaculture transformation: innovations and investment for sustainable intensification and expansion of aquaculture in Asia and the Pacific region". The White Paper provides guidance on the translation of the global vision and targets for FAO's "Blue Transformation" into clear and workable strategies for transforming the aquaculture sector of the region.

SEAFDEC Secretariat and SEAFDEC AQD (as RLC) regularly participate at NACA's annual Governing Council Meeting, wherein progress and status of project implementation, important issues in aquaculture, and current work collaborations are presented and discussed. Similarly, NACA also attends the annual Council Meeting and sometimes the Program Committee Meeting of SEAFDEC.

On behalf of NACA, I look forward to continuous collaboration with SEAFDEC towards further development and transformation of aquaculture in the Asia-Pacific region in general, and ASEAN in particular. I encourage that we work together in addressing important issues in the aquaculture industry including, but not limited to, emerging diseases, aquaculture biosecurity, AMU/AMR, and climate change impacts.

Thank you very much.

Annex 18

STATEMENT

By Dr. Steve Olive,
Mission Director of the U.S. Agency for International Development's Regional Development Mission for Asia (USAID/RDMA)

Dr. Suttinee Limthammahisorn, Secretary-General of SEAFDEC;
Distinguished members of the SEAFDEC Council and their country delegates;
And SEAFDEC Senior Officials.

My name is Steve Olive, and I am the Mission Director of the United States Agency for International Development's Regional Development Mission for Asia, or USAID/RDMA, based in Bangkok.

The U.S. government would like to extend its gratitude to SEAFDEC for the opportunity to participate in this 56th Council Meeting. We also extend our gratitude to the Government of the Philippines for hosting this important meeting, and to each of the SEAFDEC Member Countries for their active participation.

SEAFDEC is a critical driving factor behind the progress made across the region to address illegal, unreported, and unregulated, or IUU, fishing and in enhancing the sustainability of Southeast Asia's fisheries. We are grateful for our long-standing partnership with SEAFDEC and its Member Countries to support the region's efforts in addressing IUU fishing and conserving marine biodiversity.

In late 2023, USAID/RDMA awarded a grant to SEAFDEC which we refer to as the USAID Southeast Asia Fisheries Partnership. This grant represents our commitment in strengthening the leadership of SEAFDEC and developing homegrown solutions to promote sustainable fisheries. We are very grateful to SEAFDEC departments and its Member Countries for its effective implementation of this award. Your efforts have advanced the region's management of sustainable fisheries. We look forward to continuing our support to SEAFDEC and its Member Countries through this new grant.

USAID is also working with SEAFDEC through our Sustainable Fish Asia Technical Support activity, or SuFiA TS. SuFiA TS provides on-demand assistance and technical expertise requested by regional organizations, like SEAFDEC, to advance sustainable regional marine and fisheries ecosystems.

Additionally, through our collaboration with the U.S. Department of the Interior, we are working with SEAFDEC to strengthen Member Countries' technical expertise in planning marine research surveys and integrating climate change adaptation into improved fisheries management.

We value our partnership with SEAFDEC and will continue to support them in advancing the priorities of its Member Countries towards more resilient and sustainable fisheries and marine ecosystems.

Thank you again for the opportunity to participate in another successful Council Meeting—we look forward to our continued collaboration and partnership in the coming year.

Annex 19

COLLABORATIVE ARRANGEMENTS BETWEEN SEAFDEC AND OTHER ORGANIZATIONS

I. ARRANGEMENTS SIGNED DURING 2023–2024

After the 55th Meeting of the SEAFDEC Council organized in May 2023 until the 56th Meeting of the SEAFDEC Council in 2024, SEAFDEC signed collaborative arrangements with other organizations as follows:

A. International/regional Organizations, Non-Member Governments and Donors

1) Food and Agriculture Organization of the United Nations

In 2023, SEAFDEC signed two **Operational Partner Agreements (OPAs) between SEAFDEC and the Food and Agriculture Organization of the United Nations (FAO) for the implementation of the Project "Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities**." The first OPA was signed on 1 September 2023 for funding from Global Environment Facility's International Waters (GEFIW) with a total amount of funds up to USD 2,352,515 as appears as **Annex 1**; while the second OPA was signed on 10 November 2023 for *Norway Co-financing* with a total amount of funds up to USD 394,450 as appears as **Annex 2**. The duration of the two OPAs would be from the date of signature until 30 April 2028 The Project aims to promote sustainable management of fisheries, marine living resources, and their habitats in the Bay of Bengal region for the benefit of coastal states and communities. The participating countries are Indonesia, Malaysia, and Thailand. The Project comprises five (5) Components, *i.e.* 1) Sustainable management of fisheries; 2) Restoration and conservation of critical marine habitats and conservation of biodiversity; 3) Management of coastal and marine pollution to improve ecosystem health; 4) Improved livelihoods and enhanced resilience of the BOBLME; and 5) Regional mechanism for planning, coordination, and monitoring of BOBLME. SEAFDEC will serve as an Operational Partner and will be responsible for the activities under Component 1, and some part of activities under Components 3 and 5.

On 11 December 2023, SEAFDEC signed a **Letter of Agreement (LOA) between FAO and SEAFDEC for provision of Information collection and capacity building to support FAO Members implement novel listings of aquatic species on CITES Appendix II.** The duration of the LOA is from the date of signature until 31 July 2024. Under this LOA, FAO will provide SEAFDEC with a fund not exceeding USD 15,500 for the purpose to help FAO Members speed the implementation of CITES CoP19 shark and ray listings. Specifically, SEAFDEC will undertake the activities as follows: 1) Read supplied background material on implementation requirements for fisheries authorities in implementing CITES provisions for sharks and rays (termed shark); 2) Collate contacts of fisheries authority persons with responsibility for shark (fisheries address book) from countries in their region; 3) Interview fisheries authority persons with responsibility for shark from at least 5 countries on the success and challenges of implementing CITES provisions for shark, including their needs to strengthen management and delivery of information needed for legal and sustainable trade in shark and related commodities; 4) Produce a summary document of the findings in collaboration with researchers from other regions, as the raw material to be used in more extensive and wide ranging reporting to follow; 5) Assist in the production and delivery of a presentation at CITES meetings; and 6) Assist in the production of a wide ranging overview report that explains fisheries authorities needs for information, capacity support and funding for their work in implementing CITES provisions for commercially exploited aquatic species, especially shark listing made at CITES CoP19.

On 26 December 2023, SEAFDEC signed another **LOA between FAO and SEAFDEC for provision of "Support for strengthening regional capacity to monitor the status of management of aquatic genetic resources."** The duration of the LOA is from the date of signature until 30 September 2024. Under this LOA, FAO will provide SEAFDEC with a fund not exceeding USD 50,461 for the purpose to support for strengthening of regional capacity to monitor the status of management of aquatic genetic resources (AqGR) used in the aquaculture sector. SEAFDEC will host a two-day workshop on "The Application of AquaGRIS: the FAO global information system, to build national registries of aquatic genetic resources" which will be attended by participants from the SEAFDEC Member Countries including the AqGR Focal Person of the

respective countries; and, through expert to be recruited under the LOA, provide interim post-workshop technical support to participants from a group of countries identified during the Workshop to upload national data on AqGR into AquaGRIS.

2) United States Agency for International Development/Regional Development Mission for Asia

On 8 September 2023, SEAFDEC signed with the United States Agency for International Development/Regional Development Mission for Asia (USAID/RDMA) the **Public International Organization (PIO) Grant Agreement.** The duration of the Agreement is from 1 October 2023 to 30 September 2028. The purpose of this Agreement is to provide support for USAID Southeast Asia Fisheries Partnership with the total estimated amount of USD 2,900,000. The USAID Southeast Asia Fisheries Partnership Activity is a part of the larger Sustainable Fish Asia (SuFiA) project funded by the USAID/RDMA. This Activity has the overarching goal for "fisheries and aquaculture practices and productions improved and managed sustainably" with three objectives, namely: 1) Fishery policies, programs, and plans supported by SEAFDEC are adopted and implemented by national fisheries agencies; 2) Commercial and small-scale fishers have appropriate financial and human resources, capacity, and good governance to adopt sustainable fishing and aquaculture practices, and 3) Increase operational and technical capacity among national fisheries agencies and fisheries institutions. Four thematic areas of the Activity are: 1) Data-driven Fisheries Management and Conservation, including for Climate Change Mitigation and Adaptation; 2) Exploration of Integrated Multi-Trophic Aquaculture for Biodiversity Conservation, Blue Economy, and Climate Change Mitigation; 3) Reducing Negative Impacts From Fishing On The Marine Ecosystem; and 4) Sustainable Inland Fisheries Management.

3) United States Department of the Interior (US-DOI)

On 31 August 2023, SEAFDEC signed an "**Extension 2 to the Memorandum of Understanding between the United States Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)**" to extend the MOU until 30 September 2024.

On the same day, SEAFDEC also signed the "**Amendment 1 to Annex 1 of the MOU between the U.S. Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)**." The terms of the Annex are from the date of signature until 30 September 2024 with the total budget of USD 100,000. The objective of the Project is to enhance the capacity development of SEAFDEC staff on fisheries management and resilience in the context of climate change and strengthening capacity in fisheries resources and marine environmental research survey. Activities to be undertaken by SEAFDEC are: 1) Fisheries Resilience & Management; 2) Climate Change and Fisheries Stock Assessments; and 3) Strengthening Capacity of the Marine Fisheries Resources and Marine Environmental Research Survey.

4) Commonwealth of Australia

On 23 April 2024, SEAFDEC/TD signed with the Commonwealth of Australia represented by the Department of Agriculture, Fisheries and Forestry the **Contract in Relation to the Provision of Services to Deliver a Women in Fisheries Workshop (Ref no. Reference Number: C13582).** The duration of the Contract is from the signing date until 31 July 2024, with the total fee to be provided by the Commonwealth of Australia to TD of AUD 235,000. Under the Contract TD will assist the Commonwealth of Australia with the delivery of a "Women in Fisheries Workshop," which is proposed for 2–3 days in mid-May 2024 in Bangkok, Thailand. The Workshop aims to strengthen Australia's Combating Illegal, Unreported and Unregulated (IUU) Fishing and Promoting Sustainable Fisheries in Southeast Asia program goals of promoting gender inclusivity in fisheries-related MCS.

5) World Wildlife Fund, Inc. (WWF-US)

On 26 April 2024, SEAFDEC signed the **GEF Project Grant Agreement between World Wildlife Fund, Inc (WWF) and SEAFDEC for the Project "Blue Horizon: Ocean Relief through Seaweed Aquaculture.**" The Duration of the Project is from the date of signature until 31 December 2028. The project will be funded by the Global Environment Facility (GEF) with a total GEF fund of USD 6,000,000; and the total budget for SEAFDEC will be USD 1,359,143. The Project comprises 4 components, namely:

1) Regional approach and capacity for seaweed value chains in SE Asia; 2) Enabling Environment for Seaweed Aquaculture in Philippines and Viet Nam; 3) Seaweed Value Chains (production + processing + marketing); and 4) Knowledge Management, M&E, and IW Learn (regional). WWF-US will serve as the GEF Agency for this Project, with three Executing Agencies, namely: SEAFDEC as the regional Executing Agency, and the Philippine BFAR and the DOF Viet Nam as national Executing Agencies. SEAFDEC, through the regional Project Management Unit (PMU) hosted by SEAFDEC, shall be responsible for regional activities under Project Component 1 and Component 4; while the Philippine BFAR and DOF Viet Nam shall be responsible for national activities under Component 2 and Component 3, and provide contribution to the Component 4.

B. Agencies of the SEAFDEC Member Countries

1) Japan Fisheries Research and Education Agency (FRA)

The Fisheries Research Agency of Japan (formerly FRA) and SEAFDEC signed the "Arrangement for Scientific and Technical Cooperation between FRA and SEAFDEC" (hereafter referred to as "the Arrangement with former FRA") in January 2004, with an extension of the Arrangement with former FRA signed in February 2009 and January 2014. The National Fisheries University (NFU) and SEAFDEC signed the "Arrangement for Academic and Educational Cooperation between SEAFDEC and NFU" (hereafter referred to as "the Arrangement with NFU") in May 2005, with an extension signed in November 2009 and November 2014. In 2016, the Japan Fisheries Research and Education Agency (FRA) was established through a merger of the former FRA and the NFU. Consonant with the establishment of FRA, SEAFDEC and FRA agreed to unify the Arrangement with former FRA and the Arrangement with NFU, and signed the "Arrangement for Scientific and Educational Cooperation between FRA and SEAFDEC" (hereafter called "the Arrangement with FRA") on 22 January 2019, covering the period of five years.

Considering that the Arrangement for Scientific and Educational Cooperation between Japan Fisheries Research and Education Agency (FRA) and SEAFDEC which was signed in January 2019 would soon expire in January 2024, SEAFDEC and FRA signed the "**Extension of Arrangement for Scientific and Educational Cooperation between Japan Fisheries Research and Education Agency and SEAFDEC**" on 7 July 2023. This Arrangement has the objectives of: 1) The Development of Scientific and Technical Cooperation in various fields that are of interest to the two relevant organizations under the mutual understanding and interrelationship; 2) The Development of Academic and Educational Cooperation in various fields that are of interest to the two relevant organizations under the mutual understanding and interrelationship; and 3) Detailed discussions between FRA and SEAFDEC if required in the case of each practical matter. The period of the Arrangement is five years from the date of signature.

2) West Visayas State University (WVSU), Philippines

On 2 February 2023, SEAFDEC/AQD signed a "**Memorandum of Agreement (MOA) between the WVSU and SEAFDEC/AQD.**" Visayas State University offers degree programs that require on-the-job training (OJT) in order to adequately expose its students to actual work situations and enable them to enhance their knowledge, skills, work attitudes, and values; while AQD has the facilities and/or expertise to provide occupational experience to student-trainees to enhance their competence in their chosen field or endeavor. Under this MOA, WVSU will identify, recommend, and endorse the names of the students who are qualified to undergo the OJT in AQD and undertake the required preparatory procedures. AQD will allow qualified students, as recommended by the WVSU, to enter its premises and provide and/or expose the students to various work experiences and/or activities. The duration of the MOA is two years from January 2023 to February 2025.

3) Iloilo Doctors' College (IDC), Philippines.

On 27 February 2023, SEAFDEC/AQD signed with the Iloilo Doctors' College, Philippines the "**Memorandum of Agreement (MOA) between Iloilo Doctors' College, Philippines and SEAFDEC/AQD**." IDC offers programs that require students to undergo on-the-job training (OJT) as a requirement for graduation in order to expose them to actual work situations relevant to the field of specialization. Upon request of IDC, the SEAFDEC/AQD has expressed its willingness to assist the student-trainees in OJT-related activities. Under the MOA, IDC shall be responsible for the selection process of the

student-trainees as well as the required preparatory procedures; while AQD shall accept the qualified student-trainees recommended by the IDC to undergo the required total hours for OJT with personnel assigned to supervise the student-trainees. The MOA was effective from June 2022 to June 2024.

4) Igbaras National High School, Philippines

On 17 March 2023, SEAFDEC/AQD signed with Igbaras National High School the "**Memorandum of Agreement (MOA) between the Igbaras National High School and SEAFDEC/AQD.**" Igbaras National High School offers programs that require students to undergo on-the-job training (OJT) as a requirement for graduation in order to expose them to actual work situations relevant in the field of specialization; while AQD has expressed its willingness to assist the student-trainee in her OJT related activities. Under this MOA, Igbaras National High School shall be responsible for the selection of the student-trainees and the required preparatory procedures, while AQD shall accept the qualified student-trainees as recommended by the School to undergo the required total hours of the on-the-job training with personnel assigned to supervise the students. The duration of the MOA is from January 2023 to January 2024.

5) Mindanao State University – Marawi, Philippines (MSU-Marawi)

On 19 June 2023, SEAFDEC/AQD signed with the Mindanao State University – Marawi, Philippines the "**Memorandum of Agreement (MOA) between the Mindanao State University – Marawi (MSU-Marawi), Philippines and SEAFDEC/AQD**." MSU-Marawi is offering degree programs that require on-the-job training (OJT) as a requirement for graduation, in order to adequately expose its students to actual work situations relevant to their field of specialization and enable them to enhance their knowledge, skills, work attitudes, and values; while AQD has a pool of resources, activities, and technical experts to assist the needs of MSU-Marawi. Under this MOA, MSU-Marawi shall submit to AQD the OJT request and shall screen and identify the student-trainees to undergo OJT at AQD, and undertake other required preparatory procedures, while AQD shall coordinate with MSU-Marawi regarding the OJT and accept qualified student-trainees recommended by MSU-Marawi upon approval of the concerned commodity/program leaders and the AQD management. The duration of the MOA is two years after the signing date.

6) West Visayas State University, Philippines

On 12 March 2024, SEAFDEC/AQD, together with twenty-four other agencies/institutions in the Philippines, formalized cooperation with the West Visayas State University (WVSU), Philippines, through the "**Memorandum of Commitment**." As WVSU has entered into a Memorandum of Agreement with the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) for the project entitled "Enhance Regional Collaborative Program in Western Visayas"; the agencies signed this Agreement, collectively called a "Consortium Member Institutions (CMIs), agreed to jointly undertake the management and implementation of the above project and other relevant programs in the agriculture, aquatic, and natural resources (AANR) sector funded by other funding agencies both local and foreign. While WVSU serves as the host agency of the Consortium, the head of the participating agencies shall serve as the advisory and policy-making body for the Regional Research and Development Coordinating Council (RRDCC). The Agreement is effective from 1 January 2023 for 3 years.

7) Department of Agriculture-National Fisheries Research and Development Institute, Philippines

On 14 March 2024, during an inception meeting with the Department of Agriculture-National Fisheries Research and Development Institute (DA-NFRDI), SEAFDEC/AQD signed the "**Memorandum of Agreement between DA-NFRDI, Philippines and SEAFDEC/AQD."** The purpose of this Agreement is to foster cooperation and establish the rights and obligations of the DA-NFRDI and SEAFDEC/AQD in the conduct of a collaborative project "Developing Insect-based feed using traditional and molecular approaches for sustainable production of Nile tilapia (*Oreochromis niloticus*) in the Philippines." The Project will be conducted in two Fiscal Years from January 2024 to December 2025. NFRDI shall act as the Lead Agency, responsible for the general implementation of the Project, and provide and transfer funds to SEAFDEC/AQD for the conduct of the Project. AQD has the responsibilities of conducting and implementing Sub-components 1 and 2 of the Project and designating personnel involved in the two Sub-

components. The research funds to be provided to AQD for implementation of the Project in FY2024 is PhP 3,281,152.00. The Agreement shall take effect from 1 January 2024 to 31 December 2025.

