



Report of

The Twenty-second Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)

Chiang Mai, Thailand 14 - 15 November 2019



REPORT OF

THE TWENTY-SECOND MEETING OF FISHERIES CONSULTATIVE GROUP OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (FCG/ASSP)

Chiang Mai, Thailand 14-15 November 2019





THE SECRETARIAT SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

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EXECUTIVE SUMMARY

- 1. The Twenty-second Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) or 22FCG/ASSP was convened on 14-15 November 2019 in Chiang Mai, Thailand and was co-chaired by the representative from Viet Nam on behalf of the current Chairperson of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) and the Secretary-General of SEAFDEC. Attended by representatives from the ASEAN-SEAFDEC Member Countries and the ASEAN Secretariat, and SEAFDEC officials led by the SEAFDEC Secretary-General, the 22FCG/ASSP discussed the programs and activities implemented by SEAFDEC in 2019 and those proposed for 2020 under the FCG/ASSP mechanism as endorsed by the SEAFDEC Program Committee at its Forty-second Meeting (42PCM) in November 2019, and the progress of other proposals implemented under the ASSP framework, as well as the policy considerations on issues of importance to the fisheries sector of the ASEAN-SEAFDEC Member Countries.
- 2. Regarding the "Follow-up Actions to the Directives Given at the Fifty-first Meeting of the SEAFDEC Council and the Twenty-first Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP)," the 22FCG/ASSP took note of the actions undertaken by SEAFDEC in response to the directives of the SEAFDEC Council at its 51st Meeting and those of the FCG/ASSP at its 21st Meeting.
- 3. On the "Follow-up Actions to the Directives Given at Meetings of the ASEAN Bodies Related to Fisheries during 2019," the 22FCG/ASSP noted the results of the discussions of the ASEAN Bodies Related to Fisheries, namely the 27th Meeting of the ASEAN Sectoral Working Group on Fisheries (27th ASWGFi Meeting) in June 2019 in Da Nang, Viet Nam; the Special Senior Official Meeting of the 40th Meeting of the ASEAN Ministers on Agriculture and Forestry (Special SOM-40th AMAF) in August 2019 in Hue City, Viet Nam; the Special Senior Officials Meeting of the Forty-first Meeting of the ASEAN Ministers on Agriculture and Forestry Plus Three (Special SOM-18th AMAF Plus Three) also in August 2019 in Hue City, Viet Nam; and the 41st Meeting of the ASEAN Ministers on Agriculture and Forestry (41st AMAF) in October 2019 in Brunei Darussalam. More particularly, the 22FCG/ASSP noted the adoption by the 41st AMAF Meeting of the "Regional Guidelines on Cold Chain Management for Seafood," and the "Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies."
- 4. Specifically, the 22FCG/ASSP considered the views expressed with respect to the Regional Fishing Vessels Record (RFVR) that SEAFDEC should first focus on fully utilizing the current RFVR Database for vessels 24 meters in length and over, and that more discussions should be made before SEAFDEC would proceed with the establishment of a new set of Database for vessels less than 24 meters in length. Furthermore, the 22FCG/ASSP also reiterated that the information compiled in the RFVR Database could also serve as inputs to the FAO Global Record of Fishing Vessels, Refrigerated Transported Vessels and Supply Vessels (Global Record) in the future.
- 5. On the "FCG/ASSP Collaborative Programs for the Year 2019-2020," the 22FCG/ASSP took note of the FCG/ASSP projects reviewed by the 42PCM, comprising twenty-three (23) ongoing projects, of which twenty (20) projects would be completed in 2019, and three (3) projects would be continued in 2020; and thirteen (13) new projects which would commence in 2020. Furthermore, the 22FCG/ASSP also noted the five (5) Pipeline Projects, which are still being discussed with prospective donors.
- 6. On the "Progress of SEAFDEC-related Activities/Proposals under the ASEAN Fisheries Related Bodies," the 22FCG/ASSP provided the following recommendations:
 - ASEAN-Ad-hoc Steering Committee on Climate Change and Food Security
 - The results of the 8th Meeting of the Ad-hoc Steering Committee on Climate Change and Food Security (AHSCCC-FS) in March 2019 in Bali, Indonesia, were noted.

• Progress of the ASEAN Fisheries Consultative Forum (AFCF)

- The results of the 11th Meeting of the ASEAN Fisheries Consultative Forum (AFCF) in June 2019 in Da Nang, Viet Nam, were noted.

• Progress of the Implementation of the ASEAN Shrimp Alliance (ASA)

- The progress of the activities of the ASEAN Shrimp Alliance (ASA), as well as the results of the 9th Meeting of ASEAN Shrimp Alliance in June 2019 in Da Nang, Viet Nam, were noted.
- 7. With regards to the "**Policy Consideration on Important Fisheries-related Issues**," the 22FCG/ASSP provided the following recommendations:

• Combating IUU Fishing

- With regards to the "ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain," especially on the suggestion made by MFRDMD for the ASEAN Member States (AMSs) to continue conducting self-evaluation of the implementation of the ASEAN Guidelines in their respective countries on a yearly basis, MFRDMD was requested to continue communicating with the AMSs to monitor the progress of their respective self-evaluation. However, the future activities of MFRDMD regarding the ASEAN Guidelines would be carried out subject to availability of funds.
- On the "Regional Fishing Vessels Record," the AMSs were urged to consider submitting their updated data to the RFVR Database for vessels 24 meters in length and over, and that SEAFDEC should consult with the AMSs during the technical meeting to be organized in 2020, to come up with an agreement on the appropriate size ranges for vessels less then 24 meters in length to be included in the Database, as well as the mechanism for harmonizing the submission of data on fishing vessels from AMSs to SEAFDEC, then to FAO in the future.
- On the "ASEAN Catch Documentation Scheme," of which the electronic ASEAN Catch Documentation Scheme (eACDS) was pilot tested in Brunei Darussalam in 2017 and now being pilot-tested in Viet Nam, Malaysia, and Myanmar, the eACDS should also be introduced to the other countries in the future, while the request of Cambodia for TD to provide technical assistance on the use of the eACDS's offline application was noted.
- On the "Regional Cooperation for Implementation of the Port State Measures (PSM),"
 SEAFDEC should consider providing capacity building activities to the AMSs in the
 implementation of the PSM, and should work closely with FAO to avoid the duplication of
 efforts.
- With regards to the "Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including Establishment of Regional and Sub-regional MCS Network," alternative approaches raised by the ASEAN Secretariat were noted, e.g. the AMSs to consider assigning focal points to coordinate the implementation of RPOA-Capacity, or discuss the proposed establishment of an MCS Network in the context of the ASEAN Network for Combating IUU Fishing (AN-IUU).

• Promotion of Sustainable Fisheries and Aquaculture in ASEAN Region

On the "Regional Plan of Action for Sustainable Utilization of Neritic Tunas in the ASEAN Region," MFRDMD should make sure that the assumptions for different production models are satisfied prior to the analysis to ensure the reliability of the results, and to conduct data exploratory prior to the analysis and present the outcomes of data limitation that has been used in the analysis. Furthermore, the assessment should also provide a range of possible risks and stock projection that allow fisheries managers to understand and make decisions on the management measures.

- On the "ASEAN Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies," while noting that the Guidelines have already been adopted by the 41st AMAF in 2019, the activities under the proposed Phase 2 and Phase 3 of the project on Emergency Preparedness and Response Systems for implementation by AQD, were considered.

• Ensuring the Food Safety and Quality of Fish and Fishery Products in ASEAN Region

- On the "Regional Guidelines on Cold Chain Management for Seafood" which have already been adopted by the 41st AMAF in 2019, and the plan of MFRD to undertake activities under the proposed ASEAN-JICA Food Value Chain Development Project to support the sharing of information on the implementation of the Regional Guidelines, were considered.
- On the "CITES-related Issues," the Position of the ASEAN-SEAFDEC Member Countries on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices and the results of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES CoP18) on the proposals to list such CEAS, were noted.
- 8. Under the "Other Matters," the 22 FCG/ASSP considered the progress of the development of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030), and also the future processes for submission of the RES&POA-2030 for adoption by the ASEAN-SEAFDEC Member Countries.
- 9. The Report of the 22FCG/ASSP was adopted on 15 November 2019.

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REPORT OF THE TWENTY-SECOND MEETING OF THE FISHERIES CONSULTATIVE GROUP OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (FCG/ASSP)

14-15 November 2019, Chiang Mai, Thailand

INTRODUCTION

1. The Twenty-second Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) or 22FCG/ASSP was organized in Chiang Mai, Thailand from 14 to 15 November 2019. The 22FCG/ASSP discussed the programs and activities implemented by SEAFDEC in 2019 and those proposed for 2020 under the FCG/ASSP mechanism as endorsed by the SEAFDEC Program Committee at its Forty-second Meeting (42PCM) from 11 to 13 November 2019, the progress of other proposals implemented under the FCG/ASSP Framework, and the policy considerations on issues of importance to the fisheries sector of the ASEAN-SEAFDEC Member Countries. The 22FCG/ASSP was attended by representatives from the ASEAN-SEAFDEC Member Countries, the representative from the ASEAN Secretariat, as well as the SEAFDEC Secretary-General, Deputy Secretary-General and senior officials of the SEAFDEC Secretariat and Departments. The List of Participants appears as **Annex 1**.

I. OPENING OF THE MEETING

2. The 22FCG/ASSP was co-chaired by the representative from Viet Nam, *Ms. Thi Phuong Dung Nguyen* on behalf of the current Chairperson of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) and by the Secretary-General of SEAFDEC, *Ms. Malinee Smithrithee*. The Co-Chair for the ASEAN of the 22FCG/ASSP, *Ms. Thi Phuong Dung Nguyen* welcomed the participants to the Meeting and reiterated that since the Meeting would discuss the programs and activities implemented by SEAFDEC under the FCG/ASSP mechanism in 2019 and those that are planned for 2020 and beyond, as well as the relevant activities carried out under the ASEAN-related bodies, the output would pave the way for the AMSs to move towards the sustainable development of their respective fisheries. She therefore enjoined the participants to actively take part in the discussions for the success of the Meeting, and then declared the 22FCG/ASSP open. Her Opening Remarks appears as **Annex 2**.

II. ADOPTION OF THE AGENDA

3. The Agenda which appears as **Annex 3** was adopted.

III. FOLLOW-UP ACTIONS TO THE DIRECTIVES GIVEN AT THE MEETINGS OF SEAFDEC COUNCIL AND ASEAN BODIES RELATED TO FISHERIES

- 3.1 Follow-up Actions to the Directives Given at the Fifty-first Meeting of the SEAFDEC Council and the Twenty-first Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP)
- 4. The 22FCG/ASSP took note of the follow-up actions undertaken by SEAFDEC in response to the directives of the SEAFDEC Council during its Fifty-first Meeting in March 2019 and those of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) during its Twenty-first Meeting on 8-9 November 2018, as shown in **Annex 4** and **Annex 5**, respectively, and presented by the representative from the SEAFDEC Secretariat.
- 5. With regards to the Training Course on "Fish Handling Practices Applicable to Various Fishing Operations in Southeast Asia," which was originally planned to be organized in Malaysia in September 2019, the representative from Malaysia informed the 22FCG/ASSP that as the internal processes for the arrangements of the training course are still ongoing, this training course had been postponed to later dates, which would be relayed to TD.

3.2 Follow-up Actions to the Directives Given at ASEAN Bodies Related to Fisheries during 2019

- 6. The 22FCG/ASSP noted the results of the discussions of the ASEAN Bodies Related to Fisheries as presented by the representative from the ASEAN Secretariat, particularly those from the 27th Meeting of the ASEAN Sectoral Working Group on Fisheries (27th ASWGFi Meeting) on 27-29 June 2019 in Da Nang, Viet Nam; the Special Senior Official Meeting of the 40th Meeting of the ASEAN Ministers on Agriculture and Forestry (Special SOM-40th AMAF) on 5-6 August 2019 in Viet Nam, the Special Senior Officials Meeting of the Forty-first Meeting of the ASEAN Ministers on Agriculture and Forestry Plus Three (Special SOM-18th AMAF Plus Three) on 7 August 2019 in Hue City, Viet Nam; and the 41st Meeting of the ASEAN Ministers on Agriculture and Forestry (41st AMAF) on 15 October 2019 in Bandar Seri Begawan, Brunei Darussalam. The summary of the results of the discussions appears as **Annex 6**.
- 7. The 22FCG/ASSP noted that the 41st AMAF Meeting adopted the Regional Guidelines on Cold Chain Management for Seafood; and the Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies. The 22FCG/ASSP also took note of the development of the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Toward 2030 as one of the priority deliverables to SOM-AMAF in 2020, and requested the ASEAN and SEAFDEC Member Countries to make the necessary arrangement to ensure its timely completion.
- 8. The 22FCG/ASSP shared views on how to move forward with the suggestion of the 27th ASWGFi Meeting for SEAFDEC to analyze the utilization of the RFVR Database and establish a possible linkage of the RFVR Database with the FAO Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record).
- 9. During the discussion, the representative from Indonesia reiterated that the utilization of the RFVR Database for vessels 24 meters in length and over should be enhanced, but raised the concern on the proposed expansion of the RFVR Database to cover a new category of vessels less than 24 meters in length as this could pose a challenge in collecting the necessary data considering the large number of fishing vessels within this size range in the AMSs. He therefore suggested that there should be more discussions on this matter before SEAFDEC would proceed with the establishment of a new set of Database. Furthermore, he also expressed the concern that in combating the IUU fishing activities of small-size fishing vessels, it is crucial not only to obtain a complete database of such fishing vessels but also to monitor the behavior of the vessels and trace the products to ensure that products from IUU fishing activities should not access the market. Nevertheless, consideration should also be given on unregistered small-size vessels by making sure that these are not engaged in IUU fishing activities. However, he also suggested that there should be no barrier in the trade of products from these vessels taking into account the need to enhance the livelihood of small-scale fishers.
- 10. The representative from Japan shared the view that while FAO is developing the Global Record, the RFVR Database has already compiled information on the fishing vessels of the region. Therefore, the information compiled in the RFVR Database could serve as inputs to the Global Record, in order to reduce the burden of the AMSs in providing similar inputs to FAO in the future.
- 11. The representative from Malaysia shared the view of the representative from Indonesia with regards to the RFVR Database that SEAFDEC should first focus on fully utilizing the current RFVR Database, prior to its expansion to cover fishing vessels less than 24 meters in length. He added that specific size sub-category of fishing vessels to be covered in this new Database should be defined considering the very large number of these vessels in the region.
- IV. ASEAN-SEAFDEC Strategic Partnership (ASSP) and Fisheries Consultative Group (FCG) Collaborative Programs for the Year 2019-2020
- 4.1 Summary Report on the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) Collaborative Programs for the Year 2019-2020

- 12. The 22FCG/ASSP was informed by the representative from the SEAFDEC Secretariat that the Collaborative Programs under the FCG/ASSP Mechanism for 2019-2020 were reviewed by the Forty-second Meeting of the SEAFDEC Program Committee (42PCM) on 11-13 November 2019. Specifically, these Collaborative Programs comprise twenty-three (23) ongoing projects, of which twenty (20) projects would be completed in 2019, and three (3) projects would be continued in 2020; and thirteen (13) new projects which would commence in 2020. Furthermore, there are five (5) Pipeline Projects, which are still being subjected to discussion with prospective donors. The results of the program scrutiny and the recommendations of the 42PCM have been summarized as shown in (Annex 7).
- 13. With regards to the Pipeline Projects that are under the ASEAN funding mechanism, *i.e.* the ASEAN-JICA projects, the 22FCG/ASSP was also informed that once the funding arrangement is finalized, these projects would be placed under the FCG/ASSP Mechanism. As for the "Policy Guidelines for Conservation and Management of Tropical Anguillid Eels in Southeast Asian Region," this is still in its review process under the ASEAN mechanism.
- 14. In response to the concern of the representative from Singapore about the recommendations of the 42PCM on several FCG/ASSP projects that are scheduled to be completed in 2019, the representative from the SEAFDEC Secretariat explained that such recommendations would be accommodated in the new projects of SEAFDEC that address similar issues, and scheduled to commence in 2020.

V. PROGRESS OF SEAFDEC-RELATED ACTIVITIES/PROPOSALS UNDER THE ASEAN RELATED BODIES

5.1 ASEAN-Ad-hoc Steering Committee on Climate Change and Food Security

15. The 22FCG/ASSP noted the outcomes of the 8th Meeting of the Ad-hoc Steering Committee on Climate Change and Food Security (AHSCCC-FS) held 28-29 March 2019 in Bali, Indonesia, which appear as **Annex 8**.

5.2 Progress of the ASEAN Fisheries Consultative Forum (AFCF)

16. The 22FCG/ASSP noted the outcomes of the 11th Meeting of the ASEAN Fisheries Consultative Forum (AFCF) held 25-26 June 2019 in Da Nang, Viet Nam, which appears as **Annex 9.**

5.3 Progress of the Implementation of the ASEAN Shrimp Alliance (ASA)

- 17. The 22FCG/ASSP was informed by the representative from the Department of Fisheries (DOF) Thailand, regarding the progress of the activities of the ASEAN Shrimp Alliance (ASA) being coordinated by the DOF of Thailand, as well as the results of the 9th Meeting of ASEAN Shrimp Alliance on 24 June 2019 in Da Nang, Viet Nam including the recommendations and the way forward for the ASA (**Annex 10**).
- 18. During the discussion, the representative from Myanmar informed the 22FCG/ASSP that Myanmar has developed the guidelines on ASEAN Good Aquaculture Practice (GAqP) for fish and shrimps to guide the fish farmers in the country in adopting the elements of the ASEAN GAqP. In this connection, Myanmar with support from the MYSAP-GIZ Program, organized its GAqP Extension Team to be responsible for conducting training courses in the country, and for issuing the GAqP certificates to qualified aquaculture farms. The training courses are aimed at building up the capacity of the fish farmers to be able to support the implementation of national standards for the GAqP scheme.

VI. POLICY CONSIDERATION ON IMPORTANT ISSUES

6.1 Combating IUU Fishing

6.1.1 Progress of the Implementation of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain



- 19. The 22FCG/ASSP noted the progress made by MFRDMD on the promotion of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain (Annex 11), as presented by the representative from MFRDMD. Specifically, the 22FCG/ASSP was informed that MFRDMD has promoted the implementation of the ASEAN Guidelines since 2016, and that support to the AMSs had been continued by MFRDMD from 2017 to 2019, for the conduct of self-evaluation on the implementation of the ASEAN Guidelines by the respective countries. The AMSs have therefore been encouraged to continue the self-evaluation yearly and on their own.
- 20. During the discussion, the representative from Thailand informed the 22FCG/ASSP that during the past five years, Thailand has given priority to the activities in combating IUU fishing in line with the ASEAN Guidelines, and has set-up a Roadmap for the country's fisheries to be free from IUU fishing and ensure that no IUU products would enter into the domestic market as well as in the export supply chain. He added that Thailand is setting up the systems and mechanisms to pursue such Roadmap towards becoming an IUU fishing free country.
- 21. In response to the suggestion made by MFRDMD for the AMSs to continue the conduct of selfevaluation of the implementation of the ASEAN Guidelines in their respective countries on a yearly basis, the representative from the Philippines requested MFRDMD to continue communicating with the AMSs to monitor the progress of their respective self-evaluation. In response, the representative from MFRDMD also explained that the project supporting the implementation of the ASEAN Guidelines would be completed in 2019. In this regard, future activities of MFRDMD regarding the ASEAN Guidelines would be subject to the availability of funds, although the AMSs could still communicate with MFRDMD if assistance from MFRDMD on this aspect would be necessary.

6.1.2 Progress of the Regional Fishing Vessels Record

- 22. The 22FCG/ASSP was informed by the representative from TD regarding the progress of the Regional Fishing Vessels Record (RFVR), particularly on the submission of data on fishing vessels of 24 meters in length and over from the AMSs to TD in 2019 (Annex 12), and the directive given by the 51st Meeting of the SEAFDEC Council on the Protocol for Accessing of the RFVR Database that sharing of the database should be postponed until all of the AMSs could completely provide the updated data.
- With regards to the proposed expansion of the RFVR Database to cover vessels of 18-23.99 meters in length, the representative from TD clarified that such proposed range was recommended during the Meeting on Regional Fishing Vessels Record in Southeast Asia on 13-14 May 2019 in the Republic of Korea considering that vessels with such size range could be possibly landing their catch across the borders of the neighboring countries. However, the 22FCG/ASSP was also informed that the confirmation on the appropriate size of fishing vessels would be sought during the consultations with the AMSs.
- While encouraging the AMSs to submit their updated data on fishing vessels 24 meters in length and over to the RFVR Database, the representative from Thailand requested SEAFDEC to continue monitoring and encouraging the AMS in updating their information, as well as to compile the data provided by the AMSs to the RFVR Database.
- 25. The representative from Cambodia also informed the 22FCG/ASSP that as Cambodia has recently completed the census of fishing vessels, and the data on vessels 24 meters in length and over is now available, and this could be shared with other AMSs as well as with the FAO Global Record.
- 26. The representative from Myanmar informed the 22FCG/ASSP that Myanmar was unable to submit data to the RFVR Database since 2017 because Myanmar is in the process of setting-up VMS in its commercial fishing vessels which would be finished by December 2019. In this regard, she informed the Meeting that Myanmar would be able to provide data for the RFVR Database in 2020 and the country is planning to apply for IMO registration for its vessels so that the corresponding data could also be reported to the FAO Global Record.
- 27. The representative from Indonesia informed the 22FCG/ASSP that the discussion on the need to develop RFVR for the ASEAN has been started since 2013, but limited progress has been made for some

AMSs up to 2019. He therefore encouraged the AMSs to submit their updated RFVR for 24 meters and over LoA until 2019. The RFVR Database has allowed the ASEAN to enhance its effort in addressing IUU fishing issues in the region. The Database also has potentials to be used for scientific purposes, especially in providing scientific advice and defining the necessary management measures. Also in near future, an appropriate record for fishing vessel database from this region is unavoidable as this would be required by relevant existing conservation, management and market measures.

- 28. The representative from the Philippines also suggested to have further discussions on the proposed expanded coverage of the fishing vessels less than 24 meters in the RFVR Database, to taking into consideration the areas of operation, *e.g.* within archipelagic waters, within the EEZ, or beyond national jurisdictions. He also informed the 22FCG/ASSP of the requirement of IMO to register fishing vessels 12 meters and above that operate beyond the national waters.
- 29. While expressing the concern that AMSs might need to submit similar sets of data to the RFVR and the FAO Global Record, the representative from Malaysia inquired about the possibility that the data submitted by AMSs to SEAFDEC could be forwarded by SEAFDEC to the FAO Global Record to reduce the burden of the countries in the submission of similar data. In this regard, the representative from TD explained that the Global Record only requires the information of vessels with IMO number, while the RFVR Database requires information of vessels with or without IMO number. On the possibility of forwarding the data by SEAFDEC to FAO, this will depend on the decision of the AMSs whether to authorize SEAFDEC to forward such data.
- 30. The representative from Viet Nam reiterated that with the recent amendment of the country's Fisheries Law, Viet Nam has already changed the unit of measurement of fishing vessels from horsepower (HP) to length overall (LOA), and started to collect the statistics of fishing vessels. Hence, Viet Nam could provide the updated data on fishing vessels 24 meters in length and over to SEAFDEC. Moreover, she also informed the 22FCG/ASSP about other size ranges of fishing vessels in Viet Nam, *i.e.* 15-24 m and 12-15 m, however, the data on fishing vessels under these size ranges are not yet available.
- 31. While requesting TD to take into consideration the abovementioned recommendations in the future workplan of the RFVR, the 22FCG/ASSP also urged all AMSs to consider submitting their updated data to the RFVR Database for vessels 24 meters in length and over to SEAFDEC, and requested SEAFDEC to consult with the AMSs during the technical meeting in 2020 to come up with agreement on the appropriate size ranges for vessels less then 24 meters in length, to be included in the Database, as well as the mechanism for harmonizing the submission of data on fishing vessels from AMSs to SEAFDEC, then to FAO in the future.

6.1.3 Progress of the ASEAN Catch Documentation Scheme

- 32. The 22FCG/ASSP was informed by the representative from TD, regarding the progress of the development of the electronic system of the ASEAN Catch Documentation Scheme (eACDS) which was pilot tested in Brunei Darussalam in 2017 and to be pilot-tested in Viet Nam, Malaysia, and Myanmar after the technical and administrative procedures have been finalized by the concerned countries (**Annex 13**).
- 33. While appreciating the efforts of TD to pilot test the eACDS in four Southeast Asian countries, the Co-Chair for the ASEAN of the 22FCG/ASSP expressed her hope that in the future, the eACDS would also be introduced to the other countries that have not yet been identified as pilot sites.
- 34. The representative from Cambodia thanked TD for the updated progress of the eACDS and inquired about the details of the offline catch reporting system. He reiterated the request of Cambodia during the 42PCM for technical support to implement the eACDS in Cambodia, considering that Cambodia would soon become a Party to the PSMA. He informed the 22FCG/ASSP that Cambodia has already initiated the implementation of its national plan for control and inspection through a traceability system, as well as electronic logbook for recording the catch and landing of fish which is complementary to the work of TD on eACDS. While referring to the offline system of the eACDS developed by TD, he

also requested for technical assistance on the usage of the eACDS's offline application. In response, the representative from TD clarified that such assistance could be provided based on the availability of funds.

- 6.1.4 Progress of the Regional Cooperation for Implementation of the Port State Measures
- 35. The 22FCG/ASSP took note of the progress of the regional cooperation for the implementation of the Port State Measures (**Annex 14**), as presented by the representative from TD.
- 36. In the discussion, the representative from Thailand shared the view that the implementation of PSM is an important tool in combating IUU fishing by ensuring that fish and fishery products traded in Thailand do not come from IUU fishing activities. While expressing support to the initiative of TD, he looks forward to cooperating with TD in the future, especially in supporting the other AMSs to implement PSM.
- 37. The representative from the Philippines informed the 22FCG/ASSP of the ongoing FAO technical assistance to the Philippines and some other AMSs for the implementation of the PSMA. In this connection, he encouraged SEAFDEC to work closely with FAO to avoid the duplication of efforts.
- 38. The representative from Myanmar informed the 22FCG/ASSP that FAO conducted a workshop in Myanmar in October 2017 to review the country's compliance with the provisions in the PSMA, and formulate the national strategies and action plan to enable the country to gradually fulfill the requirements set in the PSMA. She added that Myanmar is developing the Standard Operating Procedures for Inspectors under the Sustainable Coastal Fisheries Programme in collaboration with DANIDA, and cooperating with the DOF of Thailand for the promotion of the PSMA in Myanmar under the bilateral agreement between Thailand and Myanmar. Nevertheless, Myanmar is seeking the assistance of SEAFDEC to continue building the capacity of its staff for the effective promotion of the PSMA in the country.
- 39. The representative from TD expressed the appreciation to Thailand for providing technical support in terms of resource persons during the Workshop on PSM organized by TD in 2019. Moreover, the representatives from the Philippines, Indonesia and Thailand also requested SEAFDEC to consider inviting their countries to participate in the PSM training which is planned to be implemented under the new JTF project starting 2020.
 - 6.1.5 Progress of the Implementation of the Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including Establishment of Regional and Subregional MCS Network
- 40. The 22FCG/ASSP was informed by the Chief of MFRDMD about the progress of the implementation of the Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including the establishment of Regional and Sub-regional MCS Network (Annex 15). He added that MFRDMD would collaborate with relevant organizations through the ASEAN Secretariat to promote the implementation of the RPOA-Capacity in the future.
- 41. While appreciating the effort of MFRDMD in supporting the AMSs to implement the RPOA-Capacity, the representative from Indonesia sought clarification on the need to establish a "Secretariat" for the region to implement the RPOA-Capacity, and specifically inquired about the plan of establishing MCS Network considering that under the ASEAN Mechanism, Indonesia is responsible for developing the MCS network in the region.
- 42. With regards to the establishment of the MCS Network, the representative from the SEAFDEC Secretariat clarified that this would be built upon the current regional/sub-regional MCS network initiatives in the Gulf of Thailand and Andaman Sea sub-regions.
- 43. During the discussion, the representative from the ASEAN Secretariat explained that creating a new working group would be difficult and would require strong justification considering the completion of the streamlining process of working groups under SOM-AMAF/AMAF. As an alternative, the ASEAN-SEAFDEC Member Countries may wish to consider assigning focal points to coordinate the

implementation of RPOA-Capacity. While the proposed establishment of an MCS Network is one of the activities identified in the Strategic Plan of Action for ASEAN Cooperation on Fisheries (2016-2020), the AMSs may need to further discuss the proposal in the context of the ASEAN Network for Combating IUU Fishing (AN-IUU), which also contains the mechanism to strengthen the coordination of MCS system among the AMSs. The 2nd ASEAN Meeting on Combating IUU Fishing in Partnership with EU on 13-14 December 2019 would be an opportunity to discuss the proposal, of which he was made aware that Thailand will be inviting SEAFDEC to take part in the said Meeting.

- 44. While appreciating the effort of SEAFDEC on the establishment of MCS Networks for the Subregions, the representative from Thailand informed the 22FCG/ASSP that Thailand has implemented the management of fishing capacity under its National Marine Fisheries Management Plan 2015-2019, to limit fishing efforts and fishing capacity at the national level. He therefore expressed the commitment of Thailand to fully support this activity as this would effectively facilitate the sharing of significant information related to MCS and IUU fishing in the sub-region.
- 45. The representative from Myanmar informed the 22FCG/ASSP that Myanmar plans to control the size and number of fishing vessels operating in the waters of Myanmar. In addition, based on the results of the R.V. Fridtjof Nansen Survey, Myanmar has no longer allowed the operation of foreign fishing vessels in its waters for a period of time, import and construction of new fishing vessels, and the issuance of new fishing licenses since 2016. She added that Myanmar has developed the National Plan of Action to Combat IUU Fishing (NPOA-IUU) through the technical assistance provided the EU in 2016, and for the southern part of the country, a catch certification system has been set up for the border trade by fish carrier vessels with technical assistance from the EU-GIZ Program since September 2016. She added that officials from the Department of Fisheries Myanmar have participated in the workshops on Catch Certification organized by SEAFDEC to be able to follow the guidelines of the EU, and would continue to collaborate with the ASEAN and SEAFDEC on this matter.

6.2 Promotion on Sustainable Fisheries and Aquaculture in ASEAN Region

- 6.2.1 Progress of the Regional Plan of Action for Sustainable Utilization of Neritic Tunas in the ASEAN Region
- 46. The 22FCG/ASSP took note of the progress of work on the implementation and promotion of the Regional Plan of Action for Sustainable Utilization of Neritic Tunas in the ASEAN Region (RPOA-Neritic Tunas), particularly the major activities and achievements after its endorsement by the ASEAN and SEAFDEC in 2015 (**Annex 16**), as presented by the Chief of MFRDMD.
- 47. During the discussion, the representative from Brunei Darussalam informed the 22FCG/ASSP that Brunei Darussalam is assisting the Secretariat to organize a Practical Workshop on Stock Risk Assessment of Longtail Tuna and Kawakawa in the Southeast Asian Waters in February 2020, and has already requested the AMSs to provide updated data on longtail tuna and kawakawa for further analysis. In this regard, the 22FCG/ASSP requested AMSs to submit the necessary data to Brunei Darussalam by 10 December 2019.
- 48. With regards to the stock and risk assessments of selected neritic tunas conducted by the SWG-Neretic Tuna, the representative from Indonesia expressed some concerns about the adopted surplus production models, *i.e.* Kobe Plot and ASPIC model, as the models have to satisfy the assumptions prior to the analysis to ensure the reliability of the results. In this regard, he suggested that in conducting the stock assessment and risk assessment, it is necessary to conduct data exploratory prior to the analysis and present the outcomes of data limitation that has been used in the analysis. In addition, the assessment should also provide a range of possible risks and stock projection that allow fisheries managers to understand and make decisions on management measures.
- 49. In responding to the suggestion raised by the representative from Indonesia, the Chief of MFRDMD explained that several parameters have been considered in the conduct of stock assessment by the SWG-Neritic Tuna. Nevertheless, MFRDMD would take into consideration the above-mentioned suggestion in the future.

- 50. The representative from Thailand reiterated its support to the promotion of the RPOA-Neritic Tunas as an effective tool in ensuring the sustainable utilization of neritic tunas in the region as it could enhance the quality of data collection as well as the accuracy of the stock assessment for developing appropriate management measure. He also added that the results of the RPOA-Neritic Tunas would also support the future implementation of the Fishery Improvement Program (FIP), and Thailand is looking forward to participating in management mechanism for neritic tunas in the region.
- The representative from the Philippines inquired whether the activities under the RPOA-Neritic Tunas would include other important neritic tuna species in the future, and whether the recommendations to reduce the fishing capacity of neritic tuna species in the Indian Ocean but the increase in the Pacific Ocean side are consistent if these species are considered as one stock. In response, the Chief of MFRDMD mentioned that MFRDMD is planning to expand the stock assessment to other important neritic tuna species, subject to availability of funds. With regards to the recommendations on reducing/increasing the fishing capacity, such recommendations were based on the data available during the period of the study, thus, there is a need for sufficient data and information in order to come up with more reliable results from the neritic tuna stock assessment in the region. Moreover, the Deputy Chief of MFRDMD also informed the 22FCG/ASSP that results from the genetic study suggested that small migration could cause no genetic differentiation between the stocks of the longtail tuna in the Indian Ocean and the Pacific Ocean.
- 52. The representative from Myanmar informed the 22FCG/ASSP that Myanmar, as a member of the IOTC, is revising the country's marine fisheries law to cover the high seas. She added that neritic tunas are common in the waters of Myanmar and are increasingly being exploited by commercial and local fisheries because of the high price offered by fish processing companies. She therefore expressed the commitment of Myanmar to support the promotion and implementation of the RPOA-Neritic Tunas.
 - 6.2.2 Progress of the ASEAN Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies
- 53. The 22FCG/ASSP was informed by the representative from AQD regarding the progress of the ASEAN Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies (Annex 17). While noting that the Guidelines have already been adopted by the 41st AMAF in 2019, the 22FCG/ASSP supported the activities under the proposed Phase 2 and Phase 3 of the project on Emergency Preparedness and Response Systems for implementation by AQD to ensure the sustainability of the adopted Guidelines.

6.3 Ensuring the Food Safety and Quality of Fish and Fishery Products in ASEAN Region

- 6.3.1 Progress of the Regional Guidelines on Cold Chain Management for Seafood
- 54. The 22FCG/ASSP took note of the progress of the Regional Guidelines on Cold Chain Management for Seafood (**Annex 18**), as presented by the Chief of MFRD. He also informed the 22FCG/ASSP that the Guidelines have already been adopted by the 41st AMAF in 2019, and that MFRD is planning to undertake activities under the proposed ASEAN-JICA Food Value Chain Development Project to support the sharing of information on the implementation of the Regional Guidelines.

6.4 CITES-related Issues

55. The 22FCG/ASSP was informed by the representative from the SEAFDEC Secretariat about the activities of SEAFDEC related to CITES (**Annex 19**) that include the conduct of capacity building programs, development of the regional common/coordination position, and updating of the information on CITES-related issues, *e.g.* development of the positions of the ASEAN-SEAFDEC Member Countries on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices at the 18th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES CoP18) and updating of the new listing of CEAS at the CITES CoP18.

56. The 22FCG/ASSP noted the Position of the ASEAN-SEAFDEC Member Countries on the Proposed Listing of CEAS into the CITES Appendices and the results of the CoP18 on the proposals to list such CEAS (*Appendix 2 of Annex 19*).

VII. OTHER MATTERS

7.1 Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Regional Towards 2030

- 57. The 22FCG/ASSP noted the progress of the development of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030), and also the future processes for submission of the RES&POA-2030 for adoption by the ASEAN-SEAFDEC Member Countries (**Annex 20**), as reported by the representative from the SEAFDEC Secretariat.
- 58. Furthermore, the 22FCG/ASSP was also informed that SEAFDEC has requested the SEAFDEC National Coordinators during the 42PCM to provide comments on the draft RES&POA-2030 by the end of November 2019. The 22FCG/ASSP was also requested to send their comments on the draft RES&POA-2030 to the SEAFDEC Secretariat by the end of November 2019. The comments from the 42PCM and 22FCG/ASSP would then be accommodated into the revised draft RES&POA-2030 for submission to the SEAFDEC Council and to the ASEAN for endorsement prior to seeking subsequent adoption by the SOM and AMAF.
- 59. While expressing the appreciation to SEAFDEC for developing the 2011 Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 (RES&POA-2020) as it has served as an important fisheries policy framework for the AMSs, the representative from Thailand requested SEAFDEC to conduct a review of the progress in the implementation of the RES&POA-2020 by the AMSs. In response, the representative from the SEAFDEC Secretariat reiterated that SEAFDEC has already conducted such review but only a few countries had responded. However, the results of such review would be shared with the delegates of the 22FCG/ASSP.

