

**REPORT OF
THE FORTY-EIGHTH MEETING OF THE COUNCIL
OF
THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

**Nha Trang, Viet Nam
4 - 8 April 2016**



**THE SECRETARIAT
SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

PREPARATION AND DISTRIBUTION OF THIS DOCUMENT

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

BIBLIOGRAPHIC CITATION

SEAFDEC. 2016. Report of the Forty-eighth Meeting of the Council of the Southeast Asian Fisheries Development Center. Southeast Asian Fisheries Development Center, Bangkok, Thailand. 347 pp.

NOTICE OF COPYRIGHT

This publication may not be reproduced, in whole or in part, by any method or process, without written permission from the copyright holder. Applications for such permission with a statement of the purpose and extent of the reproduction desired should be made through and addressed to:

SEAFDEC Secretariat
Suraswadee Building
Kasetsart University Campus
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand.

All rights reserved

©SEAFDEC 2016

CONTENT

	Paragraph No.
INTRODUCTION	1-2
INAUGURAL CEREMONY	3-6
I. PROCEDURAL MATTERS	
1.1 Opening of the Meeting	7
1.2 Election of the Chairperson for the Year 2016-2017	8
1.3 Adoption of the Agenda and Arrangement for the Meeting	9
II. REPORT OF THE SECRETARY-GENERAL	10-24
III. NOTE OF THE CHAIRPERSON OF THE SEAFDEC PROGRAM COMMITTEE ON THE RESULTS OF THE THIRTY-EIGHTH MEETING	25-33
IV. NOTE OF THE CHAIRPERSON OF THE FISHERIES CONSULTATIVE GROUP (FCG) OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP (ASSP) ON THE RESULTS OF THE EIGHTEENTH MEETING	34-39
V. POLICY CONSIDERATION ON IMPORTANT ISSUES	
5.1 Issues on Combating IUU Fishing	
5.1.1 ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain	40-42
5.1.2 Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over	43-47
5.1.3 ASEAN Catch Documentation Scheme for Marine Capture Fisheries	48-54
5.1.4 Regional Cooperation to Support the Implementation of the Port State Measures in ASEAN Region	55-63
5.1.5 Regional Plan of Action for the Management of Fishing Capacity	64-69
5.1.6 Trans-boundary Issues and Technical Dialogues	70-74
5.2 Other Emerging Issues	
5.2.1 Labor Aspect: Outputs and Recommendations from the Regional Technical Consultation on Labor Aspects within the Fishing Industry in the ASEAN Region	75-82
5.2.2 Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud Action Plan	83-86
5.3 Regional Cooperation to Promote Sustainable Fisheries and Aquaculture in ASEAN Region	
5.3.1 Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region	87-88
5.3.2 Regional Policy Recommendations on Conservation and Management of Eel Resources and Promotion of Sustainable Aquaculture	89-94
5.3.3 Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations	95-99
5.3.4 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries	100-105
5.3.5 Regional Policy Recommendations and Strategic Plans for Fishery Resources Enhancement in the Southeast Asian Countries	106-111
5.3.6 Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region	112-114

5.3.7	Regional Policy Recommendations on Addressing Early Mortality Syndromes (EMS)	115-117
VI.	OTHER MATTERS	
6.1	High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community 2015	118-121
6.2	Southeast Asian State of Fisheries and Aquaculture 2017 (SEASOFIA 2017)	122-124
6.3	The 50 th Anniversary of SEAFDEC	125-127
6.4	Preliminary Results on Human Resources Survey in SEAFDEC Member Countries	128-131
VII.	COOPERATION WITH INTERNATIONAL/REGIONAL ORGANIZATIONS AND NON-MEMBER GOVERNMENTS	132-147
VIII.	FUTURE DIRECTION OF SEAFDEC	148-154
IX.	MANAGEMENT OF THE CENTER	
9.1	New Calculation of the MRC for 2016	155-158
9.2	Plan of Operation and Programs of Work of SEAFDEC Departments and Secretariat	159-162
9.3	Operation of SEAFDEC Training and Research Vessels	163-167
9.4	Collaborative Arrangements between SEAFDEC and Other Organizations	168-172
X.	FINANCIAL MATTERS	
10.1	Adoption of Audited Financial Report for the Year 2014	173
10.2	Un-audited Financial Report for the Year 2015, and Status of the Financial Situation in the Year 2016	174-177
10.3	Proposed Budgetary Requirements of the Center for the Year 2017	178
10.4	Other Financial Matters	
10.4.1	Annual Audit the Accounts of IFRDMD	179
10.4.2	Others	180
XI.	CONCLUDING MATTERS	
11.1	Adoption of the Meeting Report and Press Statement	181-182
11.2	Date and Venue of the Forty-ninth Meeting of the SEAFDEC Council	183-184
11.3	Vote of Thanks to the Host Government	185
XII.	CLOSING OF THE MEETING	186

ANNEXES

Annex		Page
1.	List of Participants	29
2.	Welcome Statement by <i>Mr. Dao Cong Thien</i> , Vice Chairman of Khanh Hoa Provincial People's Committee	43
3.	Welcome Address by <i>Dr. Wimol Jantrarotai</i> , Director-General, Department of Fisheries (DOF) of Thailand and Chairperson of SEAFDEC Council for the Year 2015-2016	45
4.	Opening Speech by <i>H.E. Mr. Vu Van Tam</i> , Vice Minister of the Ministry of Agriculture and Rural Development of the Socialist Republic of Viet Nam	47
5.	Agenda	49
6.	Executive Summary of the Thirty-eighth Meeting of SEAFDEC Program Committee	51
7.	Executive Summary of the Eighteenth Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)	59
8.	Combating IUU Fishing in the Southeast Asian Region Through Application of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain	63
9.	Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over	65
10.	ASEAN Catch Documentation Scheme for Marine Capture Fisheries	69
11.	Regional Cooperation for Supporting the Implementation of the Port State Measures in ASEAN Region	97
12.	Regional Plan of Action for the Management of Fishing Capacity	103
13.	Trans-boundary Issues and Technical Dialogues	125
14.	Regional Cooperation on Labor Aspects Within the Fishing Industry in the ASEAN Region	129
15.	Proposed Rule for a U.S. Seafood Traceability Program	135
16.	Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region	137
17.	Regional Policy Recommendations on Conservation and Management of Eel Resources and Promotion of Sustainable Aquaculture	145
18.	Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations	147
19.	Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries	151
20.	Policy Recommendations and Strategic Plans for Fishery Resources Enhancements in the Southeast Asian Countries	161

Annex	Page
21. Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region	167
22. Regional Policy Recommendations on Early Mortality Syndrome (Acute Hepatopancreatic Necrosis Disease) and Other Transboundary Aquatic Animal Health Diseases	201
23. High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products	213
24. Preparation for Southeast Asian State of Fisheries and Aquaculture (SEASOFIA) 2017	235
25. The 50 th Anniversary of SEAFDEC	239
26. Human Resources Availability and Priority Needs for Capacity Building in Fisheries	249
27. Statement by <i>Dr. Muhammad Lukman</i> , Technical Coordinator, Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)	257
28. Statement by <i>Mr. David Brown</i> , Regional Fisheries Programme Consultant, Food and Agriculture Organization of the United Nations (FAO)	259
29. Statement by <i>Dr. Chersak Virapat</i> , Director-General, Network of Aquaculture Centres in Asia-Pacific (NACA)	261
30. Working Structures Between USAID-Oceans and SEAFDEC	263
31. SEAFDEC Minimum Regular Contribution (MRC) in 2016	265
32. Plans of Operation and Programs of Work of SEAFDEC Departments and Secretariat	267
33. Operations of the M.V. SEAFDEC and M.V. SEAFDEC 2	315
34. Collaborative Arrangements Between SEAFDEC and Other Organizations	319
35. Memorandum of Understanding Between Gifu Prefecture and the Southeast Asian Fisheries Development Center	325
36. Audited Consolidated Financial Statement for the Year 2014	327
37. Un-audited Consolidated Financial Report for the Year 2015	333
38. Status of the Financial Situation for the Year 2016	337
39. Proposed Budgetary Requirements of the Center for the Year 2017	341
40. Adopted Press Statement	345
41. Vote of Thanks to the Host Government by <i>Mr. Khin Muang Maw</i> , SEAFDEC Council Director for Myanmar and Director-General of Department of Fisheries of Myanmar	347

**THE FORTY-EIGHTH MEETING OF THE COUNCIL
OF THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

**Nha Trang, Viet Nam
4 – 8 April 2016**



The SEAFDEC Council and Alternate Council Directors, together with the Secretary-General and Deputy Secretary-General at the 48th Meeting of the SEAFDEC Council

**REPORT OF THE FORTY-EIGHTH MEETING OF THE COUNCIL
OF THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

**4 - 8 April 2016
Nha Trang, Viet Nam**

INTRODUCTION

1. The Forty-eighth Meeting of the Council of the Southeast Asian Fisheries Development Center (SEAFDEC) was convened in Nha Trang, the Socialist Republic of Viet Nam from 4 to 8 April 2016, at the invitation of the Directorate of Fisheries of the Ministry of Agriculture and Rural Development of Viet Nam.
2. The Meeting was attended by the Council Directors for Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam together with their respective delegations, as well as the Secretary-General, Deputy Secretary-General and the senior officials of SEAFDEC. The Meeting was also attended by representatives from the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR); the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF); Embassy of Sweden in Bangkok, Thailand; the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO/RAP); Network of Aquaculture Centres in Asia-Pacific (NACA); National Oceanic and Atmospheric Administration (NOAA); the Regional Plan of Action to Promote Responsible Fishing Practices Including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUU); and the United States Agency for International Development (USAID). The list of participants appears as **Annex 1**.

INAUGURAL CEREMONY

3. The Inaugural Ceremony of the Forty-eighth Meeting of the SEAFDEC Council was held on 4 April 2016, and was officiated by *H.E. Mr. Vu Van Tam*, the Vice Minister of Agriculture and Rural Development of the Socialist Republic of Viet Nam, and *Ms. Nguyen Thi Thu Nguyet*, the Deputy Director-General of the Directorate of Fisheries, Viet Nam, and *Mr. Dao Cong Thien*, Vice Chairman of Khanh Hoa Provincial People's Committee.
4. At the outset, the Vice Chairman of Khanh Hoa Provincial People's Committee, *Mr. Dao Cong Thien* welcomed the participants to the beautiful city of Nha Trang in Khanh Hoa Province. Situated on the south central coast of Viet Nam, Khanh Hoa Province occupies an area of about 5,200 km² and embraces 385 km of the country's coastline. He pointed out the importance of fisheries in the Province especially aquaculture, wild shrimp capture, and lobster culture among others, and added that capacity building for the fisheries sector of the Province would still be necessary. He cited that Khanh Hoa Province has been selected as one of the centers for development in Viet Nam and fisheries is one of the priorities for development. He then asked the SEAFDEC Council to provide support and cooperation with Khanh Hoa Province for the development of its fisheries including capacity building especially on improving the quality of its seafood export, strengthening the linkage of fish capture and processing sectors to reduce post-harvest losses, input-output control, and aquatic animals disease prevention. Such support would provide good opportunities for the people of the Province to improve their living standards and thus, ensuring the sustainable development of the Province. His Welcome Statement appears as **Annex 2**.
5. The Director-General of the Department of Fisheries of Thailand and Chairperson of SEAFDEC Council for 2015-2016, *Dr. Wimol Jantrarotai* expressed his gratitude to Viet Nam for the warm hospitality and arrangements of the 48th Meeting of the SEAFDEC Council. He emphasized that the works undertaken by SEAFDEC in 2015 had been very prominent especially the development of several regional policy recommendations and guidelines as well as the efforts of SEAFDEC to provide platform for the Member Countries to discuss emerging issues and strengthen regional cooperation. These led to the development of harmonized approaches towards addressing important issues and requirements, and enhancing the unity among the countries in expressing a common voice during relevant regional and

international fora including those of the higher authorities of the ASEAN. He also reiterated the commitment of Thailand to host the “High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community” with the theme on “Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products,” in Bangkok in August 2016. In this connection, he emphasized that the draft “*Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products*” to be discussed during this Council Meeting would be subsequently adopted by the Senior Officials of the ASEAN during the High-Level Consultation. While his term as Chair of the SEAFDEC Council is about to be completed, Dr. Wimol expressed the appreciation to his colleagues in the SEAFDEC Council of Directors as well as to partner organizations for extending their utmost support during his Chairmanship of the Council. His Welcome Statement appears as **Annex 3**.

6. The Vice Minister of the Ministry of Agriculture and Rural Development of the Socialist Republic of Viet Nam, *H.E. Mr. Vu Van Tam* welcomed the SEAFDEC Council Directors and their delegations as well as guests to Nha Trang City, the capital of Khanh Hoa Province, Viet Nam. He cited that this Meeting is meaningful because leaders in fisheries from the ASEAN and Japan would have the chance to discuss, provide directives and approve fisheries projects under the framework of SEAFDEC, especially in the context that ASEAN has become one community since 31 December 2015. While SEAFDEC has been exerting its efforts for almost 50 years to support and contribute to the fisheries development of the Southeast Asian countries, he indicated that no single word could explain the achievements from such endeavors of SEAFDEC. The support extended by SEAFDEC to promote fisheries development in the Southeast Asian region is well recognized, and for that he congratulated SEAFDEC and the Technical Departments. While referring to sector development, he stated that Vietnamese fisheries have been facing many challenges especially the increasing uncertainties at sea causing many damages, shipwreck of fishing vessels and fishermen’s fatal casualties. He therefore suggested that the efforts in combating IUU fishing should take into consideration safety at sea, humanity and high pressure of livelihoods for poor fishing communities. He committed to work closely with the SEAFDEC Member Countries in their efforts to combat IUU fishing and is ready to be actively involved in building the dialogue mechanism for IUU information exchange for undertaking prompt action, resolving incidents on fishing grounds, conducting research, rescue, storm shelter for fishermen and their vessels in the spirit of friendly cooperation and humanity through the establishment and operation of hotlines at bilateral and multilateral levels within our ASEAN Economic Community. After expressing the hope for fruitful deliberations during the Meeting, he declared the 48th Meeting of the SEAFDEC Council open. His Opening Speech appears as **Annex 4**.

I. PROCEDURAL MATTERS

1.1 Opening of the Meeting

7. The Director-General of the Department of Fisheries of Thailand and Chairperson of the SEAFDEC Council for 2015-2016, *Dr. Wimol Jantrarotai* welcomed the participants to the Meeting. He expressed again the gratitude to SEAFDEC and the Council Directors for the support extended to him during the term of his Chairmanship of the Council.

1.2 Election of the Chairperson for the Year 2016-2017

8. The Council Director for Viet Nam, *Mr. Nguyen Viet Manh* was unanimously elected as Chairperson of the SEAFDEC Council for 2016-2017, in accordance with Article 5, Paragraph 4 of the Agreement Establishing SEAFDEC. While expressing his gratitude to all the Council Directors, he sought the continued support of the Council Directors as well as from the regional organizations during his duty as the Chairperson of the Council.

1.3 Adoption of the Agenda and Arrangement for the Meeting

9. The Council adopted the Agenda of the Meeting, as amended, which appears as **Annex 5**.

II. REPORT OF THE SECRETARY-GENERAL

10. Before presenting the SEAFDEC Annual Report 2015, the Secretary-General of SEAFDEC congratulated the Council Director for Viet Nam, *Mr. Nguyen Viet Manh* for his election as the Chairperson of the SEAFDEC Council for the Year 2016-2017. He also expressed his appreciation to *Dr. Wimol Jantrarotai*, the Council Director for Thailand for serving as the Chairperson of the Council during 2015-2016, and specifically for guiding SEAFDEC toward the implementation of programs that cater to the priorities and requirements of the Member Countries.

11. After considering the requests of the Secretary-General, the Council approved the extension of *Mr. Hajime Kawamura* as Deputy Chief of the Training Department and concurrently Deputy Secretary-General from 1 to 30 April 2016, the appointment of *Dr. Kaoru Ishii* as Deputy Chief of the Training Department and concurrently Deputy Secretary-General for two years starting 1 May 2016, as well as that of *Dr. Chihaya Nakayasu* as Deputy Chief of the Aquaculture Department from 1 April 2016 until 31 March 2018 as proposed by the Government of Japan. In addition, the Council took note of the designation of the Deputy Chief of IFRDMD, *Dr. Satoshi Honda* as Acting Chief of IFRDMD starting 1 April 2016 until the nomination of the new IFRDMD Chief by the Government of Indonesia.

12. In presenting the Draft SEAFDEC Annual Report for 2015, the SEAFDEC Secretary-General focused on the highlights and major achievements of the activities carried out in 2015 in accordance with the SEAFDEC mandate categorized by SEAFDEC Program Thrusts that were adopted in 2009, taking into consideration the requirements and priorities of the Member Countries. After the discussion, the Council provided recommendations to improve the future activities of SEAFDEC.

13. While congratulating SEAFDEC for the activities undertaken in 2015, the Council Director for Japan emphasized on the importance of developing measures for combating IUU fishing, and expressed the willingness of Japan to continue supporting the activities of SEAFDEC on combating IUU fishing.

14. The Council Director for Myanmar expressed his appreciation to SEAFDEC for the implementation of programs and activities in 2015. He cited in particular the relevance of SEAFDEC activities in the promotion of sustainable fisheries resources in Southeast Asia, such as on aquaculture development and food security, technical support to regional fisheries development in various aspects, as well as to respond to the impacts of climate change through adaptation and mitigation measures of aquaculture and fisheries activities.

15. The Council Director for Thailand, while also congratulating SEAFDEC for its achievements from programs and activities undertaken in 2015, expressed the view that the future projects of SEAFDEC should specify clear linkages with its mandate, particularly to the 2011 Resolution and Plan of Action in order to raise the profile of SEAFDEC in the ASEAN mechanism. In particular, activities on “Optimizing Energy Use/Improve Safety Onboard Fishing Vessels” should focus on sanitation as well as working conditions and welfare of fishers onboard fishing vessels. On “Rehabilitation of Fisheries Resources and Habitat,” SEAFDEC should undertake an evaluation to assess whether the project came up with good outcomes. Specifically on “Inland Fisheries,” activities should be area-based and species-based; while the outputs should be packaged into “models” that could be applied by the other countries. With regards to “Aquaculture,” research activities should be linked with policies, and address possible loopholes along the whole supply chain, *i.e.* from culture, processing, marketing, including on application of GAP, and aquaculture inputs.

16. The Council Director for Thailand also expressed his support to the activities under the Program Thrust on “Enhancing Capacity and Competitiveness to Facilitate International and Intra-regional Trade,” considering that market driven measures continue to emerge. He emphasized that fish and fishery products from the region should comply with such emerging market requirements. While also expressing support to the initiatives of SEAFDEC in combating IUU fishing, he mentioned that problems on IUU fishing could not be solved by single country and need cooperation among several countries. Furthermore, combating IUU fishing should also take into consideration the whole supply chain, and the need to enhance the capacity of concerned agencies of respective countries in the implementation of the emerging requirements. After expressing the appreciation to partner organizations attending this Meeting for their

continued support to the activities of SEAFDEC, he also urged SEAFDEC to undertake more proactive works in the future. Lastly, he also encouraged SEAFDEC to make use of and synthesize statistics as well as all available data derived from its activities in order to provide information that would support fisheries development of the Member Countries.

17. While congratulating SEAFDEC for the activities undertaken in 2015, the Council Director for Indonesia expressed the concern on the use of fish meal in aquaculture, and cited that AQD should undertake activities on the utilization of locally available ingredients for feed formulations, instead of soybean which is an imported commodity in many countries. Moreover, AQD's programs on the development of sustainable aquaculture should focus on "common species" of the region, so that several countries could benefit from results of its research activities. He also informed the Meeting that in the planned stock assessment survey of Indonesia in its waters using its national research vessel, researchers from other SEAFDEC Member Countries are welcome to join the survey to share experiences and the lessons learned from this activity. Furthermore, he suggested that SEAFDEC could also consider supporting the production of materials in the national languages of the countries, including translation into local languages so that the materials would be more useful to the respective Member Countries.

18. The Council Director for Brunei Darussalam commended SEAFDEC for the implementation of activities in 2015, and informed the Council that Brunei Darussalam has been practicing prudent spending during this time and prioritizing of work making it difficult for representatives from Brunei Darussalam to attend many meetings/workshops/training courses conducted by SEAFDEC last year. Brunei Darussalam therefore expects that SEAFDEC would sustain its efforts in focusing on issues that confront the region for its programs for implementation in 2016. He shared the same concern as those raised by Indonesia that AQD should focus its research activities on high value species that are common in the region and not only on species that are dominant in the Philippines. He also reiterated that Brunei Darussalam is fully committed to combat IUU fishing in its waters, a commitment that was clearly demonstrated during the Study Visit of Brunei Darussalam Officers to Thailand to discuss issues related to Catch Certification from 28 March – 1 April 2016. On that note, he thanked Thailand through the Department of Fisheries for hosting two officers from Brunei Darussalam and for sharing the lessons learned with Brunei Darussalam on combating IUU fishing and implementation of the port State measures.

19. The Council Director for the Philippines reiterated the request of the Council during the past few years for AQD to focus its activities on aquatic disease prevention and encouraged AQD to continue conducting more activities on this aspect in the future. He also recalled that the MOU signed between SEAFDEC and USAID in June 2014, has served as framework for engaging US agencies, such as the National Oceanic and Atmospheric Administration (NOAA) and the Department of Interior (DOI) of USA, in identifying and providing technical support to the countries in the region, particularly in combating IUU fishing. He therefore suggested that the activities should be implemented under such MOU.

20. The Council Director for Cambodia congratulated SEAFDEC for the programs and activities carried out in 2015 and supported the programs for 2016 as these provide considerable inputs for the sustained efforts of the Member Countries in enhancing their skills and building the capacity to improve their peoples' livelihoods and fisheries resources management.

21. The Council Director for Malaysia expressed his appreciation to SEAFDEC for its achievements in 2015 and suggested that SEAFDEC could consider putting more emphasis on issues of common concern, particularly on shrimp diseases, *e.g.* EMS or AHPND, as well as on the development of aquaculture feed to reduce the use of fish meal, and in combating IUU fishing. He then urged the other AMSs to deny the landing of fish by Malaysian vessels in their respective ports, as a means of preventing the entry of fish from IUU fishing into the supply chain.

22. The Council Director for Lao PDR congratulated SEAFDEC for the programs and activities implemented in 2015, particularly on the conduct of on-site trainings and national/regional workshops in Lao PDR. In this connection, he requested SEAFDEC to continue providing technical support to Lao PDR in terms of capacity building on sustainable fisheries development.

23. The Council Director for Viet Nam congratulated SEAFDEC for the activities undertaken during the past year. While commending SEAFDEC for conducting training courses on the Ecosystem Approach to Fisheries Management (EAFM), he suggested that SEAFDEC could also consider enhancing the curriculum and tools of the EAFM concept by making it more applicable to the Member Countries and address the concerns on the level of participants attending the training course, thus, optimizing the implementation of EAFM concept in the region. He also informed the Council of the plan for Viet Nam to utilize the M.V. SEAFDEC 2 for the country's planned surveys in 2017-2018, the details of which would be discussed with the SEAFDEC Training Department after the budget for this purpose has already been approved.

24. After providing their views and comments on the activities of SEAFDEC, the Council approved the Draft SEAFDEC Annual Report 2015 for publication and dissemination to the Member Countries, relevant organizations and the public. However, the Council also encouraged SEAFDEC to consider the comments and suggestions made at this Meeting, during the planning and implementation of SEAFDEC programs and activities in the future.

III. NOTE OF THE CHAIRPERSON OF THE SEAFDEC PROGRAM COMMITTEE ON THE RESULTS OF THE THIRTY-EIGHTH MEETING

25. The Council took note of the results of the Thirty-eighth Meeting of the Program Committee of SEAFDEC (**Annex 6**) which was convened in Manila, Philippines on 23-25 November 2015 as presented by the Deputy Secretary-General of SEAFDEC in his capacity as the Acting Secretary-General and Chairperson of the SEAFDEC Program Committee. The Council also provided comments and suggestions for the improvement of the programs and activities of SEAFDEC in the future.

26. During the discussion, and in response to the queries of the Council Director for Indonesia, it was clarified that the countermeasures developed by SEAFDEC to combat IUU fishing in the region include the establishment of the Regional Fishing Vessels Record (RFVR) Database for vessels 24 m in length and over, and that the Database would later include vessels that measure less than 24 m in length but operate in the same waters as those vessels 24 m in length and over. Moreover, it was reiterated that SEAFDEC has been providing the platform for the development of regional cooperation and strengthening the port State controls to enable the countries to implement port State measures. As for the Special Project, the current activities are focused on providing platform for bilateral or tri-national dialogues among the countries bordering the Gulf of Thailand and those of the Andaman Sea. On the IDB-funded project which had been negotiated for many years, the Council was informed that since funding for the implementation of the Project was already received in March 2016, a planning inception meeting/workshop would be convened by MFRDMD in May 2016. The countries involved in the project are Brunei Darussalam, Indonesia, and Malaysia.

27. In order that the Council would have a clear picture on how far the projects had been implemented, the Council Director for Thailand suggested that SEAFDEC should provide a list of projects, the proposed time frame from start to completion, and the status of implementation so that the Council would know the status of project implementation. For example on the REBYC-II CTI Project which was completed in 2015, he asked SEAFDEC to prepare a report indicating whether the project has achieved its plan of work and for the Project's six-month extension period to wrap up the Project activities, the work plans during the extension period should also be provided. On the High Level Consultation scheduled in August 2016, he suggested that there is a need to raise the profile of this activity in the media at the ASEAN level through cooperative effort among the Member Countries, ASEAN and SEAFDEC as it appears that this is not much visible especially outside SEAFDEC and the ASEAN Community.

28. While appreciating SEAFDEC's achievements in 2015, the Council Director for Thailand added that follow-up actions and evaluation of the activities should also be provided in the tabulated status of implementation of the SEAFDEC programs and activities. This would allow the SEAFDEC Program Committee and/or the SEAFDEC Council to give appropriate advice on the project implementation, especially on whether the objectives and plans had been achieved. In addition, constraints and post-evaluation of the projects upon completion should also be provided to determine the value of the project accordingly.

29. While endorsing the proposed programs of SEAFDEC for 2016, the Council Director for Malaysia requested SEAFDEC to inform the Member Countries on the plans for training courses especially those of SEAFDEC/TD and SEAFDEC/AQD through the official communications aside from those uploaded the SEAFDEC Website. He added that the SEAFDEC Departments, particularly AQD, could invite appropriate research institutions of the Member Countries to conduct collaborative research at AQD, for example the Fisheries Research Institute Malaysia.

30. The Council Director for Viet Nam requested SEAFDEC to support and assist the Member Countries to develop their respective National Plans of Action in line with the RPOA-Capacity which could be associated with the EAFM concept. He also asked SEAFDEC to assist the Member Countries in improving the fishing vessel registration system as well as on technical matters relevant to the establishment of Port State Measures for the region to reduce IUU fishing.

31. With regards to the project on Fisheries *Refugia*, the Council was informed that the budget for project implementation has been approved recently. In this connection, the Council Director for Viet Nam expressed the willingness to serve as pilot country for the implementation of the project as the country has already established a number of fisheries *refugia* sites. In addition, considering that SEAFDEC/TD is the hub for training on fishing technology, he also requested TD to assist Viet Nam in training Vietnamese fishers to change from fore deck purse seining to stern deck purse seining, as this could be a means of reducing the number of labor onboard purse seiners.

32. While congratulating SEAFDEC for the successful implementation of its projects in 2015 most of which would be continuing until 2016, the Council Director for Cambodia requested SEAFDEC to consider the conduct of capacity building activities in Cambodia by training Cambodian fishers/biologists as requested by the country; inclusion of Cambodia and Viet Nam in the Mekong River Basin Sub-region considering the proximity of the countries to the Mekong River; the inclusion of Cambodia as pilot site for the USAID Oceans and Fisheries Partnership Project to ensure that the country would also be involved in HRD programs on combating IUU fishing and vessel inspection, and gain experiences in these aspects; and the involvement of researchers from Cambodia in AQD's research projects.

33. After the discussion, the Council approved the programs implemented by SEAFDEC in 2015 and endorsed the programs proposed for 2016 as recommended by the SEAFDEC Program Committee after these have been improved based on the recommendations of the Council at this Meeting.

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

34. The Council noted and endorsed the results and recommendations of the Eighteenth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) which was held from 26 to 27 November 2015 in Manila, Philippines (**Annex 7**) as presented by representative from Myanmar on behalf of the ASEAN Co-chair for the FCG/ASSP Meeting.

35. In the discussion, the Council Director for Thailand informed the Meeting that as the ASEAN Shrimp Alliance (ASA) came up with the Strategic Plan on Development and Implementation of ASEAN Shrimp GAP which was endorsed by the 33rd Meeting of AMAF. After such endorsement, some AMSs had initiated the process of aligning their national shrimp standards with the ASEAN Shrimp GAP. He informed the Council that Thailand had already completed such alignment in 2014 as well as revising the checklist, and that Thailand would host the Seventh Meeting of the ASA in May 2016 to share experiences on the implementation of ASEAN Shrimp GAP among the countries and address the issue raised by the U.S. Presidential Task Force on Combating IUU Fishing and Seafood Fraud on the listing of shrimp as species at-risk.

36. Regarding the ASEAN Fisheries and Aquaculture Conference and Exposition 2016: ASEAN Seafood for the World, the Council Director for Thailand also informed the Meeting that the event will be divided into two parts: 1) international scientific conference, and 2) exhibition and business matching. The Conference would be co-organized by the Department of Fisheries of Thailand, the Asian Fisheries

Society (AFS), NACA, SEAFDEC, FAO, GLOBEFISH, INFOFISH, and partners. In this regard, Thailand had circulated the invitation letters to all AMSs which would also extended to private sector of the AMSs.

37. The Council Director for Myanmar informed the Meeting that Myanmar hosted the 2nd Technical Working Meeting in Developing Strategic Plan of Action for ASEAN Cooperation on Fisheries 2016-2020 on 16 to 18 February 2016. The said Meeting adopted the Strategic Plan of Action (SPA) for ASEAN Cooperation on Fisheries for 2016-2020 for submission to the 24th Meeting of ASWGFi. He then encouraged the AMSs to enhance cooperation in support of the implementation of the SPA in the AMSs.

38. Regarding the U.S. Presidential Task Force on Combating IUU Fishing and Seafood Fraud which had released its final list of species at risk, the Council Director for Viet Nam requested the USA through the representative from NOAA attending this Meeting, to publicize the profile of such species so that the exporting countries could provide their comments on species at-risk and develop their respective national plans to address the issue.

39. After providing their views and comments on the activities of SEAFDEC, the Council endorsed the results of the deliberations and recommendations made at the Eighteenth Meeting of the FCG/ASSP.

V. POLICY CONSIDERATION ON IMPORTANT ISSUES

5.1 Issues on Combating IUU Fishing

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

40. The Meeting took note of the progress in the implementation of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain (**Annex 8**) which was presented by the representative from SEAFDEC/MFRDMD. The Council also noted that the Guidelines was already endorsed by SOM-AMAF, however, it would still require the adoption of a number of management tools such as the ASEAN Catch Documentation System (ACDS), Regional Fishing Vessels Record (RFVR), regional cooperation for implementation of Port State Measures (PSM) to ensure that illegally-caught fish could not enter into supply chain.

41. In the discussion, the Council Director for Thailand expressed the view that the region has very large numbers of small-scale fishers, but fishers regardless of scale, who fish without reporting their catch, should be regarded as doing some forms of IUU fishing. He therefore expressed the need to enhance the capacity of small-scale fishers to use a simplified form of logbook in order to provide information on the origin of fish so that in a way, IUU fishing could be addressed. Moreover, he emphasized that problems also occur in certain steps in trading of raw materials within the region which could result in the collapse of the whole supply chain. It is therefore necessary to enhance the capacity of countries to come up with harmonized catch certification, in order to improve trading of products among the countries in the region. Furthermore, a system of following-up the route of documents along the supply chain, *e.g.* from buyers, collectors, distributors, etc. should also be developed.

42. While encouraging the countries to implement the Guidelines even if the Guidelines is a non-binding document, the Council Director for Indonesia suggested that the Guidelines should be reviewed regularly at appropriate times, especially on how to prevent products from IUU fishing from entering into supply chain across countries in the Southeast Asian region.

5.1.2 Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over

43. The Council was informed on the outputs of the Regional Technical Consultation on the Regional Fishing Vessels Record: Use and Way Forward of RFVR Database as a Management Tool to Reduce IUU Fishing in Southeast Asian Region which organized in June 2015 in Pattaya, Thailand (**Annex 9**). The Report made by the representative from SEAFDEC/TD included Policy Recommendations and Way

Forward for AMSs and SEAFDEC to Prevent, Deter and Eliminate IUU Fishing through Utilization of RFVR Database for 24 Meters in Length and Over.

44. In the discussion, the Council Director for Malaysia mentioned that Malaysia has been supporting the activities of SEAFDEC on the development of the RFVR Database as a tool for preventing IUU fishing. He explained that the RFVR Database could be used to check foreign vessels that enter into the Malaysian ports. He therefore suggested that the RFVR Database should be regularly updated, and cited that through the satellite system, encroachment of fishing vessels in the countries could also be monitored and controlled.

45. The Council Director for Indonesia acknowledged the timeline of data submission for the RFVR Database and expressed regrets for some delays in submission of data from Indonesia due to internal administrative matters, however, the required data would be submitted to SEAFDEC by mid of April 2016. He added that to strengthen the efforts to combat IUU fishing, vessel monitoring data of Indonesian fishing vessels would be made open for public access starting in September 2016.

46. On the concern raised by the representative from RPOA-IUU on sharing of information in the RFVR Database with non-AMSs (*e.g.* RPOA-IUU member countries which are not members of SEAFDEC), the Council Director for the Philippines suggested that the reasons for such request should be considered while same security measure for accessing the RFVR Database by the AMSs should be applied with the authorized non-AMSs as well as RFMOs by providing them with the corresponding security password. In this connection, while agreeing that the database could be shared with non-AMSs and RFMOs under such principle, the Council requested the SEAFDEC Secretariat to seek approval from the ASEAN on this matter.

47. Furthermore, with regards to the utilization of the RFVR Database for 24 Meters in Length and Over, the Council took note of the Policy Recommendations made during the RTC in Pattaya, and recommended that SEAFDEC should continue updating the RFVR Database on an annual basis.

5.1.3 ASEAN Catch Documentation Scheme for Marine Capture Fisheries

48. The Council noted the output of the Experts and Technical Consultation Meetings on the Development of the Draft ASEAN Catch Documentation Scheme (ACDS) including the Info-graphic on usages of ACDS in various scenarios of catch flows of fish and fishery products into the ASEAN region (**Annex 10**), as reported by the representative from the SEAFDEC Secretariat.

49. While noting that implementation of the ACDS would be pilot-tested in Brunei Darussalam, the Council Director for Viet Nam raised the concern on the way forward after the scheme would have been piloted in Brunei Darussalam, which possibly implies that the scheme should be revised. In response, it was reiterated that the ACDS could be adjusted after the pilot testing in Brunei Darussalam in collaboration with USAID Oceans.

50. In this connection, the Council Director for Malaysia suggested that SEAFDEC should take into consideration the requirements of the EU and the U.S. Presidential Task Force in order that the ACDS would be acceptable by importing markets. In this regard, the Council was informed that the development ACDS had been carried out by closely following the EC regulations or the relevant national initiatives used by many AMSs and that the ACDS is meant not only to enhance intra-regional trade but also to improve traceability system.

51. The Council Director for the Philippines also indicated that since the ACDS would be used as basis for promoting intra-regional trade by the AMSs, this should be in line with the systems that are already being implemented by the AMSs considering that the ACDS would also be used to improve national traceability of fish and fishery products.

52. The Council Director for Indonesia suggested that the pilot testing activity of the ACDS to be implemented in Brunei Darussalam could be endorsed during this Meeting, however, the final ACDS

could be considered later after results of the pilot testing have already been compiled and the ACDS is adjusted accordingly.

53. The Council Director for Thailand also raised the concern on how to verify the information contained in the ACDS forms, and suggested that the process to investigate the accuracy of information should be taken into account in the ACDS plans of action. In this connection, he requested SEAFDEC to investigate the difficulties that could be encountered by the countries in filling up the forms, and explore the ways and means of addressing such constraints. One of such approaches would be through the production and dissemination of manuals on fish species common in the countries of the region with local names that would make it easy for fishers to recognize the fish species.

54. After the deliberation, the Council endorsed the plan to pilot test the ACDS in Brunei Darussalam and asked SEAFDEC to report the results of trial on the implementation of the ACDS during the next Meeting of the SEAFDEC Council.

5.1.4 Regional Cooperation to Support the Implementation of the Port State Measures in ASEAN Region

55. The Council took note of the proposed Regional Cooperation for Supporting the Implementation of Port State Measures (PSM) in the ASEAN Region (**Annex 11**) which was presented by the representative from the SEAFDEC Secretariat. The report also included a preliminary assessment of the current status, constraints/problems on the implementation of the PSM, and the recommendations for development of regional cooperation on PSM, which was developed through the Experts Meeting on Regional Cooperation for Supporting the Implementation of Port State Measures in Southeast Asian Region held on 2-4 February 2016 in Bangkok, Thailand.

56. While commending SEAFDEC for the works it had undertaken in support of the implementation of PSM, the Council Director for Indonesia informed the Council that although Indonesia has yet to ratify the PSM Agreement (PSMA), the regulations necessary for the implementation of PSMA have already been put in place. He expressed the view that the work plan and timeframe proposed by SEAFDEC should be reviewed and adjusted to ensure that the expected outputs could be attained. He also stressed that since SEAFDEC has already established the RFVR Database as tool for combating IUU fishing, the data proposed to be compiled and intended to support the implementation of PSM should be harmonized/integrated with the RFVR Database to refrain from developing another database.

57. The Council Director for the Philippines agreed that SEAFDEC should revisit the work plan and integrate the database for PSM with other databases for combating IUU fishing particularly the RFVR Database. He cited that development of appropriate training curriculum for capacity building is a key to enable the AMSs to develop their capacity to implement PSM; and that the proposed training should not be in the form of "Training of Trainers" considering that such training would target only limited number of port inspectors. Furthermore, enhancing the knowledge and understanding of relevant stakeholders on PSM should be promoted through information dissemination.

58. The Council Director for the Philippines also identified four main aspects that should be considered during the implementation of PSM. These include: 1) denying entry of IUU vessels into AMS's ports based on an integrated vessel database; 2) identification of designated ports; 3) prior notification of vessels entering into the countries' ports; and 4) capacity building for inspectors. In this connection, he also emphasized that making fisheries authorities of respective countries fully understand the PSM is a prerequisite for the AMSs to consider supporting and ratifying the PSMA accordingly.

59. While confirming that although Malaysia is yet to be a Party to the PSMA, the Council Director for Malaysia also informed the Council that Malaysia encourages the other countries in the region to implement PSM. In this connection, Malaysia has requested the members of the RPOA-IUU to deny landing of catches by Malaysian vessels in their ports. He cited five cases of vessels violating the country's laws that had been charged in court, and sought the collaboration of all AMSs not to allow Malaysian vessels to land their catch in other country's ports as well. Although still not a Party to PSMA, Malaysia has been obliged as member of the IOTC, to train port officers to be ready for the

implementation of required port measures. He mentioned the strategies that Malaysia had developed as guide for the implementation of PSM. These include: 1) inter-agency coordination, among Port Authority, Department of Fisheries, and Custom Department; 2) information sharing among countries; 3) application of measures not to allow vessels to unload or transship fish in Malaysian waters without obtaining written approval from the authorities. With regard to the intervention of the Council Director for Malaysia, the Council suggested that SEAFDEC could learn from the experience of Malaysia in supporting the other Member Countries in the implementation of PSM.

60. The Council Director for Malaysia also informed the Council that currently the PSMA has already been ratified by 24 countries, and needs only one more country to be put into force. In this connection, he suggested that SEAFDEC/TD could consider revising its work plan to ensure that once the PSMA comes into force, majority of the countries in the region would be ready for its implementation.

61. The Council Director for Viet Nam therefore requested SEAFDEC to raise the profile of PSM and its implementation, especially to the higher authorities of the ASEAN and to push toward the process of PSMA ratification and implementation.

62. With regards to the submission of the proposal to support the implementation of PSM, to the higher authorities of the ASEAN, the Council Director for Thailand expressed the view that such proposal should be submitted to the SOM-AMAF not only by the fisheries authorities but also as a collaborative effort by several other sectors' relevant agencies. The Council therefore suggested that SEAFDEC should develop and disseminate a package of measures to support the AMSs in the implementation of PSM.

63. After the deliberation, the Council requested SEAFDEC to revise the concept proposal including the work plan taking into consideration the comments of the Council at this Meeting, and ensure that the revised work plan respond to the objectives of the cooperation. The revised concept proposal which should be circulated to AMSs within one month after this Council Meeting by *ad referendum*, would seek the comments/endorsement of the Concept Note before its submission to the ASWGFi and higher authorities of the ASEAN as appropriate for consideration.

5.1.5 Regional Plan of Action for the Management of Fishing Capacity

64. The Council was informed of the initiatives undertaken by SEAFDEC in consultation with the SEAFDEC Member Countries on the development of the ASEAN Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including the template for the Development of the NPOA-Capacity (**Annex 12**) as presented by the representative from the SEAFDEC/Secretariat.

65. During the discussion, the Council Director for Thailand cited that the tremendous number of small fishing vessels operating in the region requires strong and urgent need to limit fishing capacity. However, while considering the recommendations in the RPOA-Capacity for countries not to increase the number of fishing vessels and reduce the number of vessels, he expressed the concern that removal of small vessels would impact on the livelihood of small-scale fishers and the communities. He therefore suggested that supporting measures to achieve the target of managing inputs/efforts commensurate with MSY without reducing the number of fishing vessels should be explored. He also noted that the RPOA-Capacity is intended to provide a regional framework for managing fishing capacity without going into the details of the measures to be undertaken by individual fishers.

66. While expressing support to the promotion of the RPOA-Capacity, the Council Directors for Indonesia and Philippines commented that the figures put up by SEAFDEC on the number of fishing vessels of their respective countries do not reflect the actual number of vessels, and thus could imply overfishing and overcapacity of fisheries in the countries' waters. In this regard, it was required that the SEAFDEC Secretariat adjust the figures accordingly.

67. The Council Director for Brunei Darussalam informed the Council that Brunei Darussalam has issued a policy on Sustainable Fisheries Management and Brunei Fisheries Limits under Chapter 130 of the country's Fisheries Order 2009 providing legislative infrastructure for the management of fisheries activities and fishing areas, as well as marine reserves and parks. This underlying policy has been

translated into operational and field level management programs in order to come up with several mitigating measures to abate the recent decline in the country's fish capture production, such as those related to managing fishing capacity, including imposing a moratorium on fishing gears, *e.g.* trawlers, control of fishing areas and mesh size, etc.

68. The Council Director for Viet Nam also informed the Meeting that the Government of Viet Nam has already formulated the NPOA-Capacity and is now in the process of implementing the NPOA-Capacity. The Council Director for Malaysia also informed the Meeting that the Government of Malaysia has already developed its NPOA-Capacity and expressed the willingness to share the country's experience on the development and implementation of the NPOA-Capacity with SEAFDEC and with the other Member Countries.

69. After the discussion, the Council asked the SEAFDEC Secretariat to accommodate the comments and suggestions raised at this Meeting, in particular to update the number of fishing vessels of the respective Member Countries, and circulate the final draft of RPOA-Capacity to the Council Directors for endorsement by *ad referendum*, before submitting this together with the Template for the Development of the NPOA-Capacity to the ASWGFi for consideration.

5.1.6 Trans-boundary Issues and Technical Dialogues

70. The Council was informed on the bilateral and sub-regional initiatives to strengthen cooperation among countries to address transboundary issues through bilateral arrangements and technical dialogues to combat IUU fishing in the sub-regions of Southeast Asia (**Annex 13**), by the representative from the SEAFDEC Secretariat.

71. During the discussion, the Council Director for Indonesia sought clarification on the mechanism for bi/tri-lateral dialogues including the proposed establishment of the Technical Advisory Committee (TAC). In response, it was clarified that the set-up arrangement for TAC is based on the recommendations of previous bi-lateral dialogues in order to manage and deal with effective fisheries management in areas bordering the sub-regional waters as well as facilitate exchange of experiences between and among bordering countries. Nevertheless, he expressed his reservations to the establishment of TAC.

72. While commending SEAFDEC for its efforts in addressing transboundary issues, the Council Director for Thailand encouraged SEAFDEC to extend the model to other sub-regional areas, and to provide similar platform to enable these countries to also discuss and address problems encountered with respect to fisheries management in transboundary areas and in combating IUU fishing. He added that the approach and model adopted would allow local communities of bordering countries to settle their problems from the technical point of view, the results of which could be used in a broader scope for the benefit of the sub-regions and eventually for the whole Southeast Asian region.

73. The Council Director for Malaysia suggested that the summary and lessons learned should be discussed and summarized at technical consultations prior to seeking the consideration of the Council.

74. After the discussion, the Council suggested that the way forward for transboundary issues and technical dialogues should be revisited and adjusted accordingly.

5.2 Other Emerging Issues

5.2.1 Labor Aspects: Outputs and Recommendations from the Regional Technical Consultation on Labor Aspects within the Fishing Industry in the ASEAN Region

75. The Council took note of the outputs of the activity of SEAFDEC related to labor aspects, including the Recommendations of the Regional Technical Consultation on Labor Aspects within the Fishing Industry in the ASEAN Region (**Annex 14**) as reported by the representative from the SEAFDEC Secretariat.

76. The Council Director for Thailand shared the experience of Thailand in addressing the concerns on human trafficking, illegal labor practices and IUU fishing by considering these as part of the country's national agenda. As a result of such effort, over 130,000 undocumented migrant workers in the country's fisheries sector have been registered as of March 2016. He also informed the Council that Thailand has already ratified the ILO Occupational Safety and Health Convention No. 187 in March 2016 and that the process of ratifying the ILO Work in Fishing Convention, 2007 (No. 188) or C188 is still being reviewed by the Cabinet. He also cited that the country takes a 'zero tolerance' approach in combating IUU fishing and addressing issues on forced labor.

77. With regard to the recommendations of the RTC on Labor Aspects, the Council Director for Indonesia informed the Council that Indonesia has issued Regulation No. 35/2015 on Human Rights System and Certification for Fisheries Business requiring the fishing companies operating in Indonesian waters to comply with human rights standards. In responding to his query regarding the mechanism for the development of the ASEAN Guidelines on Implementation of Labor Standards for the Fisheries, it was clarified that such development would take into consideration the existing standards and instruments developed by various organizations such as ILO, IMO, and FAO among others, since labor standards in fisheries in the Southeast Asian region are not yet developed. He added that it is important for the ASEAN to have its own guidelines with standards that would be suitable to the region's working conditions and applicable to all the countries, and also take into account the region's fisheries and investments in fisheries.

78. The Council Director for Myanmar informed the Meeting that the country is drafting a new law which considers labor aspects in some parts of the law and requires for the establishment of an agency for fishers. Such agency would be tasked to also conduct training for crew members and fishers working in foreign fishing vessels and to address the issues on unregistered employment of Myanmar fishers in foreign countries. In this regard, the Department of Fisheries of Myanmar is setting up a new approach for dispatching fishers and crew to work on foreign fishing vessels, based on two aspects. These are: crew members who intend to work internationally should complete a training program conducted by certified persons from IMO and ILO; and dispatch fishers only after attending the training program of the Department of Fishery (DOF) or other DOF certified agencies through agency (sending country) to agency (receiving country) system.

79. The Council Director for Malaysia shared the country's policy of not allowing migrants to work in the Malaysia's commercial fishing vessels without prior approval by the responsible authorities, and undertaking actions to check crew members including their identity. While supporting the development of such ASEAN Guidelines, the Council Director for Philippines cited that this development would assist the AMSs nevertheless, such Guidelines should take into consideration the nature of fisheries and small size vessels of the region being important fishing nations, to reduce the implications to trade barriers into the region's economies.

80. Considering that the ASEAN Guidelines is voluntary, in nature, the Council Director for Thailand cited that minimum requirements as well as common template should be developed for the countries to refer to in developing their respective regulations. He then proposed to include essential aspects such as 'good labor practices' in the Guidelines to reflect and suit the conditions of fishing sector in the region.

81. The Council Director for Viet Nam suggested that the development of the ASEAN Guidelines on labor standards should consider the specifications of small-scale fisheries considering that most of international labor standards in fishing sector are applied for commercial fishing industry.

82. While noting that the term labor standards also cover working conditions, the Council endorsed the proposed development of the ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector, for submission to and subsequent consideration by the ASEAN.

5.2.2 Presidential Task Force on Combating Illegal Unreported and Unregulated (IUU) Fishing and Seafood Fraud Action Plan

83. The representative from NOAA Fisheries, Office of International Affairs and Seafood Inspection provided information on the Presidential Task force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud Action Plan and its progress (**Annex 15**). He cited that the Action Plan released in March 2015 include a Seafood Traceability Program for certain fish and fish products imported into the United States that have been identified as particularly vulnerable to IUU fishing and seafood fraud, known as at-risk species. This include: abalone, Atlantic cod, blue crab, dolphinfish, grouper, king crab (red), Pacific cod, red snapper, sea cucumber, sharks, shrimps, swordfish, and tunas (albacore, bigeye, skipjack, and yellowfin). He mentioned that on 4 February 2016, NOAA Fisheries announced a Proposed Rule to establish the first phase of a Seafood Traceability Program through the collection or retention of data regarding the harvest, landing, and chain of custody of those species considered at-risk. He also informed the Council that NOAA Fisheries has opened the opportunity for the public to provide comments on the Proposed Rule until 12 April 2016.

84. In this connection, the Council Director for Malaysia expressed the appreciation to the U.S. Government for allowing countries to provide comments on the Proposed Rule and urged the Member Countries to send their respective comments accordingly within the timeline. The Council also expressed the need to develop a regional common position for submission through the ASEAN mechanism, notwithstanding the timeline which might make this process no longer possible.

85. The Council Director for Viet Nam, while taking note of the requirements of the U.S. Presidential Taskforce, requested the representative from NOAA Fisheries to provide more information on the basis used for determining the aquatic species considered at-risk. Concern was also expressed on the application of the Seafood Traceability Program as this program is just only applied for imported seafood products which may violate the discrimination provisions of World Trade Organization (WTO). The Council Director for Viet Nam also added that the inclusion of all species of shrimps and grouper as species at-risk should be reviewed considering that there are large numbers of shrimp species in the Southeast Asian region. In response to the point raised about WTO compliance, the NOAA Fisheries representative clarified that the US proposal for data collection at the point of entry into commerce applies equally to US domestic harvest, but as the reporting regulations for domestic harvest are already in place, the proposed rule addressed only new information collection on imports.

86. The Council Director for Singapore informed the Meeting that the joint letter among AMSs is being developed through the foreign affairs mechanism and is expected to be signed by Ambassadors of the AMSs to USA. In this connection, the Member Countries are urged to send their common voice on the Proposed Rule for species at-risk to the U.S. Government through their embassies.