II. REQUIRED CONSIDERATION BY THE COUNCIL

- The Council is requested to **take note** of the signing of collaborative arrangements between SEAFDEC and other organizations, namely:
  - Operational Partner Agreements (OPAs) between SEAFDEC and the Food and Agriculture Organization of the United Nations (FAO) for the implementation of the Project "Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities
  - Letter of Agreement between FAO and SEAFDEC for provision of Information collection and capacity building to support FAO Members implement novel listings of aquatic species on CITES Appendix II
  - Letter of Agreement between FAO and SEAFDEC for provision of "Support for strengthening regional capacity to monitor the status of management of aquatic genetic resources
  - Public International Organization (PIO) Grant Agreement between USAID and SEAFDEC for the USAID Southeast Asia Fisheries Partnership Activity
  - Extension 2 to the Memorandum of Understanding between the United States Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)
  - Amendment 1 to Annex 1 of the MOU between the U.S. Department of the Interior and SEAFDEC Concerning Supporting Participation in Sustainable Fish Asia (SuFiA)
  - Contract in Relation to the Provision of Services to Deliver a Women in Fisheries Workshop (Ref no. Reference Number: C13582) between SEAFDEC and Commonwealth of Australia represented by the Department of Agriculture, Fisheries and Forestry
  - GEF Project Grant Agreement between World Wildlife Fund, Inc (WWF) and SEAFDEC for the Project "Blue Horizon: Ocean Relief through Seaweed Aquaculture."
  - Extension of Arrangement for Scientific and Educational Cooperation between Japan Fisheries Research and Education Agency and SEAFDEC
  - Memorandum of Agreement (MOA) between SEAFDEC/AQD and academes, namely:
    - West Visayas State University, Philippines
    - Iloilo Doctors' College, Philippines
    - Igbaras National High School, Philippines
    - Mindanao State University, Marawi, Philippines
  - Memorandum of Commitment with West Visayas State University, Philippines
  - Memorandum of Agreement between DA-NFRDI, Philippines and SEAFDEC/AQD

Annex 20

PROPOSED MODIFICATION ON THE RULES FOR PAPERLESS SEAFDEC MEETINGS

I. INTRODUCTION

During the 51st Meeting of the SEAFDEC Council convened on 18–22 March 2019 in Surabaya, Indonesia, the decision was made to transition future SEAFDEC meetings to a paperless format (*i.e.* replacing hard copies of documents with electronic formats of the working documents to be presented and shared by meeting participants, or participants can download the documents from the SEAFDEC website and print if necessary). Exceptions include where the SEAFDEC Secretariat is requested to provide hard copies to specific participants. The existing Rules for Paperless SEAFDEC Meetings appear as **Appendix 1**.

Since their implementation in 2019, especially for SEAFDEC annual meetings., the electronic format of meeting documents is made available through the SEAFDEC website, while hard copies are retained for Head Delegates and participants upon request. However, in light of global imperatives including Sustainable Development Goal (SDG) 12: Responsible Consumption and Production and SDG 13: Climate Action, among others, SEAFDEC recognizes the need to align its operations with these goals, especially in the organization of future meetings.

II. PROPOSED MODIFICATION ON THE RULES FOR PAPERLESS SEAFDEC MEETINGS

SEAFDEC, therefore, seeks consideration of the SEAFDEC Council for modification on the Rules for Paperless SEAFDEC Meetings, especially **to revoke the following rules**:

Rule 1.3: One set of hardcopy of documents shall be provided to the Head Delegate of each Member Country attending in the meetings

Rule 1.4: For other participants who would like to obtain hard copies of the documents, such request shall be made to the SEAFDEC Secretariat at least two weeks before the meetings

The proposed modification of the Rules for Paperless SEAFDEC Meetings appears as **Appendix 2**.

The anticipated benefits of the modifications include reduced environmental impacts by minimizing deforestation, carbon emissions, water usage, and waste generation; and lessened costs for printing and delivering hard copies to the meeting venues. These will contribute to a more efficient and environmentally responsible operation of SEAFDEC.

III. REQUIRED CONSIDERATION BY THE COUNCIL

Consider approving the proposed revision of the Rules for Paperless SEAFDEC Meetings (**Appendix 2**), or provide other suggestions to SEAFDEC for revision on the Rules for Paperless SEAFDEC Meetings

Appendix 1 of Annex 20

RULES FOR PAPERLESS SEAFDEC MEETINGS

(Approved by the SEAFDEC Council during its 51st Meeting, Indonesia, 18–22 March 2019)

During the 51st Meeting of the SEAFDEC Council convened on 18-22 March 2019 in Surabaya, Indonesia, the SEAFDEC Council agreed that future SEAFDEC meetings should be paperless (*i.e.* replacing hard copies of documents with electronic formats of the working documents to be presented and shared by meeting participants, or participants can download the documents from the SEAFDEC website and print if necessary), unless the SEAFDEC Secretariat is requested to provide some participants with hard copies of the working documents prior to the meetings.

The Rules for Paperless SEAFDEC Meetings shall apply to SEAFDEC annual meetings, as well as technical consultations, meetings, and workshops as appropriate and practical. The following rules shall therefore govern the implementation of Paperless SEAFDEC Meetings.

1. For the SEAFDEC annual meetings, *e.g.* SEAFDEC Council Meeting, SEAFDEC Program Committee Meeting

    1.1 Meeting documents shall be made available in electronic format through the SEAFDEC website at least one month prior to the meetings. The URL shall be provided to the participants to facilitate access and downloading of the documents;

    1.2 Participants are encouraged to download the working documents from the SEAFDEC website;

    1.3 One set of hardcopy of documents shall be provided to the Head Delegate of each Member Country attending in the meetings;

    1.4 For other participants who would like to obtain hard copies of the documents, such request shall be made to the SEAFDEC Secretariat at least two weeks prior to the meetings; and

    1.5 Hard copies of financial documents for the SEAFDEC Council Meetings shall be provided only to the Head Delegates attending the SEAFDEC Council Meetings.

2. For other technical consultations, meetings and workshops

    2.1 The SEAFDEC Secretariat and Departments shall determine whether hard copies of working documents would be made available for particular SEAFDEC events;

    2.2 Working documents shall be made available in electronic format through the SEAFDEC website and the URL shall be provided to the participants to facilitate access and downloading of the documents; and

    2.3 Participants are encouraged to download the working documents from the SEAFDEC website.

Appendix 2 of Annex 20

RULES FOR PAPERLESS SEAFDEC MEETINGS

(Proposed for consideration by the SEAFDEC Council during its 56th Meeting in Tagaytay City, Philippines)

During the 51st Meeting of the SEAFDEC Council convened on 18–22 March 2019 in Surabaya, Indonesia, the SEAFDEC Council agreed that future SEAFDEC meetings should be paperless (*i.e.* replacing hard copies of documents with electronic formats of the working documents to be presented and shared by meeting participants, or participants can download the documents from the SEAFDEC website and print if necessary), unless the SEAFDEC Secretariat is requested to provide some participants with hard copies of the working documents prior to the meetings.

During the 56th Meeting of the SEAFDEC Council convened on 6–9 May 2024 in Tagaytay City, Philippines, the SEAFDEC Council further agreed on modification of the paperless policy for SEAFDEC meetings with a view to contributing to a more efficient and environmentally responsible operation of SEAFDEC.

The Rules for Paperless SEAFDEC Meetings (2024 Revision) shall apply to SEAFDEC annual meetings, as well as technical consultations, meetings, and workshops as appropriate and practical. The following rules shall therefore govern the implementation of Paperless SEAFDEC Meetings.

1. For the SEAFDEC annual meetings, *e.g.* SEAFDEC Council Meeting, SEAFDEC Program Committee Meeting

    1.1 Meeting documents shall be made available in electronic format through the SEAFDEC website at least one month prior to the meetings. The URL shall be provided to the participants to facilitate access and downloading of the documents;

    1.2 Participants are encouraged to download the working documents from the SEAFDEC website;

    ~~1.3 One set of hardcopy of documents shall be provided to the Head Delegate of each Member Country attending in the meetings;~~

    ~~1.4 For other participants who would like to obtain hard copies of the documents, such request shall be made to the SEAFDEC Secretariat at least two weeks prior to the meetings; and~~

    1.5 Hard copies of financial documents for the SEAFDEC Council Meetings shall be provided only to the Head Delegates attending the SEAFDEC Council Meetings.

2. For other technical consultations, meetings and workshops

    2.1. The SEAFDEC Secretariat and Departments shall determine whether hard copies of working documents would be made available for particular SEAFDEC events;

    2.2. Working documents shall be made available in electronic format through the SEAFDEC website and the URL shall be provided to the participants to facilitate access and downloading of the documents; and

    2.3. Participants are encouraged to download the working documents from the SEAFDEC website.

Annex 21

OPERATION OF SEAFDEC TRAINING AND RESEARCH VESSELS

Executive Summary

SEAFDEC Training Department (SEAFDEC/TD) operates two training/research vessels constructed with financial support from the Government of Japan. The vessels of SEAFDEC/TD include M.V. SEAFDEC and M.V. SEAFDEC 2. Over the years, they have been utilizing four (4) purposes (1) training cruise, (2) research cruise, (3) charter cruise, and (4) others with the main envisage delivered were intensive practical experiences and expertise at sea to ensure effective technology transfer and assessment of national fisheries resource status in the waters of the SEAFDEC Member Countries and other government-related agencies upon the request. TD has provided technical assistance and facilities through both vessels, M.V. SEAFDEC for 112 cruises and M.V. SEAFDEC 2 for 68 cruises. These activities encompass research surveys on marine fisheries resources and the marine environment, studies on fishing gear performance and impact, shipboard training covering fishing technology, marine environment, navigation, and marine engineering, sea trials on fishing operations, and maintenance of oceanographic instruments and deck machinery.

M.V. SEAFDEC

In 2023, M.V. SEAFDEC had no cruise. In 2024, TD, in collaboration with the Department of Fisheries (DoF), Thailand, will utilize M.V. SEAFDEC to carry out the survey to determine the appropriate site for rehabilitation of fisheries habitats by artificial reef applying used oil rig platforms in the Gulf of Thailand for 30 days during 15 June to 14 July 2024, tentatively. Additionally, TD is ongoing to discuss with the National Disaster Warning Center (NDWC) of the Department of Disaster Prevention and Mitigation, Thailand to seek an opportunity to charter M.V. SEAFDEC for conducting the tsunami warning buoy deployment of the National Disaster Warning Center under the Department of Disaster Prevention and Mitigation Thailand.

M.V. SEAFDEC 2

Regarding M.V. SEAFDEC 2, the total number of service days in 2023 was fourteen (14) days from four (4) cruises: two cruises carrying out for the SIMRAD EK80 shipboard training (23 to 24 March and 29 to 31 May 2023), one cruise carrying out for university student shipboard training (2 April 2023) and one cruise carrying out marine debris research survey (15 to 22 October 2023). In 2024, M.V. SEAFDEC 2 will be carried out to support Member Countries and SEAFDEC's project, *e.g.*, DoF, Brunei Darussalam on the fisheries resource and environmental research survey for two (2) cruises, Chulalongkorn on marine debris survey in the Gulf of Thailand one (1) cruise and SEAFDEC's projects for two (2) cruises, one for marine debris and microplastic survey and one for SIMRAD EK80 shipboard training.

I. INTRODUCTION

SEAFDEC/TD operates two (2) training/research vessels constructed with financial support from the Government of Japan. The vessels of SEAFDEC/TD include M.V. SEAFDEC and M.V. SEAFDEC 2. Over the past decades, SEAFDEC Member Countries have confronted coastal fisheries resource depletion. To mitigate the issue of seafood supply and reduce the fishing pressure of the coastal fisheries resources in their national waters, SEAFDEC Member Countries are interested in developing effective management based on scientific data as well as capacity building for fishery officers on fisheries resources and environment survey methodology.

To fulfill the needs of SEAFDEC Member Countries. SEAFDEC/TD has worked in close collaboration with the SEAFDEC Member Countries and other national, sub-regional, and regional partners to undertake fisheries resources and marine environment research surveys as well as enhance human resource capacity on fisheries resource exploration, marine environment research survey, fishing technology, navigation, marine engineering and fish handling onboard, and others through the utilization of both SEAFDEC's vessels with budgetary from either SEAFDEC Member Countries or charter.

With that, the utilization of the SEAFDEC's vessels could be grouped into four (4) categories including (1) training cruise, (2) research cruise, (3) charter cruise, and (4) others. Since 1993, M.V. SEAFDEC has supported SEAFDEC Member Countries to conduct shipboard operations in Southeast Asia and adjacent areas, *e.g.*, Indian Ocean, Bay of Bengal, and the Timor Sea for 2,482 days (112 cruises). The range of operation day/year was from 0 - 195 days; 0-day utilization occurred in 2015, 2021, and 2023 and 195-day utilization occurred in 1994. The average number of days at sea per year was 80.10 days/year. M.V. SEAFDEC was mainly utilized as a research cruise representing 56.29% and was accompanied by training cruises at 29.37%, charter cruises at 9.47%, and others at 4.87%. The number of days at sea and the utilization percentage composition by category of M.V. SEAFDEC appear in Table 1.

Since 2004, M.V. SEAFDEC 2 has supported SEAFDEC Member Countries to conduct shipboard operations in the waters in Southeast Asia for 1,568 days (68 cruises) mainly carried out as research cruises for 87.62% and was accompanied by training cruises 7.91%, charter cruise 3.71% and others 0.76%. Table 2 shows the number of days at sea and the utilization percentage composition by countries of M.V. SEAFDEC 2 since 2004. The operation day/year range was from 3 - 204 days; 3 days occurred in 2021 and 204 days occurred in 2005. The number of days at sea was low during the COVID-19 pandemic from 2020 to 2022. The average number of days at sea per year was 73.35. Thailand, Malaysia, and Viet Nam waters were the top three areas that M.V. SEAFDEC 2 carried out, representing nearly 62% of the M.V. SEAFDEC 2 utilization by countries.

Table 1. The number of days at sea and the percentage composition by category of M.V. SEAFDEC utilization

Year	Number of days at sea separated by category				Total number of days at sea
	Training	Research	Charter	Others	
1993	95			4	99
1994	127	8		60	195
1995	139	53			192
1996	83	110			193
1997	83	56		49	188
1998	43	109		1	153
1999	49	75			124
2000		40		1	41
2001	108	76			184
2002		81			81
2003		77		1	78
2004		93			93
2005		98			98
2006			23		23
2007		58			58
2008			2		2
2009			19	1	20
2010	1		30	2	33
2011		49	20		69
2012		75	16		91
2013		86			86
2014	1	104	23		128
2015					0
2016		6			6
2017		15	37	1	53
2018		108			108
2019		20	16		36
2020			27		27
2021					0
2022			22	1	23
2023					0

Year	Number of days at sea separated by category				Total number of days at sea
	Training	Research	Charter	Others	
Sub-total	729	1397	235	121	2482
Percentage composition of the utilization by category	29.37%	56.29%	9.47%	4.87%	100%

Table 2. Number of days at sea of M.V. SEAFDEC 2 utilized in the water in SEAFDEC Member Countries

Year	BRN	KHM	IDN	MYS	MMR	PHL	THA	VNM	Total days
2004	51	8	9	8	9	8	34	8	135
2005	23	9	0	63	25	24	28	30	202
2006	29		22	29		31	40	30	181
2007					43	32	42		117
2008	31						64		95
2009	37		30						67
2010	41			45			12		98
2011	37						24		61
2012							3	145	148
2013							23		23
2014			22*	13*		18*	4		57*
2015			22*	100		18	8		148*
2016				35			4		39
2017							5	69	74
2018		22**					38**		60**
2019				25			32		57
2020							4		4
2021							3		3
2022							6		6
2023							14		14
Sub-total	249	39	105	293	77	131	395	282	1568
Percentage composition of the utilization by countries	15.88	2.49	6.7	18.69	4.91	8.35	25.19	17.79	100

*Remark: *Joint Research Program for Tuna Research Survey in Sulu-Sulawesi Seas*
*** Joint Research Program for Marine Fisheries Research and Marine Environment in the Gulf of Thailand*

II. UTILIZATION OF THE TRAINING/RESEARCH VESSELS OF SEAFDEC TRAINING DEPARTMENT IN 2023

1. M.V. SEAFDEC

M.V. SEAFDEC had no cruise for this year.

2. M.V. SEAFDEC 2

In 2023, M.V. SEAFDEC 2 was utilized for a total of 14 days across four (4) cruises. Two training cruises were carried out for EK-80 training onboard (23 to 24 March and 29 to 31 May 2023), one cruise was dedicated to university student shipboard training (2 April 2023), and another cruise was allocated for marine debris research survey (15 to 22 October). The summary information for utilizing M.V. SEAFDEC 2 appears in Table 3.

Table 3. Utilization plan of M.V. SEAFDEC 2 in 2023

Utilizing agency	Utilizing category	Duration	Area	Purpose of the cruise
SEAFDEC	Training	23 to 24 March	Upper part of the Gulf of Thailand	Shipboard training aimed at enhancing capabilities of SEAFDEC/TD and Thailand researchers in calibrating and collecting data using the quantitative echosounder SIMRAD EK80
SEAFDEC	Training	2 April	Upper part of the Gulf of Thailand	Shipboard training intended to enhance skills of 20 undergraduate students in fishing practices, oceanographic survey, and navigation
SEAFDEC	Training	29 to 31 May	Upper part of the Gulf of Thailand	Shipboard training aimed at enhancing the capabilities of SEAFDEC/TD and Thai researchers in calibrating and gathering data using the quantitative echosounder SIMRAD EK80
Chulalongkorn University	Charter	15 to 18 October	Upper part of the Gulf of Thailand	Research survey focusing on the marine debris and microplastic situation

III. OPERATIONS OF THE TRAINING/RESEARCH VESSELS OF SEAFDEC TRAINING DEPARTMENT IN 2024

1. M.V. SEAFDEC

SEAFDEC plans to carry out 2 cruises by utilizing M.V. SEAFDEC. The information on each cruise is shown in Table 4.

Table 4. Utilization plan of M.V. SEAFDEC in 2024

Requesting agency	Utilizing Category	Duration	Area	Propose of the cruise
DoF, Thailand	Research	15 June to 14 July (tentatively)	Southern part of the Gulf of Thailand	Research survey focusing on suitable site selection for the rehabilitation of fisheries habitats using artificial reef structures, particularly through the repurposing of used oil rig platforms
National Disaster Warning Center (NDWC)	Charter	To be decided	Indian Ocean	The deployment of tsunami warning buoys by the NDWD under the Department of Disaster Prevention and Mitigation, Thailand

2. M.V. SEAFDEC 2

SEAFDEC plans to carry out 5 cruises by utilizing M.V. SEAFDEC 2. The information on each cruise is shown in Table 5.