VIII. ADOPTION OF RECOMMENDATIONS AND REPORT OF THE MEETING

- 60. The 22FCG/ASSP considered and adopted the recommendations and report of the 22nd Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP), as presented by the representative from the SEAFDEC Secretariat.
- 61. The results of the Meeting will be submitted to the higher authorities of the ASEAN and SEAFDEC for consideration and appropriate action.

IX. CLOSING OF THE MEETING

62. The Secretary-General of SEAFDEC thanked the representatives from the ASEAN-SEAFDEC Member Countries for their cooperation and active participation during the Meeting, and also for providing constructive comments, suggestions and policy recommendations. After expressing also the appreciation to the SEAFDEC Secretariat and Departments for their cooperation and support, and to the Secretariat of the Meeting for the excellent arrangements of the Meeting, she declared the Meeting closed. Her Closing Remarks appears as **Annex 21**.

Annex 1

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Annex 2

OPENING REMARKS

By *Mrs. Nguyen Thi Phuong Dzung*, Chair of the ASEAN Sectoral Working Group on Fisheries

SEAFDEC Secretary-General, *Mrs. Malinee Smithrithee*, Distinguished delegates from the ASEAN-SEAFDEC Member Countries, Senior Officials of SEAFDEC, Representative from ASEAN Secretariat, Ladies and Gentlemen, Good morning to everyone.

It is a great honor for me to be here with you for the two-day Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in Chiang Mai, Thailand. Since 1998, technical cooperation between ASEAN and SEAFDEC towards sustainable fisheries development has been initiated under the regional ASEAN-SEAFDEC Fisheries Consultative Group Mechanism (FCG) framework; and the promotion of sustainable fisheries development through this mechanism is well accredited within the ASEAN. With the formalation of the ASEAN-SEAFDEC Strategic Partnership (ASSP) in 2007, the cooperation between ASEAN and SEAFDEC and its Member Countries, for regional management of sustainable fisheries has been enhanced.

It has been over twenty years, that the cooperation between ASEAN and SEAFDEC is one of the best strategies to strengthen regional sustainable fisheries for the highest benefit of people in our region. Therefore, I would like to take this opportunity to express my sincere thanks and appreciation for all of your assistance and support for ASEAN Member States. I heard that the SEAFDEC Program Committee spent it's three day meeting with great efforts to review the programs implemented in 2019, as well as proposed program for 2020.

Ladies and Gentlemen,

For today and tomorrow, we will discuss the programs and activities implemented under the FCG/ASSP mechanism in 2019 and those that are planned for 2020 and beyond. These relate to the Fisheries Management Measures such as: Combating IUU Fishing (Catch Documentation and Traceability of Fish Products, implementation of the Post State Measures, regional fishing vessels records); Sustainable utilization of fisheries resource, sustainable Fisheries for Food security, Climate Change and Mitigation Measures. We will share the new inititives, new projects are developing in our region such as the Establishment of ASEAN Netwok for combating IUU fishing, the feasibility study on the Development of ASEAN general fisheries policy and many on going projects is conducting by SEAFDEC and new projects are now proposed. These are of importance in moving forward to sustainable fisheries in our region.

As the Co-chair of the meeting, I believe that this meeting will result in success with your cooperation and will bring the highest benefit for the Fisheries sector in our region.

Thank you.

Annex 3

AGENDA

Agenda 1: Opening of the Meeting

Agenda 2: Adoption of the Agenda

Agenda 3: Follow-up Actions to the Directives Given at SEAFDEC Meetings and ASEAN Bodies Related to Fisheries

- 3.1 Follow-up Actions to the Directives Given at the Fifty-first Meeting of SEAFDEC Council and Twenty-first Meeting of Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP)
- 3.2 Follow-up Actions to the Directives Given at Meeting of ASEAN Bodies Related to Fisheries during 2019

Agenda 4: ASEAN-SEAFDEC Strategic Partnership (ASSP) and Fisheries Consultative Group (FCG) Collaborative Programs for the Year 2019-2020

4.1 Summary Report on the FCG/ASSP Collaborative Programs for the Year 2019- 2020

Agenda 5: Progress of SEAFDEC-Related Activities/Proposals under the ASEAN Related Bodies

- 5.1 ASEAN Ad-hoc Steering Committee on Climate Change and Food Security
- 5.2 ASEAN Fisheries Consultative Forum (AFCF)
- 5.3 ASEAN Shrimp Alliance (ASA)
- 5.4 Others

Agenda 6: Policy Considerations on Important Issues

- 6.1 Combating IUU Fishing
 - 6.1.1 Progress on Implementation of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chains
 - 6.1.2 Progress on Regional Fishing Vessels Record
 - 6.1.3 Progress on ASEAN Catch Documentation Scheme
 - 6.1.4 Progress on Regional Cooperation for Implementation of the Port State Measures
 - 6.1.5 Progress on Implementation of the Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including Establishment of Regional and Sub-regional MCS network
- 6.2 Promotion on Sustainable Fisheries and Aquaculture in ASEAN Region
 - 6.2.1 Progress on Regional Plan of Action for Sustainable Utilization of Neritic Tunas in the ASEAN Region
 - 6.2.2 Progress on ASEAN Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies
- 6.3 Ensuring the Food Safety and Quality of Fish and Fishery Products in ASEAN Region
 - 6.3.1 Progress on Regional Guidelines on Cold Chain Management of Fish and Fishery Products in ASEAN Region
- 6.4 CITES-related Issues
- 6.5 Others/Emerging Issues

Agenda 7: Other Matter

7.1 Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030

Agenda 8: Adoption of Recommendations and Report of the Meeting

Agenda 9: Closing of the Meeting

FOLLOW-UP ACTIONS TO THE DIRECTIVES GIVEN AT THE 51^{ST} MEETING OF THE SEAFDEC COUNCIL

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks		
Agenda II. REPORT (OF THE	SECRETARY-GENERAL	ARY-GENERAL				
	18	Brunei Darussalam SEAFDEC should consider the possibility of expanding future collaboration and cooperation not only through the national agencies but also with the research institutes.	expanding future collaboration and ot only through the national agencies but also				
	20	Japan suggested that an amendment should be made to the SEAFDEC Annual Report, especially on the "Conservation and Management of Catadromous Eels" to reflect the fact that <i>Anguilla japonica</i> has not been listed in the CITES Appendices.	al Report, especially on the "Conservation of Catadromous Eels" to reflect the fact <i>nica</i> has not been listed in the CITES ested that SEAFDEC should consider a successes from its projects in its future le also suggested that SEAFDEC could mination of the results and lessons learnt Secretariat will include highlights of the success in their project implementation into the SEAFDEC Annual Report.		Done		
	21	<u>Viet Nam</u> suggested that SEAFDEC should consider highlighting some successes from its projects in its future annual reports. He also suggested that SEAFDEC could enhance the dissemination of the results and lessons learnt from its projects in the future through the social media.			Done		
Agenda V. POLICY C	ONSID	ERATION ON IMPORTANT ISSUES					
5.1 Issues on Combatin	ng IUU	Fishing					
5.1.1 ASEAN Guidelin	es for P	reventing the Entry of Fish and Fishery Products from IUU	Fishing Activities into the Sup	oply Chain			
	27	MFRDMD should identify the need of a particular AMS in the implementation of the Guidelines and provide training and other capacity building as necessary MFRDMD should be promoted at the international fora such as those of FAO to enhance its recognition by a wider audience.	MFRDMD organized the termin IUU fishing on 3-5 September 2 particular AMS in the implement identified during such meeting. SEAFDEC/TD will undertake a IUU fishing in the region. In this needs of such particular AMS wonew project to be implemented.	2019. The need of a matation of the Guidelines was From 2020 to 2024, a new project on combatting s connection, the identified will be accommodated into the	Preparing and publishing the terminal meeting report and final project report by Dec 2019.		

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
	28	The Council suggested that the comments previously made during the 21FCG/ASSP on the transparency of the self-evaluation process and whether the evaluation reflects the achievement of the objectives of the Guidelines, should be considered.	Same follow-	up with #27 mentioned above	
	29	MFRDMD should consider separating the scores from these questions in order that the results from the questionnaire survey would reflect the real achievement of the implementation of the Guidelines	This issue was discussed during the meeting in September (referred to above #27)	MFRDMD plans to propose in having a consultant to assess the implementation of the ASEAN Guidelines in AMSs. However, it depends on the availability of the funding.	Done
Progress of implementation of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain	32	Brunei Darussalam: In the Interim Report, a disclaimer should clearly indicate the fact that Brunei Darussalam was not included in the self-evaluation. The representative from MFRDMD clarified that the self-evaluation did not include Brunei Darussalam and Singapore due to budgetary constraints.	MFRDMD will record in the terminal report of the JTF6 project about combating IUU fishing the inability to visit Brunei Darussalam and Singapore in 2018 due to project budgetary constraints.	Inputs from Brunei Darussalam and Singapore could be obtained through the participation of their country representatives who attended the project terminal meeting held by MFRDMD in September 2019.	Done
512 D : 15:1:	33	Japan: the process of the self-evaluation and suggested that MFRDMD should consider finding alternative methods by conducting similar surveys every few years to monitor the progress made by each AMS in the implementation of the Guidelines	This issue was discussed with AMSs during the meeting in September 2019	MFRDMD plans to propose in having a consultant to assess the implementation of the ASEAN Guidelines in AMSs. However, it depends on the availability of the funding.	Done
5.1.2 Regional Fishing					
The Protocol for Accessing the RFVR Database System	35	Singapore: suggested that in the preparation of the Letter of Agreement (LOA) between non-AMSs and SEAFDEC, the flexibility for SEAFDEC to make changes to the Protocol and review the LOA when necessary	The Secretariat took note on this matter		Done
	36	Malaysia: suggested AMSs should regularly provide their respective updated data to the RFVR Database and for the proposed development of the RFVR for vessels less than	Training Department does the best to communicate and provide technical assistance to	Until now, the AMS as Myanmar, Philippine, and Viet Nam still not submit	Ongoing

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Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
		24 meters in length suggested that the current RFVR should be fully utilized instead, and then supported the approval of the Protocol for Accessing the RFVR Database System.	Myanmar, Philippine, and Viet Nam in order that they can submit updated information to RFVR Database	update information to RFVR Database	
	38	Indonesia Suggested that for the time being SEAFDEC should consider enhancing the use of the RFVR Database for vessels 24 meters in length and over instead of expanding the RFVR to also cover vessels less than 24 meters in length.	The discussion with AMS to enhance the use of the RFVR Database for vessels 24 meters in length and over instead of expanding the RFVR to also cover vessels less than 24 meters in length was conducted during RFVR side event meeting in Korea 13-14 May 2019	The result from RFVR side event meeting in Korea, AMSs agreed in principle to development and implement of RFVR less than 24 meters. This activity will conduct in next year.	Ongoing
	40	Thailand: suggested that SEAFDEC should work closely with the AMSs to ensure that the data in the RFVR Database is regularly updated.	TD always to work closely and via RFVR Nation Focal Point in RFVR database. However, the castill cannot submit update information of the castill cannot submit update information.	n each country to update obstacle is that some countries	Ongoing
	42	Japan: expressed the concern that not all AMSs have submitted the updated information in the RFVR database system. Then, encouraged all AMSs to submit their updated data to SEAFDEC based on the agreed timeline.	internal factor problem.	mation depending on their	
	43	Philippines: concurred with the suggestion of the Council Director for Brunei Darussalam that a "watch list" should be developed instead, to serve as warning for fishing vessels that are still operating unsustainable fishing practices. (para 32: Brunei Darussalam: informed the Council that there had been incidents of foreign vessels encroaching in their waters but such vessels were not apprehended but some could be identified. In this regard, the term "watch list" could be more appropriate.)	TD informed this issue to AMS and RFVR national focal point in the RFVR side event meeting in Korea. More discussion will conduct as next step in next year.	In collaboration with Secretarial the questionnaire for importance and implementation was replied by representative from AMSs during PSM training course in July 2019. The analysis results were conducted by Secretariat. However, this topic for "Watch list" plan to discuss in RFVR meeting in next year.	Ongoing



Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
	44	Secretary-General confirmed that the current RFVR Database could serve as reference for data verification, and supported the proposed development of a "watch list" of IUU fishing vessels. On the Protocol for Accessing of the RFVR Database, he supported the suggestion that sharing of database should be postponed until all AMSs could provide updated data. Secretary-General: considering that most of transshipment vessels within the Southeast Asian waters are mostly less than 24 meters in length, he suggested that the expansion of the RFVR Database to also cover vessels less than 24 meters in length should be considered to enhance the utilization of the RFVR Database in the future.	The way forward activities on RFVR less than 24 meters in length was discussed with AMS during RFVR side event meeting in Korea 13-14 May 2019. The development on this database will start in 2020.	Preliminary ideas/inputs obtained from the fishing port inspectors during the training of PSMA organized by TD in middle of 2019 was analyzed. An alternative way to obtain the idea from AMS will be explored in consultation between experts (TD, SEC, etc.)	Ongoing
5.1.3 ASEAN Catch D	ocumen	tation Scheme (ACDS)			
Electronic system of the ACDS (eACDS)	48	<u>Philippines</u> : information on the differences between the electronic Catch Documentation and Traceability System (eCDTS) developed with support from USAID Oceans and the eACDS developed with support from the Japanese Trust Fund (JTF), SEAFDEC should seek the clarification and confirmation from the USAID Oceans on this aspect.	This issue was discussed and confirmed with USAID Ocean in April 2019.		Done
	54	Singapore: viewed that the importance of eACDS should not only be to promote traceability within the country, but also traceability across the value chain and suggested SEAFDEC should consider exploring the possibility of connecting the systems of the AMSs to provide for exchange of e-certificates for trade purposes	To be discussed with AMS, and ways to establish such e-certific		Ongoing
		Support the Implementation of Port State Measures in the			
Regional Training Course on Port State Measures Implementation for Inspectors	57	Indonesia: SEAFDEC should seek assistance from FAO and relevant RFMOs to provide the resource persons for this training and proposed to conducted the training in Indonesia	TD invited resource persons from FAO, IOTC and other agencies to join in the regional training on PSM for inspector held at TD on 22-26 July 2019.	Resource persons from FAO, IOTC and other relevant agencies participated in the meeting in July 2019.	Done

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Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
The Port State Measure Agreement (PSMA)	58	<u>Viet Nam</u> : requested SEAFDEC to consider supporting the AMSs for implementing the PSMA by providing knowledge on the procedures and protocols for port inspection	TD organized the regional training course on PSM Implementation for Inspectors on 22-26 July 2019, all AMS		Done
	59	Myanmar: requested SEAFDEC to consider providing capacity building activities to Myanmar officers in support of the implementation of PSM.	were invited.		Done
	60	Thailand requested SEAFDEC to encourage the Member Countries to share their respective PSM information to the FAO Port-Lex Database and to scale up the utilization of the Database	This depends on consideration of each countries. SEAFDEC requested FAO to sponsor AMS to join in PSMA meeting in Korea from 15-17 May 2019. This issue was discussed and informed by FAO during the meeting in Korea.		Done
	61	Japan: requested SEAFDEC to follow up on to tap the expertise of other organizations in conducting training courses.	TD requested IOTC to consider sending resource persons to join the regional training on PSM implementation for inspector on 22-26 July 2019.	The invitation letter was sent to IOTC for join in PSM training course as suggested by Japan but depend on their consideration. IOTC did not sent resource person to join in the PSM training course.	Done
		for the Management of Fishing Capacity	MEDDAD 11 1	MEDDIND	0
10. The implementation of the RPOA-Capacity	66	Indonesia: requested SEAFDEC to consider supporting the AMSs in their efforts to enhance the implementation of the RPOA-Capacity	MFRDMD will consider to propose a new JAIF project about fishing capacity next year.	MFRDMD was informed by JAIF office staff that JAIF has difficulties in providing fund to support this new project. MFRDMD will explore way to get funding support for this project in near future.	Ongoing



Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
		romote Sustainable Fisheries and Aquaculture in the ASE			
	ation to	Promote Sustainable Fisheries and Aquaculture in the AS			
11. The progress of	70	<u>Indonesia</u> : MFRDMD should continue to conduct the stock	MFRDMD will continue		Ongoing
implementation of the		assessment of other species of neritic tunas	conducting stock assessments		
RPOA-Neritic Tunas		- Since the conduct of stock assessment requires long-term	of neritic tunas and pelagic		
		CPUE data, he suggested that data collection schemes of	fishes under a JTF6-II project.		
		the countries on these species should be enhanced.			
		- suggested that specific working group should be			
		established to consider the results and conclusion of the			
		stock and risks assessments of Spanish mackerel and king			
		mackerel in order to come up with appropriate management			
		recommendations			
	72	Philippines: suggested that the activities of the SWG-	MFRDMD will continue	MFRDMD will conduct	Ongoing
		Neritic Tunas should also focus on stock assessment of	conducting stock assessments	stock assessment on neritic	
		target neritic tuna species in order to come up with	of neritic tunas and pelagic	tunas and tuna like species	
		practical and effective management measures that would	fishes under a JTF6-II project.	if fishing capacity program	
		ensure the sustainable utilization of the species.		implemented in near future.	
	77	MFRDMD: the stock and risk assessments of neritic tunas	MFRDMD and SEC noted and	will explore appropriate	Ongoing
		undertaken by the SWG-Neritic Tunas should be shared	channels/ways to share such inf	ormation in order to obtain	
		with concerned RFMOs, e.g. IOTC, for appropriate action.	appropriate action.		
5.2.2 Conservation and	d Mana	gement of Tropical Anguillid Eel Resources and Promotion	of Sustainable Aquaculture		
Conservation and	81	Myanmar: requested SEAFDEC to consider providing	AQD will cover the	AQD will cover the	Done
Management of		technical support for the development of the aquaculture of	aquaculture of tropical	aquaculture of tropical	
Tropical Anguillid		tropical anguillid eels in Myanmar	anguillid eels activities in	anguillid eels in Myanmar	
Eel Resources and			Myanmar	IFRDMD will cover the	
Promotion of		SEAFDEC should consider conducting awareness training	IFRDMD will cover the catch	catch statistics on anguillid	
Sustainable		courses in the AMSs to support the establishment of the	statistics on anguillid eels.	eels.	
Aquaculture		catch statistics on anguillid eels.	The catch statistics processing	IFRDMD conducted the	
•			will be taken up in the	regional training for the	
			training course for the	improvement on	
			improvement on management	management of inland	
			of inland fisheries in Lao	capture fisheries in Lao	
			PDR, scheduled for July. This	PDR in July 2019 in	
			training has already been	collaboration with TD.	
			notified to AMSs.		
	84	<u>Thailand</u> : requested that the involvement of officers from	IFRDMD requested officers	IFRDMD conducted the	Done

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
		the Department of Fisheries of Thailand in data collection at the project sites would be considered, as well as the participation of such officers in relevant training courses and other related activities.	from the Department of Fisheries to accompany in every field survey on tropical anguillid eels in AMSs.	regional training for the improvement on management of inland capture fisheries in Lao PDR in July 2019. DOF officers from 6 countries, including Thailand, were invited to this training.	
		paredness and Response Systems for Effective Management	of Transboundary Disease Ou		
The developing the Regional Guidelines	87	SEAFDEC should make sure that documents requiring immediate approval of the Council are provided at least two weeks in advance, so that the Council would have adequate time for consideration. While expressing the appreciation to AQD for the development of the Regional Guidelines, the Council Directors for Malaysia and Singapore also shared the same concern with Thailand that more time would be necessary before any consideration on the Regional Guidelines could be made.	This was noted. AQD, with the assistance of Secretariat, circulated the document to the SEAFDEC Council Members and requested for endorsement <i>ad referendum</i> . As of writing, the Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies was endorsed by the SEAFDEC Council and was submitted to the submitted to the FCG/ASSP focal points for endorsement (ongoing).	AQD, with the assistance from SEC, is updating the progress of the endorsement from the FCG/ASSP focal points. The guidelines to be adopted at the upcoming 41st AMAF Meeting on 15 October 2019	Ongoing
		and Quality of Fish and Fishery Products in ASEAN Region	n		
		Cold Chain Management for Seafood			
The development of the Regional Guidelines on Cold Chain Management of Fish and Fishery Products in ASEAN Region	90	Indonesia: requested to consider preparing an action plan to support the implementation of the Regional Guidelines by the AMSs	MFRD noted		This would be addressed through a new project on information sharing for implementati on of the Regional

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Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
					Guidelines was proposed to be undertaken by MFRD programs under
					ASEAN- JICA FVC program.
5.4 Others					1 8
5.4.1 Way Forward fo					
	93	<u>Viet Nam:</u> suggested that SEAFDEC should work closely with FAO for collective inputs on the reference points (<i>e.g.</i> overcapacity, overfishing) for fishery subsidies	SEC noted, and will explore wa	ys forward	Ongoing
	96	Secretary-General informed the Council that SEAFDEC would work closely with FAO in updating the information on the results of discussions on fishery subsidies which would be shared with the Member Countries.			
Agenda VII. Other M	atters	House of Shared Wall the French Countries.	L		l
		and Plan of Action after 2020			
The progress of the evaluation and revision of the Resolution and Plan of Action 2020 (RES&POA-2020)	110	SEAFDEC appointment of national focal points for the revision of the RES&POA-2020 by May 2019	SEC done	The regional meeting to finalize the revised RES-POA was organized on 10-11 September 2019 and will submit the results of this meeting to the 42PCM and 22FCG respectively.	Ongoing
	110	Malaysia: suggested that such timelines to designate national focal points prior to the conduct of the regional meeting to evaluate the implementation of the RES-POA2020, should be adjusted in order that some advance works could be undertaken prior to their attendance in the meeting	SEC implemented		Done

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Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
7.3 Japanese Trust Fu	ınd (202	0-2024)			
The procedures and	112	Indonesia: suggested that the new phase of JTF should	SEC noted, and to be		Done
schedule of the	Į.	consider the conduct of more capacity building activities	accommodated into the new		
Japanese Trust Fund	Į.	that focus on technology transfer aiming to increase	phase if JTF projects		
(JTF) for 2020-2024	ļ	production and on value adding of fish and fishery products			
Agenda VIII. FUTUR	E DIRE	CTION OF SEAFDEC			
21. The Regional	115	SEAFDEC could request nominations for RFPN members	Secretariat sent out letter reques		Ongoing
Fisheries Policy		from countries on rotational basis in each year, and for	Darussalam, Cambodia, Indone	sia, and Lao PDR requesting	
Network (RFPN)		countries that do not have sufficient number of staffs, such countries may not send their representatives to the RFPN	indication of the RFPNs by 15 S	September.	
		•	Thailand initially expressed wil	lingness to send RFPN from	
	Į.		Thailand under the country's se	lf support.	
22. The SEAFDEC-	115	SEAFDEC-Sweden Project evaluation would be conducted	SEC sent the comprehensive	done	Done
Sweden Project		by mid of 2019. In this connection, the comprehensive	report to the Council		
		report of the activities and achievements of the SEAFDEC-	Directors, TD, MFRDMD,		
		Sweden Project should be sent to the Project participating	IFRDMD, and shared through		
		countries to provide the necessary information for such	email to NCs.		
		evaluation.			
23. On-going support	116	Malaysia: the development of training syllabus on fishing	TD provided training syllabus	According to	Ongoing
of TD		gear design, vessel design, and marine engineering, among	models to Malaysia i.e.	communication between TD	
	Į.	others was being acknowledged, TD was also requested to	1) Fishing Technology,	and DOF Malaysia. The	
		support the conduct of training on extension methodologies	2) Fishing Gear Illustration,	training course on "Fish	
		for extension officers from Malaysia. Moreover,	3) Observer Onboard	Handling Practices	
		SEAFDEC could consider supporting relevant experts from	Program, and	Applicable to Various	
		Member Countries to join its delegation for international	4) Fish Handling Practices	Fishing Operation in South	
	Į.	meetings/important visits on rotational basis.	Applicable to Various Fishing	East Asia" is planning to	
			Operation in South East Asia	organized in September	
				2019. TD prepared for this	
			TD was informed that	training but Malaysia	
			Malaysia plans to organize	internal process has yet	
			two (2) training courses,	finished and completed. The	
			namely	training was postponed.	
			1) Fishing Gear Technologies		
			Basic Course (Venue: APM,		
			Terengganu, Malaysia) and		
			2) Fish Handling Practices		

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
			Applicable to Various Fishing Operation in South East Asia (Venue: SEAFDEC TD, Samut Prakan, Thailand)		
24. The establishment of sustainable mariculture	116	Indonesia: SEAFDEC should consider conducting R&D of the design of the mariculture set up as well as environmental friendly fishing gears, <i>e.g.</i> efficient materials and design of FADs, and fishing gears and equipment	TD took note on the recommendations made by the Council for Indonesia on R&D for environmental friendly fishing gear.	Explore whether is the funding support is available.	Ongoing
25. Research on anguillid eels	116	SEAFDEC should also focus on the development of artificial seed production techniques considering that the increased supply of artificial seeds	Subject to be included/discussed project	d during the new JAIF's eel	Ongoing
26. The Council shared their views on the future direction of the regional fisheries development	117	SEAFDEC undertakes the revision of the RES&POA-2020, the following areas should be taken into consideration: • Marine debris and micro-plastics (linked to food safety issues) • Environmental friendly fishing gears • Sustainable mariculture set up • Full-cycle breeding and aquaculture technologies for selected high-value species such as eel • Alternative feed ingredients from land-based sources to replace fish meal • Impacts of intensive aquaculture, e.g. parasites and pollution • Aligning of SEAFDEC programs with blue economy	SEC accommodated such topics when discussing the issues during the meetings.		Done
Agenda IX. MANAGE					
9.1 Operation of SEAF	DEC T	raining and Research Vessels			
27. The Operations of SEAFDEC Training and Research Vessels	121	Philippines: SEAFDEC should consider developing a program for the utilization of the vessels that address the common concern of the Southeast Asian countries	TD took note on the recommendation on developing a program for the utilization of the vessels that addresses the common	TD: a program to obtain information on the needs of AMS is ongoing process (to be confirmed)	Ongoing

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
			concern of the Southeast Asian Countries.		
0.2 Collaborative Are	rongomo	ents between SEAFDEC and Other Organizations	Asian Countries.		
28. Three	132	Japan: requested to provide such details in writing to the	AQD, through SEC,		Done
Memorandums of Understanding	132	Council Directors	submitted a letter (dated 22 March 2019) detailing the		Done
(MOUs) signed by			collaborative arrangement		
AQD with three			signed with China to all		
technical institutions			Council Directors last 1 April		
in China			2019.		
9.3 SEAFDEC Gende	r Strateg	gy			
29. The SEAFDEC Gender Strategy	135	Indonesia: invited SEAFDEC to consider conducting pilot projects on gender in Indonesia	TD took note on this invitation of gender integration in Indonesia available. In additional SEAFD staff to support Gender activitie and Fisheries Partnership Project	and will consider if budget is EC has provided technical s under the USAID Ocean	Done
	136	Thailand: requested to consider establishing gender focal points for the AMSs to facilitate cooperation	The USAID Ocean and Fisherie appointed the Technical Workir Gender and Labor. Therefore, n group is possible. However, this consideration at the workshop of Plan for SEAFDEC Gender Stra	ng Group on Human Welfare: naking use of this working request will be taken into n Development of the Action	Done
	137	Japan expressed the view that since the SEAFDEC Gender Strategy is voluntary in nature, the word "shall" in the introductory sentence of the Strategies should be replaced with "should."	SEAFDEC took note on the rec further discussion among the Ge "shall" in the introductory sente "should."	ender team to adjust word	Done
	138	The Council made the following suggestions to revise the SEAFDEC Gender Strategy:	SEAFDEC took note the revise Strategy:	the SEAFDEC Gender	
		O An introductory sentence of the Strategies should be revised to read "In order to achieve the objectives, the following strategies should be implemented:"	revised to read "In ord	ce of the Strategies should be ler to achieve the objectives, s should be implemented:"	

Issues	Para	Recommendations made by the council	Required action/Progress (1 st Quarter) (April 2019-June 2019)	Required action/Progress (2 nd Quarter) (July-September 2019)	Remarks
		O Strategy 3.1 should be revised to read "Strive towards providing equal opportunities for the participation of male and female representatives from Member Countries and other organizations in events organized by SEAFDEC"	towards providing equ participation of male a	revised to read "Strive al opportunities for the and female representatives and other organizations in EAFDEC"	
Agenda X. FINANCIA	L MA	TTERS			
10.2 Proposed Budget	ary Reg	uirements of the Center for the Year 2020			
	162	Japan: suggested that the necessary documents should also be provided to the SEAFDEC Council of Directors in advance	TD will prepare the Proposed B Center for the 2021 send to Cou earlier than the ACM by email a	incil Directors one month	Done
Agenda XI. CONCLU	DING N			1.7	1
11.2 Date and Venue of	of the Fi	fty-second Meeting of the SEAFDEC Council			
	169	Japan: requested the Secretary-General to discuss with the Council Director for Japan to finalize the exact date and venue of the next meeting of the SEAFDEC Council.			Ongoing



22nd Meeting of Fisheries Consultative Group of the ASSP, 14-15 November 2019

FOLLOW-UP ACTIONS TO THE DIRECTIVES GIVEN AT THE $21^{\rm ST}$ MEETING OF THE FCG/ASSP

Issues	Para	Responsible Department	Required action/Progress (1 st Quarter) (November 2018-January 2019)	Required action/Progress (2 nd Quarter) (April-June 2019)	Required action/Progress (3 rd Quarter) (July-September 2019)	Status
IV. ASEAN-SEAFDEC Strategic Par						
4.1 Summary Report of the Fisheries	Consultat	tive Group (FC	G) of the ASEAN-SEAFDEC St	rategic Partnership (ASSP) Co	ollaborative Programs for th	e Year
- SEAFDEC to focus on enhancing the capacities of the Member Countries, <i>i.e.</i> providing technical assistance to the Member Counties in establishing their respective national reference points towards the harvest control rules of transboundary stocks, and in the analysis of the Maximum Sustainable Yield (MSY) and Total Allowable Effort (TAE) of target species.	14	MFRDMD	MFRDMD will assist AMSs with these concerns	MFRDMD will establish reference points for purse seine fishery in the JTF VI project by the end of 2019. MFRDMD only analyze MSY and fMSY for purse seine fishery in consideration of multispecies scenario in this region.	MFRDMD will suggest reference points for purse seine fishery in this region by the end of 2019 and incorporated in the final report of the JTF VI project.	Ongoing
VI. Policy Consideration on Internati	onal Fish	eries-related Is	sues		•	
6.1 Combating IUU Fishing (Progress	report in	implementation	on/development)			
6.1.2 Progress on Regional Fishing Vess	sels Recor	d for Vessels 24	m in Length and Over			
- TD to clarify the objective of the RFVR Database because if it could be confirmed that fishing vessels not included in the RFVR Database are considered as illegal fishing vessels	26	TD	The RFVR Database is intended as a tool to combat IUU fishing, and the data in RFVR Database is continually updated by AMSs. The fishing vessels in the RFVR Database are confirmed as non-IUU fishing vessels. But vessels not in the RFVR Database could not be considered and treated as IUU fishing vessels, however, it is recommended that the countries should find ways for confirming			
6.1.5 Progress on Implementation of the	Regional	Plan of Action	for the Management of Fishing Ca	pacity (RPOA-Capacity)		
- SEC to compile information additional feedback of AMSs to the questionnaire and further submit to the ASEAN Mechanism	37	SEC	There are three countries provided feedback to the Secretariat (Malaysia, Singapore and Thailand). Summary of the results was presented at the PCM in 2018			Done



Issues	Para	Responsible Department	Required action/Progress (1st Quarter) (November 2018-January 2019)	Required action/Progress (2 nd Quarter) (April-June 2019)	Required action/Progress (3 rd Quarter) (July-September 2019)	Status
			and subsequently to the Council in 2019.			
6.2 Promotion on Sustainable Fisherie	s and Aq	uaculture in A	SEAN Region			
6.2.1 Regional Plan of Action for Sustain	able Util	ization of Neriti	c Tunas in the ASEAN Region			
- SEC to continue providing support to AMSs to improve their capacity to manage their tuna resources, and convey the results of their works to the relevant RFMOs	44	SEC	The result from stock assessment on Kawakawa and Longtail tuna in Pacific and Indian Ocean will be further presented to relevant RFMO. It is planned that <i>Dr. Nishida</i> will directly present the result of this to IOTC Commission in 2019. And the result will be submitted to WCPFC for their information and reference.	Due to the budget constraints of the support from SEAFDEC-SWEDEN project (subject to be ended by 2019 which only project's priority issues will be implemented in 2019), the mission for Dr. Nishida was cancelled.	Secretariat will explore ways to support the process for submission of the scientific findings to the responsible RFMO (s) as suggested	Ongoing
SEC to explore how the management recommendations on neritic tunas could be put into practice in the Southeast Asian region 6.2.2 Progress on Conservation and Management recommendations on the second recommendation of the second recommenda	45	of Catadromou	Ongoing process in consultation with the ASEAN Secretariat and other project managers of the relevant regional initiatives	Currently, there is none of regional fora where SEAFDEC can put the scientific findings toward appropriate action.	This issue will be discussed at the SEAFDEC Department Chief Meeting for further appropriate actions.	Ongoing
- SEC to seek approval the Policy Guidelines from the SEAFDEC Council ad referendum, and subsequently circulate to the 21FCG/ASSP countries' head delegates requesting comments within two weeks for ad referendum endorsement to ASWGFi 6.2.3 Progress of the Proposed Establish	50	SEC and IFRDMD	Ongoing (submission for endorsement by the SEAFDEC Council <i>ad referendum</i> as well as through ASEAN mechanism). The Secretariat in collaboration with IFRDMD will request the 51 st Meeting of Council in March 2019 for their consideration and endorsement of this document.	Ongoing endorsement by ASE (FCG/ASSP focal point and A	EAN mechanism SWGFi <i>ad referendum</i>)	Ongoing Outbreaks
in Southeast Asia					·	
- Establishment of technical guidelines /mechanism for early	53	AQD	Technical lead person and consultants are currently	AQD, together with its partners, successfully	The Regional Technical Guidelines on Early	Ongoing

Issues	Para	Responsible Department	Required action/Progress (1 st Quarter) (November 2018-January 2019)	Required action/Progress (2 nd Quarter) (April-June 2019)	Required action/Progress (3 rd Quarter) (July-September 2019)	Status
warning system for aquatic animal diseases			collecting and collating data from AMSs for the draft of the guidelines	drafted the Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies. It was presented to the SEAFDEC Council 2019 in Surabaya, Indonesia and was endorsed ad referendum. The document was then submitted to the FCG/ASSP focal point. It is now awaiting endorsement.	Warning System for Aquatic Animal Health Emergencies were reviewed by the Council following its endorsement ad referendum. It was then circulated to FCG/ASSP focal points for endorsement. The guidelines is also set to be adopted at the upcoming 41 st AMAF Meeting on 15 October 2019. AQD, and its partners, published the Proceedings of the Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia. Completion reports and documents were also	
6.3 Ensuring the Food Safety and Qua	lity of Fi	gh and Fisham	Droducto in ACEAN Scotood		submitted to the project proponents in Thailand.	
6.3.1 Progress on Regional Guidelines o						
- Submit the draft Guidelines to the SEAFDEC Council in 2019 for endorsement, and subsequently submit to the ASEAN mechanism for implementation	56	MFRD	The draft Guidelines would be submitted to the SEAFDEC Council in March 2019 for endorsement.		The draft guidelines was endorsed by the 51CM, 27ASWGFi, SSOM-AMAF. The guidelines would be submitted to AMAF in Oct 2019 for	Ongoing



Issues	Para	Responsible Department	Required action/Progress (1 st Quarter) (November 2018-January 2019)	Required action/Progress (2 nd Quarter) (April-June 2019)	Required action/Progress (3 rd Quarter) (July-September 2019)	Status
					endorsement.	
6.4 CITES Issues						
- Submit ASEAN common /coordinated position once endorsed by the SEAFDEC Council	56	SEC	Regional Consultation on Develo SEAFDEC Common Position on Commercially-exploited Aquatic Appendices was held on 30-31 Ja Thailand. The representative from <i>Kissol Jr.</i> , served as Chairperson with the Member Countries' posi of several CEAS into the CITES circulated to the SEAFDEC Countreferendum. There is one commo support" the proposal for listing Mappendix II.	the Proposed Listing of Species into the CITES muary 2019 in Bangkok, a Malaysia, <i>Mr. Lawrence</i> of the RC which came up tions on the proposed listing Appendix II, which had been neil for endorsement <i>ad</i> in position of AMS "not to		Done

SUMMARY OF THE DISCUSSIONS OF THE ASEAN BODIES RELATED TO FISHERIES

SUMMARY REPORT OF THE TWENTY SEVENTH MEETING OF THE ASEAN SECTORAL WORKING GROUP ON FISHERIES

(27th ASWGFi Meeting)

27-29 June 2019, Da Nang City, Viet Nam

AGENDA ITEM 10: ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (ASSP) PROGRAMME

- 10.1 Outcomes of the 21st Meeting of the Fisheries Consultative Group (FCG) of the ASSP
- 39. The Meeting adopted the Report of the 21st Meeting of the FCG-ASSP held on 8-9 November 2018 in Langkawi, Malaysia.
- 10.2 Progress in the Implementation of Activities under FCG/ASSP
 - 10.2.1 <u>Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating Illegal, Unreported and Unregulated (IUU) Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products</u>
- 40. The Meeting noted the Checklist outlining the progress made in the implementation of activities that support AMS in the implementation of the 11 key actions in the Joint Declaration to combat IUU fishing and enhance the competitiveness of ASEAN fish and fishery products.
- 41. Considering that there are several projects and activities with corresponding focal points relating to combating IUU Fishing, the Meeting noted the suggestion to consider the proposed AN-IUU as a platform to streamline all projects addressing IUU fishing issues for efficient use of time and resources.
 - 10.2.2 <u>CITES Related Issues CITES/ ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into CITES Appendices at the CITES CoP18.</u>
- 42. The Meeting was informed that only one common position was reached between ASEAN and SEAFDEC on the proposed listing of commercially-exploited aquatic species into CITES appendix, which is AMS do not support the inclusion of short-fin and long-fin Mako sharks in Appendix II of CITES. The common position was endorsed by SOM-AMAF on 6 May 2019.
 - 10.2.3 Regional Fishing Vessels Record (RFVR)
- 43. The Meeting noted the progress of the RFVR focusing on the expansion of the database to include not only fishing vessels with 24 meters or more in length but also fishing vessels with a length less than 24 meters. The Meeting was informed that SEAFDEC plans to develop a "watch list" of IUU fishing vessels.
- 44. The Meeting suggested for SEAFDEC to consider analysing the utilization of the RFVR database, and possible linkage to FAO's Global Record of Fishing Vessels.