5.3 Regional Cooperation to Promote Sustainable Fisheries and Aquaculture in ASEAN Region

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

87. The Council took note of the progress of the development of the Regional Plan of Action on Sustainable Utilization of Neritic Tunas (RPOA-Neritic Tunas) which was endorsed by the 23rd Meeting of the ASWGFi, and subsequently submitted to the SOM-AMAF for notification (**Annex 16**), as presented by the representative from SEAFDEC Secretariat. The Council provided guidance to SEAFDEC and the Member Countries for effective implementation and collaboration for long-term sustainable utilization of neritic tunas in the region.

88. While supporting the activities to be undertaken by the Scientific Working Group (SWG) in 2017 under the agreed TORs to strengthen regional cooperation and ensure sustainable utilization of neritic tunas, the Council Director for Viet Nam expressed the concern on the role of the Scientific Working Group in promoting effective implementation and collaboration for long-term sustainable utilization of neritic tunas. In response, it was clarified that the Scientific Working Group is scheduled to meet at least once a year, with the Member Countries bearing the cost for their participation to the SWG meetings

starting in 2018. However, the cost of attendance of resource persons and secretariat to the meetings would be the responsibility of SEAFDEC. Moreover, the Council Director for Viet Nam also requested SEAFDEC to make sure that the scientific recommendations developed by the SWG should be disseminated to the Member Countries through National Focal Point.

5.3.2 Regional Policy Recommendations on Conservation and Management of the Eel Resources and Promotion of Sustainable Aquaculture

89. The Council took note of the progress made by IFRDMD in the implementation of the regional policy recommendation on Conservation and Management of the Eel Resources and Promotion of Sustainable Aquaculture including the proposed development of eel catch statistics and establishment of an inventory system (**Annex 17**), as presented by the representative from SEAFDEC/IFRDMD.

90. During the discussion, the Council Director for Cambodia suggested that SEAFDEC should provide technical information to the Member Countries on the existing species of eels in the region to enable the countries to support the collection of eel statistics for possible establishment of the eel database.

91. The Council Director for Viet Nam shared the information on the utilization eel resources in Viet Nam, and that there are two (2) major sources of catadromous eels consumed in the country: 1) eels collected from the wild; and 2) eels produced from aquaculture. These species of eels are mostly collected by small-scale fishers targeting domestic consumption and export (live eels). Although it is believed that eel statistics of Viet Nam is not systematically recorded, most eel farms in Viet Nam have their own records for commercial purposes.

92. The Council Director for Japan informed the Meeting that because the stock of European eel had decreased significantly, it is suspected that the tropical eels are over-exploited to compensate the demand. He raised the importance to properly assess the resource status and situation of exploitation and to implement proper management measures. In this connection, Japan was requested to consider providing technical assistance to SEAFDEC and the Member Countries to transfer the technology of Japan on eel farming to the Southeast Asian countries.

93. The representative from IFRDMD also informed the Meeting that IFRDMD is now preparing to organize a tropical eel workshop in Palembang, Indonesia during the last week of April 2016. Prior to its workshop, a questionnaire was prepared and sent to the SEAFDEC Member Countries for them to provide updated information on the status of tropical catadromous eels in their respective countries. Results of the survey would be reported during the said Workshop to be able to establish an inventory system for the catadromous eels in the Southeast Asian region. Another aspect to be discussed during the Workshop is the proposed listing of species of eels (Anguillid eels) in the Appendices of CITES. It is also for this reason that it is necessary to compile the present status of catadromous eel resources including the utilization and catch statistics of eel including glass eels in the region.

94. With regard to the planned Workshop, the Council was of the view that this should be transformed into a technical workshop in order that experts could also provide useful information to the Workshop. The Council Director for Thailand also added that the objectives of the activity could include the need to confirm whether the catadromous eel resources in the Southeast Asian region are over-fished. IFRDMD was therefore asked to revise the detailed action plan of the project to include the comments of the Council at this Meeting. The Council noted that currently only Indonesia and the Philippines are able to report production of eels from capture fisheries. The Council was of the view that whether countries should establish eel statistics should be decided after the Workshop.

5.3.3 Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations

95. The Council took note of the updates on the Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations especially significant research results on alternative protein sources in feed formulations (**Annex 18**), as reported by SEAFDEC/AQD.

96. The Council Director for Myanmar expressed his gratitude to SEAFDEC and the Government of Japan through the ASEAN Foundation for financially supporting the joint organization of the ASEAN Regional Technical Consultation (RTC) on Development and Use of Alternative Dietary Ingredients or Fish Meal/Oil Substitutes in Aquaculture Feed Formulation with the collaboration of the Department of Fisheries of Myanmar in December 2014 at Nay Pyi Taw, Myanmar. He added that based on the recommendations of the RTC, there is a need to create a network for exchanging/sharing of knowledge on research and development for aquatic animal nutrition in aquaculture in the region. He also informed the Meeting that the ASEAN Foundation is compiling the activities carried out by government and private sector in the region on the development of aquatic animal nutrition. In this regard, he requested the Member Countries to support the compilation of information on aquatic animal nutrition activities for the purpose of knowledge sharing and information exchange for the benefit of the aquaculture industry in the region.

97. Considering that fish meal could not be simply replaced by soybeans, the Council Director for Indonesia suggested that AQD should consider looking into the strategies on the use of alternative ingredients that are locally-available in specific locations.

98. While supporting AQD to continue its work in exploring plant-based ingredients as substitution for fish meal, the Council Director for Thailand suggested that focus of the R&D could be given to herbivorous fish species and on the digestibility coefficient of the ingredients that are available locally. Furthermore, the Council also asked AQD to take into consideration the availability of supply of the ingredients all year round, and the possibility of conducting research activities that complement rather than duplicate those of other institutions.

99. The proposed “Feed Network”, if established, will serve as a platform for SEAFDEC and its Member Countries to share technical information on alternative feed ingredients (protein sources) for aquaculture feed formulations and for collaborative efforts in screening alternative feed ingredient that are available in the region.

5.3.4 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries

100. The Council took note of the progress of work made by FAO and the Ministry of Marine Affairs and Fisheries of Indonesia in collaboration with SEAFDEC and the Member Countries in developing the Regional Plan of Action through the “South East Asia Regional Consultation Workshop on the Implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Alleviation” held in Bali, Indonesia on 24-27 August 2015 are presented by the representative from the SEAFDEC/Secretariat (**Annex 19**). The Council also noted the recommendations/suggestions from the 38th SEAFDEC Program Committee Meeting and 18th FCG/ASSP requesting SEAFDEC to work on the regionalization of the FAO Voluntary SSF Guidelines (VGSSF).

101. The Council Director for the Philippines expressed the view that as considerable amount of work has been done based on the output of the Bali Workshop, he suggested that SEAFDEC should continue its work based on the results of the Bali Workshop rather than putting its effort in developing another regional policy framework. The Council Director for Malaysia also stressed that although a regional framework could be developed at the regional level, the implementation of regional frameworks could be different from country to country, *e.g.* focusing on market, small subsidy, etc. In a related development, the Council Director for Indonesia informed the Meeting that Indonesia has recently issued an Act on the protection of small-scale fishers and aquaculture.

102. While sharing the concern that small-scale fisheries is very important for the region, the Council Director for Thailand suggested that in addition to the global/regional policy framework, a regional approach could also be developed to ensure that the framework would come up with tangible results.

103. In response to the query of the Council Director for Viet Nam on the preparation of a concept proposal to be submitted at the forthcoming COFI Meeting in July 2016, it was clarified that the concept proposal would be developed by SEAFDEC based on the recommendations of the Council at this Meeting. While considering the outputs of the Bali Workshop, the Council Director for Viet Nam suggested that the

regional framework could be developed for intervention at the COFI Meeting. In this regard, the representative from SEAFDEC informed the Council that a Regional Technical Consultation would be organized on 7-9 June 2016 to develop the Concept Note based on the guidance of the Council given at this Meeting.

104. While informing the Council that the Act on Protection and Empowerment of Small-scale Fishers, Fish Farmers, and Salt Farmers had been recently passed by its Parliament, the Council Director for Indonesia suggested that the outputs of the Bali Workshop could be adopted by the Member Countries. The Council Director for Malaysia also took note of the progress on SSF and suggested that regional guidelines could be developed to be used as basis for the implementation by each individual country of the outputs of the Bali Workshop.

105. After the discussion and deliberation, the Council took note the result of the Bali Workshop and requested SEAFDEC to develop the regional approach for the implementation of VGSSF. In this connection, the Council supported to conduct the RTC in relation to the VGSSF in June 2016 and also requested to prepare a Regional Program to submit at the 32nd Session of COFI to be organized in July 2016.

5.3.5 Regional Policy Recommendations and Strategic Plans for Fishery Resources Enhancement in the Southeast Asian Countries

106. The Council noted the outputs of the Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region in July 2015 that include Policy Recommendations and Strategic Plans for the Implementation of Fisheries Resources Enhancement Activities in the Southeast Asian Region (**Annex 20**) as reported by the representative from SEAFDEC/TD.

107. While expressing support to the Regional Policy Recommendations and Strategic Plans developed during the Symposium, the Council Director for Viet Nam suggested that some elaborations should be included in the respective actions, whether these should be undertaken at national or regional levels. Furthermore, emphasis should also be given on the need to protect mangrove areas considering the benefit of mangroves for coastal protection and as nursing ground for several aquatic species. The Council Director for Myanmar also supported the importance of mangroves for coastline protection and conservation of aquatic species.

108. The Council Director for Thailand expressed the concern on the benefits that the countries could gain from stock enhancement activities as these might not compensate with the high level of resource exploitation. In this regard, SEAFDEC would consider conducting an assessment of the wild stocks after installations of artificial reefs through implementation of the project on fisheries *refugia* with funding support from UNEP/GEF starting in 2016.

109. The Council Director for Indonesia commended SEAFDEC for the development of the Regional Policy Recommendations and Strategic Plans, and reiterated the importance of coral reef habitats in supplying fish food products for the region. In this connection, the Council noted that the CTI-CFF in collaboration with SEAFDEC is planning to carry out cooperative activities to be undertaken under the framework of the Oceans and Fisheries Partnership.

110. The Council Director for Indonesia also suggested to include other important coastal ecosystems, such as mangroves and salt marshes in the Strategic Plans. The Council Director for Malaysia also added that engagement of stakeholders and other relevant agencies should also be emphasized as they are key elements to ensure successful implementation of the Strategic Plans.

111. After the discussion, the Council requested SEAFDEC to take into consideration the comments of the Council at this Meeting and approved the Regional Policy Recommendations and Strategic Plans for Fishery Resources Enhancement in the Southeast Asian Countries for implementation by SEAFDEC and the Member Countries.

5.3.6 Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region

112. The Council was informed by the representative from MFRD on the Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region (**Annex 21**) which was finalized and adopted by senior fishery officials from the Member Countries at the End-of-Project (EOP) Meeting in August 2015 and endorsed by the 18th FCG/ASSP Meeting in November 2015 in Manila, Philippines.

113. While supporting the Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region, the Council Director for Viet Nam suggested that other aquatic species, *e.g.* molluscs should also be focused in the implementation of the Regional Guidelines. MFRD clarified that under the project, the Member Countries agreed to focus on fish and shrimp.

114. After the discussion, the Council endorsed the Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region for consideration by the 24th ASWGFi and high-level authority of ASEAN in order to promote and enhance the implementation of traceability system for aquaculture products in the region.

5.3.7 Regional Policy Recommendations on Addressing Early Mortality Syndrome (EMS)

115. The Council took note of the progress made by SEAFDEC in addressing issues on Early Mortality Syndrome (EMS) and other trans-boundary diseases, as reported by the representative from AQD. The report included the “Regional Policy Recommendations on Addressing Early Mortality Syndrome (Acute Hepatopancreatic Necrosis Disease) and Other Transboundary Aquatic Animal Health Disease” (**Annex 22**) which was developed through the “Regional Technical Consultation on EMS/AHPND and Other Trans-boundary Diseases for Improved Aquatic Animal Health Management in Aquaculture in Southeast Asia,” held on 22-24 February 2016 in the Philippines.

116. The Council Director for Indonesia emphasized that in addition to the technical solutions to overcome disease problems, cooperation among countries should be strengthened and to keep other countries informed when disease outbreak occurs in one country through the establishment of a regional early warning system. In this regard, the Council suggested that the Secretariat would discuss with AQD and AMSs on the establishment of such system.

117. While taking note of the existing mechanism of the “ASEAN Network of Aquatic Animal Health Centres (ANAAHC)”, the Council suggested that this should be mobilized to address aquatic animal diseases in the region. However, since SEAFDEC is not yet a member of this Network, the possibility of SEAFDEC to be invited by Thailand as the Network’s Lead Country, should be explored in order that issues on aquatic diseases could be addressed collaboratively instead of creating new mechanism for this purpose.

VI. OTHER MATTERS

6.1 High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community 2015

118. At the outset, the Council was informed by the representative from the SEAFDEC Secretariat that the proposed conduct of the High-level Consultation was supported by the 23rd Meeting of the ASWGFi, and the progress was subsequently considered during the 38th Meeting of the SEAFDEC Program Committee and 18th Meeting of the FCG/ASSP. Specifically, the Council noted that during the 18th Meeting of the FCG/ASSP, SEAFDEC was requested to send the draft Joint Declaration to the ASEAN Secretariat in order that this could be tabled for consideration by the 24th Meeting of the ASWGFi and the higher-authorities of the ASEAN as appropriate.

119. The progress in formulating the First Draft of “Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery

Products” (**Annex 23**) was presented by *Atty. Annaliza A. Vitug* in her capacity as the Chairperson of the Drafting Committee for preparation of the Draft Joint Declaration.

120. While noting the development of the Draft Joint Declaration, the Council commended the Drafting Committee for coming up with the Draft Joint Declaration that captured all aspects that should be addressed to ensure the competitiveness of ASEAN fish and fishery products, and provided comments to be accommodated in the final Draft as shown in the following table:

Paragraph	Suggested text	Commented by
Paragraph starting with “Recognizing”	... (CCRF, 1995); <u>and the Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU, 2007);</u>	Indonesia
Paragraph starting with “Bearing in mind”	Bearing in mind that fisheries in the Southeast Asian region had developed rapidly during the last decade contributing significantly to the improved economy <u>and food security</u> of the region, ...	Singapore
	... however, IUU fishing <u>is a serious concern and</u> threatens the sustainability of the region’s fisheries management and conservation measures, ...	Indonesia
Action 4	Enhancing traceability of aquaculture products, through the implementation of all ASEAN GAPs with certification scheme based on regulations of respective countries, and <u>traceability systems</u> that are harmonized with those of major importing countries;	Singapore
Action 9	Addressing issues on labor, ..., and supporting the development and implementation of <u>guidelines on implementation of labor standards</u> for the fisheries sector.	Singapore
Action 10	<u>Enhancing close collaboration between the AMSs and relevant RFMOs in combating IUU fishing.</u>	Thailand
Action 11	<u>Undertaking collective efforts in developing preventive and supportive measures to strengthen rehabilitation of resources to mitigate the impacts of IUU fishing.</u>	Thailand
Concluding paragraph	“...; and that <u>AMSs and SEAFDEC</u> with support from donors and collaborating partners, ...”	Cambodia

121. Furthermore, the Council Director for Singapore said that SEAFDEC or the ASEAN Sectoral Working Group on Fisheries (ASWGF_i) may not be the most appropriate platform to address labor issues, and suggested that the SEAFDEC Secretariat should consult with the ASEAN Secretariat on the appropriate platform where such issues could be raised. She added that this could be the ASEAN Committee on the Implementation of the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers (ACMW), a sub-sectoral group under the Senior Labour Officials Meeting (SLOM) that has the expertise on policy matters and resource persons who could be tapped to address issues on migrant workers.

6.2 Southeast Asian State of Fisheries and Aquaculture 2017 (SEASOFIA 2017)

122. The Council was informed the proposal made by the SEAFDEC Secretariat for the production of the publication on the “Southeast Asian State of Fisheries and Aquaculture (SEASOFIA) 2017” as shown in **Annex 24**, particularly on the outline and schedule for production of the publication. The Council,

while agreeing with the proposed outline, provided comments for improving the publication to reflect the fisheries situation of the Southeast Asian region, as shown below:

Part I. Status and Trends of Capture Fisheries and Aquaculture in SEA

Topic 1. Global Production and Utilization of Fish – *to include demand for fish*

Topic 3. Production from Marine Capture Fisheries – *to include production of seaweeds; number of vessels by fleet and number of fisherfolks*

Topic 5. Production from Aquaculture – *to include production of seaweeds and crocodile*

Topic 7. Fish Trade – *to include trade among the Member Countries*

Part II. Issues and Challenges

Topic 7. Vulnerability of Fisheries to Climate Change – *to change to “Vulnerability of Fisheries to Climate Change and Natural Disasters”*

Topic 8. Fisherfolks, and Workers in Fishing Activities (onboard) – *to remove ‘onboard’ and include gender issues and women workers in fisheries*

Add *Competition on use of water resources with other sectors*

Part III. Outlook of Fisheries and Aquaculture

Topic 1. Outlook of Fisheries and Aquaculture – *to include combating IUU fishing*

123. The Council noted that the statistics and data to be used in the publication of SEASOFIA 2017 would cover the 15-year period from 2000 to 2014, consistent with timeframe for all countries to provide statistics for the Fishery Statistics Bulletin of Southeast Asia compiled by SEAFDEC. Nevertheless, the AMSs would be requested to provide the most updated data on specific issues that are important, for the Secretariat to accommodate as appropriate.

124. The Council also took note of the suggestion made during the 38th PCM that National Coordinators should consider providing the necessary information to ensure that inputs into the SEASOFIA reflect the real picture of fisheries and aquaculture in the region. To ensure full cooperation from countries in providing inputs to the publication, SEAFDEC was requested to issue official communications to the Council Directors, requesting for the submission of article inputs on topics that may be requested by SEAFDEC.

6.3 The 50th Anniversary of SEAFDEC

125. As proposed by the SEAFDEC Secretariat, the Council considered the activities planned by the SEAFDEC Secretariat and Departments for the celebration of the 50th Anniversary of SEAFDEC in 2017 (**Annex 25**). In addition, the Council selected the best Anniversary Logo design from among the five shortlisted designs which would be used by the SEAFDEC Secretariat and Departments in all official communications as well as in all information materials produced by SEAFDEC (**Annex 25**). While encouraging the SEAFDEC Secretariat and Departments to carry out their respective plans to commemorate this very important event, the Council provided some recommendations to improve the plans for the celebration.

126. On the winning best Anniversary logo design, the Council suggested that the color of the number 50 should be gold as the color that connotes 50 years, the ‘th’ should be removed, and SEAFDEC logo should be included.

127. Regarding the activities planned for the celebration of the 50th Anniversary of SEAFDEC in 2017, the Council agreed that the event would be organized separately from the 49th Meeting of the SEAFDEC Council to be hosted by Brunei Darussalam. In addition, the Council Director for Thailand offered to host Celebration of the 50th Anniversary of SEAFDEC tentatively in November 2017 while the details of the arrangements of such event would be discussed later.

6.4 Preliminary Results on Human Resources Survey in SEAFDEC Member Countries

128. The Council noted the Preliminary Results on Human Resources Survey in SEAFDEC Member Countries, carried out by the Regional Fisheries Policy Network (RFPN) in response to the

recommendations of the SEAFDEC Council during its 47th Meeting in 2015 (**Annex 26**), as reported by the representative from the SEAFDEC Secretariat.

129. The Council was informed that the Survey was meant to collect information on the current human resource availability in AMSs focusing on the areas of specialization and to identify the gaps and areas where human resources are limited and where capacity building would be needed.

130. The Council Director for Cambodia suggested that for the area of specialization could include “Others (please specify)”.

131. After taking note of the very low turn-out of responses from the AMSs on the 2015-2016 questionnaire survey, the Council suggested not to use existing result of the survey as basis for policy recommendation, and that for the conduct of similar surveys in the future, the survey design should be properly developed to ensure that the objectives are attained, the Personnel Management Units of fisheries agencies of the AMSs should be considered as source of information considering that most countries conduct their respective human resource surveys, research institutions should be involved in future survey, the fields of specialization should be grouped into few items to get better results, and that communications should be addressed to the Council Directors in addition to the SEAFDEC National Coordinators in order to increase the number of respondents.

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

132. The Representative from the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), *Ms. Sarah Lenel* expressed her gratitude to SEAFDEC for the invitation extended to CCAMLR to participate in this Council Meeting. She informed the Meeting that CCAMLR is an intergovernmental organization responsible for the conservation of marine resources in Antarctic waters and that CCAMLR is concerned with illegal, unreported and unregulated (IUU) fishing for toothfish (*Dissostichus* spp.) in the CCAMLR Convention Area. She also informed the Meeting that CCAMLR implements a Catch Documentation Scheme (CDS) for *Dissostichus* spp. which is designed to track the harvest, transshipments, landings, export and re-export of *Dissostichus* spp. In its continuing efforts to eliminate IUU fishing, CCAMLR seeks non-Contracting Party (NCP) cooperation in the voluntary implementation of the CDS. In the ASEAN region, Brunei Darussalam, Thailand, Viet Nam, Malaysia and the Philippines have been identified through the CDS as receiving imports of toothfish from CCAMLR Contracting Parties. Additionally, ports in Indonesia, Thailand, Viet Nam, and Malaysia have been used by CCAMLR IUU-listed vessels. She encouraged the ASEAN Member States to cooperate with CCAMLR by voluntarily implementing the CDS.

133. The Council Director for Japan cited that Japan as member of RFMOs, implements several Catch Documentation Scheme (CDS). He therefore encouraged the Member Countries to implement the CDS of CCAMLR especially for toothfish.

134. The Council Director for Brunei Darussalam also informed the Meeting that Brunei Darussalam as a committee member of Regional Plan of Action to Promote Responsible Fishing Practices Including to combating Illegal, Unreported and Unregulated Fishing in the Region (RPOA-IUU), is committed in combating IUU fishing in the region. As stated by the representative from CCAMLR, Brunei Darussalam was found to import toothfishes in 2013 and 2015. In this regard, he expressed the willingness to do the best to ensure that illegal trade of these species do not pass through the country’s ports and agreed to cooperate with CCAMLR on this matter. In a related development, the Council Director for Malaysia also informed the Meeting that Malaysia received a notice from Australia regarding the possible illegal landing of toothfish in Malaysian ports. He therefore gave his assurance that Malaysia would continue to cooperate with CCAMLR on this aspect.

135. The Representative from the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF), *Dr. Muhamad Lukman* expressed appreciation to SEAFDEC for inviting the CTI-CFF Regional Secretariat to attend this Council Meeting and to the Directorate of Fisheries of Viet Nam for hosting the Meeting. He cited that CTI-CFF has been actively engaged with other regional and

international fora since its establishment in 2009, including SEAFDEC. The collaboration between the CTI-CFF and SEAFDEC officially started after the signing of the Memorandum of Understanding in April 2015, which aims to formalize relevant collaborative efforts in fostering Research and Development in fisheries in the countries around the Coral Triangle region. The collective regional cooperation would play a significant role in improving the state of implementation of the Regional Plan of Action (RPOA) of CTI-CFF accordingly. His statement appears as **Annex 27**.

136. The Representative from the Embassy of Sweden in Bangkok, Thailand, *Mr. Göran S. Haag* expressed his appreciation to SEAFDEC for the invitation extended to the Embassy of Sweden to join this SEAFDEC Council Meeting. He suggested that the Sustainable Development Goals (SDGs) should be reflected within the SEAFDEC activities especially on improving scientific knowledge, providing access for small-scale artisanal fishers, and enhancing the conservation and sustainable use of oceans and their resources by implementing international laws. He cited that the Government of Sweden has been supporting the cooperation of AMSs through the SEAFDEC-Sweden Project which has been implemented in the region for 5 years including capacity building for human resources, working conditions for fisherfolks and gender equality in the fishery sector as well as collaborating with the SEAFDEC-USAID Oceans and Fisheries Partnership.

137. *Mr. Haag* also informed the Council that the Swedish strategy for regional development cooperation in 2016-2020 would address human rights, integrated environment/climate change, as well as gender equality and analysis. Otherwise, under the SDGs 14 on Life Below Water, SEAFDEC has the potential to assist the Member Countries particularly in increasing interaction with the private sector and civil society, and for continued work on gender equality and rights.

138. The Representative from the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO/RAP), *Mr. David Brown* expressed his gratitude to the Government of Viet Nam and SEAFDEC for the invitation extended to FAO. He also expressed his appreciation to SEAFDEC for the progress made in the development of RFVR in line with the FAO Global Record to support the strategy in combating IUU fishing. He cited that under the Trawl Fisheries Bycatch Management (REBYC-II CTI), the project executed by SEAFDEC has assisted the Member Countries in capacity development in management of trawl fisheries. He pointed out that SEAFDEC in collaboration with FAO-BOBLME has been conducting the training courses on EAFM in the region such as in the Philippines, Myanmar, and Lao PDR. Concerning the adopted Voluntary Guidelines for Securing Sustainable Small-scale Fisheries, he informed the Council that FAO is considering to promote and implementation of the Guidelines. He added that the Asia-Pacific Fishery Commission (APFIC) has reaffirmed the commitment of its member countries to promote sustainable and responsible development of fisheries and aquaculture through the “blue growth” approach during its recent meeting in February 2016 in Sri Lanka. He then looked forward to collaborating with SEAFDEC in this aspect. His statement appears as **Annex 28**.

139. During the discussion, the Council Director for Viet Nam requested FAO to provide guidelines for implementation of the sustainable development goal especially the SDG14: Life Below Water.

140. In response to the request of the Council Director for Indonesia regarding the development of SEASOFIA to be produced in 2017, the representative from FAO/RAP reaffirmed to cooperate with SEAFDEC for this development.

141. The Director General of the Network of Aquaculture Centres in Asia-Pacific (NACA), *Dr. Cherdasak Virapat* expressed his gratitude to SEAFDEC for the invitation extended to NACA to participate in this Council Meeting and for the Government of Viet Nam for kind hospitality and effective arrangement of the meeting at the coastal city of Nha Trang. He also commended SEAFDEC for the significant achievements during the past years and sincerely welcomed *Dr. Kom Silapajarn* for being appointed as Secretary-General of SEAFDEC. He reiterated that the development objectives of NACA include the promotion of rural development through sustainable aquaculture and aquatic resources management where its works are based on five thematic programs, namely: aquatic animal health; sustainable farming systems; genetics and biodiversity; food safety quality and certification; and emerging global issues including response to climate change and three cross-cutting programs on education and

training; gender; and information and communications. He also informed the Council that NACA and SEAFDEC/AQD would continue to establish the MOU particularly in areas on sharing and exchanging of information on fish farming systems, crustaceans, mollusks and seaweeds as well as aquaculture feed development, etc., and the draft MOU has been under consideration by SEAFDEC/AQD. For the program of capacity building in aquaculture governance, NACA is now in the process of developing the syllabus of its capacity building program “aquaculture governance” and will collaborate with its partners including SEAFDEC. He also informed the Council that the Department of Fisheries of Thailand and SEAFDEC in collaboration with the Asian Fishery Society (AFS) and NACA will co-organize the ASEAN Fisheries and Aquaculture Conference and Seafood Exposition 2016 jointly with the 11th Asian Fisheries and Aquaculture Forum from 4-6 August 2016 at the Bangkok International Trade and Exhibition Center in Bangkok, Thailand. NACA would also take this opportunity to celebrate its Silver Anniversary on the 3rd August 2016 at the Suraswadi Building in Bangkok, Thailand. In addition, NACA in collaboration with FAO and partners including SEAFDEC will co-organize the Global Conference on Climate Change Adaptation within Fisheries and Aquaculture, Experience on the Ground, during 8-10 August 2016 in Bangkok, Thailand. Finally, he reiterated that NACA and SEAFDEC would find these opportunities to strengthen their collaboration and coordination in aquaculture development activities in the very near future. His Statement appears as **Annex 29**.

142. The representative from Australia, *Mr. James Neely* thanked SEAFDEC for the invitation for him to attend the Meeting to represent the RPOA-IUU. He referred to the Agreement of RPOA-IUU members to consider cooperating with CCAMLR by voluntarily implementing the CDS. He also referred to the earlier agreement of RPOA-IUU members to refuse entry to CCAMLR listed IUU vessels that sought to enter their ports and to inspect any vessels that did enter, and take other appropriate actions. That cooperation had been very successful. However, referring to Malaysia’s action last year in seizing the catch of the “Perlon” and selling it under a court order, he stated that the movement of the catch from the point of sale could not be tracked because the CCAMLR CDS could not be used.

143. The Regional Environment Office Director of the United States Agency for International Development/Regional Development Mission for Asia (USAID/RDMA), *Mr. Alfred Nakatsuma* congratulated the chairperson for being elected as the Chairperson of SEAFDEC Council for 2016-2017 then expressed his appreciation for the generosity of Viet Nam to host this Council Meeting and SEAFDEC for the invitation extended to the USAID/RDMA to participate in this Council Meeting. He commended SEAFDEC for its initiative to combat IUU fishing in the Southeast Asian region. He pointed out that it would be bad news for those conducting IUU fishing since more and more stringent measures are being promoted in this region such as port State measures, vessel registration, catch certification scheme. He cited that USA would also impose market-based approach which will complement with what is being done in this region. He added that USAID-Oceans in collaboration with SEAFDEC would focus their work in improving traceability system as market requirement, attack seafood fraud and the ultimate goal of sustainable utilization of fisheries resources. He then informed the Council that USA would impose new rules for importing seafood in 2016 while the country would invest 20 million USD for 5 years to specifically assist AMSs to comply with the rules. He also cited that the project would emphasize on the implementation of the ASEAN Catch Documentation Scheme and ecosystem-based approach to fisheries (EAFM) starting in selected pilot sites. He then urged the AMSs and SEAFDEC to actively collaborate for the successful implementation of the project and creation of food security in this maritime region.

144. In the discussion, the Council Director for Viet Nam raised the concern that majority of fisheries sector in this region is small-scale involving millions of fishers. He, therefore, sought technical assistance from USA in improving the fisheries management of the region since the AMSs have strong commitment to combat IUU fishing.

145. In response to the query on the mechanism between USAID-Oceans and SEAFDEC, it was clarified that SEAFDEC has nominated the focal point and each Member Country would be also requested to assign national focal point to facilitate the implementation of this project through the SEAFDEC Secretary-General. The working structures between USAID-Oceans and SEAFDEC under the ASSP/FCG appears as **Annex 30**.

146. On the development of catch documentation and traceability (CDT) of the USAID-Oceans, the Council was informed that this is based on existing ACDS where the Oceans Project would develop this in electronic system in compliance with the EU Regulation and other available catch documentation schemes. Concerning the new rules that would be imposed by USA, the Council Director for Thailand whether such rules would be imposed and whether this Project would be concluded before such rules would be imposed. He also queried about the criteria for selecting the private sector to be involved in the project. In response, the Council was informed that the rules would be imposed in September 2016 and the project would implement a traceability program for at-risk species for the AMSs countries comply with the US regulations. Concerning such regulations which would be imposed soon, the Council Director for Thailand requested the USA to provide Standard Operating Procedures (SOP) to prepare the countries in complying with such regulations.

147. In addition, the Council Director for Viet Nam requested the USAID-Oceans and Fisheries Partnership to provide a TOR of the working mechanism under the Oceans Partnership, for national coordinator and technical focal point for the Member Countries. Moreover, USAID-Oceans was also requested to submit the results of implementation of the Project to the ASWGFi and SEAFDEC Program Committee and SEAFDEC Council.

VIII. FUTURE DIRECTION OF SEAFDEC

148. The Council took note of the reports presented by the SEAFDEC Secretary-General on the results of the efforts of SEAFDEC to respond to the special request made by the Member Countries during the 47th Council Meeting in 2015. In the closed session attended by the heads of the countries' delegations only, the Council provided directives to SEAFDEC on the necessary actions that would be undertaken in 2016.

149. With regard to the development of the Draft Statements to deter, prevent and eliminate the illegal, unreported and unregulated fishing through the ASEAN Regional Forum in Honolulu, USA on 22-23 March 2016, it was noted that the statement is more concerned on security and aims to support the US Presidential Taskforce on Combating IUU Fishing. The Chairperson of the SEAFDEC Council therefore suggested that the Council Directors should bring the issues back to their countries and consult with their respective concerned authorities.

150. The Council agreed in principle to the participation of Papua New Guinea in SEAFDEC Meetings including the Program Committee Meeting as observer considering that Papua New Guinea would cover all expenses involved including meeting package (if applicable). In this connection, the Council requested Indonesia to coordinate with the country and relay such information.

151. With regard to the ASEAN-SEAFDEC Common Position on the proposed list of the Commercially-exploited Aquatic Species (CEAS) to the CITES Appendices at the CoP17, the Council agreed to the proposal for SEAFDEC to organize the Regional Experts Meeting on CEAS held on 16-17 May 2016. The Meeting would be conducted back to back with the Regional Consultation on ASEAN/SEAFDEC Common Position on 19-20 May 2016.

152. On enhancing the collaboration among ASEAN Secretariat and SEAFDEC, the current Chairperson of the SEAFDEC Council was asked to assist in coordinating with and encourage the ASEAN Secretariat focal point to collaborate closely with SEAFDEC.

153. SEAFDEC to pursue the technical support/cooperation from the USAID and/or NOAA on the Capacity Building for Combating IUU fishing particularly in Port State Measures. In addition, the Council supported the proposal of SEAFDEC to seek fund/support from the USAID for the conduct of the Collaborative Research Program on Fisheries Resources and Environment Survey in the South China Sea and Gulf of Thailand.

154. With regards to the Usage of the M.V. SEAFDEC 2 by SEAFDEC Member Countries under the cost-sharing policy, SEAFDEC requested the country-users to submit the results/reports of surveys to SEAFDEC for reference and regional analysis.

IX. MANAGEMENT OF THE CENTER

9.1 New Calculation of the MRC for 2016

155. The Council was informed on the background of the calculation of Minimum Regular Contribution (MRC) for the year 2016 (**Annex 31**). The Council recalled that during the 47th Meeting of the SEAFDEC Council, on the calculation for MRC in 2016 was agreed upon, including the amount of MRC from Indonesia which would be reduced as the adjustment factor for host countries could now be applied for Indonesia. This would result in changes of the MRC from the other countries to compensate that of Indonesia. In this connection, the Secretariat circulated to the Member Countries the new MRC that would be applied starting in 2016.

156. The Council Director for Viet Nam expressed the difficulty in applying the new rate of MRC in 2016 and suggested that the new MRC should be applied starting in 2017. The Council Director for Lao PDR also informed the Council that the Ministry of Agriculture and Forestry of Lao PDR has already approved the new rate of MRC, and is seeking approval from the Ministry of Foreign Affairs in order that the new rate could be applied in 2017.

157. The Council Director for Indonesia informed the Council that Indonesia is still negotiating with its Ministry of Foreign Affairs to secure the MRC, considering that the amount of MRC from Indonesia has drastically increased from 26,000 US\$ in 2007 to 58,000 US\$ in 2013. Indonesia would further consult with MOFA on the new rate of MRC.

158. After the presentation and discussion, the Council took note of the situation on the changes of the amount of MRC, and agreed that each Member Country should undertake internal consultation and try to secure the amount of MRC as suggested by SEAFDEC, possibly by 2017.

9.2 Plans of Operation and Programs of Work of SEAFDEC Departments and Secretariat

159. The Council was informed that after the 47th Meeting of the SEAFDEC Council, the Member Countries were requested to provide their comments on the Plans of Operation and Programs of Work of the SEAFDEC Departments and Secretariat. In this connection, SEAFDEC Secretariat accommodated the comments and sent the revised Plans of Operation and Programs of Work to the Council Directors for consideration and endorsement by *ad referendum* (**Annex 32**). As the host government of SEAFDEC/TD, Thailand through the Council Director for Thailand informed the Council that the proposed new organization structure of the SEAFDEC Secretariat and TD has been agreed between SEAFDEC and the Department of Fisheries of Thailand and amended accordingly.

160. During the discussion, the Council Director for Indonesia expressed the view that the revision of the Plan of Operation and Program of Work of TD seem to infringe to the original mandate of MFRDMD and recommended that the SEAFDEC Secretariat should demarcate the responsibilities as well as the functions and programs of work among the Departments. In this regard, it was reiterated that TD would focus its role on the development of fishing technologies, socio-economic aspects and conduct of training to enhance the capacity of the Member Countries while MFRDMD would focus on the development and management of the marine fishery resources.

161. While recognizing that there is a need to review the effectiveness and efficiency of implementation of the current programs and projects of SEAFDEC for the revision of the Plans of Operation and Programs of Work of the Departments, the Council Director for the Philippines suggested that SEAFDEC should consider working on fisheries governance and management for sustainable fisheries in the region. In this regard, SEAFDEC would try to incorporate fisheries governance in appropriate division in the new SEAFDEC structure.

162. After the deliberation, the Council approved revisions of the Plans of Operation and Programs of Work of the SEAFDEC Departments and Secretariat.

9.3 Operation of SEAFDEC Training and Research Vessels

163. The Council was informed on the progress of activities undertaken by the SEAFDEC Training Department with regards to the use of the research vessels in 2015, the proposed plans for the year 2016 as shown in **Annex 33**.

164. The Council Director for Malaysia expressed his gratitude to SEAFDEC/TD for the conduct of research survey in the waters of Malaysia in 2015 and looked forward the planned survey in 2016.

165. The Council Director for Indonesia also thanked SEAFDEC/TD for the collaborative research survey in Sulu-Sulawesi Seas in 2015, and reiterated that the country would not use the vessel in 2016.

166. Considering that the M.V. SEAFDEC 2 was built more than 10 years ago, the Council Director for Japan informed the Meeting that Japan through the Japan International Cooperation Agency (JICA) would fund for the maintenance of M.V. SEAFDEC 2 in 2016. He then requested the Member Countries to fully utilize the M.V. SEAFDEC 2 in the future.

167. After the deliberations, the Council approved the operational plan of the M.V. SEAFDEC 2 in 2016.

9.4 Collaborative Arrangements between SEAFDEC and Other Organizations

168. The Council was informed on the collaborative arrangements made by SEAFDEC with other organizations (**Annex 34**). This includes: i) Signing of Arrangements in 2015 until the 48th Meeting of the Council; ii) Collaboration Under Signing Process; and iii) New Collaboration Proposed for Approval by the Council.

169. On the proposed new collaboration, the Council Director for Japan informed the Meeting that the signing of MOU between SEAFDEC and Gifu Prefecture of Japan is envisaged to be beneficial for SEAFDEC and the Member Countries particularly for the sustainable development of inland fisheries in the Southeast Asian region. The Governor of Gifu Prefecture is planning his visit to the SEAFDEC Secretariat in May 2016. He also encouraged the Council to extend support to this MOU.

170. The Council also noted that the signing MOU between Gifu Prefecture (a local government) and SEAFDEC is made between a government and SEAFDEC, which is in compliance with the regulations of SEAFDEC in signing an MOU between SEAFDEC and a government (Article 12). This has already been exemplified by the signing MOU between USAID and SEAFDEC which is made between a government and SEAFDEC apart from signing with an organization.

171. In response to the request made by the Council to include reporting of annual statistics, number of results, number of technical assistance etc. made in connection with all signed MOUs, to be included in this presentation and working papers, the Secretariat then informed the Meeting that the statistics and achievements of the signed MOUs' cooperation would be included in the Annual Report of SEAFDEC.

172. The Council took note of the collaborative arrangements made by SEAFDEC and other organizations in 2015 until this Meeting as well as those which are being processed and would be signed in the near future; and approved the signing of MOU between SEAFDEC and Gifu (**Annex 35**).

X. FINANCIAL MATTERS

10.1 Adoption of Audited Financial Report for the Year 2014

173. In accordance with Article 6, Paragraph 2 (ii) of the Agreement Establishing the Center, the Council adopted the audited consolidated financial statements of the Center for the year ended 31 December 2014 including that of the Secretariat and the three Departments for the Year 2014 (**Annex 36**) as audited by the official auditors of the Center, *Mr. Phongtorn Duangphanya* from P&A Audit Company Ltd.

10.2 Un-audited Financial Report for the Year 2015, and Status of the Financial Situation in the Year 2016

174. The Council took note of the Un-audited Consolidated Financial Report for the Year 2015 (**Annex 37**), which comprised the Un-audited Statements of Net Assets as of 31 December 2015, the Un-audited Statements of Income and Expenditures for the Year 2015, and the Un-audited Fund Statements Fund Balance as of 31 December 2015.

175. The Council also noted and endorsed the Status of the Financial Situation for the Year 2016 (**Annex 38**), which includes the MRC in 2016 from the Member Countries and contributions from the Fisheries Agency of Japan through the Japanese Trust Fund program as well as other international organizations.

176. The Council was informed that the Audited Financial Statements of SEAFDEC for the Year 2015 would be submitted to the Council Directors during the next Council Meeting in 2017, such as those for the Consolidated Financial Statements for the Year 2015, the Secretariat Financial Statements for the Year 2015, the Training Department Financial Statements for the Year 2015, as audited by Auditor *Mr. Phongtorn Duangphanya* of the Auditing Firm P&A Audit Company Limited. Meanwhile, AQD's Financial Statements for the Year 2015 will be audited by Auditor *Ms. Cyril Jasmin B. Valencia* of Auditing Firm Sycip Gorres Velayo & Co., and MFRDMD Financial Statements for the Year 2015 by Auditor *Mr. Mohd Badaruddin bin Ismail* of Auditing Firm Adib Azhar & Co. (AF1446).

177. On the actual Minimum Regular Contribution (MRC), the Council Director for Lao PDR informed the Meeting that currently the payment for 2015 MRC of Lao PDR is under internal process of negotiation with the Ministry of Foreign Affairs for payment. Meanwhile, the Council Director for Indonesia informed the Meeting that the Indonesia's payment for 2015 MRC is still under negotiation with the Ministry of Foreign Affairs for final decision. The Council Director for Cambodia also informed the Meeting that the new rate of Minimum Regular Contribution for 2016 has already been approved by the Government of Cambodia.

10.3 Proposed Budgetary Requirements of the Center for the Year 2017

178. While expressing satisfaction with the manner of budgetary utilization by SEAFDEC, the Council endorsed the proposed budgetary requirements of the Center for the Year 2017 as shown in **Annex 39**.

10.4 Other Financial Matters

10.4.1 Annual Audit the Accounts of IFRDMD

179. The Council endorsed and approved the Internal Audit of the Indonesia Government, the "Inspectorate General IV Division" to audit the accounts of IFRDMD as this could be considered as an external audit firm to audit IFRDMD for the Financial Statements, starting in the year 2015.

10.4.2 Others

180. The Council approved the disposal of Scientific Echo Sounder FQ70M of MFRDMD considering that the equipment is no longer economical to repair. The disposal of the equipment is in accordance with the SEAFDEC Financial Regulation No.7.2. For future requests for disposals, the Council requested SEAFDEC to prepare the list of equipment to be disposed and seek approval by the Council at once during the future annual meetings of the Council.

XI. CONCLUDING MATTERS

11.1 Adoption of the Meeting Report and Press Statement

181. The Council adopted the Report of the Forty-eighth Meeting of the SEAFDEC Council and the Press Statement on the results of the Meeting as shown in **Annex 40** on 7th April 2016.

182. The Secretary-General of SEAFDEC on behalf of SEAFDEC expressed his utmost gratitude to the Chairperson of the SEAFDEC Council for excellently orchestrating the 48th Meeting of the SEAFDEC Council in Nha Trang City. He also thanked the organizers from Viet Nam for the outstanding arrangements that made all non-Viet Nam participants very comfortable during their stay in Nha Trang.

11.2 Date and Venue of the Forty-ninth Meeting of the SEAFDEC Council

183. In considering the date and venue of the Forty-ninth Meeting of the Council, the Council Director for Brunei Darussalam informed the Council that the Government of Brunei Darussalam would accept the responsibility of hosting the next Council Meeting in the Brunei Darussalam in April 2017.

184. The Council expressed its appreciation of the offer of Brunei Darussalam to host the next Council Meeting in Brunei Darussalam, and requested the Secretary-General to discuss with the Council Director for the Brunei Darussalam to finalize the exact date and venue of the next meeting of the SEAFDEC Council.

11.3 Vote of Thanks to the Host Government

185. The Council Director for Myanmar, on behalf of the Council Directors expressed the appreciation of the Council to the Government of the Viet Nam for hosting and for the excellent arrangements of this Forty-eighth Meeting of the SEAFDEC Council. He also congratulated the Chairperson of the Meeting for the successful conduct of the Meeting, and looked forward to the enhancement of SEAFDEC to enable it to continue performing its role in the sustainable development of fisheries in our region. He also expressed his gratitude to the Secretariat of the Meeting especially the staff of the Directorate of Fisheries, Ministry of Agriculture and Rural Development of Viet Nam for the smooth arrangements of the Meeting and for the memorable moments in Viet Nam. His Remarks appears as **Annex 41**.

XII. CLOSING OF THE MEETING

186. In his Closing Remarks, the Chairperson of the Council informed the Meeting that he would be retiring from government service in June 2016. However, he would continue supporting the fisheries sector of Viet Nam and the region since he is a member of the Fishers Association of Viet Nam. He acknowledged the successful work of the Council Directors and SEAFDEC staff over the past years and expressed the hope that they would continue to be committed to working in such aspects. He then expressed his sincere gratitude to SEAFDEC for the continued support in capacity building to the staff of the Directorate of Fisheries of Viet Nam that enable them to enhance their knowledge and gain experiences in improving fisheries management in Viet Nam. With this note he closed the 48th Meeting of the SEAFDEC Council.