Table 5. Utilization plan of M.V. SEAFDEC 2 in 2024

Requesting agency	Category	Duration	Area	Purpose of the cruise
Chulalongkorn University-Thailand	Charter	3 to 10 April	Upper part of the Guld of Thailand	Marine debris surveys including floating and benthic debris and microplastic contamination in water, sediment and biota
DoF, Brunei Darussalam	Research	22 April to 10 June	Waters of Brunei Darussalam	Research survey in the waters of Brunei Darussalam to assess ecological resources including the demersal and pelagic fisheries resources in post-northeast monsoon period
DoF, Brunei Darussalam	Research	September to October (tentatively)	Waters of Brunei Darussalam	Research survey in the waters of Brunei Darussalam to assess ecological resources including the demersal and pelagic fisheries resources in pre-northeast monsoon period
SEAFDEC	Research	October to November (tentatively)	The Gulf of Thailand	Marine environment and fishery resources survey by using a research vessel and evaluate the impacts of microplastics on the fisheries resources
SEAFDEC	Training	4th quarter of 2024	The upper Gulf of Thailand	Shipboard training to improve the capabilities of SEAFDEC/TD and SEAFDEC Member Countries researchers in calibrating and collecting data using the quantitative echosounder SIMRAD EK80

The annual operation plans of M.V. SEAFDEC and M.V. SEAFDEC 2 for the year 2024 are summarized in Table 6.

Table 6. Tentative operation plans of M.V. SEAFDEC and M.V. SEAFDEC 2 in 2024

Utilizing agency	Month, 2024											
	J	F	M	A	M	J	J	A	S	O	N	D
M.V. SEAFDEC												
DoF, Thailand												
National Disaster Warning Center (NDWC), Thailand												
M.V. SEAFDEC 2												
Chulalongkorn University, Thailand												
DoF, Brunei Darussalam												
DoF, Brunei Darussalam												
SEAFDEC												
SEAFDEC (to be decided)												

IV. REQUIRED CONSIDERATION BY THE COUNCIL

- Take note of the non-utilization of the M.V. SEAFDEC and utilization of the M.V. SEAFDEC 2 in 2023;
- Take note of the utilization plan of the M.V. SEAFDEC in 2024; and
- Approve the proposed utilization plan of the M.V. SEAFDEC 2 in 2024

Annex 22

PROSPECTIVE USE OF THE RESEARCH AND TRAINING VESSELS OF SEAFDEC TRAINING DEPARTMENT, AND TREND OF USE OF THE BUDGET FOR M.V. SEAFDEC

Executive Summary

During the 45th and 46th Meetings of the Program Committee, and the 55th Meeting of the SEAFDEC Council, the Japanese delegate expressed concern regarding the Research and Training Vessel of the SEAFDEC Training Department (SEAFDEC/TD)-M.V. SEAFDEC, which was constructed over 30 years ago. He emphasized the importance for SEAFDEC to address the future utilization of the vessel and determine the necessary actions for its management moving forward.

Previous utilization of M.V. SEAFDEC: In response to the concerns raised, the SEAFDEC/TD conducted a comprehensive review of the utilization of M.V. SEAFDEC since 1993. Over her 30 years of operation, M.V. SEAFDEC has been utilized for approximately 82 days per year, totaling 2,482 days of operation. These operations comprised 729 days for training, 1,019 days for research surveys, 613 days for charter, and 121 days for various other purposes. Notably, TD was the top agency utilizing the vessel with 1,766 service days, followed by the Department of Coastal Marine and Resources (DMCR) of Thailand, with 352 service days. Further analysis from 2014 to 2023 revealed that the DMCR, Thailand, was the leading agency with 247 days, followed by the National Disaster Warning Center of the Department of Disaster Prevention and Mitigation of Thailand with 125 days. A 2024 questionnaire revealed no Member Countries are planning to utilize M.V. SEAFDEC for fisheries/oceanography research surveys in the foreseeable future (2025–2030).

Budget for M.V. SEAFDEC: Expenditure for M.V. SEAFDEC from 2014 to 2023 totaled 1.72 million USD for maintenance and insurance. This included 1.00 million USD for periodic maintenance, 0.67 million USD for repair and maintenance, and 0.05 million USD for insurance coverage. Estimated expenditure from 2024 to 2028 ranged between 0.80 and 0.98 million USD.

Issues and Concerns: The SEAFDEC/TD identified several issues with M.V. SEAFDEC, including high maintenance costs due to its age and outdated research equipment and fisheries resources sampling gear. SEAFDEC/TD seeks guidance from the Council on the vessel's future, considering the possibility of disposal within the next 5 years due to high maintenance expenses and outdated facilities. In addition, SEAFDEC/TD requests the Councils to guide the acquisition of a new research and training vessel tailored for offshore fisheries resources and marine environmental surveys, as well as for shipboard training for fisheries officers and researchers from SEAFDEC Member Countries.

I. INTRODUCTION

The Southeast Asian Fisheries Development Center (SEAFDEC) is an autonomous intergovernmental body established as a regional treaty organization on 28 December 1967, under the agreement at the Second Ministerial Conference for Economic Development of Southeast Asia held in Manila, the Philippines, in April 1967, to develop fisheries potential of the region by rational utilization of the resources for providing food security to the people through transfer of new technologies, research, and information dissemination activities. The Training Department (TD) was established in 1968 and is hosted by the Government of Thailand. TD is located in Samut Prakan Province, Thailand. The original objectives of TD were to develop modern fishery technologies for the better use of marine fish resources and to reduce manpower shortages in marine capture fisheries in Southeast Asia. Nevertheless, with the change in the fisheries situation, the roles and activities of TD have been adjusted to emphasize the promotion of coastal fisheries management to ensure responsible resource utilization and sustainable livelihoods in coastal communities, and the promotion of offshore fisheries through the development of best fishing practices and energy optimization technology to ensure stable supply of food fish and reduce fishing pressure in coastal areas[1].

From the beginning of TD, the first vessel acquired was M.V. Paknam, a 386-ton stern trawler-type survey/training vessel granted by the Government of Japan in 1969. M.V. Paknam served as a training vessel

[1] SEC/SP/206 (Revised, Fifth Edition)

for developing human resources and promoting modern fishing technologies and marine engineering. During the 1970s, to promote the exploitation of offshore fisheries resources in particular skipjack tuna and other species in the fishing ground of international waters and offshore waters within the EEZs of SEAFDEC Member Countries. The second vessel, M.V. Platoo, was donated from the Government of Japan to TD in 1980 to conduct coastal training and research in Southeast Asia. M.V. SEAFDEC was built as a replacement for M.V**.** PAKNAM, granted by the Government of Japan in 1993[2]. During the 2000s' the fishery resources and the marine environment have been massively pressured not only by increases in population and fishing capacities but also by irresponsible fishing. Thus, to maintain a stable supply of fish and marine products in the ASEAN region while also maintaining sustainable fisheries, efforts must be directed to sustainable resource utilization and environmental protection. Implementation of marine fisheries resource and environmental research over the broad expansion of the ASEAN region will enable SEAFDEC Member Countries to obtain a good understanding to utilize marine fisheries resources in their waters and to formulate a research and training plan to develop the capacity of the local fishers adequately on the utilization of marine fisheries resources through two training and research vessels namely 1) M.V. SEAFDEC and 2) M.V. SEAFDEC 2.

At the 45th Meeting of the Program Committee, a Japanese delegate expressed his concern about the M.V. SEAFDEC that was granted by the Government of Japan to SEAFDEC more than thirty years ago and that if SEAFDEC finds that the utilization of the M.V. SEAFDEC is difficult or creates negative impacts on SEAFDEC activities, SEAFDEC may need to consider appropriate handling of this research vessel. His concern was reiterated in the 46th Meeting of the Program Committee that the maintenance of the M.V. SEAFDEC which was constructed more than 30 years ago could be a burden for TD. He therefore urged SEAFDEC to consider the future utilization of the vessel and what would SEAFDEC need to do with the vessel in the future.

At the 55th Meeting of the Council of SEAFDEC, the Council Director for Japan expressed concern about the Government of Japan for the financial support to maintain the SEAFDEC research vessels. To response recommendation of the Councils, SEAFDEC prepare the Prospective Use of the Research and Training Vessels of the Training Department and the Trend of Use the Budget for M.V. SEAFDEC to report to the 56th Council to seek consideration and direction guidance from the Councils to improve our efficiency to support fisheries resources and environment research survey for SEAFDEC Members Countries.

II. UTILIZATION OF M.V. SEAFDEC

M.V. SEAFDEC is a training and research vessel granted by the Government of Japan. She was constructed by Miho Dockyard, Japan in 1993. M.V. SEAFDEC has 1,178 gross tonnages, 65.02 m of length overall, 12.0 m of breadth, and 4.70 m of depth. Service speed is 14.3 knots with 30 days endurance. Accommodation of M.V. SEAFDEC is available for 60 personnel onboard.

M.V. SEAFDEC mainly operates for both training and research purposes. M.V. SEAFDEC is equipped with tuna purse seine, longlines, gillnets, traps, and automatic squid jigging machines. She has been equipped with various oceanographic instruments such as a CTD system, XBT, larvae net, plankton net, and bottom sampler.

Figure 1: M.V. SEAFDEC

[2] *Apiwat Thamakasorn* and *Rupert Elstow* (2002) The SEAFDEC Training Department in Retrospect Through 35 Years of Fisheries Development in the Training Department Today Gazette

Utilization of the M.V. SEAFDEC

Since 1993, M.V. SEAFDEC has supported ASEAN Member States to conduct shipboard operations in Southeast Asia and adjacent areas, *e.g.* the Indian Ocean, the Bay of Bengal, and the Timor Sea with 2,482 service days (Figure 2).

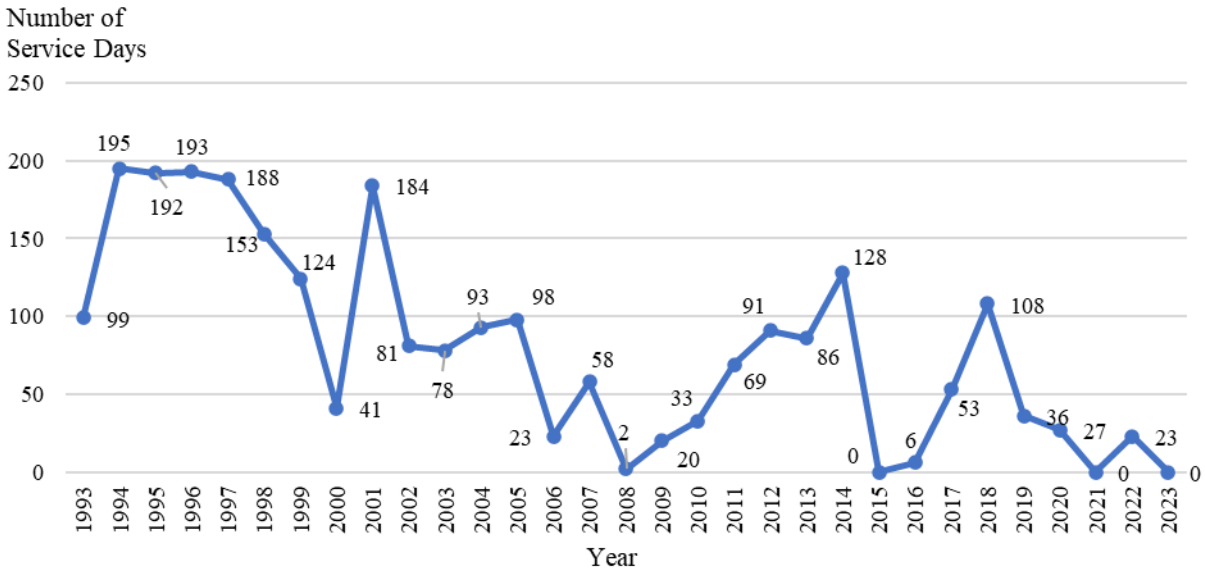


Figure 2 Number of Service Days of M.V. SEAFDEC from 1993 to 2023

The area of M.V. SEAFDEC operations to conduct tuna purse seine fishing is in the Eastern Indian Ocean. Line fishing *i.e.* tuna longline, bottom longline, and automatic squid jigging operations were conducted in the Eastern Indian Ocean, the Andaman Sea, and the Western Philippine Sea. Marine environmental and oceanography surveys are conducted in waters of SEAFDEC Member Countries (collaborative research survey) and the Eastern Indian Ocean (Figure 3).

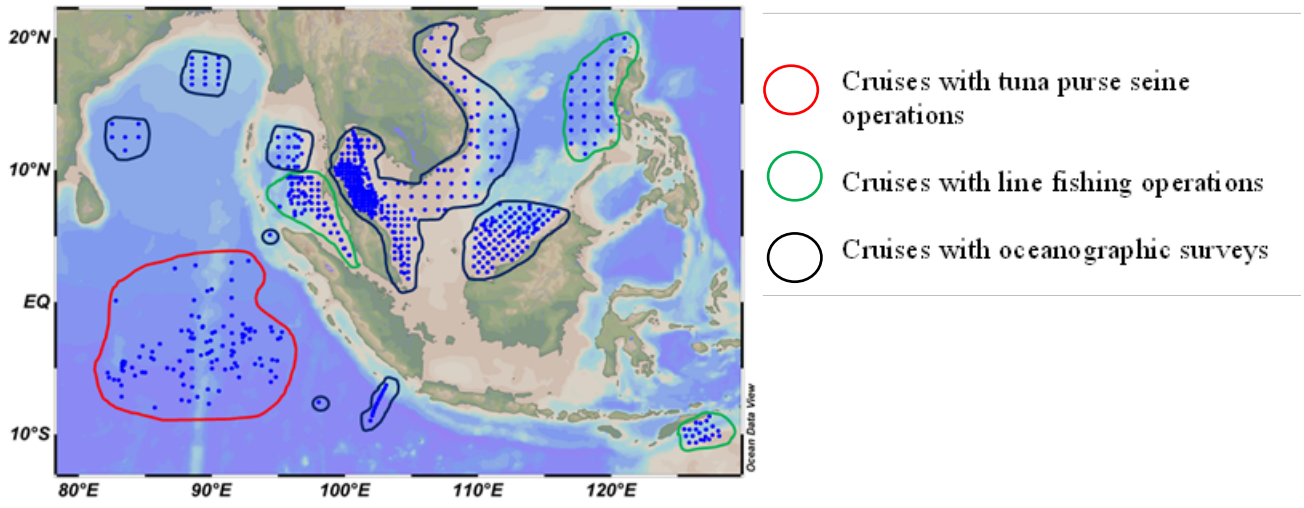


Figure 3: Positions of M.V. SEAFDEC operations from 1993 to 2023

The utilization of the M.V. SEAFDEC is classified into four (4) categories, as follows.

Four (4) main agencies which include the SEAFDEC Training Department, the Department of Coastal Marine and Resources, Thailand (DMCR), the Department of Fisheries, Thailand, and the National Disaster Warning Center (NDWC), Thailand utilized the M.V. SEAFDEC. The number of service days is shown in Table 2, Figures 4, and 5.

Table 2: Agencies to utilize M.V. SEAFDEC and number of service days

Agencies	Service days
SEAFDEC Training Department	1,767
Department of Coastal Marine and Resources, Thailand (DMCR)	351
Department of Fisheries, Thailand	103
National Disaster Warning Center, Thailand (NDWC), Department of Disaster Prevention and Mitigation, Thailand	233
Others, include the Department of Mineral Fuels, Ministry of Energy, Thailand, Private Sector	28
Total	2,482

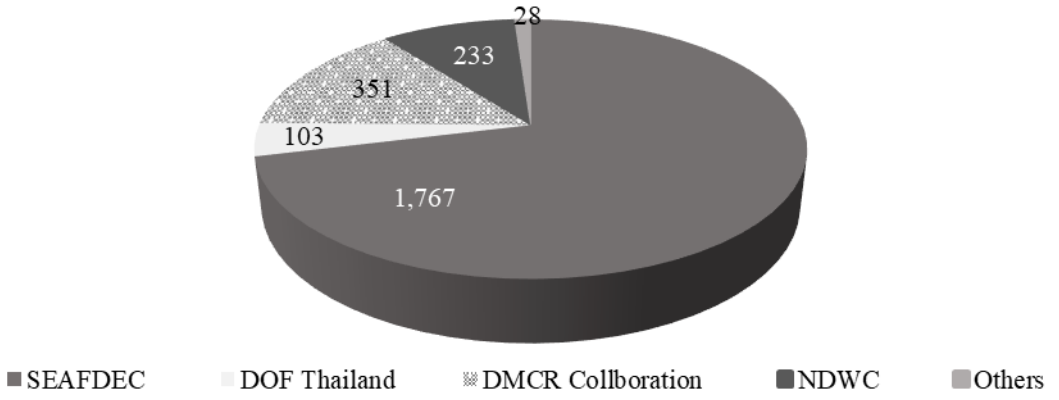


Figure 4: Number of Service Days of M.V. SEAFDEC from 1993 to 2023 separated by funding agencies

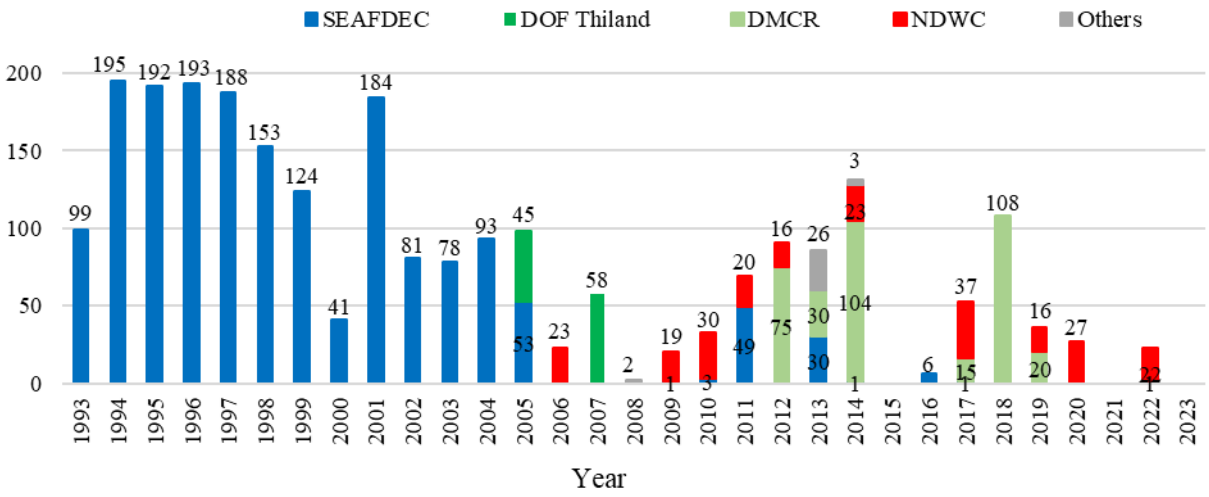


Figure 5: Number of service days of M.V. SEAFDEC from 1993 to 2023 separated by agencies

III. EXPENDITURE OF M.V. SEAFDEC FROM 2014 TO 2023

To maintain the safety and good performance of M.V. SEAFDEC in supporting SEAFDEC Member Countries, SEAFDEC/TD has periodically conducted maintenance of M.V. SEAFDEC mainly from the annual budget of SEAFDEC/TD supported by the Government of Thailand. SEAFDEC/TD classifies the major expenditures into four (4) categories, namely, 1) Repair and Maintenance Expenditure; 2) Periodic maintenance expenditure; 3) Insurance Expenditure; and 4) Maintenance for Scientific Instruments

Overall expenditure of M.V. SEAFDEC

The overall expenditure of M.V. SEAFDEC from 2014 to 2023 was 1,724,444.22 USD. The overall maintenance expenditure was found in the years that M.V. SEAFDEC conducted Periodic Maintenance including dry-docking in the years 2017, 2020, and 2022. TD estimated the overall expenditure of M.V. SEAFDEC from 2024 to 2028, amounting between 801,098.24–976,510.00 USD. (Figure 6).