10.2.4 ASEAN Catch Documentation Scheme (ACDS)

45. The Meeting was informed on the progress made on the pilot-testing of electronic-ACDS in Brunei Darussalam wherein the database and applications were fixed and updated leading to successful issuance of Catch Certificate. The Meeting noted that the pilot sites for implementation electronic ACDS have been expanded to include Myanmar, Viet Nam, and Malaysia.

10.2.5 <u>Regional Cooperation to Support the Implementation of the Port State Measures (PSM) in ASEAN Region</u>

46. The Meeting noted the progress made on the Regional Cooperation to Support the Implementation of the PSM in the ASEAN Region focusing on the conduct of Regional Training on PSM Implementation for Inspectors, establishment of networks for cooperation and exchange of information on PSM implementation, and coordination with AMS on the conduct of gap analysis on legal framework of countries vis-à-vis compliance to PSM under FAO global programme.

10.2.6 <u>Regional Plan of Action on Sustainable Utilisation of Neritic Tunas in the Southeast Asian Region</u>

47. The Meeting noted the results of stock and risk assessment of Narrow-barred Spanish Mackerel and Indo-Pacific King Mackerel indicating that the stocks in other areas of Indian Ocean have been harvested heavily than the stocks in Southeast Asian Region. Considering the difficulty of providing management measures given that both species are exploited together with other species and by different gears, the Meeting noted the recommendations of SEAFDEC for AMS to improve data collection on catch and CPUE data, and to develop multi-species and multi-gear management strategies.

10.2.7 <u>Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030</u>

48. The Meeting adopted the outputs of the Regional Meeting on Way Forward for the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region towards 2020 (RES&POA 2020) held on 1-2 May 2019 in Bangkok, Thailand, which include the following documents: i) suggested elements for revision of the RES&POA 2020; ii) list of national focal points assigned to review the RES&POA 2020; and iii) tentative work plan for reviewing the RES&POA 2020. The Meeting noted that the draft RES&POA 2020 was being reviewed by AMS and SEAFDEC.

10.3 Collaborative Projects

- 10.3.1 On-going Projects / Existing Programmes
- 49. The Meeting noted the 25 on-going projects under FCG-ASSP Mechanism (2018-2019), including the successful completion of the following projects: i) Enhancing Coastal Community Resilience for Sustainable Livelihood and Coastal Resources; and ii) Cold Chain Management for Seafood.
 - 10.3.2 New Initiatives (Proposed New Projects for the Year 2019)
- 50. The Meeting nominated Indonesia as Lead Country for the project proposal on Development of Stock Assessment Method and Strengthening of Resource Management Measures on Tropical Anguillid Eels in ASEAN Region, while the Lead Country for the Second Phase of Enhancing Coastal Community Resilience for Sustainable Livelihood and Coastal Resource Management will be informed to SEAFDEC in due course.

SPECIAL SENIOR OFFICIALS MEETING OF THE $40^{\rm th}$ MEETING OF THE ASEAN MINISTERS ON AGRICULTURE AND FORESTRY (SPECIAL SOM- $40^{\rm th}$ AMAF)

5-6 August 2019, Hue City, Viet Nam

5.2.3 Cooperation in Fisheries

45. The Meeting adopted the report of the 27th Meeting of the ASEAN Sectoral Working Group on Fisheries held on 27-29 June 2019 in Da Nang City, Viet Nam.

- 46. The Meeting agreed to submit the following documents to the 41st AMAF Meeting for adoption:
 - i. Regional Guidelines on Cold Chain Management for Seafood
 - ii. Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies
- 47. The Meeting adopted the Concept Proposal for the Establishment of ASEAN Network for Combating IUU Fishing (AN-IUU) as an operational framework for information sharing and capacity-building among AMS in combating IUU fishing in the region. The Meeting requested ASWGFi and Thailand to work with the ASEAN Secretariat and E-READI to develop the Terms of Reference and Rules of Procedures, including the Cooperation Framework of the AN-IUU.
- 48. The Meeting also noted the Policy Brief on Applying Human Rights-Based and Gender Equality Approaches to Small-Scale Fisheries in Southeast Asia.
- 49. The Meeting agreed to extend the timeline of the Assessment on the Implementation of the RPOA Fishing Capacity (as a key deliverable in 2019) to 2021 considering that the project proposal would only be submitted to JAIF for funding next year and the project may need more time to complete.
- 50. The Meeting noted that the 28th meeting of the ASWGFi would be held in Brunei Darussalam in 2020.

SUMMARY RECORD OF THE SPECIAL SENIOR OFFICIALS MEETING OF THE EIGHTEENTH MEETING OF THE ASEAN MINISTERS ON AGRICULTURE AND FORESTRY PLUS THREE (Special SOM-18thAMAF Plus Three)

7 August 2019, Hue City, Viet Nam

- xi) Project for Promotion of Sustainable Fisheries in Southeast Asian Region (Japan)
- 38. The Meeting noted that the project has implemented the following activities: i) Enhancing the capability of member countries for sustainable utilization of fisheries resources; ii) Strengthening the promotion of Sustainable Fisheries; iii) Promoting sustainable aquaculture; and iv) Promoting resource enhancement.

THE FORTY FIRST MEETING OF THE ASEAN MINISTERS ON AGRICULTURE AND FORESTRY (The 41st AMAF)

15 October 2019, Bandar Seri Begawan, Brunei Darussalam

AGENDA ITEM 6 PROGRESS IN THE IMPLEMENTATION OF POLICY FRAMEWORKS RELATED TO ASEAN COOPERATION IN FOOD, AGRICULTURE AND FORESTRY

- 11. The Meeting adopted the Report and Recommendations of the SOM-AMAF Chair to the 41st Meeting of AMAF, including the 31 documents as provided below:
 - I. The indicative deliverables for 2020 of the FAF Sector:

Fisheries Sector:

- i. The Feasibility Study on the Development of ASEAN General Fisheries Policy (AGFP) completed (Thailand);
- ii. Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Toward 2030 developed (FCG-ASSP);

- iii. Project on AMR in Aquaculture Laboratory Capacity Building, Risk Analysis and the Way Forward implemented (Singapore), including:
 - a) Regional Guideline on performing risk analysis for antimicrobial resistance arising from the use of antimicrobial agents in aquaculture developed
 - b) Regional guidelines for prudent use of antimicrobials in aquaculture developed; and
 - c) 5-year Regional Plan of Action on AMR in Aquaculture developed.
- II. Regional Guidelines on Cold Chain Management for Seafood
- III. Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies
- IV. Concept Proposal for the Establishment of ASEAN Network for Combating IUU Fishing (AN-IUU)
- 13. Noting the adoption of the Concept Proposal on the Establishment of ASEAN Network for Combating IUU Fishing (AN-IUU), the Meeting was informed that Thailand will organise the 2nd ASEAN-EU Meeting on Combating IUU Fishing on 12-13 December 2019 to discuss the Terms of Reference, Rules of Procedures and Cooperation Framework of AN-IUU. Thailand will coordinate with ASEAN Secretariat and Enhanced Regional EU-ASEAN Dialogue Instrument (E-READI) for the meeting arrangement and funding support.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd FCG/ASSP Meeting may wish to:

- Note the outcomes of the ASEAN-related Meetings that are relevant to the fisheries, particularly the
 adoption of Regional Guidelines on Cold Chain Management for Seafood and the Regional Technical
 Guidelines on Early Warning System for Aquatic Animal Health Emergencies.
- Note that the development of the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Toward 2030 is one of the key deliverables to SOM-AMAF for 2020 and discuss its timely completion.
- Consider the suggestion of ASWGFi for SEAFDEC to analyse the utilization of the RFVR database and possible linkage to FAO's Global Record of Fishing Vessels.

SUMMARY REPORT OF THE COLLABORATIVE PROGRAMS UNDER THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP AND FISHERIES CONSULTATIVE GROUP (FCG/ASSP) FOR THE YEAR 2019-2020

I. INTRODUCTION

1. The programs of activities under the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) Mechanism for the year 2019-2020 were reviewed by the Forty-second Meeting of the Program Committee (42PCM) of the Southeast Asian Fisheries Development Center (SEAFDEC) held in Chiang Mai, Thailand from 11-13 November 2019. Results of the program scrutiny and the adopted recommendations are summarized and submitted to the Twenty-second Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (22FCG/ASSP), for consideration and endorsement.

II. SUMMARY OF THE PROGRAM OF ACTIVITIES UNDER THE FISHERIES CONSULTATIVE GROUP OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP MECHANISM FOR THE YEAR 2019-2020 AND RECOMMENDATIONS RAISED DURING THE FORTY-SECOND MEETING OF SEAFDEC PROGRAM COMMITTEE

2. The programs under the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP) Mechanism, as well as the progress and achievements made at the year 2019, the proposed activities for 2020, new project, and Pipeline Projects appear in *Appendix 1*. Twenty-three (23) ongoing projects under the FCG/ASSP Mechanism, comprising 21 projects that are categorized based on the SEAFDEC Strategies, and two (2) Special Projects. Out of these projects, 20 projects would be completed in 2019, while three (3) projects would be continued in 2020. The 42PCM also reviewed the thirteen (13) new projects under the FCG/ASSP Mechanism that are scheduled to commence in 2020. In addition, the 42PCM noted the five (5) Pipeline Projects, of which SEAFDEC is securing the necessary funding for their implementation. Results of the review process as well as the recommendations of the 42PCM will be submitted to the ASWGFi through the 22FCG/ASSP for endorsement and also to the forthcoming meeting of the SEAFDEC Council for consideration and approval. The 42PCM approved the implementation of the proposed new and Pipelines Projects, and provided recommendations 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) Human Resource Development for Sustainable Fisheries

- SEAFDEC to consider developing performance indicators in relation to the project objectives to facilitate the effective and efficient review of the projects by the Program Committee Members
- TD to consider expanding the project activities in the future to cover inland fisheries
- TD to introduce the EAFM concept in Myanmar through the training of trainers (TOTs)
- TD to support the activities in the project learning sites in Lao PDR, and expand the activities to the other areas of Lao PDR in the future

(2) Optimizing Energy Use/Improving Safety Onboard in Fishing Activities

- TD to package and disseminate the purse seine vessel modification through appropriate information materials

(3) Promotion of Sustainable Fishery Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia

- TD to develop a map of important fishing grounds and critical habitats of relevant species in the region, and establish pilot sites to determine the benefits of this project to the region to serve as platform for information sharing and the development of knowledge bank - TD to develop protocols for the rehabilitation of depleted stocks of different wild species, *e.g.* blue swimming crab, god conch, and others through cooperation with AQD to mobilize the technologies on seed production that had been developed

(4) Enhancement of the Sustainability of Catadromous Eel Resources in Southeast Asia

- SEAFDEC to continue supporting the Philippines in improving data collection and management of important fishery resource

(5) Promotion of Responsible Utilization of Inland Fisheries in Southeast Asia

(6) Promotion of Countermeasures to Reduce IUU Fishing Activities

- TD to consider synthesizing the data in the RFVR Database
- TD to find the ways of improving the existing RFVR Database prior to expanding the database to cover small fishing vessels, and to take into account the relevant economic, livelihood, and political considerations in designing the specific activities in the future
- TD to develop the Database for the vessels less than 24 meters in length considering appropriate approach for inputting the necessary data, for example by importing the data from the countries' databases, considering the large number of small-scale fishing vessels in the region

(7) Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand ¹

- The Project to consider incorporating the establishment of refugia sites and development of management measures toward the sustainability of the species as well as for other species that are economically important for the Southeast Asian region

(8) Offshore Fisheries Resources Exploration in Southeast Asia

- TD to continue providing capacity building to the Member Countries on stock assessment
- TD to ensure that the titles reflect the actual activities being proposed in the future development of project document

(9) Enhancing the Compilation and Utilization of Fishery Statistics and Information for Sustainable Development and Management of Fisheries in the Southeast Asian Region

(10) Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region

- MFRDMD to consider alternative solutions for appropriate management measures for purse seine fisheries in the region which are not only based on output control such as catch limit but also input control and technical control
- MFRDMD to improve the accuracy of calculated catch per unit effort (CPUE)
- MFRDMD to conduct data analysis by another method using the same dataset collected by the project to be able to include range of uncertainties, compare and understand the results

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

(12) Enhancing Sustainable Utilization and Management Scheme of Tropical Anguillid Eel Resources in Southeast Asia

- SEAFDEC to combine and present the projects related to anguillid eel as a group, that are implemented by SEAFDEC

(13) SEAFDEC-EU/CITES Sharks Project Phase II

¹ This project will be continued in 2020

- (14) Strengthening the Effective Management Scheme with GIS (Geographic Information System) and RS (Remote Sensing) Technology for Inland Fisheries and Aquaculture in the AMS²
 - The Project to consider extending support to Thailand through the conduct of training programs for concerned officers of the DOF Thailand

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) Environment-friendly, Sustainable Utilization and Management of Fisheries and Aquaculture Resources
 - AQD to consider implementing more activities on aquaculture in the future considering its potential benefits to poverty alleviation and improved livelihood of people in the fisheries communities
 - AQD to consider undertaking studies on fishmeal replacement for feeds of marine species, *e.g.* sea bass and grouper
- (16) Reinforcement and Optimization of Fish Health Management and the Effective Dissemination in the Southeast Asian Region

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

(17) Chemicals and Drug Residues in Fish and Fish Products in Southeast Asia- Biotoxins (ASP, AZA and BTX) and Harmful Algal Blooms (HABs) in the ASEAN Region

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

(18) Combating IUU Fishing in the Southeast Asian Region through Application of Catch Certification for Trading of Fish and Fishery Products

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

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

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

- (20) Fisheries Resource Survey and Operational Plan for the M.V. SEAFDEC 2²
 - TD to support the Philippines to conduct of hydroacoustic survey fishing grounds and distribution of biomass small pelagic fisheries, taking into consideration the existing expertise and equipment in SEAFDEC and Member Countries
 - TD to support Myanmar the fisheries resoures survey in the shallow waters and coastal areas that are beyond the survey plan of the R.V. Dr. Fridtjof Nansen. Additionally, TD could provide support to build up the capacity of the officers to conduct the survey in the waters of Myanmar through a SEAFDEC Project in 2020-2024
 - TD to consider the possibility of sharing the information obtained from the surveys using the R.V. Dr. Fridtjof Nansen and the M.V. SEAFDEC 2 that would be useful for the participating countries
 - TD to consider extending the support to the Philippines on the conduct of acoustic survey for the country to obtain hands-on experience

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² This project will be continued in 2020

- TD to consider acquiring a new scientific echo-sounder that could be used during the surveys of the waters of the Southeast Asian countries

(21) Strengthening SEAFDEC Network for Sustainable Fisheries

Special Projects

- (1) Fisheries and Habitat Management, Climate Change and Social Well-being in Southeast Asia
- (2) The Oceans and Fisheries Partnership (USAID Oceans)

New Proposed Projects for the Year 2020

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

- TD to promote application of the eACDS in the region in order that similar documentation schemes would be adopted among the AMSs
- The Project to consider fostering closer collaboration with the private sector in the implementation of the activities
- The Project to improve the database to ensure that it could support the monitoring, control, and surveillance (MCS) implementation in the future
- The Project to consider establish specific, measurable, achievable, realistic, and timely (SMART) objectives as well as corresponding clear indications of project outputs, outcomes, and long-term impacts, and to establish a mechanism for the monitoring and evaluation of project implementation
- Regarding the development of the database for vessels less than 24 meters in length, specific range of the length should be determined
- The Project to consider analyzing the information similar to that of the fishery statistics as this could facilitate better understanding of the Database by the AMSs. With regards to the eACDS, after the system is implemented in several countries, the Project should also consider establishing the links for the sharing of the data among the AMSs
- The Project to conduct more frequent training on PSM

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

- The Secretariat to consider harmonizing the timeline between SOFIA and SEASOFIA, *e.g.* publishing SEASOFIA every two or four years
- The Secretariat to extend invitations to another agency (not only to BFAR) who is responsible for fishery statistics in the Philippines

(3) Responsible Fishing Technology and Practices

- SEAFDEC to consider supporting the AMSs in the implementation of the FAO Voluntary Guidelines on the Marking of Fishing Gear, considering that the Guidelines has already been promoted by FAO
- SEAFDEC could consider organizing experts' workshop on proper marking of different types of gear, particularly trawls and gillnets. And SEAFDEC to consider incorporating in the project, additional activities such as reducing of fuel consumption, enhancing safety at sea, reducing of carbon emission, and improving of onboard fish handling using chilled seawater and salt
- TD to conduct a pilot study or extension activity on the impacts of such gears as well as share the results from relevant studies undertaken in the past, with the fishers as well as law enforcers

(4) Enhancing Food Safety and Competitiveness of Seafood Products

- MFRD to consider addressing the issues on the seafood marketability as part of competitiveness objective of the project

(5) Assistance for Capacity Development in the Region to Address International Fisheriesrelated Issues

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

- The Project to consider including risk assessment for selected shark species as well as making use of appropriate stock assessment models (*i.e.* data limited methods) considering the shark statistics data that are available in the region

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

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

TD to conduct a training for the staff of DOF Thailand onboard the M.V. SEAFDEC 2 during its survey cruise, which could include fishing and marine engine operations.

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

- The Project should compile existing management measures for small pelagic at national level when available. In addition, the study also needs to clarify and define the scoping of areas of the study, connectivity as well as broad range of life history for selected species as this will affect the sampling strategy of the study. Also, there is a need to identify the capacity building needs for fishery managers to translate scientific findings into policies
- The Project to consider conducting literature review of the existing information on stock status and biology for neritic tunas from the Working Party on Neritic Tunas of IOTC.

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

- AQD to consider involving Indonesia in the capacity building related activities; to have activities on aquaculture of ornamental fishes and indigenous fish species, and marine aquaculture in floating cages should be accommodated in the project; and the activities should adopt good aquaculture practices (GAqP) taking into account the optimum carrying capacity

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

- IFRDMD to include the Philippines as a learning site of the project
- IFRDMD to consider involving Lao PDR in the project, in particular on the activity related to data collection and analysis
- IFRDMD to conduct the training course on data collection and stock assessment of inland fisheries
- IFRDMD to support capacity building in the technical matters for the management of inland fisheries

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

- The Project to jointly organize the Workshop on Assessing the Needs of the AMS in Implementing the FAO SSF Guidelines with respect to market access, in Bali, Indonesia in February 2020
- The Project to conduct EAFM in other pilot sites for inland areas
- The Project to involve the Philippines in sharing experiences from the implementation of the EAFM plan in the Philippines
- The Project to include Lao PDR in the project implementation

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

Pipeline Projects

(1) ASEAN-JICA Food Value Chain Development Project

- The Project to consider including public-private partnership into the project activity.

- (2) ASEAN-JICA Cooperation for Capacity Building on IUU Fishing Countermeasures in Southeast Asia
- (3) Gender Dimension in the Value Chain of Small-scale Fisheries & Aquaculture in Southeast Asia
- (4) FAO-GEF 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: Support to SEAFDEC Member Countries
 - SEAFDEC to consider involving MFRDMD in the course of the project planning and implementation in view of its mandate and responsibility to promote sustainable fisheries management in the region
- (5) World Bank project: Piloting the electronic ASEAN Catch Documentation Scheme (eACDS) in Viet Nam
 - SEAFDEC to consider establishing a learning site in existing tourism areas in order to expand the market access for small-scale fisheries communities, by building upon the success of the learning sites of EAFM, *e.g.* in Krabi Province of Thailand

III. REQUIRED CONSIDERATION BY THE MEETING

- The Meeting is requested to consider and endorse the achievements of the project implemented under FCG/ASSP Mechanism in 2019, the proposed project activities for 2020, the new project, as well as the Pipeline Projects, for submission to higher authorities of the ASEAN and SEAFDEC
- The Meeting is also invited to provide suggestions on the areas of improvement of the program formulation and implementation to enhance the impacts of the projects and maximize the benefits to the Member Countries

Appendix 1 of Annex 7

PROJECTS UNDER THE FISHERIES CONSULTATIVE GROUP OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (FCG/ASSP) MECHANISM FOR THE YEAR 2019-2020

Project id.*1	Strategy/Project Title	Lead Department	2019	2020				
Strategy I: Securing the sustainability of fisheries to contribute to food security, poverty alleviation and livelihood of people in the region								
201301001	Human Resource Development for Sustainable Fisheries	TD	Y	N				
201301002	Optimizing Energy Use/Improving Safety Onboard in Fishing Activities	TD	Y	N				
201301003	Promotion of Sustainable Fisheries Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia	TD	Y	N				
201503002	Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia	IFRDMD	Y	N				
201505001	Promotion of Responsible Utilization of Inland Fisheries in Southeast Asia	IFRDMD	Y	N				
201301005	Promotion of Countermeasures to Reduce IUU Fishing Activities	TD	Y	N				
201601009	Establishment and Operation of a Regional System of Fisheries <i>Refugia</i> in the South China Sea and Gulf of Thailand	TD	Y	Y				
201301007	Offshore Fisheries Resources Exploration in Southeast Asia	TD	Y	N				
201301008	Enhancing the compilation and Utilization of Fishery Statistics and Information for Sustainable Development and Management of Fisheries in Southeast Asian Region 1. Improving the Data Collection of the Commercially exploited Aquatic and Threatened Species 2. Facilitating fisheries activity information gathering through introduction of Community-based Resources Management/Co-management	TD	Y	N				
201304002	Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region	MFRDMD	Y	N				
201504003	Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	MFRDMD	Y	N				
201706005	Enhancing Sustainable Utilization and Management Scheme of Tropical Anguillid Eel Resources in Southeast Asia	SEC	Y	N				
201706006	SEADFDEC-EU/CITES Sharks Project Phase II	SEC	Y	N				
201801011	Strengthening the Effective Management Scheme with GIS (Geographic Information System) & RS (Remote Sensing) Technology for Inland Fisheries and Aquaculture at AMS ²	TD	Y	Y				
	pporting the sustainable growth of aquaculture to complement to poverty alleviation and livelihood of people in the region	isheries and co	ontribut	te to				
201503002	Environment-Friendly, Sustainable Utilization and Management of Fisheries and Aquaculture Resources	AQD	Y	N				
201503001	Reinforcement and Optimization of Fish Health Management and the Effective Dissemination in the Southeast Asian Region	AQD	Y	N				
Strategy III: E region	nsuring the food safety and quality of fish and fishery products	for the Southea	ast Asia	n				
201302001	Chemicals and Drug Residues in Fish and Fish Products in Southeast Asia –Biotoxins (ASP, AZA and BTX) and Harmful Algal Bloom (HABs) in the ASEAN region	MFRD	Y	N				

¹ Project id contains the following: The first four digits mean the starting year, the next two digits mean the lead department (TD=01, MFRD=02, AQD=03, MFRDMD=04, IFRDMD=05, SEC=06), and the last three digits are the running number.

² This project was approved in 2018 and will be implemented in 2019.

Strategy IV: I requirements	Enhancing trade and compliance of the region's fish and fishery	products with n	narket				
201304001	Combating IUU Fishing in the Southeast Asian Region through Application of Catch Certification for Trading of Fish and Fishery Products	MFRDMD	Y	N			
Strategy V: Addressing cross-cutting issues, such as labor, gender and climate change, where related to							
international	fisheries						
201306001	Assistance for Capacity Building in the Region to Address International Fisheries-related Issues	SEC	Y	N			
Strategy VI: I	Empowering SEAFDEC to strengthen its roles in the region and	to improve its s	ervices	to			
Member Countries							
201301006	Fisheries Resource Survey & Operational Plan for M.V. SEAFDEC 2	TD	Y	Y			
201306002	Strengthening SEAFDEC Network for Sustainable Fisheries	SEC	Y	N			

Special Projects

Project id	Project Title	Lead	Period
		Department	
201306003	Fisheries and Habitat Management, Climate Change and Social	SEC	2013-2019
	Wellbeing in Southeast Asia	SEC	2013-2019
201506004	The Oceans and Fisheries Partnership (USAID Oceans)	SEC	2015-2019

New Projects

Project id*3 Strategy/Project Title Lead Period **Department** 202001012 Strengthening a Regional Cooperation and Enhancing National TD 2020-2024 Capacities to Eliminate IUU Fishing in Southeast Asia 202006007 Harmonization and Enhancing Utilization of Fishery Statistics SEC 2020-2024 and Information 202001013 Responsible Fishing Technology and Practice TD 2020-2024 202002003 Enhancing Food Safety and Competitiveness of Seafood **MFRD** 2020-2024 **Products** 202006008 Assistance for Capacity Development in the Region to Address SEC 2020-2024 International Fisheries-related Issues 202004005 Research for Enhancement of Sustainable Utilization and **MFRDMD** 2020-2024 Management of Sharks and Rays in the Southeast Asian Region 202005003 Sustainable Utilization of Anguillid Eels in the Southeast Asian **IFRDMD** 2020-2024 Region 202001014 Sustainable Utilization of Fisheries Resources and Resources TD 2020-2024 Enhancement in Southeast Asia 202004006 Fisheries Management Strategies for Pelagic Fish Resources in MFRDMD 2020-2024 the Southeast Asian Region Sustainable Aquaculture through Cost-Effective Culture 202003003 Systems, and Prompt and Effective Aquatic Animal Health AOD 2020-2024 Management 202005004 Management Scheme for Inland Fisheries in the Southeast **IFRDMD** 2020-2024 Asian Region 202001015 Small-scale Fisheries Management for Better Livelihood and TD 2020-2024 Fisheries Resources Development of Stock Assessment Method for Strengthening of 202003004 Resources Management Measures of Tropical Anguillid Eels in **SEC** 2020 **AMS**

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³ Project id contains the following: The first four digits mean the starting year, the next two digits mean the lead department (TD=01, MFRD=02, AQD=03, MFRDMD=04, IFRDMD=05, SEC=06), and the last three digits are the running number.

Pipeline Projects

No.	Strategy/Project Title	Lead Department
1	ASEAN-JICA Food Value Chain Development Project	SEC
2	ASEAN-JICA Cooperation for Capacity Building on IUU Fishing Countermeasures in Southeast Asia	TD
3	Gender Dimension in the Value Chain of Small-Scale Fisheries & Aquaculture in Southeast Asia	TD
4	Sustainable Management of Fisheries, Marine Living Resources and Their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities: Support to SEAFDEC Member Countries	TD
5	Piloting the Electronic ASEAN Catch Documentation Scheme (eACDS) in Viet Nam	TD

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

PROGRESS OF THE ASEAN AD-HOC STEERING COMMITTEE ON CLIMATE CHANGE AND FOOD SECURITY

The key outcomes of the 8th Ad-Hoc Steering Committee on Climate Change and Food Security held on 28-29 March 2019 in Bali, Indonesia are as follows:

- 1. The Meeting was informed on various initiatives of the sectoral working groups on related to climate change, among others:
 - The 4th ASEAN Climate Change Resilience Network reviewed the work of each ASEAN CRN members to fully understand needs for climate change responses in the agriculture sector and recommended to enhance coordination/cooperation at the national level between agriculture, environment and rural development, utilizes the ASEAN Multisectoral Framework for Climate Change for cross-sectoral coordination.
 - The 15th AWG-FCC Meeting noted the submission of common position on Reducing Emissions from Deforestation and Forest Degradation (REDD+), which stresses the need to discuss challenges in REDD+ result based payments and financing mechanism to support REDD+ implementation.
 - ASWGFi identified measures to address climate change: i) developing mechanism for sharing information and knowledge among AMS on climate change initiatives, ii) undertaking studies to determine indicators and climate change impact mitigation and adaptation strategies, iii) developing and promote regional guidelines on the use of practical and simple indicators for aquaculture and capture fisheries within the national fisheries.
 - The Committee on Science, Technology and Innovation (COSTI) developed the Southeast Asian Climate Assessment & Dataset (SACA&D) web portal featuring both climatological analysis/indices as well as daily station time series for sites located in the South East Asia region
- 2. The Meeting shared views that the consultant has to elaborate more justification on the initial recommendations of the stock stake study, particularly on having the AHSCCC as permanent mechanism.
- 3. The Meeting noted initial recommendations of the stock taking study on SDGs implementation in FAF sectors, which were to review the indicators under ASEAN Cooperation in FAF, and to explore interfaces with parallel initiatives in SDG monitoring.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd FCG/ASSP Meeting may wish to note the outcomes of the 8th AHSCCC Meeting.

PROGRESS OF THE ASEAN FISHERIES CONSULTATIVE FORUM (AFCF)

The outcomes of the 11th AFCF Meeting held on 25-26 June 2019 in Da Nang, Viet Nam are as follows:

FISHING CAPACITY AND ZONING SYSTEM

1. The Meeting was informed by Malaysia that the proposal to conduct an Assessment on the Implementation of the RPOA Fishing Capacity jointly developed by Department of Fisheries-Malaysia and SEAFDEC/MFRDMD will be submitted by SEAFDEC/MFRDMD to the SEAFDEC Program Committee Meeting this November 2019 prior to submission to ASEAN for possible funding under JAIF. The Meeting requested SOM-AMAF through the ASWGFI to extend the timeline of this deliverable by 2021.

SECURING SUSTAINABLE SMALL-SCALE FISHERIES (SSSF)

- 2. The Meeting noted that the ASEAN Roadmap for Enhancing the Role of Agricultural Cooperative in the Global Agricultural Value Chain 2018-2025 was adopted by the 40th AMAF.
- 3. The Meeting was apprised by Thailand on the outcomes of the World Small-scale Fisheries Congress held on 22-26 October 2018 in Chiang Mai, Thailand, which discussed trans-disciplinary strategies to sustain small-scale fisheries as a global food production system
- 4. The Meeting noted the background of the development of the Policy Brief on Applying Human Rights-Based and Gender Equality Approaches to Small-Scale Fisheries that followed the FAO Sustainable Small-scale Fisheries (SSSF) Guidelines; and that ASWGFi was tasked by SOM-AMAF to review the Policy Brief and to submit a revised Title of the Policy Brief taking into account the sensitivity of the issue on human rights
- 5. The Meeting noted that the Expert Consultation Workshop on Guidance to Monitoring and Evaluation Gender Equity and Social Well-being in Fisheries Communities organised by SEAFDEC-Sweden Project on 8-10 August 2018 in Bangkok, Thailand developed key indicators to serve as a guide in monitoring and evaluation of gender equality and social wellbeing in the fishing communities in accordance with FAO SSF Guidelines.
- 6. The Meeting was informed on Indonesia's plan to conduct a workshop in August 2020 to assess the needs of AMS in implementing the FAO SSF Guidelines. The Meeting requested Indonesia to submit the Concept Note to AMS through the ASEAN Secretariat by August 2019 for comments.

RESOURCE REHABILITATION AND ENHANCEMENT

- 7. The Meeting noted Brunei Darussalam's key initiatives on resource rehabilitation and enhancement focusing on the issuance of moratorium on traditional fishing gears that reached the quota, imposing Environmental Impact Assessment and environmental parameters monitoring and management, phasing -out of trawling activities, establishment of marine protected areas, artificial reef projects, coral conservation and rehabilitation program, beach and coral ground clean-ups, and ban on catching and trading of sharks.
- 8. The Meeting noted that Cambodia has established fisheries refugia in Sihanoukville Province and mackerel refugia in Koh Kong Province.
- 9. The Meeting noted the progress of implementation of the SEAFDEC/UNEP/GEF Project on Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and the Gulf of Thailand, and that the Fisheries *Refugia* Project in collaboration with SEAFDEC-Sweden Project will explore the sub-regional management plan for the Short Mackerel in the Gulf of Thailand sub-region.

- 10. The Meeting was informed that Malaysia will be hosting the 2nd Regional Steering Committee Meeting of the SEAFDEC/UNEP/GEF Project on Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and the Gulf of Thailand on 5-6 November 2019 in Miri, Sarawak.
- 11. The Meeting was informed that under the Fisheries Refugia Project, Thailand will establish fisheries refugia in the Southern and Eastern Parts of Thailand, while Indonesia will establish fisheries refugia in the waters of Bangka-Belitung and West Kalimantan.
- 12. The Meeting noted the initiatives of Viet Nam focusing on the promulgation of fisheries laws related to the co-management in the protection of fisheries resources and implement measures such as allocate quota fishing license and review marine protected areas, restore the ecosystem, develop artificial habitat, providing alternative livelihood to fishers, and conservation of endangered species.
- 13. The Meeting noted that the Philippines issued a Fisheries Administrative Order 263, which is the establishment of Fisheries Management Areas (FMAs) for the conservation and management of fisheries in Philippine waters, resulting to the declaration of 12 major fishing grounds as FMAs in accordance with the Reference Points and Harvest Control Rules and implementation of other science-based measures. The Philippines also implements the search for the cleanest coastal communities in the country with the following criteria: absence of illegal fishing; observance of closed fishing season; establishment of the marine sanctuary; effective mangrove rehabilitation program; and clean coastal waters without domestic and industrial wastes.

IMPACTS OF CLIMATE CHANGE TO FISHERIES AND AQUACULTURE

14. The Meeting noted Viet Nam's concept proposal for a consultative workshop on climate change impacts on fisheries and aquaculture aiming to develop a guideline to address climate change impacts on fisheries and aquaculture, and requested Viet Nam to work with ASEAN Secretariat on the revision of the project proposal and to seek possible funding support from dialogue partners.

COMBATING IUU FISHING

- 15. The Meeting was updated on the progress of implementation of the RPOA-IUU focusing on strengthening of national fisheries regulation based on benchmark measures, supporting RPOA-IUU member countries in the ratification of FAO Port State Measures Agreement and implementation of NPOA-IUU, conducting Inspector Training Workshop on Port State Measures Agreement (PSMA), implementing initiatives on Coastal and Flag State Responsibilities, and strengthening monitoring, control and surveillance system.
- 16. The Meeting noted Brunei Darussalam's initiatives in combating IUU fishing focusing on the formation of National Maritime Security Steering Committee, coordination of MCS programs with National Security agencies, development of NPOA-IUU, implementation of electronic- ASEAN Catch Documentation Scheme, licensing of fishing vessels and companies, and signed an MOU on the Use of Hotline Information Exchange to Address Illegal, Unregulated and Unreported Fishing with Viet Nam.
- 17. The Meeting noted that Malaysia and FAO have completed the gap analysis of Malaysia's related fisheries legal framework with some recommendations were given to address the gaps with a view to bringing it in line with the PSMA, UNFSA, international instruments to fight IUU fishing, and EU's recommendations relating to the Malaysian national legal framework.
- 18. The Meeting noted that the SEAFDEC-Sweden Project organized the Gulf of Thailand Sub-regional MCS Network Meeting on 20-21 June 2019, which discussed the strengthening cooperation among MCS network in the Gulf of Thailand Sub-region. In addition, SEAFDEC in collaboration with several partners will organize a Regional Training on Port State Measures Implementation for Inspectors in Southeast Asia on 22-26 July 2019 at SEAFDEC/TD, Samut Prakan, Thailand.
- 19. The Meeting noted that the Regional Meeting on the Regional Fishing Vessel Record (RFVR) for vessels 24 meters in length and over as a Management Tool toward Combating IUU Fishing in ASEAN

was convened on 12-13 December 2018. Moreover, the regional initiative to develop RFVR database for the vessels sizes less than 24 meters was discussed as a side event during the FAO's 5th Meeting of Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels on 13-14 May 2019 in Seoul, Republic of Korea. Both meetings came up with the way forward on the improvement of the database of RFVR 24 meters in length and over, and development of RFVR database for the vessel size less than 24 meters.