LIST OF PARTICIPANTS

BRUNEI DARUSSALAM

Abdul Halidi Mohd Salleh
SEAFDEC Council Director for Brunei
Darussalam and Acting Director of Fisheries
Department of Fisheries, Brunei Darussalam
Ministry of Primary Resources and Tourism
Muara Fisheries Complex
SPG 287-53, Jalan Peranginan j Pantal Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2770066 to 8
Fax: +673 2770163
E-mail: halide.salleh@fisheries.gov.bn

Matzaini Haji Juna
Head of Capture Fisheries Development
Division/Acting Senior Fisheries Officer
Department of Fisheries, Brunei Darussalam
Ministry of Resources and Tourism
Muara Fisheries Complex,
SPG 287-53, Jalan Peranginan j Pantal Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2770066 to 9
Fax: +673 27701653, 2770165
E-mail: matzaini.juna@gmail.com,
matzaini.juna@fisheries.gov.bn

CAMBODIA

H.E. Eng Cheasan
SEAFDEC Council Director for Cambodia
and Delegate of the Royal Government of
Cambodia and Director General
Fisheries Administration, MAFF
#186, Preah Norodom Blvd., Sangkat Tonle Bassak
Khan Chamcar Morn, P.O. Box 582
Phnom Penh, Cambodia
Tel: +855 12915567
E-mail: engcheasan@yahoo.com

Dr. Kao Sochivi (Mrs.)
SEAFDEC Alternate Council Director for
Cambodia and Deputy Director General
Fisheries Administration, Cambodia
#186, Preah Norodom Blvd.
Chamcarmon, P.O. Box: 582
Phnom Penh, Cambodia
Tel: +855 12 202805, 15 977567
E-mail: kaosochivi@yahoo.com

Dr. Em Puthy
SEAFDEC National Coordinator for
Cambodia and Deputy Director of
Department of Planning, Finance and
International Cooperation
Fisheries Administration, Cambodia
#186, Preah Norodom Blvd.
Chamcarmon, P.O. Box: 582
Phnom Penh, Cambodia
Tel: +855 16 850003
E-mail: emputhy@yahoo.com

INDONESIA

Dr. Achmad Poernomo
SEAFDEC Alternate Council Director for
Indonesia and Senior Advisor to the Minister
for Public Policy
Ministry of Marine Affairs and Fisheries (MMAF)
Republic of Indonesia
Jl. Medan Merdeka Timur No. 16 Mina Bahari Building
I, Jakarta 10110, Indonesia
Tel: +62 21 3519070 ext. 1732
E-mail: achpoer@yahoo.com,
achmad.poernomo@knp.go.id

Fika Fawzia (Ms.)
Special Staff to the Minister

Ministry of Marine Affairs and Fisheries (MMAF)
Republic of Indonesia
Jl. Medan Merdeka Timur No. 16 Mina Bahari Building
I, Jakarta 10110, Indonesia
Tel: +62 21 3519070 ext. 7510, 21 3864293
E-mail: fiko.fawzia@kkp.go.id,
fiko.fawzia@outlook.com

Aniza Suspita (Mrs.)
Assistant Deputy Director for Regional
Cooperation

Bureau of Cooperations and Public Relations
Secretariat General
Ministry of Marine Affairs and Fisheries (MMAF)
Jl. Medan Merdeka Timur No. 16
Gedung Mina Bahari IV,
Jakarta 10110, Indonesia
Tel: +62 21 3519070 ext. 7126, 81 806561532
E-mail: asuspita@yahoo.com,
nc.indonesia@gmail.com

JAPAN

Shigeto Hase
SEAFDEC Council Director for Japan and
Deputy Director-General

Fisheries Agency of Japan
1-2-1 Kasumigaseki, Chiyoda-ku
Tokyo, 100-8907 Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: shigeto_hase570@maff.go.jp

Tsuyoshi Koga
Section Chief Affairs Overseas Fisheries
Cooperation Office, International Division

Fisheries Agency of Japan
1-2-1 Kasumigaseki, Chiyoda-ku
Tokyo, 100-8907 Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: tsuyoshi_koga660@maff.go.jp

Yusaku Minabukuro
First Secretary

Mission of Japan to ASEAN
Jl. M. H. Thamrin no. 24
Jakarta, Indonesia
Tel: 62-21 31904901
Fax: 62021039839698
E-mail: ymiyabuk@icloud.com

Sayaka Fukazawa (Ms.)
Interpreter

Fisheries Agency of Japan
1-2-1 Kasumigaseki, Chiyoda-ku
Tokyo, 100-8907 Japan
Tel: +81 3 67442367
Fax: +81 3 35020571

LAO PDR

Bounthong Saphakdy
SEAFDEC Alternate Council Director for
Lao PDR and Deputy Director General

Department of Livestock and Fisheries
P.O. Box 6644, Vientiane 01000
Lao PDR
Tel: +856 21 215243
Fax: +856 21 215141
E-mail: saphakdy@yahoo.com

Akhane Phomsouvanh
SEAFDEC National Coordinator for Lao
PDR and Deputy Director of Fisheries
Division

Department of Livestock and Fisheries
P.O. Box 6644, Vientiane 01000
Lao PDR
Tel/Fax: +856 21 217869
E-mail: akhane@live.com

MALAYSIA

Datuk Hj. Ismil Bin Abu Hassan
SEAFDEC Council Director for Malaysia and
Director General of Fisheries Malaysia

Department of Fisheries Malaysia
Level 1-6, Tower Block, 4G2
Wisma Tani, Precinct 4
62628, Putrajaya, Malaysia
Tel: +60 3 8870 4006
Fax : +60 3 8889 1195
E-mail: ismail@dof.gov.my

Dr. Mazuki Hashim
Director of Aquaculture Development
Division

Department of Fisheries Malaysia
Level 1-6, Tower Block, 4G2
Wisma Tani, Precinct 4
62628, Putrajaya, Malaysia
Tel: +60 3 8870 4616
Fax : +60 3 8889 1794
E-mail: mazaki@dof.gov.my , mazukihas@yahoo.com

MYANMAR

Khin Maung Maw
SEAFDEC Council Director for Myanmar
and Director-General

Department of Fisheries
Ministry of Agriculture Livestock and Immigration
Office (36), Nay Pyi Taw
Myanmar
Tel: +95 9 5059326
E-mail: Mr.Khinmaungmaw@gmail.com

Dr. Kyaw Kyaw
Deputy Director

Department of Fisheries
Ministry of Agriculture Livestock and Immigration
Office (36), Nay Pyi Taw
Myanmar
Tel: +95 9 782865279
E-mail: kyaw.72@gmail.com

PHILIPPINES

Atty. Asis G. Perez
SEAFDEC Council Director for the
Philippines and Officer-in-Charge,
Undersecretary of Fisheries and
Director, Bureau of Fisheries and Aquatic
Resources

Bureau of Fisheries and Aquatic Resources
3rd Floor, PCA Bldg.
Elliptical Road, Dilliman
Quezon City 1100, Philippines
Tel/Fax: +63 2 9299597
E-mail: dobfarco@yahoo.com, perezasis@yahoo.com

Rafael V. Ramiscal
SEAFDEC National Coordinator for the
Philippines and Officer-in-charge, Capture
Fishery Division

Bureau of Fisheries and Aquatic Resources (BFAR)
PCA Building, Elliptical Road
Diliman, Quezon City, Philippines
Tel/Fax: +63 2 9294296
E-mail: rv_ram55@yahoo.com

Atty. Annaliza A. Vitug (Ms.)
Chief Fishing Regulations

Bureau of Fisheries and Aquatic Resources (BFAR)
PCA Building, Elliptical Road
Diliman, Quezon City, Philippines
Tel/Fax: 63 24266532
E-mail: annalizavitug@gmail.com

SINGAPORE

Dr. Tan Lee Kim (Ms.)
SEAFDEC Council Director for Singapore
and Deputy Chief Executive Officer,
Corporate & Technology

Agri-Food & Veterinary Authority
of Singapore (AVA)
52 Jurong Gateway Road
#13-01, Singapore 608550
Tel: +65 68052626
Fax: +65 63341871
E-mail: tan_lee_kim@ava.gov.sg

Lim Huan Sein
SEAFDEC Alternate Council Director and
National Coordinator for Singapore and
Director, Aquaculture Technology
Department

Agri-Food & Veterinary Authority
of Singapore (AVA)
52 Jurong Gateway Road
#14-01, Singapore 608550
Tel: +65 68052939
Fax: +65 63341831
E-mail: lim_huan_sein@ava.gov.sg

Dr. Cheryl Goh (Ms.)
Senior Executive Manager

Agri-Food & Veterinary Authority
of Singapore (AVA)
52 Jurong Gateway Road
#13-01, Singapore 608550
Tel: +65 68052939
Fax: +65 63341831
E-mail: cheryl_goh@ava.gov.sg

THAILAND

Dr. Wimol Jantrarotai
SEAFDEC Council Director for Thailand and
Director-General

Department of Fisheries
Kaset Klang, Phaholyotin Rd.,
Chatuchak Bangkok 10900, Thailand
Tel: +66 2 5620523
Fax: +66 2 5620564
E-mail: dgwim2554@gmail.com,
wimol.jantrarotai@yahoo.com

Dr. Chumnarn Pongsri
SEAFDEC Alternate Council Director for
Thailand and Director of Fisheries Foreign
Affairs Division

Department of Fisheries
Kaset Klang, Phaholyotin Rd.,
Chatuchak Bangkok 10900, Thailand
Tel: +66 2 5798215
Fax: +66 2 5798215
E-mail: chumnarnp@gmail.com

Chuanpid Chantarawarathit (Ms.)
SEAFDEC National Coordinator for Thailand
and Chief, International Cooperation Group

Department of Fisheries
Kaset Klang, Phaholyotin Rd., Chatuchak
Bangkok 10900, Thailand
Tel/Fax: +66 25620529
E-mail: chuanpidc@gmail.com

Dr. Chongkolnee Chamchang (Ms.)
Senior Expert on International Fisheries
Affairs

Department of Fisheries
50 Kaset Klang, Chatuchak
Bangkok 10900, Thailand
Tel: +66 853212915, 61 8239588
Fax: +66 25620571
E-mail: chamchang@yahoo.com

Sontipan Pasugdee
Director of Inland Fisheries Research and
Development Division

Inland Fisheries Research and Development Division
Kaset Klang Chatuchak
Bangkok 10900, Thailand
Tel: 66 850706574
Fax: 66 2 9406522
E-mail: ffisspp@KU.ac.th

Saowamol Puteeka (Ms.)
Fisheries Biologist, Professional Level

Department of Fisheries
Kaset Klang, Phaholyotin Rd.
Chatuchak, Bangkok 10900, Thailand
Tel: +66 2 9406212
Fax: +66 2 5620493
E-mail: psaowam@yahoo.com

Narunart Pakapongyotin (Ms.)
Public Relation, Professional Level

Office of Secretary
Department of Fisheries
Kaset Klang, Phaholyotin Rd.
Chatuchak, Bangkok 10900, Thailand
Tel: +66 25620569
E-mail: narunart_p@hotmail.com

VIET NAM

Nguyen Viet Manh
SEAFDEC Council Director for Viet Nam
and Director of Department of Science
Technology & International Cooperation
under DFISH

Directorate of Fisheries (D-Fish)
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 903458885
E-mail: manhvn.htqt@mard.gov.vn

Nguyen Thi Trang Nhung (Ms.)
SEAFDEC National Coordinator for Viet
Nam and Deputy Director of Department of
Science Technology & International
Cooperation under DFISH

Directorate of Fisheries (D-Fish)
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 913153865
E-mail: trangnhungicd@gmail.com

Ta Minh Phuong
Deputy Chief of Administration Department
under DFISH

Directorate of Fisheries (D-Fish)
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 916053999
E-mail: phuongtm.tcts@mard.gov.vn

Nguyen Thi Phuong Dung (Ms.)
Deputy Director of Department of Aquatic
Resources Conservation and Development
under DFISH

Directorate of Fisheries (D-Fish)
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 979822899
E-mail: nguyendzung74@gmail.com

Vu Duyen Hai

Deputy Director of Department of Capture Fisheries under DFISH

Directorate of Fisheries (D-Fish)

10 Nguyen Cong Hoan Street

Ba Dinh District

Hanoi, Viet Nam

Tel: +84 913364925

E-mail: vuduyenhai10@gmail.com

Trần Diễm Lan

International Cooperation Department under Ministry of Agriculture & Rural Development (MARD)

Directorate of Fisheries

10 Nguyen Cong Hoan Street

Ba Dinh District

Hanoi, Viet Nam

Tel: +84 962170353

E-mail: linhnguyen.mard@gmail.com

Chau Thi Tuyet Hanh

Department of Aquaculture under DFISH

Directorate of Fisheries

10 Nguyen Cong Hoan Street

Ba Dinh District

Hanoi, Viet Nam

Tel: +84 912702008

E-mail: hanhchau08@gmail.com

SEAFDEC

The Secretariat

Dr. Kom Silapajarn

Secretary-General and Chief of SEAFDEC Training Department

SEAFDEC Secretariat

P.O. Box 1046, Kasetsart Post Office

Bangkok 10903, Thailand

Tel: +66 29406326

Fax: +66 29406336

E-mail: sg@seafdec.org

Hajime Kawamura

Deputy Secretary-General and Deputy Chief of SEAFDEC Training Department

SEAFDEC Secretariat

P.O. Box 1046, Kasetsart Post Office

Bangkok 10903, Thailand

Tel: +66 29406326, 092 0246091

Fax: +66 29406336

E-mail: ds@seafdec.org

Dr. Magnus Torell

Senior Advisor

SEAFDEC Secretariat

P.O. Box 1046, Kasetsart Post Office

Bangkok 10903, Thailand

Tel: +66 29551571

Fax: +66 29406336

E-mail: magnus@seafdec.org

Dr. Somboon Siriraksophon

Policy and Program Coordinator

SEAFDEC Secretariat

P.O. Box 1046, Kasetsart Post Office

Bangkok 10903, Thailand

Tel: +66 29406333

Fax: +66 29406336

E-mail: somboon@seafdec.org

Nualanong Tongdee (Ms.)

Information Program Coordinator, *a.i.*

SEAFDEC Secretariat

P.O. Box 1046, Kasetsart Post Office

Bangkok 10903, Thailand

Tel: +66 29551518

Fax: +66 29406336

E-mail: nual@seafdec.org

Tetsuya Kawashima
Technical Coordinator

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326, 091 7596259
Fax: +66 29406336
E-mail: kawashima@seafdec.org

Dr. Worawit Wanchana
Assistant Policy and Program Coordinator

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: worawit@seafdec.org

Dr. Taweekiet Amornpiyakrit
Senior Policy and Program Officer

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: taweekiet@seafdec.org

Pattaratjit Kaewnuratchadasorn (Ms.)
Program Manager

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: pattaratjit@seafdec.org

Kannika Boonkananurak (Ms.)
Finance Officer of SEAFDEC Secretariat
and Head of Finance Division of TD

SEAFDEC Training Department (TD)
P.O. Box 97 Phrasamutchedi
Samut Prakan 10290, Thailand
Tel: +66 24256100 ext. 150
Fax: +66 24256110 to 11
E-mail: kannika@seafdec.org

Saowanee Wanothayarnchai (Mrs.)
Acting Administration and
Finance Coordinator

P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: + 66 29406326
Fax: +66 29406336
E-mail: saowanee@seafdec.org

Ylva Mattsson (Ms.)
Fisheries Policy Expert

P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: + 66 29406326
Fax: +66 29406336
E-mail: ylva@seafdec.org

Training Department (TD)

Bundit Chokesanguan
Assistant to the Training Department Chief in
Technical/Information and Training Division
Head

SEAFDEC Training Department (TD)
P.O. Box 97 Phrasamutchedi
Samut Prakan 10290, Thailand
Tel: +66 24256100 ext. 120
Fax: +66 24256110 to 11
E-mail: bundit@seafdec.org

Panitnard Taladon (Ms.)
Special Departmental Coordinator of TD
and Training and Extension Section Head

SEAFDEC Training Department (TD)
P.O. Box 97 Phrasamutchedi
Samut Prakan 10290, Thailand
Tel: +66 24256100 ext. 116
Fax: +66 24256110 to 11
E-mail: panitnard@seafdec.org

Angkhanarat Tomyai (Ms.)
Finance Section Head

SEAFDEC Training Department (TD)
P.O. Box 97 Phrasamutchedi
Samut Prakan 10290, Thailand
Tel: +66 081 9225208
Fax: +66 24256110 to 11
E-mail: angkhanarat@seafdec.org

Aquaculture Department (AQD)

Dr. Felix G. Ayson
Chief of SEAFDEC/AQD

SEAFDEC Aquaculture Department (AQD)
Tigbauan Main Station
Tigbauan 5021, Iloilo, Philippines
Tel/Fax: +63 3307002, 0329277820
E-mail: aqdchief@seafdec.org.ph,
fgayson@seafdec.org.ph

Dr. Chihaya Nakayasu
Deputy Chief of SEAFDEC/AQD

SEAFDEC Aquaculture Department (AQD)
Tigbauan Main Station
Tigbauan 5021, Iloilo, Philippines
Tel/Fax: +63 33 5118878
E-mail: cnakayasu@seafdec.org.ph

Belen O. Acosta (Ms.)
Special Departmental Coordinator for AQD

SEAFDEC Aquaculture Department (AQD)
PSSC Building, Commonwealth Avenue
Diliman, Quezon City 1100, Philippines
Tel: +63 2 9275542
Fax: +63 2 9277825
E-mail: bacosta@seafdec.org.ph

Dr. Evelyn Grace DJ Ayson (Mrs.)
Research Division Head

SEAFDEC Aquaculture Department (AQD)
Tigbauan Main Station (TMS)
Tigbauan 5021, Iloilo, Philippines
Tel: +63 33 3307010
Fax: +63 33 3307011
E-mail: edjayson@seafdec.org.ph

Jasmine S. Gelvero (Ms.)
Administration & Finance OIC

SEAFDEC Aquaculture Department (AQD)
Tigbauan Main Station
Tigbauan 5021, Iloilo, Philippines
Tel: +63 33 3307040
Tel/Fax: +63 33 3307041
E-mail: jgelvero@seafdec.org.ph

Jiji J. Rillo (Ms.)
Budget & Cashiering Section Head

SEAFDEC Aquaculture Department (AQD)
PSSC Building, Commonwealth Avenue
Diliman, Quezon City 1100, Philippines
Tel: +63 33 3307043
Fax: +63 33 3307001
E-mail: jirillo@seafdec.org.ph

Anna F. Ortiz (Ms.)
Administrative Assistant, Manila Office

SEAFDEC Aquaculture Department (AQD)
G/F PSSC Bldg Commonwealth Avenue
Diliman Quezon city 1101
Philippines
Tel: +63 2 9277825
Tel/Fax: +63 2 9277825
E-mail: aqdmanila@seafdec.org.ph

Marine Fisheries Research Department (MFRD)

Yeap Soon Eong
Chief of SEAFDEC/MFRD

SEAFDEC Marine Fisheries Research Department
(MFRD)
2 Perahu Road, Singapore 718915
Tel: +65 67907973
Fax: +65 68613196
E-mail: Yeap_Soon_Eong@ava.gov.sg

Ong Yihang
Scientist

Post-Harvest technology Department and MFRD
Programmes
2 Perahu Road, Singapore 718915
Tel: +65 67907973
Fax: +65 68613196
E-mail: Ong_yihang@ava.gov.sg

Marine Fishery Resources Development and Management Department (MFRDMD)

Ahmad Adnan Nuruddin
Chief of SEAFDEC/MFRDMD

SEAFDEC Marine Fishery Resources Development and
Management Department (MFRDMD)
Taman Perikanan Chendering
21080 Kuala Terengganu
Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6175136
E-mail: adnan@seafdec.org.my

Dr. Osamu Abe
Deputy Chief of SEAFDEC/MFRDMD

SEAFDEC Marine Fishery Resources Development and
Management Department (MFRDMD)
Taman Perikanan Chendering
21080 Kuala Terengganu
Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6174042
E-mail: abe@seafdec.org.my

Raja Bidin Raja Hassan
Special Departmental Coordinator for
MFRDMD

SEAFDEC Marine Fishery Resources Development and
Management Department (MFRDMD)
Taman Perikanan Chendering
21080 Kuala Terengganu
Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6175136
E-mail: rbidin@seafdec.org.my

Inland Fishery Resources Development and Management Department (IFRDMD)

Dr. Satoshi Honda

Acting Chief of SEAFDEC/IFRDMD

SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD)
Jl. Gab H. A. Bastari No. 08
Kel. Silaberanti, Kec. Saberang UluI,
Palembang 30252, Sumatera Selatan, Indonesia
Tel: +62 711 5649600
Fax: +62 711 5649601
E-mail: honda.satoshi@affrc.go.jp

Dr. Dina Muthmainnah (Ms.)

Special Departmental Coordinator for
IFRDMD and Section Head of Fishery,
Limnology and Resources Enhancement

SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD)
Jl. Gab H. A. Bastari No. 08
Kel. Silaberanti, Kec. Saberang UluI,
Palembang 30252, Sumatera Selatan, Indonesia
Tel: +62 711 5649600
Fax: +62 711 5649601
E-mail: dina.gofar@yahoo.co.id

Nurwanti (Ms.)

Head of Administration and Finance
section

SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD)
Jln. Gub HA. Bastari No.08
RT. 29 RW.07 Kel. Silaberanti
Kec. Seberang Ulu I, Jakabaring
Palembang 30252, Sumatera Selatan, Indonesia
Tel: +62 711 5649600
Fax: +62 711 5649601
E-mail: nurwanti.dewangga@gmail.com

OFFICIAL AUDITOR

Phongtorn Doungphanya

External Auditor

P & A Audit Company Limited
645 Mu Ban Chatkeaw, Soi Happyland 1
Nawamin Rd., Klongjan Bangkok
Bangkok 10240, Thailand
Tel: +66 081-8115200
E-mail: Phongtorn.d@gmail.com

TECHNICAL SECRETARIES

Virgilia T. Sulit (Ms.)

Fisheries Technical Officer

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: sulit@seafdec.org

Sawitree Chamsai (Ms.)

Policy and Program Officer I

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: sawitree@seafdec.org

Saivason Klinsukhon (Ms.)
Information Officer I

SEAFDEC Secretariat
P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: saivason@seafdec.org

ORGANIZATIONS

Sarah Lenel (Ms.)
Fishery Monitoring and compliance Manager

Commission for the Conservation of Antarctic Marine
Living Resources (CCAMLR)
181 Macquarie St, Hobart, TAS7000,
Australia
Tel: +61 (0) 3 62101102, +61 90 0 400740536
E-mail: sarah.lenel@ccamlr.org

Dr. Muhamad Lukman
Technical Coordinator

CTI-CFF Regional Secretariat
Jl. A. A Maramis Kayuwatu, Kairagi II
Manado, North Sulawesi 95254
Indonesia
Tel: +62 81341121660
E-mail: lukman.lucky@cticff.org

Göran Haag
Counsellor

Embassy of Sweden, Bangkok
One Pacific Place
140 Sukhumvit Road
Bangkok 10110, Thailand
Tel: +66 22637200
Fax: +66 22637255
E-mail: goran.s.haag@gov.se

David Brown
FAO Regional Fisheries Programme
Consultant

FAO Regional Office for Asia and the Pacific
39 Phra Athit Road, Phra Nakorn
Bangkok 10200, Thailand
Tel: +66 2 6974173
Fax: +66 2 6974445
E-mail: David.brown@fao.org

Dr. Cherdsak Virapat
Director General

Network of Aquaculture Centres in Asia-Pacific
(NACA)
Suraswadi Building, Department of Fisheries
Kasetsart University Campus
Ladyao, Jatujak, Bangkok, Thailand
Tel: +66 25611728
Fax: +66 25611727
E-mail: cherdsak.virapat@enaca.org

Christopher Rogers
Assistant Director for International Fisheries

U.S. Department of Commerce,
NOAA National Marine Fisheries Service
Office for International Affairs and Seafood Inspection
1315 East-West Highway, Room 10633
Lilver Spring, Maryland USA 20910
Phone: +1-301-427-8350
Fax: +1-301-713-2313
E-mail: Christopher.rogers@noaa.gov

James Neely
Manger, Foreign Compliance Policy

RPOA-IUU Secretariat
Australian Fisheries Management Authority
Level 6, 73 Northbourne Avenue, Canberra City,
ACT, 2600, Australia
Tel: +61262255463
Fax: +61262255500
E-mail: Jim.neely@afna.gov.au

Geronimo Silvestre
Chief of Party

USAID/The Oceans and Fisheries Partnership
208 Wireless Rd., 12th Floor Lumpini
Pathumwan, Bangkok 10330, Thailand
E-mail: Geronimo.Silvestre@oceans-partnership.org

Nives Mattich (Ms.)
Deputy Chief of Party

USAID/The Oceans and Fisheries Partnership
208 Wireless Rd., 12th Floor Lumpini
Pathumwan, Bangkok 10330, Thailand
E-mail: Nives.Mattich@oceans-partnership.org

Alfred Nakatsuma
Regional Environment Office
Director

USAID Regional Development Mission for Asia
Athenee Tower 25th Floor,
63 Wireless Road, Lumpini
Patumwan, Bangkok 10330 Thailand
E-mail: anakatsuma@usaid.gov

Sarah Burgess-Herbert (Ms.)
Natural Resources Officer

USAID Regional Development Mission for Asia
Athenee Tower 25th Floor,
63 Wireless Road, Lumpini
Patumwan, Bangkok 10330 Thailand
E-mail: sburgessherbert@usaid.gov

OBSERVERS

Bach Van Hanh
Department of Science Technology &
International Cooperation
under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 984556559
E-mail: hanhbv.tcts@mard.gov.vn, bvhanh@gmail.com

Dang Thuy Linh (Ms.)
Planning & Financial Department under
DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 914748686
E-mail: danglinh2112

Le Hong Lien (Ms.)
Department of Aquatic Resources
Conservation and Development under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
Tel: +84 912319864
E-mail: lehonglients@gmail.com

Hidenao Watanabe
Fisheries Management Policy Advisor
to D-Fish

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District
Hanoi, Viet Nam
E-mail: watahide527@gmail.com

Nguyen Mai Huong (Ms.)

Department of Science Technology &
International Cooperation under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 913533581
E-mail: huongseaprodex@gmail.com

Tran Hai Yen

Administration Department under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 912754755
E-mail: haiyen.tcts@yahoo.com.vn

Nguyen The Hoang

Department of Fisheries Resources
Surveillance under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 1689099996
E-mail: hoangng84@gmail.com

Tran Thi Tuyet Lan (Ms.)

Department of Science Technology &
International Cooperation under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 904163367
E-mail: lanтт.khcn@mard.gov.vn

Nguyen Thanh Binh

Department of Science Technology &
International Cooperation under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 912419911
E-mail: ntbinh@mard.gov.vn

Nguyen Thi Hong Nhung (Ms.)

Department of Science Technology &
International Cooperation under DFISH

Directorate of Fisheries
10 Nguyen Cong Hoan Street
Ba Dinh District, Hanoi, Viet Nam
Tel: +84 915977227
E-mail: nhung.doa@gmail.com

SECRETARIAT OF THE MEETING

Nathacha Sornvaree (Mrs.)

SEAFDEC Secretariat
E-mail: nathacha@seafdec.org

Julasak Markawat

SEAFDEC Secretariat
E-mail: julasak@seafdec.org

Vu Thi Chung (Ms.)

Administration Department under D-FISH

Directorate of Fisheries (D-FISH)
E-mail: chung7779@gmail.com

Nguyen Thi Ha (Ms.)

Administration Department under D-FISH

Directorate of Fisheries (D-FISH)
E-mail: nguyenhathanh1981@gmail.com

Tran Thi Thu Hien (Ms.)

Fisheries Information Center (FiCEN) under

Directorate of Fisheries (D-FISH)
E-mail: hienthutrani123@gmail.com

Vu Thi Phoung Thanh (Ms.)

Department of Fisheries Resources
Surveillance under D-FISH

Directorate of Fisheries (D-FISH)
E-mail: thanh004@gmail.com

WELCOME STATEMENT

By Mr. Dao Cong Thien

Vice Chairman of Khanh Hoa Provincial People's Committee

H.E. Mr. Vu Van Tam, Deputy Minister of Agriculture and Rural Development,
Mrs. Nguyen Thi Thu Nguyet, Deputy Director General of Directorate of Fisheries,
Dr. Wimol Jantrarotai, Director General of Thailand Department of Fisheries, Chairperson of the SEAFDEC Council for the year 2015-2016,
Dr. Kom Silapajarn, SEAFDEC Secretary-General,
Mr. Hajime Kawamura, SEAFDEC Deputy Secretary-General,
SEAFDEC Council Directors,

Distinguished guests and delegates from international organizations!
Ladies and Gentlemen,

On behalf of Khanh Hoa Provincial People's Committee, I would like to warmly welcome Mr. Vu Van Tam, Deputy Minister of Agriculture and Rural Development cum Director-General of Directorate of Fisheries, Chairman of the SEAFDEC Council for the year 2015 – 2016; representatives from Ministries and Central Agencies; the relevant Agencies of the Ministry of Agriculture and Rural Development and SEAFDEC Council Directors, delegates from SEAFDEC Member States; distinguished guests attending the 48th SEAFDEC Council Meeting held by the Ministry of Agriculture and Rural Development in Nha Trang city, Khanh Hoa Province. I would like to wish you all good health and our successful meeting!

Ladies and Gentlemen!

Viet Nam is a coastal country with thousands of small islands and exclusive economic zone and great continental shelf. Viet Nam Sea Water is rich in marine resources and of diversity which contribute significantly to the marine economic development of the country. For Viet Nam, as well as SEAFDEC Member States, Fisheries plays a great role in supplying food, creating jobs and income for coastal fishing communities. The development of sustainable fisheries is a long-term target aimed at responsible capture fisheries, conservation of fisheries resources in Viet Nam in particular and the region in general.

Khanh Hoa is a province located in the south central coastal with the natural area of 5.205 km² of land-based, with over 385 km of coastline and more than 200 large and small islands. Khanh Hoa is blessed with a temperate climate, lies in north-south traffic axis, has convenient traffic conditions on road, rail, waterways and air. Khanh Hoa is a province of long coastline which has sheltered and deep bays such as Van Phong Bay, Cam Ranh Bay.

Khanh Hoa has many ports and Cam Ranh port is one of the best deep water port in Viet Nam and in the world.

Fisheries plays an important role in the economic - socio development strategy of Khanh Hoa province. Khanh Hoa province has over 9,800 fishing vessels with a total capacity of about 550,000 CV of which is 1,250 fishing vessels with over 90 CV Annually fisheries capture is about 80.000tons; Khanh Hoa is the fisheries breeding center of the country. Aquaculture area is about 3,500 hectares with annual aquaculture output of over 20,000 tons and the target species are of high economic value such as tiger shrimp, white shrimp, lobster, cobia, grouper, snail, snout.

Khanh Hoa has over 1,000 purchasing facilities of primary processing of seafood material, 44 seafood processing factories reach export standards. Seafood export products are present in 64 world markets. The seafood processing advantage has contributed significantly to consuming seafood products from aquaculture and fisheries capture and gaining the growing seafood export value.

Khanh Hoa has the advantage of infrastructure, geographical position, natural conditions, the availability of resources, Khanh Hoa province has been accepted by the Government to apply a pilot project of establishing Fisheries Center in Cam Linh ward, Cam Ranh city, Khanh Hoa province. This is a major project in compliance with the policy of the Government. The establishment of the Fisheries Center will not only help the provincial fisheries but also the fisheries of the South Central region.

Ladies and Gentlemen!

Although there are significant developments in fisheries, Khanh Hoa still faces the following difficulties:

1. The fisheries activities of Khanh Hoa in recent years has been in shortage of coherent phases of the entire value chain from fisheries capture, aquaculture, processing and consuming products which lead to rising production costs, decreasing product quality and the value of exports. Material price fluctuations also affect directly the interests of fishermen and businessman.
2. Although Khanh Hoa is a province with plenty of seafood processing factories, the purchasing activities of seafood material have been made through the middlemen or agents system largely. This makes the processing companies have difficulties in controlling, traceability of origin according to the standard of export requirement.

To settle the above difficulties, Khanh Hoa province is promoting cooperation model, linking production in fisheries capture, aquaculture, seafood processing.

For fisheries capture: Establish the link among the owners of fishing vessels who use the same fishing gear and have the same fishing grounds and voluntarily cooperate with processing factories and middlemen. Through this link, fishermen can learn experiences, different techniques from each other, provide information about fishing grounds in time, shorten the duration to the fishing grounds, extend the duration at sea, reduce production costs, reduce post-harvest losses, do logistics for each other, master the market, increase economic efficiency, protect and support to rescue each other when the incidents occur at sea.

For aquaculture; Promote cooperation model among farmers who feed the same species and can take on more management function from input to output including water, seed, feed, aquatic veterinary medicine, environment, disease prevention, and implement product sales links with processing factories. This will help control farming areas, seed quality management and food, raise productivity stability, increase economic efficiency, create stable jobs, improve life, and maintain long-term aquatic activities.

For seafood processing: seafood processing factories in Khanh Hoa step by step to actively establish close links with the fishermen, aquaculture farmers, fisheries services providers to improve seafood product quality, increase export value, fully meet the requirements of traceability system, the demands of the market.

Ladies and Gentlemen!

It is a great honor for Khanh Hoa Province to be chosen as the venue for the 48th SEAFDEC Council Meeting. With participations of top leaders of fisheries sectors of ASEAN countries and international organizations, I believe that the Meeting will come up with specific solutions to manage fisheries effectively and develop sustainable fisheries.

I would like to wish the 48th SEAFDEC Council Meeting be fruitful and once again wish all of you good health.

Thank you very much for your attention.

WELCOME ADDRESS

By Dr. Wimol Jantrarotai

*Director-General, Department of Fisheries (DOF) of Thailand and
Chairperson of the SEAFDEC Council for the Year 2015-2016*

Our Guest of Honor, His Excellency *Mr. Vu Van Tam*, the Vice Minister of Agriculture and Rural Development of the Socialist Republic of Viet Nam,
The Chairman of Khanh Hoa Province,
My colleagues in the SEAFDEC Council of Directors,
Delegates from SEAFDEC Member Countries,
The Secretary-General, Deputy Secretary-General, and officials of SEAFDEC,
Representatives from partner organizations,

Ladies and Gentlemen,
Good morning!

It gives me a great honor and pleasure to welcome you all to this 48th Meeting of the SEAFDEC Council. On this auspicious occasion, please let me express my deepest appreciation to the Government of the Socialist Republic of Viet Nam for the kind hospitality and arrangements as well as for providing the venue for this Meeting.

We are all aware that the year 2015 has been very significant for the Southeast Asian region, especially in terms of promoting sustainable fisheries development in the light of the ASEAN Community Building. Efforts toward such endeavor has indeed foster closer collaboration and cooperation among the ASEAN Member States, as well as Japan as member of SEAFDEC that provides significant contributions and technical support enabling SEAFDEC to undertake activities towards sustainable fisheries development in the region.

The works undertaken by SEAFDEC in 2015 had also been very prominent. In particular, the SEAFDEC Secretariat and Departments pursued the implementation of several programs of activities that address the fisheries priority of our region. Specifically, we could also note the number of regional policy recommendations and guidelines developed during the recent years, the progress of which would be reported and discussed at this Meeting. SEAFDEC has also provided several fora to facilitate discussions and cooperation among countries in order to come up with harmonized approach towards addressing important emerging issues and requirements.

On behalf therefore of the SEAFDEC Council, I wish to extend our utmost appreciation to SEAFDEC for the works that it had undertaken during the past years and planned for the coming years. Such efforts not only help create unity among countries and be able to make louder voice during relevant international fora, but also raise such matters to the higher authorities of ASEAN. In such a way, the visibility of the fisheries sector is enhanced particularly its contribution to food security, livelihood and improved national economies of the respective countries.

My Colleagues in the Council, Ladies and Gentlemen,

Please allow me to take this opportunity during this SEAFDEC Council Meeting, to highlight once again the important matters that we should consider and discuss. This is on the concerns and more stringent requirements for countries in the region to come up with effective measures to combat IUU fishing. We are all aware that combating IUU fishing is a complicated matter, taking into consideration the transboundary nature of our fishery resources as well as the very nature of our region's fishing activities that are undertaken across borders of neighboring countries. Therefore, addressing problems on IUU fishing requires collective efforts among concerned countries. In this regard, close cooperation at bilateral and sub-regional levels would be very crucial to address the issues on IUU fishing in an

efficient manner, as this would serve as basis for addressing problems on IUU fishing at the broader regional level.

We are sure that through SEAFDEC, several activities have been lined-up for implementation to address the issues on combating IUU fishing. However, we should also consider the intensity of the issues that could tremendously influence the fishery industry of the region. There is still a strong need for common direction towards addressing the issues to ensure that sustainability of fisheries is achieved in our region.

We are therefore very delighted to announce that Thailand would soon host the “High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community” under the theme of “Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products” in Bangkok in August this year. It is expected that the draft “*Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products*” which was developed by the Member Countries with support from SEAFDEC would also be discussed at this Council Meeting. We need to review such draft before its subsequent adoption at the Senior Officials during the High-Level Consultation. Such declaration is very crucial for our region as this reflects our efforts and strong intention in combating IUU fishing and enhancing the competitiveness of our fish and fishery products.

Please allow me to inform you that in the case of Thailand, our Government had recently issued the new Royal Ordinance on Fisheries B.E. 2558 (A.D. 2015), with the primary objective of reforming the country’s existing Fishery Law. This is in response to the current fisheries situation and emerging requirements for conservation and sustainable management of the aquatic resources. Under this new Ordinance, our country would be able to come up with appropriate regulations for sustainable fisheries management including combating IUU fishing in the future.

On another note, I have to remind my colleagues in the SEAFDEC Council that in 2017, SEAFDEC would have attained its 50 years jubilee of providing assistance to the Member Countries in their journeys towards sustainable fisheries development. Let us help SEAFDEC in celebrating this very significant occasion in a very memorable manner, by discussing during this Meeting, the relevant activities that need to be undertaken.

Ladies and Gentlemen, my term as Chairperson of the SEAFDEC Council is about to complete. At this juncture, I would like to take this opportunity to encourage SEAFDEC to continue its good work in providing technical support to all Member Countries. I would also wish to express my utmost appreciation to my colleagues in the SEAFDEC Council of Directors for extending their utmost support during my term as Chairperson of the SEAFDEC Council. My appreciation is also extended to the collaborating partners of SEAFDEC for providing generous support and cooperation throughout the past year. Your continued support and sustained partnership have allowed SEAFDEC to implement activities that are beneficial to the countries in the region.

With that let me thank all of you once again. I truly wish this 48th Meeting of the SEAFDEC Council great success. Good day!

OPENING SPEECH

By H.E. Mr. Vu Van Tam

*Vice Minister of the Ministry of Agriculture and Rural Development
of the Socialist Republic of Viet Nam*

Dr. Wimol Jantrarat, Director-General of Thailand Department of Fisheries, Chairperson of the SEAFDEC Council for the year 2015-2016,
Mr. Dao Cong Thien, Vice Chairman of Khanh Hoa Provincial People's Committees,
Dr. Kom Silapajarn, SEAFDEC Secretary-General,
Mr. Hajime Kawamura, SEAFDEC Deputy Secretary-General,
SEAFDEC Council Directors,
Distinguished guests and delegates from international organizations,

Ladies and Gentlemen!

Today, it is a great honor for Viet Nam to host the 48th SEAFDEC Council Meeting in the beautiful coastal City of Nha Trang.

On behalf of Ministry of Agriculture and Rural Development of Viet Nam, I would like to warmly welcome the Chairperson of the SEAFDEC Council, SEAFDEC Council Directors, Mr. Secretary-General and distinguished guests attending the 48th SEAFDEC Council Meeting. I would like to wish you all good health and our successful meeting!

Ladies and Gentlemen!

The 48th SEAFDEC Council Meeting is an extremely meaningful event for SEAFDEC Member Countries. It is an opportunity for us, who have key positions in planning and making fisheries management policies in member states, could exchange, agree and approve the plans, programs, projects and cooperation activities in SEAFDEC framework of 2016 - 2017 period, and discuss the important emerging issues in the region, outline the development orientations for sustainable and environmentally responsible fisheries development and food security in our region, especially in the context that ASEAN Member States become one community since 31 December 2015, and the integration process and increasing risks and challenges for fishermen at sea and regional fisheries.

Since founded in 1967, SEAFDEC has completed really a lot of works for the benefits of our fisheries in the region. Please allow me to reiterate the achievements as mentioned by Mr. Chairperson: crucial roles and contributions of SEAFDEC to the development of ASEAN Fisheries are uncountable, especially in the improvement of fisheries management to meet international standards, towards the sustainable fisheries development, and ensuring food security and socio-economic stability of ASEAN region.

Over decades of development, SEAFDEC has been actively participating in the process of promoting sustainable fisheries in the ASEAN region. I highly appreciated SEAFDEC initiative in elaborating Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN region towards 2020 and endorsed by SEAFDEC Member Countries in 2011. These documents are very important for Member States to provide major and proper directions for legal frameworks and policies for sustainable fisheries development as well as the basis for formulation and implementation of SEAFDEC programs and cooperation activities.

Let me take this opportunity to congratulate SEAFDEC, Secretariat and Technical Departments for their great efforts in development of common standards to narrow the gaps between ASEAN countries, to create a common voice in the improvement of fisheries management bringing our fisheries to integrate with responsible fisheries of the world such as ASEAN GAP, ASEAN Certification system, particularly human resource development for member states. For Viet Nam, 30-35 times have been

annually sent to attend SEAFDEC training courses, professional seminars and workshops. This is extremely valuable for Viet Nam in building capacity for our staff involving in fisheries management. On this occasion, I would also like to express our appreciation for the goodwill and the precious supports of SEAFDEC to Vietnamese fisheries sector in recent years and hope that the cooperation will be further strengthened the future contributing significantly to the development of sustainable fisheries as well as food security in our ASEAN economic community.

Ladies and Gentlemen,

As most of ASEAN member states, the Fisheries sector of Viet Nam plays an important role in the national economy, particularly in food supply and creating jobs and incomes for more than 4 million workers. In recent years, Viet Nam Fisheries sector has made significant achievements. Total production reached 6.55 million ton in 2015 increasing 27.3% compared to 2010. The export turnover reached 6,7 million USD and seafood export are expanded to 160 countries and territories such as EU, US, Japan, Korea During this development process, Viet Nam has actively applied good practices in fisheries management. However the Vietnamese Fisheries sector is still small scale fisheries with increasing risk in fishing operations, low effectiveness and competitiveness. Therefore Viet Nam has been in the efforts of fisheries restructure towards the modernized industry, quality improvement and sustainable development to be more effective, responsible and competitive along the line with poverty reduction, gender equality and environment-friendly.

Unpredictable climate changes, volatile market conditions as well as strict international standards and requirements on food safety, traceability and origin of fishery products have been creating difficulties and challenges in implementing sustainable development goals for Viet Nam in particular and countries in the Asian region in general. In the recent years Vietnamese fishermen have been facing many challenges, especially the issue of safety in the context of increasing uncertainties at sea. Since 2014 up to now, there have been 3967 accidents of Vietnamese fishing vessels with 2364 of total injured and dead fishermen. Therefore the issue of combating illegal, unreported and unregulated fishing in our region should take consideration of safety at sea, humanity and increasing pressure of livelihoods for poor fishing communities. Viet Nam has taken a lot of efforts to cooperate with other countries in the region to build up a dialogue mechanism for exchanging information, resolving incidents on fishing grounds, fishing vessels operating in the each country's waters and the other relevant issues, conducting research, rescue, storm shelter for fishermen and vessels in the spirit of friendly cooperation and humanity. It is also to ensure the safety of fishermen and vessels operating at seas, especially through the establishment and operation of hotlines with other ASEAN countries. Besides the hotline between Viet Nam and the Philippines is officially established and operated effectively, Viet Nam is right now negotiating with Brunei, Cambodia, Thailand and Malaysia.

In addition to the efforts of SEAFDEC in changing the approach of combating IUU fishing from the perspective of management of individual activities of fishing vessels to a comprehensive approach and chain-linkage of which regulations and requirements for product circulation in the market will be the core. Viet Nam committed to work closely with SEAFDEC Member Countries in the effort to combat IUU fishing and ready actively build the dialogue mechanism for information exchange and resolvment of issues relating to fishing grounds through the establishment and operation of hotlines at bilateral and multilateral levels within our ASEAN economic community.

I strongly believe that the 48th meeting of SEAFDEC Council co-chaired by Mr. Chairman and with active participations of delegates and SEAFDEC Council members, many important issues of the fisheries in our region will be seriously and responsibly discussed and I wish the meeting will be fruitful.

With this note, I declare the 48th meeting of SEAFDEC Council open.

Thank you very much for your attention.

AGENDA

Agenda 1: Procedural Matters

- 1.1 Opening of the Meeting by Chairperson of SEAFDEC Council for the Year 2015-2016
- 1.2 Election of Chairperson for the Year 2016-2017
- 1.3 Adoption of the Agenda and Arrangements for the Meeting

Agenda 2: Report of the Secretary-General

Agenda 3: Note of the Chairperson of the SEAFDEC Program Committee on the Results of the Thirty-eighth Meeting

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

Agenda 5: Policy Consideration on Important Issues

- 5.1 Issues on Combating IUU Fishing
 - 5.1.1 Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain
 - 5.1.2 Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over
 - 5.1.3 ASEAN Catch Documentation Scheme
 - 5.1.4 Regional Cooperation to Support the Implementation of the Port State Measures in ASEAN Region
 - 5.1.5 Regional Plan of Action for Management of Fishing Capacity
 - 5.1.6 Trans-boundary Issues and Bi-lateral arrangements/dialogues
- 5.2 Other Emerging Issues
 - 5.2.1 CITES Issues: Regional Common/Coordinated Position
 - 5.2.2 Labor Aspects: Outputs and Recommendations from the Regional Technical Consultation on Labor Aspects within the Fishing Industry in the ASEAN Region
 - 5.2.3 Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud Action Plan
- 5.3 Regional Cooperation to Promote Sustainable Fisheries and Aquaculture in the ASEAN Region
 - 5.3.1 Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region
 - 5.3.2 Regional Policy Recommendations on Conservation and Management of Eel Resources and Promotion of Sustainable Aquaculture
 - 5.3.3 Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations
 - 5.3.4 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries
 - 5.3.5 Regional Policy Recommendations and Strategic Plans for Fishery Resources Enhancement in the Southeast Asian Countries
 - 5.3.6 Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region
 - 5.3.7 Regional Policy Recommendations on the Early Mortality Syndrome (EMS)

Agenda 6: Other Matters

- 6.1 High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products
- 6.2 Southeast Asian State of Fisheries and Aquaculture 2017 (SEASOFIA-2017)
- 6.3 The 50th Anniversary of SEAFDEC
- 6.4 Preliminary Results on Human Resources Survey in SEAFDEC Member Countries

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

Agenda 8: Future Direction Requested by the Council (Closed Session) (to be attended by Member Countries' Head Delegates and SEAFDEC Secretary-General)

Agenda 9: Management of the Center (Closed Session)

- 9.1 New Calculation of the MRC for 2016
- 9.2 Plans of Operation and Programs of Work of SEAFDEC Departments and Secretariat
- 9.3 Operation of SEAFDEC Training and Research Vessels
- 9.4 Collaborative Arrangements between SEAFDEC and Other Organizations

Agenda 10: Financial Matters (Closed Session)

- 10.1 Adoption of Audited Financial Report for the Year 2014
- 10.2 Un-audited Financial Report for the Year 2015, and Status of the Financial Situation for the Year 2016
- 10.3 Proposed Budgetary Requirements of the Center for the Year 2017
- 10.4 Other Financial Matters

Agenda 11: Concluding Matters

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

Agenda 12: Closing of the Meeting

EXECUTIVE SUMMARY OF THE THIRTY-EIGHTH MEETING OF SEAFDEC PROGRAM COMMITTEE

The Thirty-eighth Meeting of the Program Committee of the Southeast Asian Fisheries Development Center (SEAFDEC) was held in Manila, Philippines, from 23 to 25 November 2015 and hosted by the Aquaculture Department (AQD). The Meeting reviewed the SEAFDEC Programs implemented in 2015 and scrutinized the programs to be implemented in 2016 to ensure that these programs have been formulated and implemented in line with the priorities and needs of the Member Countries. The list of SEAFDEC programs of activities for 2015-2016 appears as *Appendix 1*. The Meeting was chaired by the Acting Secretary-General of SEAFDEC in his capacity as the Chairperson of SEAFDEC Program Committee.

The Meeting noted the progress and achievements made by SEAFDEC in the implementation of **Programs under the FCG/ASSP Mechanism** in 2015, which comprise the twenty (20) projects, 19 of which could be categorized under five Program Thrust: 1) Developing and promoting responsible fisheries for poverty alleviation and food security; 2) Enhancing capacity and competitiveness to facilitate international and intra-regional trade; 3) Improving management concepts and approaches for sustainable fisheries; 4) Providing policy and advisory services for planning and executing management of fisheries; and 5) Addressing international fisheries-related issues from a regional perspective; and one 'Special Project'. In addition, the Program Committee noted one project scheduled to be completed in 2015, while two (2) new projects are also proposed for 2016. The Program Committee approved the programs, and provided recommendations which could be summarized as follows:

Program Thrust I: Developing and Promoting Responsible Fisheries for Poverty Alleviation and Food Security

1. Human Resources Development (HRD) for Sustainable Fisheries

- In the training to be conducted under this project, TD to focus more on extension methodologies essential for delivering the knowledge on sustainable fisheries management to local communities
- Member Countries to put forward their requests for follow-up on-site training activities of which the budget could be allocated either through the existing JTF through SEAFDEC or from additional support

2. Optimizing Energy Use/Improving Safety Onboard in Fishing Activities

- TD to collaborate with the Philippines especially in the activities on safety at sea and design of small fishing boats
- TD to continue extending the knowledge and transfer the technology developed to fisheries extension officers in Indonesia
- Japan to consider supporting the implementation of this project especially in terms of providing resource persons from Japan

3. Promotion of Sustainable Fisheries Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia

- TD to assess the resources near artificial reefs (ARs) considering that resource assessment has not been done near the deployed ARs in the region
- TD to dispatch experts on ARs to assist the Member Countries in the assessment of resources near ARs
- TD to determine the appropriate methodology based on basic information on biology and bio-diversity collected prior to the implementation of resource enhancement activities
- TD to support the implementation of Policy Recommendations and Strategic Plans of Action for Fishery Resources Enhancement in the Southeast Asian Countries
- TD to develop a management plan after assessment of the resources is conducted in particular pilot site, and Philippines could host a pilot site for this project

4. Environment-friendly, Sustainable Utilization and Management of Fisheries and Aquaculture Resources

- AQD to develop other modules for environment-friendly aquaculture of economically important species, e.g. rice-cum-shrimp culture and technologies developed should be transferred through regional training courses
- AQD to consider the possibility of involving researchers from Member Countries to participate in its research activities and SEAFDEC to develop the mechanism for this type of cooperation
- AQD to share the outcomes of its projects especially on breeding of seahorses and relevant information on resource recovery technologies to the Member Countries
- Indonesia to share the experience with other MCs on the successfully implemented rice-cum-shrimp/fish-culture

5. Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia

- IFRDMD to consider including Thai researcher(s) to join field trip(s) for seed collection of eel species in its future plan
- IFRDMD to rush up the implementation of this project especially on reviewing the status of tropical eel resources in the region with Japan supporting the implementation by sharing information on resource management of eels
- SEAFDEC to provide training to enhance the capacity of Myanmar staff in compiling information on the abundance and status of the country's eel resources
- Member Countries to consider attending the International Fisheries Symposium on Tropical Eel Genus *Anguilla* in Banda Aceh, Indonesia, 10-12 December 2015 concerning that scientific-based information could be established for the management and conservation of eel resources

6. Promotion of Responsible Utilization of Inland Fisheries in Southeast Asia

- IFRDMD to review the results of various activities conducted by TD and the Mekong River Commission (MRC) in relation to community and rights-based fisheries, as well as Cambodia on fisheries co-management
- IFRDMD to collaborate with the Member Countries and TD in preparing its program of activities considering that several activities on co-management of inland fisheries has been carried out even before the establishment of IFRDMD

Program Thrust II: Enhancing Capacity and Competitiveness to Facilitate International and Intra-regional Trade

7. Chemical and Drug Residues in Fish and Fish Products in Southeast Asia-Biotoxin (ASP, AZA and BTX) and Harmful Algal Bloom (HABs) in the ASEAN region

- The progress and achievements in the implementation of this project were noted

8. Cold Chain Management of Seafood

- The progress and achievements in the implementation of this new project which commenced in 2015, were noted

9. Reinforcement and Optimization of Fish Health Management and the Effective Dissemination in the Southeast Asian Region

- AQD to explore the possibility of undertaking activities that address the urgent need to control the spread of emerging shrimp disease known as *Enterocytozoon hepatopenaei* (EHP) caused by a microsporidian parasite
- AQD to consider strengthening its role in the ASEAN Network of Aquatic Animal Health Centres (ANAAHC) in order that the network set-up between AMSs and NACA could be actively mobilized
- AQD to include discussions on EHP during the RTC on EMS/AHPNS and other Transboundary Diseases scheduled in February 2016 funded by Government of Japan through the ASEAN Secretariat

- SEAFDEC to consider allocating budget and include emerging issues in aquaculture such as incidence of shrimp diseases, particularly the Early Mortality Syndrome (EMS) and EHP, in the future project activities of AQD
- AQD to collaborate closely with the Member Countries in monitoring the occurrence of emerging aquatic diseases in the region
- SEAFDEC Secretariat to mobilize its existing project to provide platform for addressing emerging fisheries-related issues including those on emerging aquatic animal diseases that may arise in the future
- Thailand to join the research activities on vaccination of shrimps and enhancement of shrimp antiviral immune response to shrimp disease

Program Thrust III: Improving Management Concepts and Approaches for Sustainable Fisheries

10. Strategies for Trawl Fisheries By-catch Management (REBYC-II CTI)

- TD to develop significant solution or best approach to deal with sustainable utilization and management of bycatch
- TD to continue and extend results of the project activities to other Member Countries
- TD to enhance the awareness of stakeholders especially the incorporation of the EAFM concept by developing mass media to increase stakeholders' awareness
- TD to support the Member Countries with the process of developing trawl fisheries management plan considering the involvement of fish meal industries/association/animal feed associations

11. Promotion of Countermeasures to Reduce IUU Fishing Activities

- SEAFDEC to provide technical support during national training course for scientific observers onboard as well as observers' onboard transshipment vessels
- Japan to consider providing technical assistance for observers' onboard training programs as officially requested by other Member Countries
- Member Countries to review their respective relevant regulations on transshipments before making a specific request for technical assistance to SEAFDEC
- SEAFDEC to support the effort of Myanmar in combating IUU fishing through training that mainly focuses on fishing vessel inspection to enhance the capacity of the country's fisheries officers from the coastal areas
- SEAFDEC to provide support to the Member Countries through the conduct of regional training or regional workshop on this aspect using the Japanese Trust Fund
- TD in collaboration with SEAFDEC Secretariat to come up with concept note on regional cooperation to support the implementation of Port State Measures within the ASEAN region to be proposed for consideration by the next SEAFDEC Council Meeting

12. Combating IUU Fishing in the Southeast Asian Region through Application of Catch Certification for Trading of Fish and Fishery Products

- Individual countries to conduct consultation in 2016 to gather inputs on problems associated with the implementation of the guidelines, and followed by a regional technical consultation at a later stage

Program Thrust IV: Providing Policy and Advisory Services for Planning and Executing Management of Fisheries

13. Fisheries Resource Survey & Operational Plan for M.V. SEAFDEC 2

- Malaysia thanked TD for assistance in successful conduct of Demersal Surveys for Stock Assessment in Sabah, Sarawak and Labuan EEZs of Malaysia from 21 July to 15 October 2015
- Malaysia to use the M.V. SEAFDEC 2 for a national survey of demersal fish stocks and assessment survey in Malaysian waters (East Coast of Peninsular Malaysia) during April to June 2016

- Member Countries to fully utilize the M.V. SEAFDEC 2 after the vessel would be undertaken follow-up maintenance including renewal/replacement of survey equipment onboard with support by the Government of Japan through the JICA Program

14. Offshore Fisheries Resources Exploration in Southeast Asia

- The progress and achievements in the implementation of this project were noted

15. Enhancing the Compilation and Utilization of Fishery Statistics and Information for Sustainable Development and Management of Fisheries in the Southeast Asian Region

- TD to support Viet Nam through conduct of TOT on-site training course on data analysis and utilization on cost-sharing basis
- SEAFDEC to enhance the capacity of officers at the inspection and quarantine units for aquatic animals, especially in identification of sharks and rays, based on carcasses, and derivatives thereof

16. Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region

- MFRDMD to update the report on status of purse seine fisheries in the region
- MFRDMD to analyze data on status of purse seine fisheries from each country and come up with regional synthesis
- SEAFDEC to dispatch experts, *e.g.* from Japan and other countries to support the assessment of major catch species by types of fishing gear
- MFRDMD to study cost-effectiveness of TAE system before TAE is put into practice
- MFRDMD to develop more options that could be applied by the countries as appropriate

17. Research and Management of Sharks and Rays in the Southeast Asian Waters

- Demarcation should be made on data collection activities for sharks and rays between MFRDMD which focus on biological aspects and methodology for species identification mainly for CITES-listed and rare species and those of TD which focus on data collection at landing sites mainly for common species
- Title of activities and publications under the projects of MFRDMD and TD should be specific for greater clarity

Program Thrust V: Addressing International Fisheries-related Issues from a Regional Perspective

18. Assistance for Capacity Building in the Region to Address International Trade-related Issues

- Member Countries to collect basic information on the species potentially proposed for listing in the CITES Appendices, *e.g.* tunas, precious corals, other shark species, and to take actions towards sustainable utilization of the resources

19. Strengthening SEAFDEC Network for Sustainable Fisheries

- Considering the significance of this project in enhancing the visibility of SEAFDEC, the Program Committee noted the achievements of the project in 2015 and considered the proposed activities for 2016

For the Special Project on “**Fisheries and Habitat Management, Climate Change and Social Well-being in Southeast Asia**”, the Program Committee recommended:

- SEAFDEC to include Viet Nam in the Mekong River Basin Sub-regional arrangement
- SEAFDEC to facilitate the arrangement of another meeting between Malaysia and Thailand to review the progress of proposed actions from the First Sub-regional Technical Meeting on Effective Fisheries Resource Management
- SEAFDEC to support the plan of Thailand to develop bilateral arrangements with neighboring states for combating IUU fishing

On the Proposed New FCG/ASSP Programs for the Year 2016 and Onwards, the Program Committee provided comments and suggestions to enhance the implementation of such projects as follows:

1. Enhancing Coastal Community Resilience for Sustainable Livelihood and Coastal Resources Management

- MFRDMD to formally establish the focal points of participating countries to facilitate communication and dissemination of the final project proposal and relevant documents as soon as possible
- MFRDMD to convene the inception workshop in January 2016 taking into consideration the budget from the ASEAN-SEC/IDB which would be granted in early 2016

2. USAID Oceans and Fisheries Partnership

- Project to convene formal meeting between USAID and Thailand on the project in the near future
- SEAFDEC to be represented in USAID-Oceans meetings since this is a collaborative project with SEAFDEC
- Project to consider that incorporating e-CDT system would be a big challenge for the small-scale fisheries
- Project to clearly develop mechanism for implementation considering that the project is placed under the FCG/ASSP mechanism and such mechanism should be aligned with regional initiatives to facilitate subsequent implementation by national agencies
- Project to clearly develop mechanism for implementation making sure that this could not be confused as an ASEAN project and to make sure that national agencies could take up regional initiatives into practice
- Project to make available more details on the activities including the time frame for the implementation of such activities
- Project activities should not duplicate those that are conducted by SEAFDEC
- Member Countries and all concerned to strengthen collaboration as many programs of SEAFDEC are being supported by various donors

The Program Committee also endorsed **Departmental Programs** proposed for 2016 which comprise eight continuing programs from 2015, five of which would be implemented by AQD, namely: 1) Adapting to Climate Change Impacts; 2) Healthy and Wholesome Aquaculture; 3) Maintaining Environmental Integrity through Responsible Aquaculture; 4) Meeting Socio-economic Challenges in Aquaculture; and 5) Quality Seed for Sustainable Aquaculture; and three by TD, namely: 1) Promotion on Strengthening SEAFDEC Visibility and Image; 2) Tailor-made Training Program; and 3) Improvement of Fisheries Technology and Reduction of Impacts from Fishing. The Program Committee provided recommendations which could be summarized as follows:

1. Aquaculture Department

- AQD to disseminate technology developed by AQD for producing cultivars of *Kappaphycus* using tissue culture to the private sector for application in commercial scale, specifically in the Philippines.
- AQD to consider accommodating researchers from Indonesia to be involved in research activity on feed formulation and obtain information on technology developed by AQD in this respect.