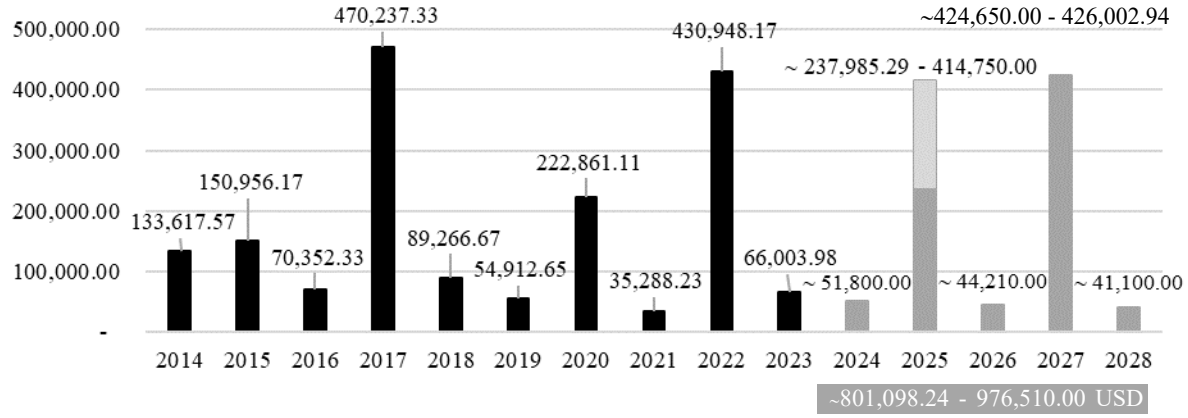


Figure 6: Overall expenditure (USD) of M.V. SEAFDEC from 2014 to 2023 and estimated trend from 2024 to 2028

Repair and Maintenance Expenditure

Repair and maintenance expenditure is the expenditure that is prepared for daily maintenance of the vessels including the annual inspection (or so-called 'annual survey'). The annual inspection is necessary to be conducted to renew the certification as required by the Marine Department of Thailand's regulation and to maintain the vessel readiness to support SEAFDEC Member Countries and other SEAFDEC missions. The total repair and maintenance expenditure from 2014 to 2023 was 668,960.35 USD or 38.8% of total expenditure.

Referring to an interview with the Master of M.V. SEAFDEC, the fluctuation of the repair and maintenance expenditure is associated with the conditions of various sections of the vessel including hull, engines, instruments navigation, fishing, etc. SEAFDEC/TD estimated the repair and maintenance expenditure of M.V. SEAFDEC from 2024 to 2028, amounting to 209,500.00 USD (Figure 7).

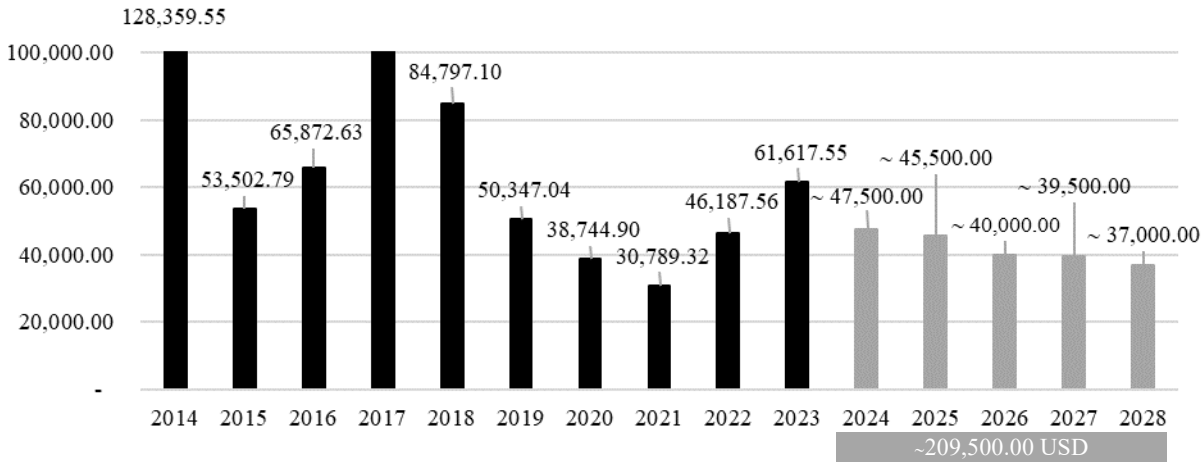


Figure 7: Total repair and maintenance expenditure of M.V. SEAFDEC from 2014 to 2023 and estimated trend from 2024 to 2028

Periodic maintenance expenditure

The periodic maintenance expenditure has been prepared to support periodic maintenance of M.V. SEAFDEC including dry-docking for the ship survey/inspection under the relevant regulations required by the Marine Department of Thailand which stipulate that the vessels need to undergo the special check and dry-docking at least twice within 5 years. During 2014–2023, M.V. SEAFDEC conducted four (4) dry-dockings in the years 2015, 2017, 2020, and 2022, respectively.

The total periodic maintenance expenditure from 2014 to 2023 was 1,009,779.79 USD or 58.6% of the total expenditure. The highest periodic maintenance dry-docking expenditure occurred for a special survey in 2022 at 380,411.28 USD. The lowest periodic maintenance dry-docking expenditure for the intermediate survey occurred in 2015 amounting to 92,778.69 USD.

The trend of dry-docking expenditure for the intermediate survey and special survey that plans to be conducted during 2024–2028 is increasing. SEAFDEC estimated the total periodic maintenance expenditure during 2024–2028 as 570,588.24–746,000.00 USD. Referring to the interview with the Master of M.V. SEAFDEC, SEAFDEC/TD considers the high maintenance costs due to its age and outdated research equipment and fisheries resources sampling gear. (Figure 8).

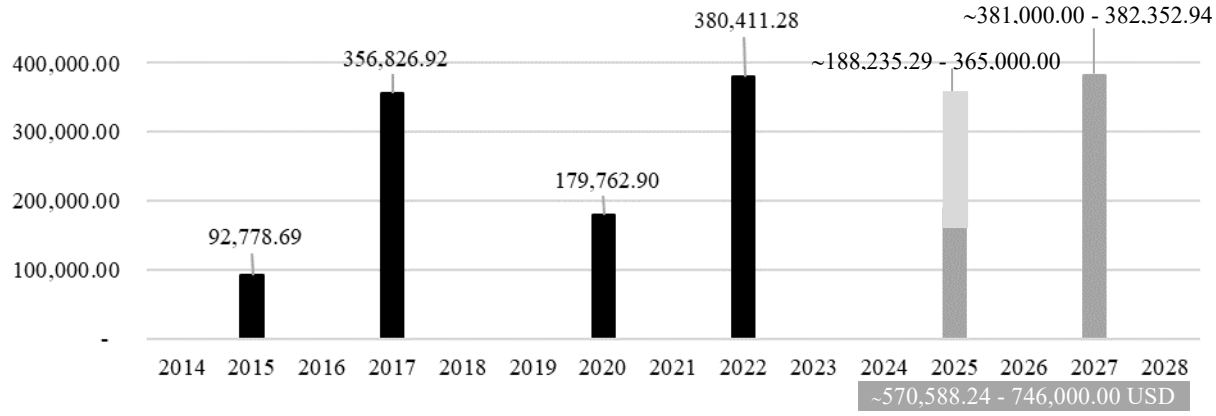


Figure 8: Periodic maintenance expenditure (USD) of M.V. SEAFDEC from 2014 to 2023 and estimated trend from 2024 to 2028

Insurance Expenditure

Total insurance expenditure from 2014 to 2023 was 45,704.08 USD or 2.6% of the total expenditure. The trend of insurance expenditure that plans to be conducted during 2024–2028 is estimated within the range between 4,100 to 4,300 USD/Year with total insurance expenditure as 21,010.00 USD (Figure 9).

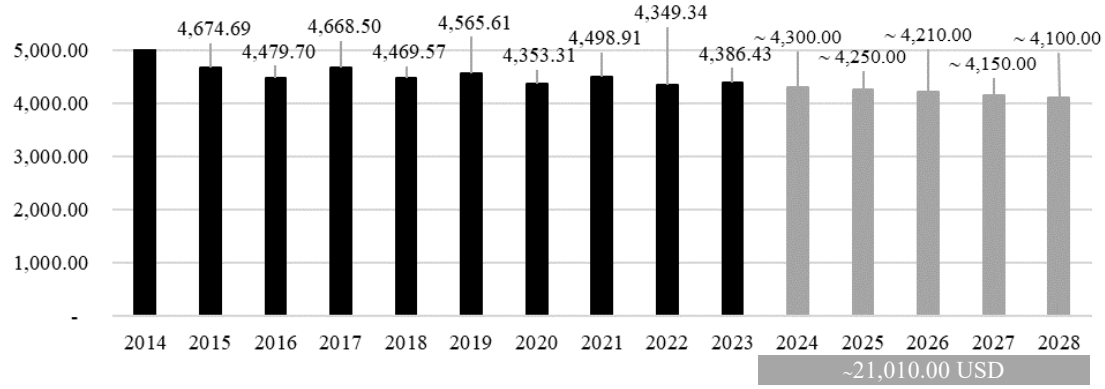


Figure 9: Total insurance expenditure of M.V. SEAFDEC from 2014 to 2023 and estimated trend from 2024 to 2028

IV. THE SIGNIFICANT ISSUES OF M.V. SEAFDEC TO SUPPORT SEAFDEC MEMBER COUNTRIES

The significant issues of M.V. SEAFDEC to support SEAFDEC Member Countries on fisheries resource and environmental research survey are separated into 2 categories, as follows.

1. Technical issues

The operational issues directly affect SEAFDEC Member Countries that plan to utilize M.V. SEAFDEC. There are four (4) operational issues.

a) Tuna purse seine as the main fishing gear to conduct research survey is not suitable for fisheries resources research survey. In general, trawl nets, both bottom trawl and midwater trawl, are regularly used as sampling gear for the fisheries resources survey. The current design of M.V. SEAFDEC is difficult to modify from a tuna purse seine operation to bottom trawl and midwater trawl operations.

b) Deck machinery and stern deck arrangement of M.V. SEAFDEC is not suitable for the fisheries resources survey. The research vessel requires to be equipped with a trawling system that includes trawl winches, trawl nets, gallows, and an A-Frame on the stern deck to facilitate towing operations of the oceanographic equipment. Furthermore, the vessel should install other necessary machinery to reduce manpower to safely operate survey or sampling equipment onboard.

c) Outdated research equipment and fisheries resources sampling gear. The research vessel is required to be equipped with up-to-date hydroacoustic instruments (fishing and instruments to investigate fisheries resources abundance) including the communication and vessel monitoring system (VMS) during the conduct of a survey.

d) Considering the size of M.V. SEAFDEC, 1,178 GT, the operation is not suitable to support a coastal resources research survey.

2. Financial Issues

a) The operational expenditure of M.V. SEAFDEC is considered a high operational expenditure. The operational expenditure directly affects the affordability of SEAFDEC Member Countries that plan to utilize M.V. SEAFDEC. SEAFDEC/TD considers that the gradually reducing utilization of M.V. SEAFDEC is caused by the fuel cost and the high fuel consumption of the vessel. The information from the Ship and Fleet Section of TD reveals that the estimated fuel consumption of the main engine and electric generators of M.V. SEAFDEC is 11,000 liters/24 hours (estimated expense 900–950 USD/24 hour). The high fuel cost together with the large consumption rate causes the overall operational expenditure to be high. As a result, SEAFDEC Member Countries confront the financial difficulties of planning the cruise surveys by using M.V. SEAFDEC. In addition, the navigation from SEAFDEC/TD located in Thailand to the distant research areas of SEAFDEC Member Countries such as the Philippines, Indonesia, and Myanmar consumes large volumes of fuel that leads to massive costs of the overall expenditures[3].

b) The maintenance expenditure of M.V. SEAFDEC directly affects the management of SEAFDEC vessels. The number of service years of M.V. SEAFDEC is the major hindrance to vessel maintenance. During the past ten (10) years, from 2014 to 2023, the total expenditure of M.V. SEAFDEC was 1,724,444.22 USD. The estimation of the total expenditure of M.V. SEAFDEC is between 801,098.24 – 976,510.00 USD to support the overall maintenance cost of M.V. SEAFDEC from 2024 to 2028.

Referring to the interview with the Master of M.V. SEAFDEC, the high maintenance costs are due to its age and outdated research equipment and fisheries resources sampling gear. Furthermore, the spare parts of the main engine, auxiliary engine, navigation equipment, or specific parts, etc., have been out of supply or

[3] Example calculation of fuel consumption for round-trip navigation from SEAFDEC/TD Samutprakarn to Phuket Province of Andaman Sea, Thailand 109,920 litter (3,847,200 baht with 35 baht/liter) calculated by Master of M.V.SEAFDEC

unavailable due to their product discontinuation. In general, these engine and navigation spare part manufacturing companies produce the spare parts for around 20 years before they cease production. Hence, the deterioration of M.V. SEAFDEC age is directly related to the overall maintenance cost that has increased annually since 1993.

V. SUMMARY OF THE FUTURE UTILIZATION OF M.V. SEAFDEC

Referring to the abovementioned issues of M.V. SEAFDEC to support Member Countries, the results of the Questionnaire on the Utilization of SEAFDEC Research Vessels and Plan of National Fisheries Resource Research Survey of SEAFDEC Member Countries reveal that none of SEAFDEC Member Countries requests to utilize M.V. SEAFDEC to conduct the fisheries resources and marine environment research survey and human resource development programs during 2025–2029.

However, SEAFDEC/TD received a proposal of two (2) ad hoc cruises, *i.e.* 1) A research survey in the Gulf of Thailand requested by the Department of Fisheries, Thailand tentatively 30 service days in the third quarter of 2024, and 2) A chartering cruise of the National Disaster Warning Center (NDWC) under the Department of Disaster Prevention and Mitigation of Thailand, to deploy the tsunami warning buoy in the Indian Ocean in the last quarter of 2024. Both cruise plans are under preparation.

Due to the significant issues of M.V. SEAFDEC to support SEAFDEC Member Countries, the Council is requested to agree with SEAFDEC/TD to develop a disposal plan of M.V. SEAFDEC and a proposal for a new research and training vessel that is suitable for offshore fisheries resources and marine environmental survey and shipboard training for fisheries officers and researchers of SEAFDEC Member Countries.

VI. REQUIRED CONSIDERATION BY SEAFDEC COUNCIL

- The Councils are requested to take note of the utilization of the M.V. SEAFDEC from 1993 to 2023 and the expenditure incurred during 2014–2023;
- The Councils are requested to support SEAFDEC/TD in developing a disposal plan for M.V. SEAFDEC, and;
- The Councils are requested to provide guidance on the acquisition of a new research and training vessel tailored for offshore fisheries resources and marine environmental surveys, as well as for shipboard training for fisheries officers and researchers from SEAFDEC Member Countries.

Annex 23

PROSPECTIVE USE OF THE RESEARCH AND TRAINING VESSELS OF SEAFDEC TRAINING DEPARTMENT TREND OF USE OF THE BUDGET FOR M.V. SEAFDEC 2

Executive Summary

Since 2004, the Southeast Asian Fisheries Development Center/Training Department (SEAFDEC/TD) has been operating the research and training vessel, M.V. SEAFDEC 2, to support national and regional activities including fishery resources and marine environmental surveys and human resources capacity building program on fishing technology, oceanography, and navigation. SEAFDEC Member Countries are considering utilizing M.V. SEAFDEC 2 to conduct fisheries resources and marine environment research surveys and human resource development programs in their waters during 2025–2029.

To ensure the safety and effectiveness of M.V. SEAFDEC 2 in supporting SEAFDEC Member Countries, SEAFDEC/TD oversees the operation of M.V. SEAFDEC 2 primarily from the Minimum Regular Contribution (MRC) and the cost-sharing policy for the utilization of M.V. SEAFDEC 2. Starting in 2010, an annual provision of 42,000.00 USD was allocated for periodic maintenance expenses for M.V. SEAFDEC 2. The amount has been increased to 75,000.00 USD annually since 2015. SEAFDEC/TD has been closely monitoring the increased maintenance expenditures since 2014.

SEAFDEC/TD has recorded the overall expenditure of M.V. SEAFDEC 2 over the past ten (10) years, from 2014 to 2023, which was 1,450,803.02 USD. This expenditure includes a total repair and maintenance expenditure of 446,396.83 USD, a total periodic maintenance expenditure of 548,640.00 USD, a total insurance expenditure of 84,613.94 USD, and a total maintenance of the scientific instrument amounting to 44,246.00 USD. The trend of the expenditure of M.V. SEAFDEC 2, particularly for periodic maintenance expenditure including dry-docking, will continue to rise during 2025–2029.

To adequately fund the periodic maintenance of M.V. SEAFDEC 2 for the period of 2025 to 2028, SEAFDEC/TD proposes raising the budget reserved for this purpose from 75,000.00 USD to 108,000.00 USD annually, starting in 2025. Consequently, the total MRC budget for the operation costs of M.V. SEAFDEC 2 will increase from 150,000.00 USD to 183,000.00 USD annually, beginning in 2025. To cover this additional expense for the vessel's periodic maintenance, amounting to 33,000.00 USD, it is proposed to allocate funds from another budget line of the MRC, specifically item 1.4) Other Program, Sub-item 1.4.1 Priority area/activities urgently required by the Member Countries.

I. INTRODUCTION

In 2004, the Government of Japan granted a fisheries research and training vessel namely, M.V. SEAFDEC 2 to SEAFDEC/TD under Japan's Grant Aid Scheme for Eligible Countries. The vessel has been utilized by the Grant Aid Eligible Countries and other SEAFDEC Member Countries to conduct fishery resources and environmental research surveys while providing training in fishing technology, oceanography, and navigation both national and regional activities. To achieve these activities and to ensure the benefit of M.V. SEAFDEC 2 given to SEAFDEC Member Countries, Eligible countries and the Operational committee were established to consider the utilization and plan of the cruise of M.V. SEAFDEC 2.