- 20. The Meeting noted that the Philippines drafted an Executive Order that will serve as Implementing Rules and Regulation for PSMA, including the conduct of collaborative seminar with FAO on PSMA, complementary instruments and tools to combat IUU Fishing in 3-4 April 2019. The Philippines is also implementing the Integrated Marine Environmental Monitoring Programme for the improvement of the reporting compliance and maintenance of the fishing activities database.
- 21. The Meeting noted the Philippines' expression of gratitude for the kindness that the Vietnamese fishermen showed to the 22 Filipino fishermen left adrift at sea following the boat-sinking incident with Chinese vessel at Recto Reed Bank last 9 June 2019.
- 22. The Meeting was informed on Viet Nam's initiatives to combat IUU fishing, which include the implementation of NPOA-IUU, ratification to the PSMA and UNSFA Agreements, the conduct of fishing vessel inspection, and the setting-up of Vessel Monitoring System (VMS) to fishing vessels 24 meter and more in length.
- 23. The Meeting noted Indonesia's effort to combat IUU fishing, which includes the implementation of RPOA IUU and NPOA IUU, ratification of PSMA and establishment of pilot sites for PSMA, developing standard operating guidelines on the implementation of PSMA, the establishment of MCS system, and development of training curriculum for inspectors. Indonesia also emphasized the importance of transparency in the fisheries sector in order to strengthen its commitment to combat IUU fishing in the ASEAN region.
- 24. The Meeting was informed that Cambodia submitted a draft law to the National Assembly for the ratification of the Port State Measures Agreement.
- 25. The Meeting was apprised on Myanmar's initiative to combat IUU fishing, which include the development of NPOA IUU fishing, accession to PSMA, the establishment of MOU with Thailand for cooperation against IUU fishing and illegal fish trade, implementation of PSM, and setting up of vessel monitoring system for offshore fishing vessels. Myanmar is considering cooperating with the RPOA IUU with the support from Norway.
- 26. The Meeting was informed that combating IUU fishing is a national agenda of Thailand, and several initiatives have been implemented including the implementation of PSMA, development of NPOA IUU, cooperation with international organisations (*e.g.* RPOA IUU), enforcement of MCS system, implementation of traceability system, conduct of formal training for fisheries officers on-boarding and inspection technique, and improvement of inspection standard and procedure.
- 27. The Meeting noted Brunei Darussalam's initiatives on traceability system focusing on the implementation of a licensing system for all fisheries, aquaculture, and fish processing activities; implementation of the electronic ASEAN Catch Document Scheme (ACDS); registration of approved farms implementing Good Aquaculture Practices; and conduct of national residue monitoring program.
- 28. The Meeting was updated by SEAFDEC on the pilot-testing of electronic ACDS in Brunei Darussalam wherein the database and applications were fixed and updated leading to successful issuance of Catch Certificate. The Meeting noted that the pilot sites for the implementation electronic ACDS have been expanded to include Myanmar, Viet Nam, and Malaysia.
- 29. The Meeting noted that Indonesia has developed a national plan of action for AMR (2017-2019) in collaboration between the Ministry of Health and the Ministry of Marine Affairs and Fisheries (MMAF), including the guidelines on Anti-microbial Use Survey and Anti-microbial Resistance Surveillance in aquaculture. In addition, the Traceability System on National Fisheries Logistic that

- also includes aquaculture, namely STELINA was developed in 2018, which also can be used for various purposes including in issuing of health certificate.
- 30. The Meeting was informed on the new Fisheries Law of Viet Nam regulating the registration of aquaculture farms of shrimp, pangasius, and cage farms, including licensing for mariculture. The regulations related to record and record-keeping of aquaculture farm as well as fishing vessels also have been mandated.

TRACEABILITY OF FISHERIES AND AQUACULTURE PRODUCTS

- 31. The Meeting noted Brunei Darussalam's initiatives on traceability system focusing on the implementation of a licensing system for all fisheries, aquaculture, and fish processing activities; implementation of the electronic ASEAN Catch Document Scheme (ACDS); registration of approved farms implementing Good Aquaculture Practices; and conduct of national residue monitoring program.
- 32. The Meeting was updated by SEAFDEC on the pilot-testing of electronic ACDS in Brunei Darussalam wherein the database and applications were fixed and updated leading to successful issuance of Catch Certificate. The Meeting noted that the pilot sites for the implementation electronic ACDS have been expanded to include Myanmar, Viet Nam, and Malaysia.
- 33. The Meeting noted that Indonesia has developed a national plan of action for AMR (2017-2019) in collaboration between the Ministry of Health and the Ministry of Marine Affairs and Fisheries (MMAF), including the guidelines on Anti-microbial Use Survey and Anti-microbial Resistance Surveillance in aquaculture. In addition, the Traceability System on National Fisheries Logistic that also includes aquaculture, namely STELINA was developed in 2018, which also can be used for various purposes including in issuing of health certificate.
- 34. The Meeting was informed on the new Fisheries Law of Viet Nam regulating the registration of aquaculture farms of shrimp, pangasius, and cage farms, including licensing for mariculture. The regulations related to record and record-keeping of aquaculture farm as well as fishing vessels also have been mandated.
- 35. The Meeting was informed by the ASEAN Secretariat that Singapore's project proposal on Antimicrobials in Aquaculture- Laboratory Capacity Building, Risk Analysis, and the Way Forward has been endorsed by ASWGFi and will be submitted to SOM-AMAF and subsequently to Committee of Permanent Representative (CPR) of ASEAN for consideration and endorsement. It is expected that the endorsement process will be completed by the end of August 2019.

NACA

36. The Meeting was informed on the recent activities of NACA's Regional Aquatic Animal Health Programmes focusing on the holding of annual meetings of Asia Regional Advisory Group on Aquatic Animal Health, publication of Asia Pacific Quarterly Aquatic Animal Disease report, issuance of advisories on emerging aquatic animal diseases, conduct of regional consultations on Tilapia Lake Virus, AMU and AMR Aquaculture, Emergency Preparedness and Response and aquaculture biosecurity.

REPORT FROM THE INTERIM SECRETARIAT ON ASEAN PUBLIC-PRIVATE TASK FORCE ON SUSTAINABLE FISHERIES AND AQUACULTURE

37. The Meeting was informed on the collaboration between MMAF-Indonesia and USAID Oceans to support the implementation of electronic Catch Documentation and Traceability using the Public-Private Partnership (PPP) platform. The Meeting noted that a Focus Group Discussion to develop the PPP Framework for CDT implementation based on Best Practices Sharing will be organised on October 2019, in which the outcomes will be useful in formulating future actions of the ASEAN Public Private Taskforce on Sustainable Fisheries and Aquaculture.

WORK PLAN OF THE AFCF (2016-2020)

38. The Meeting discussed the Work Plan of the AFCF (2016-2020) and agreed to submit to ASWGFi the following key deliverables for 2020-2021, and requested the Lead AMS to make the necessary arrangement to ensure the timely completion of the deliverables.

	Deliverables	Leads	Year
1	Project on AMR in Aquaculture – Laboratory Capacity Building, Risk Analysis, and the Way Forward - Regional Guideline on performing risk analysis for antimicrobial resistance arising from the use of antimicrobial agents in aquaculture; - Regional guidelines for prudent use of antimicrobials in aquaculture; - 5-year Regional Plan of Action on AMR in Aquaculture.	Singapore	2020
2	Develop regional guideline on the indicators for aquaculture and capture fisheries to facilitate adaptation to the impacts of climate change.	Philippines Viet Nam	2021
3	Develop a mechanism for sharing information and knowledge among AMS on climate change initiatives	Philippines Viet Nam	2021
4	Develop/establish monitoring, control, and surveillance (MCS) networks at the regional and sub-regional level	Indonesia	2021
5	Develop regional networking with fisheries cooperatives/communities and fisher's organisation to support access to the international market	Indonesia Cambodia	2021
6	Develop regional guidelines and principles on inspection mechanism	Thailand	2021
7	Assessment on the Implementation of the RPOA Fishing Capacity	Malaysia	2021

OTHER MATTER

39. The Meeting noted that some AMS were not able to provide an updated list of fisheries representatives to the ASEAN Working Group on CITES and Wildlife Enforcement. In this regard, the Meeting requested the ASEAN Secretariat to re-circulate the letter through the ASWGFi Focal Points requesting SOM-AMAF to update the list of AWG CITES and WE Focal Points to include representatives from ASWGFi.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd FCG/ASSP Meeting may wish to note the outcomes of the 11th AFCF Meeting.

PROGRESS OF THE IMPLEMENTATION OF ASEAN SHRIMP ALLIANCE (ASA)

Executive Summary of the 9th Meeting of ASEAN Shrimp Alliance

I. INTRODUCTION

The ASEAN Shrimp Alliance Term of Reference was endorsed by the 29th Meeting of the ASEAN Ministers on Agriculture and Forestry (29th AMAF) on 1 November 2007 in Bangkok Thailand. All 10 ASEAN Member States are member of ASEAN Shrimp Alliance (ASA). Department of Fisheries, Thailand is the Secretariat of ASA and SEAFDEC is the collaborating partner of ASA. Objectives of ASA are to develop ASEAN Shrimp Culture Practices; discuss on trade related issues and enhance ASEAN negotiation power in shrimp world market through formation of common issues in relevant international fora. Since its establishment, ASA priority activity is the development of the ASEAN Shrimp Culture Practices including its Strategic Plan on development and implementation of ASEAN Shrimp Standard. Regional Expert Group Meetings were organized during 2009 – 2011 to develop the ASEAN Shrimp Good Aquaculture Practices (ASEAN Shrimp GAP). The ASEAN Shrimp GAP was developed based on FAO Technical Guideline of Aquaculture Certification. Consequently, the Standard on ASEAN Good Aquaculture Practices for Shrimp Farming or ASEAN Shrimp GAP together with the Strategic Plan on Development and Implementation of ASAEN Shrimp GAP was endorsed by the 33rd Meeting of AMAF in October 2011, Indonesia. ASEAN Shrimp GAP comprises four modules as recommended in the FAO Guidelines on Aquaculture Certificate with slightly difference in details of each module. The four modules comprise 1) Food Safety and Quality, 2) Animal Health and Welfare, 3) Environment Integrity and 4) Socio – economic Aspects.

II. PROGRESS OF ASA FOR 2019

The Ninth Meeting of ASEAN Shrimp Alliance (ASA) was organized on 24 June 2019 in Da Nang, Viet Nam, and was hosted by the Ministry of Agriculture and Rural Development of Viet Nam.

AMS's representatives presented the current status on implementation of ASEAN shrimp GAqP applied to national shrimp GAqP. Strategic Plan on the Development of ASEAN Shrimp GAP and its 5 strategic approaches consisting of 1) the development of ASEAN Shrimp GAP; 2) establishment of National Shrimp GAP; 3) alignment of National Shrimp GAP; 4) strengthening national certification system; and 5) promotion and training to increase awareness and knowledge of ASEAN Shrimp GAP have been elaborated. Shrimp production and market trends in India, shrimp disease, status, challenge, and way forward to regional mechanism for warning system for shrimp disease, and shrimp production in Southeast Asia: status, trends, challenges and outlook were also reported in the meeting.

In order to push up the ASEAN Shrimp GAP, the Meeting agreed that the assessment of ASEAN Shrimp GAP should be firstly implemented. Secondly, the formation of ASEAN Certification Scheme will be considered, and then the promotion of ASEAN Shrimp GAP will be encouraged for the recognition of the international market. Fisheries matter upon mutual interest and benefit, such as technology transfer, joint research and innovation for shrimp farming were also raised to further discuss in the ASA Meeting. Feed, disease, aquaculture information, international tariff, works and technical paper were suggested to be uploaded to the ASA website and information of outbreak of shrimp diseases situation and information should be communicated through NACA and ANAAHC platform.

The 10th ASA Meeting will be held in Brunei Darussalam, date and venue of the 10th ASA Meeting will be upon further consideration.

REPORT OF THE NINTH MEETING OF ASEAN SHRIMP ALLIANCE

24 June 2019, Da Nang, Viet Nam

I. INTRODUCTION

The Ninth Meeting of ASEAN Shrimp Alliance (ASA) was organized on 24 June 2019 in Da Nang, Viet Nam, and was hosted by the Ministry of Agriculture and Rural Development of Viet Nam.

The Meeting was attended by representatives from the ASEAN Member States (AMSs), namely, Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, the Republic of the Union of Myanmar, the Republic of the Philippines, Singapore, the Kingdom of Thailand, and the Socialist Republic of Viet Nam as well as the representatives from the Network of Aquaculture Centres in the Asia-Pacific (NACA).

II. OPENING OF THE MEETING

The Chairperson, Dr. Chumnarn Pongsri, Advisor to the Department of Fisheries of Thailand delivered the opening remarks. He reiterated the principal objective of the arrangement of the ASEAN Shrimp Alliance (ASA), is to establish a mechanism among members to share and exchange information of shrimp commodities relating to shrimp export toward the same direction of shrimp products development among ASEAN Countries through the website; to encourage and improve the ASEAN Shrimp Standard via ASEAN-SEAFDEC Strategic Forum and/or Roadmap for Integration of Fisheries Sector under ASEAN Economic Integration; to create strong mechanism among ASEAN to jointly prevent non-tariff trade barrier by shrimp importing countries and all NGO; to develop proposal and recommendations for action in relation to common concern issues and collaborative actions by the members; and to jointly coordinate and provide dialogue for communication to international forum. He stated that the Meeting would provide a very good opportunity to review what activities that served the ASA objectives, what to be maintained, revised or further developed. He informed the meeting that after June 2013 in Bogor, Indonesia, the development of implementation according to the Strategic Plan on the Development and Implementation of ASEAN Shrimp GAP has not been updated yet, therefore; he encouraged the representatives from ASEAN Member States (AMSs) to share their accomplishments, difficulties, comments and suggestion to help AMSs moving forward together efficiently. He also indicated that the key factor to reach the goal setting is the strong cooperation among AMSs, therefore; he requested AMSs to inform its focal point in charge of marine shrimp to coordinate all concerned issues among the AMSs to the Department of Fisheries of Thailand by the end of July 2019. He added that with the purpose of facilitating the exchange of information on shrimp in the region, the website of ASEAN Shrimp Alliance (www.aseanshrimpalliance.net) has been developed and invited all AMSs to upload and share their updated shrimp situation regularly. Apart from representatives from AMSs, the speaker from the Network of Aquaculture Centres in Asia - Pacific, Dr. Eduardo Leaño participated in the meeting to share the information on Shrimp production in Southeast Asia: Status, Trends, Challenges and Outlook which will be of benefit to the improvement and development of shrimp industry in ASEAN region. He then declared the Meeting open.

III. ADOPTION OF THE AGENDA

The Chairperson informed the Meeting that the representative of Seafood Taskforce was not able to participate in the meeting so that the agenda 6 was removed. The Meeting adopted the revised Agenda.

IV. UPDATES ON THE PROGRESS OF THE IMPLEMENTATION ON THE STRATEGIC PLAN ON THE DEVELOPMENT AND IMPLEMENTATION ON ASEAN SHRIMP GAP

Viet Nam informed that the Minister of MARD approved and issued the 1st version of VietGAP standard (Vietnamese good aquaculture practices) in July 5th 2011 and revised version in Sep 6th, 2014 (under the Minister Decision No 3824/QD-BNN dated Sep 6th, 2014). Besides, the guideline on application of VietGAP for brackish-water shrimp also has been approved under the Minister Decision No 4835/QD-BNN dated Nov 24th, 2015. The VietGAP was endorsed as a voluntary standard.

The VietGAP certification activities has been operating since 2012 under regulation of the Circular No 48/2012/TT-BNNPTNT dated Sep 26th, 2012 regulates on the certification scheme for aquaculture, crop, livestock products which produced in accordance with VietGAP application. In this Circular, the certification body (CB) of VietGAP is recognized as is the 3rd party agencies who meet all conditions of (1) be a legal organization; (2) has QMS and satisfy the national standard TCVN 7457:2004 or ISO 17065; and (3) present of two permanent auditors or more for each scope. The auditor must fulfil requirements as ability for GAP evaluation and undertakes the training course organized by D-fish.

In order to facilitate VietGAP application and certification, D-Fish organized many training courses for auditors/farmers. At present, D-fish certified 293 ToT; 194 auditors and accredited 10 CBs. In addition, 58 (in total of 624) Certificated of VietGAP has been granted for about 90 shrimp farms recently.

Regarding to promote application of VietGAP, Viet Nam support training courses for farmers, demonstration and awareness campaign. At least, 4 video clips on introduction of VietGAP application and several clips on demonstration of VietGAP have been produced and broadcasted on television as well as the website of D-fish (vietgap.tongcucthuysang.gov.vn)

In order to promote VietGAP to the consumers, the VietGAP certification has been coded and issued online at vietgap.tongcucthuysang.gov.vn. By this way, the VietGAP certification can be viewed by public, showing its transparency. In addition, D-fish also has been conducting the benchmarking with ASC, GlobalGAP since 2014 and join in GSSI network for the mutual recognition.

The representative of the Philippines, Mrs. Maria Abegail A. Albaladejo informed the Meeting that the Philippine National Standard Code of Practices (GAqP) for shrimp (PNS/BAFS 197:2017) ICS 65.150 was approved in May 2017. This contains practices adopted from ASEAN-GAP for shrimp farming and Good Aquaculture Practice Farmer Guidance Workbook of the Bureau of Fisheries and Aquatic Resources (BFAR).

The representative of the Myanmar, *Mr. Nyunt Win* concluded that Myanmar already developed the Guidelines on ASEAN Good Aquaculture Practices (ASEAN GAqP) for Food Fish and ASEAN Shrimp Good Aquaculture Practices to guide the elements of Good Aquaculture Practice (GAqP) in Myanmar. Aquaculture Division, Department of fisheries is the Competent Government agency responsible for management of the aquaculture sector of the country. To comply with common certification scheme in ASEAN, Myanmar needs to prepare its institutional structure for inspection and certification body. To build up the capacity of the farmers and technical support for implementing of National GAqP scheme, Myanmar will implement a program in this year with the support of Myanmar Sustainable Aquaculture Program (MYSAP) project that include testing facilities improvement of fish disease laboratory. Myanmar nominated *Mr. Saw Lah Paw Wah*, Director for Aquaculture Division, mruslbwedof@gmail.com as the focal point of Myanmar for ASA.

V. ASEAN SHRIMP GAP STATUS AND FUTURE PLAN

The representative from Thailand, Miss Montira Thavornyutikarn elaborated the Strategic Plan on the Development of ASEAN Shrimp GAP and its 5 strategic approaches consisting of 1) the development of ASEAN Shrimp GAP; 2) establishment of National Shrimp GAP; 3) alignment of National Shrimp GAP; 4) strengthening national certification system; and 5) promotion and training to increase awareness and knowledge of ASEAN Shrimp GAP. She also concluded the progress implementation of ASEAN Shrimp GAP started since 2009. The ASEAN Shrimp GAP was endorsed by the ASEAN Ministerial Meeting on Agriculture and Forestry (AMAF) in 2011. At that time, some AMSs developed their national shrimp gaps. From 2012-2014, this was the period for the development of standard and establishment of the certification process. As agreedduring the ASA meeting, AMSshaveto align theirnational shrimp GAP with ASEAN Shrimp GAP. From 2015 until now, the implementation for thealignment and strengthening certification system activities has been carried out by some AMSs. The next step to be done are the promotion and training in ASEAN Shrimp GAP. She finally requested all AMSs to push up their implementation to complete the objectives of ASA. Moreover, she demonstrated the certification system recognized in many countriesand explained that in the production levelandfarms should be certified by Certified Body (CB) with standard such as GAP, Organic, etc. The CBor Inspection bodyshould have certified with ISO/IEC 17065, 17021, 17020 and accredited by Accreditation Body (AB). Then AB has been certified with ISO/IEC 17011.AB has equivalence in product certification and should be a member of Pacific Accreditation Cooperation (PAC). This whole system demonstrates the competency, transparency, and impartiality of the certification system.

PROGRESS OF THE IMPLEMENTATION OF THE ASEAN GUIDELINES FOR PREVENTING THE ENTRY OF FISH AND FISHERY PRODUCTS FROM IUU FISHING ACTIVITIES INTO THE SUPPLY CHAIN

EXECUTIVE SUMMARY

Illegal, unreported and unregulated (IUU) fishing was identified as the biggest threat to the sustainable development of fisheries and aquaculture in the Asia-Pacific region (29th Session of APFIC). In response to the need to combat IUU fishing, the issue on management of fishing capacity and combating IUU fishing was seriously addressed by ASEAN, SEAFDEC and the RPOA initiative to combat IUU fishing, as well as in the "Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020" adopted by the Ministers and Senior Officials during the ASEAN-SEAFDEC Conference in 2011. Therefore, it is urgently needed for Southeast Asian Countries to strengthen measures to exclude IUU fish and fishery products from the supply chain through the formulation and dissemination of the "ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain." The guidelines will serve as trade measures for Southeast Asian countries to combat IUU fisheries through controlling and monitoring trade of fish and fisheries products.

MFRDMD studied existing fishing and trading practices in small-scale fishery & problems in compliance with the EC Regulation 1005/2008 in large-scale fishery to help formulate the "ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain." The ASEAN Guidelines was finalized in September 2014 and subsequently endorsed in the ASEAN framework and finally by the 37th AMAF and published in 2015.

MFRDMD has worked with AMSs to promote and disseminate "ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain" since 2016. Following the promotion for implementation of the ASEAN Guidelines in AMSs, self -evaluation on the implementation of the ASEAN Guidelines were conducted in 2017, 2018 and 2019.

Table 1: Showing the self-evaluation scores in 2017, 2018 and 2019 for the status of implementation of the ASEAN Guidelines on preventing entry of fish and fishery products from IUU fishing activities into the supply chain

Year	Events	Br	Cam	Ind	Lao	Msia	Myr	Phi	Sin	Tha	Vie
2017	RTC	68.1	65.8	87.8	46.4	88.5	84.1	80.7	70.2	90.9	76.7
2018	Country visits		84.8	96.4	60	92.4	94	96.4		98	92.4
2019	Terminal										
2019	meeting	84.8	86.4	97.6	80	98.4	94.8	99.6	96	98	96.4

On the overall we can positively see an increasing trend in the status of implementation of the ASEAN Guidelines from 2017 till 2019 in the Southeast Asian Region. Since this project ended in 2019, AMSs are suggested to consider continuing the self-evaluation the implementation of the ASEAN Guidelines on their own on a yearly basis, to keep track of the activities to combat IUU fishing in their countries.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd Meeting of the FCG/ASSP is requested to take note of results of the promotion for the implementation of the "ASEAN Guidelines for preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain" in ASEAN Member States. The meeting is also invited to provide advices and suggestions to SEAFDEC/MFRDMD on the way forward for implementation of the ASEAN Guidelines in ASEAN Member States.

PROGRESS OF THE REGIONAL FISHING VESSELS RECORD

EXECUTIVE SUMMARY

The Regional Fishing Vessels Record (RFVR-24m) and its database system were developed through the harmonization from series of Expert Meetings and regional technical consultation. Currently, the RFVR-24m includes the 28 Key Data Elements (KDEs) as basic information required ineffective tools to support the fishing vessel inspection by Port State to reduce the Illegal, Unreported and Unregulated (IUU) fishing vessels entry into port. It is expected that RFVR will work as a practical tool for related authorities of the ASEAN Member States (AMSs) in checking and taking corrective actions against inappropriate behavior of its fishing vessels, thereby supporting the elimination of IUU fishing in the Southeast Asian Region. For example, AMSs can take appropriate actions against "Double-Flagging Vessels, IUU fishing vessels, Port State Control and pouching" by sharing information and identifying problematic vessels through the RFVR database.

In 2019, The Meeting on Regional Fishing Vessels Record in Southeast Asia" was organized from 13 to 14 May 2019 as side event meeting in "the Fifth Meeting of the Global Record Informal Open-Ended Technical and Advisory Workshop Group (GRWG5)" at Seoul, the Republic of Korea. The information of RFVR Database is updated twice time per year and Brunei Darussalam, Indonesia, Malaysia, Singapore, and Thailand submitted their first updated information to SEAFDEC.

According to results from Questionnaires on RFVR benefit for 24 meters in length and over through less than 24 meters in length at the national and regional level, all AMSs agreed that RFVR Database has benefited with AMSs in national and regional level as consideration tools to prevent IUU fishing. The development of RFVR less than 24 meters (might be range 18 – 23.99 meters) will conduct in the future through enhancing the utilization and improvement of the RFVR Database in cooperation with AMSs.

I. INTRODUCTION

The Regional Fishing Vessels Record (RFVR) for 24 meters in length and over was endorsed by the SEAFDEC Council Meeting in 2013 and supported by the Special Senior Officials Meeting of the Thirty-fourth Meeting of the ASEAN Ministers on Agriculture and Forestry (Special SOM-34th AMAF). Subsequently, the Meeting of the SEAFDEC Council in 2014 endorsed the proposed RFVR activities plan.

The RFVR-24m and its database system were developed through the harmonization from series of Expert Meetings and regional technical consultations. Currently, the RFVR-24m includes the 28 KDEs as basic information required ineffective tools to support the fishing vessel inspection by Port State to reduce the IUU fishing vessels entry into port. It is expected that RFVR will work as a practical tool for related authorities of AMSs in checking and taking corrective actions against inappropriate behavior of its fishing vessels, thereby supporting the elimination of IUU fishing in the Southeast Asian Region. For example, AMSs can take appropriate actions against "Double-Flagging Vessels, IUU fishing vessels, Port State Control and pouching" by sharing information and identifying problematic vessels through RFVR database.

II. PROGRESS OF IMPLEMENTATION OF REVR

Refer to comment from the 21st FCG/ASSP Meeting was as "the objective of the RFVR Database should be clarified, *e.g.* to be confirmed that fishing vessels not included in the RFVR Database are considered as illegal fishing vessels". According to clarification for user, the sentence of "The fishing vessels in the RFVR Database are confirmed as non-IUU fishing vessels. However, the fishing vessels is not in the RFVR Database. It could not be considered and treated as IUU fishing vessels" was appeared in webpage of the RFVR Database.

The Meeting on Regional Fishing Vessels Record (RFVR) in Southeast Asia

The SEAFDEC Training Department (SEAFDEC/TD) organized "The Meeting on Regional Fishing Vessels Record (RFVR) in Southeast Asia" from 13 to 14 May 2019 as side event meeting in "the Fifth Meeting of the Global Record Informal Open-Ended Technical and Advisory Workshop Group (GRWG5)" with supported by Food and Agriculture Organization of the United Nations (FAO) and the Government of the Republic of Korea at the JW Marriott Hotel Seoul, Seoul, the Republic of Korea. There were 22 participants from AMSs (excluded Brunei Darussalam and Singapore), FAO, non-AMSs attended in this side event meeting. The Meeting discussed the progress of updated information for RFVR Database 24 meters in length and over, preparation and ways forward in the development of the RFVR Database less than 24 meters in Southeast Asia, future cooperation with FAO on sharing information between RFVR and Global Record. The Meeting came up with plan activity for next year and the way to cooperation with FAO in the future.

Updating of RFVR database

The updating of information on RFVR Database was agreed by AMSs twice time per year. The submission situation in the first time in 2019 and the total number of fishing vessels is shown as *Table 1 and 2* respectively.

Table 1: Submission of updated information on RFVR in the first time in 2019

Country	January	April	July	October	November
Brunei Darussalam	√			√	
Indonesia	$\sqrt{}$		X		
Malaysia	$\sqrt{}$		$\sqrt{}$		
Myanmar		X			
Philippines		X			
Singapore	V				
Thailand		V			
Viet Nam		X			

Table 2: Number of fishing vessels 24 meters in length and over in RFVR Database

Country	Number	Voor Undeted	
Country	Fishing Vessel	Carrier Vessel	Year Updated
Brunei Darussalam	11	-	2019
Cambodia	-	-	-
Indonesia	2,048	202	2019
Lao PDR	-	-	-
Malaysia	236	-	2019
Myanmar	698	-	2017
Philippines	509	498	2017
Singapore	-	1	2019
Thailand	345	28	2019
Viet Nam	445	-	2015
Total	4,292	729	

The benefit of RFVR Database for AMSs in national and regional level

The Questionnaires on RFVR benefit for 24 meters in length and over through less than 24 meters in length at the national and regional level sent to AMSs for RFVR meeting in December 2018. All AMSs agreed that RFVR Database has benefited with AMSs at the national and regional level as consideration tools to prevent IUU fishing. The more detail is shown in *Appendix 1*.

III. A FUTURE PLAN FOR IMPLEMENTATION OF RFVR

According to results from the questionnaire on the benefit of RFVR Database for AMSs at the national and regional level and also agreed from RFVR Meeting. The development of RFVR less than 24 meters (might be range 18 – 23.99 meters) will conduct in the future. Moreover, enhancing the utilization and improvement of the Regional Fishing Vessels Record (RFVR) Database will also be conducted in cooperation with AMSs.

REQUIRED CONSIDERATION BY THE MEETING

- To take note of the progress of work undertaken by SEAFDEC
- To provide advice on RFVR implementation in the future

The benefit of RFVR Database for 24 meters in length and over through less than 24 meters in length for AMSs in national and regional level

	The benefit of RFVR Database for 24m in length	The benefit of RFVR Database for less than 24m in length
Brunei	- 6	
Country	Easy online reference on the details of respective size fishing vessels when required. The Department of Fisheries can focus those fishing vessels to be monitored and to keep informed the owner of the fishing vessels to operate fishing within the EEZ maritime area.	The details of the respective size fishing vessels would be easily referred and accessible online. Department of Fisheries would gain the benefit in the management, monitoring and surveillance aspects of those fishing vessels to operate fishing within the designated fishing zones inside the EEZ maritime area.
Region	Easy online reference on the details of respective size fishing vessels of other countries in the region when required especially when the foreign fishing vessels found conducting IUU fishing activities in Brunei Darussalam's EEZ maritime area.	The details of the respective size fishing vessels of other countries would be easily referred and accessible online when required especially when foreign fishing vessels found conducting IUU fishing activities in Brunei Darussalam's EEZ maritime area.
Cambodia		
Region	FiA of Cambodia has not yet implemented RFVR for 24 meters in length and over because there is no fishing vessel 24 meters in length and over. - Provide AMSs with reliable and rapid tools to share information on vessels engaging in international fishing operation (fishing operations in the foreign country's EEZ or in the high	 Easy to manage fishing vessels and fishing related activities. Can identify IUU fishing vessels and take appropriate actions against IUU Vessels. Useful to make a good plan for fisheries management. It can improve fishing license and fishing vessel registration. It can share information and other relevant data to relevant institutions and stakeholders. Provide AMSs with reliable and rapid tools to share information on vessels engaging in international fishing operation (fishing operations in the foreign country's EEZ or in the
	sea) - Facilitate AMSs to take coordinated countermeasures against IUU fishing vessels.	high sea) - Facilitate AMSs to take coordinated countermeasures against IUU fishing vessels.
Indonesia		
Country	 It will prevent the use of registered fishing vessels from other AMS to apply for fishing permits in Indonesia, thus prevent IUU Fishing. It also can be used to identify the origin of Illegal Fishing Vessel caught by the authorized officer. However, Indonesia has not to use RFVR Database on assessing fishing vessel; rather we use our own Management Information System of Fishing Vessel Registration called SIPALKA. 	 It will prevent the use of registered fishing vessels from other AMS to apply for fishing permits in Indonesia, thus prevent IUU Fishing. It also can be used to identify the origin of Illegal Fishing Vessel caught by the authorized officer. However, Indonesia has not to use RFVR Database on assessing fishing vessel; rather we use our own Management Information System of Fishing Vessel Registration called SIPALKA.



	The benefit of RFVR Database	The benefit of RFVR Database
Region	for 24m in length - It will prevent the use of registered fishing vessels from other AMS to apply for fishing permits in Indonesia, thus prevent IUU Fishing. It also can be used to identify the origin of Illegal Fishing Vessel caught by the authorized officer. - However, Indonesia has not to use RFVR Database on assessing fishing vessel, rather we use our own Management Information System of Fishing Vessel Registration called SIPALKA	for less than 24m in length It will prevent the use of registered fishing vessels from other AMS to apply for fishing permits in Indonesia, thus prevent IUU Fishing. It also can be used to identify the origin of Illegal Fishing Vessel that caught by the authorized officer. However, Indonesia has not to use RFVR Database on assessing fishing vessel, rather we use our own Management Information System of Fishing Vessel Registration called SIPALKA
Malaysia	For fishing year-11:	Malaysia has a database of all its fishing
Region	For fishing vessel licensing management, the Department of Fisheries (DOF) has developed an e-licensing system that updates all information and data regarding the status of all Malaysian fishing vessels (from small scale to high seas vessels). Through this e-licensing system, fishing vessel data will be generated and updated to our MFVR as well as the RFVR system. MFVR is used by all fisheries-related enforcement agencies in Malaysia to know the current status of the specific Malaysian fishing vessel during the inspection or for intelligence gathering. Since MFRV covers all fishing vessels (from small scales to high seas vessels) and its data is always up to date, MFVR is highly reliable and it is used as the main reference since it also includes violations and penalties histories of each fishing vessels. It envisages for RFVR to be used as one of the main reference by all fisheries related enforcement agencies in Southeast Asia to find out the current status of a specific foreign fishing vessel. One of the major concerns (for Malaysia) is to find out whether they are officially registered or deregistered by a Flag State. Internationally, any foreign vessels are required to submit a request to enter port 48 hours before the date of entry, so RFVR Database is important preliminary information while waiting for the Flag States to give their official response. However, as of now, since many Member Countries have issues in updating the RFVR Database, Malaysia did not rely on this database as one of the main references when conducting the investigation or collecting intelligence. It envisages for RFVR to be used as one of	vessels from small scale fisheries to high seas as part of our efforts in managing our fishing capacity for sustainable fisheries management. To have a regional database for fishing vessels for less than 24 meters in length is highly desirable because of all the issues that have been highlighted earlier (for 24 meters length and over). However, since many major fishing countries in Southeast Asia did not license its small-scale fisheries or traditional fisheries, as such no official records, so it is rather pointless to proceed with the database for less than 24 meters in length. There is also no agreed definition for small scale fisheries for Southeast Asia if we want to exclude this type of fishing vessels from the database for less than 24 meters in length. It envisages for RFVR to be used as one
Kegion	It envisages for RFVR to be used as one of the main references by all fisheries related enforcement agencies in Southeast Asia to find out the current status of a specific	of the main references by all fisheries related enforcement agencies in Southeast Asia to find out the current status of a

	The benefit of RFVR Database	The benefit of RFVR Database
	for 24m in length	for less than 24m in length
	foreign fishing vessel. However, as of now, since many Member Countries have issues in	specific foreign fishing vessel. RFVR (if complete and actively activated)
	updating the RFVR Database, Malaysia do not rely on this database as one of the main	can also be used to analyze the level of fishing capacity (as a baseline
	references when conducting investigation or collecting intelligence.	information) when conducting stock assessments on shared stocks between
	RFVR (if complete and actively activated) can also be used to analyze the level of	countries.
	fishing capacity (as a baseline information) when conducting stock assessments on	
	shared stocks between countries.	
Philippines	DEVEN 1 . 1 . 1	
Country	RFVR database could be useful in Port State control, catch documentation and traceability	
	system and strengthen to deter IUU fishing.	
Region	RFVR database could be useful in Port State	
	control, catch documentation and traceability	
	system and strengthen to deter IUU fishing.	
Singapore		
Country	The RFVR could be useful in helping to	
	identify the Flag State of the fishing vessel	
	and if the vessel is authorized to be	
	fishing/operating outside of their waters.	
	Details of the fishing vessels, including its	
	relevant licenses and authorized activities, contained in the RFVR will facilitate the	
	coastal State monitoring and surveillance as	
	well as port State measure assessments.	
Region	In addition to the benefits mentioned in Q9,	
	the RFVR could be useful in combatting IUU	
	fishing as it helps to identify vessels that fish	
	illegally in more than one AMS, as such	
	vessels could also be involved in double-	
	flagging activities.	
Thailand		
Country	1. Use as a tool for support Port State	1. Use data for surveillance on
	Measure and also cross-check in the	neighboring countries' fishing
	Catch Documentation.	vessels poaching through Thai
	2. Having the data of fishing vessels in neighboring countries and also in South	waters. 2. Use as a tool for support Port State
	East Asia.	Measure and also cross- check in the
	3. Database of RFVR 24 meters in length	Catch Documentation.
	and over, some vessels can also use for	3. Having the data of fishing vessel in
	submit to FAO Global Record.	neighboring countries and also in
		South East Asia.
Region	1. Use as a tool for support Port State	1. Use data for surveillance on
	Measure and also cross check in the	neighboring countries fishing vessels
	Catch Documentation.	poaching through Thai waters.
	2. Having the data of fishing vessels in	2. Use as a tool for support Port State
	neighboring countries and also in South East Asia.	Measure and also cross check in the
	3. Database of RFVR 24 meters in length	Catch Documentation. 3. Having the data of fishing vessels in
	and over some vessels can also use for	neighboring countries and also in
	submit to FAO Global Record.	South East Asia.
	4. Strengthen on combating IUU fishing in	4. Strengthen on combating IUU fishing
	South East Asia.	in South East Asia.
	5. Got a credit on IUU free from trading	5. Got a credit on IUU free from trading
	countries.	countries.