2. Training Department

- TD to consider the possibility of sharing the video clips on observation of trawl net using underwater camera through SEAFDEC/TD website
- TD to communicate with the WorldFish Center on the possibility of complementing their database on Trawl Fisheries with those of TD
- TD to continue activities to provide technical assistance for the promotion of fishing technologies and practices applicable for fishers in Thailand

The Program Committee further considered and endorsed three **Other Programs**, namely: 1) Coastal Area Capability Enhancements in Southeast Asia; 2) Application of Fish Passage Design Principles to Enhance Sustainability of Inland Fishery Resources in the Southeast Asian Region; and 3) Technical Exchange between Thailand and Myanmar Fisheries Scientist, which were implemented in 2015 and

proposed for 2016; and noted that the experiences gained from the project implementation would be shared with all Member Countries after the completion of these projects.

Finally, the Program Committee took note of the status of the **Pipeline Project** on “Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand (UNEP/GEF/SEAFDEC Project)”, and agreed that once the Project is endorsed by the CEO of GEF, the Project status would be changed from “Pipeline Project” to “On-going Project”.

The Program Committee took note of the strengthened cooperation with non-member governments and international/regional organizations, particularly the Network of Aquaculture Centres in Asia-Pacific (NACA).

The Program Committee took note of the “Monitoring and Evaluation of SEAFDEC Programs for 2015 and Onwards”, which SEAFDEC was requested to consider improving the evaluation form taking into account the recommendation made by the Program Committee. Furthermore, the Program Committee also took note of the progress made by countries in the implementation of the 2011 ASEAN-SEAFDEC Resolution and Plan of Action.

With regards to the “Preparation of the High-level Consultation on Regional Cooperation in Sustainable Fisheries Development towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products”, Member Countries were requested to nominate the appropriate person to serve as member of Drafting Committee and attend in the Stakeholders’ Consultation as well as the Drafting Committee Meeting to develop the draft Joint Declaration. The Program Committee further expressed the concern on the time and protocol required by each country in obtaining approval of the draft Joint Declaration as well as the process of assuring the participation of SOM to the High-level Consultation.

On the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication” (FAO SSF Guidelines), the Program Committee agreed on the development of the Regional Guidelines taking into consideration the priorities and specificity of the AMSs.

On the Southeast Asian Status of Fisheries and Aquaculture (SEASOFIA), the Program Committee took note of the draft outline of the publication, and the request for the National Coordinator to facilitate providing the necessary information to ensure that the inputs into the SEASOFIA reflect the real picture of fisheries and aquaculture in the region.

After the deliberations, the Program Committee adopted the Report of the 38th Meeting of the SEAFDEC Program Committee for submission to the 48th Meeting of SEAFDEC Council, and to the ASEAN through the 18th Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP).

REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Council Meeting is requested to:

- Consider and approve the progress of programs implemented in 2015; and
- Endorse the programs proposed to be implemented in 2016 as recommendations made by the SEAFDEC Program Committee.

**PROGRAMS OF ACTIVITIES UNDER FCG/ASSP MECHANISM
FOR THE YEAR 2015-2016**

I. Programs of Activities under FCG/ASSP Mechanism

Existing programs

Program Thrust/Project Title	Lead Department	2015	2016
Thrust I: Developing and Promoting Responsible Fisheries for Poverty Alleviation & Food Security			
1. Human Resource Development for Sustainable Fisheries	TD	Y	Y
2. Optimizing Energy Use/Improving Safety Onboard in Fishing Activities	TD	Y	Y
3. Promotion of Sustainable Fisheries Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia	TD	Y	Y
4. Environment-friendly, Sustainable Utilization and Management of Fisheries and Aquaculture Resources	AQD	Y	Y
5. Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia	IFRDMD	Y	Y
6. Promotion of Responsible Utilization of Inland Fisheries in Southeast Asia	IFRDMD	Y	Y
Thrust II: Enhancing Capacity & Competitiveness to Facilitate International and Intra-regional Trade			
7. Chemical and Drug Residues in Fish and Fish Products in Southeast Asia - Biotxin (ASP, AZA and BTX) and Harmful Algal Blooms (HABs) in the ASEAN region	MFRD	Y	Y
8. Cold Chain Management for Seafood	MFRD	Y	Y
9. Reinforcement and Optimization of Fish Health Management and the Effective Dissemination in the Southeast Asian Region	AQD	Y	Y
Thrust III: Improving Management Concepts and Approaches for Sustainable Fisheries			
10. Strategies for Trawl Fisheries By-catch Management (FAO-GEF/REBYC-II CTI)	TD	Y	N
11. Promotion of Counter Measures to Reduce IUU fishing activities	TD/ MFRDMD	Y	Y
12. Combating IUU Fishing in the Southeast Asian Region through Application of EU Catch Certification for Trading of Fish and Fishery Products	MFRDMD	Y	Y
Thrust IV: Providing Policy & Advisory Services for Planning & Executing Management of Fisheries			
13. Fisheries Resource Survey and Operational Plan for M.V. SEAFDEC 2	TD	Y	Y
14. Offshore Fisheries Resources Exploration in Southeast Asia	TD	Y	Y
15. Enhancing the Compilation and Utilization of Fishery Statistics and Information for Sustainable Development and Management of Fisheries in Southeast Asian Region	TD/SEC	Y	Y
16. Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region	MFRDMD	Y	Y
17. Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	MFRDMD	Y	Y
Thrust V: Addressing International Fisheries Related Issues from a Regional Perspective			
18. Assistance of Capacity Building in the Region to Address International Trade-related Issues	SEC	Y	Y
19. Strengthening SEAFDEC Network for Sustainable Fisheries	SEC	Y	Y

Special Project

Project Title	Lead Department	Period
1. Fisheries and Habitat Management, Climate Change and Social Well-being in Southeast Asia	SEC	2013-2017

New Projects Starting from 2016

Project Title	Lead Department	Period
1. Enhancing Coastal Community Resilience for Sustainable Livelihood and Coastal Resources Management (ASEAN-SEC/IDB/ SEAFDEC)	MFRDMD	2015-2017
2. USAID “Oceans and Fisheries Partnership”	SEC	2015-2019

II. Departmental Programs

Project Title	Department	2015	2016
1. Adapting to Climate Change Impacts	AQD	Y	Y
2. Healthy and Wholesome Aquaculture	AQD	Y	Y
3. Maintaining Environmental Integrity through Responsible Aquaculture	AQD	Y	Y
4. Meeting Socio-economic Challenges in Aquaculture	AQD	Y	Y
5. Quality Seed for Sustainable Aquaculture	AQD	Y	Y
6. Promotion on Strengthening of SEAFDEC Visibility and Image	TD	Y	Y
7. Tailor-made Training Programs	TD	Y	Y
8. Improvement of Fisheries Technology and Reduction of the Impact from Fishing	TD	Y	Y

III. Other Programs

Project Title	Department	2015	2016
1. Coastal Area Capability Enhancements in Southeast Asia (SEAFDEC/RIHN Collaborative Project)	TD	Y	Y
2. Application of Fish Passage Design Principles to Enhance Sustainability of Inland Fishery Resources in the Southeast Asian Region (ACIAR supported Project)	TD	Y	Y
3. Technical Exchange between Thailand and Myanmar Fisheries Scientists	SEC	Y	N

IV. Pipeline Projects and Emerging Needs for Preparation of Future Project Proposals

Project Title	Lead Department	Period
Establishment and Operation of a Regional System of Fisheries <i>Refugia</i> in the South China Sea and Gulf of Thailand (UNEP/GEF/SEAFDEC)	TD	2015-2019

Y = Program/project implemented during the year

N = Program/project not implemented during the year

**EXECUTIVE SUMMARY OF THE EIGHTEENTH MEETING OF FISHERIES
CONSULTATIVE GROUP OF THE ASEAN-SEAFDEC STRATEGIC PARTNERSHIP
(FCG/ASSP)**

1. The Eighteenth Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (18 FCG/ASSP) was convened in Manila, Philippines from 26 to 27 November 2015, and was co-chaired by the representative from Myanmar for the Chairperson of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) and the Acting Secretary-General of SEAFDEC. Attended by representatives from the ASEAN-SEAFDEC Member Countries and SEAFDEC officials led by the Acting Secretary-General, the Meeting reviewed the progress and developments of the programs, projects and activities under the FCG/ASSP Mechanism, and provided views and recommendations for their improvement and effective implementation.

2. On **“Follow-up Actions to the Directives Given at SEAFDEC Meetings and ASEAN Bodies Related to Fisheries,”** the 18 FCG/ASSP provided recommendations as follows:

- SEAFDEC should follow-up on the progress in development of the FAO Catch Documentation Scheme (FAO CDS) and make sure that the ASEAN Catch Documentation Scheme (ACDS) is inline with this global initiative. Concern on the need to make ACDS acceptable by the EU market should also be considered by SEAFDEC in working toward the development of ACDS.
- Considering that the approach undertaken by the USAID-Oceans project in developing catch documentation and traceability (CDT) system that would also support ASEAN Member States (AMSs) in the implementation of ACDS is very significant for the region, this should be carefully considered by the AMSs.
- The AMSs should closely collaborate with SEAFDEC in coming up with a common stand in response to the recommendations of the US Presidential Task Force on Combating IUU Fishing and Seafood Fraud.
- The ASEAN Secretariat would closely coordinate and strengthen its cooperation with SEAFDEC and subsidiary bodies, and continue to facilitate trade among the AMSs in the future.

3. On the **“FCG/ASSP Programs for the Year 2015-2016,”** the 18 FCG/ASSP endorsed the progress and achievements of twenty-two (22) projects implemented under the FCG/ASSP in 2015 and two (2) new projects proposed for 2016. In addition, for the pipeline project on “Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand”, once this project is endorsed by the CEO of GEF, the project would also be placed as existing FCG/ASSP project so that the implementation would commence the soonest time possible.

4. On the **“Progress of the Proposals Implemented under the ASSP,”** the 18 FCG/ASSP noted the progress and provided recommendations as follows:

- On the *“ASEAN-SEAFDEC Cooperation in the Implementation of the ASEAN Integrated Food Security (AIFS) Framework,”* particularly the concept proposals on “Climate Change and Its Impacts on Fisheries and Aquaculture Adaptation and Mitigation Towards Food Security,” although the Strategic Plan of Action (SPA) for ASEAN Cooperation on Fisheries 2016-2010 has been drafted and would be submitted to the ASWGFi, the components on fisheries in the SPA could also be brought up to the higher level of the ASEAN mechanism.
- In order that fisheries sector is mainstreamed in the ASEAN mechanism that deals with food security issues, there is a need to strengthen the cooperation and role of the AMSs in the ASEAN Fisheries Consultative Forum (AFCF). In addition, the roles and functions of the ASWGFi need to also be strengthened, especially in addressing fisheries issues to be

recognized by the leaders in the ASEAN community. Furthermore, SEAFDEC would also come up with new framework under food security focusing on combating IUU fishing in the region, which will be included in the discussions and incorporated in the Joint Declaration during the High-level Consultation.

- On the “*ASEAN Fisheries Consultative Forum (AFCF)*,” the 23rd Meeting of the ASWGF_i requested that activities under the AFCF would be integrated in the SPA for ASEAN Cooperation on Fisheries 2016-2020.
- On the “*ASEAN Shrimp Alliance (ASA)*,” ASA should consider addressing the emerging issues in shrimp diseases that affect the sustainability of the shrimp culture industry; and expedite the development of a certification scheme for ASEAN Shrimp GAP by making use of the second phase of the ASEAN Good Aquaculture Practice (GAqP) led by the Philippines.
- On the “*ASEAN Fisheries and Aquaculture Conference 2016*,” Thailand was requested to issue the invitation letter as soon as possible to allow the ASEAN and SEAFDEC Member Countries to make necessary preparations.
- On the “*High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Toward the ASEAN Economic Community*,” the ASEAN Secretariat would facilitate the process of obtaining endorsement of the Joint Declaration by the 24th Meeting of the ASWGF_i, and the higher-authorities of the ASEAN; and would communicate the Chair of the ASWGF_i to include this concern as one of the agenda during the 24th ASWGF_i Meeting. SEAFDEC Secretariat was also requested to circulate the draft Joint Declaration to the Member Countries the soonest time possible, to allow the countries adequate time to make comments.
- On the “*Results of the East Asia Summit: Track II Group Report on Enhancing Food Security through Sustainability Fisheries Management and Marine Environmental Conservation*,” as five principles recommendations reached by the Meeting are in line with activities undertaken under the ASSP and AFCF frameworks, these should be taken into account in the development of the respective management plans. SEAFDEC was also requested to support the implementation of the management plans, particularly in the implementation of the EAFM.

5. On “**Policy Consideration on International Fisheries-related Issues**,” the 18 FCG/ASSP took note of the progress and provided recommendations as follows:

- ***CITES issues: Regional implementation support:***

- SEAFDEC and the AMSs were suggested to consider developing a mechanism to control and protect commercially-exploited aquatic species, such as eels, by certain stage. In addition, SEAFDEC and AMSs could also consider developing a mechanism to avoid illegal trade of aquatic species that are not yet listed in the CITES Appendices, which should not only be applied to countries of origins but also to importing countries.
- Bigeye tuna might be a candidate species for listing in the CITES Appendices, considering the declining bigeye tuna resources due to the use of purse seine in association with FADs, and that restriction of catch by WCPFC and IOTC might not be sufficient for the resources to recover.
- The ASEAN-SEAFDEC Member Countries were requested to nominate appropriate persons who could make decision on the common/coordinated position on CITES-related issues to attend in the RTC to be organized by SEAFDEC in May 2016. The common-coordinated position would then be submitted to the SEAFDEC Council by *ad referendum*, and subsequent to the 24th ASWGF_i Meeting and 12th Meeting of the ASEAN Expert Group on CITES.

- In order for fisheries-related matters be included in the agenda of the forthcoming AEG-CITES Meeting, the focal points from the AMSs for fisheries should provide inputs to their respective national CITES Management Authorities. In addition, the Chairperson for ASWGFi and SEAFDEC would also be invited to the forthcoming AEG-CITES Meeting.
- **Combating IUU Fishing**
 - On provision of updated information for the database of the “Regional Fishing Vessels Record for Vessels (RFVR) 24 meter in Length and Over,” Indonesia would exert efforts to submit relevant data and nominate the national focal point by the end of 2015.
 - The progress of developing the “ASEAN Catch Documentation Scheme (ACDS),” and the plan for conducting stakeholders’ consultation and trial application of the ACDS were noted.
 - On the “ASEAN Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain,” SEAFDEC was requested to amend the Guidelines in response to the recommendation of the SOM-37th AMAF, by deleting “the FAO Port State Measures Agreement” from Topic 3: Guiding Principle of the Guidelines.
 - On “Regional Cooperation for Implementation of Port State Measures,” SEAFDEC was requested to find the ways and means of convincing high-level officials to amend relevant laws of the respective country in order that the implementation of PSM could be pushed forward. Furthermore, as some countries are still not in the position to ratify the PSM Agreement, the word “Agreement” should be removed from the concept proposal. In addition, SEAFDEC was also requested to establish a model or pilot site for PSM implementation in the AMSs, e.g. in Malaysia.
 - SEAFDEC will organize the Experts Consultation Meeting in January 2016 to discuss the provisions under the PSM Agreement and identify the possible issues in the Agreement that require sharing/exchanging of experiences in the ASEAN region, and come up with the concept proposal for submission to the 48th Meeting of the SEAFDEC Council.
 - SEAFDEC was requested to include concern on the “US Presidential Task Force on Combating IUU Fishing and Seafood Fraud” under its project on Assistance of Capacity Building in the Region to Address International Trade-related Issues, and to conduct RTC to address this concern as soon as possible. The representative from Viet Nam further expressed the willingness to serve as focal point to provide information on the Task Force to other AMSs.
 - The final draft RPOA-Capacity developed through the Consultation to be organized December 2015 would be submitted to the 48th Meeting of SEAFDEC Council and subsequently to the next AFCF and ASWGFi in 2016 for endorsement.
- **Promotion of Sustainable Fisheries in the ASEAN Region**
 - The “Regional Plan of Action on Sustainable Utilization of Neritic Tunas in the ASEAN Region” was endorsed by the 47th Meeting of SEAFDEC Council, and the 23rd Meeting of ASWGFi, with further notification by the SOM-AMAF in 2015. The progress made by SEAFDEC in the implementation of the RPOA-Neritic Tunas was noted.
 - The “Regional Policy Recommendations on Conservation and Management of the Catadromous Eel Resources and Promotion of Sustainable Aquaculture” was endorsed by the 47th Meeting of SEAFDEC Council, and noted by the 23rd Meeting of ASWGFi. The progress made by SEAFDEC in the implementation of the Regional Policy Recommendations was noted.

- On the “Policy Recommendations and Strategic Plans of Action for Fisheries Resources Enhancement Activities in the Southeast Asian Countries,” the “Strategic Plan of Action” should be changed to “Strategic Plan”, and additional strategic plan on “conduct of resources monitoring before and after implementation of habitat improvement measures” should also be added. Furthermore, the Policy and Recommendations and Strategic Plans should be submitted to the higher authorities of SEAFDEC and ASEAN for consideration and endorsement.

- ***Food Safety Issue***

- The final draft of the “Regional Guidelines on Traceability System for Aquaculture Products in ASEAN Region” should be submitted to the next SEAFDEC Council and the ASWGFi for consideration and endorsement.

- ***Other Regional Important Issues***

- On the “Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication,” SEAFDEC should consider developing the Regional Guidelines on Small-scale Fisheries (RSSF), which should be consistent with the International Voluntary Guidelines. In this regard, the plan of SEAFDEC to organize an RTC or Experts Meeting in early of 2016 to discuss the contents and scope of the RSSF was noted. Furthermore, SEAFDEC was requested to prepare Regional Proposal supporting the implementation of international guidelines for small-scale fisheries under the framework of Global Assistant Programme (GAP) to be submitted to the 32nd COFI in 2016.
- SEAFDEC was requested to develop approach to deal with difficulties faced by countries in provision of information required by the “FAO Global Record.”
- The progress on the development of the “FAO Catch Documentation Scheme,” and the plan of SEAFDEC to seek assistance from the EU to be able to initiate capacity building on international standards for data sharing were noted.

6. The Report of the 18th Meeting of FCG/ASSP was adopted on 27 November 2015.

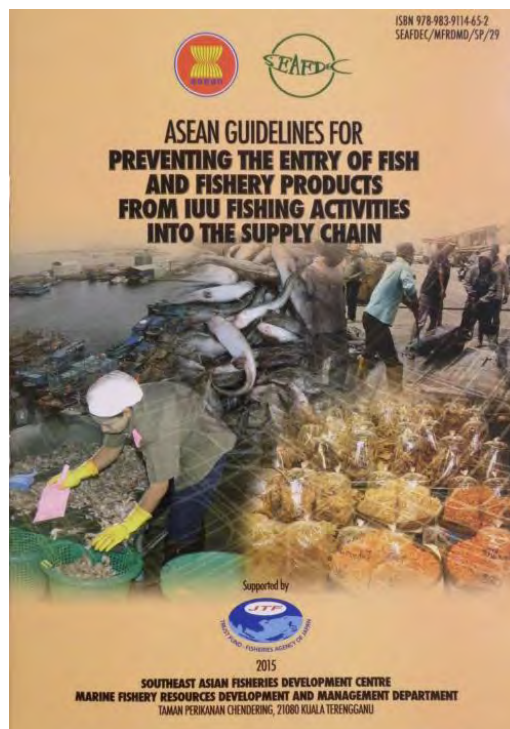
REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Council Meeting is requested to consider and endorse the results of the deliberations and recommendations made at the Eighteenth Meeting of the FCG/ASSP

Annex 8

COMBATING IUU FISHING IN THE SOUTHEAST ASIAN REGION THROUGH APPLICATION OF THE ASEAN GUIDELINES FOR PREVENTING THE ENTRY OF FISH AND FISHERY PRODUCTS FROM IUU FISHING ACTIVITIES INTO THE SUPPLY CHAIN

Since 2012, MFRDMD in collaboration with SEAFDEC/Secretariat has worked for development of "The ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain" through a series of meetings, participatory and consultative process involving fishery experts from the ASEAN-SEAFDEC Member Countries. The Guidelines outlines the possible future actions in the ASEAN region in combating IUU fishing, in accordance with the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region towards 2020 adopted in 2011. With incorporation of suggestions made by delegates from MCs during 17th Meeting of FCG/ASSP in 2014 and 47th Meeting of the Council Southeast Asian Fisheries Development Center in April 2015, the final draft of the Guidelines was endorsed by 23rd Meeting of the ASEAN Sectoral Working Group on Fisheries (ASWGF_i) in June 2015 for consideration of higher level meetings of the ASEAN. The Guidelines was endorsed by 37th SOM-AMAF in September 2015.



To assist MCs for implementation of the Guidelines in consideration of each countries' circumstance, MFRDMD started information gathering using feedbacks to a questionnaires to identify the present status and issues in implementing the Guidelines in each MCs. Concurrently, MFRDMD started country visits and consultation with relevant government officers from each MCs to promote the Guidelines and compile present status and issues for translation of the Guidelines into possible practical actions.

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

MFRDMD compiled to compare CPUE data for the last 30 years in the Southeast Asian Region where historical CPUE data are available to examine the trend of stock status for purse seine fisheries. "The Current Status of Purse Seine Fisheries in Southeast Asian Region" was published as an output of 2 years activities of this project. The report provides detail information on catch, effort and type of fishing gears used for catching pelagic fishes in this region, especially on the commercial fleets of the

purse seine fisheries to further assess possibilities for implementation of the Total Allowable Catch (TAC) system. Also this report involves compilation and comparison of available catch per unit effort (CPUE) for the last three decades in the region, the genetic study of commercially important pelagic species, and construction of management strategies for sustainable purse seine fisheries in the Southeast Asian region.



To seek for another options for management of purse seine fisheries in the ASEAN region, MFRDMD invited the Japanese expert for sharing information on the latest movement of sustainable fishery management in Japan and Total Allowable Effort system.

Genetic study of *Amblygaster sirm* has been continued for small pelagic fish targeted by purse seine fishery to consider appropriate management of purse seine fishery in the region and the result will be provided in the next RTC meeting in August 2016.

REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Council Meeting is requested take note the progress in implementation of the Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain, which was endorsed by the 47th Meeting of the SEAFDEC Council in 2015, and supported by the 23rd Meeting of the ASWGF_i before subsequent endorsement by the SOM-37th AMAF in 2015.

REGIONAL FISHING VESSELS RECORD FOR VESSELS 24 METERS IN LENGTH AND OVER

I. INTRODUCTION

Refer to approved by the SEAFDEC Council during its 45th Meeting in April 2013 in the Philippines for establishment of the Regional Fishing Vessels Record (RFVR) for 24 meters in length and over as a tool to combat IUU fishing in the Southeast Asian Region which implement by the SEAFDEC Training Department (TD) under the project of promotion of countermeasure to reduce IUU fishing. Later, the concept proposal was supported by the Special Senior Officials Meeting of the Thirty-Fourth Meeting of the ASEAN Ministers on Agriculture and Forestry (Special SOM-34th AMAF). Moreover, the 46th Meeting of the SEAFDEC Council in April 2014 in Singapore also endorsed the proposed RFVR activity plan. The series of activities implementation has been conducted. In 2015, the Regional Technical Consultation on the Regional Fishing Vessels Record: Use and Way Forward of RFVR Database as a Management Tool to Reduce IUU Fishing in Southeast Asian Region was organized from 2 to 4 June 2015 with came out of “the Policy Recommendation, Strategies and Way Forward for AMSs and SEAFDEC to Prevent, Deter and Eliminate IUU Fishing through Utilization of RFVR Database for 24 Meters in Length and Over”

II. POLICY RECOMMENDATION, STRATEGIES AND WAY FORWARD FOR AMS AND SEAFDEC TO PREVENT, DETER AND ELIMINATE IUU FISHING THROUGH UTILIZATION OF RFVR DATABASE FOR 24 METERS IN LENGTH AND OVER

The Consultation discussed and summarized the Policy Recommendation, Strategies and Way Forward for AMS and SEAFDEC to Prevent, Deter and Eliminate IUU Fishing through Utilization of RFVR Database for 24 Meters in Length and Over as follows;

1) Basic requirement items for the RFVR Database for 24 meters in length and over

Issues/Challenges	Recommendations
1.1 Date of launching	Countries which do not have information on “Date of Launching” of the fishing vessel could provide input on “Year of built” instead
1.2 Addition of two (2) items to the 26 Basic requirements	<ul style="list-style-type: none"> • The Consultation suggested including two (2) items to the Basic requirements are 1) expiration date of fishing license; and 2) fishing license number. • The Consultation noted that there would be 28 basic requirements (Table 1) for the RFVR Database and that SEAFDEC would seek approval from the Council on the said matter.
1.3 Type of vessel	<ul style="list-style-type: none"> • The Consultation supported the inclusion of carrier vessels operating at sea that carry fish and fishery products in the RFVR Database • The Consultation also supported the inclusion of Cambodian fishing vessels that operate in international waters in the RFVR Database. In this connection, SEAFDEC would send official letter to FiA/Cambodia requesting for data submission for the RFVR Database.
1.4 Lack of information on carrier vessels from other AMS	The RFVR Database includes all types of fishing vessels, and supporting vessels <i>i.e.</i> light boat, sonar boat, and carriers that are related to fishing activities operating in EEZ, coastal waters of other AMS, and in the High Seas or RFMO’s Area. In this connection, the Consultation requested AMS to submit information of all supporting and carrier vessels for the RFVR Database.

Issues/Challenges	Recommendations
1.5 Serial number of engine	The serial number of engine is one of the important information that could be used as vessel identity for checking its registration. Therefore, AMS are requested to compile this information in their national fishing license system.

Table 1: Updated basic information requirements for RFVR database for 24 meters in length and over

Information on fishing vessels	Information on fishing vessels
1. Name of vessel	15. International Radio Call sign
2. Vessel Registration Number	16. Engine Brand
3. Owner Name	17. Serial number of engine
4. Type of fishing method/gear	18. Hull material
5. Fishing License number	19. Date of registration
6. Expiration date of fishing licenses	20. Area (country) of fishing operation
7. Port of registry	21. Nationality of vessel (flag)
8. Gross tonnage (GRT/GT)	22. Previous name (if any)
9. Length (L)	23. Previous flag (if any)
10. Breadth (B)	24. Name of captain/master
11. Depth (D)	25. Nationality of captain/master
12. Engine Power	26. Number of crew (maximum/minimum)
13. Shipyard/Ship Builder	27. Nationality of crew
14. Date of launching/Year of built	28. IMO Number (If available)

2) Improving of Initial Data set for the RFVR Database for 24 meters in length and over

Issues/Challenges	Recommendations
2.1 Data error, Double recording , and Incomplete information/data	The National Focal Points are requested to verify the RFVR data before submission to SEAFDEC. The verified initial data set for fishing vessels of 24m in length and over shall be submitted to SEAFDEC by end of July 2015.
2.2 Online submission	The Consultation recommended SEAFDEC to update the RFVR Database for data online submission in the future.
2.3 Difficulty in data inputs/data uploading in local language	AMS agreed to submit all information in English alphabet/language.
2.4 Updated number of fishing vessels	Number of fishing vessels for 24 meters in length and over that was reported by AMS varies by year. In the event of drastic change in the number of fishing vessels, the AMS is required to provide reason for that drastic change in order to avoid wrong interpretation.
2.5 Unclear abbreviation: N/A, ND	For standardization of data/information in the RFVR Database, SEAFDEC would develop a Manual for data input.

3) Usage of the RFVR Database for 24 meters in length and over

Issues/Challenges	Recommendations
3.1 Editing of User name and password for accessing the RFVR Database	In assuring user friendliness of the RFVR Database security system, SEAFDEC should consider including the function to allow the change of user name and password.

Issues/Challenges	Recommendations
3.2 Standardization of the type of fishing vessels	Based on the inputs from AMS, the type of gear is standardized to the type of fishing vessel as appears in Table 2 .
3.3 Awareness building on usage of the RFVR Database	AMS is requested to identify the potential users from other relevant inter-agencies and promote the usage of the RFVR Database within the country.

Table 2: Type of fishing gear and methods and category of Vessel Types used in the RFVR Database

Country	Type of fishing method/gear	Type of fishing vessels
Brunei Darussalam	Trawler	TRAWLER
	Purse seine	PURSE SEINER
Indonesia	Purse Seine (Pukat Cincin) Pelagis Kecil	PURSE SEINER
	Bouke Ami (Stick Held Drift Net)	STICK HELD DIP NETTER
	Jaring Insang (Gillnet) Hanyut Dasar / Liong Bun	GILLNETTER
Malaysia	Fish Purse-Seine	PURSE SEINER
	Trawl Nets	TRAWLER
	Anchovy Purse-Seine	PURSE SEINER
	Hook & Lines	LONGLINER
	Transport	CARRIER
Myanmar	Trawler	TRAWLER
	Stow	STOW NETTER
	Purse Seiner	PURSE SEINER
	Trap Setter	TRAP SETTER
	Drift/ Gill Nets	GILLNETTER
Philippine	Sardine/Mackerel/Scad Purse Seine,	PURSE SEINER
	Tuna Purse Seine	TUNA PURSE SEINE
	Ring Net	RING NET VESSEL
	Round Haul Seine	SEINER
	Tuna Longline, Any Longline	LONGLINER
	Trawl Net	TRAWLER
	Drive-In Net (Paaling)	DRIVE-IN NET VESSEL
	Danish Seine	DANISH SEINER
	Beach/ Drag Seine	BEACH SEINE
	Bag Net	BAG NET VESSEL
	Handline	HANDLINER
	Push Net	PUSH NET VESSEL
	Others (No Specification)	OTHERS
	Sonar boat, Light boat, Tanker, Skiff boat	SUPPORTING BOAT
Carrier	CARRIER	
Thailand	Gillnets	GILLNETTER
	Purse seine	PURSE SEINER
	Otter board trawls	TRAWLER
	Pair trawls	PAIR TRAWLER
	Push net	PUSH NET VESSEL
	Longline	LONGLINER
Viet Nam	Pair Trawl Fishing	PAIR TRAWLER
	Trawl Fishing	TRAWLER
	CRAFT SHOOTING FISHING	OTHERS

Country	Type of fishing method/gear	Type of fishing vessels
	Gill Net fishing	GILLNETTER
	Fishing Logistic	Supporting Boat
	Hook And Line	HOOK&LINE VESSEL

4) Updating/Renewing Data of the RFVR Database for 24 Meters in Length and Over to System

Issues/Challenges	Recommendations
4.1 Time lag for validating fishing vessel	The Consultation took note of the time lag which might be a problem in compilation of fishing vessel information of one (1) whole year. However, it should not affect the validity of information in the RFVR Database for real time data would be needed for verifying the fishing vessel information by AMS.
4.2 Time for annual renewing/ updating of data	AMS identified the time period for updating or renewing the countries' fishing vessel information for the RFVR Database as follows: <ul style="list-style-type: none"> ○ Philippines: 1st Quarter of year ○ Malaysia: 1st Quarter of year ○ Thailand: 2nd Quarter of year ○ Myanmar: 3rd Quarter of year ○ Viet Nam: 4th Quarter of year ○ Indonesia: 4th Quarter of year ○ Singapore (To revert) ○ Cambodia (To revert)

5) Responsibility of National Focal Points (NFP) on the RFVR Database

Issues/Challenges	Recommendations
5.1 Unclear TOR of the NFP	The Meeting agreed on the Term of Responsible (TOR) of the National Focal Point (NFP) which aims to enhance the efficiency in coordination The National Focal Point would act as representative of the Member Country with respect to technical coordination work with SEAFDEC. The functions of the National Focal Point are as follows; <ul style="list-style-type: none"> (a) To coordinate on compilation and verification of quality and accuracy of data and information of fishing vessels; (b) To respond for annual updating of data and information for RFVR database; (c) To manage the User Account of RFVR-database system of their respective countries.
5.2 Updating of NFP for RFVR	Any addition or change of NFP for RFVR should be submitted officially to SEAFDEC.

III. REQUIRED CONSIDERATION BY THE COUNCIL MEETING

The 48th Council Meeting is requested to:

- Consider and support to the Policy Recommendation, Strategies and Way Forward for AMS and SEAFDEC to Prevent, Deter and Eliminate IUU Fishing through Utilization of RFVR Database for 24 Meters in Length and over.
- Indonesia to submit of basic information requirements for RFVR database for 24 meters in length and over through nominate the National Focal Point for RFVR

ASEAN CATCH DOCUMENTATION SCHEME FOR MARINE CAPTURE FISHERIES

I. EXECUTIVE SUMMARY

Market driven measures on trading of fish and fishery products, specifically, the EC Regulation 1005/2008 has impacted not only to the countries that send their products to the EU but also to some countries that do not export their fish directly to the EU which need catch certificates. In addition, for the purpose of conservation and management of tunas by the Regional Fisheries Management Organization (RFMOs), the RFMO's Catch Documentation Schemes is introduced to their member countries for implementation. Taking into account the impact from both market driven measures mentioned above, all relevant AMS that traded their fish and fishery products needed to implement the measures. AMS considers the importance of measures that could provide guidance to improve the traceability system for capture fisheries and combating IUU fishing. By the reasons, AMS realized that catch documentation scheme could be used as one of management tools to improve and strengthen better management of fisheries in the ASEAN region as well as could support intra-regional and international trade of fish and fishery products beyond trading with the EU and under the framework of RFMOs areas.

In according to the abovementioned circumstances, issues pertaining to the EC-Regulation 1005/2008 and how to increase the traceability of capture fisheries has been immensely discussed at the 13th Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in December 2010 in Thailand. SEAFDEC Secretariat was suggested to take a proactive role in facilitating the sharing of experiences and information among the Member Countries (e.g. difficulties faced by the industry, areas of negotiations with EC, possible solutions/options), in order to enhance the capacity of Member Countries in complying with the requirements of the EC Regulation. Moreover, the AMS expressed their support on improve the traceability for capture fisheries to ensure the sustainability of fisheries for food security toward 2020 within the ASEAN Region. In addition, AMS also support the development of common regional catch documentation scheme/system herein after called "ASEAN Catch Documentation System/Scheme for Marine Capture Fisheries taking into consideration the format, standard and information requirements of importing countries, but simplified in order to enhance its applicability by small-scale fisheries in the region.

In response to the request from AMSs, SEAFDEC Secretariat in collaboration with MFRDMD conducted the small group of expert while come up with the first draft ASEAN Catch Documentation System/Scheme for Marine Capture Fisheries in 14-16 October 2014. Furthermore, SEAFDEC also conducted the Regional Technical Consultation in 16 -18 December 2014 to harmonize and come up with the 2nd draft of the ASEAN CDSs. This draft was proposed for consideration and comments at the 47th Meeting of the Council of SEAFDEC (47CM) in April 2015. In order to accommodate the comments from 47CM, SEAFDEC organized another Expert meeting in May 2015 and come up with the finalized 3rd Draft of the ACDS (**Appendix 1**) as well as the Info-graphic on usages of ACDS in various scenarios of catch flows of fish and fishery products into the ASEAN Region (**Appendix 2**). SEAFDEC was also suggested to conduct the Stakeholder Consultations and testing of the system in which SEAFDEC are in the process of planning and implementation from end of 2015 to 2016 in collaboration with AMSs and other partnerships particularly the USAID-Oceans and Fisheries Partnership.

II. REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Meeting of the Council of SEAFDEC is requested to endorse the ASEAN Catch Documentation Scheme for Marine Capture Fisheries, and take note Info-graphic on usages of ACDS in various scenarios of catch flows of fish and fishery products into the ASEAN Region, the results of Stakeholder Consultation on promotion of the ACDS, and future plan for testing of ACDS, for subsequent submission of the ACDS for consideration by the ASEAN. The Council is also requested to support the pilot activity to ensure smooth implementation specifically testing of the ACDS, and to provide comments and advise to accelerate the policy support for implementation of the ACDS to ensure that all fish and fishery products are in the traceability system through the regional cooperation in the ASEAN region.



<RECOMMENDATIONS>

ASEAN CATCH DOCUMENTATION SCHEME FOR MARINE CAPTURE FISHERIES

SEAFDEC/SECRETARIAT IN COLLABORATION WITH MFRDMD

ASEAN Lead Country: Singapore

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER



Contents

	Page
ABBREVIATIONS AND ACRONYMS	
PREFACE	4
Part I. INTRODUCTION	6
1.1 Objectives of the ASEAN Catch Documentation Scheme	6
1.2 Nature and Scope	6
1.3 Definition of Terminologies	6
Part II. PROVISIONS	8
2.1 Catch Flow/Movement of the ACDS	8
2.2 ACDS Catch Documents	8
2.2.1 Catch Documents for Large Fishing Vessels	9
a) Catch Declaration/Logbook/Logsheets (CD1)	9
b) Movement Document (MD1)	9
c) Processing Statement (PS) for Imported Fish	9
d) ASEAN Catch Certificate (ACC) for Exportation of Fish and Fishery Products from AMS	9
e) ASEAN Re-export Certificate	9
2.2.2 Simplified Catch Documents for Small Fishing Vessels	10
a) Simplified Catch Declaration/Logbook/Logsheets (CD2)	10
b) Simplified Movement Document (MD2)	10
c) Simplified ASEAN Catch Certificate (SACC) for Exportation of Fish and Fishery Products of Small Fishing Vessels from AMS	10
2.3 Verification	10
2.4 Records Keeping and Information Sharing	11
2.5 Monitoring and Evaluation	11
2.6 Secretariat of the ACDS	11
2.7 Requirements for the Non-AMS	12
Part III. ANNEXES	
I. List of Products Excluded from Definition of “fish and fishery products”	13
II-A. Catch Declaration/Logbook/Logsheets (CD1)	14
II-B. Simplified Catch Declaration/Logbook/Logsheets (CD2)	15
III-A. Movement Document (MD1)	16
III-B. Simplified Movement Document (MD2)	17
IV. Processing Statement (PS)	18
V-A. ASEAN Catch Certificate for Exportation (ACC)	19
Appendix 1: Transport Details	20
V-B. Simplified ASEAN Catch Certificate (SACC)	21
VI. ASEAN Re-export Certificate (AREC) for Imported Fish and Fishery Products	22
VII. Minimum Requirements to Determine Equivalence to ACDS	23
Table 1. Fishing Areas of the National Jurisdiction	24
Figure 1. Catch Flow/Movement of ASEAN Catch Documentation Scheme	25

ABBREVIATIONS AND ACRONYMS:

ACC	ASEAN Catch Certificate
ACDS	ASEAN Catch Documentation Scheme
AMS	ASEAN Member States
ASEAN	Association of Southeast Asian Nations
CITES	Convention on International Trade in Endangered Species
EC	European Commission
EEZs	Exclusive Economic Zones
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FCG/ASSP	Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership
GT	Gross tonnage
IUU fishing	Illegal, Unreported and Unregulated fishing
MT	metric tons
MFRDMD	Marine Fishery Resources Development and Management Department
RFMO	Regional Fisheries Management Organization
SACC	Simplified ASEAN Catch Certificate
SEAFDEC	Southeast Asian Fisheries Development Center
UNCLOS	United Nations Convention on the Law of the Sea

PREFACE

ASEAN is a major producer of fish and fishery products, jointly accounting for a quarter of the global fish production. Of the world's top 15 marine capture fisheries producers, six are from the ASEAN, namely: Indonesia, Myanmar, Philippines, Viet Nam, Thailand, and Malaysia. Indonesia ranked second of the world's highest marine capture fisheries producers, with production of 5.40 million metric tons (MT) in 2012 an increase of about 27.0% over the last decade. The Fisheries Statistical Bulletin of Southeast Asia showed that in 2012, Indonesia's total production from marine capture fisheries reached 5.40 million MT followed by Myanmar at 2.33 million MT, Philippines at 2.15 million MT, Viet Nam at 2.11 million MT, Thailand at 1.61 million MT, and Malaysia at 1.47 million MT. It is worth noting that production from marine capture fisheries of Myanmar and Viet Nam increased by 121.4% and 46.8%, respectively, over the last decade.

The global demand for the region's fish and fishery products is rising as more countries depend on the ASEAN catches. Australia sources nearly half of its fish demand from the ASEAN countries. Studies showed that Australia's domestic fish requirement would reach 776,000 MT by 2020, of which 610,000 MT will be imported. One of ASEAN's major trading partners, Japan, has been the leading importer of seafood in the world. In 2011, Japan's seafood import reached 2.69 million MT amounting to 1.45 trillion yen. Japan imports shrimps primarily from Viet Nam, Indonesia, and Thailand. Indonesia is also one of the country's major sources of tuna, third to Taiwan and Korea. This growth was driven by the increased demand from Europe and the United States. Viet Nam's seafood is also in demand as exports grew from US\$ 5.0 billion in 2010 to US\$ 6.2 billion in 2012. The United States is fast rising as a major importer of seafood from Viet Nam. It is the primary importer of tuna and the second largest importer of shrimps from Viet Nam. Thailand and Viet Nam are two of the world's major exporters of fish and fishery products.

Market-driven measures on trading of fish and fishery products, specifically, the EC Regulation 1005/2008 has impacted not only to the countries that send their products to the EU but also to some countries that do not directly export their fish to the EU which need catch certificates. In addition, for the purpose of conservation and management of tunas by the Regional Fisheries Management Organizations (RFMOs), the RFMOs Catch Documentation Schemes are introduced to their respective member countries for implementation. Taking into account the impact from both market-driven measures mentioned above, all relevant AMS that trade their fish and fishery products need to implement the measures. AMS recognized the importance of measures that could provide guidance to improve the traceability system for capture fisheries and combating IUU fishing. By these reasons, AMS realized that catch documentation scheme could be used as one of management tools to improve and strengthen better management of fisheries in the ASEAN region as well as support intra-regional and international trade of fish and fishery products beyond trading with the EU and under the framework of RFMO areas.

Based on the abovementioned circumstances, issues pertaining to the EC Regulation 1005/2008 and traceability of capture fisheries had been immensely discussed at the 13th Meeting of the FCG/ASSP in December 2010 in Thailand. During that Meeting, SEAFDEC Secretariat was requested to take a proactive role in facilitating the sharing of experiences and information among the AMS in complying with the EC Regulation (*e.g.* difficulties faced by the fishing industry, areas of negotiations with EC, possible solutions/options), and in enhancing the capacity of AMS in complying with the EC Regulation. Moreover, the AMS expressed their support on the need to improve the traceability for capture fisheries to ensure the sustainability of fisheries for food security in the region. In this connection, AMS supported the development of a common regional catch documentation scheme taking into consideration the format, standards and information requirements of importing countries, but simplified to enhance its applicability by the small-scale fisheries in the region.

The ASEAN Catch Documentation Scheme (ACDS) comprises three main parts. Part I is the Introduction which includes the objectives of ACDS, nature and scope, and definition of terminologies to better understand the basic elements and focus of ACDS; Part II on the Provisions of the main ACDS consists of 1) Catch Flow/Movement of the ACDS, 2) ACDS Catch Documents focusing on (a) Catch Documents for Large Fishing Vessels, and (b) Simplified Catch Documents for Small Fishing Vessels. Part II also includes Verification, Records Keeping and Information Sharing, Simplified Catch Document (for small fishing vessels), Monitoring and Evaluation, the Secretariat for the ACDS, and

requirements for the Non-AMS. Annexes are also appended in the document as well as important references that are put together in Part III of the ACDS. Shown in Table 1 are the fishing areas of the respective AMS.

The ACDS is one of the fisheries management tools for enhancing intra-regional and international trades and is an essential part of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain to be adopted by AMS. As defined in the said Guidelines, the forms of IUU fishing activities occurring in the Southeast Asian region include: (1) illegal fishing activities within a country; (2) unauthorized transshipment and landing of fish/catch across borders; (3) poaching in the EEZs of other countries; (4) illegal fishing and trading practices of live reef food fish, reef-based ornamental and endangered aquatic species; (5) IUU fishing in the high seas and RFMO areas.

PART I: INTRODUCTION

1.1 Objectives

The objectives of the ASEAN Catch Documentation Scheme (ACDS) are:

1. To provide a unified framework that will enhance traceability of fish and fishery products for effective marine fisheries management in AMS;
2. To enhance the credibility of fish and fishery products for intra-regional and international trade; and
3. To prevent entry of fish and fishery products from IUU fishing activities into the supply chain of AMS.

1.2 Nature and Scope

1. The ACDS shall be [voluntary] [mandatory] for all AMS unless otherwise provided in this Document.
2. The ACDS is established to improve traceability for marine capture fisheries in AMS and enhance intra-regional and international trade of all AMS.
3. The ACDS applies to the catch of fish and fishery products with the exception of those listed in **Annex I**.
4. The ACDS applies to trade of marine fish and fishery products, processed or not.
5. The ACDS covers only export/import of whole fish and fish meat and excludes fish parts such as head, eyes, roe, gut, fin, skin, tail, with the exception of shark fin.
6. For transshipment, landings of domestic products, exports, imports, and re-exports, under jurisdiction of AMS, a catch certificate and details of transshipment shall accompany all catches. There is no waiver of this requirement.
7. The ACDS will cover catch from small fishing vessels (which meet the criteria) that can contribute to trade among the AMS, and accordingly a simplified catch document would be applied.
8. This ACDS is meant for intra-regional and international trades demonstrating AMS commitment to combat IUU fishing.
9. Non-AMS's existing Catch Certification may be recognized as equivalent to the ACDS based on the minimum requirements in **Annex VI**.