Due to budgetary constraints in 2006, the meeting of the Eligible Countries and Operation Committee has ceased. However, the request for utilization of MV SEAFDEC 2 for the national fisheries resources program of the Member Countries has been continued as part of the SEAFDEC Program Committee Meetings. In 2007, funding support for the operation of M.V. SEAFDEC 2 was mainly received from the Minimum Regular Contribution (MRC) and the cost-sharing policy on the use of M.V. SEAFDEC 2[1]. To maintain the safety and efficiency of M.V. SEAFDEC 2 to support Member Countries, the Council approved SEAFDEC/TD at the 41st Meeting of SEAFDEC Council in the year 2009 to reserve a budget for the periodic maintenance expenses of M.V. SEAFDEC, 42,000.00 USD annually starting from 2010. In 2016, the Council approved at the 47th Council Meeting in 2015 to increase the budget reserve for periodic

[1] SEAFDEC. 2009. Report of the Forty-First Meeting of the Council of the Southeast Asian Fisheries Development Center, Southeast Asian Fisheries Development Center, Bangkok, Thailand. 188 pp

maintenance of M.V. SEAFDEC 2 from 42,000.00 USD to 75,000.00 USD annually, starting from 2015. However, SEAFDEC/TD has continually monitored the maintenance cost and considered that the maintenance expenditure of M.V. SEAFDEC **2** will further increase during 2024–2028.

With that SEAFDEC/TD prepares the report for submission to the Council in order to request approval for the revision of the budget for periodic maintenance expenditure of M.V. SEAFDEC **2** and the total MRC budget that will support M.V. SEAFDEC 2.

II. UTILIZATION OF M.V. SEAFDEC 2

M.V. SEAFDEC 2 is the research and training vessel having 207 gross tonnages (international) of 32.5 m long and 7.2 m wide. The accommodation space of M.V. SEAFDEC 2 is available for 37 personnel, including 17 crew members and 22 researchers/trainees onboard.

Figure 1: M.V. SEAFDEC 2

The main fishing gear are trawl (bottom and pelagic), longline, squid jigging, and drift gill net. The vessel is also equipped with new technologies of oceanographic instruments, navigation, and marine electronic equipment. This vessel will be utilized to implement fisheries research and fishery training programs in the coastal waters of SEAFDEC Member Countries as requested.

The total number of utilization days of M.V. SEAFDEC 2 from 1993 to 2023 is 1,568 days. It was also recorded that Thailand, Malaysia, and Viet Nam waters were the top three (3) areas that M.V. SEAFDEC 2 operated and occupied nearly 50% of the M.V. SEAFDEC 2 utilization by the Member Countries.

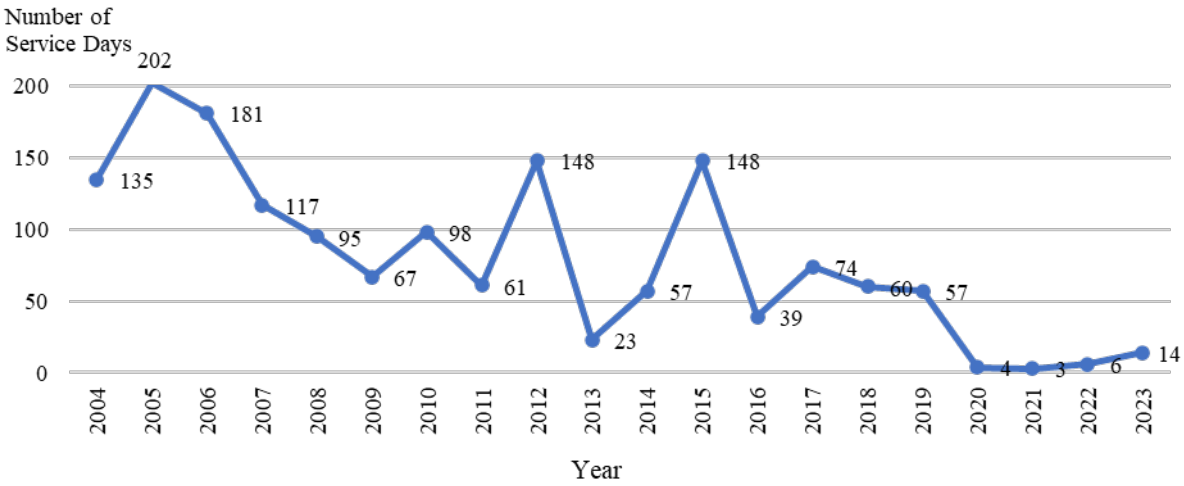


Figure 2: Number of service days of M.V. SEAFDEC 2 from 2004 to 2023

III. FUTURE UTILIZATION OF M.V. SEAFDEC 2 BY THE SEAFDEC MEMBER COUNTRIES

1. Fisheries Resource and Oceanographic Research Survey

Regarding the Questionnaire on the Utilization of SEAFDEC Research Vessels and Plan of National Fisheries Resource Research Survey of SEAFDEC Member Countries during 2025–2030 that SEAFDEC/TD sent to Member Countries in early 2024, six (6) of ten (10) SEAFDEC Member Countries have national plans to conduct the fisheries resource and oceanographic research survey in their waters during 2025–2029. The result of the questionnaire survey appears in Table 1.

Table 1: National plans for fisheries resource and oceanographic research survey

Cambodia	2025	Oceanographic survey, Fish larvae survey, Fisheries resource survey (Stock assessment)
	2029	Oceanographic survey, Fish larvae survey, Fisheries resource survey (Stock assessment)
Malaysia	2025	Demersal fisheries resources survey
	2026	Pelagic fisheries resources survey by using hydroacoustic equipment
	2027	Pelagic fisheries resources survey by using hydroacoustic equipment
	2028	Demersal fisheries resources survey
	2029	Pelagic fisheries resources survey by using hydroacoustic equipment
Myanmar	2026	Fisheries resources and oceanographic research survey
	2028	Fisheries resources and oceanographic research survey
Philippines	2025	Demersal Stock Assessment
	2026	Demersal Stock Assessment
	2027	Fisheries Oceanographic Survey
	2028	Demersal Stock Assessment
	2029	Demersal Stock Assessment
Thailand	2025	Research Survey on Marine Fisheries Resources and Marine Environment
	2026	Fisheries resources and oceanographic research survey in the central Gulf of Thailand and the Andaman Sea
	2027	Fisheries resources and oceanographic research survey in the central Gulf of Thailand and the Andaman Sea
Viet Nam	2025	Fisheries Resources Survey in shoals and seamounts in the Southern Sea of Viet Nam

2. Promotion of fishing gear and the training program related to the topics of the fisheries resources and environmental/oceanographic survey

In addition to the fisheries resource and oceanographic research survey, the M.V. SEAFDEC 2 has the efficiency to provide human resources development for SEAFDEC Member Countries. The results of the questionnaire survey reveal that SEAFDEC Member Countries are interested in promoting or conducting training programs using three (3) fishing gear types *i.e.* bottom trawl, bottom longline, and pot (or trap). Furthermore, M.V. SEAFDEC 2 can support human resources development and research on fishing technology, fisheries resources, and oceanography/environment. The result appears in Table 2 and Table 3.

Table 2: Promotion of fishing gear or conducting training programs

Member Country	Purse seine	Bottom trawl	Midwater trawl	Tuna longline	Bottom longline	Gillnet	Pot/ Trap	Light fishing	Dredge
Cambodia		√	√						
Malaysia					√		√		
Myanmar		√	√		√	√	√	√	
Philippines	√	√		√	√		√		
Thailand		√	√	√	√		√		
Viet Nam		√	√						√
Score	1	5	4	2	4	1	4	1	1

Table 3: Research/training program related to the fisheries resources and environmental and oceanographic survey interested by SEAFDEC Member Countries

Topics	Priority
1. Training on fishing technology (including acoustic data analysis)	1
2. Fisheries resource exploration	2
3. Research on fishing technology	2
4. Research on oceanography/environment (including tuna and tuna-like species fishing)	2
5. Training on oceanography/environment	3

IV. EXPENDITURE DURING 2014–2023

To maintain the safety and efficiency of M.V. SEAFDEC 2 in supporting SEAFDEC Member Countries, SEAFDEC/TD manages the operation of M.V. SEAFDEC2 mainly from the Minimum Regular Contribution (MRC) and the cost-sharing policy on the utilization of M.V. SEAFDEC 2. SEAFDEC/TD separates four (4) main expenditures referred to the financial report of M.V. SEAFDEC 2 includes; 1) Repair and Maintenance Expenditure; 2) Periodic maintenance expenditure; 3) Insurance Expenditure; and 4) Maintenance for Scientific Instruments

The overall expenditure of M.V. SEAFDEC 2 during the past ten (10) years from 2014 to 2023 was 1,450,803.02 USD. The estimated budget in 2024 is 461,407.00 USD[2]. The trend of the overall expenditure that plans to be conducted during 2025–2029 is increasing. Estimated overall expenditure during 2025–2029 will be 1,067,437.10 USD (Figure 3).

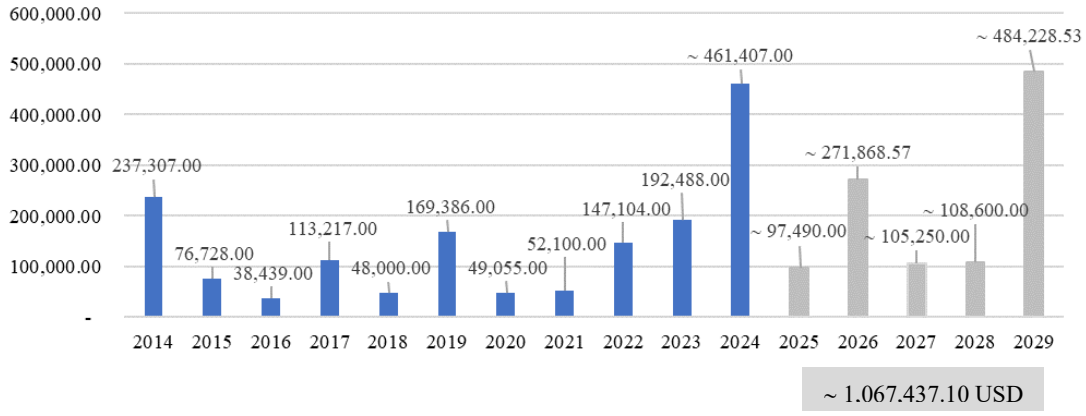


Figure 3: Overall expenditure of M.V. SEAFDEC 2 during 2014–2023 and estimated from 2025 to 2029

The expenditure of M.V. SEAFDEC 2 is categorized into 4 items as follows.

1. Repair and maintenance expenditure

Repair and maintenance is the expenditure prepared for annual maintenance of the vessels that include the annual inspection (or so-called annual survey) to renew the certification as required by the Marine Department of Thailand and to maintain the vessel's readiness to support SEAFDEC Member Countries and other SEAFDEC missions.

Total repair and maintenance expenditure during 2014–2023 was 446,396.83 USD. The repair and maintenance expenditure fluctuates during 2014–2020 but tends to increase after the year 2021. Referring to the interview with the Master of M.V. SEAFDEC 2, it is difficult to estimate the repair and maintenance expenditure because it depends on the condition of various sections of the vessel, however, the age of the

[2] It is noted that the periodic maintenance with dry-docking in early 2024 has been committed and secured fund 369,058.00 USD. However, the finalized budget for annual maintenance, insurance, and maintenance for scientific instrument will be summarize in early 2025.

vessel will certainly increase the repair and maintenance expenditure. SEAFDEC/TD estimates the total repair and maintenance expenditure for the next 5 years, during 2025–2029, to be 417,000.00 USD (Figure 4).

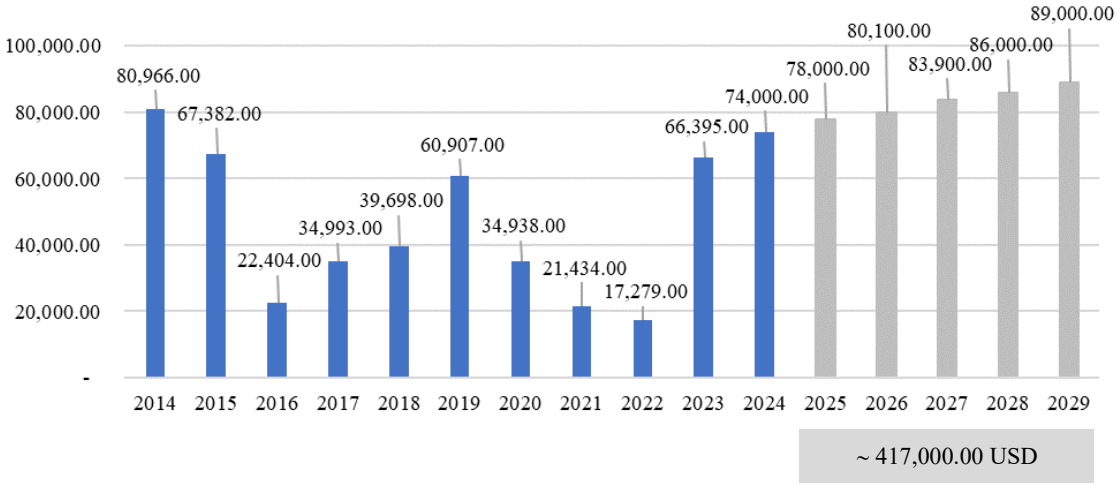


Figure 4: Total repair and maintenance expenditure of M.V. SEAFDEC 2 from 2014 to 2023 and estimated trend from 2025 to 2029

2. Periodic maintenance expenditure

This expenditure has been prepared to support periodic maintenance of M.V. SEAFDEC 2 that includes dry-docking for the ship survey/inspection under the relevant regulations required by the Marine Department of Thailand which stipulate that the vessels need to undergo the special check and dry-docking at least twice within 5 years.

During the period from 2014 to 2024, M.V. SEAFDEC 2 conducted seven (7) dry-docking in the years 2014, 2017, 2019, 2021, 2022, 2023 and 2024. The dry-docking for the intermediate survey was conducted in the years 2017 and 2022 while the dry-docking for the special survey was conducted in the years 2014, 2019, and 2023[3], and 2024. Dry-docking in 2021 was conducted for the installation of the hydroacoustic instrument SIMRAD EK80.

The total expenditure for periodic maintenance with dry-docking from 2014 to 2024 is 917,697.00 USD. The lowest periodic maintenance expenditure, 15,234.00 USD, was spent on the installation of the hydroacoustic instrument SIMRAD EK80 in the year 2021. In the case of periodic maintenance with dry-docking for ship survey/inspection, the lowest expenditure of periodic maintenance was in 2014 at 69,044.00 USD. The highest expenditure on periodic maintenance is 369,058.00 USD, to be spent in the year 2024.

The trend of dry-docking expenditure for the intermediate survey and special survey that plans to be conducted during 2025–2029 is increasing. SEAFDEC estimates the total periodic maintenance expenditure during 2025–2028 as 542,857.10 USD (Figure 5).

[3] The survey in 2023 was shifted from mid-2024 because the period of dry docking for Special Survey in 2024 may overlap the period of cruise survey to support SEAFDEC Member Countries. With that SEAFDEC considers the survey in 2023 is a part of the special survey in 2024.

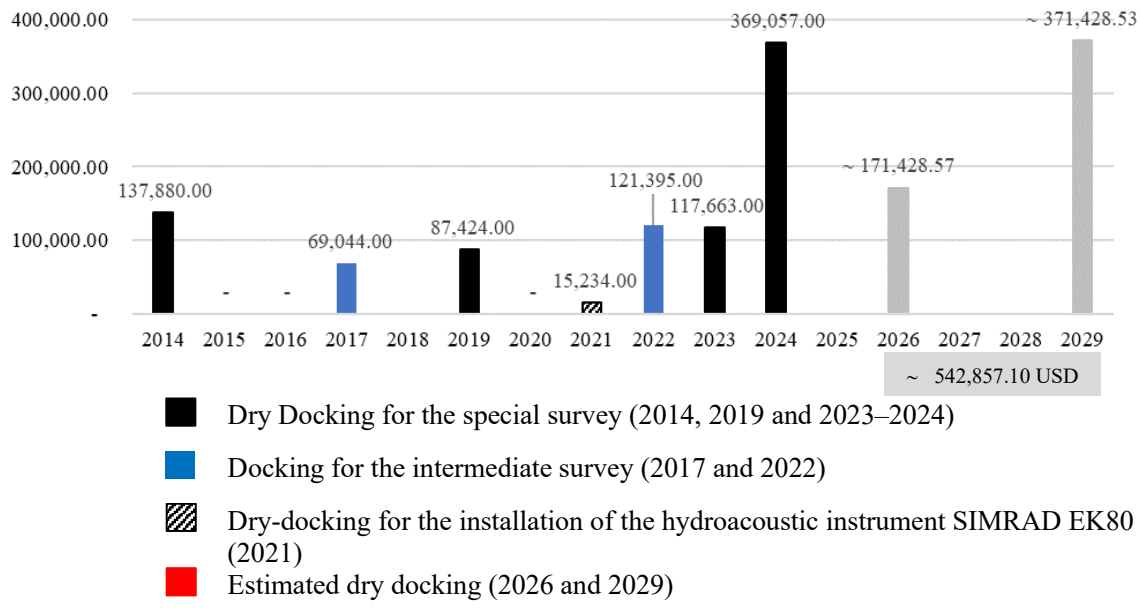


Figure 5: Dry-docking expenditure of M.V. SEAFDEC 2 from 2014 to 2023 and estimated trend from 2024 to 2028

3. Insurance expenditure

The total insurance expenditure from 2014 to 2023 is 84,542.00 USD. The insurance expenditure was highest in the year 2014 (9,859.00 USD) and lowest in the year 2021 (7,266.00 USD). SEAFDEC estimates the total periodic maintenance expenditure during 2025–2029 as 50,640.00 USD (Figure 6).

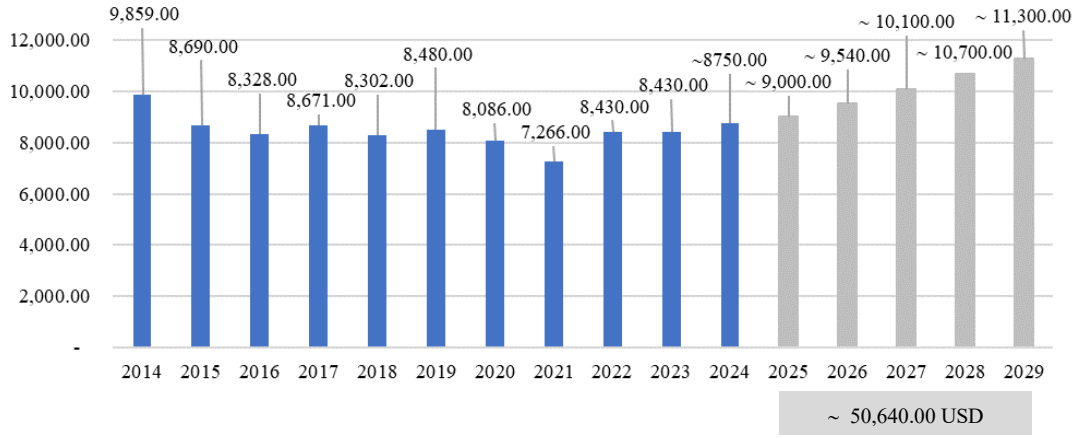


Figure 6: Total insurance expenditure of M.V. SEAFDEC 2 from 2014 to 2023 and estimated trend from 2025 to 2029

4. Maintenance of scientific instruments

The periodic maintenance expenditure has been also prepared to support the maintenance or calibration of scientific instruments that need periodic calibration and maintenance by their companies *e.g.* CTD, TSG, and PRR.[4] to maintain and ensure the accuracy of their functions. The total maintenance of the scientific instruments expenditure from 2014 to 2023 is 44,246.00 USD.