	The benefit of RFVR Database for 24m in length	The benefit of RFVR Database for less than 24m in length
Viet Nam		
Country	Management of Fishing Vessels by Lengths as of January 1, 2019, according to the Fisheries Law 2017, data on fishing vessels over 24m are essential in the management of fisheries in Viet Nam. It is one of the conditions required to be active in certain waters. According to the general trend of regional and international fisheries management organizations; Take part in fishing activities in international waters when licensed. To provide equipment for ensuring safety of fishing ships operating in sea areas according to Vietnamese and international regulations.	 Develop planning and strategy for the development of fishing fleet for 10 years, 20 years, and 30 years; License for quota-based exploitation by fishing methods and species based on the plan of aquatic resource exploitation Manage capture fisheries activities from the granting of a license.
Region	 Unified management of capture fisheries in the area by length. Introduce mandatory regulations that unify the management of fishing vessels with member countries of SEAFDEC. Issue licenses for fishing vessels engaged in fishing in sea areas under the management of SEAFDEC or the world Fisheries Management Organizations. Having the first database and researching and evaluating the resources, reserves and the possibility of exploiting them in the sea areas. 	 Database for research resources, reserves and the ability to allow exploitation; Provide recommendations for the fisheries of member countries of regional fisheries management organizations.

PROGRESS OF THE ASEAN CATCH DOCUMENTATION SCHEME

EXECUTIVE SUMMARY

The ASEAN Catch Documentation Scheme (ACDS) is one of the regional initiatives between the Southeast Asian Fisheries Development Center (SEAFDEC) and the ASEAN Member States (AMSs) toward improving traceability of marine capture fisheries with aims to prevent the entry of fish and fishery products from IUU fishing activities into the supply chain. From 2014 till 2017, five (5) Technical Consultations and expert meetings have been organized for deliberation on the concept of ACDS. Finally, the ACDS was endorsed at the Twenty-fifth Meeting of the ASEAN Sectoral Working Group on Fisheries (25ASWGFi) in May 2017 in Singapore. Later the document was also adopted by the SOM-AMAF in the same year. To support the implementation of the ACDS, the electronic system is required taking into consideration the guidance from the SEAFDEC Councils that the process should not create an unnecessary burden, cost or lengthy process for all supply chain importers/exporters.

SEAFDEC initiated eACDS implementation in Brunei Darussalam as pilot testing of the ACDS since 2016. The introduction of the overall system of eACDS was launched during the Inaugural Ceremony of the Forty-ninth Meeting of the SEAFDEC Council in June 2017.

Since the pilot testing of the eACDS was launched, the series of consultation and on-site training on the use of eACDS by all relevant Stakeholders were conducted in collaboration with the Department of Fisheries (DOF), Brunei Darussalam. Presently, the eACDS system is on the process of testing and improving the system. While the implementation in Viet Nam, Myanmar, and Malaysia is in the process of prototype development.

In this year several activities were implemented in collaboration with Sub-D-Fish in Binh Thuan Province, Viet Nam as one of the project site. The progress of work in Viet Nam includes: (1) discussion on (a) development of eACDS application, (b) verification of eACDS application, and (c) on-training on the use of eACDS application on web-based and mobile for officer and stakeholder in the part of Point In-Port Out, (d) development of catch report at sea by offline technology, movement procedure, purchasing, request of Catch certification which came upon issuance of Catch Declaration (CD), Movement Document (CD), Statement of Catch (SC), and Catch Certification (CC). In collaboration with DOF, Myanmar, country/project's site visit and discussion on initial planning for eACDS implementation through preparation of Key Data Elements (KDEs) for eACDS database development and selection of pilot area was conducted. The verification on development eACDS application in the part of Port In-Port out will be conducted in December for Myanmar. In collaboration with DOF of Malaysia, the country/site's visite and discussion was made on initial planning and cooperation with DOF, Malaysia through conducted baseline survey and analysis including collected KDEs for eACDS database development. Kalanton and Kuantan were selected for the project site. The verification of development eACDS application in the part of Port In-Port out will be conducted in the middle of November 2019.

I. INTRODUCTION OF THE ACDS

In accordance with the requirement of SEAFDEC Member Countries in complying with the requirements of the EC Regulation 1005/2008 since January 2010, the Thirteenth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in December 2010 in Thailand suggested SEAFDEC/Secretariat to take a proactive role in facilitating the sharing of experiences and information among the Member Countries in order to enhance the country's capacity and efforts to deal with all future market-driven measures that would impact to the fisheries sectors particularly economic and social aspects in the Southeast Asian region. In response to this, SEAFDEC proposed the development of the common regional catch documentation scheme which aims to ensure that the traceability of capture fisheries is improved to meet the requirements and to reduce such impacts from market measures. Later, the AMSs expressed their support on improving the traceability for capture fisheries to ensure the sustainability of fisheries for food security toward 2020 as guided in the 2011 Resolution and Plan of Action.

In connection to this, the development of a common regional catch documentation scheme hereinafter called the "ASEAN Catch Documentation Scheme (ACDS) to enhance the intra-regional and international trade was supported at the SSOM-AMAF in 2013.

The development of the ACDS concept was initiated by SEAFDEC Secretariat (SEAFDEC/SEC) in collaboration with MFRDMD and experts/ fisheries managers from SEAFDEC Member Countries with the support from Japanese Trust Funds since 2014. One expert group meeting and one Technical consultation meeting were convened in October and December 2014 for the First Draft of ACDS, respectively. Another expert meeting convened in 2015 for finalizing the draft of ACDS, was also organized following the recommendations made by the Forty-seventh SEAFDEC Council Meeting. The results from three meetings in 2014 and 2015 could come up with the final draft ACDS Concept and draft info-graphic on the usage of ACDS for 18 scenarios of catch/trade flows into and or among the AMS in the region. To ensure that ACDS is applicable and benefit to the relevant stakeholders, namely: operators of fishing vessels, suppliers, seafood processors for export and traders who export and transship, SEAFDEC convened the Stakeholder Consultations in March 2016 with aims to introduce the concept and compile their views for further development of the appropriate system of ACDS for both electronic and manual system to cover all requirements of the SEAFDEC Member Countries. SEAFDEC is recommended to develop the electronic system of ACDS that should be included not only commercial fisheries but also considering to support small-scale fishers. In addition, at the Forty-ninth meeting of the SEAFDEC Council on April 2016, the Council suggested that the eACDS should be developed in harmonization with other existing catch documentation schemes to ensure that this would be acceptable to the EU and US Presidential Task Force, and thus, enhance trading of fish and fishery products from the Southeast Asian region, while the Council endorsed Brunei Darussalam as a pilot testing country for the eACDS. In connection to this, the ACDS concept was also endorsed by the Twenty-fifth ASEAN Sectoral Working Group on Fisheries (ASWGFi) in May 2017 in Singapore. Later the concept was also adopted by the Thirty-ninth AMAF Meeting in the same year.

SEAFDEC initiated eACDS implementation in Brunei Darussalam as pilot testing of the ACDS since 2016. The introduction of an overall system of eACDS was launched by the Permanent Secretary of the Ministry of Primary Resources and Tourism of Brunei Darussalam, Dr. Haji Abdul Manaf bin Haji Metussin, during the Inaugural Ceremony of the Forty-ninth Meeting of the SEAFDEC Council in June 2017.

II. THE MODULE ON PROMOTION AND IMPLEMENTATION OF eACDS

The module on promotion and implementation of the eACDS in the AMSs is conducted to five (5) process activities, as follows:

- 1. Introduction activities. AMS was introduced to eACDS, and the scheme's structure and function were demonstrated.
- Baseline survey and situation analysis. A baseline survey with relevant authorities on the process of
 issuing CDs, MDs, and CCs in each country was conducted and analyzed. KDEs were discussed
 with the representative from each country and cooperation for implementing the eACDS was
 requested.
- 3. *Prototype development*. The eACDS prototype was developed and modified to the context of each implementing country.
- 4. Testing and improving the system. The eACDS was piloted with relevant users. Problems identified were solved and the system was further tailored to each country context. Relevant authorities, master fisherman, fishing vessel owns, buyers, and processers were trained on using the application.
- 5. *IT transfer.* During the testing phase, all data were stored on the SEAFDEC cloud server. When testing was completed, the database was transferred to each country to be maintained.

III. PROGRESS ON DEVELOPMENT OF ELECTRONIC ASEAN CATCH DOCUMENTATION SCHEME (eACDS) IN ASEAN MEMBER STATES

Brunei Darussalam

Since the pilot testing of the eACDS was launched in Brunei Darussalam in June 2017. The series of consultation and on-site training on the use of eACDS by all relevant Stakeholders were conducted in collaboration with the Department of Fisheries (DOF), Brunei Darussalam. Presently, the eACDS system is on the process of testing and improving the system. In 2019, the following and monitoring of testing and situation were conducted. The eACDS application also was improved and adjusted to support Brunei Darussalam as a friendly user. The use of eACDS on web-based and mobile applications (offline catch report at sea) was introduced and trained for DOF staff.

Viet Nam

The representative from Viet Nam proposed in the Fortieth Meeting of the Program Committee (40th PCM) of the Southeast Asian Fisheries Development Center (SEAFDEC) which held in Bangkok, Thailand on November 2017 that SEAFDEC could also support Viet Nam in the development of a system to apply the eACDS for marine fishery products. To follow up this proposed, the introduction of eACDS system was conducted for all relevant stakeholders and the Directorate of Fisheries (D-Fish) in Viet Nam in 2017. Moreover, the visit and discussion on initial planning and cooperation with D-Fish for eACDS implementation through the preparation of Key Data Element for eACDS database development and selection of pilot areas were conducted in 2018.

Presently, the eACDS system is on the process of prototype development. In 2019, several activities were implemented in Binh Thuan Province, Viet Nam as a project site. The discussion on development of eACDS application, verification of eACDS application, and on-training on the use of eACDS application on web-based and mobile for officer and stakeholder in the part of Point In-Port Out, catch report at sea by offline technology, movement procedure, purchasing, request of Catch certification which came upon issuance of Catch Declaration (CD), Movement Document (CD), Statement of Catch (SC), and Catch Certification (CC) were conducted.

Myanmar

According to the Fiftieth SEAFDEC Council Meeting in March 2018, the Council Director for Myanmar looked forward to cooperate with SEAFDEC in strengthening regional cooperation to combat IUU fishing by supporting the implementation of the eACDS at the national level. To follow up this cooperation, the introduction of eACDS system was conducted for all relevant stakeholders and the Department of Fisheries (DOF), Myanmar through visit and discussion on initial planning and cooperation with DOF, Myanmar for eACDS implementation through preparation of Key Data Elements (KDEs) for eACDS database development and selection of pilot area was conducted.

Presently, the eACDS system is on the process of prototype development. In 2019, the KDEswere collected to develop eACDS database and application. The verification on development eACDS application in the part of Port In-Port out will be conducted in December in collaboration with the DOF, Myanmar.

Malaysia

Refer to the Forty-first Meeting of the Program Committee of SEAFDEC which was held on November 2018. Malaysia proposed in the Meeting to consider Malaysia as a project site for eACDS implementation. The introduction of eACDS system was conducted for all relevant stakeholders and the Department of Fisheries, Malaysia.

In 2019, the SEAFDEC eACDS working team visited and discussed initial planning and cooperation with DOF, Malaysia through conducted baseline survey and analysis including collected KDEs for eACDS database development. Kalanton and Kuantan were selected for the project site. The verification of development eACDS application in the part of Port In-Port out will be conducted in the same week of the SEAFDEC Program Committee Meeting. Presently is in the process of prototype development.

IV. A FUTURE PLAN FOR eACDS IMPLEMENTATION

According to SEAFDEC project in the next five-year plan (2020-2024). The eACDS activities will emphasize on:

- Continued coordination, facilitation, development and expansion of eACDS in AMSs, particularly for Viet Nam, Malaysia, Myanmar and *etc*. (as Member Countries requirement)
- Regional workshop to exchange information on fisheries catch documentation and traceability in AMSs
- National/regional/international network for collaborative activities to eliminate IUU fishing such as MOU with Nha Trang University for collaboration on eACDS implementation in Viet Nam.

REQUIRED CONSIDERATION BY THE MEETING

- The Twenty-second FCG/ASSP is requested to take note of the progress of the electronic ASEAN Catch Documentation Scheme (eACDS) implementation in Brunei Darussalam, Viet Nam, Myanmar, and Malaysia.
- The meeting may wish to also provide advice to promote the application of ACDS to combat IUU fishing and enhance intra-regional and international trade in fish and fishery products.

PROGRESS OF THE REGIONAL COOPERATION FOR IMPLEMENTATION OF THE PORT STATE MEASURES

EXECUTIVE SUMMARY

The Concept Proposal on Regional Cooperation for Supporting the Implementation of Port State Measures (PSM) in the ASEAN Region was raised in the Forty-eight Meeting of the SEAFDEC Council in April 2016 .According to this, the Southeast Asian Fisheries Development Center (SEAFDEC) in collaboration with the ASEAN Member States (AMSs) and partners conducted relevant activities such as The workshop on regional cooperation for implementation of PSM to improve fisheries management and reduce Illegal, Unreported and Unregulated (IUU) fishing in Southeast Asia in 2016 and capacity building to support the implementation of PSM for fishery managers in 2018.

In July 2019, "The Regional Training on Port State Measures (PSM) implementation for Inspectors in Southeast Asia" in collaboration with partners such as The Department of Fisheries (DOF) Thailand, Australian Fisheries Management Authority (AFMA), Food And Agriculture Organization of the United Nations (FAO), National Oceanic and Atmospheric Administration (NOAA), and The United States Agency for International Development (USAID) was organized which aimed to better understand on implementation of PSM, and increasing of knowledge, skill and experience on inspection to support PSM and port control implementation for AMSs.

Moreover, in the next five-year plan, SEAFDEC will continue to emphasize regional cooperation to support the implementation of PSM in the region. The main implementation activities will consist of capacity development on port inspection to support the PSM implementation, regional meeting to share information on detecting IUU fishing vessels for preventing the landing of fish and fishery products from IUU fishing vessels at ports in AMSs, and regional workshop on the review of national legal framework and procedures for the implementation of PSM.

I. INTRODUCTION

Refers to the adopted International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing)IPOA-IUU (in 2001, in which the requirement for PSM is included .The Food and Agriculture Organization of the United Nations)FAO(has worked on the PSM to combat IUU fishing including identifying the needs for human resources development to implement PSM while developed as minimum standards -an "FAO Voluntary Model Scheme on Port State Measures "to combat IUU fishing in 2004 Later, the FAO Conference adopted resolution 12/2009 approving the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, as a legally binding instrument in 2009. The Objective of the PSM Agreement is to "prevent illegally caught fish from entering international markets through ports. "Port State needs to take the action on the restriction of entry into port, use of the port, access to port services, in addition to the inspection and other enforcement activities are also mentioned in the agreement .Taking into account the importance of seafood products from Southeast Asian to around the world market, trade-in and out are some of the important activities .To avoid any impact on trade as well as preventing the entry of IUU fish and fishery products either from international or intra-regional trade, the implementation of PSM is therefore needed taking into accounts other existing regional management tools developed under the ASEAN-SEAFDEC Collaborative Framework such as ASEAN Catch Documentations, RFVR-24m in length, ASEAN Guidelines to prevent the entry of IUU products into the supply chain, etc. Implementation of PSM required inter-agency as well as regional and international cooperation. There are several actions needed as mentioned in the provisions in which port States need to consider their legal instruments to compile with PSM .Based on the technical consultations on the implementation of PSM by AMSs, the results showed that many AMSs are still inadequate of the human capacity to implement the PSM, while many foreign vessels not only from outside the ASEAN region such as high-sea or Regional Fisheries Management Organizations)RFMOs(areas but also vessels among the AMSs. In 2015, SEAFDEC, therefore, proposed the regional approaches to support the implementation of the PSM in and effective management through the harmonization and cooperation among AMS.

At the Forty-eight Meeting of SEAFDEC Council in April 2016, the Concept Proposal on Regional Cooperation for Supporting the Implementation of Port State Measures in the ASEAN Region was raised at the Meeting .According to this, SEAFDEC in collaboration with AMSs and partners conducted relevant activities such as The Workshop on Regional Cooperation for Implementation of Port State Measures to Improve Fisheries Management and Reduce IUU Fishing in Southeast Asia on 2016 and Capacity building to support the implementation of PSM for fishery managers in 2018.

II. PROGRESS OF REGIONAL COOPERATION ON PSM

Refer to suggested and requested by Fiftieth-first SEAFDEC Council Meeting in 2019 and also continue to capacity building to support implementation on PSM in the region, "The Regional Training on Port State Measures implementation for Inspectors in Southeast Asia" in collaboration with partners such as The Department of Fisheries (DOF) Thailand, Australian Fisheries Management Authority (AFMA), Food And Agriculture Organization of the United Nations (FAO), National Oceanic and Atmospheric Administration (NOAA), and The United States Agency for International Development (USAID) was organized from 22 to 26 July 2019 at SEAFDEC/TD, Samut Prakan, Thailand. There were forty participants (11 women and 29 men) who engaged in and conduct PSM and/or port control activities at inspection level from AMSs excluding Lao PDR attended in this training. The training focused to update the current situation on inspection activities for port control and PSM from AMSs through sharing information on the implementation of PSM inspection from our partners. The training also provided a study trip to observe PSM inspection at port activities for tuna carrier vessels. In the end, the participants were expected to better understand on implementation of PSM and increasing of knowledge, skill, and experience on inspection to support PSM and port control implementation.

III. A FUTURE PLAN FOR REGIONAL COOPERATION TO SUPPORT IMPLEMENTATION OF PSM

According to the ASEAN-SEAFDEC Regional Meeting on the Resolution and Plan of Action for ASEAN Region Toward 2030 which hold in September 2019 in Bangkok, Thailand which mentioned on "Improve the capacity of relevant national authorities and strengthen their functions for regional and bilateral/subregional cooperation, to effectively implement the requirements of port State measures and flag State responsibilities." The regional cooperation to support the implementation of PSM in the region will continue to conduct in the next five-year plan (2020-2024). The activities will emphasize on;

- Capacity development on port inspection to support the PSM Implementation, and the introduction on the PSM implementation (in general) to non-ratified AMSs.
- Regional meetings to share information on detecting IUU fishing vessels for preventing the landing of fish and fishery products from IUU fishing vessels at ports in AMSs.
- Regional workshop on the review of national legal framework and procedures for the implementation of the PSM, including a gap analysis in the respective legal frameworks of the AMSs.

REQUIRED CONSIDERATION BY THE MEETING

- To take note of the progress of work undertaken by SEAFDEC.
- To provide advice on required support from SEAFDEC (in collaboration with other organizations) to strengthen the implementation of PSM in the ASEAN.

PROGRESS OF THE IMPLEMENTATION OF THE REGIONAL PLAN OF ACTION FOR THE MANAGEMENT OF FISHING CAPACITY (RPOA-CAPACITY) INCLUDING ESTABLISHMENT OF REGIONAL AND SUB-REGIONAL MCS NEWORK

In 2015, SEAFDEC, with the funding support from the SEAFDEC-Sweden Project in partnership with the Japanese Trust Fund together with Malaysia as the lead country for the cluster, "Promoting Sustainable Fisheries Practices: Fishing Capacity and Responsible Fisheries Practices" under the ASEAN mechanism, supported the ASEAN Member States in the development of the Regional Plan of Action on the Management of Fishing Capacity or RPOA-Capacity. Subsequently, the RPOA-Capacity was approved by SEAFDEC council in 2016, and endorsed by the ASEAN mechanism in 2016. The RPOA-Capacity is important in that it provide guidance to regional cooperation on the management and control of fishing capacity. It provides guidance to cooperation on how to monitor and control of fishing being conducted in a legal and sustainable manner by balancing fishing effort with assessments on available resources through sub-regional and bilateral arrangement. Sets of the key priorities to improve the management of fishing capacity and describes measures to control fishing effort based on catch documentation, to implement the Agreement on Port State Measures, and to strengthen the Monitoring, Control and Surveillance networks.

As requested by MCs in 2018, the SEAFDEC Secretariat conducted the questionnaires survey on the progress of the Implementation of the RPOA-Capacity, however, only three countries responded to the questionnaires and it was requested at the 21 FCG in 2018. Therefore, MFRDMD will study the status implementation of the Regional Plan of Action (RPOA) Fishing Capacity in SEA region through questionnaires. MFRDMD will analyze the feedback from the questionnaires. Regional Technical Consultation (RTC) will be held to discuss on RPOA fishing capacity. MFRDMD will lead and conduct assessment of fishing capacity and stock status of pelagic fishes in the SEA region. RTC on fishing capacity of pelagic fishes will be held to discuss on result of the assessment conducted.

One of the key elements in the RPOA-Capacity is to strengthen of Monitoring, Control and Surveillance (MCS) Networks at Sub-regional level. During 2017-2019, the SEAFDEC-Sweden Project facilitated discussions among the AMS on MCS sub-regional cooperation and developed roadmaps for the establishment of MCS Networks for the Gulf of Thailand and the Andaman Sea Sub-regions, respectively, by building on already established coordinating national bodies that facilitated and enhanced inter-agency cooperation in support of efforts to monitor and control of fishing activities and to combat illegal fishing. The SEAFDEC-Sweden Project requested the nomination of National Technical Groups (NTG) to participate in those sub-regional MCS coordination networks. The NTG's comprise officers from relevant agencies such as navy, fisheries, port authorities, customs, trade, immigration, labor, transport, and environmental agencies, as well as maritime enforcement authorities. The NTG members are appointed by respective countries to work at the sub-regional level on the development of working mechanism for the MCS network that should be further considered for decision at high management level management.

Subsequently, the Sub-regional meetings on the Development of Monitoring, Control and Surveillance (MCS) Network were convened as follows:

- Northern Andaman Sea Sub-region, on 24-25 July 2018 in Bangkok, Thailand
- Gulf of Thailand Sub-Region, 20-21 June 2019, in Chonburi, Thailand.
- Southern Andaman Sea Sub-region, 20-21 August 2019 in Bangkok, Thailand

Based on the results of these meetings, countries agreed in principle, on the strengthening of the sub-regional MCS network establishment. It was noted that it is important to have a comprehensive MCS system to facilitate inter-agency cooperation and information sharing relevant to monitoring, control and surveillance (MCS) needs. Key issues in relation to MCS in Southeast Asia that need to be considered include understanding of national legal frameworks, effective bilateral and sub-regional coordination for facilitating monitoring of fishing effort, trade flows (import/export), improve product traceability, improvement of stock and catch assessment of transboundary species (*e.g.* catch efforts, vessels utilized, stock status and assessment results)

In order to establish sub-regional MCS Networks, some basic elements for the participating countries to consider include common understanding among designated agencies, identification of needs for cooperation with neighboring countries, determination of national priorities, the scope of cooperation, and agreement among relevant agencies. However, it is important to build upon existing national inter-agency coordination in recognition of national laws and regulations as it is noted that national mandates and legal implications gives a focus on fisheries management and enforcement in national waters.

The sub-regional agreements/arrangement should be voluntary basis and not legally bound but built on trust for mutual benefits. Existing national laws and regulation should be understood and recognized as a basis for cooperation. Therefore, it is important to note that to move forward with this an initial step is to facilitate sharing of useful information and simplified presentation of national management work (*i.e.* scientific, trade verification data, and similar).

The initiation of the MCS Network collaboration could include possible options for M, C and S communication that could be through email group, appointment of coordinators for specific issues such as scientific and monitoring and control (combat IUU) committee/coordinators and to utilize existing platforms such as SEAFDEC, ASEAN, bilateral MOUs and RPOA-IUU (note for Andaman Sea is that Myanmar is not involved in the RPOA-IUU).

REQUIRED CONSIDERATION BY THE MEETING

- The FCG/ASSP is requested to note the progress on implementation of the RPOA for the management of fishing capacity and provide guidance to secure funding and support from potential donors to implement all activities proposed by SEAFDEC/MFRDMD.
- Moreover, the FCG/ASSP is also requested to take note the progress on establishment of the MCS Network and advise further steps for the implementation of the management plan in a given subregion.

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

BACKGROUND

The regional cooperation to promote the sustainable utilization of neritic tuna was initially made since 2013. The followings are the progress of works, major activities and their achievements on utilization of neritic tuna fisheries resources in Southeast Asia:

Events	Outputs/Achievements
45 th Meeting of SEAFDEC	Endorsement of the proposal of SEAFDEC Secretariat to conduct
Council, 2013	consultations for development of Regional Plan of Action for Sustainable
	Neritic Tuna Fisheries (RPOA – Neritic Tuna)
Consultative Meeting on	RPOA – Neritic Tuna (zero draft)
Regional Cooperation on	
Sustainable Neritic, 2013	
Expert Group Meeting on the	RPOA – Neritic Tuna (draft)
Development of Regional Plan of	
Action on Sustainable Utilization	
of Neritic Tunas, 2014	
17 th Meeting of the FCG/ASSP,	Endorsement of the RPOA – Neritic Tuna
2014	
1 st Meeting of the Scientific	Establishment of the SWG on Stock Assessment of Neritic Tuna in the
Working Group on Stock	ASEAN Region, and draft of the TOR for SWG Neritic Tuna
Assessment of Neritic Tuna in the	
ASEAN Region, 2014	Agreement for the conduct of a regional studies for sustainable neritic tuna
	fisheries resources, covering seven species of the neritic tunas:
	1. Longtail tuna (Thunnus tonggol)
	2. Eastern little tuna/Kawakawa (Euthynnus affinis)
	3. Frigate tuna (Auzis thazard)
	4. Bullet tuna (Auxis rochei)
	5. Bonito (Sarda orientalis)
	6. Indo-Pacific king mackerel (Scomberomorus guttatus)
47 th Meeting of SEAFDEC	7. Narrow barred Spanish mackerel (Scomberomorus commerson)
in the ting of SEITEE	Endorsement of: - RPOA – Neritic Tuna
Council, 2015	- RPOA – Nertite Tuna - TOR of SWG on Stock Assessment of Neritic Tuna in the ASEAN
	Region
2 nd Meeting of the SWG – Neritic	The SWG – Neritic Tuna concluded to use "Stock Production Model
Tuna, 2015	Incorporating Covariates (ASPIC) for the regional studies on stock
Tulia, 2013	assessment of the neritic tuna fisheries resources
3 rd Meeting of the SWG – Neritic	Results of the regional studies on stock assessment of longtail tuna and
Tuna, 2016	kawakawa.
Tulia, 2010	Kawakawa.
	A set of policy recommendations and proposed management measures for
	consideration by the countries, and capacity building requirements for the
	ASEAN Member States.
4 th Meeting of the SWG – Neritic	The SWG – Neritic Tuna suggested to conduct a technical workshop for
Tuna, 2017	data quality controls for stock assessments.
5 th Meeting of the SWG – Neritic	Proposal to conduct the 2 nd neritic tuna stock assessment that would be led
Tuna, 2019	by Brunei Darussalam
1 01100, 2017	of armer an incommunity

HIGHLIGHTS OF ACTIVITIES IMPLEMENTED FROM 2017 TO 2019

In the process for promoting sustainable utilization of the neritic tunas in the ASEAN region, the results of stock assessment for longtail tuna and kawakawa was reported to the 25th Meeting of ASEAN Sectoral Working Group on Fisheries (ASWGFi) in 2017. The 25ASWGFi noted on the suggestion that current

catch levels of the longtail tuna and Kawakawa in the Indian Ocean of Southeast Asia should be reduced by 13% and 7% respectively, while the catch level of both species in Pacific Ocean of Southeast Asia can be increased by 123% and 9%. The 25ASWGFi also supported to the conduct of stock assessment as provided by the work of the SWG – Neritic Tuna. However, it was suggested that such regional initiatives should corporate with activities of the Tuna Regional Fisheries Management Organizations in the region.

In 2018, SEAFDEC organized a "Practical Workshop on Stock Assessment of Indo-Pacific King Mackerel and Narrow-barred Spanish Mackerel in the Southeast Asian Waters" with the aim to transfer knowledge to the scientists of the AMSs based on the experiences from the conduct of the regional study on stock assessment for the longtail tuna and Kawakawa. The Workshop also aimed at standardizing stock assessment analysis for neritic tuna in Southeast Asia by using software on CPUE standardization, ASPIC, Kobe plot, and Risk assessments.

The 5th Meeting of the SWG-Neritic Tuna was held in Bangkok, Thailand from 9 to 11 January 2019 supported by Sweden Project. The meeting focus on updating results of Indo-Pacific King Mackerels and Narrow-Barred Spanish Mackerel stock and risk assessment, review and discuss on the seer fishes stock and risk assessment and its workplan. The meeting also review and updating on genetic study for LOT and KAW and lastly has discussed on the capacity building requirement to improve neritic tuna statistic in the Southeast Asia countries.

FOLLOW-UP RECOMMENDATIONS FROM THE $51^{\rm ST}$ MEETING OF SEAFDEC COUNCIL (2019)

Referring to the report of the 51st Meeting of SEAFDEC Council, para 70, SEAFDEC/MFRDMD in collaboration with SEAFDEC Secretariat and TD will continue effort to conduct the stock assessment of Indo-Pacific king mackerel and narrow-barred Spanish mackerel. The workshop on data analyses was scheduled in February 2020 and involving a resource person from Japan.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd FCG/ASSP Meeting is requested to take note on the progress of work on implementation and promotion of RPOA-Neritic Tuna.

PROGRESS OF THE ASEAN REGIONAL TECHNICAL GUIDELINES ON EARLY WARNING SYSTEM FOR AQUATIC ANIMAL HEALTH EMERGENCIES

EXECUTIVE SUMMARY

The most serious problems faced by the aquaculture sector are diseases spread and introduced through movements of hatchery-produced stocks, new species for aquaculture, and the development and enhancement of the ornamental fish trade. During the 2012 and 2013 meetings of the SEAFDEC Program Committee, member country representatives conveyed concern regarding the outbreaks of EMS/AHPND and other transboundary diseases in the region and recognized the need for a concerted regional effort to address this. In response, the SEAFDEC Council, during its meeting on April 2014, suggested that aquatic animal health management, particularly the control and prevention of transboundary aquatic animal diseases, be included in the formulation of future programs of SEAFDEC and its partners in the region. Acknowledging the pressing need for sustained regional efforts to address disease problems in farmed aquatic animals, particularly on shrimps, SEAFDEC/ AQD and the Department of Agriculture's Bureau of Fisheries and Aquatic Resources of the Philippines, with financial support from the Japan-ASEAN Integration Fund, convened the Regional Technical Consultation on EMS/APHND and other Transboundary Diseases for Improved Aquatic Animal Health in Southeast Asia from 22 to 24 February 2016 in Makati City, Philippines. The Consultation assessed the status of EMS/AHPND and other emerging diseases in farmed shrimps in ASEAN Member States; identified gaps, priority areas for research and development and potential collaborative arrangements; and formulated regional policy recommendations that centered on emergency preparedness and response systems (early warning, detection and response) for an effective management of aquatic animal disease outbreaks in the region.

An ASEAN Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia was conducted by SEAFDEC/AQD and the Government of Thailand (AAHRDD, Department of Fisheries) to address the recommendations of the RTC on AHPND and other transboundary diseases. The Consultation tackled the pressing concern of the ASEAN Member States on how to systematically approach devastating outbreaks of transboundary diseases of aquatic animals in the region following a well-defined Aquatic Emergency Preparedness and Response Systems (EPRS). SEAFDEC/AQD and DOF-AAHRDD coordinated with the ASEAN Network of Aquatic Animal Health Centres (ANAAHC), the existing ASEAN body on aquatic animal health which is mainly responsible for the coordination of aquatic animal health projects and activities in the region.

Progress to date:

Considering the Government of Japan's strong commitment in supporting the initiatives related to enhancing food security and safety within ASEAN Member States, this consultation on aquatic emergency preparedness and response systems for effective management of transboundary disease outbreaks in Southeast Asia was approved for support by the Government of Japan through the Japan-ASEAN Integration Fund (JAIF) in January 2018.

The ASEAN Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia (ASEAN RTC on AEPRS) was held last 20-22 August 2018 in Centara Grand at Central Plaza Ladprao in Bangkok, Thailand. A total of 71 participants including country representatives from AMCs, resource persons, private sectors of selected countries, and representatives from DOF-Thailand, SEAFDEC Secretariat and Aquaculture Department attended.

The ASEAN RTC on AEPRS comprised of three technical sessions: (1) Ten Country representatives presented current status of aquatic emergency preparedness and response systems concomitant to national laws, legislations, SOP's and aquatic animal health strategies, among others; (2) Six Resource persons presented the importance of aquatic emergency preparedness and response systems for effective management of transboundary disease outbreaks based on primary accounts documented at the global or regional level; and (3) Workshop to identify gaps, policy recommendations, and priority areas for R&D



collaboration. Through the collaboration of all sectors and institutions present during the consultation, the expected outputs had been met. The full report was presented to the SEAFDEC Council Members during the Fifty-first Council Meeting at Surabaya, East Java, Indonesia. Power point presentations of the participants are available at SEAFDEC website http://www.seafdec.org.ph/2018/asean-rtc-on-aeprs/

Following the workshop, a Regional Technical Guidelines and Mechanism for Early Warning System for Aquatic Animal Diseases was drafted together with consultants. Guidelines on Early Warning System for Aquatic Animal Health Emergencies were reviewed by the Council following its endorsement ad referendum. It was then circulated to FCG/ASSP focal points for endorsement. The guidelines was also set to be adopted at the upcoming 41^{st} AMAF Meeting on 15 October 2019. The copy of the endorsed guidelines is in *Appendix 1*.

AQD and its partners published the Proceedings of the Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia. The Proceedings was successfully launched during the SEAFDEC/AQD 46th Anniversary Celebration last 11 July 2019. E-copy of the Proceedings is available at the SEAFDEC/AQD website (https://www.seafdec.org.ph/wp-content/uploads/2019/01/RTC-on-AEPRS-Proceedings.pdf). Completion reports and supporting documents on this project were also submitted to the proponents in Thailand.

To ensure the sustainability of the project, Phase 2 and Phase 3 are suggested. Following are excerpts from the Completion Report submitted to JAIF:

- Regular meetings, more funding, and trust between stakeholders (*e.g.* government, research institutions, academe, the private sectors) in disclosing information are some activities that will establish a sustainable, functional and effective engagement on AEPRS.
- A Phase 2 of the project, involving the same people with more private sector and academe representation, is proposed. Phase 2 will prepare Contingency Plans for high-profile diseases, Manuals and other EPRS toolkits needed in the implementation of the Technical Guidelines on EPRS prepared in Phase 1.
- A Phase 3 of the project might be needed for the capacity building on preliminary guidelines implementation which will include simulation exercises of Contingency Plans and EPRS toolkits prepared in the proposed Phase 2. Workshops on database registry for diseases, experts, and laboratories; analysis of surveillance data; aquatic epidemiology; risk analysis; pathology and the like may also be included in Phase 3.
- All these activities are relevant to the sustainability of the project result.

REQUIRED CONSIDERATION BY THE MEETING

- The Council is requested to note the progress of the development of the ASEAN Regional Technical Guidelines on Early Warning System for Aquatic Animal Health Emergencies.
- The meeting is also requested to comment on the proposed follow-up actions to ensure the sustainability of the project as well as to suggest activities on how to move forward.

Appendix 1 of Annex 17

REGIONAL TECHNICAL GUIDELINES ON EARLY WARNING SYSTEM FOR AQUATIC ANIMAL HEALTH EMERGENCIES

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The drafting committee would like to thank the Food and Agriculture Organization of the United Nations and the ASEAN Member States (AMS) for commenting on the Guidelines. Our thanks go to ASEAN Network of Aquatic Animal Health Centers (ANAAHC) Focal Points for valuable input on the Guidelines. Our sincere gratitude also goes to the ASEAN Secretariat for facilitating all the needed assistance.