1.3 Definition of Terminologies

1. **Catch Declaration:** tabulated form submitted by Master of fishing vessel or its authorized representative specifying information related to catch and landing data.
2. **Certify:** to declare in writing that relevant ACDS documents are true.
3. **Competent Authority:** any person or organization that has been legally delegated or invested the authority, capacity, or power to perform a designated function.
4. **Conservation and Management Measures:** means or procedures to conserve and manage one or more species of living marine resources that are adopted and in force in accordance with relevant rules of international and/or national law.
5. **Consignment:** products which are either sent simultaneously from one exporter to one consignee or covered by a single transport document during shipment from exporter to consignee.
6. **Exportation:** any movement of fish and fishery products harvested from one AMS to other AMS or non-AMS.
7. **Fish and Fishery Products:** any marine fish and fishery products except those listed in **Annex I** of this Scheme's Provisions.
8. **Fishing Master:** a person controlling, directing or determining all fishing operations and activities of a fishing vessel.
9. **Fishing Vessel:** any vessel used or intended for the purpose of commercial exploitation of fishery resources, including supporting ships, fish processing vessels, vessels engaged in transshipment and carrier vessels equipped for the transportation of fishery products, except container vessels.
10. **High Seas:** all parts of the sea as defined in Article 86 of the UNCLOS.
11. **Importation:** the introduction of fish and fishery products into any AMS, including those for transshipment purposes at ports/landing sites in its territory

12. **IUU Fishing:** refer to definition in the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain. The Guidelines specifically addresses five (5) major forms of IUU fishing activities occurring in the Southeast Asian region that include the following:
 - a. Illegal fishing activities within a country;
 - b. Unauthorized transshipment and landing of fish/catch across borders;
 - c. Poaching in the EEZs of other countries;
 - d. Illegal fishing and trading practices of live reef food fish, reef-based ornamental and endangered aquatic species;
 - e. IUU fishing in the high seas and RFMO areas.
13. **Logbooks/logsheets:** tabulated form of various information related to the types of gear, capacity of fishing gear, number of fishing operations, amount of catches by species or groups, fishing grounds, which should be declared by the Master of fishing boat or authorized persons/or representatives.
14. **Re-exportation:** any movement out of any AMS of fish and fishery products which had been previously imported into that AMS
15. **Regional Fisheries Management Organization (RFMO):** a sub-regional, regional or a similar organization with competence, as recognized under international law, to establish conservation and management measures for living marine resources placed under its responsibility by virtue of the convention or agreement by which it was established.
16. **Representatives:** A person authorized by owner of vessel/Captain/Fishing Master to certify the authenticity of data and information
17. **Small Fishing Vessels:** are fishing vessels:
 - a. with an overall length of less than 12 meters without towed gear; or
 - b. with an overall length of less than 8 meters with towed gear; or
 - c. without a superstructure; or
 - d. less than 20 GT
18. **Simplified Catch Document:** type of catch declaration or logbook/logsheets applicable for small fishing vessels to be filled by the skipper and submitted to authorities when landing (Refer to **Annex II-B**)
19. **Skipper:** the master or captain of a vessel, especially of a small fishing vessel
20. **Supporting Ships:** ships that are directly involved in fishing operations including sonar boat, light boat, and skiff boat
21. **Transshipment:** the unloading of all or some fish and/or fishery products on board a fishing vessel to another fishing vessel at sea or in port.
22. **Unique Serial Number:** reference number for tracing the catch/product flow in the supply chain, where the unique serial number could consist of types of ACDS document, ASEAN Member States code, year, month, day, and running reference, for example: CD1/TH20141014001
23. **Validate:** to officially prove that certified relevant ACDS documents are true
24. **Verification:** the process of establishing the accuracy or validity of data and information during its catch flow movement
25. **Verify:** to check that relevant ACDS documents are accurate

PART II: PROVISIONS

2.1 Catch Flow/Movement of the ACDS

1. Catch movement under the ACDS covers the exportation of fish and fishery products from AMS flagged fishing vessels operating within their EEZs, that of other AMS and/or the High Seas, and re-exportation of imported fish and fishery products from AMS (**Figure 1**).
2. Catch movement under the ACDS also covers the importation of fish and fishery products from non-AMS.

2.2 ACDS Catch Documents

3. Exportation and re-exportation of fish and fishery products, processed or not, caught by AMS flagged fishing vessels within their EEZs, that of other AMS and/or the High Seas, shall be accompanied by ACC.
4. The ACC shall be validated by the Competent Authority of flag State of the fishing vessel

from which the fish and fishery products have been obtained. It shall be used to certify that such catches have been made in accordance with applicable national laws and regulations.

2.2.1 Catch Documents For Large Fishing Vessels

a) Catch Declaration/Logbook/Logsheet (CD1)

5. The catch and information in the catch declaration or logbook/logsheet (**Annex II-A**) shall be declared by captain/fishing master/skipper and reported to the competent authority at fishing ports/landing sites.
6. Competent authorities shall verify catch declaration/logbook/logsheet submitted by captain/fishing master/skipper.
7. Competent authorities shall submit a copy of catch declaration/logbook/logsheet to the relevant national fisheries management and statistics units.

b) Movement Document (MD1)

8. The use of this document is optional on the part of the individual AMS.
9. The captain/fishing master/skipper/owner of fishing vessel and/or representative shall provide inputs in **MD1 (Annex III-A)**.
10. Competent authorities shall verify information in the MD1.
11. The competent authorities shall conduct random check to verify information in the movement document.
12. Fish processing units shall maintain proper stock records keeping for verification by competent authorities.

c) Processing Statement (PS): for Imported fish

13. The use of this statement is for re-exportation of processed imported fish.
14. The competent authorities shall issue Processing Statement (**Annex IV**) for the exportation of processed fish.

d) ASEAN Catch Certificate (ACC): for Exportation of Fish and Fishery Products from AMS

15. The use of this ACC is for the exportation of fish caught by AMS flagged fishing vessels operating within their EEZs, that of other AMS, non-AMS waters and/or the High Seas.
16. Exportation of fish and fishery products under ACDS shall be authorized through the issuance of ASEAN Catch Certificate (ACC) for Exportation of Fish and Fishery Products (**Annex V-A**) by the competent authorities of the AMS from which the exportation takes place.

e) ASEAN re-export Certificate

17. Re-exportation of imported fish and fishery products that have not undergone further processing shall be authorized through the issuance of ASEAN Re-export Certificate for Fish and Fishery Products (**Annex VI**).

2.2.2 Simplified Catch Documents For Small Fishing Vessels

a) Simplified Catch Declaration/Logbook/Logsheet (CD2)

18. A simplified catch declaration/logbook/logsheet (**Annex II-B**) is introduced to enable small fishing vessels to trade with other AMS or other States. An exporter trading fish from several small fishing vessels shall complete the said Simplified Catch Declaration/Logbook/Logsheet.
19. The simplified catch document (**CD2**) may be applied for any small fishing vessels as identified in PART I, Paragraph 1.3: "small fishing vessels".
20. All catches from small fishing vessels must be landed at ports/landing sites of the flag State unless otherwise agreed between neighboring AMS. Exporters may combine such catches into appropriate number of consignments.

b) Simplified Movement Document (MD2)

21. The use of this document is optional on the part of the individual AMS
22. The skipper/owner of fishing vessel and/or representative shall provide inputs in **MD2 (Annex III-B)**.

c) Simplified ASEAN Catch Certificate (SACC): for Exportation of Fish and Fishery Products of Small Fishing Vessels from AMS

23. Exportation of fish and fishery products from small fishing vessels from AMS under ACDS shall be authorized through the issuance of Simplified ASEAN Catch Certificate (SACC) (Annex V-B) by the competent authorities of the AMS from which the exportation takes place.

2.3 Verification

24. AMS shall have in place the necessary verification procedures to ensure compliance of ACDS at all levels.
25. Verifications may consist of examining the products, verifying declaration data and authenticity of documents, examining the accounts of operators and other records, as well as inspecting means of transport.
26. For the purpose of verification, the competent authorities of importing AMS may seek verification and clarification from exporting AMS and non-AMS on the validity and accuracy of the ACDS documents or its equivalent with reference to the identified areas of possible non-compliance. The copy of the request shall be forwarded to the ACDS Secretariat.
27. The request for verification shall be acknowledged and acted upon by the exporting AMS and non-AMS within a reasonable time. In the event that the competent authorities of the exporting AMS and non-AMS fail to act on the request, the importing AMS may deny the consignment with notice to the exporting AMS and non-AMS and the shippers.

2.4 Records Keeping and Information Sharing

28. AMS shall keep all relevant validated ACDS documents for importation, exportation, and re-exportation for a period of at least two years in accordance with national regulations.
29. AMS shall develop manual/handbook for local staff/officers for the implementation of the ACDS.
30. AMS shall share data or information related to transshipment at sea and landing of catches inside AMS ports/landing sites including but not limited to the name of landing vessels, verified weight landed, destination, and others.
31. AMS shall provide the ACDS Secretariat with official stamp or seal of the competent authority and may voluntarily provide the ACDS Secretariat with names of authorized signatories of competent authority and their specimen signatures.

2.5 Monitoring and Evaluation

32. Each AMS shall nominate a national focal point to coordinate, monitor and evaluate the implementation and management of the ACDS.
33. The ACDS shall be reviewed and updated by AMS every 3 years and/or when necessary.

2.6 Secretariat for the ACDS

34. A Secretariat shall be established to undertake the following:
- (1) Provide fulltime overall administration and coordination for the implementation of the ACDS;
 - (2) Compile and collate all information and documents including list of Competent Authority, official seal, name of authorized signatories and their specimen signatures, request for verification;
 - (3) Act as repository of all notifications from non-AMS;
 - (4) Conduct reconciliation of data and information in ACDS documents;
 - (5) Provide formal reports to the ASEAN Secretariat;
 - (6) Develop and maintain electronic system for data and information recording and sharing;
 - (7) Provide necessary assistance to AMS in case of difficulties encountered in the implementation of ACDS;
 - (8) Provide access for counterchecking of specimen signatures and official stamps of competent authorities of AMS; and
 - (9) Review the existing catch certificate of non-AMS and determine whether it is equivalent to ACDS (based on minimum requirements to determine equivalence to ACDS

appeared in Annex VI) and inform the non-AMS accordingly.

2.7 Requirements for the Non-AMS

35. Non-AMS shall notify the Secretariat of ACDS on the relevant competent authority as well as existing catch certificate scheme. Non-AMS shall provide the ACDS Secretariat with official stamp or seal of the competent authority and may voluntarily provide the ACDS Secretariat with names of authorized signatories of competent authority and their specimen signatures.
36. Importation of fish and fisheries products from non-AMS should be accompanied by Catch Certificate which is equivalent to ACC.
37. The Catch Certificate shall be validated by the Competent Authority of flag State of the fishing vessel from which the fish and fishery products have been obtained. It shall be used to certify that such catches have been made in accordance with applicable national laws and regulations.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

ANNEX I

List of “fish and fishery products” excluded from ACDS **set up in point 7 of article 1.3**

- Fish parts such as head, eyes, roe, gut, fin, skin, tail except shark fins
- Freshwater fish and fishery products
- Aquaculture products obtained from fry or larvae
- Ornamental fish
- Oysters, live
- Scallops including queen scallops, of the genus *Pecten*, *Chlamys* or *Placopecten*, live, fresh or chilled
- Coquilles St. Jacques (*Pecten maximus*), frozen
- Other scallops, fresh or chilled
- Mussels
- Snails, others than those obtained from the sea
- Prepared and preserved mollusks
- Corals
- CITES-listed species

ANNEX II-A

CATCH DECLARATION/LOGBOOK/LOGSHEET (CD1)				
1. Unique Serial Number		2. Reference Number		
3. Validation Authority: (Agency Name)				
(a) Address	(b) E-mail Address		(c)Tel.	(d) Fax
4. Fishing Vessel Name:	5. Flag-Home Port	6. Registration Number	7. Call Sign:	8. IMO/Lloyd's Number: (If issued)
9. Fishing License No. Valid to:	10. Vessel Contract No. Inmarsat No., Fax No., Telephone No., E-mail address (if issued):			
11. Type of Processing On Board:				
12. Description of Product				
(a) Species	(b) Product Code	(c) Catch Area(s) & Dates	(d) Estimated Live Weight (kg)	(e) Verified Weight Landed (kg) where appropriate
13. Name of Master of Fishing Vessel – Signature – Seal:				
14. Declaration of Transshipment At Sea				
(a) Name of Master of Fishing Vessel/ Captain/Representative:		(b) Signature and Date	(c) Transshipment Date/Area/Position	(d). Estimated Weight (kg)
(e) Name of Master of Receiving Vessel/Carrier	(f) Signature	(g) Vessel Name	(h) Registration Number	(i) IMO/Lloyd's Number (If issued)
15. Flag State Authority Validation:				
(a) Name/Title		(b) Signature	(c)Date	(d) Seal (stamp)

ANNEX II-B

SIMPLIFIED CATCH DECLARATION/LOGBOOK/LOGSHEET (CD2) FOR SMALL FISHING VESSELS				
1. Unique Serial Number		2. Reference Number		
3. Validation Authority (Agency Name)				
(a) Address	(b) E-mail Address		(c) Tel.	(d) Fax
4. Fishing Vessel Name	5. Flag-Home Port		6. Registration Number	
7. Fishing License No. Valid to:				
8. Description of Product				
(a) Species	(b) Product Code	(c) Catch Area(s) & Dates:	(d) Estimated Live Weight (kg)	(e) Verified Weight Landed (kg) where appropriate
9. Flag State Authority Validation:				
(a) Name/Title:		(b) Signature:	(c) Date:	(d) Seal (stamp):

ANNEX III-A

MOVEMENT DOCUMENT (MD1) (OPTIONAL DOCUMENT)				
1. Unique Serial Number		2. Reference Number: CD1/XXXXXX		
3. Validation Authority: (Agency name)				
(a) Address	(b) E-mail address		(c) Tel.	(d) Fax
4. Fishing Vessel Name	5. Registration Number		6. Fishing License No. Valid Until:	
7. Date of Landing/unloading:		8. Landing Place/Name:		
9. Description of Product				
(a) Product by species	(b) Product Code	(c) Estimated Live Weight (kg/MT)	(d) Total Weight (kg/MT)	
10. Purchasing documents				
(a) Name of Buyer:	(b) Registration No. :	(c) Address:	(d) Phone No. :	
(e) Catch by Species	(f) Total Weight (kg/MT)	(g) Sold by:	(h) Buyer's signature:	
11. Processing Plant				
(a) Processing Plant Name:	(b) Registration No. :	(c) Address:	(d) Phone No. :	
(e) Catch by Species:	(f) Date of Processing:	(g) Total Weight Used:	(h) Remaining Fish:	(i) Name of Controller:
12. Flag State Authority <u>Verification</u>:				
(a) Name/Title		(b) Signature	(c) Date	(d) Seal (stamp)

ANNEX III-B

SIMPLIFIED MOVEMENT DOCUMENT (MD2) FOR SMALL FISHING VESSELS				
1. Unique Serial Number		2. Reference Number: CD21/XXXXX, CD22/XXXXX, ...		
3. Validation Authority: (Name, Address)				
4. List of Fishing Vessel: (1) (2) (3) (4)		5. Registration Number		6. Fishing License No.– Valid Until:
7. Date of Landing/unloading:			8. Landing Place/Name:	
9. Description of Product				
(a) Product by species	(b) Product Code	(c) Estimated Live Weight (kg/MT)	(d) Total Weight (kg/MT)	
10. Purchasing documents				
(a) Name of Buyer:	(b) Registration No.:	(c) Address:	(d) Phone No.:	
(e) Catch by Species	(d) Total Weight (kg/MT)	(f) Sold by:	(g) Buyer's signature:	
11. Processing Plant				
(a) Processing Plant Name:	(b) Registration No.:	(c) Address:	(d) Phone No. :	
(e) Catch by Species:	(f) Date of Processing:	(g) Total Weight Used:	(h) Remaining Fish:	(i) Name of Controller:
6. Flag State Authority <u>Verification</u> :				
(a) Name/Title		(b) Signature	(c) Date	(d) Seal (stamp)

ANNEX IV

Processing Statement (PS)

(for imported fish through processing before re-exportation)

I confirm that the processed fishery products: (product description and Combined Nomenclature code) have been obtained from catches accompanied by the following information:

ACC Unique Serial Number	Vessel name(s) and flag(s)	Validation date(s)	Catch description	Total landed weight (kg)	Catch processed (kg)	Processed fishery product (kg)

Name and address of the processing plant _____

Name and address of the exporter (if different from the processing plant)

Approval number of the processing plant _____

Health certificate number and date _____

Responsible person of the processing plant:	Signature:	Date:	Place:
---	------------	-------	--------

Endorsement by the competent authority: _____

Official:	Signature and seal:	Date:	Place:
-----------	---------------------	-------	--------

ANNEX V-A
APPENDIX 1

ASEAN CATCH CERTIFICATE (ACC) FOR EXPORTATION					
1. Unique Serial Number:		2. Reference Number: MD1/XXXXX or CD1/XXXX			
3. Validating Authority: (Agency Name)					
(a) Address:	(b) E-mail Address		(c) Tel.	(d) Fax	
4. Fishing Vessel Name	5. Flag-Home Port	6. Registration Number	7. Call Sign	8. IMO/Lloyd's Number (If issued)	
9. Fishing License No. Valid to:	10. Vessel contract no. Inmarsat No. , Fax No., telephone No., E-mail address (if issued)				
11. Type of Processing On Board					
12. Description of Exported Product					
(a) Species	(b) Product Code	(c) Catch Area(s) and Dates	(d) Estimated Live Weight (kg)	(e) Verified Weight Landed (kg) where appropriate	
13. Name and Address of Exporter:			Signature	Date	Seal
14. Name/Title of Competent Authority Validation:			Signature	Date	Seal
15. Transport Details (Appendix 1)					
16. Importer Declaration					
Name and Address of Importer		Signature	Date	Seal	Product Code
17. Import Control - Authority	Place	Importation Authorized (*)	Importation Suspended(*)	Verification Requested – Date	
18. Customs Declaration (if issued)		Number	Date	Place	
(*) Tick as appropriate					

TRANSPORT DETAILS				
1. Country of Exportation Port/Airport/Other Place of Departure	2. Exporter Signature			
<input type="checkbox"/> Vessel name and flag <input type="checkbox"/> Flight number/airway bill number <input type="checkbox"/> Truck nationality & registration number <input type="checkbox"/> Railway bill number <input type="checkbox"/> Other transport document	Container Number(s) List attached	Name	Address	Signature

ANNEX V-B

SIMPLIFIED ASEAN CATCH CERTIFICATE (SACC) FOR SMALL FISHING VESSELS						
1. Unique Serial Number:			2. Reference Number: CD2/xxxxxxx or MD2/xxxxxxx			
3. Validating authority (Name, Address, tel., fax):						
4. Description of exported Product						
(a) Species		(b) Product Code		(c) Verified weight landed		
5. List of Vessel that have provided catch and quantities by each vessel (name, registration number, etc. annexed);						
6. Name of Exporter, address, tel. and fax.		Signature		Date	Seal (Stamp)	
7. Flag State Authority Validation						
Name / Title		Signature		Date	Seal (Stamp)	
8. Transport details:						
Country of exportation	Port/airport/ other place of departure	Date of shipment	Vessel name and flag	Flight /airway /Truck /Railway other transport number/ bill number	Shipped to	Container number
9. Importer declaration:						
Name and address of Importer		Signature		Date	Seal (Stamp)	Product Code
10. Import control: Authority Place		Place		Importation authorized *	Importation suspended *	Verification requested – date
11. Customs declaration (If issued)			Number		Date	Place

ANNEX VI

ASEAN RE-EXPORT CERTIFICATE (AREC) (FOR IMPORTED FISH and FISHERY PRODUCT)				
1. Certificate Number:		2. Date:	3. Country Name:	
4. Description of Re-Export Product		5. Weight (kg)		
(a) Species	(b) Product Code	6. Balance From Total Quantity Declared In the Catch Certificate		
7. Name of re-Exporter	Address	Signature	Date	
8. Authority Name/Title	Signature	Date	Seal/Stamp	
9. Re-Export Control				
(a) Place	(b) Re-Export Authorized (*)	(c) Verification Requested (*)	(d) Re-Export declaration Number	(e) Date
(*) Tick as appropriate				

ANNEX VII

MINIMUM REQUIREMENTS TO DETERMINE EQUIVALENCE TO ACDS

The non-AMS must submit the following document to the ACDS Secretariat:

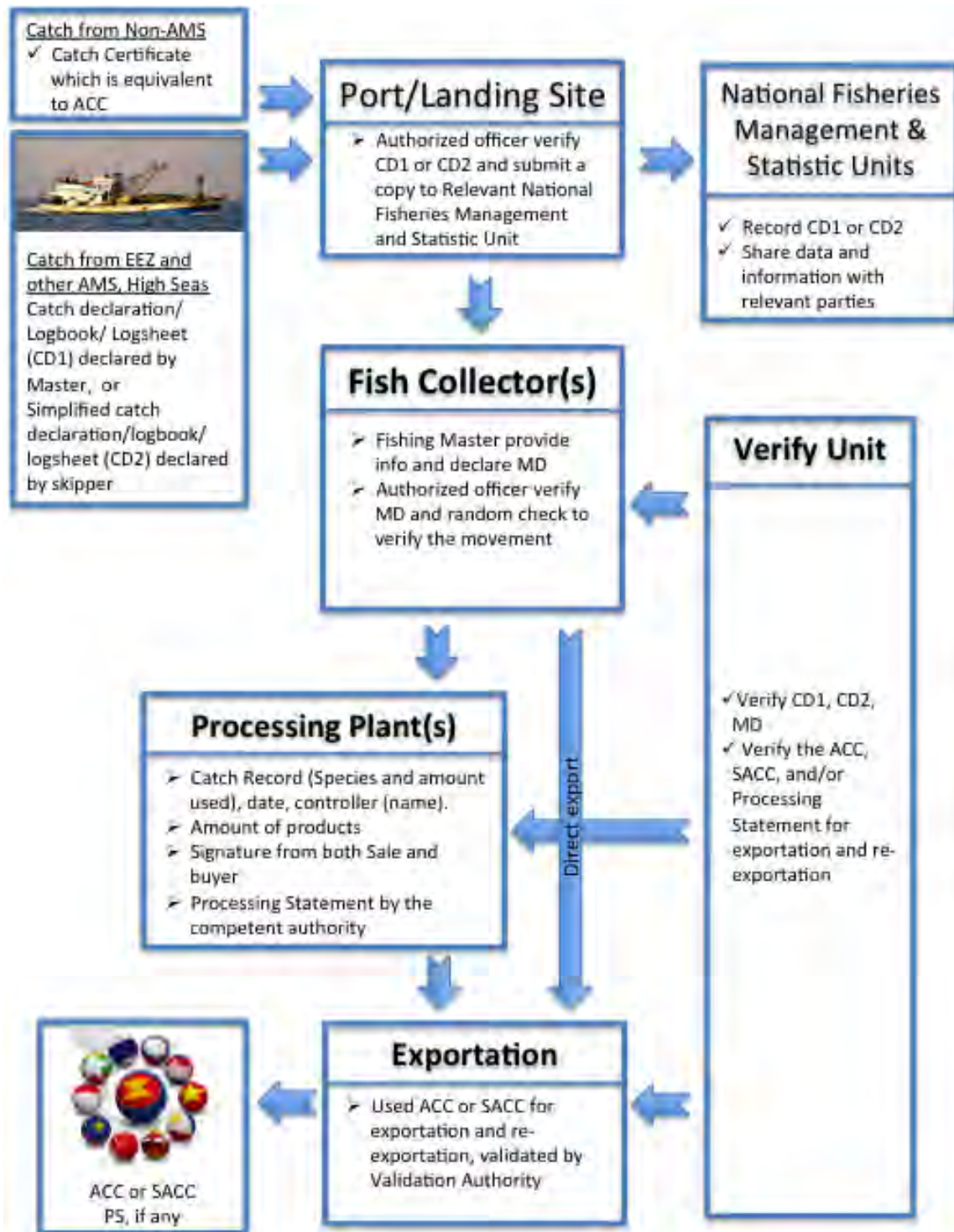
1. The template of catch certificate in the official letterhead with logo of competent authority containing the following information;
 - 1.1 Validation authority name, address, phone number and fax
 - 1.2 Item
 - 2) Company owner, address, telephone number, fax.,
 - ✓ fishing vessel name, flag home port/registration number, call sign, IMO/Lloyd's number (if issued),
 - ✓ fishing license number and validity, Inmarsat number, telephone no. fax. no., email address (if issued),
 - 1) Description of product, type of processing on board,
 - ✓ species, product code, catch area (s) and dates, estimated live weight (kg), verified weight landed (kg) where appropriate,
 - 2) Name and address of exporter including signature, date and seal;
 - 3) Competent authority validation
 - ✓ Name/Title, signature, date, seal
 - 4) Transport detail (Appendix 1)
2. RFMO registration for fishing vessel operated in RFMO area of competence.
3. Details of catch certification scheme including Standard operating procedure (SOP) or manual

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

TABLE 1: FISHING AREA WITHIN THE NATIONAL JURISDICTION

Country	Fishing Areas/Management Areas
BRUNEI DARUSSALAM	Up to 200 nautical miles from shore of Brunei Darussalam: Zone 1-4
CAMBODIA	<ol style="list-style-type: none"> 1) KohKong Area 2) PreahSihanouk Area 3) Kampot Area 4) Kep Area
INDONESIA (11 Areas)	<ol style="list-style-type: none"> 1) Fishing Management Area 571 2) Fishing Management Area 572 3) Fishing Management Area 573 4) Fishing Management Area 711 5) Fishing Management Area 716 6) Fishing Management Area 717 7) Fishing Management Area 718
MALAYSIA	<ol style="list-style-type: none"> 1) West Coast of Peninsula Malaysia 2) East Coast of Peninsula Malaysia 3) Sarawak waters 4) East Coast of Sabah 5) West Coast of Sabah
MYANMAR	<ol style="list-style-type: none"> 1) Rakhine Coastal Region 2) Ayeyawaddy Delta Region 3) Tanintharyi Coastal Region
THE PHILIPPINES	<ol style="list-style-type: none"> 1) N C R 2) Ilocos Region 3) Cagayan Valley 4) Central Luzon 5) CALABARZON 6) MIMAROPA 7) Bicol Region 8) Western Visayas 9) Central Visayas 10) Eastern Visayas 11) Zamboanga Peninsula 12) Northern Mindanao 13) Davao Region 14) SOCCSKSARGEN 15) Caraga 16) ARMM
SINGAPORE	Territory water of Singapore
THAILAND	<ol style="list-style-type: none"> 5) Gulf of Thailand 6) Andaman Sea
VIET NAM	<ol style="list-style-type: none"> 1) Tonkin Gulf 2) Central Area 3) Offshore Area 4) South East Area 5) South West Area

FIGURE 1: ASEAN Catch Documentation Scheme: Fishes landed by Flag state vessels operating within their EEZ, other AMS, High Seas and Non-AMS

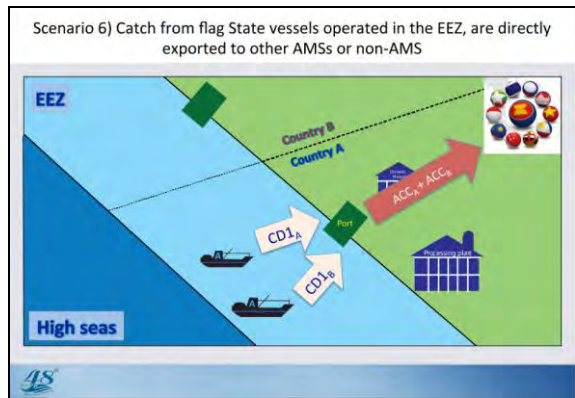
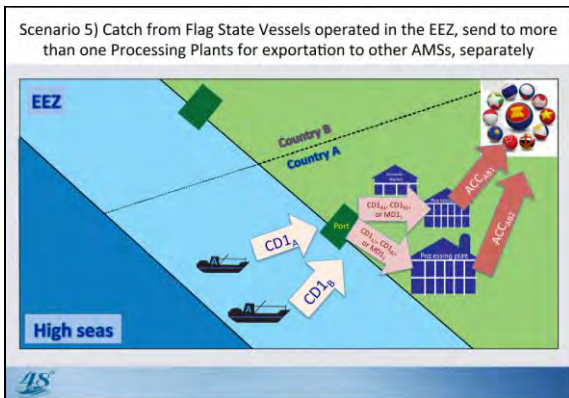
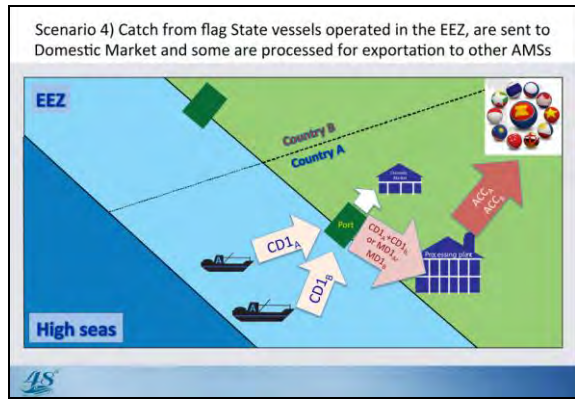
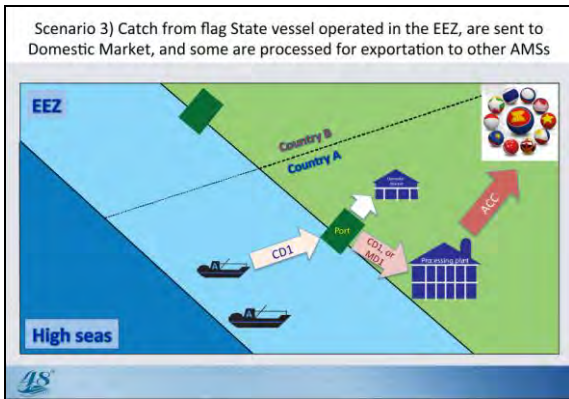
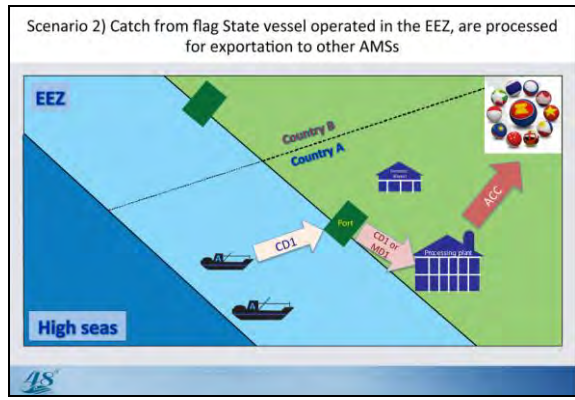
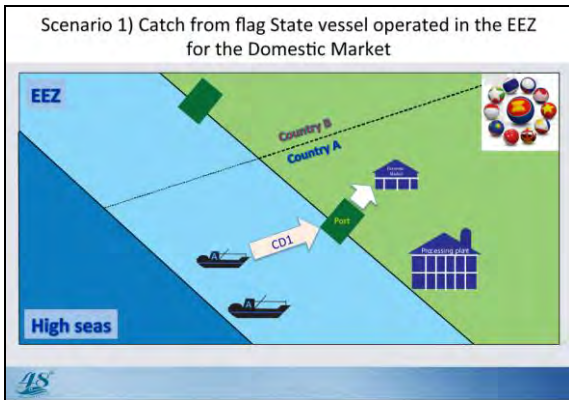


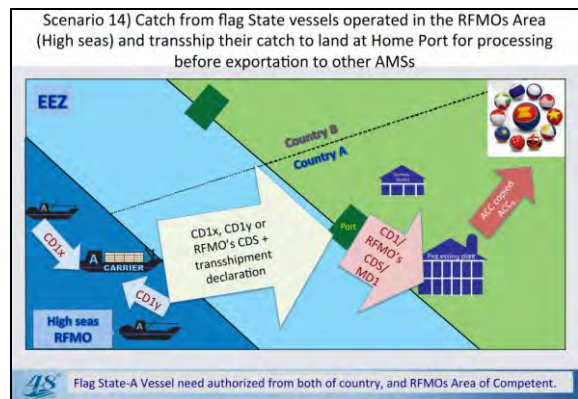
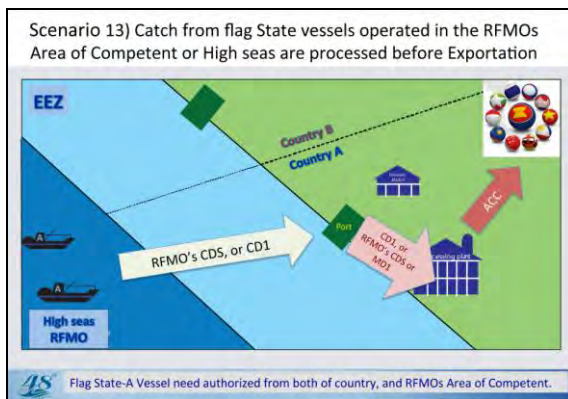
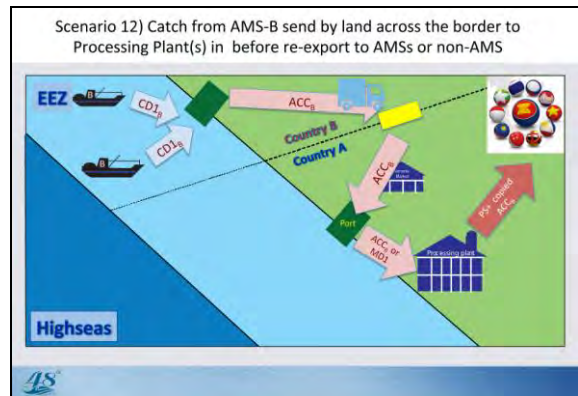
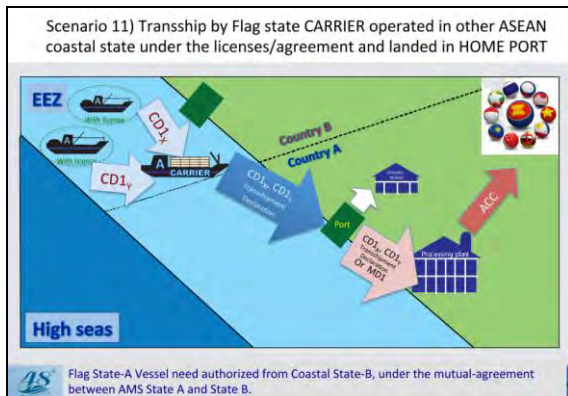
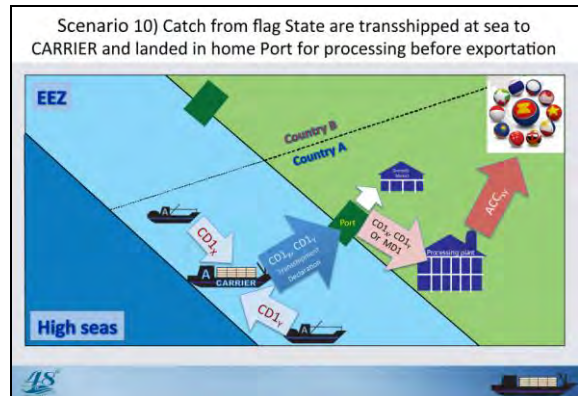
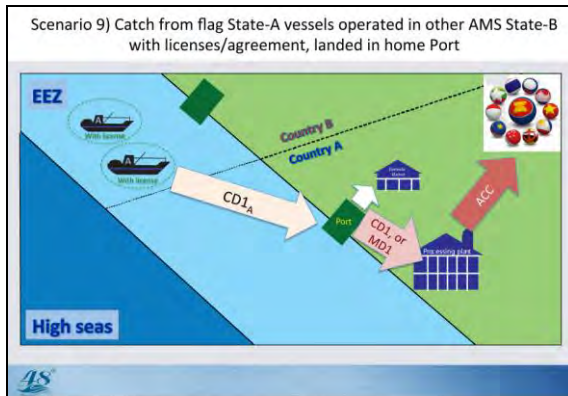
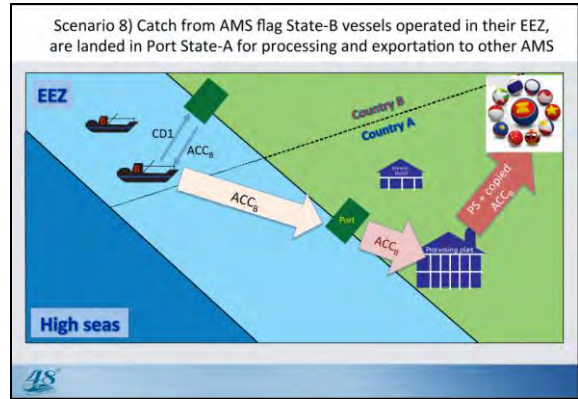
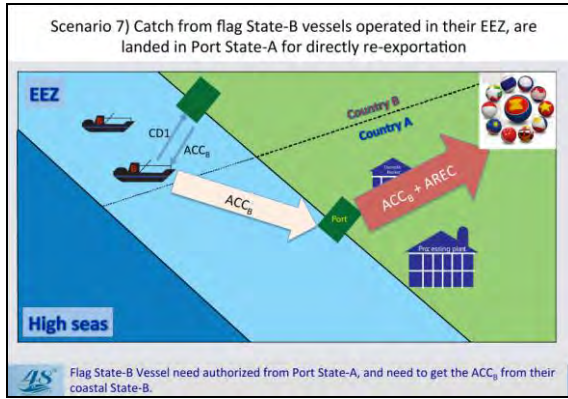


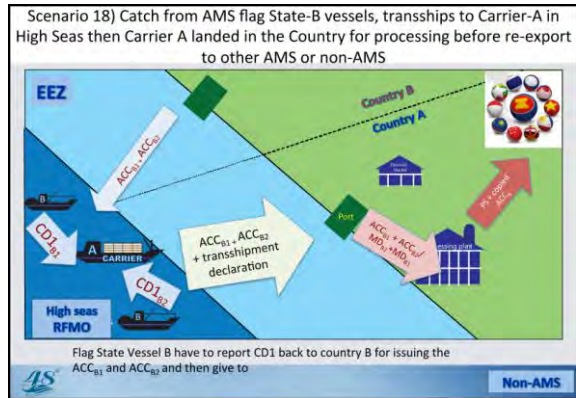
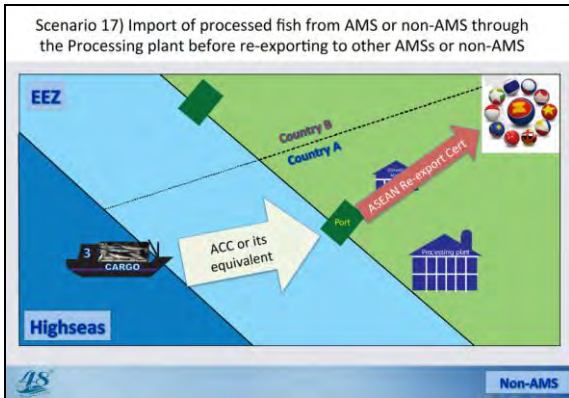
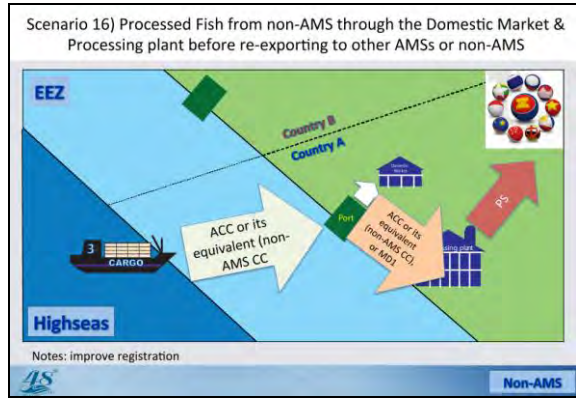
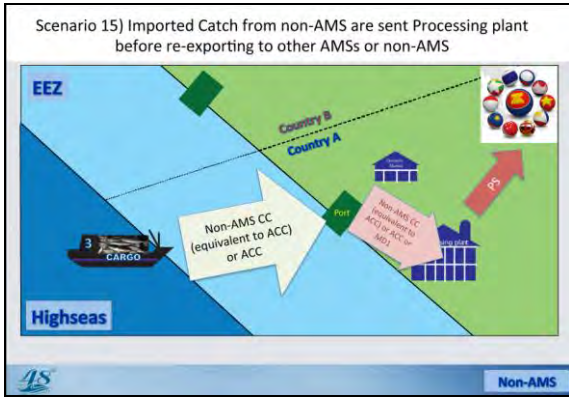
ASEAN Catch Documents

ACDS Catch Documents for Large Fishing Vessel:

- Annex II-A. Catch Declaration/Logbook/Logsheets (CD1)
- Annex II-B. Simplified Catch Declaration/Logbook/Logsheets (CD2)
- Annex III-A. Movement Document (MD1)
- Annex III-B. Simplified Movement Document (MD2)
- Annex IV. Processing Statement (PS) for Re-export processed fish
- Annex V-A. ASEAN Catch Certificate for Exportation (ACC)
- Appendix 1: Transport Details
- Annex V-B. Simplified ASEAN Catch Certificate (SACC)
- Annex VI. ASEAN Re-export Certificate (AREC) for Imported Fish and Fisheries Product







REGIONAL COOPERATION FOR SUPPORTING THE IMPLEMENTATION OF THE PORT STATE MEASURES IN ASEAN REGION

I. INTRODUCTION AND RATIONAL

The importance of port State measures (PSM) are included in the International Plan of Action to prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) adopted by the FAO Committee on Fisheries (COFI) in 2001. FAO has identified PSM as an effective means of combating Illegal, Unreported and Unregulated Fishing including identifying the need to build capacity and for human resources development to implement port State measures. 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 is to “prevent illegally caught fish from entering international markets through ports”. To do so, port State needs to take the actions on restriction of entry into port, use of port, access to port services, in addition the inspection and other enforcement activities are also mentioned in the PSM.

Taking into account the importance of seafood trade from Southeast Asia of around the world and to avoid any negative impact international or intra-regional trade, the implementation of port State measures are therefore needed together with other regional management measures developed under the ASEAN-SEAFDEC Collaborative Framework such as ASEAN Catch Documentations Scheme, Regional Fishing Vessels Record (RFVR), ASEAN Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing into the Supply Chain, etc.

Implementation of PSM requires not only appropriate country laws and regulations that are consistent with international law and qualified inspectors capable of examining all relevant areas of the vessel, the fish on board, the nets and any other gear, equipment, and any document or record on board. In addition, it also requires the international, regional and inter-agency cooperation on exchange of information. However, due to the high volumes of seafood trade in ASEAN region, there are human resource, institutional and infrastructure constraints for effective implementation of port State controls for all foreign fishing vessels SEAFDEC therefore proposes to establish the Regional Cooperation to support the effective implementation of the port State measures. In addition to the standard approach, harmonized approaches for all foreign-flagged vessels of the AMSs in which the port State measures need to be harmonized and agreed by all AMS and aligned with the international and regional agreement/measures, as well as link to the existing management tools such as ACDS, the Guideline on Preventing IUU products, and the Regional Fishing Vessels Record.

Under the ASEAN-SEAFDEC Strategic Partnership Program, SEAFDEC convened the Expert Meeting on Regional Cooperation for Supporting the Implementation of Port State Measures in Southeast Asian Region was conducted from 2-4 February 2016. The preliminary assessment on the current status, constraints/problems on the implementation of the PSM, and the recommendation for development of the regional cooperation were discussed and finalized as follows:

II. NATIONAL INITIATIVES, CURRENT STATUS ON IMPLEMENTATION OF PORT STATE MEASURES

- a) CAMBODIA
 - Laws and regulations support PSM implementation
 - In the process to develop NPOA-IUU which will also include PSM
 - PSM has not really applied since no foreign vessels unloading in the country
 - No designated port for PSM
- b) INDONESIA
 - Signed the PSMA and preparing to ratify the FAO PSMA
 - Following the IOTC resolution on PSM to prevent, deter and eliminate IUU fishing

- 5 designated ports for PSM implementation
 - At present, no foreign or joint venture fishing vessels operating in the EEZ
 - Requirement of foreign fishing vessels information prior to entering into port
 - Implement the EC-Catch Certification, the CCSBT CDS, and IOTC resolution on CDS for big-eye tuna statistic
 - Decree laws and regulations to support PSM implementation
 - NPOA-IUU linked to the implementation of PSM
 - Conduct some capacity building on PSM and relevant activities for staff concern
- c) MALAYSIA
- Only one designated port in Penang under IOTC requirement
 - Domestic law supports the implementation of PSM
 - Foreign fishing vessel is required to get written approval prior to land fish
 - Continuous capacity building on PSM for officials from relevant agencies
 - NPOA-IUU developed in 2013
- d) MYANAMAR
- Signed for accession the FAO PSMA in 2010
 - Decree for laws and regulations to support PSM implementation
 - Local and foreign fishing vessel has to be inspected in check points before entering landing site
 - Designated five port for foreign fishing vessel which operate in Myanmar EEZ
 - Implement check point as one stop service to inspect the fishing vessel when they go to fishing ground and come back to the port
 - Implementation of catch certification scheme for EU regulation
 - Preparing NPOA-IUU linked to the PSMA
- e) PHILIPPINES
- One designated port for foreign vessel in Davao and is planning to designate on more port in General Santos
 - Fishing vessel must submit prior notification information to the one-stop action center
 - Enacted law and regulation to support PSM implementation
 - Foreign fishing vessel is required to submit catch documentation in support to PSM implementation
 - Develop the NPOA-IUU in 2013 which include PSM
 - Sign the instrument of accession to the 2009 FAO PSMA in 2016 and is currently in the process of ratification
 - Conducted capacity building training for PSM implementation for local inspectors
- f) SINGAPORE
- 3 ports designated for fishing vessels to import, export and tranship fish: Jurong Fishery Port, Jurong Port and Senoko Fishery Port
 - Advanced notification of arrival for foreign fishing vessel
 - Compliance with CCAMLR's Catch Documentation
 - Collaboration with ICCAT issuance of re-export certificates for Big-eye Tuna and Swordfish
- g) THAILAND
- 46-ports have designated for PSM and on-going for revision
 - Implemented pilot project on PSM at Phuket in 2012-2014
 - Preparing for accession to the 2009 FAO PSMA
 - Significant enforcement activities
 - Requirement prior to port entry
 - Relevant activities to PSM (Traceability system, MCS)
 - Decree law and regulation to support PSM implementation

- Development of NPOA-IUU with support PSM implementation
- Developing “Processing Statement and PSM Linked System” (PPS)
- Updated inspection manual base on information provided by MoU and NPCI

h) VIET NAM

- No designated port for foreign fishing vessels
- Requirement information prior to port entry
- Law, decree and regulation to support PSM implementation
- Development of NPOA-IUU with support PSM implementation

III. SUMMARY OF CONSTRAINTS/PROBLEMS ON PSM IMPLEMENTATION

Table 1. Summary of the constraints/problems on PSM implementation by ASEAN Member States

Constraints/Problems	CM	ID	MY	MM	PH	SG	TH	VN	Challenges
Operational									
<ul style="list-style-type: none"> • Lack of standard operating procedure (SOP) in implementing PSM with any scale of vessel 	X	X			X		X	X	1. Renew and reorganize fishing port operational procedure to support PSM 2. Development of harmonized SOP on vessel inspection at port for guidance of all AMS 3. Identify needs and capacity building for staff concern on relevant PSM implementation 4. Difficulties in verification of vessel documentation and inspection
<ul style="list-style-type: none"> • For port managed under different agency; insufficient inter-agency cooperation for port PSM implementation 	X	X		X				X	
Legal									
<ul style="list-style-type: none"> • Challenge with regards to implementation of laws and regulations 	X	X	X				X	X	1. Inconsistent law interpretation
<ul style="list-style-type: none"> • Challenge in interpretation of PSMA 	X	X			X	X	X	X	
Human resource									
<ul style="list-style-type: none"> • Limit of capacity of implementing facilities and officer concern 	X	X		X		X	X	X	<none>
Infrastructure									
<ul style="list-style-type: none"> • Insufficient infrastructure and lack of budget for infrastructure to support PSM 	X	X		X			X		<none>
Information									
<ul style="list-style-type: none"> • Lack of fish landing data system and management, such as the IUU vessel list from RFMOs is not updated 	X		X*						1. Encourage “traders” to cooperate with AMS through information and education campaigns 2. Sharing of information such as catch, fishing vessel, fishing gear through sharing of experience in PSM
<ul style="list-style-type: none"> • Lack of regional network, MCS and information sharing in concern agencies among country 	X	X	X**	X	X		X	X	

Constraints/Problems	CM	ID	MY	MM	PH	SG	TH	VN	Challenges
<ul style="list-style-type: none"> Lack of awareness about PSM among the stakeholder 	X	X							implement among AMS 3. Information sharing on rules and regulations for inter-agency collaboration and implementation <ul style="list-style-type: none"> Create “rapid alert system” for ASEAN (through Mobile Application if available) Establishment of the ACDS
<ul style="list-style-type: none"> Limited traceability of some imports 						X			
<ul style="list-style-type: none"> Control of ports fall under different port authorities 			X						
<u>Measures related to PSM implementation</u>									<none>
<ul style="list-style-type: none"> Lack of vessels registration and fishing license system management 	X								

Note: * Malaysia’s experience shows that RFMO’s IUU vessel list may not be up-to-date
 ** Malaysia sees information sharing with regards to PSM implementation e.g. inspection report as a challenge rather than an issue for the region

IV. DEVELOPMENT OF THE REGIONAL COOPERATION ON PSM

Based on the discussion, there are other three challenges needed to be considered for future actions as follows:

- Regional cooperation on PSM and related issues among AMS
- Strengthening bilateral/ multilateral arrangement on all IUU activities through PSM implementation and MCS network
- Identification of a model port for demonstration of PSM best practices within the ASEAN region

In this connection, the recommendations for Regional Cooperation to support the implementation of the port State measures are summarized in Table 2:

Table 2. Recommendations for Regional Cooperation to support the implementation of the port State measures

Refers to the PSMA		Recommendations of Regional Cooperation on PSM implementation
PART	Article No.	
Entry Into Port	Article 7: Designated port	<ul style="list-style-type: none"> Encourage AMS to identify designated ports for foreign fishing vessel and encourage not to allow foreign fishing vessel to unload fish and fishery products in non-designated ports. The list of designed ports should include information of the name of the port, address of location, contact person and his/her designation as well as official website in English version. SEAFDEC shall publicize the information of AMS’ s designated ports.
	Article 8: Advance request for port entry	<ul style="list-style-type: none"> AMS shall require, as a minimum standard, the information requested in Annex A¹ or relevant document to be adopted by AMS² to be provided before granting entry to a vessel to its port. To support the implementation by port State, database module of

¹ Refers to ANNEX 1 of the 2009 Agreement of the port State measures

² SEAFDEC to provide a simplified document for small fishing vessel for adoption by AMS

Refers to the PSMA		Recommendations of Regional Cooperation on PSM implementation
PART	Article No.	
		the list of vessels shall be expansion developed based on the existing Regional Fishing Vessels Record (RFVR).
	Article 9: Port entry, authorization or denial	<ul style="list-style-type: none"> Information exchange on the country laws and regulations shall be shared among the AMS taking into accounts that some AMSs (e.g. Malaysia and Indonesia) do not allow its fishing vessel excluding carriers to unload catch at other country ports. To encourage AMS to require foreign fishing vessels and carriers to submit pre-arrival information (such as approval to land catch, origin of catch or certificate of catch) so that port State can decide whether to authorize or deny the entry of this vessel into their port. Decision to deny shall be communicated to the flag state To provide the awareness building to relevant stakeholders (e.g. fishing boat owner, importer, port authority, etc.) at national level to enhance the better understanding the country laws and regulations, and other procedure on Inspections.
Inspections and Follow-Up Action	Article 12: Levels and priorities for inspection	<ul style="list-style-type: none"> Adopt the Standard Operating Procedures (SOP) on the risk assessment and inspection of vessels through the harmonization/consultation workshop. AMS may consider minimum levels for inspection of vessels through, as appropriate, agreement among all AMSs. To support inspection of the vessels, the historical data/information of vessel are required in the database module of vessels.
	Article 15: Transmittal of inspection results	<ul style="list-style-type: none"> AMS shall transmit the results of each inspection to the flag State of the inspected vessel AMS shall submit SEAFDEC the total number of inspection annually. When AMS flagged vessel has been denied entry, denied the use of port or denied the landing of fish, the port State needs to share the summary report of inspection to SEAFDEC.
	Article 16: Electronic exchange of information	<ul style="list-style-type: none"> To facilitate implementation of this Regional Cooperation, each AMS, where possible, establish a communication mechanism that allows for direct electronic exchange of information, with due regard to appropriate confidentiality requirements. In addition, AMS should cooperate to establish an information-sharing mechanism by SEAFDEC to facilitate the exchange of information with existing database for this cooperation.
	Article 17: Training of inspectors	<ul style="list-style-type: none"> Request FAO, RFMOs, ASEAN, SEAFDEC and relevant agencies on training of trainer for port inspections including legal and operational aspects with an emphasis on practical hands-on component Develop a network/team among AMSs on training of trainer for port inspections Consider an existing training module developed by RPOA-IUU in collaboration with the Australian Maritime on port inspections to support the TOT programs.
	Article 18: Port State actions following inspection	<ul style="list-style-type: none"> Publicize and awareness building on standard inspection procedure

V. WAY FORWARD

Adopted in 2009 by the U.N. Food and Agriculture Organization, the treaty requires parties to exert greater port controls on foreign-flagged vessels, and as a result to keep illegal, unreported, and unregulated, or IUU, fish out of the supply chains in the world's markets by removing the

incentive for dishonest fishing operators to continue their illegal activities. In other words, Implementation of the port State measures are in fact needed by all ASEAN Member States that allow foreign-flagged vessels to entry into port. The concerned stakeholders such as fishing boat operators, boat owners, exporter, importers, and etc. are needed to understand the situation while support the port authorities to effectively implementation the PSM, taking into consideration that port States enforcing the treaty will refuse port entry or access to port services, including landing and transshipment of fish, to foreign-flagged vessels known to have engaged in IUU fishing.