[4] CTD is Conductivity Temperature and Depth with additional sensors, TSG-Fluorometer is Thermo-salinograph with Fluorometer, PRR is Profiling Reflectance Radiometer System

The trend of insurance expenditure that plans to be conducted during 2024–2028 is increasing. SEAFDEC estimates the total maintenance of the scientific instrument expenditure during 2024–2028 as 56,940.00 USD (Figure 7).

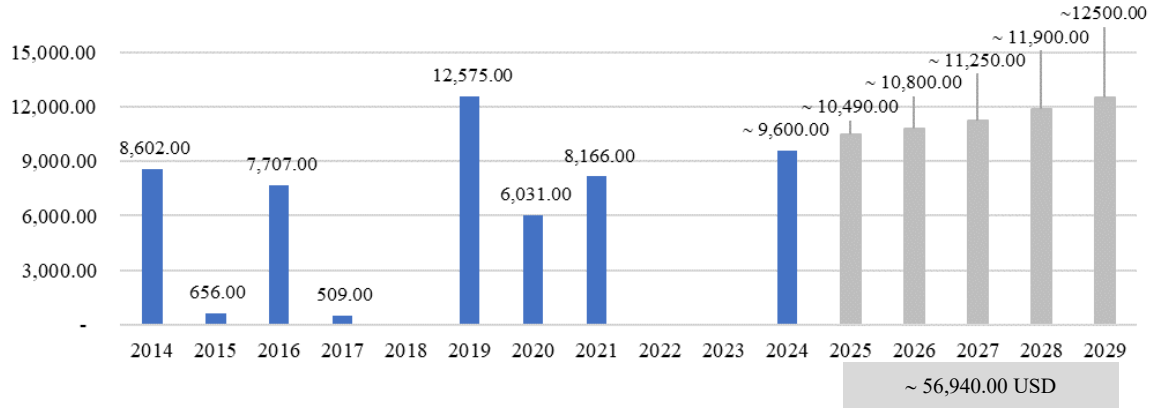


Figure 7: Total Maintenance of the scientific instruments of M.V. SEAFDEC during 2014–2023 and estimated trend from 2025 to 2029

V. SUMMARY OF THE FUTURE UTILIZATION OF M.V. SEAFDEC 2

1. Future research and training vessels to support the Member Countries

Results of the Questionnaire on the Utilization of SEAFDEC Research Vessels and Plan of National Fisheries Resource Research Survey of SEAFDEC Member Countries reveal that some SEAFDEC Member Countries still require SEAFDEC/TD to support the fisheries resources and marine environment research survey and human resource development programs during 2025–2029.

2. Financial issues of maintenance cost

Referring to the funding support for the operation of M.V. SEAFDEC 2 that is mainly from the MRC and the cost-sharing policy on the utilization of M.V. SEAFDEC 2, the available MRC budget with the total amount of 150,000.00 USD per year since 2007. This amount of budget is to be spent for four (4) categories, *i.e.* 1) Operation expenditure, 2) Maintenance expenditure, 3) Insurance expenditure, and 4) Vessel periodic maintenance expenditure.

To maintain the safety and efficiency of M.V. SEAFDEC 2 to support the Member Countries in the situation that the estimated maintenance expenditure is gradually increasing in particular the next five (5) years, from 2025 to 2029, SEAFDEC/TD proposes to increase budget reserved for periodic maintenance of the M.V. SEAFDEC 2 from 75,000.00 USD to 108,000.00 USD annually, starting in 2025. With that the total MRC budget to support M.V. SEAFDEC 2 is increased from 150,000.00 USD to 183,000.00 USD annually, starting in 2025. The budget arrangement for the operation of M.V. SEAFDEC 2 is described in Table 5.

The increased expense for vessel periodic maintenance of 33,000.00 USD is proposed to be transferred from the Minimum Regular Contribution Item 1.4) Other Program, Sub-item 1.4.1 Priority area/activities urgently required by the Member Countries.

Table 5 The arrangement of the budget for the operation of M.V. SEAFDEC 2

Cost	2024	2025 onward
1) Operation cost	30,000	30,000
2) Annual maintenance cost	35,000	35,000
3) Insurance cost	10,000	10,000
4) Expenses for vessel periodic maintenance cost*	75,000	108,000
Total	150,000	183,000

VI. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to approve the increasing amount of reserved budget from the MRC for periodic maintenance of the M.V. SEAFDEC 2 from 75,000.00 USD to 108,000.00 USD annually starting in 2025. This amount shall be allocated from the other budget line of the MRC, specifically item 1.4) Other Program, Sub-item 1.4.1 Priority area/activities required by the Member Countries. This would make the total amount of the budget to support M.V. SEAFDEC 2 increase from 150,000.00 USD to 183,000.00 USD annually.

Annex 24

REGIONAL FISHERIES POLICY NETWORK (RFPN) PROGRAM

I. BACKGROUND

Since 2007, SEAFDEC has established the Regional Fisheries Policy Network (RFPN) program, where the RFPN members from SEAFDEC Member Countries are stationed and working at the SEAFDEC Secretariat for the period on a one-year basis. The RFPN was created to facilitate collaboration among national fisheries officers of the Member Countries in promoting regional and sub-regional cooperation on issues related to regional fisheries policy. Their roles and functions are designed to provide support and make contributions to formulate regional fisheries policies and policy recommendations, among other responsibilities. After they returned to their respective offices, many of them were assigned to carry out important tasks and among their network, they continued to communicate with each other. The Terms of References of the RFPN are shown in **Appendix 1**. This program received funding support from the SEAFDEC-Sweden Project and the Japanese Trust Fund (JTF). From 2007 until 2019, eight Member Countries participated in this regional program, including Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam. Due to the COVID-19 pandemic, since 2020, the RFPN was put on hold temporarily.

In 2023, the SEAFDEC Council during its 55th Meeting in May 2023, requested SEAFDEC to explore alternative funding sources for reactivating the RFPN program, including the potential use of the accumulated unspent budget from the Minimum Regular Contribution (MRC). This paper will provide updated information based on the request of the 55CM.

II. ISSUES AND CONCERNS REGARDING THE IMPLEMENTATION OF THE RFPN PROGRAM SINCE 2019

1. Depletion of Senior Fisheries Officers Available for Nomination

For nearly half of the RFPN program's implementation period, the nomination of RFPN members adhered to its TOR. This approach agreed upon since its program inception, focused on selecting successor candidates from senior fisheries officers with relevant experience in fisheries policies. As a result, numerous regional policies were formulated and initiated through collaborations involving RFPN members during the early stages of this program. However, in the latter stage of the RFPN program, it became evident that several countries encountered challenges in assigning their senior fisheries policy staff to be stationed at the SEAFDEC Secretariat. This was considerably due to the increasing fisheries issues and challenges faced by the countries, necessitating the presence of senior fisheries policy personnel at their respective home offices rather than seconded to the SEAFDEC Secretariat. Additionally, there was a shortage of staff members who had already acquired substantial experience in the field of fisheries policy and management to replace these senior officers. Consequently, it was noted that a significant proportion of the RFPN members nominated from the latter half of the RFPN Program until 2019 were relatively young or with limited experience in the field of fisheries policies and other emerging issues related to fisheries management, as outlined in its TOR, which is an integral part of the core values initially emphasized by the RFPN program.

2. Development of Regional Fisheries Policy in Southeast Asia over the Past Decade

Over the past decade, it is evident that numerous organizations, agencies, and task forces have emerged in Southeast Asia with the primary mission of developing regional fisheries management policies. These include various ASEAN Fisheries Working Groups/Networks (such as AN-IUU, CITES, Environment, Climate Change, Fish Trade, etc.), RPOA-IUU, CTI-CFF, and Water Resources Management Working Group under the Mekong River Commission, etc. These entities have well-defined functions, mandates, roles, and responsibilities related to fisheries policy development in Southeast Asia. Notably, many regional fisheries policies have been successfully formulated and implemented across almost all aspects of fisheries management by these key organizations.

3. Insufficient Funding Arrangements in Conjunction with the Impact of the COVID-19 Pandemic

The establishment of the RFPN program was originally facilitated by the Collaborative Project supported by the Government of Sweden and the Japanese Trust Fund (JTF). Even after the termination of the SEAFDEC-Sweden project in 2019, the JTF remained committed to providing funding support to the RFPN program with limited financial resources. Consequently, for the 2020 batch, the duration of the RFPN program had to be shortened from one year to six months to accommodate the same number of participants, which remained at eight. However, due to the global outbreak of COVID-19 in late 2019, the RFPN program had to be temporarily put on hold.

4. 2022 Establishment of New Regional Capacity Building Network Program

In 2021, in line with the commitment to enhancing the capacity of ASEAN Member States (AMSs) in sustaining fisheries and aquaculture for food security in the ASEAN region, the SEAFDEC Secretariat proposed a series of regional programs with the financial support of JTF, entitled "Regional Capacity Building Network (RECAB) program." Making use of the RFPN budget that was temporarily put on hold, this program is designed to organize technical training courses aimed at enhancing the skills and expertise of fisheries officers from the AMSs. The expected total number of participants would be 20 officers for each course. The program also strengthens regional cooperation and facilitates the establishment of a regional network focusing on such specific technical topics, through their participation. Furthermore, this capacity-building program, delivered through short-term training courses, is designed to address emerging international fisheries-related issues by utilizing the existing expertise of SEAFDEC technical departments. Through these networks, these participants know each other and are bound, and it is expected that they will keep the connection and work and help each other in the future in their working areas. These training programs include both theoretical and practical sessions, enabling participants to acquire a deep understanding of the subject matter and apply it to their respective careers. In the initial trial phase of the RECAB program, the following courses were planned and implemented: "Gender in Fisheries" at TD in 2022, "Aquaculture" at AQD in 2023, and "Fisheries Stock Assessment" at MFRDMD in 2024.

III. VIEWS AND SUGGESTIONS FROM THE PROGRAM COMMITTEE DURING THE 46TH MEETING IN 2023

SEAFDEC Secretariat brought the request of the SEAFDEC Council during the 55th Meeting in 2023 that requested SEAFDEC to explore alternative funding sources for reactivating the RFPN program, including the potential use of the accumulated unspent budget from the Minimum Regular Contribution (MRC). SEAFDEC Secretariat made the analysis and expressed some issues and concerns of the implementation of the RFPN, as described above mentioned and also provided the scenario analyzed by SEAFDEC Secretariat on the MRC, which amount of USD 500,000 annually and there was no adjustment of the MRC until the present. The MRC was intended to support the operation of the SEAFDEC Secretariat and for the reserved budget for periodic maintenance of the vessel. From 2020 to 2022 due to the COVID-19 situation, many of the SEAFDEC activities had to be put on hold including its annual events organized through online mode resulting in some accumulated unspent budget. However, to ensure the future financial sustainability of SEAFDEC, and it is important that a certain amount of accumulated MRC need to be reserved for future activities that may emerge in response to the needs of the Member Countries, such as regional events that have a broad regional impact or special events aimed at shaping future regional fisheries policies and directions. Moreover, with the possibility of increasing the operation cost of the SEAFDEC Secretariat in the future, having a certain amount of reserved budget could provide a buffer to avoid increasing the Member Countries' contribution to MRC in the short future.

During the 46PCM, various views and suggestions were made by the Program Committee Members, as provided below:

Table 1: Countries views and suggestions regarding the reactivation of the RFPN

Countries	Views/Suggestions
Brunei Darussalam, Singapore, and Japan	Follow with a majority decision
Cambodia	• The duration of stay should be one year • TOR should be revised to focus on capacity building by involving the RFPN members in SEAFDEC activities, facilitating coordination between SEAFDEC and the respective Member Countries, and providing updated information on the implementation of SEAFDEC programs and activities including relevant reports.
Indonesia	• The duration of stay should be one year • TOR should be reviewed
Lao PDR	• The duration of stay should be one year
Malaysia	• The duration of stay should be whether cover six months or one year is up to SEAFDEC, considering the availability of the budget
Myanmar	• If there is a sufficient budget, the RFPN program should be reactivated. • Expectations from the existing TOR are quite high and it is difficult for the staff to meet such requirements.
Philippines	• The duration of stay should be one year • TOR should be reviewed
Thailand	• The duration of stay should be one year • TOR of the RFPN should be retained and agreed with SEAFDEC to establish a screening process to ensure the high qualification of the RFPN members
Viet Nam	• If the MRC could support the RFPN program for three years, the RFPN program could be reactivated as proposed by SEAFDEC

IV. ISSUES FOR CONSIDERATION BY THE 56TH MEETING OF SEAFDEC COUNCIL

1. Proposed modification of the Terms of Reference of the RFPN

As per the suggestions made at the 46PCM, the SEAFDEC Secretariat reviewed the present TOR of the RFPN (2017), as shown in **Appendix 1,** and has the view that the TOR is valid and well-established covers the functionality of the RFPN, therefore, the existing TOR would remain. Considering the views expressed by 46PCM, the SEAFDEC Secretariat would like to propose a modification of the existing TOR of RFPN, as shown in **Appendix 2**. This is in line with the country's requirement as suggested at the 46PCM.

2. Budget Estimation and Duration of Stay

Based on the estimated budget to support eleven (11) RFPN members to be stationed at the SEAFDEC Secretariat, in Bangkok, Thailand, the total amount of the required budgets for twelve (12) months, is approximately USD174,300, as shown in **Table 2**.

At this current stage, there are no potential donors to support this program and as suggested by the Council to use the unspent MRC, therefore, the SEAFDEC Secretariat would like to request consideration and approval from the SEAFDEC Council to use the unspent accumulated MRC for the RFPN.

Table 2: The estimated budget to be used to support the RFPN members

Items	Rate (USD)	No.	Required Budget for 12-month period (USD)
Airfare	800 USD	11	8,800
Daily Subsistence Allowance (DSA)	750 USD	11	99,000
Accommodation	300 USD	11	39,600
Health Insurance	400 USD/1 year	11	4,400
Laptops and accessories	1,300 USD	11	14,300
Accommodations when attending the meetings/workshops	100 USD*6 nights*6 rooms)*2 trips	11	7,200
Other expenses			1,000
Total			**174,300**

3. Timeframe and Evaluation

The use of unspent accumulated MRC to reactivate the RFPN program should have a clear timeframe and careful consideration of the financial situation and budget planning. The SEAFDEC Secretariat would like to propose the timeframe for RFPN to be considered by the Council on a year-by-year basis subject to the financial status of the MRC, starting from 2025. The invitation for the nomination of new batches of RFPN will be assessed and be approved by the Council for the following year. The SEAFDEC Secretariat will report the performance of RFPN and expenditure of RFPN and the remaining unspent MRC during the SEAFDEC Council Meeting in the following year, for consideration.

V. REQUIRED CONSIDERATION BY THE COUNCIL

- To consider and approve to reactivate the RFPN program
- To consider and approve the proposed modification of the Terms of Reference of the RFPN (**Appendix 2**)
- To approve the estimated budget for 12 months and the use of the unspent accumulated MRC to support the RFPN in 2025

Appendix 1 of Annex 24

SEAFDEC REGIONAL FISHERIES POLICY NETWORK

Terms of Reference (since 2007)

The Regional Fisheries Policy Network (RFPN) is made up of officers from Member Countries that are appointed by the respective country to be stationed at the Secretariat, subject to the availability of funds. The inputs by RFPN will be used to promote regional and sub-regional cooperation. They will provide important contributions to events and activities under SEAFDEC program including responses to climate change and adaptation and other SEAFDEC activities and consultations as decided from time to time and they will be active in the process to:

(a) Identify issues related to fisheries, raised at national, sub-regional, regional, and international levels, which may have potential impacts to fisheries in the region;
(b) Identify studies and activities that should be conducted to compile information on the identified issues as a basis for developing policy recommendations and strengthening regional and subregional coordination;
(c) Initiate and promote the formulation of regional fisheries policies and policy recommendations, including the preparation and finalization of the required working/position or background papers;
(d) Promote in-country (for Member Countries) or in-department (for SEAFDEC Departments) coordination to compile relevant information and data as inputs to conduct studies, on-site training consultations and other activities;
(e) Support the development of strategies to promote closer policy dialogues and regional and subregional cooperation among the Member Countries and SEAFDEC; and
(f) Follow-up on the implementation of policies for ASEAN and the ASEAN region on fisheries, aquatic environment and climate change, international convention and agreements in the Member Countries.

Appendix 2 of Annex 24

REVISION OF THE REGIONAL FISHERIES POLICY NETWORK (RFPN) PROGRAM

Terms of Reference

The Regional Fisheries Policy Network (RFPN) is made up of officers from Member Countries that are appointed by the respective country to be stationed at the Secretariat, subject to the availability of funds. The inputs by RFPN will be used to promote regional and sub-regional cooperation. They will provide important contributions to events and activities under SEAFDEC programs ~~including responses to climate change and adaptation~~ and other SEAFDEC activities and consultations as decided from time to time and they will be active in the process to:

(a) Identify issues related to fisheries, raised at national, sub-regional, regional, and international levels, which may have potential impacts to fisheries in the region;
(b) Identify studies and activities that should be conducted to compile information on the identified issues as a basis for developing policy recommendations and strengthening regional and subregional coordination;
(c) Initiate and promote the formulation of regional fisheries policies and policy recommendations, including the preparation and finalization of the required working/position or background papers;
(d) Promote in-country (for Member Countries) or in-department (for SEAFDEC Departments) coordination to compile relevant information and data as inputs to conduct studies, on-site training consultations and other activities;
(e) Support the development of strategies to promote closer policy dialogues and regional and subregional cooperation among the Member Countries and SEAFDEC; and
(f) Follow-up on the implementation of policies for ASEAN and the ASEAN region on fisheries, aquatic environment and climate change, international convention and agreements in the Member Countries.
(g) Follow up communication and coordination between SEAFDEC and their respective home country and report the updated information on the implementation of SEAFDEC programs and activities including relevant reports to their respective country.