The drafting committee, as it appears in Appendix 1, consists of everyone who attended and contributed at the ASEAN Regional Technical Consultation on Aquatic Emergency Preparedness and Response Systems for Effective Management of Transboundary Disease Outbreaks in Southeast Asia that was held in Bangkok, Thailand on 20-22 August 2018.

ABSTRACT

These Draft Regional Technical Guidelines for Early Warning System on Aquatic Animal Health Emergencies was developed to enumerate the actions to be undertaken by the AMS in case of the occurrence of known, unknown, existing, emerging or re-emerging disease(s). The draft guideline identified the key players in aquatic emergency preparedness and response system including their roles and responsibilities. Actions to be undertaken during any disease emergencies were also described.

PREFACE

Aquaculture has been expanding rapidly. This expansion is accompanied by old and/or new emerging and/or re-emerging diseases whose causative agent may be known or unknown. These diseases may cause disease outbreaks resulting to 100% mortality in the cultured organism Disease occurrence may be due to irresponsible aquaculture practices including the transfer of aquatic species, particularly farmed stocks carrying pathogens. Recognizing the impact of such diseases to the aquaculture industry, the ASEAN Regional Technical Consultation (RTC) on EMS/AHPND and Other Transboundary Diseases for Improved Aquatic Animal Health Management in Southeast Asia, funded by the Japan-ASEAN Integration Fund (JAIF), was held on 22-24 February 2016 in Makati, Philippines. One of the recommendations in the Consultative meeting is to focus on emergency preparedness and response systems (EPRS) for managing aquatic animal disease outbreaks in the region.

In response to the recommendation of the RTC on EMS/AHPND, the ASEAN Regional Technical Consultation (RTC) on Aquatic Emergency and Response System (AEPRS) organized and held on 20-22 August 2018 in Bangkok, Thailand with funding from JAIF. One of the Plans of Action identified during the RTC on Aquatic EPRS is to develop the ASEAN AEPRS guidelines. The purpose of this set of guidelines is to enumerate the actions to be undertaken by the AMS in case of the occurrence of known, unknown, existing, emerging or re-emerging disease(s).

During the RTC on Aquatic EPRS, ANAAHC Focal Points were requested to complete an EPRS Audit prepared by FAO. This Draft Guidelines is based on the analysis of the FAO Emergency Preparedness and Response Systems audit for aquatic animal diseases completed by the ANAAHC Focal Points. SCOPE AND PURPOSE

This set of guidelines is developed to help national regulators and stakeholders in responding to and managing suspected outbreaks of emergency aquatic animal diseases; thus improve national emergency preparedness in order to maximize the efficiency of response to serious outbreaks of aquatic animal diseases.

This document aims to provide guidance to Competent Authorities (CAs) in the decision-making and in issuing regulations that can minimize the impacts of serious aquatic disease occurrence and/or outbreaks through containment or eradication or mitigation whether at the regional, national, or farm level. It is envisaged that a harmonized guideline for aquatic EPRS among AMS is developed.

The purpose of this set of guidelines is to enumerate the actions to be undertaken by the AMS in case of the occurrence of known, unknown, existing, emerging or re-emerging disease(s).

The set of guidelines is based on the analysis of the FAO Emergency Preparedness and Response Systems audit for aquatic animal diseases completed by the AMS

BACKGROUND

Aquaculture production in Southeast Asia has grown rapidly over the last two decades contributing approximately 10% of the annual world aquaculture production. However, irresponsible aquaculture practices including the transfer of aquatic species, particularly farmed stocks carrying pathogens, has brought about the emergence of infectious diseases thereby posing serious threats to the sustainability of aquaculture in the region. One of the infectious diseases that recently impacted the shrimp industry in the region was the acute hepatopancreatic necrosis disease (AHPND) or popularly known as early mortality syndrome (EMS). AHPND outbreaks in cultured penaeids in Vietnam, Thailand, Malaysia, and Philippines significantly led to low production and concomitant economic losses. The pressing situation on AHPND in cultured shrimp in the region at that time spurred the organization of a consultative meeting, i.e. ASEAN Regional Technical Consultation (RTC) on EMS/AHPND and Other Transboundary Diseases for Improved Aquatic Animal Health Management in Southeast Asia, funded by the Japan-ASEAN Integration Fund (JAIF), on 22-24 February 2016 in Makati, Philippines. The RTC was not only instrumental in assessing the current status of EMS/AHPND and other emerging diseases in farmed shrimps in ASEAN Member States (AMSs) but also facilitated the identification of gaps and priority areas for research and development collaboration. Notably, the consultation was pivotal in the formulation of Regional Policy Recommendations, which among others, focused on emergency preparedness and response systems (EPRS) for managing aquatic animal disease outbreaks in the region. This prompted the organization of the ASEAN Regional Technical Consultation (RTC) on Aquatic Emergency and Response System (AEPRS) which was held on 20-22 August 2018 in Bangkok, Thailand. One of the Plans of Action identified during the RTC on Aquatic EPRS funded by JAIF, is to develop the ASEAN AEPRS guidelines.

EPRS are comprised of contingency planning arrangements that can minimize the impacts of serious aquatic animal disease. Establishing a harmonized aquatic EPRS among AMSs would certainly warrant a solid platform for an effective and prompt decision-making with clearly defined responsibilities and authority.

Emergency preparedness is the ability to respond effectively and in a timely fashion to disease emergencies (e.g. disease outbreaks, mass mortalities). The capability to deal with emergency disease situations requires a great deal of planning and coordination (including establishing operational, financial and legislative mechanisms) and making available required resources (i.e. skilled personnel and essential equipment). As long as there is importation of live aquatic animals, the possibility of serious disease outbreaks due to exotic pathogens will exist. Even under the best of circumstances, pathogens will occasionally escape detection, breach national barriers, become established, spread and cause major losses. The extent to which losses occur often depends on the quickness of detection (which depends on the effectiveness of disease surveillance, diagnostics and reporting programs) and the rapidity and effectiveness with which governments recognize and react to the first reports of serious disease. As quick and effective reaction (containment and/or eradication) is largely dependent upon contingency planning, all countries need to develop such plans for key cultured species and diseases.

ACRONYMS AND ABBREVIATIONS

ANAAHC ASEAN Network of Aquatic Animal Health Centres

AMS ASEAN Member State

ASEAN Association of Southeast Asian Nations

CA Competent Authorities

EPRS Emergency Preparedness and Response System

FAO Food and Agriculture Organization of the United Nations

FHO Fish Health Officer MC Member Country

NACA Network of Aquaculture Centers in Asia-Pacific

OIE World Organization for Animal Health

TERMS AND DEFINITIONS

Aquaculture - Science, art and business of cultivating aquatic organism under controlled condition.

Aquaculture site - Hatchery, nursery or grow-out area, including land-based, flowthrough and open-water based systems.

Aquaculturist - A person who engages in the aquaculture.

Aquaculturist Community - A group of persons engaged in aquaculture

Aquatic animals – All life stages (including eggs and gametes) of fish, molluscs and crustaceans originating from aquaculture establishments or removed from the wild, for farming purposes, for release into the aquatic environment or for human consumption (modified from OIE, 2005).

Biosecurity – The sum total of a country's activities and measures taken to protect its natural aquatic resources, capture fisheries, aquaculture and biodiversity and the people who depend on them from the possible negative impacts resulting from the introduction and spread of serious transboundary aquatic animal diseases (TAADs).

Competent authority – The National Veterinary Services, or other Authority of an OIE Member Country, having the responsibility and competence for ensuring or supervising the implementation of the aquatic animal health measures recommended in the World Organisation for Animal Health's (OIE) Aquatic animal health code (modified from OIE, 2005). 5

Containment - Action of keeping the disease and pathogen within specified zones with controls in place around infected zones to prevent spread to uninfected populations within the country or straddling neighboring borders.

Contingency plan – A documented work plan designed to ensure that all needed actions, requirements and resources are provided in order to eradicate or bring under control outbreaks of specified diseases of aquatic animals (modified from OIE, 2005).

Disease - An abnormal occurrence displayed by living organisms through a common characteristics (signs), or sets of characteristics.

Eradication - Initial destruction of disease with eventual total elimination of the pathogen from an affected population, including sub-clinical infections if they occur. This is the highest level of response but may not always be possible, especially where the disease was well-established prior to the initial detection (*i.e.* where early detection has essentially failed), intermediate or carrier hosts are unknown, or the source of the infection is unknown.

Fish Health Officer - A person legally qualified or sufficient to perform an act that will diagnose cause of disease.

Introduction – The human-assisted movement of an aquatic animal to an area outside its natural range.

Mitigation - Reduction of the impacts of the pathogen by implementing control measures at the farm, or affected population, level that reduce the occurrence and severity of disease. These measures focus on stocks within the infected zone, and concentrate on long-term circumvention of disease losses, either through development of treatments or husbandry techniques. These measures are based on failed eradication attempts or epidemiological risk assessments indicating that eradication efforts are unfeasible or impractical.

Monitoring – Collection and analysis of information necessary to detect changes in prevalence or intensity of infection.

Movement - Human-mediated movement of aquatic animals within or across political borders

(international, state/provincial or regional boundaries) or between differing geographic areas (e.g. between drainage basins) or zones of differing disease status.

Occurrence - An event especially something that is not expected to happen.

Outbreak - A sudden increase in occurrences of a disease in a particular time and place.

Pathogen - A biological agent that causes disease or illness to its host.

Risk – The likelihood of the occurrence and the likely magnitude of the consequences of an adverse event to public, aquatic animal or terrestrial animal health in the importing country during a specified time period (modified from OIE, 2005).

Risk analysis – The complete process composed of hazard identification, risk assessment, risk management and risk communication (modified from OIE, 2005).

Risk assessment – The evaluation of the likelihood and the biological and economic consequences of entry, establishment or spread of a hazard within the territory of an importing country (modified from OIE, 2005). 6

Surveillance – A systematic series of investigations of a given population of aquatic animals to detect the occurrence of disease for control purposes, which may involve testing samples of a population (modified from OIE 2005).

Transfer – The movement of an aquatic animal to an area within the established or historical range of the species.

Zone – A portion of one or more countries comprising (a) an entire water catchment from the source of a waterway to the estuary or lake, or (b) more than one water catchment, or (c) part of a water catchment from the source of a waterway to a barrier that prevents the introduction of a specific disease or diseases, or (d) part of a coastal area with a precise geographical delimitation, or (e) an estuary with a precise geographical delimitation, that consists of a contiguous hydrological system with a distinct health status with respect to a specific disease or diseases for which required surveillance and control measures are applied and basic biosecurity conditions are met for the purpose of international trade. All areas of the zone much have the same health status. The zones must be clearly documented (e.g. by a map or other precise locators such as Geographical Positioning System [GPS] coordinated by the competent authority [ies] (modified from OIE, 2005)

GUIDING PRINCIPLES (FAO/NACA 2000)

These set of Guiding Principles, developed to guide in the implementation of the Asia Regional Technical Guidelines on Health Management for the Responsible Movement of Live Aquatic Animals (FAO/NACA, 2000), are relevant to the implementation of the Regional Technical Guidelines for Early Warning System for Aquatic Animal Health Emergencies.

- 1. Movement of living aquatic animals within and across national boundaries is a necessity for economic, social and development purposes.
- 2. Such movements may lead to the introduction of new and emerging pathogens and to disease establishment and, therefore, may pose risks to the importing country's animal, plant and human health status
- 3. The role of health management is to reduce the risks arising from the entry, establishment or spread of pathogens to a manageable level with the view to protecting animal, plant and human life. Health management should also protect living aquatic resources, the natural aquatic environment and aquatic biodiversity, as well as support the movement of aquatic animals and protect trade.
- 4. The health management process is defined, in the broad sense, as aquatic animal health management encompassing pre-border (exporter), border and post-border (importer) activities, as well as relevant national and regional capacity-building requirements (infrastructure and specialised expertise) for addressing health management activities, and development and implementation of effective national and regional policies and regulatory frameworks required to reduce the risk of disease spread through movement (intra- and international) of live aquatic animals.
- 5. Health management measures should be practical, cost-effective and easy to implement by utilising readily available facilities. Individual countries may need to adopt, modify or vary these Technical Guidelines to suit their own particular situations and resources.

- 6. The varying capacity of developing countries to implement programmes on health management should be acknowledged by relevant international organizations and financial institutions. These organizations should give full recognition to the special circumstances and requirements of many developing countries.
- 7. Health management measures shall be based on an assessment of the risk to animal, plant and human life or health. In assessing the risk, prevalence of specific pathogens in both the region of origin and the region of destination shall be a crucial issue. The likelihood of new or emerging pathogens becoming established in the region of destination is a major consideration.
- 8. All movements of aquatic animals should be conducted within the provisions given in existing relevant international agreements and instruments. Health management measures should not be applied in a manner which would constitute a disguised restriction on trade. Health management measures should be applied only to the extent necessary to protect animal, plant or human life or health, and must be based on scientific principles and not be maintained without sufficient scientific evidence.
- 9. In determining the appropriate level (stringency) of health management measures to be applied, relevant economic and ecological factors have to be taken into account. These are, inter alia: potential damage due to loss of production or value, and the cost of control or eradication. A conservative approach should be adopted in cases where insufficient knowledge exists in relation to disease risks posed by a particular import; a higher stringency of health management procedures should be adopted where inadequate knowledge exists.
- 10.The first movement (introduction) of a new species into a new area will require special health management considerations in light of the need to evaluate scientific evidence regarding the risk of introducing pathogens to new areas.
- 11. Different regions should attempt to harmonise health management procedures to facilitate safe movement of aquatic animals within and between regions.
- 12. Considering the free movement of aquatic species in trans-boundary waterways, division of regions into manageable sub-regional units based on factors such as geography, hydrography, ecosystems, epizootiological surveillance and effectiveness of control is necessary for the effective implementation of health management procedures. The basis for the establishment of such units should be uniform, clear and unambiguous.
- 13. Honest, conscientious and transparent reporting is essential for health management to be effective.
- 14.Technical co-operation among regional experts is essential to promote exchange of information and expertise.
- 15. Collaboration among the governments, public institutions, and the private sector, including all stakeholders, is important to achieve the full purpose of implementing effective health management. Opportunities for sharing the benefits of health management among all stakeholders should be explored.

Aquatic EPRS Technical Guidelines

Section 1: General Administration

AMS's should identify the national government agency (national authority) with primary responsibility for managing the country's EPRS. The identified national authority should have clear lines of responsibilities (administrative and technical), clear organigram including relationships with national and international emergency response arrangements.

1.1. ROLES AND RESPONSIBILITIES

1.1.1. Competent Authority (CA)

The list of CAs is in Appendix 2. The CA should be responsible for the following:

a) Technical, diagnostic capacity and capability relevant to aquatic health in the



country.

- b) Coordinate with other relevant agencies within the country.
- c) Approval and/or registration of aquaculture premises.
- d) Approval and/or registration of third party aquatic health diagnostic laboratory.
- e) Create awareness among aquaculturists through extension and awareness programs.
- f) Communicate with other AMS.
- g) Monitoring and surveillance for OIE listed and other significant and emerging aquatic animal diseases in the country.
- h) Implement enforcement activities for non-compliance to national practice and/or legislations.

1.1.2. Fish Health Officer (FHO)

The FHO should be responsible for the following:

- a) Recognize a suspected disease emergency.
- b) Carry out diagnostic procedures.
- c) Report findings to the appropriate provincial or national authority responsible for declaring a disease emergency and declaring a response.

1.1.3. Aquaculturist

The Aquaculturist should be able to:

- a) Recognize a suspected disease emergency at farm level.
- b) Report disease occurrence and/ or outbreak to appropriate authorities.
- c) Prevent the spread of suspected diseases from their own farms to other farms
- d) Perform treatments to reduce potential virulence
- e) Document any information related to clinical signs, mortality, etc.

1.2. COMMUNICATIONS

- a) Aquaculturist inform FHO or extension worker about disease occurrence/outbreak in the pond.
- b) FHO or extension worker inform CA about disease occurrence/ outbreak in the pond.
- c) CA reports disease occurrence/outbreak to NACA and OIE.
- d) Semi-annual consultation with aquatic animal health professionals and relevant agencies, academe, researchers, industry representatives is carried out.
- e) There is direct line of communication from the regional counterparts to the national authority for reporting suspected disease agents of concern.
- f) The aquaculturist and the aquaculturist community inform FHO or extension worker about any abnormal occurrences in the fish farm.
- g) FHO or extension worker inform competent authority (CA) about all abnormal occurrences in the fish farm and the presumptive diagnostic results.
- h) CA analyzes the report from FHO whether it is necessary to perform confirmatory examination or not. If it necessary, CA performs confirmatory examination and make the final report.

Section 2: Aquatic EPR System Elements

A planned approach for the prevention, preparation and response to an emergency situation should be identified. The approach should include the elements of EPRS: early warning, early detection, and early response. The role of each player should be clearly defined.

2.1. Early Warning System

- a) CA monitors aquatic animal disease occurrence/outbreak in other countries (such as via the International Biosecurity Intelligence System (IBIS) [http://biointel.org/], through the internet, scientific literatures, aquatic animal health newsletters, e-mail discussion groups, conference attendance) and relay the information to all relevant stakeholders, including but not limited to aquaculturists, fish health professionals, etc.
- b) CA checks and reports disease occurrence/outbreak to Network of Aquaculture Centers In Asia Pacific (NACA) or World Organization for Animal Health (OIE).

2.2. Early Detection System

- a) Immediate recognition of signs of disease, or an emerging disease situation, or unexplained mortality, in aquatic animals at farm level by the aquaculturist.
- b) Aquaculturist immediately communicates the event to the FHO or CA.
- c) FHO or CA conducts diagnostic investigation with minimal delay. FHO or CA should have access to laboratories with the expertise and facilities required to diagnose and differentiate listed and emerging diseases from endemic or benign infections.
- d) Immediate recognition of signs of disease, or an emerging disease, or unexplained mortality, in aquatic animals at farm level by the aquaculturist/aquaculturist community.
- e) FHO/CA inspects, collects, and documents all information including samples related to abnormal occurrences and chorological occurrences
- f) FHO informs CA about abnormal occurrence outbreak in the fish farm and also report the presumptive results.
- g) CA analyzes the report from FHO whether it is necessary to do confirmatory examination or not. If it is necessary, confirmatory examination can be started. The final report should consist of conclusion that the abnormal occurrence could differentiate the listed or emerging disease.

2.2.1. Risk analysis

- a) CA conducts risk analysis to identify high priority aquatic disease threats.
- b) CA identifies farm level risk factors.
- c) CA conducts epidemiological studies.

2.2.2. Disease surveillance

- a) CA conducts passive surveillance for targeted and non-targeted diseases.
- b) CA conducts active surveillance for targeted diseases.

2.3. Early Response System

2.3.1. At pond/farm level

- a) Aquaculturist, FHO, fisheries extension officers introduce measures to contain or control disease prior to disease diagnosis
- b) Aquaculturist provides FHO or CA with information on disease signs, as well as any movement of live animals prior to disease occurrence/outbreak.
- c) FHO or CA recommends actions that would rapidly and effectively contain, and then possibly eliminate an emergency disease outbreak, and mitigate its effect or prevent it from spreading and becoming an uncontrollable epizootic.
- d) FHO, fishery extension officer, CA assists and ensures the implementation of recommended control measures to prevent disease spread, both prior to and after disease diagnosis
- e) FHO or CA coordinates control measures between farmers, both affected and non-affected.
- f) Aquaculturist provides FHO/CA with information on abnormal occurrence/disease signs, as well as any movements of live animal prior to disease
- g) Aquaculturist community do prevention the spread of the suspected disease at their farm to another location
- h) Aquaculturist/aquaculturist community do any possible treatment to reduce of potential damage
- i) Aquaculturist/aquaculturist community do documentation of any information related to clinical sign, mortality rate, etc.

2.3.2. At national level

- a) CA confirm the disease diagnosis with the reference laboratory
- b) CA identifies risks factors based on reported disease scenario
- c) CA defines disease zones based on data from reporting laboratories
- d) CA initiates information, education and communication (IEC) campaign
- e) CA recommends Contingency Plans

Section 3: Implementation of the Technical Guidelines

Countries adopting these Technical Guidelines should agree to implement them in line with their national circumstances and capacity. These guidelines are recommended to be integrated into existing national strategies on aquatic animal health management or aquaculture biosecurity strategies, aquaculture development plans and other emergency preparedness mechanisms. Implementation is done in a phased manner, based on existing priorities and capacities.

A detailed implementation plan is essential. The implementation plan will cover important aspects pertaining to the following:

3.1. Capacity building

3.1.1 Response management manuals

FHO should follow a documented procedure on collection, packaging, transporting and sending samples to the laboratory.

3.1.2 Diagnostic resources

- a) Regional laboratories and specialized centers with responsibilities for providing emergency diagnostic services should be available.
- b) Technical expertise in aquatic disease controls should be available.
- c) New staff/veterinarians should be recruited and trained, in case the diagnostic team is lacking to cater to the needs of the aquaculture industry.
- d) Continuous staff development should be implemented.

3.1.3 Training resources/ field personnel

- a) FHOs and CAs prior to designation should undergo training on fish health management.
- b) Resource persons are invited to conduct on-site workshops/forum/trainings
- c) Formal non-degree training programs and regional institutions are available to provide short training course on fish health management given to designated government and industry personnel.

3.2. Contingency plans

3.2.1. Summary document

The CA should prepare a summary document presenting an overview of the national approach for contingency planning for serious aquatic animal diseases. The information should be concisely and clearly presented, such that it can be easily understood by all stakeholders.

A sample flow diagram summarizing the different actions to be undertaken during any disease emergencies is in Appendix 3.

3.2.2. Support plans

a) Legislation

Countries should have legislation that support actions in responding to disease emergencies, *e.g.* access to farm premises, collection of samples, movement controls, mandatory stock disposal, compensation, etc.

b) Financial

- i. Necessary budget allocation for the emergency response should included in the annual budget.
- ii. The national authority should provide resources for preparedness and response
- iii. There should be a system to compensate or assist farmers on losses due to mandatory destruction.

c) Resource

i. Resource plans and access to personnel/equipment/analysis from other laboratories should be arranged, in advance; to avoid wasting time seeking approvals or negotiating conditions when an emergency is underway.

ii. Technical expertise in aquatic disease controls should be available.

d) Other agencies

- i. A collaboration between different governmental departments and agencies, key private-sector organizations, and regional or international assistance and expertise should be available in case major outbreak of a rapidly spreading, highly pathogenic disease may require collaborative efforts.
- ii. Awareness building and advocacy including public-private sector partnership should be implemented.

3.2.4 Awareness and education

FHOs, Aquaculturists, the Aquaculturist Community should attend trainings on aquatic animal health provided by other agencies or organizations such as Food and Agriculture Organization (FAO), Southeast Asian Fisheries Development Center (SEAFDEC), Network of Aquaculture Centres in Asia-Pacific (NACA), World Organization for Animal Health (OIE), European Union (EU), Japan International Cooperation Agency (JICA), Australian Centre for International Agricultural Research (ACIAR), International Development Research Centre (IDRC) and other Association of Southeast Asian Nations (ASEAN) initiatives. Attendance to training promotes awareness of emerging diseases and ways to prevent their entry, or actions to be taken such as detection and control, in case they have entered the culture system.

3.2.5 Simulated response exercises

Desktop and field simulation exercises should be done on SOP's being followed by the FHO's and other players in the performance of their tasks to enhance their skills and confidence in performing their duties.

3.3 Technical plans/ EPRS Toolkit

The CA, CA staff and FHO should prepare the technical plans which are sets of instructions or manuals, required to support the contingency plans. Some manuals are "generic" and can be applied to all/most disease emergencies; whereas others will need to be disease specific, taking into account the need for specialized expertise, partnerships or international coordination. The technical plans must include the private-sector for a cohesive coordination of effort.

3.3.1 Control Centers Management Manual

The Control Centers Management Manual which outlines the organizational response during the investigation, alert, operational and stand-down phases of an aquatic animal disease emergency should be prepared.

3.3.2 Destruction manual

The Destruction Manual which is an operational procedures manual to be used in instances where preventing the spread of a serious disease necessitates the efficient and humane killing of stock should be prepared.

3.3.4 Disposal manual

The Disposal Manual which is an operational procedures manual that provides guidance on best practice for safe transport and disposal of carcasses, animal products and wastes should be prepared.

3.3.5 Disease strategy manuals

Disease Strategy Manuals which are a series of manuals that provide specific information needed for the recognition and control of individual diseases should be prepared.



3.3.6 Job descriptions

- a) Job cards summarizing tasks (roles and responsibilities) of key personnel involved in EPRS for a rapid and effective response to a disease emergency should be available.
- b) Alternates should be designated and alerted and ready when a contingency plan is put into effect, whether for training or for a real-time exercise, in case key personnel cannot participate for reasons beyond their control.
- c) Contingency plan responsibilities should be incorporated into the normal job description of key individuals.
- d) Personnel involved should be authorized through Fisheries Office Order issued by the Bureau Director.

3.4. Recovery from an emergency disease

3.4.1 Verification and international acceptance of disease freedom

- a) It should be proven that the affected population has regained freedom from the disease agent.
- b) It should be demonstrated that the country has a capable aquatic animal health service and relevant disease surveillance programs.
- c) Targeted surveillance should be implemented using scientifically proven laboratory tests for both clinical and subclinical infections.
- d) Surveillance data should be provided as evidence of an effective surveillance program and diagnostic testing.

3.4.2 Rehabilitation of aquaculture facility

- a) The aquaculture facility should be rehabilitated to rebuild socio-economic losses and reestablish lost markets.
- b) Affected area should be repopulated with disease-free animals, usually an alternative species is used.

3.5. Monitoring and evaluation

AMS's should establish a network among CA's to document, collate, summarize and analyze compliance with the guidelines among the AMS's. EPRS Audit and review should also be implemented.

3.6. Regional cooperation

Not all MC's implement biosecurity measures and best management practices thus disease outbreaks are experienced. AMS's should conduct regular meetings to share information, technology and best practices that can improve the ability of each MC's in preventing or responding to aquatic emergency situations. Another consultation to present the guidelines for refinement and consensus, and for capacity building on its implementation is essential. Regional consultative meetings should be organized to prepare technical plans or EPRS toolkits (*i.e.* disease strategy manuals, fish disease outbreak/fish kill investigations, contingency plans, strategy manuals, simulation exercises, proper documentation, epidemiology and surveillance).

References:

Arthur JR and Reantaso MB. 2018. Guidelines for the preparation of a National Aquatic Animal Health Strategy (Annex IIb) of Report of the FAO/DAFF/AU-IBAR/SADC Regional Workshop on Improving Aquatic Animal Health Management and Strengthening Biosecurity Governance in Africa, Durban, South Africa, 5-7 November 2014. In: FAO. 2018. Development of a Regional Aquatic Biosecurity Strategy for the Southern African Development Community (SADC) FAO Fisheries and Aquaculture Circular No. C1149. Rome. 344 pp. (http://www.fao.org/3/ca2764en/CA2764EN.pdf)

Arthur JR, Baldock CF, Subasinghe RP, and McGladdery SE. 2005. Preparedness and Response to Aquatic Animal Health Emergencies in Asia: Guidelines. FAO Fisheries Technical Paper No. 486. Rome, FAO. 40 pp.

Baldock C. 2005. National contingency plans for aquatic animal disease emergencies: the way forward for developing countries. p. 157–165. In: Subasinghe RP, Arthur JR (eds.). Regional workshop on preparedness and response to aquatic animal health emergencies in Asia. Jakarta, Indonesia, 21–23 September 2004. FAO Fisheries Proceedings. No. 4. Rome, FAO. 2005.178p.

FAO/NACA. 2000. The Asia Regional Technical Guidelines on Health Management for the Responsible Movement of Live Aquatic Animals and The Beijing Consensus and Implementation Strategy. FAO Fisheries Technical Paper No. 402. Rome, FAO. 2000. 53p. http://www.fao.org/tempref/docrep/fao/005/x8485e/x8485e00.pdf

Perer R, Bondad-Reantaso M, Chávez Sánchez M, and Irde E. 2018. A survey of national emergency preparedness and response (EPR) systems. FAO Project TCP/INT/3501: Strengthening biosecurity governance and capacities for dealing with the serious shrimp infectious myonecrosis virus (IMNV) disease. FAO Fisheries and Aquaculture Circular No. 1172. FAO. Rome. 40 pp. Licence: CC BY-NC-SA 3.0 IGO

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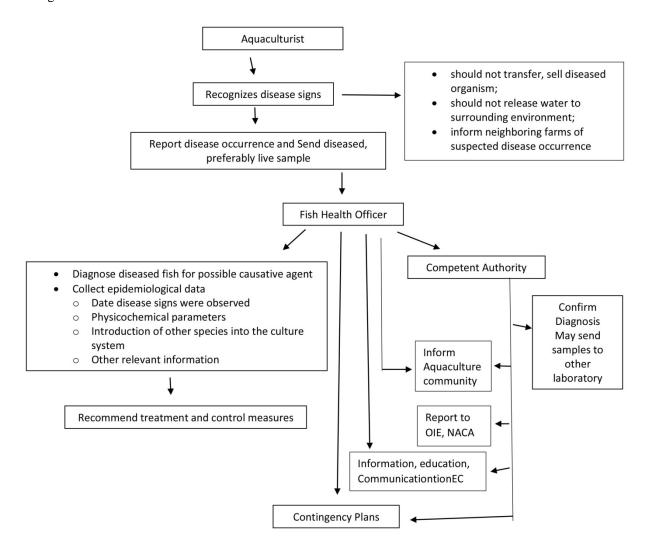
Ms. Nualanong Tongdee

Appendix 2. Competent Authorities in ASEAN Member States Responsible for Aquatic Animal Health Emergencies. Country

Country	Agency
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	Ministry of Primary Resources and Tourism
	Muara Fisheries Complex, Jalan Peranginan Pantai Serasa Muara, BT1728, Brunei
	Darussalam
	Tel: +673 277 0068-69
	Fax: +673 277 1063
Cambodia	Department of Aquaculture Development
	Fisheries Administration
	Ministry of Agriculture, Forestry and Fisheries
	#186, Preah Norndom Blvd., Tonle Bassac ward Chamcar Mon Dist., Phnom Penh
	P.O. Box 582, Phnom Penh, Cambodia
	Tel: +855 12 915567
	Fax: +855 23 21579
Indonesia	Directorate General of Aquaculture
	Ministry of Marine Affairs and Fisheries
	Jl. Medan Merdeka Timur No. 16
	Gedung Mina Bahari Building III Jakarta 10110, Indonesia
	Tel: +62 21 3519070
	Fax: +62 21 386
Japan	Animal Products Safety Division, Food Safety and Consumer Affairs Bureau
Japan	Ministry of Agriculture, Forestry and Fisheries
Lao, PDR	Department of Livestock and Fisheries
Lao, I DK	P.O. Box 6644, Vientiane 01000 Lao PDR
	Tel/Fax: +856 21 215243
Malaysia	Department of Fisheries
Maiaysia	Level 2 Tower 4G2, Wisma Tani
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	Administrative Centre 62628
Mysaman	
Myanmar	Department of Fisheries Ministry of Agricultura Livesteek and Imigation
	Ministry of Agriculture, Livestock and Irrigation
	Building 36, Nay Pyi Taw, Myanmar Tel: +95 9 7 8118 7927
DL'11''	Fax: +95 67 418536
Philippines	Bureau of Fisheries and Aquatic Resources
	PCA Building, Elliptical Road
	Diliman Quezon City, Philippines
	Tel: +632 254 6772
a:	Fax: +632 254 6773
Singapore	National Parks Board (NParks)
	Animal and Veterinary Service
	52 Jurong Gateway Road, #09-01, Singapore 608550
	Singapore Food Agency
	52 Jurong Gateway Road, #14-01, Singapore 608550
	Tel: +65 6795 2880
Thailand	Department of Fisheries
	50 Phahonyothin Road, Khwaeng Latyao
	Kaset Klang, Chatuchak, Bangkok 10900, Thailand
	Tel: +662 579 7444, +662 562 0583
Vietnam	Department of Animal Health
	Ministry of Agriculture and Rural Development
	Directorate of Fisheries
	10 Nguyen Cong Hoan Street
	Ba Dinh District, Hanoi, Viet Nam



Appendix 3. Flow diagram summarizing the different actions to be undertaken during any disease emergencies.



Annex 18

PROGRESS OF THE REGIONAL GUIDELINES ON COLD CHAIN MANAGEMENT OF FISH AND FISHERY PRODUCTS IN THE ASEAN REGION

EXECUTIVE SUMMARY

The Regional Guidelines on Cold Chain Management of Fish and Fishery Products in ASEAN Region is the main output of the MFRD project on Cold Chain Management of Seafood. The guidelines have been developed following a series of participatory and consultative process and workshops involving fishery officials from the ASEAN-SEAFDEC Member Countries and cold chain trials that were implemented in each of the ASEAN-SEAFDEC Member Countries organized under the Marine Fisheries Research Department (MFRD) Programmes. Consultations were done with various experts on cold chain management of fish and seafood quality assurance from Curtin University (Australia) and Sydney Fish Market. The guidelines were finalized and adopted by senior fishery officials from all member countries at the End-of-Project Meeting, held in April 2018, in Singapore. Following the endorsement of the guidelines by the SEAFDEC Council at the 51st Meeting of the SEAFDEC Council in March 2019, the ASEAN officials endorsed the guidelines at the ASWGFi in June 2019, SSOM-AMAF in August 2019 and finally at the 41AMAF in October 2019.

The guidelines, which were drafted with the consensus of and in accordance to the collective inputs from all the ASEAN-SEAFDEC Member Countries, will serve as a common platform and reference for member countries when implementing cold chain management for fish and fishery products. The guidelines comprise 5 chapters and an annex. The first three chapters serve as an introduction, comprising scope and overview, definitions of terms used in the guidelines, and a generic flow chart on the cold chain for fish and fishery products. The introductory chapters help to provide a basic understanding of the elements and focus of the guidelines. The remaining chapters provide the actual guidelines, highlighting the points at which cold chain management should be implemented, and how it can be implemented by the member countries. Critical points, as well as common challenges faced are also listed in these chapters, along with potential solutions. The Annexes contain information of controlling and monitoring techniques and technologies and microbial limits on materials used in the implementation of cold chain management. The final chapter is the references used in drafting these guidelines.

REQUIRED CONSIDERATION BY THE MEETING

The 22nd Meeting of FCG/ASSP is requested to take note of the endorsed Regional Guidelines on Cold Chain Management of Fish and Fishery Products in ASEAN Region (*Appendix 1*). The 22nd FCG/ASSP Meeting is also requested to take note that the ASEAN-JICA Food Value Chain Project has proposed a project on information sharing on implementation of the Regional Guidelines on Cold Chain Management for Fish and Fishery Products in the ASEAN Region to support the adoption of the guidelines in the region. The project will be undertaken by SEAFDEC MFRD programmes.



Regional Guidelines on Cold Chain Management of Fish and Fishery Products in ASEAN Region

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 - c) Chilling
 - d) Processing
 - e) Freezing
 - f) Glazing
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- 6. Annexes
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 - c) Checklist on Temperature Monitoring
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Background

The Codex Alimentarius Commission (2008) defines Cold Chain as "A term embracing the continuity of successively employed means to maintain the temperatures of foods, and appropriate, from receiving through processing, transport, storage, and retailing". As affluence in the region continues to grow, demands for high quality food, and particularly seafood, also grows. Furthermore, as countries seek to facilitate and encourage more bilateral trade, it is not uncommon for goods to travel thousands of miles before reaching a market. However, fish and seafood are temperature sensitive and highly perishable commodities, with deterioration occurring almost immediately following catch or harvest. Fish and seafood deterioration can occur through microbiological metabolism, oxidative reactions, and enzymatic activity, which are processes that can be accelerated through poor temperature control. Cold chain management is an essential tool in maintaining and ensuring the quality and safety of fish and seafood, as well as its economic value.

Throughout the supply chain, the fisheries industry heavily relies on proper cold chain management practices to ensure the quality, safety and commercial viability of its products. From aquaculture production or wild catch, post-harvest handling, receiving, processing, packing, transport, to retail, it is essential to ensure there is no breakage in the cold chain to main high quality and safety of the seafood. Practices such as the application of ice, use of refrigerated seawater, storage in refrigerated facilities, and chilling or freezing, are used to ensure that the fish and seafood is kept under cold chain throughout the supply chain. However, these low temperature conditions must also be supported by good and hygienic handling practices, to effectively delay spoilage of the fish and seafood.