For further support the development of regional cooperation in the implementation of PSM in the ASEAN Region, SEAFDEC will continue work in close collaboration with its Member Countries under the supervision from the Council Directors. In connection to this, Table 3 shows the work plan for development of the Regional Cooperation through the harmonization, sharing of information to support the effective implementation at region level, testing of the system, and process on adoption of the system from 2016 till April 2018.

Table 3. Work plan for development of the Regional Cooperation on PSM

ACTIVITY	SCHEDULE
<ul style="list-style-type: none"> • Experts Meeting on establishment of the vessels database system to support the PSM implementation 	December 2016
<ul style="list-style-type: none"> • Technical workshop on SOP on vessel inspections 	February 2017
<ul style="list-style-type: none"> • Development of the database system 	January – October 2017
<ul style="list-style-type: none"> • Testing the system through pilot site demo 	August 2017 – February 2018
<ul style="list-style-type: none"> • Adoption of the system 	April 2018

VI. REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Meeting of the Council of SEAFDEC is requested to take note and endorsement the proposed Regional Cooperation for Supporting the Implementation of Port State Measures in ASEAN Region. The Council is also invited to advise and comments for effective implementation of the PSMA in the ASEAN region to enhance the capability of ASEAN Member States in combating IUU fishing through the PSM.

REGIONAL PLAN OF ACTION FOR THE MANAGEMENT OF FISHING CAPACITY

I. EXECUTIVE SUMMARY

In response to request from SEAFDEC Member Countries, SEAFDEC has worked with the DOF/Malaysia on the approaches to support for the Management of Fishing Capacity for the ASEAN region, while agreed in principle to target on the Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity). The 1st Regional Technical Consultation (RTC) on the Development of RPOA-Capacity was organized on 24-25 Feb. 2015 with the aims to review the AMSs' management of fishing capacity and identify the issues/problems as basic information to be included in the RPOA-Capacity. The results of the RTC as appeared in the Appendix 2 are used for developing the zero draft RPOA-Capacity by AMS experts at its Meeting on 19-21 August 2015. This zero draft was then discussed at the 2nd RTC held on 15-17 December 2015 in Phuket Thailand and the Meeting came up with the final Draft of RPOA-Capacity. The RPOA-Capacity contain four (4) parts: Part 1 as an introduction part includes rationale, problems on the sustainable fisheries management, and the needs for RPOA-Capacity; Part 2 include the goals and objectives of the RPOA-Capacity; Part 3 refers to the guiding principle in developing the RPOA-Capacity. Part 4 is the main part of the Plan of Action for the Management Fishing Capacity and this part comprises of 5 Sessions as follows: 1) Assessment of Fishing Capacity; 2) Preparation and Implementation of National Plans; 3) International Consideration; 4) Required Urgent Measures for Regional Fisheries Management; and 5) Mechanisms to Promote of the Implementation. It is expected that the final draft of RPOA-Capacity will be discussed and endorsed by the 48th Meeting of the Council in order for further submission to the 24th ASWGF and high-level of the Fisheries Ministry for support and endorsement in 2016.

II. BACKGROUND

The management of fishing capacity is one of key elements in fisheries management to be able to match fishing effort with available resources, to protect important habitats as well as to enforce regulations to safeguard the interest of specifically vulnerable groups of people. In general the fisheries management schemes that are being developed aim to regulate the active fishing effort by developing schemes and management plans to give directions on *where, how, when and by whom* to fish. The management directions can include information on total number of vessels that can be allowed at a given time and area; the type of gear to be used (and not to be used); special restrictions on protected areas, protected species and defined seasonal restrictions; traditional rights to fish, exclusive rights and other specified rights, as well as other additional aspects that should be considered and respected when regulating the actual fishing effort.

As a guide, reference is made to the FAO Code of Conduct for Responsible Fisheries. The Code included several recommendations to address the concerns and to improve fisheries management. Furthermore, FAO Member States adopted, subsequent to the Code of Conduct an International Plan of Action on the Management of Fishing Capacity, 1999 (IPOA-Capacity). The IPOA-Capacity specified a number of steps to be taken, including: a) assessment and monitoring of fishing capacity; b) preparation and implementation of national plans of action (NPOA-Capacity); and c) international (regional) considerations and recommendations for immediate steps to address the management of fishing capacity. There are already a number of countries in the region that have developed or in the process to develop NPOA-Capacity. Some countries have yet to develop NPOA-Capacity but they have indicated that they have laws and regulations in place that are supportive to the management of fishing capacity.

SEAFDEC, on the request by Member Countries, has since 2006 been able to organize expert consultations and regional technical consultations highlighting the critical importance to address the management of fishing capacity in Southeast Asia to reduce pressure on available stocks, to mitigate conflicts over resources and to promote sustainability for people dependent on fisheries resources. Unregulated (and/or un-enforced) fisheries and over-capacity, relative to available resources, also tend to increase incidences of illegal fishing within countries, as well as across boundaries with increased hardship facing smaller communities as a result. To improve levels of sustainability and equal

sharing of benefits from fisheries, it is required that immediate efforts are called for to reduce over-capacity, to improve (implementation of) regulatory measures and to combat illegal fishing throughout the ASEAN region.

In addition, the importance of the management of fishing capacity to the sustainability of fisheries and food security was one of the central themes raised during the **ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020** held in Bangkok, Thailand, 13-17 June 2011 with the Sub-theme 1.2, being fully focused on the “Management of Fishing Capacity” and subsequently reflected in the **2011 Resolution and Plan of Action**.

Following the request from Member Countries and to support Member Countries in managing fishing capacity and in the development of the NPOA's, it is suggested that there are needs for a Regional Plan of Action for the management of fishing capacity (RPOA-Capacity). The objective of the RPOA-Capacity would be to serve as guidance for the management of fishing capacity in an ASEAN perspective and also to support the countries in the development and implementation of their respective NPOA-Capacity. Besides, the RPOA-Capacity would be useful for fisheries management and/or capacity management at the sub-regional areas such as Andaman Sea, Gulf of Thailand and Sulu-Sulawesi Seas.

III. NATIONAL INITIATIVES ON MANAGING FISHING CAPACITY:

Brunei Darussalam:

Under the policy of Sustainable Fisheries Management, Brunei Fisheries Limits, Chapter 130 and Fisheries Order, 2009 provide legislative infrastructure for the management of fisheries activities and fishing areas, as well as marine reserves and parks. This underlying policy has been translated into operational and field level management programs to ensure:

- The protection of resources from over-fishing and destructive fishing activities;
- The protection of breeding grounds (coral reefs and mangroves) and promote recruitment and recovery.
- Promotion of responsible fishing and environment-friendly technology.

The fishing capacity management has been undertaken in Brunei Darussalam and some mitigating measures have been implemented to abate the recent decline in the fish capture production such as;

- Implementation of fishing zonation system;
- Moratorium on the issuance of new fishing licenses for commercial bottom trawlers, since 2000;
- The implementation of new mesh size regulations using 51 mm square mesh netting for the trawl cod end, since 2002;
- Imposition of moratorium on small-scale fishing activities in Zone 1 (0 ~ 3 nautical miles from the shore) since 2008;
- Promoting the conservation program in Brunei waters, for the purpose of habitat enrichment, which in turn would create more breeding grounds for the young fish, increase biodiversity as well as creating more alternative fishing grounds to the fishermen;
- Prohibitions of destructive fishing implements and activities such as cyanide fishing and use of explosives under the Fisheries Order 2009;
- Published the NPOA-IUU fishing in 2011.

Cambodia:

The legislative and institutional systems for fishing capacity management for marine fisheries subsector were in place such as under the Law on Fisheries-2007 as follows:

- Article 45, All type of fishery exploitation in the marine fisheries domain, except subsistence fishing shall be allowed only in the possession of license and the exploitation shall follow the conditions and obligations in fishing logbook. The model of fishing logbook shall be determined by the proclamation of the Ministry of Agriculture Forestry and Fisheries (MAFF).
- Article 47, Fishermen shall transship fishery products at a fishing port determined by Fisheries Administration (FiA). Foreign fishing vessels that are permitted to fish in the marine fisheries domain shall inform the FiA prior to port in marine fisheries domain in Cambodia. Other terms

and conditions on transshipment of fishery products and anchoring of the foreign fishing vessels shall be determined by FiA, and

- Article 48: Based on precise scientific information that the fishing practices have been or are being the cause of serious damage to fish stock, FiA has the right to immediately and temporarily suspend fishing activities and propose for a re-examination of the fishing agreement in order to seek for the decision from the MAFF.

Under the NPOA for management of fishing capacity, the marine capture fisheries is classified into two (2) levels, whereby national fishing is managed by the Ministry of Agriculture, Forestry, and Fisheries (MAFF) and Fisheries Administration (FiA), whereas international fishing is managed the Cabinet of Prime Minister Office. The NPOA had been drafted and the Inter-Ministries Joint Working Group was formed to accelerate the approval and implementation of the NPOA.

Indonesia:

The legal framework governing marine fisheries subsector in Indonesia are as follows:

- Act No. 31/2004 as amended by No. 45/2009 on Fisheries.
- Act No. 27/2007 as amended by No. 1/2014 on Coastal and Small Islands Management.
- Regulation of Government No. 60/2007 on Fish Resources Conservation.
- Ministerial Decree No. 45/2011 on Estimation of Fish Resources Potential in FMA.

The fishing capacity management has been undertaken in Indonesia such as data collection and reporting, moratorium to imported fishing vessels, prohibition of transshipment at sea, prohibition of lobster and crab catch, prohibition of trawls and seine nets, and establishment of closing area for fishing (conservation). Indonesian NPOA is still in the draft stage and yet to be launched. The NPOA is referred as technical guidance and detailed action plan within the framework of the NPOA are in the process of development.

Malaysia:

The Fisheries Act 1985 provides the legislative framework for the conservation, management and development of the capture fisheries in Malaysia. For the development of fishing industry in Malaysia closely followed National Agro-Food Policy 2011-2020 (NAP) “Sustainable development of capture fisheries industry is important to ensure fisheries resources are preserved and could be sustained for the future.” The Phase-2 NPOA-Capacity was adopted, it is focused on 12 identified issues and challenges and 3 strategies: The strategies for the NPOS-Capacity are 1) Review and implement effective conservation and management measures; 2) Strengthen capacity and capability for monitoring and surveillance programs; and 3) Promote public awareness education programs. For long term objective of this Phase-2 NPOA-Capacity is for Malaysia to achieve an efficient, equitable and transparent management of fishing capacity in marine capture fisheries by 2018.

Myanmar:

Legal Frame Work on management of fishing capacity in Myanmar is referred to Myanmar Marine Fisheries law (1990) and the law relating to the fishing rights of foreign fishing vessels (1989). In addition, the Country’s regulations related to management of fishing capacity are in place as follows: 1) Prohibition of building or importing new fishing vessel; 2) prohibited fishing in high sea; 3) Trawl can transform to other fishing gears, but other fishing gears can not transform to trawl; 4) flag state measure and port state measures including the installing of VMS and implementation of the Catch Certificate scheme. The challenges and future implementation for management of fishing capacity in Myanmar are concluded as 1) To promote effective inspection for all fishing vessels at sea; 2) To initiate using VMS for effective MCS system in all fishing vessel; 3) To encourage using TEDs and JTEDs in trawl fishing vessels; and lastly 4) To study the survey on fishing capacity of each fishing gear group.

The Philippines:

Legal and Institutional Framework in the Philippines are covered two classes of fishing vessels such as 1) Commercial Fishing – fishing with the use of fishing vessels 3.1 Gross Tons (GT) and above and operating beyond 15 kilometers from the shoreline; and 2) Municipal Fishing – fishing with the use of fishing vessels less than 3.1 GT and operating within the area of 15 kilometers from the shoreline. Registration of commercial fishing vessels is the mandate of the Maritime Industry Authority

(MARINA) while registration of municipal fishing vessels is delegated to the Local Government Units (LGUs). For the Licensing of commercial fishing vessels is the mandate of the Bureau of Fisheries and Aquatic Resources while licensing of municipal fishing vessels is the authority of the Local Government Units (LGUs).

The Philippines does not have a NPOA on Fishing Capacity Management yet, however the Country plan to develop NPOA within 5 years. Nevertheless, Philippines has established a moratorium on the issuance of new licenses and other clearances as well as stopped building new boats and importing second hand boats. Philippines also conducted joint mobile registration and licensing with MARINA and conducted inventory of all commercial fishing boats. These relevant issues are the challenges for the Philippines to implement in near future.

Singapore:

Based on the Legislative and institutional systems in Singapore, fishing capacity is monitored through catch declaration and reporting which are parts of AVA's licensing requirements. There is no more licenses issued for inshore fishing vessels. Related to the NPOA-Capacity, Singapore **initiated inter-agency** engagements to have regular discussion and coordination towards the development of SG's NPOA against IUU fishing activities, including the implementation of relevant PSMA measures. In addition, Singapore plans to review of policies and amendments to Fisheries Act to further strengthen enforcement powers.

Thailand:

The legal and Institutional Framework related to management of fishing capacity in Thailand is referred to the new Fisheries Act, 2015 was composed of 11 Chapters and 104 sections, the new Fish Act will be implementing on 1st April 2015. It was clear that the enactment of this law aimed primarily at the conservation of the fishery resources, particularly those in freshwater or inland habitats, coastal habitats and marine habitats. The Act has a provision for the adoption of a regulation (the instrument that requires a Cabinet approval) and a notification (instrument that can be issued by the responsible Ministry in pursuant to the Act). A number of regulations and notifications have been adopted and issued for the management of both freshwater and marine fisheries. The Chapters are composed of Fisheries Management, Fishery Zone, Promotion of Aquaculture, Standard of Fish or Fish Products, Importation and Exportation of Fish and Fish Products, Overseas Marine Fishery, Fees on license or Permit and Substitute, Transferability, Competent Official, Administrative Measure, Penalties. The Department of Fisheries (DOF) serves as the principal agency dealing with fishing, marine resources, and the management of maritime habitats. Department of Marine and Coastal Resources (DMCR) and the Office of Natural Resources and Environmental Policy and Planning (ONEP), under the Ministry of Natural Resources and Environment (MONRE), with their legal mandates overlapping with the DOF, particularly in the maritime and coastal areas, have been working closely together.

Viet Nam:

In Viet Nam, the NPOA-Capacity was developed and adopted in principal referred to the country's legal documents such as Fisheries Law (2003); Viet Nam's Marine Strategy to 2020; Government's relevant decrees, resolutions and decisions; as well as to the International legal documents such as International Convention on the Law of the Sea (1982); Code of Conduct for Responsible fisheries (FAO, 1995); and the FAO Tech. Guidelines of IPOA for the Management of Fishing Capacity. The specific objectives are as follows 1) to reduce total trawl fishing boats by 15% in 2014-2017, and 12% in 2018-2025, 2) Fisheries co-management is applied for 8 coastal provinces in 2014-2017, and 28 provinces in 2018-2025, 3) Fishing boats are controllable in consistence with allowable resources of each particular area in 2018-2025.

IV. DEVELOPMENT OF THE RPOA-CAPACITY

SEAFDEC in cooperation with Department of Fisheries, Malaysia organized the Regional Technical Consultation on Development of Regional Plan of Action - Management of Fishing Capacity (RTC-Capacity), on 24– 26 February 2015 in Kuala Lumpur, Malaysia, with the co-financial support of the Japanese Trust Fund and the SEAFDEC- Sweden Project. The RTC successfully identified the Key Issues and feasible measures with regards to the management of fishing capacity including practical

action and useful measures to consider in the process of developing the RPOA-Capacity (see **Appendix 2**).

SEAFDEC started drafting of the RPOA-Capacity based on the outputs of priority key issues and feasible measures from the 1st RTC for further discussion with the selected Experts from SEAFDEC member Countries. In connection to this, SEAFDEC convened an expert consultation during 19–21 August 2015 in Songkhla, Thailand with the aims to discuss and finalize a zero draft RPOA-Capacity entitled “Experts Group Meeting on Development of the Regional Plan of Action for the Management of Fishing Capacity”. It was attended by experts from respective SEAFDEC Member Countries, senior officers from SEAFDEC Secretariat, MFRDMD and TD. The Meeting finalized a zero-draft of RPOA-Capacity.

Prior the process for endorsement of RPOA-Capacity at the 48th Meeting of the SEAFDEC Council, scheduled in April 2016, the Second Meeting of the RTC on Regional Plan of Action for the Management of Fishing Capacity was convened during 15-17 December 2015 in Phuket, Thailand. The final draft of the ASEAN Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including with the template for the Development of NPOA-CAPACITY are agreed by the Meeting as appeared in the **Appendix 1**.

V. REQUIRED CONSIDERATION BY THE 48th COUNCIL MEETING

The 48th Meeting of the Council of SEAFDEC is requested to consider and endorse the Final Draft of the ASEAN Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) including the template for the Development of NPOA-Capacity based on the country consultations as shown in **Appendix 1**, for subsequent submission of the Final Draft for consideration by the ASEAN. The Council is also invited to provide advise and comments for effective implementation of the RPOA-Capacity particularly on cooperation in managing fishing capacity at sub-regional and regional levels.

Final Draft¹
ASEAN Regional Plan of Action for the Management of Fishing Capacity
(RPOA-Capacity)
(As of 17 December 2015)

PART 1
INTRODUCTION

During the last three to four decades, many Southeast Asian countries including Indonesia, Thailand, Philippines, Myanmar, Viet Nam, and Malaysia ranked among the top ten countries with the largest fisheries industries in the world. The ASEAN fisheries sector has played very important role in providing fish for food security, generating livelihood and employment, alleviating poverty, and increasing national revenues. In 2013, the total fishery production by two sub-sectors: inland and marine capture fisheries, was about 19.1 million metric tons (MT) valued at about 23.5 billion US\$ (SEAFDEC, 2015²). The introduction of new fishing gear technologies as well as post-harvest and processing equipment had since 1960s led to the rapid and intensive development of fisheries industry in the region, particularly in Thailand, Indonesia, Philippines and Viet Nam.

The growing fishing fleets throughout the region coupled with rapid increases in harvesting capacity, has not been matched with the development of national capacities and regional/sub-regional cooperation to manage the fishing effort with due consideration given to the sustainability of fishery resources. Limited management, or regulation and control, of the active fishing capacity has allowed fisheries to operate in an “open-access regime” leading to continued increase in number of vessels and people engaged in fisheries. Therefore, there is a need to improve and implement licensing schemes and other capacity management measures that effectively limit entry into the fisheries, replacing the present inadequately designed systems.

As reported, the estimated total number of fishing vessels in the ASEAN Member States (AMSs) in 2014 was 1.86 million vessels of which almost 99% are fishing vessels less than 24 meters in length. Indonesia, Philippines and Viet Nam have the largest numbers of fishing vessels with about 1,183,000, 478,500, and 124,600 vessels, respectively, although such numbers are believed to be only underestimations (Countries’ reports during RTC-RFVR, June 2015). Since 1980s, most of the near shore fishing areas in Southeast Asia are overfished (Silvestre, G.T., 2003³). In many coastal areas however, the catch per unit efforts and other biological parameters and/or reference target points indicate declining status of fish stocks. Even though management instruments had been introduced to protect vulnerable fish stocks (*e.g.* closed areas and seasons, gear restrictions) together with efforts to contain the growth of the numbers of fishing fleets, the impact of such efforts still could not be seen in terms of securing sustainability of available resources.

In order to meet the demand for fish by the growing populations, and to maintain or increase the supply of raw materials for the processing industries considering that the region’s fishery resources are facing heavy exploitation, fishing activities have been expanded from the coastal areas to offshore waters and even outside of the national Exclusive Economic Zones (EEZs). Such expansion takes place both with and without proper authorization and licensing - causing widespread illegal, unreported and unregulated (IUU) fishing, including encroachment into other countries’ EEZs. The depletion of fishery

¹ This Final Draft was adopted during the Second RTC on Regional Plan of Action for Management of Fishing Capacity in December 2015, based on Zero Draft developed by the AMSs Experts at the Experts Group Meeting in August 2015 taking into consideration the results from the 1st RTC on Regional Plan of Action for Management of Fishing Capacity in February 2015

² SEAFDEC, 2015. Fishery Statistical Bulletin of Southeast Asia 2013. Southeast Asian Fisheries Development Center, Bangkok, Thailand.

³ Silvestre, G.T. et al., 2003. South and Southeast Asian Coastal Fisheries: Their Status and Directions for Improved Management – Conference Synopsis and Recommendation. WorldFish Center Conference Proceedings 67 (2003)

resources in the region by excessive fleet capacity and harvesting effort needs to be considered in the perspective of related trans-boundary management issues together with expected losses in the generation of national economic revenues. Illegal and unsustainable fisheries that end up with trade restrictions would have direct implications on the trade of fish and fishery products not only to world markets but also within the ASEAN region.

It is well recognized that there is an urgent need for countries to cooperate in order to improve fisheries management, especially, with regards to the management of fishing capacity at national, sub-regional and regional levels. In order to match fishing effort with available resources, management of fishing capacity is one of the most basic tools available in support of sustainable fisheries. Moreover, fishing effort should be controlled to protect important habitats while regulations should be enforced to safeguard the interest of, specifically the vulnerable groups of people.

It is in responding to requests of the AMSs that SEAFDEC had organized since 2006 experts consultation and regional technical consultations highlighting on the critical importance of addressing the management of fishing capacity in Southeast Asia. This is meant to reduce pressure on available stocks, mitigate conflicts over resources and promote sustainability for people dependent on fishery resources. Unregulated (and/or un-enforced) fisheries and over-capacity, relative to available resources, also tend to increase incidences of illegal fishing within countries, as well as across boundaries resulting in increased difficulties faced by smaller communities. To improve the levels of sustainability and promote equal sharing of the benefits from fisheries, it is necessary that immediate efforts are called for to reduce over-capacity, improve (implementation of) regulatory measures and combat illegal fishing throughout the ASEAN region. It should be noted that the importance of management of fishing capacity to the sustainability of fisheries and food security was one of the central themes raised during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020, held in Bangkok, Thailand, 13-17 June 2011 under Sub-theme 1.2 that fully focused on the “Management of Fishing Capacity” and subsequently reflected in the adopted 2011 Resolution and Plan of Action.

Referring to the FAO Code of Conduct for Responsible Fisheries (1995), several recommendations on the need to improve fisheries management have been included. Furthermore, the FAO Member States subsequently adopted the International Plan of Action on the Management of Fishing Capacity 1999 (IPOA-Capacity). The IPOA-Capacity specified a number of steps to be taken including: a) assessment and monitoring of fishing capacity; b) preparation and implementation of national plans of action (NPOA-Capacity); and c) international (regional) considerations and recommendations for immediate steps to address the management of fishing capacity.

In general, the fisheries management schemes that are being developed should aim to regulate the active fishing effort by developing schemes and management plans to give directions on where, how, when and by whom to fish. The management directions can include information on total number of vessels allowed at a given time and area; the type of gear to be used (and not to be used); special restrictions on protected areas, protected species and defined seasonal restrictions; traditional rights to fish, exclusive rights and other specified rights⁴, as well as other additional aspects that should be considered and respected when regulating the actual fishing effort. A number of countries in the region had developed or are in the process of developing their respective NPOA-Capacity. Some countries that had not yet developed the NPOA-Capacity have indicated that the necessary laws and regulations are in place and are supportive to the management of fishing capacity.

Recognizing the importance of management of fishing capacity, the ASEAN sought the collaboration of SEAFDEC to develop the Regional Plan of Action for Management of Fishing Capacity (RPOA-Capacity) during the Fourth Meeting of the ASEAN Fisheries Consultative Forum (AFCF) in 2012 in Indonesia. The development of such activity was considered and supported by the SEAFDEC Member Countries during the 47th Meeting of the SEAFDEC Council in 2014.

The overall objective of the RPOA-Capacity would be to serve as guide for the management of fishing capacity in an ASEAN perspective and also to **support the ASEAN Member States in the**

⁴ As stipulated in respective countries’ national laws and regulations

development and implementation of their respective NPOA-Capacity (SEAFDEC, 2006⁵). The RPOA-Capacity is also meant to support the need to enhance regional cooperation on fisheries management and/or management of fishing capacity in sub-regional areas such as the Andaman Sea, Gulf of Thailand, South China Sea⁶ and Sulu-Sulawesi Seas. Strengthened regional and sub-regional cooperation on the management and control of fishing capacity would provide an effective platform for the AMSs to support efforts to combat IUU fishing.

The **RPOA-Capacity** has been developed through dialogue with ASEAN-SEAFDEC Member Countries such as the regional technical consultations and expert meeting (1st RTC in February 2015 in Malaysia, Experts meeting in August 2015 in Thailand and 2nd RTC in December 2015 in Thailand) organized by SEAFDEC with the funding support from the Government of Japan through SEAFDEC-Japanese Trust Fund and the Government of Sweden through the SEAFDEC-Sweden Project. The RPOA-Capacity contain four (4) parts: Part 1 as an introduction part includes rationale, problems on the sustainable fisheries management, and the needs for RPOA-Capacity; Part 2 include the goals and objectives of the RPOA-Capacity; Part 3 refers to the guiding principle in developing the RPOA-Capacity. Part 4 is the main part of the Plan of Action for Managing Fishing Capacity and this part comprises of 5 Sessions as follows: 1) Assessment of Fishing Capacity; 2) Preparation and Implementation of National Plans; 3) International Consideration; 4) Required Urgent Measures for Regional Fisheries Management; and 5) Mechanisms to Promote of the Implementation.

Thus, it is expected that the RPOA-Capacity could also serve as basis for the AMSs in formulating relevant policies and provide an enabling environment for clear direction and understanding of the need to effectively manage the fishing capacity at national level. In addition, the RPOA-Capacity is intended to respond to the need for AMSs to strengthen regional cooperation in managing fishing capacity in sub-regional areas such as the Gulf of Thailand, South China Sea⁵, Andaman Sea, Sulu-Sulawesi Seas, and other sub-regional areas where the fisheries need to be managed by concerned AMSs.

PART 2 GOALS AND OBJECTIVES

The RPOA-Capacity is intended to serve as guide for the AMSs in developing their respective National Plans of Action for Managing Fishing Capacity (NPOA-Capacity) as well as in enhancing regional cooperation on sustainable fisheries management and improving regulations on fishing effort at sub-regional/regional level. Thus, the ultimate goal of the RPOA-Capacity is to facilitate development of appropriate fishing capacity management to ensure that levels of fishing effort are commensurate with sustainable use of available fishery resources.

The specific objectives of the RPOA-Capacity are to:

- a) enhance the effective, efficient, equitable and transparent management of fishing capacity for long-term sustainability;
- b) ensure that fishery managers should endeavor to initially limit fishing capacity at the present level and progressively reduce the fishing effort applied to affected fisheries;
- c) avoid growth in fishing capacity that undermines the long-term sustainability objectives; and
- d) enhance sub-regional cooperation in managing fishing capacity, specifically with regards to trans-boundary species or shared species.

⁵ SEAFDEC. 2006. Report of the Experts Meeting on Management of Fishing Capacity in Southeast Asia, 27-29 July 2006, Sihanouk Ville, Cambodia. Southeast Asian Fisheries Development Center. 141 p.

⁶ The term “South China Sea” is used in its geographical sense and does not imply recognition of any territorial claims within the area (UNEP/GEF/SCS Project Document on “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand”)

PART 3 GUIDING PRINCIPLE

The RPOA-Capacity is developed based on the principles stipulated in international and regional instruments, such as the FAO Code of Conduct for Responsible Fisheries (CCRF), International Plan of Action for Managing Fishing Capacity (IPOA-Capacity), the relevant rules of international laws that are reflected in the United Nations Convention on the Law of the Sea of 10 December 1982 (UNCLOS), and the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region (2001, 2011).

The RPOA-Capacity is developed through consultation processes with experts and officials from the ASEAN-SEAFDEC Member Countries in February, August and December of 2015.

PART 4 PLAN OF ACTION FOR MANAGING FISHING CAPACITY

Section I: Assessment of Fishing Capacity

Diagnosis and identification of fisheries and fishing capacity

- 1) States should assess and regularly update the availability of active fishing capacity at local, national, trans-boundary, sub-regional and regional levels as basis for cooperation on the management of fishing capacity.
- 2) States should improve collection system for catch and effort data to include all types of fisheries such as large-scale or commercial fisheries and small-scale or artisanal fisheries.
- 3) States should regularly conduct national assessments of fishery resources to estimate appropriate reference points and compare with the actual fishing efforts at given times as well as with the aggregated fishing effort in defined sub-region.
- 4) States should adopt national measurements and definitions of fishing capacity including vessels, gears, people engaged in fisheries.

Section II: Preparation and Implementation of National Plan of Action for the Management of Fishing Capacity

2.1 Development of national plans and policies

- 1) States should establish system(s)/mechanism(s) to develop NPOA-Capacity and to monitor, evaluate, review its effectiveness and revise (if necessary).
- 2) States should not make insufficient information on fisheries resources as the reason to delay the implementation of policies to control fishing capacity and reduce its level where appropriate, and in accordance with the precautionary principle using currently available information.
- 3) States should develop measures to be undertaken to address overcapacity:
 - a. Implement schemes to limit the number of fishing vessels and fishing licenses
 - b. Put into place management systems that would prevent fishing capacity from expanding beyond the optimum level which the available resources can support in the long run or related target levels, even though the current status does not indicate any overcapacity
 - c. Develop measures and encourage the use of supporting tools to prevent or eliminate excess fishing capacity to ensure that the levels of fishing effort are commensurate with the sustainable use of fishery resources to secure the effectiveness of conservation and management measures
 - d. Consider the application of fishing zones as a robust approach to manage and restrict fishing capacity in certain fisheries, especially for coastal and relatively stationary fisheries, in areas reserved for traditional and smaller-scale fisheries supported by co-management arrangements
 - e. Consider the use of appropriate reference points *e.g.* Maximum Sustainable Yield (MSY), Catch Per Unit Effort (CPUE) as indicators of resource status for the management of fishing capacity at national and/or regional/sub-regional levels

- f. Encourage industry-based capacity adjustments and implement input and output control, and other management measures
 - g. Consider the development of fishing vessel construction and importation control measures as a proactive approach for controlling fishing capacity
 - h. Consider the introduction or development of fishing fees scheme such as economic rent of the fishery resources referred to as 'resource rent', as basis for fishing vessel registration and fishing licenses
- 4) States should establish records of fishing vessels registration/licensing, fishing gear licensing system, and
 - a. improve the national procedures for fishing vessel registration and fishing licensing systems (vessels, gears, fishers)
 - b. share information on registered vessels and issued fishing licenses within sub-regions and/or the region as a whole (if needed)
 - c. establish national database for fishing vessels registration and fishing licenses
 - 5) States should conduct a systematic assessment of the consequences of overcapacity from production and economic perspective together with its impact on major stakeholders at local, national and sub-regional levels.
 - 6) States should strengthen, consistent with national fishery laws/regulations and other related domestic laws, domestic mechanisms to deter nationals and beneficial owners from engaging in illegal, unreported and unregulated fishing activities, and States should facilitate the implementation of such mechanisms and ensure that enforcement actions are carried out.
 - 7) States should consider, in the perspective of continued high pressure on available fisheries resources (due to overfishing, habitat and environmental degradation and/or climate variability/change), to, at national and sub-regional level, develop and implement fishery resources enhancement programs and/or recovery plans. The plans should have the multiple objectives of increasing the fish stocks, providing breeding grounds of some target species, protecting and restore important habitats, increasing fish shelter areas including artificial habitats to replace the deteriorated natural habitats. The following actions are among the key approaches to ensure that the status of fishery resources are maintained and/or enhanced:
 - a. Coordinate with relevant agencies to regularly compile information on the status and availability of important fish stocks, including information on areas of importance for different stages of their life cycle;
 - b. Enhance understanding of the importance of stock enhancement including habitat conservation in order to conserve the early life cycle stage of fishes such as spawning, nursery grounds, and protect the migratory paths (that might be trans-boundary);
 - c. Develop fishery management tools, including fisheries *refugia*, closed areas, protected areas and aquatic reserves for both inland and marine areas for implementation at national level and in trans-boundary areas to effectively conserve and manage fish stocks, trans-boundary fish stock and to protect habitats, on a case-by-case basis in accordance with the best available scientific information and precautionary approach;
 - 8) States should strengthen their respective fisheries related institutions and provide adequate support to research on issues related to the management of fishing capacity. Coordinated international research is also recommended, especially with regard to the development of tools and policy instruments which could be more appropriate at country/sub-regional/regional levels.
 - 9) States should harmonize and coordinate the implementation of the NPOA-Capacity with other related NPOAs/Policies and Programs to achieve effective control of fishing capacity.
 - 10) States should consider the socio-economic requirements, including alternative sources of employment and livelihood to fishing communities which bear the burden of reductions in fishing capacity.
 - 11) States should develop and promote awareness-raising campaigns and programs to all relevant stakeholders in order to increase the effective implementation of NPOA-Capacity.
 - 12) States should work closely with stakeholders in developing and adopting policy framework that would improve the suitability of input-output technical control levels that will be used in the formulation and implementation of the NPOA-Capacity.

2.2 *Subsidies and economic incentives*

- 1) States should assess the effect that some economic incentives, including subsidies, may have on the development and implementation of efforts to control fishing capacity.
- 2) States should undertake a national/sub-regional review of the various subsidies and other economic incentives being provided to their respective fishing industries, together with qualitative assessments of their likely impact on fishing capacity, expected investment decisions, and sustainability. It should be noted that not all subsidies and economic incentives are necessarily faulty such as incentives related, for example, to safety, fish quality, infrastructures, buy-back program.
- 3) States should reduce and progressively eliminate fisheries subsidies and/or incentives that contribute to overfishing, overcapacity and over-investment.

2.3 *Regional Considerations and Cooperation*

- 1) States should provide mutually agreed data on vessels, gears and people engaged in fisheries as well as other fisheries-related information with regards to catches, landing and available stocks to provide a complete, accurate and timely way to support efforts to manage fishing capacity at sub-regional areas.
- 2) States and sub-regions should, inter alia, adopt appropriate measures, based on the best scientific evidence available, which are designed to maintain or restore stocks at sustainable levels, as qualified by relevant environmental and economic factors, including the special requirements of some developing countries in the region.
- 3) States should consider the establishment of sub-regional/regional fisheries management arrangements/bodies for the purpose of managing the resources as well as fishing capacity on a cooperative basis. Such cooperation is essential for the sub-regional/regional managements of trans-boundary fish stocks.
- 4) States should support co-operation and exchange of information with regional and sub-regional fisheries organizations.

Section III: International Considerations and Fishing in High Seas or RFMO Competent Areas

- 1) States should collaborate with RFMOs by sharing information, participating in and developing harmonized systems of data collection, and supporting the actions of the respective RFMOs to limit fishing capacity in the international waters.
- 2) States are encouraged to comply with international agreements which are related to the management of fishing capacity, and in particular, the 1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas known as the Compliance Agreement and the Agreement of the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks known as the 1995 UN Fish Stocks Agreement.
- 3) States should ensure that no transfer of capacity to the jurisdiction of another State should be carried out without the expressed consent and formal authorization of that State.
- 4) States should, in compliance with their duties as Flag States, avoid approving the transfer of vessels flying their flag to high sea areas where such transfers are inconsistent with responsible fishing under the Code of Conduct.

Section IV: Required Urgent Measures for Regional Fisheries Management

- 1) States should develop policy frameworks for the sub-regional/regional management of fishing capacity. To be effective it is required that policies are developed simultaneously by relevant authorities (in accordance with national laws and regulations) in each of the countries and with national and sub-regional coordination of implementation and enforcement to ensure that fishing capacity is limited to agreed target levels.
- 2) States, in collaboration with other States, should assess the extent of overcapacity in defined fishing areas (trans-boundary, sub-regional and/or regional). Choose either an input or output basis as a reference point together with a range of indicators for the purpose of measuring active over-capacity.

- 3) States should develop sub-regional/regional conservation and management measures for fish stocks that are currently unmanaged regionally, in accordance with the best available scientific information on the status of such stocks.
- 4) States should conduct fishers/stakeholders fora at sub-regional/regional levels to build awareness on the need for conservation and management of fisheries resources and that in the management context, the effective management of fishing capacity is a requirement for effective conservation and management.
- 5) States should enhance the political will and awareness towards sub-regional/regional fisheries management and conservation.
- 6) States should strengthen sub-regional/regional Monitoring, Control and Surveillance (MCS) networks.

Section V: Mechanisms to Promote Implementation

- 1) States should develop information programs to increase awareness on the need for the management of fishing capacity, and the cost and benefits resulting from adjustments in fishing capacity.
- 2) States should support the sharing/exchange of scientific and technical information on issues related to the management of fishing capacity and promote its regional availability using existing national and sub-regional fora.
- 3) States should support capacity building as well as institutional strengthening and consider providing financial, technical and other assistance to some developing countries in the region to address issues related to the management of fishing capacity.
- 4) States should report to the ASEAN and SEAFDEC on the progress of assessment, development and implementation of their respective plans for the management of fishing capacity as part of their efforts in implementing the 2011 ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region towards 2020.
- 5) SEAFDEC will, as directed by the Council Directors, support the development and implementation of National Plans of Action (NPOAs)¹ for the management of fishing capacity through specific, in-country technical assistance projects.

XXXXXXXXXXXXXXXXXXXXXXXXXX

¹ Based on the Recommended Template agreed upon during the Second Regional Technical Consultation on Regional Plan of Action for Management of Fishing Capacity in December 2015 in Thailand

ABBREVIATIONS

AFCF	ASEAN Fisheries Consultative Forum
AMSs	ASEAN Member States
ASEAN	Association of Southeast Asian Nations
CCRF	Code of Conduct for Responsible Fisheries
CPUE	Catch Per Unit Effort
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
IPOA	International Plan of Action
IUCN	International Union for Conservation of Nature
IUU fishing	Illegal, Unregulated, and Unreported fishing
NPOA	National Plan of Action
MCS	Monitoring, Control and Surveillance
MSY	Maximum Sustainable Yield
RFMO	Regional Fisheries Management Organization
RFVR	Regional Fishing Vessel Record
RTC	Regional Technical Consultation
SEAFDEC	Southeast Asian Fisheries Development Center
UNCLOS	United Nations Convention on the Law of the Sea
WTO	World Trade Organization

DEFINITION OF TERMINOLOGIES

1. **Beneficial owner:** This is a legal term where specific property rights (“use and title”) in equity belong to a person even though legal title of the property belongs to another person (Black's Law Dictionary (2nd Pocket ed. 2001 pg. 508)). This often relates where the legal title owner has implied trustee duties to the beneficial owner.
2. **Buy-back program:** This is a program usually government sponsored, for buying vessels or licenses from fishers and removing the vessels from the fishery (<https://stats.oecd.org/glossary/detail.asp?ID=248>; <http://www.fao.org/3/a-a1338e/a1338e14.pdf>)
3. **Catch Per Unit Effort (CPUE):** also called catch rate - is frequently the single most useful index for long-term monitoring of a fishery. Declines in CPUE may mean that the fish population cannot support the level of harvesting. Increases in CPUE may mean that a fish stock is recovering and more fishing effort can be applied. CPUE can therefore be used as an index of stock abundance, where some relationship is assumed between that index and the stock size. Catch rates by boat and gear categories, often combined with data on fish size at capture, permit a large number of analyses relating to gear selectivity, indices of exploitation and monitoring of economic efficiency. (<http://www.fao.org/docrep/004/Y2790E/y2790e02.htm#TopOfPage>)
4. **Commercial Fisheries:** Fisheries undertaken for profit and with the objective to sell the harvest on the market, through auction halls, direct contracts, or other forms of trade. (FAO definition)
5. **Community-based Management:** The core feature of locally developed, decentralized resource management is that user communities are ceded the rights and have the responsibilities for managing their own resources, typically using a mix of traditional or more formalized mechanisms of contract and enforcement to define access, exploitation methods and intensity. This is increasingly being applied in fisheries, though in many cases, the management structure is widened to include public sector agencies and other partners, in co-management. (<http://www.fao.org/fishery/topic/16626/en>).
6. **Co-management:** This is typically defined as a partnership arrangement between government and the local community of resource users, sometimes also connected with agents such as NGOs and research institutions, and other resource stakeholders, to share the responsibility and authority for management of a resource. There are no standardized approaches, but rather a range of arrangements, levels of sharing of responsibility and power, and ways of integration of local management mechanisms and more formalized government systems. In addition, the term is referred to the approach that is gaining particular importance in small-scale fisheries, for which local management capacity and responsibility, combined with the support of formal legal frameworks and information/decision making systems may offer particular advantages. However, their potential depends on the existing policy and legal environment, local and national support for community-based initiatives, and the capacities of various partners. (<http://www.fao.org/fishery/topic/16625/en>).
7. **Economic rent:** Economic rent can be defined as the surplus value created during the production of a good or service, due to the ownership of a factor of production that is in fixed or limited supply (<http://www.fao.org/docrep/003/x6827e/X6827E02.htm>)
8. **Excess Capacity:** The existence of underutilized capacity is an indication that excess capacity exists in a fishery, and that fewer boats, if fully utilized, could potentially have caught the same total catch. Excess capacity is a short run phenomenon and depends on the state of the resource and the environment (natural, social and economic) in which the fishers operate. A fishery with a fluctuating stock may exhibit excess capacity in some years and full capacity in others. Similarly, if market conditions are unfavorable, a fleet may exhibit excess capacity that disappears once prices return to their normal level (FAO Technical Guidelines For Responsible Fisheries).
9. **Exclusive Rights:** This is the right or privilege that can only be used by the person who it is granted to (<http://thelawdictionary.org/exclusive-right/>)
10. **Fisheries refugia:** Spatially and geographically defined marine or coastal areas in which specific management measures are applied to sustain important species (fisheries resources) during critical stages of their life cycle, for their sustainable use. (<http://www.fao.org/docrep/017/i3147e/i3147e.pdf>).
11. **Fishing Capacity:** Fishing capacity is, for a given resource condition, the amount of fish (or fishing effort) that can be produced over a period of time (e.g. a year) by a vessel or a fleet if fully utilized, that is if effort and catch were not constrained by restrictive management measures (FAO Technical Guidelines For Responsible Fisheries).

12. **Fishing Effort:** The amount of fishing gear of a specific type used on the fishing grounds over a given unit of time for example hours trawled per day, number of hooks set per day or number of hauls of a beach seine per day. When two or more kinds of gear are used, the respective efforts must be adjusted to some standard type before being added (FAO, 1997).
13. **Incentives:** An incentive is anything that motivates or stimulates people to act (Giger 1996; cited in FAO 1999). Sargent (1994; cited in Tomforde 1995) defines incentives as signals that motivate action. Other definitions refer to the “incitement and inducement of action” (Enters 2001). Within the context of development projects, incentives have also been described as “bribes” and “sweeteners” (Smith 1998). To be of interest and to have an impact, incentives need to affect the cost-benefit structure of economic activities such as plantation management. Hence, in the context of the regional study, incentives can be defined as policy instruments that increase the comparative advantage of forest plantations and thus stimulate investments in plantation establishment and management (<http://www.fao.org/3/a-ad524e/ad524e05.htm>)
14. **Information Program:** A program to disseminate information pertaining to a particular subject or issue related to fisheries management with the objective of improving the understanding of target audience on that subject.
15. **Input/output controls:**
 - **Input controls** are restrictions put on the intensity of use of gear that fishers use to catch fish. Most commonly these refer to restrictions on the number and size of fishing vessels (fishing capacity controls), the amount of time fishing vessels are allowed to fish (vessel usage controls) or the product of capacity and usage (fishing effort controls). Often fishing effort is a useful measure of the ability of a fleet to catch a given proportion of the fish stock each year. When fishing effort increases, all else being equal, we would expect the proportion of fish caught to increase (<http://www.fao.org/docrep/005/y3427e/y3427e06.htm>)
 - **Output controls** are direct limits on the amount of fish coming out of a fishery (fish is used here to include shellfish and other harvested living aquatic animals). Obvious forms of output control are limits placed upon the tonnage of fish or the number of fish that may be caught from a fishery in a period of time (e.g. total allowable catches; in reality, usually total allowable landings) (<http://www.fao.org/docrep/005/y3427e/y3427e06.htm>)
16. **Protected Areas:** This is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values (IUCN Definition 2008) (https://www.iucn.org/about/work/programmes/gpap_home/pas_gpap/)
17. **Protected Species:** a species of animal or plant which it is forbidden by law to harm or destroy (<http://www.collinsdictionary.com/dictionary/english/protected-species>)
18. **Monitoring, Control and Surveillance (MCS):**
 - **Monitoring:** the collection, measurement and analysis of fishing activity including, but not limited to: catch, species composition, fishing effort, bycatch, discards, area of operations, etc. This information is primary data that fisheries managers use to arrive at management decisions. If this information is unavailable, inaccurate or incomplete, managers will be handicapped in developing and implementing management measures.
 - **Control:** involves the specification of the terms and conditions under which resources can be harvested. These specifications are normally contained in national fisheries legislation and other arrangements that might be nationally, sub-regionally, or regionally agreed. The legislation provides the basis for which fisheries management arrangements, via MCS, are implemented.
 - **Surveillance:** involves the regulation and supervision of fishing activity to ensure that national legislation and terms, conditions of access, and management measures are observed. This activity is critical to ensure that resources are not over exploited, poaching is minimized and management arrangements are implemented. (<http://www.fao.org/fishery/topic/3021/en>)
19. **Maximum Sustainable Yield (MSY):** The highest theoretical equilibrium yield that can be continuously taken (on average) from a stock under existing (average) environmental conditions without affecting significantly the reproduction process. Also referred to sometimes as Potential yield. (<http://www.fao.org/faoterm/en/?defaultCollId=21>)
20. **Open access:** is the condition where access to the fishery (for the purpose of harvesting fish) is unrestricted; *i.e.*, the right to catch fish is free and open to all (<https://stats.oecd.org/glossary/detail.asp?ID=3084>)

- 21. Overfishing:** Overfishing is a generic term used to refer to the state of a stock subject to a level of fishing effort or fishing mortality such that a reduction of effort would, in the medium term, lead to an increase in the total catch. Often referred to as overexploitation and equated to biological overfishing, it results from a combination of growth overfishing and recruitment overfishing and occurs often together with ecosystem overfishing and economic overfishing.
(<http://www.fao.org/faoterm/en/?defaultCollId=21>)
- 22. Overcapacity:** is a longer-term problem and reflects a divergence between the resources used to harvest the resource (and the resultant current level of output) and the resources needed (and corresponding output) to harvest the resource at an “optimal” level. Optimal, in this sense, will largely be driven by the objectives of fisheries management, be they economic, social or conservation based (or some combination of all three). If the fishery is severely overexploited, this optimal yield may be higher than the current catch level, but associated with a large biomass. The existence of underutilized capacity may be indicative of overcapacity, but it does not necessarily convey information about the extent of overcapacity. Conversely, with an overexploited stock, little excess capacity may exist even though considerable overcapacity exists (FAO Technical Guidelines For Responsible Fisheries).
- 23. Precautionary Principle:** A set of agreed cost-effective measures and actions, including future courses of action, which ensures prudent foresight, reduces or avoids risk to the resources, the environment, and the people, to the extent possible, taking explicitly into account existing uncertainties and the potential consequences of being wrong.
(<http://www.fao.org/docrep/003/w1238e/W1238E01.htm>).
- 24. Reference Point:** An estimated value derived from an agreed scientific procedure and/or model, which corresponds to a specific state of the resource and of the fishery, and that can be used as a guide for fisheries management. Reference points may be general (applicable to many stocks) or stock-specific. (<http://www.fao.org/faoterm/en/?defaultCollId=21>).
- 25. Regional Fisheries Management Organizations (RFMO):** an intergovernmental organization, established by international agreement, with the competence to adopt conservation and management measures.
(<http://www.fao.org/in-action/vulnerable-marine-ecosystems/key-concepts/en/>).
- 26. Resource Rent:** This is a key concept in fisheries exploitation and management which is the total revenue that can be generated from the extraction of natural resources less the cost of extracting such resources (WTO definition)
- 27. Sub-regions:** This refers to any region or areas whereas more than one country are concerned or the areas that are related to the trans-boundary issues and/or fish stock that needed to be managed together through the collaboration and cooperation. In Southeast Asian region, the sub-regions are referred to the specific sea areas such as Gulf of Thailand, Andaman Sea, Sulu-Sulawesi Seas, etc.
- 28. Stock Enhancement:**

 - The release of cultured juveniles into wild population(s) to augment the natural supply of juveniles and optimize harvests by overcoming recruitment limitation (<http://www.stockenhancement.org/about/history.html>)
 - Stock enhancement of wild fisheries - The enhancement of stocks of an existing wild, open-access fishery with species that may or may not be self-recruiting. This category includes the stocking of relatively large inland water-bodies where there are no property rights to the stock. Generally the recapture rate of stocked fish is low and repeated enhancement is not always necessary to maintain the fishery.
 - Culture-based fisheries - The stocking of small water-bodies is a form of enhancement that is typically undertaken on a regular basis and the stocking activity is the only means of sustaining the fishery. Typically, a person or a group of persons and/or an organization will have property rights to the stock. The source of stock for the enhancement may be derived from capture, but more typically is obtained from a hatchery operation. These features collectively amount to a form of aquaculture that according to the FAO definition (FAO 1997), is referred to as culture-based fishery.
(<http://www.fao.org/docrep/008/ae932e/ae932e05.htm>)
- 29. Fisheries Subsidies:** Fisheries subsidies are government actions or inactions that are specific to the fisheries industry and that modifies - by increasing or decreasing - the potential profits by the industry in the short-, medium- or long-term.
(<http://www.fao.org/docrep/005/y4446e/y4446e0k.htm>)