Annex 25

AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF THE CENTER FOR THE YEAR 2022 ENDING ON 31 DECEMBER 2022

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
AUDITED ABRIDGED CONSOLIDATED FINANCIAL STATEMENTS
AS AT DECMEMBER 31, 2022 AND 2021

	In USD		
	2022		**2021**
REVENUES			
Contributions from: -			
Member governments	10,254,872		10,836,612
Other sources	504,454		195,614
Other income	783,878		1,026,856
TOTAL REVENUES	**11,543,204**		**12,059,082**
EXPENDITURES			
Operating and Capital Expenditures			
Research	3,770,179		3,794,833
Training	1,101,305		709,187
Information	469,163		537,291
Collaborative	134,575		114,541
Others	198,296		91,344
Administrative	4,202,561		4,003,425
TOTAL EXPENDITURES	**9,876,079**		**9,250,621**
SURPLUS (DEFICIT), For the year	1,667,125		2,808,461
FUND BALANCE, Beginning of year	17,500,847	1/	15,686,443
FUND ADJUSTMENT	4,325		(9,437)
FUND BALANCE, End of year	**19,172,297**		**18,485,467** 1/
REPRESENTED BY:			
ASSETS			
Current assets			
Cash and cash equivalents	19,886,351		19,049,694
Receivables and other receivables	196,141		365,724
Advance and deposits	13,280		24,407
Materials and supplies inventory	31,323		41,631
Fuel oil for vessels	179,183		145,004
Prepayments	9,069		170,895
Other current assets	20,082		2,168
Total Current Assets	**20,335,429**		**19,799,523**
Noncurrent assets			
Restricted bank deposit	5,395		5,581
Reserved budget for vessel periodic maintenance	262,962		337,841
Termination indemnity fund	2,108,939		2,235,012
Long-term investments	279,356		196,082
Other noncurrent assets	220,798		367,724
Total Noncurrent Assets	**2,877,450**		**3,142,240**
TOTAL ASSETS	**23,212,879**		**22,941,763**
LESS: LIABILITIES			
Accrued payable	697,144		609,971
Contribution received in advance	759,166		932,793
Fund held in trust	209,940		356,010
Total Current Liabilities	**1,666,250**		**1,898,774**
Reserved budget for vessel periodic maintenance for M.V. SEAFDEC 2	265,393		322,510
Provision for termination indemnity	2,108,939		2,235,012
TOTAL LIABILITIES	**4,040,582**		**4,456,296**
NET ASSETS	**19,172,297**		**18,485,467**

1/ The Difference of USD 984,620 (USD 17,500,847 – USD 18,485,467) resulted from the change of rate in USD translation.

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
SECRETARIAT
ABRIDGED FINANCIAL STATEMENTS
AS AT DECEMBER 31, 2022 AND 2021

	In USD		
	2022		**2021**
REVENUES			
Contributions from: -			
Member governments	499,000		499,000
Other income	51,501		100,625
TOTAL REVENUES	**550,501**		**599,625**
EXPENDITURES			
Operating and Capital Expenditures			
Training	-		-
Information	65,633		37,225
Collaborative	100,709		103,700
Others	-		-
Administrative	131,000		71,283
TOTAL EXPENDITURES	**297,342**		**212,208**
SURPLUS (DEFICIT), For the year	253,159		387,417
FUND BALANCE, Beginning of year	1,370,669	1/	1,030,388
FUND ADJUSTMENT	-		-
FUND BALANCE, End of year	**1,623,828**		**1,417,805** 1/
REPRESENTED BY:			
ASSETS			
Current assets			
Cash and cash equivalents	1,652,689		1,422,148
Other receivables	40,126		37,367
Advance and deposits	167		441
Prepayments	2,374		1,445
Total Current Assets	**1,695,356**		**1,461,401**
Noncurrent assets			
Reserved budget for vessel periodic maintenance	262,962		337,841
Total Noncurrent Assets	**262,962**		**337,841**
TOTAL ASSETS	**1,958,318**		**1,799,242**
LESS: LIABILITIES			
Accounts and other payables	38,782		29,063
Contribution received in advance	30,315		29,864
Reserved budget for vessel periodic maintenance for M.V. SEAFDEC 2	265,393		322,510
TOTAL LIABILITIES	**334,490**		**381,437**
NET ASSETS	**1,623,828**		**1,417,805**

1/ The difference of USD 47,136 (USD 1,370,669 – USD 1,417,805) resulted from the change of rate in USD translation.

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
AS AT DECEMBER 31, 2022 AND 2021

	In USD			
	2022		**2021**	
REVENUES				
Contributions from: -				
Member governments	2,682,488		2,865,234	
Other sources	405,573		16,364	
Other income	140,112		355,636	
TOTAL REVENUES	**3,228,173**		**3,237,234**	
EXPENDITURES				
Operating and Capital Expenditures				
Research	231,573		244,667	
Training	969,959		623,620	
Information	176,037		200,418	
Collaborative	33,866		10,841	
Others	198,296		91,344	
Administrative	1,152,072		1,076,431	
TOTAL EXPENDITURES	**2,761,803**		**2,247,321**	
SURPLUS (DEFICIT), For the year	466,370		989,913	
FUND BALANCE, Beginning of year	9,627,787	1/	8,968,966	
FUND ADJUSTMENT	-		-	
FUND BALANCE, End of year	**10,094,157**		**9,958,879**	1/
REPRESENTED BY:				
ASSETS				
Current assets				
Cash and cash equivalents	10,656,743		10,550,273	
Other receivables	16,530		10,838	
Advance and deposits	13,113		23,966	
Supplies inventory	13,941		15,208	
Fuel oil for vessels	174,825		142,966	
Prepayments	6,695		169,450	
Total Current Assets	**10,881,847**		**10,912,701**	
Noncurrent assets				
Restricted bank deposit	5,395		5,581	
Termination indemnity fund	2,108,939		2,235,012	
Total Noncurrent Assets	**2,114,334**		**2,240,593**	
TOTAL ASSETS	**12,996,181**		**13,153,294**	
LESS: LIABILITIES				
Accrued payable	64,234		56,474	
Contribution received in advance	728,851		902,929	
Total Current Liabilities	**793,085**		**959,403**	
Provision for staff termination indemnity	2,108,939		2,235,012	
TOTAL LIABILITIES	**2,902,024**		**3,194,415**	
NET ASSETS	**10,094,157**		**9,958,879**	

1/ The difference of USD 331,092 (USD 9,627,787 – USD 9,958,879) resulted from the change of rate in USD translation.

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
AQUACULTURE DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
AS AT DECEMBER 31, 2022 AND 2021

	In USD		
	2022		**2021**
REVENUES			
Contributions from: -			
Member governments	5,829,074		6,078,551
Other sources	98,881		179,250
Other income	592,265		570,595
TOTAL REVENUES	**6,520,220**		**6,828,396**
EXPENDITURES			
Operating and Capital Expenditures			
Research	3,538,606		3,434,971
Training	131,346		85,567
Information	227,493		299,648
Administrative	1,675,179		1,577,079
TOTAL EXPENDITURES	**5,572,624**		**5,397,265**
SURPLUS (DEFICIT), For the year	947,596		1,431,131
FUND BALANCE, Beginning of year	6,502,391	1/	5,687,089
FUND ADJUSTMENT	4,325		(9,437)
FUND BALANCE, End of year	**7,454,312**		**7,108,783** 1/
REPRESENTED BY:			
ASSETS			
Current assets			
Cash and cash equivalents	7,576,919		7,077,273
Receivables	139,485		317,519
Materials and supplies	-		-
Inventory	17,382		26,423
Fuel oil for vessels	4,358		2,038
Other current assets	20,082		2,168
Total Current Assets	**7,758,226**		**7,425,421**
Noncurrent assets			
Long-term investments	279,356		196,082
Other noncurrent assets	220,798		367,724
Total Noncurrent Assets	**500,154**		**563,806**
TOTAL ASSETS	**8,258,380**		**7,989,227**
LESS: LIABILITIES			
Accounts and other payables	594,128		524,434
Fund held in trust	209,940		356,010
TOTAL LIABILITIES	**804,068**		**880,444**
NET ASSETS	**7,454,312**		**7,108,783**

1/ The difference of USD 606,392 (USD 6,502,391 – USD 7,108,783) resulted from the change of rate in USD translation.

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
MARINE FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
AS AT DECEMBER 31, 2022 AND 2021

	In USD	
	2022	**2021**
REVENUES		
Contributions from: -		
Member governments	613,862	667,019
TOTAL REVENUES	**613,862**	**667,019**
EXPENDITURES		
Operating and Capital Expenditures		
Administrative	613,862	667,019
TOTAL EXPENDITURES	**613,862**	**667,019**
SURPLUS (DEFICIT), For the year	-	-
FUND BALANCE, Beginning of year	-	-
FUND ADJUSTMENT	-	-
FUND BALANCE, End of year	-	-
REPRESENTED BY:		
ASSETS	-	-
Current assets	-	-
Cash and cash equivalents	-	-
Other receivables	-	-
Advance and deposits	-	-
Prepayments	-	-
Total Current Assets	-	-
TOTAL ASSETS	-	-
LESS: LIABILITIES		
Accrued payable	-	-
TOTAL LIABILITIES	-	-
NET ASSETS	-	-

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
INLAND FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
AS AT DECEMBER 31, 2022 AND 2021

	In USD	
	2022	**2021**
REVENUES		
Contributions from: -		
Member governments	630,448	726,808
Other income	-	-
TOTAL REVENUES	**630,448**	**726,808**
EXPENDITURES		
Operating and Capital Expenditures		
Research	-	115,195
Administrative	630,448	611,613
TOTAL EXPENDITURES	**630,448**	**726,808**
SURPLUS (DEFICIT), For the year	-	-
FUND BALANCE, Beginning of year	-	-
FUND ADJUSTMENT	-	-
FUND BALANCE, End of year	-	-
REPRESENTED BY:		
Cash and cash equivalents	-	-
Other receivables	-	-
Advances and deposits	-	-
Prepayments	-	-
Total Current Assets	-	-
TOTAL ASSETS	-	-
LESS: LIABILITIES		
Accrued payable	-	-
TOTAL LIABILITIES	-	-
NET ASSETS	-	-

Annex 26

UN-AUDITED FINANCIAL REPORT FOR THE YEAR 2023 AND THE STATUS OF THE MRC FOR THE YEAR 2024

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF NET ASSETS
AS AT DECEMBER 31, 2023 AND 2022

	In USD	
	2023 (Un-audited)	**2022 (Audited)**
ACCUMULATED FUND		
As at December 31	**20,180,072**	**19,172,297**
REPRESENTED BY:		
Current Assets		
Cash and cash equivalents	20,614,872	19,886,351
Receivables and other receivables	200,905	196,141
Advances and deposits	18,244	13,280
Supplies inventory	41,360	31,323
Fuel oil for vessels	147,576	179,183
Prepayments	10,041	9,069
Other current assets		20,082
Total Current assets	21,032,998	20,335,429
Noncurrent Assets		
Reserved budget for vessel periodic maintenance	314,708	262,962
Restricted bank deposit	5,441	5,395
Termination indemnity fund	2,190,382	2,108,939
Long-term investments	281,299	279,356
Other noncurrent assets	252,377	220,798
Total Noncurrent assets	3,044,207	2,877,450
Total Assets	**24,077,205**	**23,212,879**
Less: LIABILITIES		
Current Liabilities		
Accrued payable	529,096	697,144
Contribution received in advance	711,368	759,166
Funds held in trust	241,292	209,940
Total Current Liabilities	1,481,756	1,666,250
Noncurrent Liabilities		
Reserved budget for vessel periodic maintenance for M.V. SEAFDEC 2	224,995	265,393
Provision for staff termination indemnity	2,190,382	2,108,939
Total Noncurrent Liabilities	2,415,377	2,374,332
Total Liabilities	**3,897,133**	**4,040,582**
TOTAL NET ASSETS	**20,180,072**	**19,172,297**

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF REVENUES AND EXPENDITURES FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022
(IN USD)

	Operating Fund		Fellowship Fund	Others Fund	Total	
	Host Department	MRC			2023 (Un-audited)	2022 (Audited)
REVENUES						
Revenues from: -						
Government of Brunei Darussalam	-	7,000	-	-	7,000	7,000
Government of Cambodia	-	12,000	-	-	12,000	12,000
Government of Indonesia	705,829	52,000	-	-	757,829	682,448
Government of Japan	-	280,000	-	-	280,000	280,000
Government of Lao PDR	-	6,500	-	-	6,500	6,500
Government of Malaysia	635,796	21,500	-	-	657,296	635,362
Government of Myanmar	-	22,500	-	-	22,500	22,500
Government of Philippines	5,869,604	25,000	-	-	5,894,604	5,854,074
Government of Singapore	-	13,500	-	-	13,500	13,500
Government of Thailand	2,602,485	33,000	44,118	-	2,679,603	2,715,488
Government of Viet Nam	-	26,000	-	-	26,000	26,000
Sub-total	**9,813,714**	**499,000**	**44,118**	**-**	**10,356,832**	**10,254,872**
Other Income						
Other sources	-	-	-	80,658	80,658	504,454
Other income	599,409	(1,691)	680	33,354	631,752	783,878
TOTAL REVENUES	**10,413,123**	**497,309**	**44,798**	**114,012**	**11,069,242**	**11,543,204**

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF REVENUES AND EXPENDITURES FOR THE YEARS ENDED DECEMBER 31, 2023 AND 2022
(IN USD)

	Operating Fund		Fellowship Fund	Others Fund	Total	
	Host Department	MRC			2023 (Un-audited)	2022 (Audited)
EXPENDITURES						
Operating Expenditures						
Program of Activities:						
Research	3,269,541	-	-	77,511	3,347,052	3,770,179
Training	712,766	-	2,675	9,822	725,263	1,101,305
Information	336,113	58,144	-	40,535	434,792	469,163
Collaborative	91,776	149,897	-	26	241,699	134,575
Others	-	-	-	17,130	17,130	198,296
Total Operating Expenditures	**4,410,196**	**208,041**	**2,675**	**145,024**	**4,765,936**	**5,673,518**
Administrative & Capital expenditures	5,227,955	193,132	-	27,433	5,448,520	4,202,561
TOTAL EXPENDITURES	**9,638,151**	**401,173**	**2,675**	**172,457**	**10,214,456**	**9,876,079**
SURPLUS (DEFICIT) FOR THE YEAR	**774,972**	**96,136**	**42,123**	**(58,445)**	**854,786**	**1,667,125**

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF FUND BALANCES AS AT DECEMBER 31, 2023 AND 2022
(IN USD)

	Balance as at January 1, 2022	Adjustment of Fund	Surplus (Deficit)	Balance as at December 31, 2023 (Un-audited)	Balance as at December 31, 2022 (Audited)
Operating fund	16,596,808	1,478	871,108	17,469,394	16,467,673
Fellowship fund	309,297	-	42,123	351,420	306,682
Other funds	2,417,970	(267)	(58,445)	2,359,258	2,397,942
Net 1/	**19,324,075**	**1,211**	**854,786**	**20,180,072**	**19,172,297** 1/

Remark: 1/ The difference of USD 151,778 (USD 19,324,075 - USD 19,172,297) resulted from the change of rate in USD translation

CONTRIBUTION RECEIVED FROM SEAFDEC MEMBER COUNTRIES AS ANNUAL MINIMUM REGULAR CONTRIBUTION (MRC) IN 2018 – 2024 (IN USD)

Countries	Actual received in 2018	Actual received in 2019	Actual received in 2020	Actual received in 2021	Actual received In 2022	Actual received In 2023	Amount received in 2024 as at 13/3/2024
Brunei Darussalam	7,000	7,000	7,000	7,000	7,000	7,000	7,000
Cambodia	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Indonesia	52,000	52,000	52,000	52,000	52,000	52,000	52,000
Japan	280,000	280,000	280,000	280,000	280,000	280,000	280,000
Lao PDR	6,500	6,500	6,500	6,500	6,500	6,500	-
Malaysia	21,500	21,500	21,500	21,500	21,500	21,500	21,500
Myanmar	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Philippines	25,000	25,000	25,000	25,000	25,000	25,000	-
Singapore	13,500	13,500	13,500	13,500	13,500	13,500	13,500
Thailand	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Viet Nam	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Total	**499,000**	**499,000**	**499,000**	**499,000**	**499,000**	**499,000**	**467,500**

PROPOSED BUDGETARY REQUIREMENTS OF THE CENTER FOR THE YEAR 2025

Table 1: Estimated Contributions Received by SEAFDEC from Member Countries and Other Sources (In USD) in the Fiscal year 2024

Sources	Secretariat	TD	MFRD	AQD	MFRDMD	IFRDMD	Total	%
Brunei Darussalam	7,000	-	-	-	-	-	7,000	0.05
Cambodia	12,000	-	-	-	-	-	12,000	0.08
Indonesia	52,000	-	-	-	-	627,219 h/	679,219	4.40
Japan	280,000	-	-	-	-	-	280,000	1.81
Lao PDR	6,500	-	-	-	-	-	6,500	0.04
Malaysia	21,500	-	-	-	2,442,941 g/	-	2,464,441	15.97
Myanmar	22,500	-	-	-	-	-	22,500	0.15
Philippines	25,000	-	-	6,277,464 f/	-	-	6,302,464	40.85
Singapore	13,500	-	- e/	-	-	-	13,500	0.09
Thailand	33,000	2,995,000 d/	-	-	-	-	3,028,000	19.62
Viet Nam	27,000	-	-	-	-	-	27,000	0.17
Sub-total	**500,000**	**2,995,000**	**-**	**6,277,464**	**2,442,941**	**627,219**	**12,842,624**	**83.23**
Others	1,171,113 b/	814,842 c/	-	601,254 i/	-	-	2,587,209	16.77
Total	**1,671,113** a/	**3,809,842**	**-**	**6,878,718**	**2,442,941**	**627,219**	**15,429,833**	**100%**

Remarks: a/ Includes Minimum Regular Contribution (MRC) from all SEAFDEC Member Countries = USD 500,000
b/ Includes extra-budgetary sources from Japanese Trust Fund = USD 1,105,102 (Excluding MRC = USD 280,000), SEAFDEC-FAO Fund = USD 66,011
c/ Includes extra-budgetary sources from USAID Partnership = USD 394,894, and SEAFDEC-FAO BOBLME Fund = USD 419,948
d/ Contribution in cash from Thailand
e/ No Contribution from Singapore
f/ Contributions in cash from Philippines
g/ Contributions in kind from Malaysia
h/ Contributions in kind from Indonesia
i/ Includes Contributions from non-member governments, International/Regional agencies, National Agencies, Other Agencies and Resources Generation

Table 2: Estimated Expenditures of the Center for 2024 (In USD)

Category	SEC [1/]	TD [2/]	MFRD [3/]	AQD [4/]	MFRDMD [5/]	IFRDMD [6/]	Total	%
1. Program of Activities								
1.1 Research Programs	-	298,000	-	3,685,940	-	-	3,983,940	25.82
1.2 Training Programs	5,000	1,243,800	-	867,066	-	-	2,115,866	13.71
1.3 Information Programs	86,000	29,000	-	601,113	-	-	716,113	4.64
1.4 Collaborative Programs	150,000 [7/]	191,800	-	-	-	-	341,800	2.22
1.5 Other Programs	1,234,113 [8/]	814,842 [9/]	-	320,239 [10/]	-	-	2,369,194	15.35
Sub-total	**1,475,113**	**2,577,442**	**-**	**5,474,358**	**-**	**-**	**9,526,913**	**61.74**
2. Administrative and Non- Program Expenditures								
2.1 Operating Expenditures	188,500	1,232,400	-	1,150,413	-	-	2,571,313	16.67
2.2 Capital Expenditures	7,500	-	-	253,947	-	-	261,447	1.69
	196,000	**1,232,400**	**-**	**1,404,360**	**-**	**-**	**2,832,760**	**18.36**
2.3 In-kind Expenditures	-	-	-	-	2,442,941	627,219	3,070,160	19.90
Sub-total	**196,000**	**1,232,400**		**1,404,360**	**2,442,941**	**627,219**	**5,902,920**	**38.26**
Total	**1,671,113**	**3,809,842**	**-**	**6,878,718**	**2,442,941**	**627,219**	**15,429,833**	**100%**

Remarks:
1/ Secretariat
2/ Training Department: The Program of Activities already includes administrative and other expenses which are directly related to the programs.
3/ Marine Fisheries Research Department.
4/ Aquaculture Department: The Program of Activities already includes administrative and other expenses which are directly related to the programs.
5/ Marine Fishery Resources Development and Management Department.
6/ Inland Fishery Resources Development and Management Department.
7/ Includes operation cost, maintenance, insurance, and expenses for vessel periodic maintenance of the M.V. SEAFDEC 2.
8/ Includes program expenses from Japanese Trust Fund = USD 1,105,102, SEAFDEC-FAO Fund = USD 66,011, and Other Programs from MRC Fund = USD 63,000.
9/ Includes program expenses from USAID Partnership = USD 394,894, and SEAFDEC-FAO BOBLME = USD 419,948
10/ Includes program expenses from non-member governments, international/regional/national organizations, and other agencies.