In the ASEAN region, fisheries industry players face many challenges in the implementation of a cold chain system. Firstly, many players in the fisheries industry are small-medium enterprises, with limited access to technologies and appropriate facilities, and lack knowledge of cold chain management practices. Furthermore, many fisheries supply chain systems in this region involve individual players who operate as single entities. Thus, even if businesses are able to procure facilities and technologies to apply cold chain management in the handling of fish and seafood, problems arise in maintaining the system throughout the supply chain. Finally, cold chain management practices are still largely voluntary in many ASEAN Member Countries, and are not enforced as a requirement

In view of this, the Southeast Asian Fisheries Development Centre (SEAFDEC), under its Marine Fisheries Research Department (MFRD) Programmes, has initiated and implemented a project on the Cold Chain Management of Seafood from 2015-2017/18, of which this set of guidelines were developed in close consultation with the ASEAN-SEAFDEC member countries. The project is in line with the ASEAN-SEAFDEC Resolution (20) and Plan of Action (D58 and D63), as endorsed at the ASEAN-SEAFDEC Conference 2011. The goals of the project were to create a platform for the ASEAN region to share knowledge, experiences, and cost-effective technologies on the cold chain management of seafood, and to develop a set of guidelines for cold chain management of fish and fishery products to serve as a benchmark for ASEAN Member Countries when developing their own national guidelines.

1. Scope and Objective

Scope

The Guidelines cover the application and observation of time and temperature controls for the cold chain management of raw and minimally processed chilled and frozen fish and fishery products, along the stages of post-harvest handling, chilling, receiving, processing, freezing, glazing, packing, cold storage, transport and distribution, retail and wholesale.

Objective

The Guidelines aim to serve as a reference for best practices in cold chain management for raw and minimally processed chilled and frozen fish and fishery products to ensure safety, quality, and wholesomeness of such products.

2. Definitions

As used in the Guidelines, the following terms are defined as follows:

Chilling

The process of cooling fish and fishery products such that the core temperature is-between 0 to 5 $^{\circ}$ C.

Note: As per CAC Code of Practice for Fish and Fishery Products, chilling was defined as the process of cooling fish and shellfish to a temperature approaching that of melting ice. That temp. is 0 °C. Therefore we suggest putting a range of between 0 to 5 °C. This is also to differentiate it from superchilling.

Clean Water

Water from any source where harmful microbiological contamination, substances and/or toxic plankton are not present at such levels that may adversely affect the safety of fish and fishery products intended for human consumption.

EARD

Cold Chain

Consists of a series of operations involved in time and temperature controls in post-harvest handling, receiving, processing, freezing, glazing, packing, storing, transporting, and retail and wholesale of fresh, chilled and frozen fish and fishery products to ensure that food safety and quality is maintained.

<u>Fish</u>

Any of the cold blooded aquatic vertebrates and invertebrates intended for human consumption.

Fishery products

Any edible human food product in which fish is the characterising ingredient.

Fish and fishery products business

A business, enterprise or activity that involves the production and processing of fish and fishery products, intended for human consumption.

Fish and fishery products handler

A person who engages in the production and processing of fish and fishery products, intended for human consumption.

Glazing

Application of a protective layer of ice formed at the surface of a frozen product by spraying or dipping it into chilled potable water, or chilled potable water with approved additives, as appropriate.

Note: To be consistent with the statement in section (f)

<u>Harvesting</u>

The process which involves taking the fish out from water for human consumption.

Minimally Processed Products

Products derived from primary processing (*e.g.* washing, gutting, deboning, filleting, freezing, glazing, chilling and packaging), that does not fundamentally alter the raw fish or that only separate the whole, intact fish into components.

Post-Harvest Handling

Handling of fish that begins after fish is taken out from water for human consumption, prior to processing.

Potable Water

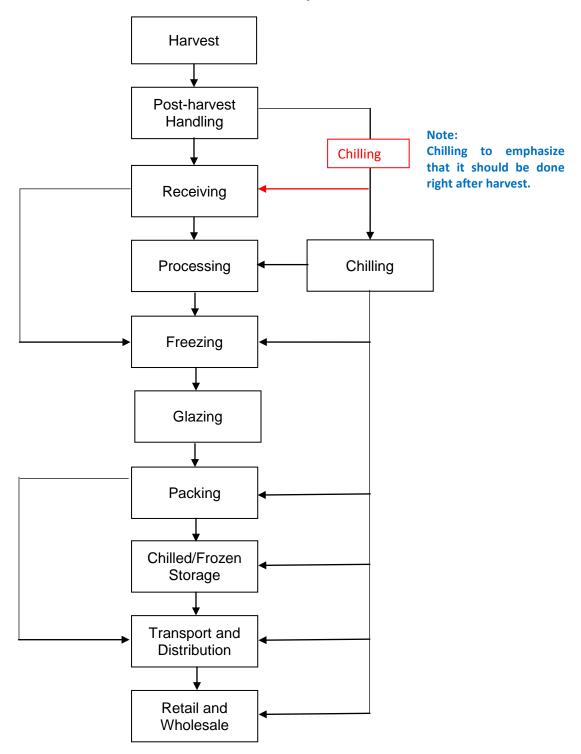
Fresh water fit for human consumption. Standard of potable water should not be lower than those contained in the latest edition of The International Standards for Drinking-Water issued by the World Health Organisation (WHO).

Time and Temperature controls

The monitoring and maintaining of time and temperature of fish and the fishery products through the supply chain, to ensure safety and quality of products is maintained.



3. Generic Flow Chart on Cold Chain for Fish and Fishery Products



4. Production

Chilled fish and fishery products should be maintained between 0 to 5 °C. During processing for short periods, temperature of fish and fishery products should not exceed 10°C, subject to national regulations.

The core temperature of frozen fish and fishery products should be maintained at a temperature of -18°C or below.

Monitoring, controlling and recording of time and temperature should be done regularly. All temperature monitoring devices should be calibrated as appropriate.

a) Post-harvest

(include on-board handling and harvest from aquaculture facilities)

The post-harvest operations should ensure that all measures are taken to maintain adequate time and temperature control for the fish and fishery products.

b) Chilling

Fish and fishery products should be chilled and maintained between 0 to 5 °C. Ice used in the process should be made from clean water.

c) Receiving

Collecting

Fish and fishery product businesses should take all monitoring and recording measures to ensure it only accepts fish and fishery products that is under adequate time and temperature control at the point of receiving.

Fish and fishery product handlers should be competent in product safety and quality evaluation techniques, including time and temperature monitoring, to ensure raw fish and fishery products meet essential safety and quality provisions of the appropriate standard.

Sorting and grading

The facility for sorting and grading should be capable of maintaining time and temperature control of the fish. To minimise handling damage, fish and fishery products should be handled with care, particularly during sorting and grading in order to avoid physical damage such as puncture and mutilation. Where containers are used for sorting and grading of fish and fishery products, they should be cleaned and not overfilled. Sorting and grading should

be carried out with minimal delay.

Holding

Fish and fishery products before and after processing need to be maintained under adequate time and temperature control. It should be stored using appropriate fish containers.

d) Processing

Adequate time and temperature control should be maintained and recorded during processing.

Washing and gutting

An adequate supply of chilled clean water should be available for washing. Gutted fish should be drained and well iced, or appropriately chilled and stored in clean containers, in specially designated and appropriate areas which maintain the fish and fishery products under time and temperature control.

Filleting/deboning

Fish and fishery products should be appropriately iced or chilled in clean containers, protected from dehydration, and stored in appropriate areas. The temperature of the fish and fishery products should be maintained at not more than 10°C during filleting and deboning, and between 0 to 5 °C during storing.

Thawing

Thawing can be done under clean air or potable water. Temperature used during thawing should be controlled such that core temperature of product is maintained between 0 to 5°C.

e) Freezing

The fish and fishery products should be subjected to freezing process as quickly as possible. A time and temperature regime should be established and should take into consideration the freezing equipment and capacity as well as the nature of the fish and fishery products. The size, shape and temperature of fish and fishery products entering the freezing process should be as uniform as possible. Frozen products should be moved to the cold storage facility as quickly as possible. The core temperature of the frozen fish and fishery products should be monitored regularly for completeness of the freezing process, at a minimum of -18°C.

f) Glazing

Glazing is considered complete when the entire surface of the frozen fish product is covered

with suitable protective coating of ice and should be free of exposed areas where dehydration can occur. Chilled potable water should be used for glazing.

g) Packing

Packing should be conducted in the shortest time possible, to ensure product is maintained within required temperatures. Packaging material should be clean, good, durable, and sufficient for its intended use and of food grade material.

h) Storing

Fish and fishery products should be stored under time and temperature control, where there is an adequate means of monitoring and recording its time and temperature. Chilled fish and fishery products should be maintained between 0 to 5 °C. The core temperature of frozen fish and fishery products should be maintained at -18°C or below.

i) Transport and Distribution

A fish and fishery product business operator should ensure fish and fishery products are kept chilled or frozen, and exercise means of monitoring time and temperature of the products during transport and distribution.

Before and after loading, the cleanliness, suitability and sanitation of the transport vehicle should be verified.

The transport vehicle should be capable of maintaining adequate time and temperature control of fish and fishery products. The products should be packed with protection against contamination, exposure to extreme temperatures and the drying effects of the sun or wind. Arrangement of the packages within the transport vehicle should optimise time and temperature control, and should ensure that any possible damage to fish and fishery products is avoided.

j) Retailer and Wholesaler

During receiving, fish and fishery products should not be accepted if required temperatures are not met, and non-conformances are present in packaging or product. Delivery should be scheduled in a manner to ensure that fish and fishery products can be transferred properly and stored in the shortest possible time.

Adequate time and temperature control should be maintained in display shelves. It is recommended to retain records of temperature monitoring. Chilled fish and fishery products should be maintained between 0 to 5 °C. Frozen products should be maintained at -18°C or below.

The display should be situated away from sources of heat and direct sunlight, and not overloaded. Wet market operators should ensure quick and proper unloading of fish and fishery products upon receipt. Equipment used in wet markets should be clean, and display cabinets should protect fish and fishery products from external factors such as sunlight and pests. Products should be maintained under ice to ensure temperature control, and stored in clean containers.

Handlers should implement "first in first out" practice.

5. Skills and Knowledge

A fish and fishery product business operator should ensure that fish and fishery product handlers have skills and knowledge in food safety, quality and personal hygiene.

6. Annexes

a) Chilling Methods

Some examples of chilling methods are as listed below.

Note: Icing is replaced by chilling because the mechanism for RSW cannot be qualified as icing.

- Ice slurry: One-part water to one-part ice
- Direct Icing: cooling is effected by the direct contact between the melted ice and the fish; alternating layers of fish and ice
- Chilled seawater: Seawater is chilled at 0°C, with the addition of ice. Ideal for vessels fitted with holding water
- Refrigerated seawater: Seawater chilled using mechanical cooling system. Used in vessels with holding water

It is essential to ensure that clean water is used to make ice used in icing. Fish should also be stored in shallow layers, and surrounded with finely divided ice, or ice slurry before processing. Avoid over stacking and over filling storage boxes or containers, to minimise risk of damaging and contaminating fish and fishery products.

In direct icing, storage boxes and containers should have drainage outlets to remove melted ice. Bottom and top of storage boxes or containers should be covered with sufficient layers of ice. Ice should be added when necessary.

Different forms of ice to use

- Flake ice: Allows for an easier, more uniform and gentle distribution of ice around fish and in storage container. It will cause very little or no mechanical damage to fish, and will chill fish more quickly than the other types of ice.
- Crushed ice: Large and sharp pieces of ice in this ice form may damage fish
 physically. However, finely crushed ice melt quickly on the fish surface and
 large pieces of ice that tend to last longer and compensate for thermal losses.
- Block ice: Requires less stowage volume for transport, and melts slowly. It also contains less water at the time it is crushed than flake ice
- Tube ice: Very durable, and has large surface area. More suitable for use in chilled Seawater systems if ice is wet, as it normally is under tropical conditions, as less water exists on its surface
- Slush ice: Fine ice crystal that allows flow-ability through pumping systems, allowing it to fill small spaces without the use of water.

Microbiological quality of ice

The microbiological quality of ice made from potable water is as shown below.

Parameters	Limits
E. coli	N.D. in 100ml
Coliform bacteria	N.D. in 100ml

(Where N.D. denotes Not Detected)

Adapted from the World Health Organisation (2002)

b) **Temperature Monitoring Methods**

- Data Loggers: A range of temperature data-logger devices are available. Such
 devices are flexible in their operation, recording and some providing
 information direct to an alarm management system.
- Digital Thermometers: A flat blade or needle probe is sometimes the selected temperature measuring device
- Bi-metal Thermometers: A bi-metal dial thermometer may be suitable.



- Glass Thermometers: Mercury-in-glass or alcohol-in-glass thermometers pose a potential hazard due to possibility of cross- contamination.
- Infra-red (non-contact) Surface Temperature Thermometers: This can be a fast way to take product surface temperatures without having to open the case or damage product. Be aware that measuring the temperature of outer packaging is indicative only of the temperature of the product inside, and may be inaccurate due to abuse and calibration issues.
- Data devices from new technologies: Emerging technologies include active or passive RFID tags to monitor product temperature fluctuation history. Higher end, robust and reliable, wireless sensor network based, online monitoring solutions embracing product traceability, are available.
- Time Temperature Indicators (TTIs): TTIs provide 'indication' rather than quantitative measurement, which can be helpful, particularly at package monitoring level. Typically, these are based on heat sensitive film on packaging that highlight cumulative temperature abuse.

c) **Checklist on Temperature Monitoring**

Checklists should include details in accordance to national and international regulatory requirements, such as:

- Name and address of supplier
- Date and time of recording
- Name of product/equipment to be monitored
- Recorded temperature
- Name of monitoring personnel
- Signature/initials of verifying personnel

d) <u>Different types of Freezing Techniques</u>

- Continuous stream of cold air: Continuous streams of cold air is blown onto the fish and fishery products, freezing the products to the desired temperature.
 Such equipment includes Air Blast Freezers.
- Direct contact: Direct contact between the fish and fishery products, and a refrigerated surface, to allowing freezing through conduction. Such equipment includes Contact Freezers.

Immersion or spraying: Fish and fishery products are sprayed with refrigeration liquids within freezing units to bring products to desired temperature.

e) Thawing Methods

- Air Thawing: Fish and fishery products are left at ambient or chilled temperatures until thawing has completed. This method is recommended for small and individually frozen products, as waterlogging can occur. Good drainage should also be ensured.
- Water Thawing: Products are placed in running water to aid controlled thawing. This means that the product can be thawed quickly, producing a better quality product. Factors that can be controlled include water temperature, flow rate and product separation.

7. References

Centre for Food Safety. (2014). *Microbiological Guidelines for Food: For ready-to-eat food in general and specific food item* (1st ed., p. 19). Hong Kong: Centre for Food Safety, Food and Environmental Hygiene Department.

Codex Alimentarius. (2012). Code of practice for fish and fishery products (2nd ed.). Rome: World Health Organization.

World Health Organisation. (2002). *Guidelines for drinking-water quality* (2nd ed.). Singapore: Geneva.

Annex 19

CITES-RELATED ISSUES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement between governments (also known as Parties). Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival in the wild, which was entered into force on 1 July 1975. CITES regulates international trade in over 35,000 species of animals and plants, including their products and derivatives, ensuring their survival in the wild with benefits for the livelihoods of local people and the global environment.

The 17th Meeting of the Conference of the Parties to CITES (CoP17, Johannesburg, 2016) adopted a large number of decisions related to the management of and trade in sharks and rays. Also at the CoP17, Parties decided to include four additional species of sharks (*Alopias* spp. And *Carcharhinus falciformis*) and nine species of rays (*Monula* spp.) in Appendix II, with entry to force delayed until 4 October 2017.

CITES (2018) reported that as of January 2017, about 5,800 species of animals and 30,000 species of plants are protected by CITES against over-exploitation through international trade, and are listed in the CITES Appendices. Currently the CITES include approximately 100 commercially-exploited aquatic species (CEAS) of fish, mollusks and echinoderms.

The listing of CEAS into the CITES Appendices is one crucial issue faced by the fisheries sectors of Southeast Asia as it could impact not only on the management of fisheries but also on the economies of the countries in the region. Such impacts are anticipated not only as a result of regulation in trade of the species being listed in the CITES Appendices, but also in the trade of look-a-like species, as well as trade in parts or processed forms of the species. Moreover, the listing could also result in the termination of data collection on the catch and information on the status of the species. Furthermore, difficulties could also be anticipated in delisting or down-listing of the species once these are listed in the CITES Appendices.

SEAFDEC in response to the request made at the 32nd Meeting of SEAFDEC Program Committee Meeting in 2000, a regional program has been initially implemented with the support from the Japanese Trust Fund entitled "Assistance of Capacity Building in the Region to Address International Fish Trade Related Issues" implementing under the ASEAN-SEAFDEC Strategic Partnership Mechanism. The major output from these program activities is to formulate a regional common/coordinated position of the ASEAN-SEAFDEC Member Countries (MCs) to reflect situation of the Southeast Asian fisheries. Such common/coordinated position of the ASEAN-SEAFDEC MCs has been addressed by SEAFDEC and its MCs at the international fora (*e.g.* CITES-CoP, etc.) to safeguard the regional interest.

Since 2013 to date, SEAFDEC Training Department (TD) and Marine Fisheries Research and Development Department (MFRDMD) has implemented a number of capacity building activities to support AMS in collecting scientific data on the shark species listed under CITES Appendices. Moreover, with the funding support from EU through CITES Secretariat in 2015 and 2018, SEAFDEC carried out one-year regional project on shark data collection in relevant countries of ASEAN Member States (AMSs) to support information-poor countries to: compile information on shark data collection; organizing national workshops and training sessions on shark identification for local enumerators; capacity building on recording of landing data at species level. The outputs from this program include: compiled and published results from one-year data collection in the participating countries; taxonomic information of sharks/rays caught in the Southeast Asian region collected; trained enumerators making correct and validate of species at landing sites during data collection activities; compiled information on utilization of sharks; and transferred field guide on sharks and rays species in Cambodian, Myanmar, and Vietnamese languages.

UPDATING INFORMATION ON CITES-RELATED ISSUES

• Positions of the ASEAN-SEAFDEC Member Countries on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices at the CITES CoP18

In order to facilitate the discussion of these proposals by the ASEAN-SEAFDEC Member Countries, SEAFDEC with support from the Government of Japan through the Japanese Trust Fund convened the

"Regional Consultation for Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices" on 30-31 January 2019 in Bangkok, Thailand. Attended by fisheries experts and National Coordinators from the ASEAN-SEAFDEC Member Countries, namely: Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam as well as Officers from the SEAFDEC Secretariat and Departments, namely TD, AQD, MFRDMD and IFRDMD, and with Resource Person from FAO Rome, the Regional Consultation came up with technical recommendations and the ASEAN-SEAFDEC Countries' Positions on the proposals for the possible inclusion of the aforesaid CEAS into the CITES Appendices at the CITES-CoP18. The Positions appear as *Appendix 1*.

• New Listing of CEAS at the CITES CoP18 (17-28 August 2019, Geneva, Switzerland)

All proposals to list the CEAS were adopted at CoP18 as shown in *Appendix 2*.

REQUIRED CONSIDERATION BY THE MEETING

The Meeting is requested to take note the progress of international and regional initiatives on CITES issues, as well as to provide policy directives to SEAFDEC and Member Countries on the implementation of regional/national initiatives related to CITES listed CEAS.

Appendix 1 of Annex 19

POSITIONS OF THE ASEAN-SEAFDEC MEMBER COUNTRIES

On the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices at the CITES-CoP18

(Adopted by the "Regional Consultation for Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices," 30-31 January 2019, Bangkok, Thailand)

(Endorsed by FCG/ASSP on 21 March 2019; ASWGFi on 29 March 2019; AWG CITES &WE on 2-4 April 2019; and SOM-AMAF on 6 May 2019)

I. INTRODUCTION

Four proposals have been submitted by CITES Parties for listing of Commercially Exploited Aquatic Species (CEAS) into the CITES Appendices for consideration during the 18th Session of the Conference of the Parties of CITES (CITES-CoP18), namely:

- A. Inclusion of the blackchin guitarfish (*Glaucostegus cemiculus*), and the sharpnose guitarfish (*Glaucostegus granulatus*) and all of other giant guitarfishes, *Glaucostegus* spp. in Appendix II;
- B. Inclusion of the following three species belonging to the subgenus Holothuria (Microthele): *Holothuria* (Microthele) fuscogilva, Holothuria (Microthele) nobilis and Holothuria (Microthele) whitmaei, in Appendix II;
- C. Inclusion of the short-fin Mako shark, *Isurus oxyrinchus* and long-fin Mako shark *Isurus paucus* in Appendix II; and
- D. Inclusion of the two species commonly referred to as the white-spotted wedgefish, *Rhynchobatus australiae* and *Rhynchobatus djiddensis*, in Appendix II; and inclusion of all other species in the Family Rhinidae (wedgefish): *Rhynchobatus cooki*, *Rhynchobatus immaculatus*, *Rhynchobatus laevis*, *Rhynchobatus luebberti*, *Rhynchobatus palpebratus*, *Rhynchobatus springeri*, *Rhynchorhina mauritaniensis*, *Rhina ancylostoma*, and any other putative species of the Family Rhinidae in Appendix II.

In order to facilitate the discussion of these proposals by the ASEAN-SEAFDEC Member Countries, SEAFDEC with support from the Government of Japan through the Japanese Trust Fund convened the "Regional Consultation for Development of the ASEAN-SEAFDEC Common Position on the Proposed Listing of Commercially-exploited Aquatic Species into the CITES Appendices" on 30-31 January 2019 in Bangkok, Thailand. Attended by fisheries experts and National Coordinators from the ASEAN-SEAFDEC Member Countries, namely: Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam as well as Officers from the SEAFDEC Secretariat and Departments, namely TD, AQD, MFRDMD and IFRDMD, and with Resource Person from FAO Rome, the Regional Consultation came up with technical recommendations and the ASEAN-SEAFDEC Countries' Positions on the proposals for the possible inclusion of the aforesaid CEAS into the CITES Appendices at the CITES-CoP18.

II. Recommendations, Countries' Views and Positions on the Proposals¹

	Recommendations	Countries' view	Positions of countries		
Proposal			Support	Not support	Position held in abeyance
A	• As Glaucostegus cemiculus and G. granulatus are not reported in the Southeast Asian region, while other species of the Genus Glaucostegus are caught as "bycatch," listing of the species into the Appendix II of CITES might not reduce the catch of these species. Promotion of better management schemes, e.g. bycatch reduction, use of selective fishing gears, would therefore be more appropriate approaches for the conservation of the species.	Brunei: There is no record of catch of this species at species level. They are mixed with the wedgefish, annual landing of about 500 kg. Small-scale fishing gear including gillnet are catching this group as by-catch, consuming only at local. Cambodia: There is no record of catch of this species in Cambodia, while some published data is insufficient to support the listing of the species into the Appendix II Indonesia: Although the two species are not commonly found in the region, some other species of the Genus Glaucostegus are found, so problems on products identification and traceability could be enormous Japan: There is insufficient data to support the listing of the species into Appendix II, also considering that this is by-catch species, regulating trade would not help in conserving the species Lao PDR: As a landlocked country, Lao PDR will follow the position of majority of the ASEAN countries Malaysia: As there is inadequate data to support the listing of the species into the Appendix II, and Malaysia is not range State of these species, Malaysia recommends that the species (Glaucostegus cemiculus and G. granulatus) could instead be listed in Appendix III Myanmar: The proposed species are found only in few numbers (as by-catch) in Myanmar waters Philippines: The Philippine position on the proposed listing is consistent with the provisions in the Philippine national law for aquatic species that are classified as threatened s under the IUCN Red List	Philippines	Brunei Darussalam Cambodia Indonesia Japan Lao PDR Malaysia Myanmar Thailand	Singapore* Viet Nam*



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Meeting of Fisheries Consultative Group of the ASSP, 14-15 November 2019

	Recommendations	Countries' view	Positions of countries		
Proposal			Support	Not support	Position held in abeyance
		Thailand: Only few numbers of the species are caught in Thai waters, and there would be problems on the identification of these species Viet Nam: There is not enough scientific evidence to support the listing of the species in CITES Appendices, and if there is no ASEAN common position, the position of Viet Nam will be subject to the decision of the CITES authorities in Viet Nam			
В	 Although fisheries management measures for sea cucumbers are being promoted in some countries in the region, such effort should be strengthened. The potentials for hatchery production of teatfish should be explored to support prospects for aquaculture and stock enhancement. 	Brunei: concerning difficulties in identifying the species under dry condition. In addition, Brunei does no longer export any sea cucumbers to Hong Kong as they did before. Cambodia: Although there is no catch data on the three species (i.e. not species specific), Cambodia is more concerned about the overexploited status of other sea cucumber populations in Cambodia, and so currently, Cambodia has the position to "support" the proposal however the country's Fisheries Office would consult with the CITES Scientific Authority for Aquatic Resources in Cambodia to finalize and confirm such position Indonesia: There is no available species specific data record for these species proposed, while sea cucumber has been recorded as a single commodity (as trepang) in Indonesia, listing the species in the CITES Appendices would therefore require big effort in recording and trade monitoring, especially that the fisheries statistical data does not classify it into species, not even genus specific Japan: There is not enough scientific evidence to counter the proposal, but implementation should also be considered Lao PDR: As a landlocked country, Lao PDR will follow the position of majority of the ASEAN countries Malaysia: There is no available species specific data recorded for these species proposed, while sea cucumber trade categorized these	Philippines	Brunei Darussalam Indonesia Lao PDR Malaysia Myanmar Thailand	Cambodia** Japan** Singapore* Viet Nam*

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	Recommendations	Countries' view	Positions of countries		
Proposal			Support	Not support	Position held in abeyance
		species under a single commodity (gamat in Malay; sea cucumber in English) in Malaysia, so that up listing these species in CITES requires a big challenge for traceability			
		Myanmar: There is no catch data in the country on the three proposed species			
		Philippines : The Philippine position on the proposed listing is consistent with the provisions of the Philippine national law for aquatic species that are already classified as threatened in the IUCN Red List.			
		Furthermore, prior to CITES CoP16, the Philippines had planned to submit a proposal for the Appendix III listing of selected high value species that includes <i>Holothuria scabra</i> and the two teatfish species: <i>H. fuscogilva</i> and <i>H. whitmae</i> , using as scientific evidence the results of the 2004-2008 national stock assessment and trade surveys conducted by the Philippine Bureau of Fisheries and Aquatic Resources (BFAR) and local academic institutions			
		Thailand : Although <i>H. nobilis</i> is a species rarely found in Thailand, but Thailand has compiled some import data of other sea cucumber species, <i>i.e.</i> for <i>H. fuscogilva</i> , and the information provided by the proponent (EU) is inconsistent with the available data of Thailand, so that more studies on the species would be necessary, while listing of this species in CITES Appendices would be a big challenge for traceability			
		Viet Nam: Most of sea cucumber species are under strict management in the country's new Fisheries Law (in endangered and rare list), in which it is forbidden to catch teatfish, although Viet Nam supports for the fisheries management of sea cucumbers			
С	As the proposed species are not targeted in the Southeast Asian region but is caught as "by-catch,"	Brunei : no record of catching these species in Brunei waters. There is insufficient scientific information in order to support the proposal		Brunei Darussalam	

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	Recommendations	Countries' view	Positions of countries		
Proposal			Support	Not support	Position held in abeyance
	listing of the species into the CITES Appendix II would not reduce the catch of these species. Promotion of better management schemes should therefore be the more appropriate measures for the	Cambodia: Although the species is not native to Cambodia, the species does not meet the criteria for listing under Appendix II Indonesia: The species is mainly caught as by-catch from longline, while Indonesia has already developed the NPOA (1st period: 2010-2015; 2nd period: 2016-2020) for sharks, so this species can be		Cambodia Indonesia Japan	
	conservation of the species.	addressed through this management plan and the Regional Fisheries Management Organizations (RFMOs) management measures		Lao PDR	
	Listing of the species should be considered taking into account the	Japan: The species does not meet the criteria for listing under		Malaysia	
	situation that the stock status does not meet CITES listing criteria and	Appendix II, and also, implementation issues are also expected		Myanmar	
	that implementation challenges are expected.	Lao PDR : As a landlocked country, Lao PDR will follow the position of majority of the ASEAN countries		Philippines***	
		Malaysia: Although the species does not meet the criteria for listing		Thailand	
		the species under Appendix II, Malaysia recommends that the range States of these species in areas with depleted stocks should consider proposing the species for listing under Appendix III		Singapore* Viet Nam*	
		Myanmar : The species are mainly caught as by-catch in the country and only in small quantities			
		Philippines ² : While the proposed listing of both species would benefit both the animals and stakeholders, more data is needed to support its listing in any of the CITES Appendices .Although the WCPFC have Conservation and Management Measures)CMM (for sharks in general and for both species in particular, data on population decline, and other listing criteria are inadequate. Locally, both species needs further population assessments by the expert			
		members of the Philippine Aquatic Red List Committee)PARLC .(Outcomes of assessments would be inputs into the updating of the National Red List of Threatened Aquatic Species the country; as a necessary element for doing Non-Detrimental Finding)NDF (for restrictions on international trade and other measures such as annual			

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Proposal	Recommendations	Countries' view	Positions of countries		
			Support	Not support	Position held in abeyance
D	As the proposed species are not targeted in the Southeast Asian region but caught as "by-catch," listing of the species into the CITES Appendix II might not reduce the catch of these species. Promotion of better management schemes for reduction of by-catch should therefore be the more appropriate measures for the conservation of the species.	quotas, size limits, seasonal fishing closures, and the like. Thailand: The species is oceanic and not native to Thailand, so that after Thailand ceased the oversea operations of Thai fishing vessels since 2016, only few accidental catch had been reported although there could still be crucial issues on species identification Viet Nam: There is insufficient data to support the listing of these species under the CITES Appendix II Brunei: There is no record of catch of this species at species level. They are mixed with the guitarfish, annual landing of about 500 kg. Small-scale fishing gear including gillnet are catching this group as by-catch, consuming only at local. Cambodia: There is insufficient data to support the listing of the species into the CITES Appendix II Indonesia: Wedgefishes are still abundant and contribute to 16% of Indonesia's production of rays, although Indonesia needs to put more efforts on species identification to distinguish wedgefishes from other species under the same genus Japan: There is no scientific evidence on the stock that meet the criteria for listing of the proposed species into CITES Appendix II, and also considering that it is by-catch species, regulating trade would not help in conserving the species Lao PDR: As a landlocked country, Lao PDR will follow the position of majority of the ASEAN countries Malaysia: Listing of the species into CITES Appendix II would create difficulties in distinguishing the proposed species from the other species of the same genus, e.g. guitarfish, by officers at entry and exit points of the country, so Malaysia recommends that the range State of the species Rhynchobatus djiddensis could propose	Philippines	Brunei Darussalam¹ Cambodia Indonesia Japan Lao PDR Malaysia Myanmar Thailand	Singapore* Viet Nam*

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Proposal

Remarks:

Recommendations

*Country's position to follow the ASEAN Common Position	
**Country's position would be communicated with the SEAEDEC Secretariat upon Consultation with concerned national outbo	ritios

are still abundant in the country

small quantity

the CMS

Countries' view

Myanmar: The species is mainly caught as by-catch and only in

Philippines: The Philippine position to support the proposal and its acceptance to be one of the proponents stemmed from the fact that Philippines was the proponent of the up listing of wedgefishes to Appendix I that was adopted by the Convention on Migratory Species (CMS) CoP12 hosted by the Philippines in 2017.

The Philippines is the only ASEAN Member State that is Party to

Thailand: Only small amount of the proposed species has been

Viet Nam: From the 2-year data collection of SEAFDEC, the composition of the species in the total catch is very low

problem on identification of the species could arise

caught in Thai waters, so there is still insufficient data for listing of the species into the CITES Appendix, and if the species is listed, the **Positions of countries**

Not support

Support

Position held

in abeyance

^{**}Country's position would be communicated with the SEAFDEC Secretariat upon Consultation with concerned national authorities

^{***}The result from the discussion during the visit of SEAFDEC Secretariat staff to BFAR – the Philippines on 11 Feb. 2019, and e-mail communication with the representative from BFAR after the Regional Consultation.

¹Positions by Brunei Darussalam and Singapore were confirmed by consultation during the visit of SEAFDEC staff on 12, 13 February respectively.

Results of the Proposal Adoption for CEAS at the CoP18

Proposals	Proponents	Adoption	Remarks
Wedgefish) Rhinidae spp.(to be listed in Appendix II	EU and other States) Bangladesh, Benin, Bhutan, Brazil, Burkina Faso, Cabo Verde, Chad, Cote	Support: 112 (76%) Not support: 30 (21%)	Entering into force: 3months
Total of 10 species of wedgefish)Rhinidae(:	d'Ivoire, Egypt, Ethiopia, Fiji, Gabon, Gambia, India, Jordan, Kenya, Lebanon, Maldives, Mali,	Abeyance: 4 (3%)	
8 species under Genus <i>Rhynchobatus</i> , namely <i>R. djiddensis</i> , <i>R. cooki</i> , <i>R. immaculatus</i> , <i>R. luebberti</i> , <i>R. australiae</i> , <i>R. laevis</i> , <i>R. palpebratus</i> , and <i>R. springeri</i>	Mexico, Monaco, Nepal, Niger, Nigeria, Palau, Philippines, Saudi Arabia, Senegal, Seychelles, Sri Lanka, Sudan, Syrian Arab Republic, Togo and Ukraine(
1 species under Genus <i>Rhynchorhina</i> , namely <i>Rhynchorhina</i> mauritaniensis	,		
1 species under Genus Rhina, namely Rhina ancylostoma			
Giant Guitar fish (Glaucostegus spp.) to be listed in Appendix II	EU and other States (Bangladesh, Benin, Bhutan, Brazil, Burkina Faso, Cabo Verde, Chad, Cote	Support: 109 (76%) Not Support: 30 (21%)	Entering into force: 3months
Total of 6 species of guitar fish under Genus <i>Glaucostegus</i> spp.), namely:	D'Ivoire, Egypt, Gabon, Gambia, Maldives, Mali, Mauritania, Monaco, Nepal, Niger, Nigeria, Palau, Senegal, Sierra Leone, Sri Lanka, Sudan,	Abeyance: 4 (3%)	
G. thouin, G. typus, G. cemiculus, G. granulatus, G. halavi, and G. obtusus	Syrian Arab Republic, Togo and Ukraine		
Mako Shark (Isurus spp.)	EU and other States (Bangladesh, Benin, Bhutan, Brazil, Burkina Faso, Cabo Verde, Chad, Cote	Support: 102 (70%) Not support: 40 (27%)	Entering into force: 3months
2 species of mako sharks, shortfin mako (<i>Isurus oxyrinchus</i>) and longfin mako (<i>I. paucus</i>)	d'Ivoire, Dominican Republic, Egypt, Gabon, Gambia, Jordan, Lebanon, Liberia, Maldives, Mali, Mexico, Nepal, Niger, Nigeria, Palau, Samoa, Senegal, Sri Lanka, Sudan and Togo)	Abeyance: 4 (3%)	The highest number of proponents (54) for listing this species
Teatfish (Holothuria spp.)	EU, USA, Kenya, Senegal, and Seychelles	Support: 108 (74%) Not support: 30 (21%)	Entry into force: 12months (28
Total of 3 species of teatfish to be listed in Appendix II: Holothuria fuscogiva, H. nobilis, and H. whitmaei		Abeyance: 7 (5%)	August 2020)

Annex 20

RESOLUTION AND PLAN OF ACTION ON SUSTAINABLE FISHERIES FOR FOOD SECURITY FOR THE ASEAN REGION TOWARDS 2030

The Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 (RES&POA-2020) were prepared by the ASEAN-SEAFDEC Member Countries in collaboration with ASEAN and SEAFDEC, and were adopted by the Countries during the Ministerial and Senior Officials Meeting of the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020 "Fish for the People 2020: Adaptation to a Changing Environment" held during 13-17 June 2011 in Bangkok, Thailand. The RES&POA-2020 are envisaged to serve as policy framework and priority actions to support sustainable development of fisheries and enhancing the contributions from fisheries to food security and better livelihood of people in the region towards the coming decade.

On the occasion of the 5-year implementation of RES&POA-2020 in 2015, SEAFDEC Secretariat proposed to review the progress and results of the programs implementation based on the RES&POA-2020, and the priority issues to be addressed in ensuring sustainable fisheries development and enhancing the contribution of fisheries to food security in the Southeast Asian region. That was also to ensure that the implementation programs/activities are in line with the RES&POA-2020. To monitor the progress of the programs/activities implementation, the SEAFDEC Secretariat had prepared a survey questionnaire with the template for report on the implementation of the RES&POA-2020 which was sent to the AMSs for their cooperation and contributions to the said purposes. The feedback from the SEAFDEC Member Countries to the questionnaire for mid-term implementation of the RES&POA-2020 was reviewed and presented at the Thirty-Eight Meeting of the Program Committee of the SEAFDEC in November 2015.