- 30. Total Allowable Catch (TAC):** The TAC is the total catch allowed to be taken from a resource in a specified period (usually a year), as defined in the management plan. The TAC may be allocated to the stakeholders in the form of quotas as specific quantities or proportions. (<http://www.fao.org/faoterm/en/?defaultCollId=21>)
- 31. Traditional fisheries:** *This involves fishing households (as opposed to commercial companies), using relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips, close to shore, mainly for local consumption. In practice, definition varies between countries, e.g. from gleaning or a one-man canoe in poor developing countries, to more than 20-m. trawlers, seiners, or long-liners in developed ones. Artisanal fisheries can be subsistence or commercial fisheries, providing for local consumption or export. They are sometimes referred to as small-scale fisheries".* (<http://www.fao.org/fishery/topic/14753/en>)
- 32. Trans-boundary Stock:** a group of commercially exploitable organisms/fish, distributed over, or migrating across, the maritime boundary between two or more national jurisdictions, or the maritime boundary of a national jurisdiction and the adjacent high seas, whose exploitation can only be managed effectively by cooperation between the States concerned. (<http://www.fao.org/docrep/006/y4652e/y4652e03.htm>)

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

**RECOMMENDED TEMPLATE
FOR THE DEVELOPMENT OF
NATIONAL PLAN OF ACTION FOR MANAGING FISHING CAPACITY
(NPOA-CAPACITY)**

I. INTRODUCTION

- ❖ General problems and challenges on managing fishing capacity
- ❖ Importance of NPOA-Capacity

II. NATIONAL PROFILE ON FISHERIES

2.1. Fishing Capacity Assessment

- ❖ By types of fishing vessels
- ❖ By types of fishing gear
- ❖ By number of people engaged in capture fisheries
- ❖ By management area
- ❖ Fishing efforts

2.2. Resources Assessment

- ❖ Status and Trends of Fisheries
- ❖ Total production: including by Species, gears
- ❖ Fisheries management indicators *e.g.* MSYs or other indicators
- ❖ Biomass estimation from past surveys
- ❖ Others

2.3. Identification Main Issues and Challenges

- ❖ Overfishing
- ❖ Habitat degradation
- ❖ Encroachment into coastal waters
- ❖ Illegal fishing vessel including use of destructive fishing practices
- ❖ Inadequate enforcement capacity and capability
- ❖ Lack of public awareness and participation
- ❖ Conflicts in policies objectives

2.4. Basic legal aspects, including institutional frameworks and responsibilities

III. GOAL, OVERALL OBJECTIVES AND SPECIFIC OBJECTIVES

IV. PLAN OF ACTION FOR MANAGING FISHING CAPACITY

4.1. Improve Management Policy

- ❖ Update and endorse policy level decision

4.2. Conduct Research and Assessment

- ❖ Promote research and effective utilization of regular data collection
- ❖ Research on impact assessment on the change of fish population
- ❖ Periodic, stratified biomass estimation (by scientific surveys)
 - ✓ By resources type: demersal, pelagic, prawn, etc.
 - ✓ By area/zone/depth of water (depending on the management regime)
- ❖ Conduct assessment to identify overcapacity by fleet segment and gear used in order to better adjust the strategies

4.3. Improve Fishing Capacity Management/Measures

- ❖ Define total allowable fishing capacity based on resource assessment, and further develop quota system for provinces
- ❖ Limit fishing capacity in coastal and inshore areas
- ❖ Prohibit fully or partially specific fishing gears in particular fishing grounds
- ❖ Encourage the utilization of traditional and local knowledge to support the management of fisheries and fishing capacity

4.4. Improve Legal and Institutional Frameworks, with responsibilities and coordination defined

4.5. Improve Enforcement and MCS

- ❖ Establish database and analysis tools
- ❖ Continue development of VMS for fishing vessels
- ❖ Strengthen and build capacity for relevant fisheries officers: inspection and surveillance
- ❖ Establish coordination mechanism among monitoring and surveillance forces at the seas involving relevant institutions as defined in national laws
- ❖ Establish functioning national MCS-network(s)

4.6. Promote Participation of Relevant Stakeholders

- ❖ Define specific roles of stakeholders in NPOA-Capacity implementation
- ❖ Formulate and strengthen central and local institutional framework for co-management
- ❖ Support effective participation of fisheries associations and private sector
- ❖ Cooperate with community organizations and individuals in the development and implementation of NPOA-capacity at provincial and district levels

4.7. Responsibilities/Implementation

- ❖ Fisheries Administration
- ❖ Other Departments as applicable to each country (responsible for vessel registration, inspection and enforcement)
- ❖ Legal and Organization Departments (need to be better defined)
- ❖ Accounting and Planning Departments (need to be better defined)
- ❖ Research Institute for Marine Fisheries
- ❖ Local Governance, (province and district administration as applicable)
- ❖ Social and professional associations and/or fishing community, including private sector and community fisheries organizations)

V. STRATEGIES

Strategy 1: Improve Management Policy

No.	Issues and Challenges	Key Actions	Time Frame

Strategy 2: Conduct Research and Assessment

No.	Issues and Challenges	Key Actions	Time Frame

Strategy 3: Improve Fishing Capacity Management/Measures

No.	Issues and Challenges	Key Actions	Time Frame

Strategy 4: Improve Legal and Institutional Frameworks, with Responsibilities and Coordination Defined

No.	Issues and Challenges	Key Actions	Time Frame

Strategy 5: Improve Enforcement and MCS

No.	Issues and Challenges	Key Actions	Time Frame

Strategy 6: Promote Participation of Relevant Stakeholders

No.	Issues and Challenges	Key Actions	Time Frame

VI. MONITORING AND EVALUTAION

VII. GLOSSARY

VIII. REFERENCE

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Identified key issues and feasible measures as a basis reference for development of the RPOA- capacity

Issues	Feasible Measures	Technical Assistances
Policy and Legal Framework in Managing Fishing Capacity		
1) Ineffective policies, legal framework in managing fishing capacity	❖ Strengthen good governance	❖ Consultations to improve understanding by politicians/policy makers using recommendations based on scientific evidence
❖ Decisions inconsistent with current policies	❖ Voice out in ASEAN platform	❖ Capacity building
❖ Lack of political will and awareness towards conservation and fisheries management	❖ Identify gaps and issues in legal framework	
❖ Subsidies vs incentives	❖ Consistency in policy and implementation (both national and regional levels)	
Information for Fishing Capacity Management (vessels, gears, and fishers)		
2) Insufficient information for fishing capacity management	❖ Identify gaps	❖ Review works
❖ Data on concerned fishing capacity (e.g. no. of fishing boat, gears, fishers)	❖ Develop common database	❖ Organize trainings/workshops/consultations
❖ Incomplete information of gear specification and documentation (e.g. length of fishing gear)	❖ Economic and financial studies on the impacts of capacity management	❖ Develop appropriate gear specification and design for sustainability of resources
		❖ Provide guidance technology systems including VMS, Automated Identification System (AIS) databases, GRMS (mobile telephone system), etc.
		❖ Information sharing on active fishing capacity
Information for Fishing Capacity Management (fishery resources)		
3) Inadequate data and information on fisheries resources	❖ Identify gaps	❖ Reviews
❖ Lack of policies/systems to deal with fisheries management in data poor situation	❖ Develop common SOP (feasible and effective method) for data collection	❖ Organize trainings/workshops/consultations
❖ Lack of expertise to assess fishing capacity	❖ Capacity building program	❖ Stock assessment, improve data collection and methodologies for both marine and inland fisheries
4) Lack of research and assessment of migratory shared stocks	❖ Capacity building	❖ Organize the regional fora
	❖ Conduct research and assessment of migratory shared stocks	❖ Conduct trainings/workshops/consultations
	❖ Information dissemination	
Capacity and Capability to Manage Fishing Capacity		
5) Inadequate capacity and capability for monitoring, control and surveillance	❖ Strengthening MCS	❖ Organize trainings/workshops/consultations
❖ Encroachment of local fishing vessel into prohibited area	❖ Inter-agencies and inter-countries coordination	❖ Flag and Port State Measures trainings and inspections
❖ Encroachment of foreign	❖ Utilization of “Fishermen eyes” (co-management)	❖ Safety inspections
	❖ Improve law enforcement	❖ Legal and regulatory technical assistance
	❖ Information sharing on	

Issues	Feasible Measures	Technical Assistancess
fishing vessels	<p>MCS</p> <ul style="list-style-type: none"> ❖ Capacity building program ❖ Promote co-management, decentralization, EAFM ❖ Input control (vessels, licenses, gears, days at sea) ❖ Output control (TAC, quota, MPA, zoning, spatial and temporal measures, minimize discards) ❖ Increase license fees (for commercial scale fisheries) <p>Cooperation with relevant authorities to ensure safety of fishing vessels (inspection and certification as part of fishing license requirements)</p> <ul style="list-style-type: none"> ❖ Promote alternative livelihood (other than fishing) ❖ Reduce low cost labors on fishing fleets 	<ul style="list-style-type: none"> ❖ Development of NPOA-capacity and determination of target fishing capacity
<p>Public Awareness</p> <p>6) Insufficient public awareness and participation</p> <ul style="list-style-type: none"> ❖ Fishers ❖ General public (exclude fishers <i>e.g.</i> consumers) 	<ul style="list-style-type: none"> ❖ Fishers/stakeholders forum (at local, national and regional levels) ❖ Media and awareness campaign ❖ Information, education and communication program (IEC) 	<ul style="list-style-type: none"> ❖ Organize the regional fora ❖ Conduct trainings/ workshops/consultations
<p>7) Market-driven pressure</p> <ul style="list-style-type: none"> ❖ Demand for fish promoting unsustainable fishing practices (<i>e.g.</i> high price fish, endanger fish, trash fish) 	<ul style="list-style-type: none"> ❖ Promote EAFM ❖ Public awareness to consume fish from sustainable fisheries ❖ Requirements for aqua feeds and raw materials for export causes pressure to the fishing capacity 	<ul style="list-style-type: none"> ❖ Support training courses

TRANS-BOUNDARY ISSUES AND TECHNICAL DIALOGUES

I. Rationale

Over the years, SEAFDEC has facilitated bilateral dialogue through sub-regional approach to discuss and look for effective ways to improve management of fisheries in order to sustain fisheries resources in each sub-region¹ in Southeast Asia. Highlights are given on importance of trans-boundary important aquatic species and integration of fisheries and habitats managements, as well as control IUU fishing and destructive fishing activities. Since 2013, a series of Sub-regional Technical Meetings (STMs) on effective fisheries management for the Gulf of Thailand sub-region, the bilateral dialogues between Thailand-Cambodia and Cambodia-Viet Nam as well as the dialogues between Thailand-Malaysia for sub-regional Andaman Sea have been organized. It was envisaged that the bilateral dialogues/arrangements would facilitate opportunity to agree upon relevant activities of neighboring countries including combating IUU fishing and to strengthen bilateral cooperation on management for sustainable utilization of trans-boundary fisheries resources.

In this paper, trans-boundary issues and bilateral arrangements/dialogues with regard to effectively combat IUU fishing were compiled based upon outputs² from several STMs and sub-regional fisheries management initiatives facilitated by SEAFDEC.

II. Recommendations on Trans-boundary Issues and Bi-lateral Arrangements/ Dialogues to Combat IUU Fishing

To move forward in combating IUU fishing, the followings are clarified through the STMs as common issues relevant to trans-boundary issues and bilateral arrangements/dialogues as referred to major outputs:

Establishment of a platform for agreements between neighboring countries

To starting the process for establishing the joint efforts in combating IUU fishing, it was highly recommended to establish a platform for bi-lateral agreement between neighboring countries. It could be “*Planning and Management Committee*”. This platform will be a fora where countries can share experiences on several important and immerging issues in aspects of reduce illegal and destructive fishing activities, as well as to review progress and results of actions/activities implemented under bi-lateral arrangements.

In many cases, the Committee will also useful for developing key indicators for assessment of activities implementation under bi-lateral arrangement that will support efforts towards improved management of fisheries and habitats and management of fishing capacity including combating IUU fishing. Members of the Committee should be arranged intending to strengthen collaborative and cooperative agreements within and among countries with relevant agencies (*e.g.* agencies responsible for fisheries, enforcement, environment, etc.). Members of the Committee are important for information sharing, capacity building clarification, to effectively resolve problems on illegal and destructive fishing, as well as to monitor

¹ In Southeast Asian Region, there are 4 sub-regions, namely: Andaman Sea, Gulf of Thailand, Sulu and Sulawesi Seas, and Mekong River Basin.

² References

1. 2015. The 5th Meeting of the Gulf of Thailand Sub-region. September, Nontaburi Province, Thailand
2. 2015. Sub-regional Technical Meeting on Effective Fisheries Management between Cambodia and Thailand. January 2015, Trat Province, Thailand
3. 2014. Sub-regional Consultative Meeting on the Collaborative Fisheries Management around the North Andaman Sea/Myeik Archipelago
4. 2014. The First Technical Meeting of the Joint Working Team for Fisheries Management between Cambodia and Viet Nam.
5. 2014. Sub-regional Technical Meeting on Effective Fisheries Management between Malaysia and Thailand
6. 2013. The 4th Meeting of the Gulf of Thailand Sub-region.

transfer/landing of fisheries products across borders. This would also help to enhance cooperation by strengthening institutional responsibility within countries and among neighboring countries to include trans-boundary dialogue to come up with sub-regional agreements and bi- and multi-lateral arrangements.

Common areas for bi-lateral cooperation to combat illegal and destructive fishing

After establishment of the bi-lateral agreement/dialogue between neighboring countries, a number of priority issues can be addressed. The followings show common areas/topics for bi-lateral cooperation³.

- a) Joint framework and work plan of activities
- b) Effective management of fishing capacity (fishing vessels and fishers)
- c) Agreement on a joint approach to manage/integrate fisheries and habitat management
- d) Management system for trans-boundary species resources
- e) Human and institution capacity program
- f) Fishing ports monitoring program
- g) Catch document and traceability system
- h) Bi-lateral mechanism to share experience from traditional knowledge local capacity/communities for improvement of fisheries/habitat management
- i) Building up of working relations for institutions and entities responsible for management of fishing ports and landing sites, including records of catches landed by foreign vessels
- j) Improving vessels registration and fishing licensing systems
- k) Efficient MCS system for effectively control of fishing capacity and to combat IUU fishing, destructive fishing, and encroachment by larger fishing vessels to coastal waters
- l) Awareness raising program for fishers and concerned authorities to minimize IUU and destructive fishing activities

Establishment of Technical Advisory Committee

To ensure that activities implemented under bi- and/or tri-lateral arrangements or dialogues will be recognized at “high-level management authorities” in later stage, it is recommended that a technical advisory committee should be established at bi-lateral and/or sub-regional level. Results from implementation of activities under bi-lateral arrangements/dialogues would be analyzed and packaged through the technical advisory committee for further submission to high-level management authorities. Ultimately, it is expected that these kind of information package will provide more understandable for policy makers and general public. It is envisaged that implementation of joint/coordinated fisheries management measures between that of bi- and/or tri-lateral arrangements for trans-boundary issues with final target at “larger fisheries resource management areas” based on available reliable technical information for applying future precautionary approach in order to reduce illegal and destructive fishing activities to rebuild depleted stocks and also to conserve critical habitats.

III. Ways Forward

Taking into accounts the key trans-boundary issues related to combating IUU fishing such as landing of fishes across the border, double flagged vessels operate in the trans-boundary areas, and conduct the IUU fishing. These are related to the fishers and/or fishing vessel owners who have conducted as usual practices in the past. The awareness building to all stakeholders concerned are needed, as many AMSs now have amended the law to control such illegal fishing/activities. It is therefore, necessary to:

- Strengthen/encourage involvement of fishers and key stakeholders to support the management measures
- Implementing/promoting *ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain* (endorsed by the SSOM-36th AMAF revision by the 24th August 2015)
- Implementing catch documentations and reporting system of catch to the Flag States

³ Outputs from SEAFDEC’s sub-regional technical meetings

REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note bilateral and sub-regional initiatives, and indicate values in terms of strengthen cooperation among countries (bilateral, sub-regional, and regional). The Council is also requested to suggest on measures to ensure effective implementation of agreed work plans to improve fisheries management and combat IUU fishing.

REGIONAL COOPERATION ON LABOR ASPECTS WITHIN THE FISHING INDUSTRY IN THE ASEAN REGION

I. INTRODUCTION

The rapid development in the fisheries sector together with increased demand of fish and fishery products for human consumption, result in a growing global demand of fish-workers in fishing and aquaculture related activities. Meanwhile, illegal, unreported, and unregulated (IUU) fishing activities continue to proliferate to fill up the gap in the supply of fish and fishery products. However, such illegal fishing activities have been reported to be associated with increasing incidence of labor abuses, forced labor, child labor and human trafficking.

The ASEAN countries, as major producers of fish and fishery products, have made considerable efforts to implement management measures that ensure the sustainability of fish stocks, to combat IUU fishing as well as to promote fair labor standards throughout the Southeast Asian region. However, labor concerns continue to loom in the fisheries sector necessitating the need to address labor issues for the sustainable development of fisheries in the region. For such reason, labor issues including the situation of migrant workers, working conditions and safety at sea was given priority in the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 adopted in 2011. In fact, the need to address the status of migrant workers is highlighted in the *ASEAN Socio-Cultural Community Blueprint* and the *ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers*. The importance of soliciting broad institutional responses and obtaining international recognition of the efforts being made to address labor issues is recognized by ASEAN-SEAFDEC Member Countries, particularly with regards to coordination on the implementation of needed actions to improve working conditions and to strengthen the status of workers employed in the fishing sector in the ASEAN region.

At the Global/International level, there are several convention/agreements relevant to the fishing sector that have impacted on the requirements of the ASEAN countries, in paths towards the ASEAN Community building, to address the need to improve working conditions in the fisheries sector, including the importance of migrant workers (e.g. ILO Convention 188 on Work in Fishing). FAO have emphasized on the increasing concerns stated in international policy on requirements to secure “decent work”, as one of the most important issues to be addressed to ensure that the development of fisheries and aquaculture translates into enhancement of livelihoods of fishers, fisher-folk, fish farmers and workers at various stages of fish value chains. The countries’ role in addressing the decent work deficits and in promoting the effective implementation of the ILO decent work agenda in the fisheries and aquaculture sectors should be made clear, including the 2030 Agenda for Sustainable Development as expressed in the *Sustainable Development Goals (SDG)*, Resolution (70/1), 25 Sept 2015 referred to as labor, child labor and human trafficking.

In the effort to combat illegal practices and to improve regulation and records of vessels, catches and people engaged within the fishing sector, many ASEAN countries have been seriously exerting efforts to revise and implement their respective national legal frameworks including those relevant to labor aspects. Individual countries had also taken their own significant steps to regulate and improve the ways in which good labor practices could be ensured within the fisheries sector. For example:

- In Philippines: a vessel owner/skipper is required to provide a guarantee that all crew members are to be treated in accordance with Philippine labor laws, before a fishing license is issued for the vessel
- In Indonesia: a special Sub Directorate of Fisheries Labour and Manning a Fishing Vessel is established within the Directorate of Fishing Vessel and Fishing Gears under the Directorate General of Capture Fisheries of the Ministry of Marine Affairs and Fisheries
- In Thailand: the recent Royal Ordinance on Fisheries (2015) includes labor aspects (Art 11), and the Department of Fisheries (DOF) in cooperation with the Department of Labour Protection and Welfare (DLPW) and the International Labour Organization (ILO) had developed a set of four Good Labour Practice (GLP) Guidelines that include guidelines for:

- Aquamarine Shrimp Farms
- Shrimp and Seafood Primary Processing Workplaces, “peeling sheds” and other small-scale seafood processing
- Shrimp and Seafood Processing/Packing Factories
- Fishing Vessels (still pending endorsement)
- Countries like the Philippines, Indonesia and Viet Nam are actively promoting and providing the opportunities, including building-up of capacity of fishing crew members, for their nationals to go abroad to work in the fisheries sector. Efforts are made to ensure decent working conditions abroad – but their schemes have been faced with difficulties in covering all migrant workers
- Nationals in large numbers, from Myanmar, Cambodia and Lao PDR are being engaged to work onboard fishing vessels and in processing facilities of neighboring countries. In general, there is lack of “specific policies, regulations and measures” and as a result, recruitments and movements are largely unregulated in spite of efforts being made by the governments

SEAFDEC recently organized the First Regional Technical Consultation (RTC) on Labor Aspects within Fishing Industry in the ASEAN Region on 25-27 February 2016 in Bangkok, which was participated by representatives from government agencies responsible for fisheries and labor from ASEAN-SEAFDEC Member Countries, Embassies and Independent organizations. Representatives included Fisheries Agencies, Department of Labor (of some countries); representatives from international and regional organizations such as ILO, FAO/AFPIC, USAID-Oceans, ICSF, UNACT, EU delegation to Thailand, Swedish Embassy, Sustainable Development Foundation, SEAFish for Justice and others including representatives from Trade Unions, Private Sector and Civil Society Organizations. Key international agreements including the requirements of those agreements in relation to labor engaged in fisheries were highlighted and discussed with participants at the Consultation. Participating countries from the ASEAN region provided an update on their current national legal provisions and implementation guidelines for securing the rights and well-being of labor engaged in the fishing sector, including the recruitment and treatment of migrant workers.

II. ISSUES AND CHALLENGES ON LABOR ASPECTS IN THE REGION

Rapid development of the fisheries sector and demand of more workers in the fisheries sector has been filled up by fish-workers from within and outside the ASEAN Member States seeking for better job opportunities and incomes. However, issues have frequently been surfacing with regards to the plight of fish-workers throughout the region. These include:

- Low wages, absence of or inadequate social security
- Workers are unskilled in relation to fishing operations, lack of training before working onboard in fishing vessels, unaware of the requirements for safety at sea
- Possessing fake or no legal documents, subjected to forced labor, child labor, human trafficking
- Poor working conditions, unfair treatment by employers
- Limited capacity for inspection of fishing vessels at sea for compliance with sea safety

Based on the discussions during the 1st RTC, the key points that should be addressed and implemented to secure good and fair working conditions in the region had been categorized into four (4) groups, as summarized below:

- **Employment practices and working conditions (living conditions) at sea and in processing plants** should secure and build upon:
 - Standards/ Instruments/ (ILO-C188, IMO/FAO/ILO Guidelines, COC, etc)
 - National GLP
 - Appropriate legal framework
 - Minimum wage, working hours, food, safety, health
 - Awareness building
 - Provide skills training/capacity building, pre-departure training program before working onboard fishing vessels, safety at sea
 - **Labor unions/associations:** at **national** and **regional** levels

- Combating illegal (IUU) fishing and improving registration/licensing of vessels, gear and people and improving records of catches. Improve records throughout the supply chain (on vessels/at factories)
 - Registration and licenses of vessels, gear – and **people**
 - Surveillance of fishing activities and recruitment procedures (coastal state/port state/flag state, sea port, landing site, base)

- Migration policy (sending/receiving side)
 - Rules and practices to be established between states (establish MOUs)
 - Improve ability to implement MOUs (issue passport, visa, work permit, seaman’s book)
 - Easy – and regulated/registered - access
 - Surveillance at borders of people and goods crossing
 - Unregulated should be → regulated (private agents, broker’s recruiting agencies)
 - Illegal should → be legalized (registration)
 - Monitoring → surveillance → penalty should be strengthened

- Combat Human Trafficking
 - Reinforce policy matters
 - Strengthen inter-ministerial coordination (Ministries, Embassies etc)
 - Strengthen surveillance (police, coast guard, etc.)
 - Involve private sector, NGOs, CSOs

After the discussion, recommendations were formulated with regards to the rights and working conditions of people engaged in the fisheries sector, including migrant workers (domestic and foreign), to secure their decent working conditions in the spirit of the ASEAN Community. A summary of the recommendations during the RTC that are supportive of decent working and living conditions of all fishers and fish-workers in the ASEAN Region, is shown in the following table:

Inputs	Interventions/Recommendations	
	National agencies	Regional cooperation
International instruments (ILO, FAO, IMO)	<ul style="list-style-type: none"> • Strengthen inter-ministerial cooperation and apply an integrated and comprehensive approach in implementing international instruments • Competent authorities to be defined and with focal point identified to enhance cooperation and dialogue • Seek “high level” support on measures to ensure good working conditions • Raise the application of standards of labor/working conditions in the fisheries sector based on the C188 and other relevant and applicable ILO conventions and international instruments • Build upon/relate to the ILO and FAO initiative on “Decent Work”, recognizing the four pillars; 1) Employment, 2) Social security, 3) Status and Rights of workers, and 4) Governance and Social dialogue 	<ul style="list-style-type: none"> • Promote the application of standards of labor/working conditions in the fisheries sector based on the C188 and other relevant and applicable ILO conventions and international instruments • Increase awareness on the relevance (and implications) of international instruments (ILO, IMO, etc.) as reference to standards applicable to the improvement of working conditions (including contracts, wages, etc.) for domestic and migrant workers • AMSs to adopt an inclusive approach to decent work (employment, working conditions, social protection, social dialogue of men and women fishers and fish workers, and of migrant fishers and fish workers)

Inputs	Interventions/Recommendations	
	National agencies	Regional cooperation
Regional instruments (ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers)	<ul style="list-style-type: none"> • AMSs to develop regulations or policies on labor in the fisheries sector based on the ASEAN Declaration • Consider and strengthen the roles and obligations of the “receiving” countries, the “sending” countries and commitments by “ASEAN” as indicated in the “ASEAN Declaration” 	<ul style="list-style-type: none"> • Coordinate dialogue or consultations to develop the ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector
NGOs/CSOs	<ul style="list-style-type: none"> • Build awareness of agencies on the importance and context of labor related laws and measures – aim for a “broader social dialogue” while building upon a “human rights based approach” 	<ul style="list-style-type: none"> • Involve NGOs/CSOs in the development of the ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector
Best practices (national regulations)	<ul style="list-style-type: none"> • Maintain close collaboration between fisheries-related agencies, labor departments and other responsible agencies to ensure that the rights of fisheries labor are protected under respective countries’ national labor laws • Ensure the development, enhancement and implementation of national laws and regulations • Support the implementation and maintenance of good working conditions including steps to secure rights of workers (in accordance with national laws) • Support the formulation of labor unions/associations at national and regional levels (in accordance with national laws) • For domestic fishers, adopt labor standards including occupational safety and health standards (OSHS) • For migrant workers, develop standards for recruitment, good working conditions, re-integration approach 	<ul style="list-style-type: none"> • Establish MOU or multi-lateral or bilateral labor agreement to address the concerns of migrant workers • For domestic fishers, promote the adoption of labor standards including occupational safety and health standards (OSHS) • Support the formulation of labor unions/associations at national and regional levels (in accordance with national laws)

III. WAY FORWARD

As a result from the RTC on Labor, and in response to the requirements of the ASEAN countries on labor aspects, it was suggested that a set of **ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector** should be developed in line with the international standards. Such development should build upon the intentions of the ASEAN Socio-Cultural Community Blueprint, the provisions of the “ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers” (2007), and other relevant ASEAN declarations.

SEAFDEC in collaboration with ASEAN Member States would continue to work on these aspects, following the endorsement of the recommendations of the 1st RTC by the SEAFDEC Council and ASWGF. The process of addressing labor issues in the fisheries sector of the Southeast Asian region would be continuing as shown in the following table.

• 1 st RTC on Labor Aspects within the Fishing Industry in the ASEAN Region	25-27 Feb. 16
• Stakeholders Consultation on Combating IUU Fishing and Enhancing the Competitiveness of ASEAN fish and fishery Products	1-2 March 16
• Drafting of Joint Declaration on Combating IUU Fishing and Enhancing the	3-4 March 16

Competitiveness of ASEAN fish and fishery Products	
• Endorsement processes by SEAFDEC Council and the ASEAN at ASWGFI	June 2016
• High-level Consultation for Adopting the Joint Declaration	3 August 16
• Regional Program implementation by SEAFDEC and AMS	2017

IV. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note the results and recommendation from the 1st RTC on Labor Aspects within Fishing Industry in the ASEAN Region and support the proposed development of a set of **ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector** in line with the international standards, for subsequent submission for consideration by the ASEAN.

PROPOSED RULE FOR A U.S. SEAFOOD TRACEABILITY PROGRAM

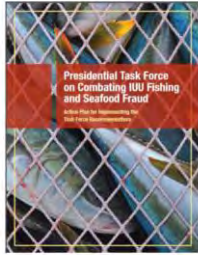
By Mr. Christopher Rogers

*Assistant Director for International Fisheries, U.S. Department of Commerce,
NOAA National Marine Fisheries Service Office for International Affairs and Seafood Inspection*

Overview

- Background & Context
- General description of proposed system
- Proposed data elements
- Next steps

Presidential Task Force on Combating IUU Fishing and Seafood Fraud



- Established under Presidential Memo in [June 2014](#) after the *Our Ocean Conference*
- Co-chaired by NOAA and State Department
- Involves senior-level representatives from 10 federal agencies and 5 executive offices of the President
- Public engagement through Federal Register Notice, public meetings and demarches
- Developed recommendations in [December 2014](#), solicited public input on implementation
- Released Action Plan for implementation in [March 2015](#)
- Transitioned into a standing committee of the National Ocean Council for implementation and oversight

Traceability Components and Timeline

Traceability Program (Recommendations 14 & 15):

- Direct the Task Force, with input from U.S. industry and other stakeholders, to identify and develop, within six months a list of the types of information and operational standards needed for an effective seafood traceability program to combat seafood fraud and IUU seafood in U.S. commerce.
- Direct the Task Force to establish, within 18 months, the first phase of a **risk-based traceability program to track seafood from point of harvest to entry into U.S. commerce.**

- Principles for identifying at-risk species
- **Draft and final list of at-risk species**
- Minimum standards and necessary data
- International Trade Data System (ITDS)
- Species name and codes (Rec. 10)
- **Traceability rulemaking**
- Information sharing
- Trusted Trader program
- Evaluation and expansion

International Fisheries Trade Permit


- The International Trade Data System is in implementation process
- NOAA Fisheries published a proposed rule implementing its existing permit documentation programs for tuna, swordfish, and toothfish (Chilean seabass).
- The ITDS proposed rule would establish the International Fisheries Trade Permit to consolidate these existing permit programs.
- This traceability proposed rule would extend the IFTP to include "Importers of record" of species covered by the rule.



TODAY, TRADERS MUST SUBMIT THE SAME INFORMATION TO MULTIPLE AGENCIES, MULTIPLE TIMES THROUGH PROCESSES THAT ARE LARGELY PAPER BASED AND MANUAL. THE SINGLE WINDOW WILL STREAMLINE THIS PROCESS.

List of Principles

- Enforcement capability
- Catch documentation scheme
- Complexity of the chain of custody and processing
- Species misrepresentation
- Mislabeling or other misrepresentation
- History of fishing violations
- Human health risks [as a result of mislabeling, species substitution, etc.]



List of At-Risk Species

- Abalone
- Atlantic cod
- Blue crab
- Dolphinfish (Mahi Mahi)
- Grouper
- King crab (red)
- Pacific cod
- Red snapper
- Sea cucumber
- Sharks
- Shrimp
- Swordfish
- Albacore, bigeye, skipjack, and yellowfin tuna

Reporting Data Elements – Harvesting or producing entity

- Name and flag state of harvesting vessel(s)
- Evidence of authorization to fish
- Unique vessel identifier (when available)
- Type(s) of fishing gear used
- Name(s) of farm or aquaculture facility

Reporting Data Elements – Information on the fish harvested or produced

- Species of fish
 - Scientific name
 - Acceptable market name
 - ASFIS number
- Product description(s)
- Name(s) of product
- Quantity and/or weight of product

Reporting Data Elements – Information on where and when the fish was harvested, produced, and landed

- Harvest date(s)
- Area(s) of wild capture or aquaculture harvest
- Point of first landing
- Name of entity(ies) to which fish was landed

Recordkeeping Data Elements – Chain of custody

“Additional information on each point in the chain of custody regarding the shipment of the fish or fish product to point of entry into U.S. commerce would be established as a recordkeeping requirement on the part of the importer of record to ensure that information is readily available to NMFS to allow it to trace the fish or fish product from the point of entry into U.S. commerce back to the point of harvest to verify the information that is reported upon entry.”

Notable issues and next steps

- No new data reporting requirements for U.S domestic wild-capture fisheries
- U.S. domestic aquaculture data gaps for shrimp and abalone
- Seeking comments on the timing of import data implementation
- Comment period closes on April 12, 2016
- Final rule to be published this fall
- Request for comments on Trusted Trader concepts in March or April

Opportunities for Public Input

- ✓ Species at-risk principles webinars and written comments
- ✓ Data and standards comments
- ✓ Draft principles and species at-risk comments
- Proposed rule on traceability implementation comments
- Trusted Trader comments

How to comment...

- Seeking detailed comments from all interested stakeholders — WWW.Regulations.Gov Enter ID: NOAA-NMFS-2015-0122-0001
- Holding public listening sessions
- All information is posted on the NOC Committee web portal at www.iuufishing.noaa.gov

Past Public Webinar-Conference Calls and Meetings

March 18, 08:00-10:00 AM Eastern Time

March 7, 11:00AM-1:00PM Eastern Time, Seafood Expo N. America

February 24, 3:00-5:00 PM Eastern Time

February 18, 3:00-5:00 PM Eastern Time

Comments?

The screenshot shows the homepage of the IUU Fishing and Seafood Fraud Web Portal. The header includes the NOAA logo and the title 'National Ocean Council Committee on IUU Fishing and Seafood Fraud'. Below the header, there is a welcome message and a navigation menu with three main sections: 'HOT TOPICS', 'ANNOUNCEMENTS', and 'ENGAGEMENT DATES'. The 'HOT TOPICS' section lists several items with dates and brief descriptions. The 'ANNOUNCEMENTS' section lists items with dates and brief descriptions. The 'ENGAGEMENT DATES' section lists items with dates and brief descriptions.

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

I. EXECUTIVE SUMMARY

Recognizing the importance of neritic tuna fisheries in the Southeast Asian waters, the regional or sub-regional cooperation to promote the sustainable utilization of neritic tunas is therefore needed. In this connection, the 45th Meeting of the SEAFDEC Council endorsed the proposal of SEAFDEC Secretariat to conduct regular stakeholders' consultations for the development of the Regional Plan of Action for Sustainable Neritic Tunas Fisheries (RPOA-Neritic Tunas). In response to the advice from the Council, SEAFDEC with funding support from the SEAFDEC-Sweden Project together with ASEAN-SEAFDEC Member Countries developed the RPOA-Neritic Tunas through a series of Expert meetings and Regional Technical Consultation since 2013. The draft RPOA-Neritic Tunas resulted from the consultative meetings was circulated to all SEAFDEC Member Countries for comments before it was addressed and endorsed as amended by the 17th Meeting of the FCG/ASSP in December 2014. The Final RPOA-Neritic Tunas was adopted at the 47th Meeting of the Council (47CM) in April 2015, and later endorsed by the 23rd Meeting of the ASEAN Sectoral Working Group on Fisheries in June 2015 with the notification by SOM-AMAF on the same year.

To promote the implementation of the RPOA-Neritic tuna, the establishment of the Scientific Working Group and its TORs has been developed to facilitate the work of Scientific Working Group. The objectives of the ToR is to ensure that the Regional Cooperation from AMS on the stock assessment of the neritic tunas can be effectively implemented by the SWG as well as SEAFDEC to continue support under the ToR framework after the end of the funded project in 2017. The TORs was later endorsed by the ASEAN-SEAFDEC Member Countries at its 47CM (**Appendix 1**).

Two scientific working groups were conducted in Malaysia in 2014 and Viet Nam in 2015 with aims to review the existing status of neritic tunas, drafting the SOP for data collection and genetic study, and to discuss work plan for stock assessment for longtail tuna and eastern little tunas for 2016 and onwards by the invited scientists from Japan, and expert from MFRDMD. In addition, the capacity building for basic understanding of the stock assessment and data collection will be provided to all relevant SEAFDEC Member Countries from end of 2015 till 2017.

II. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note endorsement of the RPOA-Neritic Tunas by the higher authority of ASEAN-SEAFDEC Member Countries and consider for 2017 Scientific Working Group Activities under the agreed TORs to strengthen the regional cooperation and ensure sustainable utilization of Neritic Tunas through the implementation of the RPOA-Neritic Tunas. The Council is also invited to provide directive guidance to SEAFDEC and relevant ASEAN Member States for effective implementation and collaboration for long term sustainable utilization in the region.

TERMS OF REFERENCE OF THE SCIENTIFIC WORKING GROUP FOR STOCK ASSESSMENT ON NERITIC TUNAS IN THE SOUTHEAST ASIAN REGION

(Adopted at 47th SEAFDEC Council, April 2015)

I. Introduction and Rationale

Refers to the Expert Group Meeting on Regional Plan of Action on Sustainable Utilization of Neritic Tuna Resources in the Southeast Asian Waters conducted on 18-20 June 2014 in Krabi Province, Thailand, that, during the workshop, one of the important outputs was the need to establish Scientific Working Group on Stock Assessment for neritic tunas in the Southeast Asian waters herein after called “SWG-Neritic tunas”. In this connection, SEAFDEC Member Countries namely Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Viet Nam nominated their delegations to work as members of the scientific working group since October 2014. To facilitate the work of Scientific Working Group, SEAFDEC formulated the Term of Reference (ToR) to be considered and finalized by all members of the SWG at the 1st Meeting of the Scientific Working Group on Neritic Tunas Stock Assessment in the Southeast Asian Waters, 18-20 November 2014 in Malaysia. The objectives of the ToR is to ensure that the regional cooperation from AMS on the stock assessment of the neritic tunas can be effectively implemented by the SWG as well as SEAFDEC to continue support under the ToR framework after the end of the funded project.

II. Role of SWG-Neritic tunas

The role of SWG is to provide technical/scientific advice particular on the current status of neritic tuna fisheries resources and policy consideration needs to the SEAFDEC Council for the improvement of fisheries management in Southeast Asia.

III. Scope of Work

SWG will cover data collection, genetic study and other relevant activities to support stock assessment on neritic tunas and mackerel species (seerfish) for the management of neritic tunas in Southeast Asian waters.

IV. Terms of Reference of the SWG-Neritic tunas

- To review and assess the current status of the neritic tuna resources in the region;
- To provide scientific based recommendations on priority fisheries management issues which may include policy consideration, and coordinated fisheries management actions for sustainable utilization of neritic tunas;
- To share the national catch and effort data/information including the biological data (if available) for regional stock assessment of the neritic tunas;
- To identify the needs for human capacity requirements in Member Countries; and
- To coordinate with international/regional organizations, programs or projects concerned with fisheries management and sustainable use of fisheries resources in formulating advice.

V. Composition of the SWG-Neritic tunas

The composition of the SWG-Neritic tunas is identified as follows:

a. SWG-Neritic tunas:

The SWG comprises at least two standing members representing the SEAFDEC Member Country by nomination with Four-year fixed tenure of members and possibility for reappointment.

b. Chief Scientist(s):

An interim Chief Scientist for stock assessment of neritic tunas shall be a stock assessment expert from MFRDMD. A work period of the Chief Scientist is depended upon the tenure of the study period as decided by the SWG.

c. Chairperson:

SWG-Neritic tunas shall be chaired by Chief MFRDMD and co-chaired by a representative of its Member Countries on an annual rotational basis following alphabetical in order.

d. Resources persons/ Experts:

SWG-neritic tunas may identify and invite resource persons/experts from the Member Countries, ASEAN and other international/regional organizations to participate in SWG Meeting on an *ad-hoc* basis.

e. Secretariat:

MFRDMD in collaboration with the SEAFDEC Secretariat shall serve as a secretariat of the SWG meeting, as well as coordinate with the SWG members on the propose period and date of the meeting.

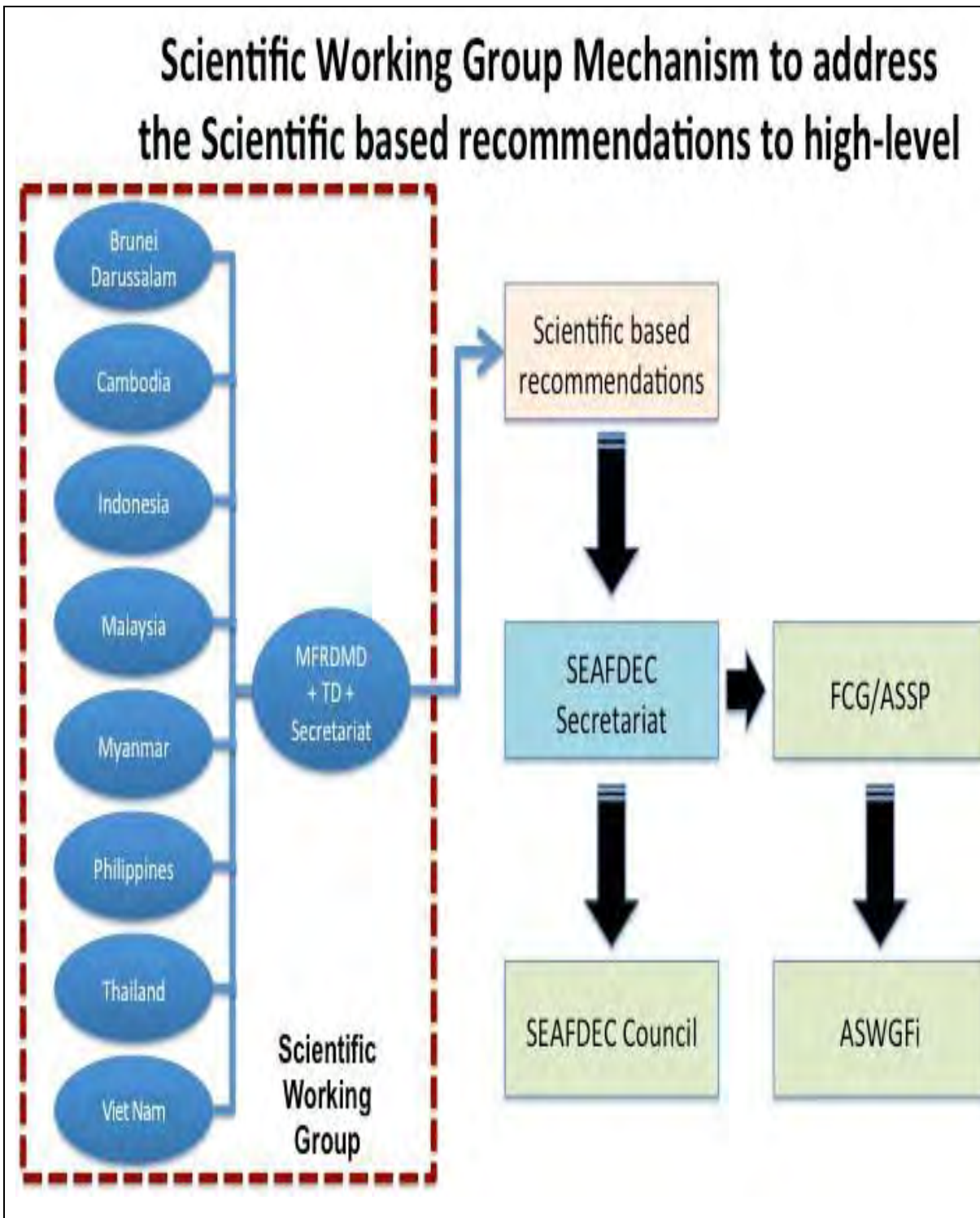
f. Rapporteur:

Secretariat of the meeting shall perform a Rapporteur of the SWG meeting in collaboration with the host country.

VI. Nature of SWG Activities and Financial Arrangements

1. SWG is scheduled to meet at least once a year. The timing of the meeting(s) should be set in accordance with SEAFDEC annual working cycle before the SEAFDEC Program Committee Meeting.
2. Inter-sessional activities may be conducted as the need arises and subject to availability of funds.
3. The SWG meetings will be partially funded by SEAFDEC-Sweden Project managing by the secretariat of the working group. Under this condition, annually a certain amount of the money would be used for the meeting cost and participation of members from SEAFDEC MFRDMD and Secretariat to the SWG meetings; while the Member Countries would bear the cost for their participation to the SWG meetings starting from 2018.
4. The cost for attendance of the resource persons during SWG meeting (s) or during the inter-sessional activities should be from SEAFDEC-Sweden project and extra budgetary sources under the responsible of the Secretariat, while the cost for the experts/ representatives from international/regional organizations will be shouldered by their respective organizations.
5. The cost for the inter-sessional activities will be funded from SEAFDEC-Sweden project and/or extra-budgetary sources.
6. SEAFDEC Secretariat in collaboration with the Member Countries and the MFRDMD are responsible for sourcing extra-budgetary funds for SWG.
7. Based on SWG's advice, the SEAFDEC Council will decide on how such advice should be considered and followed-up for the next session including imparting the recommendations to the ASEAN through ASEAN Sectoral Working Group on Fisheries.

VII. Mechanism to Convey the Technical/Scientific Advice/Recommendation



Remarks: At the 2nd SWG –Neritic Tuna Meeting in RIMF, Hai Phong , Viet Nam, The meeting suggested that any Scientific based recommendations from the SWG meeting should send to NC for consideration and comments before further submission to Secretariat and the SEAFDEC Council.

List of the standing members of SWG-Neritic Tunas from 2014

SWG Name	Position	Address	Email
Brunei Darussalam			
❖ Not confirm yet			
Cambodia			
❖ Mr. Suy Serywath (Chief Scientist)	Director, Fisheries Research and Development Institute	Fisheries Administration 186 Norodom Blvd, Sangkat Tonle Basac Khan Chamcar Mon, Phnom Penh CAMBODIA Tel. (855-12) 714 239 Fax: (855-23) 219 256	serywath@gmail.com
❖ Mr. Kao Monirith	Deputy Director, Marine Fisheries Inspectorate, Marine Fisheries Research and Development Institute	Fisheries Administration 186 Norodom Blvd, Sangkat Tonle Basac Khan Chamcar Mon, Phnom Penh CAMBODIA Tel. (855-12) 714 239 Fax: (855-23) 219 256	kaomonirith@yahoo.com
Indonesia			
❖ Mr. Khairul Amri (Chief Scientist)	Senior Researcher, Marine and Fisheries Research Institute	Agency of Marine and Fisheries Research and Development, Ministry of Marine Affairs and Fisheries Jl. Muara Baru Ujung Komplek Pelabuhan Perikanan Nizam Zachman, Jakarta, INDONESIA Tel: +62-8568020608 Fax: +62-21 64700929	Kh_amri@yahoo.com
❖ Mr. Thomas Hidayat (Senior Officer)	Researcher, Marine and Fisheries Research Institute,	Agency of Marine and Fisheries Research and Development, Ministry of Marine Affairs and Fisheries Jl. Muara Baru Ujung Komplek Pelabuhan Perikanan Nizam Zachman, Jakarta, INDONESIA Tel: +62-081806043030; Fax: +62-21 64700929	thomas.hidayat@yahoo.com hidayatthomas245@gmail.com
Malaysia			
❖ Mr. Mohd Noor bin Noordin (Senior Officer)	Head, Marine Aquaculture Section	Department of Fisheries Malaysia 1st Floor, Podium 2, Block 4G2 Wisma Tani, Precinct 4 62628, Putrajaya Tel.: +6 03-8870 4618 Fax.: +6 03-8889 1749 Mobile: +6 012-678 4028	mnn@dof.gov.my
❖ Mr. Hj Samsudin bin Basir (Chief Scientist)	Senior Researcher, FRI Kg. Aceh,	Kompleks Perikanan Kg. Aceh, 3200 Sitiawan, Perak, Malaysia Tel.: +6 05-691 4752 Fax.: +6 05-691 4742 Mobile: +6 019-457 2978	samsudin@dof.gov.my

SWG Name	Position	Address	Email
Myanmar			
❖ Dr. Htun Thein (Chief Scientist)	Assistance Director, Marine Fisheries Research and Development Bureau	Department of Fisheries, Marine Fisheries Research and Survey Unit, Building No. 36, Nay Pyi Taw, MYANMAR Tel.: +95 67 418534 Mobile: +95 95027889	htunthein.akyab@gmail.com
❖ Mr. Nay Myo Aye (Senior Officer)	Assistance Fisheries Officer	Ye Township, Regional Fishery Officer, Department of Fisheries Mon State Mobile: +95 9425355353	irnp.dof@gmail.com nyonyo.ye@gmail.com
Philippine			
❖ Mr. Noel C. Barut (Chief Scientist)	National Coordinator, National Stock Assessment Program	National Fisheries Research and Development Institute (NFRDI) Corporate 101 Bldg, 101 Mother Ignacia Avenue Quezon City, Metro Manila The PHILIPPINES Tel./Fax: +63 2-3725063	necbarut@gmail.com
❖ Ms. Grace V. Lopez	Aquaculturist II, Marine Fisheries Research Division Vertebrate Section,	National Fisheries Research and Development Institute (NFRDI) Corporate 101 Bldg, 101 Mother Ignacia Avenue Quezon City, Metro Manila Tel.: +63 2-765133(LOC. 607) Fax: + 63 2-725063	gmvlopez@yahoo.com
Thailand			
❖ Mrs. Praulai Nootmorn (Chief Scientist)	Director, Marine Fisheries Technology Research and Development Institute	Marine Fisheries Research and Development Bureau Kaset-Klang, Bang Khen, Bangkok 10900 THAILAND Tel.: +66 8 5070 6589	nootmorn@yahoo.com
❖ Ms. Pakjuta Khemakorn	Fishery Biologist, (Professional Level), Marine Fisheries Research and Development Bureau	Southern Marine Fisheries Research and Development Center, 79/1 Wichianchom Rd., Bo-Yang, Muang, Songkhla 90000 THAILAND Tel.: 66 8 1896 4702	pakjuta@gmail.com
Viet Nam			
❖ Mr. Pham Hung	Officer, Department exploitation and protection of fisheries resources	Department of Capture Fisheries and Resources Protection, Directorate of Fisheries 10 Nguyen Cong Hoon, BaDinh, Hanoi, VIET NAM Tel.: +84-983-804-039	hungfam83@gmail.com
❖ Mr. Nguyen Viet Nghia (Chief Scientist)	Deputy Director, Expert, Research Institute for Marine Fisheries	224 Le Lai, Hai Phong City VIET NAM Tel.: +84-982-728-365 Fax: +84-313-836-812	nvngghia@rimf.org.vn

1) Tentative Work Plan for Neritic Tunas Stock Assessment

#	Activity/Program	2014	2015	2016	2017	2018	2019
REGIONAL PLAN OF ACTION								
1	Developing the POA-Neritic Tunas	X						
CAPACITY BUILDING PROGRAM								
2	Improving Data Collection, (including on job training) a. Catch and effort data b. Biological data c. Species identification d. Classification of gears e. Data handling, Database-worksheet, f. others		X	X	X			
3	Stock Assessment a. Length base stock analysis b. Surplus production • Time series data (10 Years) for MYS estimation • Trends analysis c. Data poor stock assessment d. Age structure production model e. Kobe-plot f. Biological analysis • Measures analysis (Length analysis) • Gonad analysis • Stomach analysis g. Genetic analysis			X	X	X		
STOCK ASSESSMENT PROGRAM								
4	1 st Assessment of neritic tunas stock: a. Longtail tuna (Tongol)			X				
	b. Eastern little tuna (Kawa kawa)				X			
	c. Frigate tuna					X		
	d. Other species: Seer fish					X		
5	2 nd Assessment of neritic tunas stock:						X	X

2) Capacity Building Program

Capacity Building Needs	Type of Capacity Building	Beneficiaries/Target Clientele
Objective I: Determining available data and information, improving data collection and developing key indicator		
• Neritic tuna species identification and biological information	TOT Training (on-site)	Data enumerator, observers, port inspectors, scientists, other key data informants, experts
• Capacity building to collect neritic tuna data	Training (on-site)	Port officers, enumerators
• Statistics and data collection (including standardizing the stock assessment methodology and data collection)	Workshop	Managers, researchers, statisticians
• Assess CPUE, stocks status to calculate based on catch data and fishing effort	Training and Workshop	Managers, researchers, experts
• Tuna larvae identification	Regional Training	Researchers

REGIONAL POLICY RECOMMENDATIONS ON CONSERVATION AND MANAGEMENT OF EEL RESOURCES AND PROMOTION OF SUSTAINABLE AQUACULTURE

Executive Summary taking into accounts the high demand of Catadromous eels from East Asia Country for Unagi kabayaki products, the 36th Meeting of the Program Committee in November 2013 requested SEAFDEC to spearhead the conduct of a study on eel resources - through the collaboration with Member Countries - covering the following issues: a) Compilation of basic information on eel species in Southeast Asia; b) Research on eel biology; c) Development of eel fishery management measures; and d) Promotion of sustainable aquaculture of eels. In response to this, SEAFDEC organized the 1st Regional Technical Meeting on Information Gathering of Eel Resources and Aquaculture Production in Southeast Asia on 27 January 2014 in Bangkok, Thailand, with aims to compile information related to eel resources from the wild and status of aquaculture in the Southeast Asian Countries and developed the way forward and future meeting of eel experts of the Southeast Asian Region. In addition, SEAFDEC also organized the 2nd Regional Consultation on Development of Regional Policy Recommendation on Sustainable Management of Eel Resources and Aquaculture Production in Southeast Asia in Palembang, Indonesia from 31 August to 1 September 2014. The results from the consultation are the Regional Policy Recommendations and Strategic Actions for the Conservation and Management of Catadromous Eel Resources (*Anguilla spp.*) and Sustainable Development of Catadromous Eel Aquaculture in Southeast Asia. However, ASEAN-SEAFDEC Member Countries consider that the proposed Policy Recommendations and Strategic Actions required for Regional Cooperation that would be aligned with the promotion of AEC-2015.