Table: 3 Expected Contributions Received by SEAFDEC from Member Countries and Other Sources (In USD) in the Fiscal Year 2025

Sources	Secretariat	TD	MFRD	AQD	MFRDMD	IFRDMD	Total	%
Brunei Darussalam	7,000	-	-	-	-	-	7,000	0.04
Cambodia	12,000	-	-	-	-	-	12,000	0.08
Indonesia	52,000	-	-	-	-	689,941 h/	741,941	4.60
Japan	280,000	-	-	-	-	-	280,000	1.74
Lao PDR	6,500	-	-	-	-	-	6,500	0.04
Malaysia	21,500	-	-	-	2,506,670 g/	-	2,528,170	15.67
Myanmar	22,500	-	-	-	-	-	22,500	0.14
Philippines	25,000	-	-	6,321,112 f/	-	-	6,346,112	39.34
Singapore	13,500	-	- e/	-	-	-	13,500	0.08
Thailand	33,000	3,185,000 d/	-	-	-	-	3,218,000	19.95
Viet Nam	27,000	-	-	-	-	-	27,000	0.17
Sub-total	**500,000**	**3,185,000**	**-**	**6,321,112**	**2,506,670**	**689,941**	**13,202,723**	**81.85**
Others	1,054,712 b/	1,273,195 c/	-	599,602 i/	-	-	2,927,509	18.15
Total	**1,554,712** a/	**4,458,195**	**-**	**6,920,714**	**2,506,670**	**689,941**	**16,130,232**	**100%**

Remarks:
a/ Includes Minimum Regular Contribution (MRC) from all SEAFDEC Member Countries = USD 500,000
b/ Includes extra-budgetary sources from Japanese Trust Fund = USD 1,054,712 (Excluding MRC = USD 280,000)
c/ Includes extra-budgetary sources from USAID Partnership = USD 831,630, SEAFDEC-FAO BOBLME = USD 441,565
d/ Contributions in cash from Thailand
e/ No Contributions from Singapore
f/ Contributions in cash from Philippines
g/ Contribution in kind from Malaysia
h/ Contributions in kind from Indonesia
i/ Includes Contributions from non-member governments, International/Regional agencies, National Agencies, Other Agencies and Resources Generation

Table 4: Proposed Expenditures of the Center for 2025 (In USD)

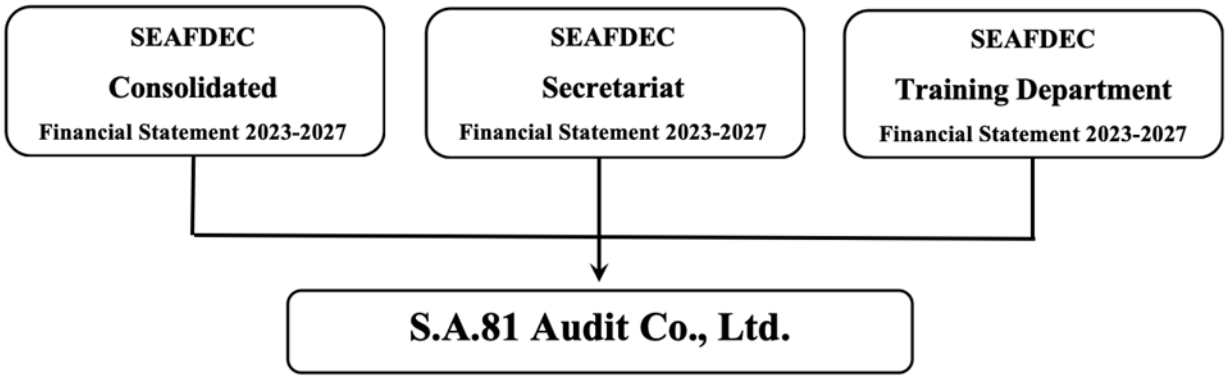
Category	SEC [1/]	TD [2/]	MFRD [3/]	AQD [4/]	MFRDMD [5/]	IFRDMD [6/]	Total	%
1. Program of Activities								
1.1 Research Programs	-	300,100	-	3,689,786	-	-	3,989,886	24.74
1.2 Training Programs	5,000	1,308,500	-	883,607	-	-	2,197,107	13.62
1.3 Information Programs	86,000	29,000	-	602,928	-	-	717,928	4.45
1.4 Collaborative Programs	183,000 7/	177,000	-	-	-	-	360,000	2.22
1.5 Other Programs	1,054,712 8/	1,273,195 9/	-	336,002 10/	-	-	2,663,909	16.52
Sub-total	**1,328,712**	**3,087,795**	**-**	**5,512,323**	**-**	**-**	**9,928,830**	**61.55**
2. Administrative and Non- Program Expenditures								
2.1 Operating Expenditures	218,500	1,370,400	-	1,152,769	-	-	2,741,669	17.00
2.2 Capital Expenditures	7,500	-	-	255,622	-	-	263,122	1.63
	226,000	1,370,400	-	1,408,391	-	-	3,004,791	18.63
2.3 In-kind Expenditures	-	-	-	-	2,506,670	689,941	3,196,611	19.82
Sub-total	**226,000**	**1,370,400**	**-**	**1,408,391**	**2,506,670**	**689,941**	**6,201,402**	**38.45**
Total	**1,554,712**	**4,458,195**	**-**	**6,920,714**	**2,506,670**	**689,941**	**16,130,232**	**100%**

Remarks:
1/ Secretariat
2/ Training Department: The Program of Activities already includes administrative and other expenses which are directly related to the programs.
3/ Marine Fisheries Research Department.
4/ Aquaculture Department: The Program of Activities already includes administrative and other expenses which are directly related to the programs.
5/ Marine Fishery Resources Development and Management Department.
6/ Inland Fishery Resources Development and Management Department.
7/ Includes operation cost, maintenance, insurance, and expenses for vessel periodic maintenance of the M.V. SEAFDEC 2.
8/ Includes program expenses from Japanese Trust Fund = USD 1,054,712 and Other Programs from MRC Fund = USD 33,000
9/ Includes program expenses from USAID Partnership = USD 831,630 and SEAFDEC-FAO BOBLME Fund = USD 441,565
10/ Includes program expenses from non-member governments, international/regional/national organizations, and other agencies.

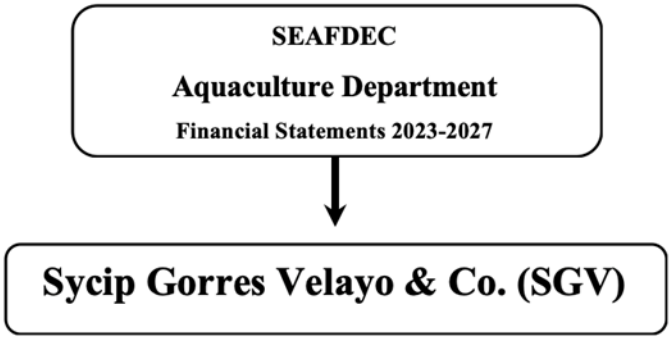
Annex 28

NEW AUDIT FIRMS FOR FISCAL YEARS 2023–2027

CONTACT PERSON AND EXTERNAL AUDIT FIRM



Auditor Name	:	**Mr. Terakarn Watprapasak**
Address	:	**33/118 Moo 14, Bangna-Trad Road,**
		Bangkaew Sub-District, Bangplee District,
		Samuth Prakarn 10540, Thailand
Telephone	:	**(662) 7450317**
Mobile	:	**(668) 8659-8994**



Auditor name	:	**Ms. Djole S. Garcia**
Address	:	**6760 Ayala Ave, Legazpi Village,**
		Makati, Metro Manila,
		Philippines 1226
Telephone	:	**(632) 8891-0307**
Fax	:	**(632) 8819-0872**

SEAFDEC

Marine Fishery Resources Development and Management Department

Financial Statements 2023-2027

↓

Adib Azhar & Co.

Auditor name : **Nik Ahmad Adib Bin Nik Ismail**

Address : **No. 13-2, Jalan Elektron G U16/G E-Boulevard,**
Denai Alam, 40160 Shah Alam,
Selangor, Malaysia

Telephone : **03-7734 2242**

SEAFDEC

Inland Fishery Resources Development and Management Department

Financial Statements 2023-2027

↓

Indonesia Government Internal Audit
(General Inspectorate III Division)

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PRESS STATEMENT

1. At the kind invitation of the Government of the Philippines through its Department of Agriculture, Bureau of Fisheries and Aquatic Resources as the host, the Fifty-sixth Meeting of the SEAFDEC Council (56CM) was convened on 6–9 May 2024 in Tagaytay City, Philippines.

2. In attendance at the Meeting were the Council Directors and delegates from the SEAFDEC Member Countries, namely: Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam. The Inaugural Ceremony of the Fifty-sixth Meeting of the SEAFDEC Council was held on 6 May 2024 and presided over by the Undersecretary for Fisheries of the Department of Agriculture (DA) of the Philippines and Council Director for the Philippines, *Ms. Drusila Esther E. Bayate*. The Council unanimously elected the Council Director for the Philippines, *Ms. Bayate*, as the Chairperson of the SEAFDEC Council for the Year 2024–2025, succeeding, *Mr. Wai Lin Maung*, SEAFDEC Council Director for Myanmar who served as the Chairperson of the SEAFDEC Council for the Year 2023–2024.

3. Recognizing the need for continued efforts in combating illegal, unreported and unregulated (IUU) fishing, the Council noted the significant regional initiatives undertaken by SEAFDEC, including the Regional Fishing Vessels Record (RFVR) Database, electronic ASEAN Catch Documentation Scheme (eACDS), and enhancement of national capacities in port State measures (PSM) implementation. While noting the priority areas for future action to combat IUU fishing in Southeast Asia, the Council requested SEAFDEC to collaborate with relevant agencies, including the Regional Plan of Action to Promote Responsible Fishing Practices Including Combating IUU Fishing (RPOA-IUU) and the ASEAN Network to Combat IUU Fishing (AN-IUU), among others in its future efforts for combating IUU fishing.

4. The Council congratulated SEAFDEC for coming up with the preliminary results of stock and risk assessments of Indo-Pacific king mackerel (*Scomberomorus guttatus*) and narrow-barred Spanish mackerel (*S. commerson*) in the Southeast Asian waters. The Council further recommended that after obtaining the final results, the ASEAN Member States (AMSs) shall discuss the holistic management of the species before endorsing the results to the 33rd Meeting of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) in 2025.

5. Noting the progress made by SEAFDEC in revising the Regional Framework for Fishery Statistics in Southeast Asia, the Council approved the "Regional Framework for Fishery Statistics of Southeast Asia (2024 Edition)" for further submission and endorsement under the ASEAN mechanism. It is expected that the Framework (2024 Edition) will be applied by SEAFDEC for the compilation of regional fishery statistics data for 2024 onwards.

6. The Council took note of the CITES-related issues and reiterated the important role of SEAFDEC to continue supporting the Member Countries in utilizing scientific evidence and developing common positions in response to proposals for listing of commercially exploited aquatic species (CEAS) into CITES Appendices. Moreover, SEAFDEC was requested to continue to provide capacity-building activities to address the challenges faced by the AMSs, *e.g.* species identification, data collection of catch, stock assessment, and traceability of critical CEAS.

7. The Council recognized the significance of global biodiversity and environmental conservation frameworks, *i.e.* the Kunming-Montreal Global Biodiversity Framework; Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Treaty); Other effective area-based conservation measures (OECM); and the new international legally binding instrument on plastic pollution, including in the marine environment. In light of these frameworks, the Council recommended that SEAFDEC provide updated information to support the Member Countries in navigating and implementing these global frameworks effectively.

8. The Council recognized with appreciation the longstanding support extended by the Government of Japan through the Japanese Trust Fund (JTF) to projects and activities that addressed the priorities of the AMSs for the sustainable development of fisheries and aquaculture in Southeast Asia. Moreover, the Council expressed gratitude to the Government of Japan for the continued commitment to supporting sustainable fisheries and aquaculture development of the region through the new phase of the JTF (JTF-7) which will be implemented from 2025 to 2029.

9. The Council appreciated the cooperation and collaboration between SEAFDEC and other regional/international agencies/organizations, particularly the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO/RAP), Network for Aquaculture Centres in Asia-Pacific (NACA), and United States Agency for International Development (USAID) in undertaking activities toward sustainable development of fisheries and aquaculture in the Southeast Asian region.

10. On the utilization of M.V. SEAFDEC 2 which was granted by the Government of Japan to SEAFDEC in 2004, Brunei Darussalam, Malaysia, Myanmar, and Viet Nam proposed to utilize the vessel for the conduct of fishery resource and environmental surveys in their respective waters in 2025.

11. This Fifty-sixth Meeting of the SEAFDEC Council was successfully concluded. The Council noted the progress and achievements of the SEAFDEC programs and projects in 2023 and approved the proposed programs of activities to be undertaken in 2024. The Council encouraged SEAFDEC to effectively implement programs and projects responsive to the priorities and needs of the Member Countries. Moreover, the Meeting signified the continued commitment of the Member Countries to continue working with SEAFDEC as well as collaborating with partner organizations towards the sustainable contribution of fisheries and aquaculture to food security, economy, and well-being of the people in the Southeast Asian region.

For more information, please contact:
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VOTE OF THANKS TO THE HOST GOVERNMENT

By Dr. Phanthavong Vongsamphanh,
Deputy Director-General of the Department of Livestock and Fisheries (DLF) of Lao PDR
and SEAFDEC Alternate Council Director for Lao PDR

Madam Drusila Esther E. Bayate, the Chairperson of the SEAFDEC Council,
Distinguished Council Directors,
Delegates from Member Countries,
SEAFDEC Secretary-General and senior officials.

Good afternoon!

As we come to the conclusion of the 56th Meeting of SEAFDEC Council, and this is my first time attending the Council Meeting, I am honoured and privileged to express my gratitude to all those who have contributed in one way or another to make this Meeting a success.

First of all, on behalf of the SEAFDEC Council Directors and representatives of the cooperating partners attending this meeting, we would like to express our deep gratitude and compliments to the Government of the Philippines, particularly the Bureau of Fisheries and Aquatic Resources of the Philippines, for their most generous and wonderful hospitality and arrangements for our stay in this Tagaytay city.

Allow me also to congratulate the Madam Chairperson of the SEAFDEC Council for the successful conduct of the meeting. Although we had a very hectic schedule in this meeting, I am glad that we were able to come up with policy guidelines for SEAFDEC to consider in planning its future activities. Through the discussion, I have noted the determination of the Member Countries to support and strengthen SEAFDEC to continue to play its role in the sustainable development of fisheries in our region.

Finally, we would like to express our gratitude to the Secretariat of the Meeting, especially to the staff of BFAR, who have worked extremely hard, both in the foreground and in the background. They are really helpful in supporting us during this short stay. Despite our busy schedules, we had a great time enjoying the beautiful view of Taal Lake, the traditional food and cultural dance, and the field trip experience. They deserve congratulations for a job well done.

With this, I wish you all success and good health.
Thank you very much.

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CLOSING REMARKS

By Ms. Drusila Esther E. Bayate,
Chairperson of the SEAFDEC Council

To Council Directors, officials, and department heads from the SEAFDEC,
To our development partners, colleagues, and fellow public servants,
Ladies and gentlemen,

As we draw the curtains on the 56th SEAFDEC Council Meeting, I am filled with a profound sense of fulfillment and gratitude for the productive discussions and meaningful outcomes achieved during our time together. This meeting has been instrumental in reaffirming our commitment to advancing sustainable fisheries management and aquaculture development in the region.

With the Council's approval of the proposed programs for 2024, our obligations as member-countries have been defined yet again.

One of the key highlights of our discussions has been the unanimous agreement to continue supporting capacity-building programs, particularly in aquaculture, and to intensify the region's efforts in combating Illegal, Unreported, and Unregulated (IUU) fishing.

SEAFDEC will also provide capacity building on MCS across all fisheries to strengthen measures in combating IUU fishing. The outcomes of the Regional Workshop on combating IUU fishing, which identified 9 priority areas for future actions, will serve as a roadmap for our continued collaboration in this area. Additionally, the Council has taken cognizance of identifying practical tools to assess the magnitude of IUU fishing, thus enhancing our collective efforts in addressing this pressing issue.

In line with this commitment, SEAFDEC will continue to facilitate the transfer of technology, including the use of artificial intelligence (AI) for small-scale fisheries, to enhance the efficiency and sustainability of our fisheries sector.

With regards to the future of SEAFDEC's training assets and vessels, the Council is supporting the development of a disposal plan for M.V. SEAFDEC and will be making arrangements for the acquisition of a new research and training vessel, taking into consideration the suggestions made by the Council.

The Council has also approved the reactivation of the Regional Fisheries Policy Network (RFPN) Program, for a one-year term starting in 2025. On a related note, the Council has agreed to utilize the accumulated MRC budget to support the RFPN program and will consider its continuation on a year-by-year basis.

With the Council's approval of the proposed budgetary requirements of the Center for the year 2025, we are confident that the plans, which we have collectively labored through the last four days, will see the light of the day.

Throughout our discussions, your insights have been enlightening, your suggestions invaluable, and your commitment unwavering. It is through our collaboration and shared goals that we can address the challenges facing the fisheries sector and create a more sustainable future.

I extend my heartfelt gratitude to all participants for your active engagement and invaluable contributions, which have been instrumental in the success of this meeting. My thanks also go to the SEAFDEC Secretariat for organizing this meeting.

Let us steadfastly uphold the spirit of collaboration and commitment that has characterized our discussions, as we unite in our efforts towards a more sustainable and prosperous future for the fisheries sector in our region.

Thank you very much!