Considering that the RES&POA-2020 have a specific timeframe towards 2020 which would be approaching very soon, the SEAFDEC Council at its 50th Meeting in 2018 suggested that this document should be reviewed in order to ensure that it is still up to date. Moreover, as the RES&POA-2020 were endorsed under the ASEAN mechanism. The Council stated that the need to review this document should be raised at the forthcoming meetings of the FCG/ASSP and ASWGFi. Upon consideration by these two meetings, the ASEAN-SEAFDEC Member Countries agreed to designate their respective focal points to review the Resolution and Plan of Action.

In this connection, the SEAFDEC Secretariat carried out regional meetings on "Way Forward of the Resolution and Plan of Action for the ASEAN Region Towards 2020" in May and September 2019. The first regional meeting held in May 2019 aimed to review the progress made by ASEAN Member States focusing on the outputs/outcomes attained at national level, and those of SEAFDEC and other regional and sub-regional partners in the implementation of the RES&POA-2020. The Meeting also discussed and identified other fisheries-related priority/emerging issues which should be considered in reviewing the RES&POA, and would attempt to establish the possible links between RES&POA-2020 with other fisheries policy development process in the ASEAN. Additionally, the first meeting would allow SEAFDEC to facilitate preparation of draft RES&POA beyond 2020 with the inputs, supports and cooperation of AMS.

According to the feedback of the questionnaire results extracted for mid-term (2015) and final (2019), it was clarified that the activities implemented by the AMS are relevant with the RES&POA-2020, *i.e.* under the thematic areas consisting of planning and information, fisheries management, marine fisheries, inland fisheries, aquaculture, optimal utilization of fish and fishery products, fish trade, and regional and international policy formulation. Although the results of the questionnaire survey have the potential for application in sustainable fisheries development in the region, such feedback had been derived from three AMS only. It was suggested that evaluation of the implementation of the RES&POA should be discussed in the future as part of the monitoring and evaluation of its implementation.

The draft RES&POA Towards 2030 (RES&POA-2030) was developed at the first regional meeting. After the first regional meeting, the document was accommodated the comments from SEAFDEC Secretariat and the Departments, SEAFDEC Member Countries, as well as resource persons. In September 2019, the Secretariat organized the second regional meeting to finalize the draft of the RES&POA-2030. The following table shows issues and outputs from the series of events for reviewing the RES&POA-2020 and



developing the RES&POA-2030:

Date and Events/Activities	Issues/Outputs		
Early 2019	Establishment of the National Focal Point (NFP) for		
	reviewing the RES&POA-2020 and drafting		
	RES&POA-2030		
May 2019 – the 1 st Regional Meeting	Key issues, challenges and concerns for revision of		
	the RES and POA-2020		
May to August 2019	Revising the draft RES-POA-2030 ad referendum		
	(SEAFDEC Departments and AMSs)		
September 2019 – the 2 nd Regional Meeting	Review the 3 rd draft RES&POA-2030 to come up		
	with the 4 th draft RES&POA-2030		
Before the end of September 2019	Obtain comments from the NFP		
November 2019: 42PCM and 22FCG Meetings	Collect views from PCM and FCG, come up with		
·	the 5 th draft RES&POA-2030		
End of November 2019	Submission of the 5 th draft to the NFP		
April 2020: 52CM	Endorsement of the 5 th draft RES&POA-2030		
End of April 2020	Circulation to FCG/ASSP Focal Point ad		
	referendum		
28 th ASWGFi Meeting (June 2020)	Endorsement of the final draft RES&POA-2030		
After 28 th ASWGFi Meeting	Circulation of the final draft RES&POA-2030 to		
	Council for Japan for adoption of the POA-2030 by		
	SOM		
41 st SSOM (August 2020)	Adoption of the POA-2030, endorsement of RES-		
	2030 for submission to 42 nd AMAF		
42 nd AMAF (August 2020) and Minister of Japan	Adoption of the RES-2030		

REQUIRED CONSIDERATION BY THE MEETING

The Meeting is requested to take note and provide views/suggestion toward adoption of the RES&POA-2030 ($Appendix\ I$).

Appendix 1 of Annex 20

4th Draft of Resolution and Plan of Action for ASEAN Region Towards 2030

(As of ASEAN - SEAFDEC Regional Meeting on the Resolution and Plan of Action for ASEAN Region Towards 2030, 10-11 September 2019, Bangkok, Thailand)

Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030

We, the Ministers of the ASEAN-SEAFDEC Member Countries on the occasion of the Forty-second Meeting of the ASEAN Ministers on Agriculture and Forestry (42nd AMAF) on xx August 2020 in Cambodia, with the Minister of Japan responsible for fisheries through *ad referendum*, taking into consideration the "Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020" adopted by the Ministers responsible for fisheries of the ASEAN-SEAFDEC Member Countries during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020 "Fish for the People 2020: Adaptation to a Changing Environment in 2011, and accommodating the emerging issues that could occur in the near future;

Reaffirming our commitment to the United Nations 2030 Agenda for Sustainable Development adopted in 2015, particularly those that contribute to achieving sustainable development and management of fisheries;

Bearing in mind the possible impacts climate change has on fishery resources, and noting ongoing efforts to address and better understand climate change under the United Nations Framework Convention on Climate Change (UNFCCC) adopted in 1994, the Paris Agreement, and the Intergovernmental Panel on Climate Change (IPCC)";

Being guided by the 2007 ASEAN Charter, which aims to ensure sustainable development for the benefit of present and future generations and to place the well-being, livelihood, and welfare of the peoples at the center of ASEAN community building process;

Recognizing the ASEAN Community Vision 2025, and the Vision and Strategic Plan for ASEAN Cooperation in Food, Agriculture and Forestry (2016-2025) which are meant to achieve "A competitive, inclusive, resilient and sustainable Food, Agriculture, and Forestry (FAF) sector integrated with the global economy, based on a single market and production base contributing to food and nutrition security and prosperity in the ASEAN Community";

Being aware of the ASEAN-Japan Cooperation through the ASEAN Plus Three Mechanism that aims to support the realisation of ASEAN Community Vision 2025;

Also **bearing in mind** the continuous efforts of the ASEAN Member States (AMSs) in ensuring the sustainable development of fisheries and aquaculture is in line with relevant international guidelines and agreements, *e.g.* the FAO Code of Conduct for Responsible Fisheries; and the Regional Guidelines on Responsible Fisheries in Southeast Asia, the Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU) framework, and the ASEAN RPOA for the Management of Fishing Capacity;

Acknowledging the efforts of the AMSs in implementing the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 adopted on 17 June 2011; and the Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating Illegal, Unreported and Unregulated Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products, adopted on 3 August 2016;

Recognizing the ASEAN-SEAFDEC Strategic Partnership that provides the cooperative platform between ASEAN and SEAFDEC in achieving the long-term common goals towards the development and management of sustainable fisheries through various regional initiatives;



DO HEREBY RESOLVE, without prejudice to the sovereign rights, obligations, and responsibilities of our countries under relevant international laws and arrangements, to:

- 1. Sustain the supply of fish and fishery products from the ASEAN to improve food security, facilitate poverty alleviation, and improve the livelihoods of ASEAN people dependent on the harvesting, farming and marketing of fish and fishery products, by enhancing the necessary national fisheries policies, legal and institutional frameworks that encourage and support responsible fisheries and aquaculture operations, including small-scale operations as well as providing supplementary livelihood options;
- 2. Further develop strategic partnerships and cooperation to maximize the synergies and complementarities among the various stakeholders, *e.g.* government, private sector, civil society, and relevant development partners and donor agencies, in addressing regional and global challenges that may impact sustainable development of fisheries and aquaculture throughout the supply chain;
- 3. Promote capacity building of relevant organizations and stakeholders through mobilization of resources and harmonization of initiatives that support fisheries communities and governments, with due consideration given to gender equality;
- 4. Strengthen fisheries governance by evaluating current constraints to ensure comparability and compatibility of the required practices and the operations of fisheries in the AMSs;
- 5. Further develop regional initiatives to promote a responsible fisheries management mechanism, taking into account the specific social, economic, cultural, ecological, and institutional contexts and diversity of the ASEAN and ASEAN fisheries in the spirit of the realization of the ASEAN Economic Community and the ASEAN Socio-Cultural Community;
- 6. Implement effective management of fisheries that integrates habitat with fishery resources management, and aims to improve the social and economic benefits of all stakeholders, especially by delegating selected management functions to the local level and promoting co-management as a partnership between government and relevant stakeholders;
- 7. Promote sound management of fishing capacity and use of responsible fishing technologies and practices, recognizing increasing emphasis on rights-based fisheries; and at the same time, secure the rights and well-being of inland and coastal fisheries communities as well as the ecological well-being;
- 8. Strengthen cooperation among AMSs and with international and regional organizations in combating IUU fishing and management of fishing capacity to balance available resources;
- 9. Support the efforts to promote low carbon development technologies by minimizing the contribution of the fisheries sector to greenhouse gas emissions, with emphasis on promoting the use of energy-efficient equipment and alternative energy sources;
- 10. Enhance resilience of fisheries communities in anticipating and adapting to changes in the environments of inland and coastal waters, including those caused by climate change, which could adversely affect communities in their operations of fisheries and aquaculture;
- 11. Increase awareness and support the reduction of impacts of aquatic pollution and marine debris, including abandoned, lost or otherwise discarded fishing gear (ALDFG), and microplastics/microbeads on fisheries and aquaculture;
- 12. Strengthen knowledge, including local knowledge, and science-based development and management of fisheries by enhancing the national capacity to collect, analyze, and share fisheries data and information;
- 13. Improve the working conditions of people engaged in fisheries activities, and strengthen measures for safety of fishing vessels taking into consideration the specificity of fisheries of the region;
- 14. Enhance awareness of the contributions that inland fisheries have on food security and livelihoods, and ensure that the well-being of fishery resources and stakeholders are taken into consideration when undertaking development projects that could impact on the sustainability of inland fisheries;
- 15. Promote inter-agency coordination of the multiple uses of inland aquatic resources for the development of conservation measures for inland aquatic habitats;
- 16. Strengthen aquaculture governance and implement good aquaculture practices to sustain production for food safety and security, sustainable livelihoods, and rural development;
- 17. Promote cooperation among AMSs and with international and regional organizations to support the implementation of good aquaculture practices through joint research, technology transfer, and human resource development;
- 18. Mitigate the potential impacts of aquaculture on the environment and biodiversity including the spread of pathogens of aquatic animals caused by over-intensification of aquaculture operations, inappropriate implementation of aquatic animal health management, and uncontrolled introduction and movement of aquatic species;

- 19. Promote joint ASEAN approaches and positions in international trade in fish and fishery products produced in the region, by harmonizing the standards, criteria, and guidelines, and developing mutually-recognized agreements on sustainability and food safety management systems;
- 20. Support the competitiveness of the ASEAN fish trade through the development of procedures and programs that would certify, validate, or otherwise indicate the origin of fish and fishery products to improve product traceability, sustainable fishing practices, and food safety, in accordance with international and national requirements;
- 21. Optimize the utilization of catch/harvest by reducing post-harvest losses and wastes to increase fish supply and improve economic returns through promotion of appropriate technologies, facilities and best practices along the supply chain;
- 22. Improve and exchange technologies, and enhance facilities to ensure that fish quality assurance and safety management systems are in place and operational, taking into account the importance of traditional fishery products and food security requirements, and promote the development of fishery products as supplementary livelihoods for fisheries communities;
- 23. Support the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 adopted by the Senior Officials of the ASEAN-SEAFDEC Member Countries on [Date]; and to
- 24. Pledge our commitment to fully support this Resolution, and task the ASEAN Senior Officials to implement necessary actions and report the progress in the advancement of sustainable fisheries that contribute to a prosperous, stable, and peaceful ASEAN Community;

AND DO HEREBY DECIDE,

That the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 be implemented as soon as possible and use the *Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030* adopted by the Senior Officials of the ASEAN-SEAFDEC Member Countries on the occasion of the Special Senior Official Meeting of the 41st ASEAN Ministerial Meeting on Agriculture and Forestry (SSOM-41st AMAF) held on xx August 2020 in Brunei Darussalam, and the Senior Official of Japan responsible for fisheries through *ad referendum*, as priority actions for formulating and implementing programs, projects, and activities by the AMSs and through the appropriate ASEAN-SEAFDEC mechanisms.

Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030

The Senior Officials of the ASEAN-SEAFDEC Member Countries on the occasion of the Special Senior Officials Meeting of the 41st ASEAN Ministerial Meeting on Agriculture and Forestry (SSOM-41stAMAF) on xx August 2020 in Brunei Darussalam, with the Senior Official of Japan responsible for fisheries through *ad referendum*, taking into consideration the priority actions stipulated in the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 adopted by the Senior Officials responsible for fisheries of ASEAN-SEAFDEC Member Countries during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020 "Fish for the People 2020: Adaptation to a Changing Environment" in 2011, as well as the emerging issues; and

Guided by the (Draft) Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030, and the need to enhance collaboration among government agencies that have the responsibility for fisheries and fisheries-related issues in order to harmonize policies, plans and activities that support sustainable fisheries, food safety and security at the national and regional levels;

Recognizing the progress made by the ASEAN Member States (AMSs) in the implementation of the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020;

Recalling the initiatives of the AMSs to adopt the policy frameworks and instruments developed through the ASEAN-SEAFDEC Strategic Partnership (ASSP);

HEREBY DECIDE

That the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 should serve as priority actions for AMSs in developing and implementing programs, projects, and activities in support of the implementation of the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030.

A. Planning and Information

1. Integrate the planning of marine capture fisheries, inland capture fisheries, and aquaculture subsectors to promote sustainable development of the fisheries sector, including harvesting and post-harvest in both capture fisheries and aquaculture;



- 2. Strengthen the capacity to plan for sustainable fisheries in the context of changing socio-economic and ecological environments through the mobilization of the most up-to-date data and information, and the provision of appropriate policy summaries for decision makers;
- 3. Strengthen national statistical mechanisms for fisheries and aquaculture including data collection disaggregated at species level, and exchange of statistical data; and include collection/compilation of nonroutine data and information, *e.g.* from fish consumption surveys, species composition, biological information, as well as local and indigenous knowledge, with the aim of improving the valuation of fisheries including monitoring of their performance;
- 4. Establish reference points, and come up with estimated biomass or capacity level to determine the maximum sustainable yield, allowable biological catch, or allowable effort for marine and inland fisheries;
- 5. Strengthen the collection of data and information, where relevant, on species under international concern, *e.g.* sharks and rays, sea turtles, catadromous eels, aquatic mammals, etc., and harmonize/standardize data collection methods among countries in the region;
- 6. 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;
- 7. Coordinate, decentralize and enhance the sharing of relevant statistics and fisheries-related data and information between the national fisheries and other authorities including those responsible for food security, environment, trade, aquaculture, water resources, agriculture/forestry, wetlands, migration/employment, and rural development;
- 8. Promote the use of simple and practical indicators that had been developed, for planning, monitoring, and evaluation of fisheries in support of achieving sustainability;
- 9. Share and exchange information on research findings, good practices, and experiences among countries, including national and regional institutions;

B. Fisheries Management

- 10. Regularly review, update and strengthen national fisheries policies, legal and institutional frameworks through consultation and engagement of government agencies, the private sector, fishers, civil society, and other relevant stakeholders;
- 11. Accelerate the development of fisheries management plans as basis for fisheries conservation and management;
- 12. Implement measures to prevent unauthorized fishing and eliminate illegal fishing practices, *e.g.* strengthening enforcement of laws and regulations, establishing monitoring control and surveillance (MCS) mechanisms and network, developing and promoting responsible fishing practices, encouraging supplementary livelihood options;
- 13. Enhance implementation of comprehensive policies for fisheries management through (i) licensing systems (boats, gear, and people); (ii) rights-based fisheries; (iii) supportive legal and institutional frameworks; (iv) strengthened institutional cooperation; and (v) streamlined co-management;
- 14. Strengthen the adoption of fisheries management approaches, *e.g.* co-management and ecosystem approaches to fisheries management, at all levels with all relevant stakeholders involved in the process of planning and policy formulation for management of natural resources, conservation, rehabilitation of habitats and protective geographical features, and improvement of human well-being;
- 15. Strengthen the capacity of fisheries communities and the capability of fisheries-related organizations (e.g. by empowering such organizations as appropriate) to implement necessary actions towards increased resilience, improved livelihoods, adoption of supplementary livelihoods, and poverty alleviation, in support of achieving sustainable development with gender integration in the process;
- 16. Enhance the participation of local communities, fisheries-related organizations, and other stakeholders in fisheries management and in fisheries and stock assessments by providing data, local ecological information, and traditional knowledge on the status of fisheries and stocks;
- 17. Raise awareness of the need to develop financial incentives, especially for small-scale stakeholders and cooperatives, *e.g.* micro-credit, with national and regional institutional assistance for the responsible development of fisheries enterprises and developmental activities that optimize economic returns;
- 18. Enhance the efficient use of energy by adapting appropriate technologies for fishing gear and fishing vessel design, and fishing operations; and promote the use of alternative energy sources;
- 19. Improve the capability of fishing crew and workers in fishing industry, and conduct educational and skills development program for new crew members and workers entering the industry; while also adopt appropriate technologies to optimize number of crew onboard fishing vessels;

- 20. Promote the implementation of good and appropriate employment practices in accordance with domestic laws and regulations or relevant international instruments;
- 21. Enhance the capacity of relevant authorities and communities to collaboratively resolve conflicts on resources utilization;
- 22. Explore the potential of under-utilized fishery resources through comprehensive fishery resources surveys, and promote their exploitation in a precautionary manner based on analysis of the best available scientific information;
- 23. Encourage the implementation of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) and promote the collection of sex-disaggregated statistics on fishers and fish workers in the fish value chain;
- 24. Promote fair distribution of benefits gained from both intra-regional and international trade of fish and fishery products among small-scale actors along the whole value chain;
- 25. Monitor and assess the perceived impacts of climate change to fisheries and aquaculture; and adjust existing programs to take into consideration the effects of climate change and natural disasters, focusing on the programs for (i) developing appropriate adaptation and mitigation plans; (ii) integrating fisheries and habitats management; (iii) enhancing community resilience through livelihood diversification; (iv) strengthening local organizations; and (v) promoting safety at sea and other priority areas;
- 26. Assess and manage the impacts of aquatic pollution and marine debris, including abandoned, lost, or otherwise discarded fishing gear (ALDFG) and microplastics/microbeads, on fisheries and aquaculture;
- 27. Foster cooperation with other countries for the conduct of stock assessment on straddling, transboundary, highly migratory, and shared fishery resources, as appropriate, to serve as inputs for formulating science-based fishery management plan; and strengthen sub-regional and bilateral cooperation including inter-agency cooperation for management of such resources;

C. Marine Fisheries

- 28. Strengthen the implementation of measures and activities to combat IUU fishing by ensuring compliance with national laws and regulations, and with the provisions of relevant international instruments; encourage the development and implementation of national plans of action to combat IUU fishing; promote inter-agency coordination for effective implementation of laws and regulations; and enhance awareness and understanding of applicable international and regional instruments and agreements through information dissemination campaigns;
- 29. Establish and strengthen regional, sub-regional, and bi-lateral coordination on fisheries management and efforts to combat IUU fishing; and where appropriate promote the establishment of Monitoring, Control and Surveillance (MCS) network through inter-agency coordination and information sharing;
- 30. Mobilize regional/sub-regional collaboration frameworks and tools for combating IUU fishing, *e.g.* Regional Plan of Action to Promote Responsible Fishing Practices including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU); ASEAN Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity); Regional Fishing Vessels Record (RFVR); ASEAN Catch Documentation Scheme (ACDS), and the use of technologies to support monitoring and surveillance of fishing activities, *e.g.* Vessel Monitoring System (VMS), traceability systems;
- 31. Support consultative dialogues at regional/sub-regional level among fisheries legal officers to share and exchange information on updated legal and regulatory frameworks in addressing issues in fisheries management;
- 32. Improve the capacity of relevant national authorities to effectively implement the requirements of port State measures and flag State responsibilities;
- 33. Intensify research on the impacts of various fishing gear types and methods on the ecosystem and populations of aquatic animals, and develop and promote environment-friendly fishing practices, *e.g.* low impact and fuel efficient (LIFE) fishing gears/methods;
- 34. Mitigate bycatch and discard concerns including excessive catch of juvenile fish by promoting the adoption and implementation of relevant regional and international guidelines, *e.g.* FAO International Guidelines on Bycatch Management and Reduction of Discards;
- 35. Promote resource enhancement approaches with appropriate monitoring and evaluation programs, *e.g.* deployment of appropriate resource enhancement structures, restocking of commercially-important aquatic species, and restoration of degraded habitats, taking into consideration possible socio-ecological impacts;



- 36. Ensure the integration of fisheries with habitats management by applying the concept of fisheries *refugia* in line with the Regional Guidelines on the Use of Fisheries *Refugia* for Capture Fisheries Management in Southeast Asia to complement the existing conservation and management measures;
- 37. Promote the adoption of different management approaches to sustainably manage major critical coastal habitats, *e.g.* mangroves, coral reefs and seagrasses; and develop and disseminate information and guidance on the use of appropriate tools and interventions;
- 38. Ensure safety at sea, decent working conditions and implementation of onboard fishing vessels sanitation, including the development of new design for fishing vessels, in compliance with relevant international standards;
- 39. Assess the possible impacts of subsidies on fisheries, particularly on the special requirements and the needs of small-scale fisheries in the region;

D. Inland Fisheries

- 40. Establish and implement comprehensive policies and supporting legal and institutional frameworks, and adopt ecosystem approaches to inland fisheries management that devolve co-management responsibilities to the local authorities and stakeholders, strengthen the rights of communities, and promote rights-based fisheries;
- 41. Enhance awareness of the importance of inland fisheries for local food security, and the importance of rehabilitating and restoring habitats for migratory inland aquatic animals, restocking indigenous aquatic species to enhance productivity (with monitoring and evaluation of restocking programs) and encouraging culture-based inland fisheries, where appropriate;
- 42. Monitor the impacts, and mitigate the negative impacts of invasive/alien species on the inland ecosystem and biodiversity;
- 43. Strengthen inter-agency coordination (national/sub-regional) on multiple-use water resources of the wetlands/flood-plains to sustain inland fisheries, mitigate conflicts among users and also encourage better coordination to address transboundary inland fisheries management issues;
- 44. Promote Research and Development (R&D) to understand the migration patterns, spawning grounds and seasons, and nursery grounds of important inland aquatic animals; and ensure the sustainability of inland fisheries by maintaining health of the ecosystem, particularly the inter-connectivity of habitats and the specific management needs during the dry season;
- 45. Monitor and assess the impacts of the construction/operations of man-made structures that could alter the water ways and affect migration and spawning of aquatic animals, particularly those at risk of overexploitation, and develop mitigating measures and appropriate conservation and management measures for such impacts through consultative processes that may involve collaboration with regional organizations;
- 46. Encourage coordinated planning and management on the use of inland water bodies including rivers, floodplains, wetlands, etc. through (i) resource enhancement programs; (ii) inland fisheries management programs; (iii) environmental impact assessment of structures on the aquatic resources; and (iv) restocking of indigenous and/or commercially-important aquatic animals species taking into consideration concerns on genetic diversity; and build/improve the capacity of human resources and institutions in the implementation of such programs;
- 47. Formulate guidelines to promote the use of practical and simple indicators for inland/floodplain fisheries within the national inland fisheries management framework, to facilitate (i) timely local level fisheries management decisions with due respect to the large number of people/farmers that take part in fishing; (ii) dialogues to ensure that the inter-connectivity of fish migration path is kept as a tool for management/conservation measures; and (iii) adaptation to the effects of climate change within water bodies;

E. Aquaculture

- 48. Ensure that national programs and policies on aquaculture address social, economic, and environmental aspects of sustainable aquaculture to improve food security, livelihoods, and employment, and alleviate poverty by (i) providing the mechanisms and enabling policies for good aquaculture practices, efficient markets and fair trade; (ii) strengthening the capacity of small-holder fish farmers; and (iii) promoting inter-agency collaborations;
- 49. Develop and implement ASEAN guidelines for environment-friendly and responsible aquaculture and good aquaculture practices that cover (i) integration of quality and safety management systems for products with significant trade potentials; (ii) use of chemicals in aquaculture in relation to food safety; (iii) development of product traceability systems from farm to market; and (iv) implementation of quarantine and inspection/ sampling procedures and Sanitary and Phytosanitary (SPS) measures for aquaculture products to ensure food safety;

- 50. Integrate aquaculture into rural development activities within the context of multiple-use of land and water resources through inter-agency coordination in policy formulation, project planning and implementation, stakeholder consultation, extension services and technology transfer; and participate in and provide support to regional initiatives that assess the role of aquaculture in poverty alleviation for better policy formulation;
- 51. Explore the use of advanced technologies for marine (inshore and offshore) and inland aquaculture, including the development of full-cycle breeding and aquaculture technologies for selected high-value species;
- 52. Implement measures or strategies at national and local levels to: (i) monitor and regulate aquaculture operations; (ii) prevent over intensification of aquaculture; and (iii) ensure that activities are carried out in a sustainable manner and that aquatic animal welfare is taken into consideration as appropriate; (iv) effectively enforcing regulations to avoid conflict in the use of common resources; and (v) adopt the concept of environmental carrying capacity including the implementation of good aquaculture practices;
- 53. Provide government support for R&D on: (i) improving existing genetic resources; (ii) assessing the impact of climate change on aquaculture; and (iii) improving the feeding and aquatic animal health management;
- 54. Promote the production and distribution of specific pathogen-free (SPF) and specific pathogen-resistant (SPR) broodstock and seeds through: (i) establishment of certified government or private hatcheries as sources of quality seed; (ii) dissemination of new breeding technologies and techniques for the effective distribution and maintenance of genetically-improved strains; and (iii) implementation of sound policies that promote better hatchery management practices, including the responsible collection and use of wild broodstock and seed;
- 55. Improve aquatic biosecurity by providing support to: (i) research on the development of domesticated, genetically improved, specific pathogen-free (SPF), and specific pathogen-resistant (SPR) aquaculture species; and (ii) small-scale hatchery operators and farmers to access healthy broodstock and improve their ability to adopt, at the farm level, the established techniques for aquatic animal health management;
- 56. Formulate and implement complementary and supportive policies that will: (i) build the capacity of fish farmers and hatchery operators in adopting broodstock and hatchery technologies and innovations; (ii) enhance fish farmers and hatchery operators' access to SPF/SPR broodstock and seeds produced through farmer-friendly broodstock management methods; (iii) foster strong cooperation between the public and private sectors engaged in development and dissemination of quality broodstock and seed stock; (iv) strengthen the capacity of fish farmers' groups, *e.g.* by empowering fish farmers' groups; and (v) promote development of a skilled workforce for the aquaculture industry;
- 57. Encourage good and appropriate employment practices in accordance with domestic laws and regulations or relevant international instruments;
- 58. Raise awareness of the need to develop financial incentives and micro-credit, with national and regional institutional assistance, for the responsible development of aquaculture enterprises and developmental activities that optimize economic returns;
- 59. Reduce the risk of negative environmental impacts, loss of biodiversity, and disease transmission by regulating the introduction and movement of aquatic organisms in accordance with relevant regional and international guidelines, *e.g.* the Regional Technical Guidelines on Health Management for the Responsible Movement of Live Aquatic Animals;
- 60. Continue national efforts to prevent and control serious disease outbreaks by providing government support to: (i) R&D following standard procedures (*e.g.* OIE standards) in handling emerging diseases and surveillance of transmission of diseases; and (ii) regional initiatives on harmonization of regional disease control standards, disease reporting, and implementation of contingency plans to handle emerging diseases;
- 61. Further enhance capabilities in the diagnosis and control of aquatic animal diseases through: (i) continued support in development of technology and techniques for disease identification; (ii) promotion of the widespread use of users friendly, field-friendly, rapid and standardized diagnostic tests; and (iii) establishment of regional and inter-regional referral systems, including the designation of reference laboratories and timely access to fish health experts within the region;



- 62. Strengthen the implementation of regional warning systems on aquatic animal health and diseases to inform other AMSs of relevant epidemiological events and to raise awareness of emerging pathogens that may pose risks. Build emergency preparedness capacity through rapid and timely responses to reduce potential catastrophic consequences of emerging diseases as highlighted by ASEAN Network of Aquatic Animal Health Centres (ANAAHC);
- 63. Promote the prudent use of legal antibiotics in aquaculture, and monitor the impacts of Antimicrobial Resistance (AMR) on aquatic animals;
- 64. Improve the efficient use of aquafeeds by strictly regulating the quality of manufactured feed and feed ingredients, and support continued/applied research for developing suitable alternative protein sources that will reduce the cost and dependence on fish meal and other fish-based products, and subsequently promote regional sharing of information on feed ingredients; encourage the culture of species requiring no or low fish meal content in their feed and application of effective feeding management practices, taking into account the need for cultural and social acceptance of feed ingredients;
- 65. Undertake risk assessment of the culture of exotic aquatic species, and establish measures to prevent the escape of high risk species and their possible impacts on the natural ecosystem and biodiversity;
- 66. Improve human resource capabilities for responsible aquaculture through: (i) closer public and private sector collaboration in R&D, paying particular attention to the need for advanced skills in biotechnology and assessment of the efficacy and economics of the use of probiotics and immunostimulants including vaccines; and (ii) effective implementation of aquaculture education and extension services;
- 67. Formulate and implement national policies and strategies that will enable the aquaculture sector to adopt measures to mitigate the potential impacts of climate change and environmental stressors by providing support to R&D on climate change, and other environmental-related issues to increase resilience, strengthening the overall capacity of various stakeholder groups and fostering cooperation within the aquaculture sector and with other sectors, and developing standard procedures for disaster risks reduction in aquaculture;
- 68. Apply precautionary approach to safeguard the environment from the over-intensification and expansion of inland, coastal and offshore aquaculture;
- 69. Conduct risk assessment and R&D related to the use of Genetically Modified Organism (GMO) products in aquaculture (*e.g.* broodstock and aquafeeds) including food safety issues;

F. Optimal Utilization of Fish and Fishery Products

- 70. Strengthen support for the development and application of technologies and best practices that optimize the utilization of catches/farmed products, reduce post-harvest losses and wastes, value-add byproducts and valorize fish waste/trimmings in commercial and small-scale fisheries, aquaculture, and processing operations, through improved processing, facilities and infrastructure development, onboard and onshore handling, and storage, distribution and marketing of fish and fishery products;
- 71. Promote the production of and preserve the diversity of traditional fish products by assisting producers to secure stable supplies of quality raw materials and meet food safety requirements; and improve product identity, nutritive value and marketing. In the process, promote the identity of and other initiatives on local fishery products;
- 72. Strengthen fish quality and safety management systems that support the competitive position of ASEAN fish and fishery products in the world markets, including possible adoption of cold chain management standards and moving towards ISO22000 and ISO/IEC 17025 accreditation of national fish inspection laboratories; enhance capacity and acknowledge the recognized national laboratories, risk analysis and equivalence agreement, *e.g.* the Mutual Recognition Agreement (MRA); and promote the implementation of the quality and safety management systems among small and medium enterprises in the AMSs;
- 73. Encourage relevant control agencies at all levels to apply appropriate legislation and coordinated activities regarding the handling, processing, distribution, storage, marketing, quality, and safety of fish and fishery products;
- 74. Promote and conduct training programs and develop training materials to upgrade the technical skills and competencies of personnel in the public and private sectors on fisheries post-harvest technologies, and food quality and safety management systems;
- 75. Raise awareness of the need to develop financial incentives and micro-credit, with national and regional institutional assistance for the responsible development of fisheries and aquaculture enterprises, and developmental activities that optimize economic returns;
- 76. Encourage good and appropriate employment practices in accordance with domestic laws and regulations or relevant international instruments;

77. Adopt standards and guidelines for handling fish and fishery products, and implement hygienic fish handling onboard fishing vessels and provide training on fish and fishery products handling as part of the requirements for issuance of permits at all levels for fish vessel crews;

G. Fish Trade

- 78. Strengthen cooperation among AMSs to implement international standards with regards to trade in fish and fishery products within the ASEAN;
- 79. Implement regional/ASEAN standards (*e.g.* ASEAN Good Aquaculture Practices (ASEAN GAqP), ASEAN Shrimp Good Aquaculture Practices (ASEAN Shrimp GAP), and ASEAN Policy Guidelines on Standards and Conformance) applicable for fishery and aquaculture products that are in line with international requirements and applicable to the region; and promote such standards to be acceptable by importing markets;
- 80. Encourage the implementation of appropriate international standards and strengthen programs relevant to Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) measures, R&D, as well as capacity building and awareness raising on fish trade-related issues;
- 81. Encourage, as appropriate, the development of national laws, rules and regulations on trading of species in accordance with relevant rules of international law;
- 82. Strengthen cooperation and mechanisms among AMSs to work towards common positions that could be reflected in international fish trade related fora, *e.g.* World Trade Organization (WTO), Food and Agriculture Organization of the United Nations (FAO)/COFI Sub-committee on Fish Trade, Office International des Epizooties (OIE), Codex Alimentarius Commission (CAC), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- 83. Engage the private sector (*e.g.* ASEAN Seafood Federation) in addressing trade-related issues, and in collaborative efforts to promote and sustain regional and international trade;
- 84. Assist small-scale producers to comply with standards on safety and quality of fish and fishery products by providing support programs including capacity building;
- 85. Assist small-scale producers from both capture fisheries and aquaculture in securing and maintaining access to markets at the national, regional and international levels, and in the process, develop marketing systems that are not capital intensive but are accessible for local producers;
- 86. Apply traceability systems with mechanisms as needed to certify or validate the information for the whole supply chain by harmonizing AMSs' inspection systems in line with international standards and strengthening port inspections process to improve traceability;
- 87. Encourage and provide guidance to develop/improve branding or eco-labeling of fish and fishery products that demonstrate the eco-friendly and socially acceptable nature of ASEAN products, including organic standards and coordination of Halal requirements;

H. Regional and International Policy Formulation

88. Increase participation and involvement of AMSs in international fora and technical committees, *e.g.* CITES, CAC, FAO, OIE, Regional Fisheries Bodies (RFBs), and WTO; and promote ASEAN interest, recognizing that fisheries policies of relevance to the ASEAN are increasingly discussed and agreed upon at the global level.

Annex 21

CLOSING REMARKS

By Ms. Malinee Smithrithee SEAFDEC Secretary-General

Distinguished delegates from the ASEAN-SEAFDEC Member Countries, Representative from the ASEAN Secretariat, My colleagues from SEAFDEC, Ladies and Gentlemen, Good Afternoon!

First of all, as the Co-chair of SEAFDEC for the Twenty-second Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership, please allow me to thank the representative from the Directorate of Fisheries of Viet Nam, *Ms. Nguyen Thi Phuong Dung*, for co-chairing this Meeting with me. I would also wish to thank the representatives from the ASEAN-SEAFDEC Member Countries and their respective delegations for their cooperation and active participation during our deliberations. Your valuable inputs had surely led us to the successful conclusion of this Meeting.

As you are all aware of, the recommendations of this Meeting would be submitted to the higher authorities of the ASEAN and SEAFDEC. I am therefore very grateful to all of you for your constructive comments and suggestions. On behalf of SEAFDEC, please be assured that your recommendations would be considered for the improvement of our operations, especially regarding the ASEAN-SEAFDEC collaborative programs, the initiatives in addressing important regional fisheries issues, as well as on the Resolution and Plan of Action Towards 2030.

Lastly, I would also wish to thank the Secretariat of the Meeting for their excellent preparation and arrangements. As our Meeting has come to an end, let me now declare this Twenty-second Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership closed.

For those who will be travelling from this beautiful city of Chiang Mai back to your respective countries, we wish you a safe trip. Once again, thank you very much for your active participation during our two-day Meeting.

Have a Good Day!

Southeast Asian Fisheries Development Center (SEAFDEC)

What is SEAFDEC?

SEAFDEC is an autonomous intergovernmental body established as a regional treaty organization in 1967 to promote sustainable fisheries development in Southeast Asia.

Mandate

To develop and manage the fisheries potential of the region by rational utilization of the resources for providing food security and safety to the people and alleviating poverty through transfer of new technologies, research and information dissemination activities

Objectives

- To promote rational and sustainable use of fisheries resources in the region
- To enhance the capability of fisheries sector to address emerging international issues and for greater access to international trade
- To alleviate poverty among the fisheries communities in Southeast Asia
- To enhance the contribution of fisheries to food security and livelihood in the region

SEAFDEC Program Thrusts

- Developing and promoting responsible fisheries for poverty alleviation
- Enhancing capacity and competitiveness to facilitate international and intra-regional trade
- Improving management concepts and approaches for sustainable fisheries
- Providing policy and advisory services for planning and executing management of fisheries
- Addressing international fisheries-related issues from a regional perspective













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