Therefore, SEAFDEC is suggested to raise this policy recommendation for consideration and endorsement under the ASSP mechanism at the 17th Meeting of FCG/ASSP in December 2014, and later was adopted by the 47th Meeting of the SEAFDEC Council in April 2015. In 2015, IFRDMD has been conducted some baseline surveys on the Glass Eel and Yellow Eel exploitation in the Indonesian and Philippines inland waters from fishermen, fish collectors, small and large scale eel farms and also the marketing channel. Required Consideration by the 18th FCG/ASSP: 1) the meeting is requested to take note on the progress on endorsement of the Regional Policy Recommendations on Conservation and Management of Eel Resources and Promotion of Sustainable Aquaculture as well as the research work on eels resources by IFRDMD; and 2) the meeting is also invited to provide future direction and support SEAFDEC in conducting the status of eel resources within the Southeast Asian Region.

In this 48th Meeting of the SEAFDEC Council, IFRDMD reports that fisheries statistics is one of the most important basic data for considering the present status and recent trend of fish resources, in order to evaluate the relative abundance of eel resources. Developing the eel catch statistics and establishing its inventory system immediately could be useful, not only for sustainability but also for future development of the eel industry and its conservation. IFRDMD requests to Member Countries to develop catch statistics on eel in a hurry in consideration with the international circumstances on usage of eel resources.

REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Meeting of the Council of SEAFDEC is requested to endorse the proposed development of eel catch statistics taking into consideration international requirements on the sustainable utilization of eel resources.

REGIONAL POLICY RECOMMENDATIONS FOR DEVELOPMENT AND USE OF ALTERNATIVE DIETARY INGREDIENTS IN AQUACULTURE FEED FORMULATIONS

I. EXECUTIVE SUMMARY

The efficient use of aquaculture feeds and continued research for developing suitable alternative protein sources that will reduce dependence on fish meal and other fish-based products were adopted by the ASEAN Member States (AMS) in June 2011 as part of their Plan of Action on Sustainable Fisheries for Food Security until 2020. The Regional Technical Consultation on Development and Use of Alternative Dietary Ingredients or Fish Meal Substitutes in Aquaculture Feed Formulation, held in Nay Pyi Taw, Myanmar on 9-11 December 2014 came up with regional policy recommendations and information on the immediate actions for the development and use of alternative dietary ingredients in aquaculture feed development. This document reports on the progress made on regional policy recommendations on aquaculture feed development, particularly on protein substitution in aquafeed formulations.

II. INTRODUCTION

As a follow-up to the 2001 Plan of Action on the use of aquaculture feeds, the ASEAN-SEAFDEC Ministers and Senior Officials adopted in 2011 the Resolution and Plan of Action which enjoin the Member Countries to *'improve the efficient use of aquatic feeds by strictly regulating the quality of manufactured feed and feed ingredients and support continued research for developing suitable alternative protein sources that will reduce the dependence on fish meal and other fish-based products'*. At the Inception Workshop on Follow-up Activities to the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020 in 2011, the participants highlighted the need to fast-track the search for alternative protein source in dietary formulations as well as facilitate the sharing of information in this area of research.

Some countries have begun implementing policies that will regulate the quality and use of manufactured feeds and feed ingredients. With regard to SEAFDEC, the Aquaculture Department (AQD) has done extensive research and development on nutritional requirements, alternative feed ingredients and their digestibility, and developed suitable feed formulations for a wide range of aquaculture species at various growth stages.

Although much research efforts on fish meal and fish protein substitutions in aquafeed have been done and presently being done, information and valuable findings have also not been widely disseminated. One of the priority areas that has been identified and included in the AFCF (ASEAN Fisheries Consultative Forum) workplan (2011-2015) is the *'development of better feeds for sustainable aquaculture'*. Part of the AFCF workplan under feed development is to bring together the experts from international and regional organization and representatives from ASEAN member states to elaborate on the research and development efforts related to protein substitution in aquaculture feed formulations and define the region's policy directions.

Recognizing the need for a concerted action to follow-up on this priority issue of the ASEAN on aquaculture, the Southeast Asian Fisheries Development Center (Aquaculture Department and Secretariat) and the Government of Myanmar convened the Regional Technical Consultation on Development and Use of Alternative Dietary Ingredients or Fish Meal Substitutes in Aquaculture Feed Formulation. This consultation meeting was held in Nay Pyi Taw, Myanmar on 9-11 December 2014, with main financial support from the Government of Japan through the Japan-ASEAN Solidarity Fund, administered by the ASEAN Foundation. Partial support and in-kind contributions were also provided by SEAFDEC (Japanese Trust Fund) and the Government of Myanmar (Department of Fisheries, Ministry of Livestock, Fisheries and Rural Development).

III. HIGHLIGHTS OF THE MEETING

The regional consultation brought together 60 participants from various stakeholder groups who are into planning and/or R&D on aquaculture feeds and nutrition. The participants included the representatives from the ASEAN-SEAFDEC Member Countries, technical experts on aquaculture feed, and officers from ASEAN Foundation, FAO-RAP and SEAFDEC (Secretariat and Aquaculture Department). Representatives from the private sector (local feed company) were also present.

The meeting was held to provide a forum for charting the regional priorities and future directions on feed development, particularly on the use of alternative feed ingredient or protein substitutes.

Regional Policy Recommendations

The workshop session generated a list of key issues in the thematic areas, gaps, strategies and recommendations for the three species groups, categorized according to their feeding habits - herbivores, carnivores and omnivores. The most important outcome of the meeting was a list of Regional Policy Recommendations for the development and use of alternative dietary ingredients in aquaculture feed development (see below).

Issues/Gaps	Regional Policy Recommendations
<ul style="list-style-type: none"> • Knowledge & Technology • Nutritional profiles of feed ingredients (amino acid/fatty acid profile) 	<ul style="list-style-type: none"> • Create a network /regional forum for exchanging and sharing of information on R&D on feed formulation and improving feed efficiency • Technical support to improve farmer knowledge on feed and feeding management, hygiene and sanitation • Information exchange and cooperation with other regions
<ul style="list-style-type: none"> • Status of the aquafeeds 	<ul style="list-style-type: none"> • Assess the capacity of feed milling companies, status of import – export of the raw materials for feed ingredients
<ul style="list-style-type: none"> • Raw materials from IUU fishing activity/GMO 	<ul style="list-style-type: none"> • Traceability system of raw materials • Apply the Catch Documentation system
<ul style="list-style-type: none"> • Efficiency of Feed Formulation 	<ul style="list-style-type: none"> • R&D on aquafeeds quality, formulation and use of Alternative Dietary Ingredients
<ul style="list-style-type: none"> • Sustainability of supply of alternative dietary ingredients to replace fish meals 	<ul style="list-style-type: none"> • Need government program to increase production and centralized supply of feed ingredients in each local government • Develop techniques for mass production of high quality alternative ingredients • Establish the local ingredients supplier networks
<ul style="list-style-type: none"> • Creation of regulations/fishery acts to manage the development of Aquafeeds 	<ul style="list-style-type: none"> • Establish the national Aquafeeds quality standards (control) to ensure that feed milling companies comply with the regulation/fishery acts
<ul style="list-style-type: none"> • Center of ASEAN Program 	<ul style="list-style-type: none"> • SEAFDEC/AQD to work closely with ASEAN Member States, R&D institutions, the academe, Industry and inter-regional organizations as a center of ASEAN programs on Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Development • Establishment of the ASEAN Network on Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Development
<ul style="list-style-type: none"> • Regional Cooperation 	<ul style="list-style-type: none"> • Develop the National Action plan on Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Development • Increase the awareness of importance of reducing dependence of aquaculture on marine animal origin feed and ingredients

Progress to date:

R&D on aquafeeds quality, formulation and use of Alternative Dietary Ingredients

In order for aquaculture to increase its importance as a major net contributor to human food supply with the ASEAN region, aquafeeds need to be less reliant on fish meal and fishery products as principal sources of nutritional protein, and suitable cost effective substitutes have to be sought. The development of cost-efficient and environment-friendly aquafeeds with low or no inclusion of fish meal, in association with the optimization of feed utilization is one of the pressing needs in the region which requires a concerted effort. AQD's work has focused on development of feed formulations during various life stages of important aquaculture species – milkfish, snapper, grouper, sea bass, siganid, pompano, catfish, tilapia, bighead carp, shrimps and freshwater prawn, mud crab, and abalone. The Department has conducted several studies to define the nutritional requirements of important aquaculture commodities, alternative feed ingredients and its digestibility. In response to the present and emerging needs of the region, AQD's experiments have given greater emphasis on finding alternative ingredients which can partially (20 to 80%) replace fish meal in several aquaculture species with no adverse effects on their growth, survival, and feed conversion ratio. Some of the recent important findings in this area of research are as follows:

- Fermented cowpea could replace 40% of fishmeal in milkfish feed.
- Defatted soybean meal and soy protein concentrate could replace 50% and 40% of the fish meal, respectively, in milkfish feed in freshwater, brackishwater and marine culture environments. Furthermore, the use of this SEAFDEC-USB feed formulations gave lower FCRs (in marine cages-1.6; in brackishwater ponds-1.8) compared to milkfish commercial feed (in marine cages-2.3; in brackishwater ponds-2.6). The SEAFDEC-USB-fed stocks also attained a marketable size of >400 average body weight in shorter culture period.
- Distillers dried grain solubles (DDGS) could replace 45% of soybean meal in milkfish diet. Verification trial is on-going in milkfish culture in marine cages.
- About 10-15% inclusion of milkfish hydrolysate in grouper feed has been tested in a small scale experiment.
- In abalone, enriched *Ulva pertusa* can be used as fish meal substitutes for juvenile feed.

The use of these locally available alternative protein sources in the diet of various fish species may offer opportunities to reduce feed cost and decrease environmental degradation.

Technical support to improve farmer knowledge on feed and feeding management, hygiene and sanitation

Provision of technical support through capacity-building is a continuing activity of AQD. To disseminate widely the technologies developed by AQD on aquafeed management and nutrition, the Department, in partnership with Member Countries, has continued to conduct *in-situ* training and publish extension manuals which incorporated feeds and feeding as the main subjects.

Information exchange and cooperation with other regions

Through the financial support of the Government of Japan and ASEAN (Japan-ASEAN Solidarity Fund), SEAFDEC/AQD has published in early 2016 the 'Proceedings of the ASEAN RTC on Development and Use of Alternative Dietary Ingredients or Fish Meal Substitutes in Aquaculture Feed Formulation'. This publication contains important information on the current use of alternative ingredients in the SEAsian region, the constraints on their wider use and recommendations to attain the objective of reducing dependence on the use of feed ingredients from aquatic animal origin.

An on-line internet-based version of the fish nutrition course is also offered biennially for participants from the Member Countries and other interested parties. Lectures on fish nutrition as well as practical sessions on feed preparation are also integral components of every training course offered by AQD.

Creation of a network and/or a regional forum for exchanging/sharing of knowledge on research and development for aquatic animal nutrition

One of the gaps identified during the RTC on Feeds held in Myanmar in 2014 was the need for an ASEAN Center Program on Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Development. To meet this need, the recommendation was to create a network that will also serve as a mechanism for exchanging knowledge/information on R&D for aquatic animal nutrition. It is

known that networking has spread to many frontiers in agricultural research because of its perceived benefits. However, sustaining a network is also a challenge because this will require the strong commitment of all members (countries/organizations) and resources (human, institutional and most importantly, financial).

Develop the National Action plan on Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Development; Formulation of laws and regulations to encourage feed companies to use plant proteins/oils in aquafeeds production

These recommendations at the national level are to be initiated by the Member Countries.

IV. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note of the progress made in aquaculture feed development particularly on efforts related to utilization of alternative protein source in feed formulation and to give comments/advice on the recommendation that pertains to establishment of a network.

VOLUNTARY GUIDELINES FOR SECURING SUSTAINABLE SMALL-SCALE FISHERIES

I. EXECUTIVE SUMMARY

The “Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (VGSSF)” was finally endorsed at the 31st Session of COFI in June 2014. The Guidelines would serve as a fundamental tool to support FAO’s vision of eradicating hunger and promoting sustainable development as outlined in FAO’s new strategic framework. Furthermore, it should be noted that the SSF Guidelines was developed through global consultation processes that involved more than 4,000 representatives from member governments, small-scale fishers, fish workers and their organizations, researchers, development partners, and other relevant stakeholders representing more than 120 countries in six regional and more than 20 civil-society organization-led national consultative meetings.

The SSF Guidelines has the objective of: a) enhancing the contribution of small-scale fisheries to global food security and nutrition, in order to support the progressive realization of the right to adequate food, b) contributing to the equitable development of small-scale fishing communities and poverty eradication, to improve the socio-economic situation of fishers and fish workers within the context of sustainable fisheries management, c) achieving sustainable utilization, prudent and responsible management and conservation of fisheries resources consistent with the CCRF and related instruments, d) promoting the contribution of small-scale fisheries to an economically, socially and environmentally sustainable future for the planet and its people, e) providing guidance that could be considered by States and stakeholders for the development and implementation of ecosystem friendly and participatory policies, strategies and legal frameworks for the enhancement of responsible and sustainable small-scale fisheries, and f) enhancing public awareness and promoting the advancement of knowledge on the culture, role, contribution and potential of small-scale fisheries, considering ancestral and traditional knowledge, and its related constraints and opportunities. The SSF Guidelines clearly states that these objectives should be achieved through the promotion of a human rights-based approach, by empowering small-scale fishing communities—including both men and women, to participate in decision-making processes and to assume responsibilities for sustainable use of fishery resources, by placing emphasis on the needs of developing countries and for the benefit of vulnerable and marginalized groups.

As the SSF Guidelines is voluntary in nature, even if it includes specific focus on the needs of developing countries, **it is global in scope**. Taking into accounts, the high concentration of small-scale fisheries in the Southeast Asian region that continues to contribute to the economies of the countries, the diversity and complexity of small-scale fisheries, and the characteristics of fisheries for subsistence should be considered during the development of the regional approaches towards improving small-scale fisheries in the Southeast Asia region. Since some provisions in the SSF Guidelines may not be applicable or suitable for small-scale fishers in the Southeast Asian region, SEAFDEC is therefore requested by its Member Countries to develop adaptive measures to regionalize the international SSF Guidelines through a regional process of consultations and meetings with the Member Countries and other relevant stakeholders which was planned in 2015.

However, the South East Asia Regional Consultation Workshop on the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication was held in Bali, Indonesia, on 24-27 August 2015. It was co-organized by the Ministry of Marine Affairs and Fisheries (MMAF) of the Republic of Indonesia and the Food and Agriculture Organization of the United Nations (FAO), while FAO Bay of Bengal Large Marine Ecosystem (BOBLME) Project and SEAFDEC is invited to collaborate on this. The workshop was attended by 116 participants including representatives of governments, regional and international organizations, fisher-folk organizations, Civil Society Organization (CSOs), NGOs, academia and other relevant actors. Nine SEAFDEC Member Countries except Brunei Darussalam and Lao PDR join the meeting. The objectives of the workshop were to raise awareness and support the implementation of the SSF Guidelines towards a Regional Plan of Action as appeared in **Appendix 1**.

SEAFDEC raised the outputs from the workshop to the 38th PCM and the 18th FCG/ASSP for consideration and guidance whether SEAFDEC could proceed to continue finalizing the RPOA-SSF from the zero draft or consider for the Regionalized Guidelines for SSF as suggested by Member Countries during the pass SEAFDEC meeting. Because, in view of SEAFDEC, the POA developed from the MMAF/FAO workshop could also reflect the Southeast Asian Countries requirements for securing sustainable small-scale fisheries. Nevertheless, after consultation with the 38th Meeting of SEAFDEC Program Committee in November 2015, all Program Committee requested SEAFDEC to focus in developing the voluntary Regionalized Guidelines based on the FAO SSF Guidelines. In this connection, SEAFDEC has discussed with relevant partners especially Too Big Too Ignore which is the Global Partnership for Small-scale Fisheries Research and it was suggested that another framework could be developed instead of Regional Guidelines, *e.g.* Regional Approach to support the ASEAN in the implementation of the FAO Voluntary Guidelines for Securing Small-scale Fisheries.

REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note of the progress work by FAO and MMAF/Indonesia in collaboration with SEAFDEC and its Member Countries to support the implementation of the SSF Guidelines towards a Regional Plan of Action, as well as the recommendations/suggestions from the 38th PCM and 18th FCG/ASSP asking SEAFDEC to further work on regionalization of the FAO/SSF Guidelines. In this connection, the Council is requested to provide policy guidance and way forward to SEAFDEC based on three options:

- 1) Endorse the Bali Workshop for further implementation by MCs;
- 2) Develop the Regional Voluntary Guidelines on SSF; and
- 3) Regional approach to support the ASEAN in the implementation of the VGSSF

Annex 5 – Working group outputs

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Group 1 – Governance of tenure and sustainable fisheries management			
Access to fishery resources	<ul style="list-style-type: none"> Zoning User rights/right based system for SSF are included in legal frameworks 	<ul style="list-style-type: none"> CAM: Boundaries for management areas are clearly defined in participation with resource users and local government (co-management). INA: Panglima Laut – building on traditional fisheries management systems/zones. Zoning 12 miles SSF, under provincial management. Zoning: <ul style="list-style-type: none"> PHI: SSF (= < 3GT) can fish anywhere and municipal waters (15 km) exclusive for SSF (except for no-take MPAs). Local government unit can make municipal ordinances regarding coastal water (and exclude external fishers). THA: 6 miles only for SSF – no 'commercial' fishers. MYA: 10 miles for < 30 feet boats but need licence. VIE: zone ..miles for 90CV (SSF) MAL: 5 zones, including 5 miles for SSF. Registration (ID cards) of fisheries (PHI, INA, MYA). 	<p>REGIONAL</p> <ul style="list-style-type: none"> Definition in SEAFDEC Regional CCRF (Code of Conduct for Responsible Fisheries) – revisit? Strengthen fisheries at ASEAN level. Make the ASEAN fisheries sectoral WG aware of the SSF Guidelines. <p>NATIONAL</p> <ul style="list-style-type: none"> Definition of small-scale fisheries Develop and strengthen existing SSF fishing zones with regard to: <ul style="list-style-type: none"> Legal recognition; Enforcement/MCS; Awareness/information. <p>Responsibility: DOF or local gov't (depending on decentralisation) in partnership.</p> <p>Demarcation of fishing zones / Cfi boundaries (CAM)</p> <p>Create limited access zones that are enforced</p> <p>Include SSF fishing areas in national and provincial spatial planning (INA)</p>
User/tenure rights (fisheries and land) for SSF:	<ul style="list-style-type: none"> User/tenure rights for SSF are included in legal frameworks Securing rights for indigenous peoples and other local communities through legal frameworks 	<ul style="list-style-type: none"> Panglima Laut in INA institutionalised (in Aceh, Lombok), supported by provincial laws – recognised by 'proper law'. Some other examples of recognition of traditional law but at local level. National level general recognition of traditional rights. 	<p>REGIONAL</p> <ul style="list-style-type: none"> Exchange of experiences on securing land tenure and access to beaches/waterfront (marine and inland waters) for SSF among SE Asia countries. <p>NATIONAL</p> <ul style="list-style-type: none"> Review of land tenure rights system and legalise customary rights to protect SSF and indigenous people from competition from other sectors (e.g., tourism) and access to beaches/waterfront (marine and inland water) should be public, as appropriate. Responsibility: need to involve ministry/local government in charge of land.

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
<p>Appropriate management systems for long-term conservation:</p>	<ul style="list-style-type: none"> • HRBA to sustainable, productive and healthy ecosystems and improved well-being of fishing communities • Alternative livelihoods exist (switching to tourist activities) • Knowledge (scientific and traditional) based management 	<ul style="list-style-type: none"> • Promotion of EAF (MAL, INA, PHI, VIE), including capacity building of fishers, officials and academics. Adopted for FM in INA, including use of EAF indicators. In VIE EAF support to provincial level including MPAs and LMMAs. MPAs in CAM with multiannual planning. • In PHI, MPA management include fishers. • Programmes in PHI: PPPs, training capacity building for alternative livelihoods, scholarships for fisher children. • In THA, EAF capacity strengthening. • VMS (vessel monitoring system) – still starting in MYA. 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Capacity building of regional partners (organisations and projects, e.g. PEMSEA and CTI). • Incorporate in regular training courses (by MFF, BOBLME, AIT). <p>NATIONAL</p> <ul style="list-style-type: none"> • Follow EAF for fisheries management planning and implementation, e.g consultation with fishers on and information / communication. • Incentives/compensation to fishers who are directly displaced by coastal development/resource protection. • Capacity development on different topics, including HRBA: <ul style="list-style-type: none"> • For fishers to enable them to apply self-regulation) • For change agents (local government, NGO, government) • Changing attitude of governments from seeing SSF as a recipient to a right holder. • Partner with new (non fisheries) partners, e.g., Human Rights Commission to ensure HRBA. • EAFM and HRBA training should be promoted and incorporated as part of existing and new courses (fisheries and related education). • Establish inter-ministerial task forces/committees to address SSF issues. • Establish a SSF desk/branch in DOF. <ul style="list-style-type: none"> • Monitoring, Contr • Olling and Surveillance (MCS).
<p>Co-management, consultations and representation:</p>	<ul style="list-style-type: none"> • Consultation processes at national and regional levels in place established • Equitable participation of SSF actors in co-management (not top down only) 	<ul style="list-style-type: none"> • Areas of self-regulation (THA) • Co-management legally recognised in some areas of MYA. • Co-management can be established if communities want (Cfi) in CAM – for both marine and inland waters. • Legal basis for co-management in VIE (but lack of awareness among SSF). • Institutional development from local to national level (capacity building) in MYA. • 1800 locally managed MPAs and network in PHI. • FARMC (Fishery and Aquatic Resources Management Councils) in PHI, local councils including fishers and other stakeholders. 	<p>NATIONAL</p> <ul style="list-style-type: none"> • Ensure that SSF is given appropriate importance in any ICZM arrangement and other frameworks, e.g. Blue Economy. • Establish fisheries advisory bodies including SSF representation at local and national level (refer Philippines FARMC).

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Transboundary issues (at national and regional contexts):	<ul style="list-style-type: none"> Appropriate fora, including regional human rights and legal mechanisms, exist to resolve internal and external issues, including issues relating to transboundary resources and migrants and migratory fishers and fish workers (HRBA). 	<ul style="list-style-type: none"> CTI (coral triangle initiatives) – institutional structure. BOBLME and other projects. ASEAN sectoral WG on fisheries Fishing agreement with INA-AUS. Tolerance of SSF in INA – MAL: bilateral agreements. In CAM, agreements with THA and VIE on how to manage SSF in some provinces. CSO organisation at regional level. Sharing of tools and guidelines in CTI region. 	<p>REGIONAL</p> <ul style="list-style-type: none"> Promote bilateral agreements to solve transboundary issues among countries in the region. Make the ASEAN fisheries sectoral WG aware of the SSF Guidelines. <p>NATIONAL</p> <ul style="list-style-type: none"> Enhance coordination among ministries (and LGUs for Phil) at national level.
Assistance and support to SSF affected by CC and DR			<p>REGIONAL</p> <ul style="list-style-type: none"> Establish arrangements for regional collaboration on CCA and DRM. Incorporate SSF in ASEAN Coordinating Centre for Humanitarian Assistance (Jakarta) and Asian Disaster Preparedness Centre (Bangkok). <p>NATIONAL</p> <ul style="list-style-type: none"> Include SSF specifically in national DR legislation and in CCA plans/programmes. Develop assessments specific to SSF for CC and include SSF as specific part of CC plans/programmes (not only fisheries). Develop alternative income generating activities. Longer time frame for weather forecast linked to early warning adequate for SSF. Carry out vulnerability assessment for SSF. Social security/insurance for CC & DR for SSF.

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Group 2 – Social development, employment and decent work and Gender equality and Disaster risks and climate change			
Lack of empowerment of SSF communities at all levels	Integrated ecosystemic holistic approach for small-scale fisheries development	<ul style="list-style-type: none"> • Community-based/collaborative management + meaningful participation in decision making • Responsible/sustainable investment in social infrastructure in coastal areas • Collaboration with Ministry of Communication on the use of Information and Communication Technology for SSF (Indonesia-MoU to supply mobile phones to share information on prices, fishing grounds etc.) • Financial inclusion through the use of mobile phones for social transfers (India) • Commercial banks encouraged to cover remote areas (India) • Corporate Social Responsibility schemes designed with full involvement of SSF communities/ based on needs of SSF communities (e.g. India - use of old cables from underwater cable industry for fish cages) • Public-private partnership at local level for fish marketing (Philippines) • Indonesia- NPOA SSF included a review of the legal and regulatory framework • Japan has support officers for coastal fisheries 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Sharing about empowerment conditions within SEA countries for further national action (applies to all issues) to learn and to develop baseline/indicators/gap analysis for the region • Develop guidance on implementation (FAO) • Promote the endorsement of the SSF Guidelines by ASEAN and other relevant regional associations • Promote the engagement with other relevant ASEAN bodies to consider the SSF Guidelines • Mapping of projects/initiatives relevant to the SSF Guidelines implementation in the region • Review current bilateral and regional agreements and examine how they align with the SSF Guidelines, and consider amendments and changes • Propose SSF as next thematic research issue for ASEAN Intergovernmental Commission on Human Rights (AICHR) <p>NATIONAL</p> <ul style="list-style-type: none"> • Promote the SSF Guidelines with the Ministry/Department of Agriculture in each country to bring them on agenda of ASEAN ministerial level on agriculture and forestry (AMAF) • Promote registration of SSF fishers and fish workers in close collaboration with the fishing communities, their organizations and NGOs • Promote inter-departmental collaboration within each country outside the fishery department • Establish national platforms representing all related stakeholders to support the SSF Guidelines implementation in a participatory manner as indicated in particular in para. 13.4, 13.5 and 10.1 of the SSF Guidelines • Review current (fisheries) laws and regulations to examine how they align with the SSF Guidelines (example from Indonesia) <p>Strengthen extension services for SSF (example from Japan)</p>

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Tensions generated by transborder / boundary issues	Environment for small-scale fisheries communities free of crimes	<ul style="list-style-type: none"> • Bilateral agreements to not detain small-scale fisheries in foreign EEZ (e.g. Indonesia-Malaysia) • Promotion of transition from informal to formal migration as collaboration between Ministries of Labour, Foreign Affairs and Fisheries (e.g. Philippines, Myanmar - pre-departure training for the merchant marine sector) • Register of seafarers as already established for the merchant fleet sector 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Identify migration hotspots • Encourage bilateral agreements for appropriate handling of SSF (e.g. through MoUs) in relation to transborder/boundary issue <p>NATIONAL</p> <ul style="list-style-type: none"> • Encourage collaboration between Ministry of Foreign Affairs, Ministry of Labour and Fisheries Department • Increase awareness of and understanding of issues in relation to transborder/boundary issues at local level (e.g. on risks of IUU fishing, migration for labour) <p>Examine establishment of safe passage for customary movement between countries</p>
Limited or lack of access to education for all	Informed and educated coastal communities	<ul style="list-style-type: none"> • Schools and teachers provided to coastal communities by Civil Society Organizations (e.g. Philippines) • Floating schools in inland and marine areas (e.g. Cambodia, Vietnam) • Quota of scholarships for students from fishing communities to access public university specialized in fisheries (Indonesia) • Development of context-specific curriculum for primary/secondary school for coastal communities (Thailand) • Indonesia and Rhode Island University have an MoU 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Arrange study visits in the region, including to Japan, facilitated through organizations such as SEAFDEC • Promote discussion in ASEAN on investment mechanism for education infrastructure and partnerships to enable this • Promote regional basic literature programs for SSF <p>NATIONAL</p> <ul style="list-style-type: none"> • Provide training for women in fish processing and marketing (hands on training) • Youth: provide support for education fee, scholarships, university exchange programs (e.g. example from Indonesia) • Develop specific curricula based on SSF needs, in consultation with SSF stakeholders • Promote increased investment in social infrastructure for SSF communities <p>Explore the use of new technology for education</p>

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
<p>Poor working conditions in small-scale fisheries and lack of social protection</p>	<p>Decent work for all is operative in the region</p>	<ul style="list-style-type: none"> • Malaysia has a social protection for SSF • Indonesia has an insurance scheme for fisheries 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Promote implementation of ILO guidance, including recent regional work on migrant labor (e.g. establishment of seafarer register), in line with ASEAN Declaration on the Rights and Protection of migrant workers • Promote regional agreement on social protection/security for migrant labour • Share experiences from national social protection schemes to encourage establishment/ strengthening of national schemes • Establish formal complaints mechanism (example from ILO on forced labour) <p>NATIONAL</p> <ul style="list-style-type: none"> • Establish register of fishers and fishworkers • Establish pre-migration training programs <p>Establish/strengthen health and safety insurance mechanisms for all SSF, including migrants</p>
<p>Need for gender-sensitive legal, regulatory and policy framework and its implementation</p>	<p>Active promotions and realization of gender equality and equity in SSF</p>	<ul style="list-style-type: none"> • Malaysia has ' women in business' groups, including for fisheries • Philippines have guidelines on the recognition of women in agriculture which could be adapted to SSF • Indonesia has empowerment programs targeting SSF women 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Ensure the participation of SSF women in the ASEAN Commission on women and children • Gather and share best practices on women empowerment, also through social media and cultural campaigns <p>NATIONAL</p> <ul style="list-style-type: none"> • Develops specific plan for women in SSF and ensure allocation of budget for women programs • Promote SSF women groups (for example, Women in Business groups in Malaysia) • Develop national guidelines for the recognition of SSF women (example for rural women recognition available from the Philippines) • Gather and share best practices on women empowerment, also through social media and cultural campaigns <p>Develop/strengthen legislation to ensure the realization of women's rights</p>

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Emergency response and disaster risk management not including SSF enough	Inclusion of fisheries and fishing communities and indigenous people in inland and coastal areas in national policy and plans at all level	<ul style="list-style-type: none"> • ASEAN Declaration on Climate Change and Resilience • Sectoral plan/strategy for climate change adaptation for the fisheries sector (Indonesia) 	<p>REGIONAL</p> <ul style="list-style-type: none"> • Discussion and monitoring of the implementation of the ASEAN Declaration on Climate Change and Resilience, ensuring the inclusion of SSF <p>NATIONAL</p> <ul style="list-style-type: none"> • Actively involve SSF stakeholders in the development and implementation of national plans for CC adaptation and disaster risk to integrate natural resource management and SSF (ecosystem approach; example from Indonesia on sectoral CC adaptation strategy) <p>Pilot projects at field level and share learning to inform a regional CC adaptation program</p>
Group 3 - Value chains, post-harvest and trade			
Access to markets	SSF meet local food security needs, participate as partners in domestic and global value chains and get a fair share of the benefits	<p>Ongoing:</p> <ul style="list-style-type: none"> • Fish Auction practices at the landing site • Fishing/fishers cooperative and fishing guilds • Promote the SSF products to the International market • Market certification for SSF products • FIP for SSF • Joint promotion of SSF products among Asia - Pacific countries • Centralized Landing for the SSF <p>Good practices:</p> <ul style="list-style-type: none"> • Direct link between SSF to the retailers • Clustering the SSF in to the Plasma scheme • Seafood festival to bring the consumers directly in to the SSF • Promoting sustainable product from SSF to the market including consumers education 	<p>Regional:</p> <ul style="list-style-type: none"> • Assessment of the small-scale fisheries value chain • Market analysis at regional level to look at the demand trend for fisheries product • Promotion for SSF products at the regional market • Assessment of the impact of ASEAN Economic Community and trade barriers on SSF <p>National:</p> <ul style="list-style-type: none"> • Assessment of the small-scale fisheries value chain and risk analysis on impacts on local food security • Improvement of value-added traditional products such as: Fish sauce, Smoked Fish, Fish Crackers, Fish floss, Fish Balls, souvenirs, etc. • Facilitate market access for traditional product to the retailers • Monitoring of fish prices and supply
Avoiding post-harvest losses	Reduce fish losses and ensure quality of the product to increase fishers' income and support sustainable fisheries management	<p>Ongoing:</p> <ul style="list-style-type: none"> • The improvement of on board preservation • Capacity building for fishers and other players along the value chain for good handling practices on board and distribution • Provide collecting vessels for SSF at sea. • Improvement of traditional processing practices and diversification • Inspection systems for the catches quality and safety at the landing site <p>Good practice:</p> <ul style="list-style-type: none"> • Good cool chain system along the supply chain 	<p>Regional:</p> <ul style="list-style-type: none"> • Regional assesment on the sustainable fish catch and processing capacity • Identify potential causes of fish losses along the supply chain for SSF • Promote best practices for handling and distribution e.g.: standardized fish box • Establish a platform to promote exchange of experiences among SSF in Asean <p>National:</p> <ul style="list-style-type: none"> • Promote best practices for handling and distribution e.g.: standardized fish box • Identify the most critical fisheries in terms of sustainability, loss and waste to establish measures

Issue	Vision/objective	Good practice and ongoing initiatives	Proposed actions
Investment in appropriate infrastructure	Conducive policy and business environment to encourage investment in infrastructure appropriate to SSF	Ongoing: <ul style="list-style-type: none"> Partnership with the private sectors in providing better facilities for SSF Sekaya Maritim Program (Indonesia) Improvement of landing sites for SSF Encourage private sectors to invest in infrastructures for SSF Investment in transition from destructive to more selective fishing gears Good practices: <ul style="list-style-type: none"> Providing one stop services systems including logistics and license for SSF 	Regional: <ul style="list-style-type: none"> Case study at regional level to identify best policies for facilitating investment in infrastructure for SSF Establish regional organization for fishing port managers National: <ul style="list-style-type: none"> Capacity development for the maintenance and management of landing site/fishing port Capacity building for SSF business skills Establish national organization for fishing port and landing site managers e.g.: such as in Indonesia Encourage innovation in the appropriate technology on infrastructure for SSF
Access to information on market and trade	Establish transparent market information systems for local and international market and trade, facilitate networking between SSF and end users, and promote better access to information through suitable ICT	Ongoing: <ul style="list-style-type: none"> www.pipp.com and information board in some landing sites. www.wpi.kkp.go.id for the fish price information. Online catch certification system SMS for market and fishing related information 	Regional: <ul style="list-style-type: none"> Identify the need for information of players along the supply chain including market requirements Ensure regional scalability and compatibility for information and communication technology e.g. should be available in different ASEAN languages National: <ul style="list-style-type: none"> Establish fishers market for SSF, like in Malaysia Establish up-to-date and transparent market price information Identify the need of information of players along the supply chain including market requirements
Traditional forms of associations	Organize SSF associations, facilitate their evolution and strengthening to encourage fair and inclusive environment, improve their bargaining positions through an inclusive legal framework, and promote community-based resource management combining local wisdom and scientific knowledge	<ul style="list-style-type: none"> Transition to written contract between SSF and the middlemen Develop fisher club to link with the buyers and encourage ecotourism Fisher association provide Capacity building on sustainable fishing and business Improve fisheries income (premium price) back to the community Empowering customary law (eg: <i>adat & tara bandu</i>) Good practices: <ul style="list-style-type: none"> <i>Van chai</i> (Vietnam), <i>tara bandu</i> (Timor Leste), <i>Sasi & Panglima Laot</i> (Indonesia) Revival and modernization of traditional fisheries management system (e.g. Samoa) 	Regional: <ul style="list-style-type: none"> Empower regional EAFM working group to support the SSF Creating and strengthening fishing associations and providing technical support and capacity building Regional review of how traditional system have evolved and adapted to sustainable resources management and trade requirements National: <ul style="list-style-type: none"> Empowering local fishing communities to get involved in resources management, capacity building and establish link with the market such as in Malaysia Creating and strengthening fishing associations and providing technical support and capacity building

POLICY RECOMMENDATIONS AND STRATEGIC PLANS FOR FISHERY RESOURCES ENHANCEMENT IN THE SOUTHEAST ASIAN COUNTRIES

I. EXECUTIVE SUMMARY

Recognizing the need to enhance the fisheries resources in the jurisdictions of the respective Southeast Asian countries as well as their transboundary areas due to the declining and/or over exploitation of several economically important fish stocks and the loss of relevant habitats. The ASEAN-SEAFDEC Resolution and Plan on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 adopted in June 2011, stipulated the need for the Southeast Asian countries to “*optimize the use of inshore waters through resources enhancement programs such as promoting the installation of artificial reefs and structures, encouraging coordinated and effective planning for coastal fisheries management programs, undertaking environmental impact assessment studies, restocking of commercially important fish species, as appropriate, and give priority to human resources development for the implementation of such programs*”. To support ASEAN Member States as aforementioned, SEAFDEC conducted the “Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region” on 27-30 July 2015 in Pattaya, Thailand with the support from the government of Japan through the Japanese Trust Fund. The symposium aims to share knowledge and lessons learnt from resources enhancement initiatives undertaken by SEAFDEC and the Southeast Asian countries. The fishery resources enhancement activities discussed in the Symposium focused on 2 themes: 1) Habitat Improvement and Management that includes deployment of artificial reefs, establishment of fisheries *refugia*, habitat rehabilitation; and 2) Artificial Propagation and Stock Release. During the Symposium, it was also recognized that based on reports, country inputs, resource enhancement through artificial propagation and stock release of the region’s economically important species, is one of the effective approaches that would help protect and restore the aquatic resource habitats and target stocks. The Symposium therefore identified and adopted the Policy Recommendations and Strategic Plan for the Implementation of Fisheries Resources Enhancement Activities in the Southeast Asian region.

II. REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Meeting of the Council of SEAFDEC is requested to take note and endorse the Policy Recommendations and Strategic Plans for the Implementation of Fisheries Resources Enhancement Activities in the Southeast Asian region. The Council is also invited to provide recommendations and way forward on the policy recommendation and strategic plan to be implemented by Member Countries and SEAFDEC.

**Policy Recommendations and Strategic Plans for
Fishery Resources Enhancement in the Southeast Asian Countries**
(Adopted on 30 July 2015)

1) Fishery Resources Enhancement through Habitat Improvement and Management

Issues/ Challenges	Recommendations	Strategic Plan
Artificial Reefs Management	<ul style="list-style-type: none"> ➤ Best practices on installation of artificial reefs (ARs) should be promoted to ensure the protection of aquatic species during their life cycle and allowing them to reach optimum size. ➤ Planning and deployment of ARs should be undertaken, taking into consideration the following: <ul style="list-style-type: none"> • Clear purpose of ARs, <i>e.g.</i> resources enhancement; • Results from relevant feasibility studies, including cost-benefit analysis, socio-economic analysis, financial analysis, among others; • Involvement of researchers, policy makers, fishing communities, local government units and other stakeholders in the planning process; • Results of site suitability evaluation, <i>e.g.</i> existing corals/fishes, seabed conditions, oceanographic conditions, water circulation patterns; • Choice of AR design(s) that should suit seabed conditions and purpose; and • Certainty that installed ARs does not create pollution to the marine environment. ➤ ARs should be regularly monitored (over time, and seasonally) using appropriate parameters, <i>e.g.</i> conditions of ARs, primary productivity, abundance and diversity of aquatic species (fish, macro benthos, etc.). The impacts of ARs on environmental conditions, <i>e.g.</i> water current, turbidity, and sedimentation among others should also be monitored. ➤ Regular monitoring and evaluation of the effectiveness of AR programs should be conducted (for short-medium and long-term) by comparing various indicators before/after or within/outside ARs. Correlation of the abundance of species inhabiting the ARs and other environmental factors, <i>e.g.</i> bottom condition, water current/condition, should also be established. ➤ Cost-benefit analysis of AR deployment program(s) should be conducted, taking into consideration the resources, environmental and socio-economic benefits that could be gained from the program(s). Data to be collected could include investment costs (ARs construction and deployment), fisheries production by fishing gear and fishers' incomes before and after ARs deployment, and other ecosystem services. 	<ul style="list-style-type: none"> ➤ Developing Regional Guidelines on Best Practices for Installation of the Artificial Reefs (ARs)
	<ul style="list-style-type: none"> ➤ Implementation of AR program(s) should be integrated with other fisheries management measures, <i>e.g.</i> fishing regulations that include among others, prohibition of encroachment of commercial fishing 	<ul style="list-style-type: none"> ➤ Integrating fisheries management measures/principles in AR management programs

Issues/ Challenges	Recommendations	Strategic Plan
	<p>activities, establishment of conservation/fishing zones, to ensure that resources are utilized in sustainable manner. Stakeholders' consultations on the management of ARs should be conducted to elaborate responsibility of stakeholders and fishers in the management plan.</p>	
	<ul style="list-style-type: none"> ➤ AR programs could be implemented in the coastal and offshore (if necessary) areas to ensure that the life cycle of both of demersal and pelagic species is sustained. ➤ A list of expertise on ARs and available resources should be compiled for reference and usage by the countries. 	<ul style="list-style-type: none"> ➤ Integrating ARs in policies and plans for coastal and offshore fisheries resources conservation, management and development
<p>Integrating Fisheries and Habitat Management</p>	<ul style="list-style-type: none"> ➤ Fisheries <i>refugia</i> could be implemented to complement the existing conservation/management measures, by integrating it with the fisheries objectives of protecting critical life cycle, e.g. spawning, nursing, broodstock aggregation, and migratory routes of species targeted for management. 	<ul style="list-style-type: none"> ➤ Promoting the establishment of fisheries <i>refugia</i> as a tool for integrating fisheries and habitat management
	<ul style="list-style-type: none"> ➤ Selection of site(s) for fisheries <i>refugia</i> should be based on scientific information and local knowledge especially in identifying the areas that are natural habitats for critical stages of the life cycle of species targeted for management, e.g. spawning, nursery grounds, broodstock aggregation, migratory routes. The area of the Fisheries <i>Refugia</i> should be manageable by concerned stakeholders. ➤ Regulations on fishing activities in the <i>refugia</i> (e.g. restriction of harvestable size, fishing seasons, fishing gears/methods) should be enforced taking into account up-to-date scientific data (e.g. spawning season, size at maturity, larval study), which should be relevant and correspond to the activities of host communities. 	<ul style="list-style-type: none"> ➤ Conducting scientific research programs and stakeholders consultation to support the identification of suitable sites and establishment of fisheries <i>refugia</i> for target species, and coming up with scientific evidence that harmonize with local knowledge to serve as basis for developing appropriate management measures
	<ul style="list-style-type: none"> ➤ Community participation should be optimized for the establishment and management of fisheries <i>refugia</i> (e.g. identification of suitable sites, establishment/implementation of management measures including MCS) and collaboration with relevant government agencies at local/national levels should be strengthened so that the fisheries <i>refugia</i> could be as self-sustaining as possible. 	<ul style="list-style-type: none"> ➤ Ensuring the sustained participation of key stakeholders in the planning, sites selection and development of management measures for fisheries <i>refugia</i>
	<ul style="list-style-type: none"> ➤ Sub-regional cooperation should be strengthened for the establishment of fisheries <i>refugia</i> for management of trans-boundary species (e.g. Indo-pacific mackerels) that move across the EEZs of more than one country. 	<ul style="list-style-type: none"> ➤ Enhancing regional and sub-regional collaboration for the establishment of fisheries <i>refugia</i> system for transboundary fish stocks management
<p>Degradation of (fish) habitats in the Southeast Asian region</p>	<ul style="list-style-type: none"> ➤ Fish habitat restoration priorities in different water resources in the region should be reviewed. 	<ul style="list-style-type: none"> ➤ Making habitat restoration a priority at national levels
	<ul style="list-style-type: none"> ➤ Effectiveness of habitat restorations and resources enhancement in inland water resources such as lakes should be determined through the following methodologies: <ul style="list-style-type: none"> • Conduct of baseline studies • Harmonization of legal and juridical mandates of authorized agencies, including local governments 	<ul style="list-style-type: none"> ➤ Developing the best practice guidelines on habitat restoration for different water resources such as inland and marine, in conjunction with fisheries resources

Issues/ Challenges	Recommendations	Strategic Plan
	<p>responsible for water resources</p> <ul style="list-style-type: none"> • Pooling of government funds and resources • Mobilization of local communities and/or other stakeholders • Application of technical tools to reconstruct the fisheries • Improvement of buffer zones <p>➤ Habitat restoration should be implemented through suitable co-management arrangements taking into consideration the importance of the ecosystem</p> <p>➤ The “Satoumi Concept” could be considered as one of the Integrated Coastal Management approaches for habitat restoration.</p> <p>Remarks: Developed by Japan, the “Satoumi Concept” is a form of unified management system for land and sea, where management mechanisms for coastal waters move inland, one step away from integrated coastal management so that land and sea are brought under a unified management policy. In short, the “Satoumi Concept” is meant for environmental conservation of coastal areas in harmony with human interaction on land.</p>	enhancement programs
	<p>➤ Enhancement of fish populations in restored habitats could be carried out by applying appropriate techniques such as installation of ARs, establishment of fisheries <i>refugia</i>, restocking, and/or mangrove reforestation, etc.</p>	<p>➤ Rebuilding sustainable fish populations in restored habitats</p>
	<p>➤ Since indigenous knowledge is crucial for habitat restorations, applicable only in most cases for specific areas and the culture of local communities, science and indigenous knowledge should be combined to ensure the effectiveness of habitat restorations.</p>	<p>➤ Undertaking baseline studies based on indigenous and scientific knowledge</p>
	<p>➤ Impact assessment of lost natural habitats (<i>i.e.</i> coral reefs, sea grass and sea beds) due to human activities (irresponsible fishing or pollution) should be conducted as well as raising the awareness of stakeholders on the importance of habitats to humans and fishes.</p>	<p>➤ Conducting impact assessment of lost natural habitats, and raising the awareness of stakeholders on conservation and protection of the natural habitats</p>

2) Fishery Resources Enhancement through Artificial Propagation and Stock Release

Issues/Challenges	Recommendations	Strategic Plan
Sub-theme 1: Potentials and Limitations of Stock enhancement and Restocking		
<p>➤ Selection of species and release area considerations</p> <ul style="list-style-type: none"> • Lack of species and site specific protocols/guidelines for successful stock enhancement/ 	<p>➤ Stock enhancement and restocking activities should take into consideration the following:</p> <ul style="list-style-type: none"> • Development of species- and site-specific strategies to ensure success of activity; <ul style="list-style-type: none"> - Give high importance to availability of scientific information/biology of the target species. - Ensure appropriate choice of species – benthic over pelagic and migratory species 	<p>➤ Developing Regional Guidelines or criteria for feasibility assessment and improvement and disseminating the Guidelines to Member Countries</p> <p>[Note: the Guidelines will take into considerations the elements for higher</p>

Issues/Challenges	Recommendations	Strategic Plan
<p>restocking</p> <ul style="list-style-type: none"> • Techniques (specific to stock enhancement) for ex-ante impact assessment and monitoring (biological, environmental, social and economic) are not available <p>➤ Strategy to ensure sustainability of activities and gains/benefits achieved from stock enhancement is not yet developed</p> <p>➤ Although benefits from stock enhancement and restocking are urgently needed and appreciated, the technical capabilities and financial resources of most Member Countries could be limited</p>	<ul style="list-style-type: none"> - Provide adequate preparation/rehabilitation of receiving habitats to ensure likelihood of success. - Give preference to marine reserves as release sites for managed monitoring and harvesting. <ul style="list-style-type: none"> • Active involvement of the local people (especially the fisherfolks) in the planning, implementation and monitoring activities, with understanding that the objectives of the activity and its long-term sustainability will largely depend on their continuous active involvement and participation; • Well-defined governance arrangements, and access and harvest rights through consultations with various stakeholders in enhancement/ restocking activities; • Conduct of cost-benefit analysis of release and stock enhancement activities; • Implementation of long-term planning with all stakeholders to ensure availability of sufficient funds and manpower resources; • Participation of the local government units and their assured commitment to adopt and sustain stock enhancement initiatives (with donor funds) beyond project completion date; • Creation of supplemental and alternative livelihood strategies to encourage fisherfolks' participation and compliance to regulations; • Promotion of multi-stakeholder involvement and embedding conflict management in all phases of stock enhancement activity (including planning for and prioritizing a bottom-up approach in policy & regulation formulation); • Implementation of regulations and networking with enforcement agencies for protection of released stocks and management of recaptures; and • Implementation of activities, in conjunction with other management and conservation measures, to ensure that resources are utilized in sustainable manner. 	<p>success of restocking and stock enhancement covering the technical (choice of species, biology/life cycle of species, sustainable supply of quality seeds/stocks), environmental (suitability of site), social/institutional (involvement and strong support of local communities, local government agencies and research institutions), and economic aspects (funds)].</p> <p>➤ Formulating a 'Strategy or Framework for sustainability of stock enhancement initiatives' and disseminating this Framework to Member Countries</p>
Sub-theme 2: Release strategies and ecological interaction with natural stocks		
<p>➤ Lack of release protocols/guidelines (specific to stock enhancement)</p>	<p>➤ Assess the initial status of the community structure of the release site and monitor over time to determine the effects of interaction with the released stocks</p> <p>➤ Determine the appropriate size of release of stocks to ensure high survival, avoidance of predators and economic efficiency</p>	<p>➤ Establishing release protocols/guidelines based on scientific findings and in accordance with existing policy instruments/regulations</p>

Issues/Challenges	Recommendations	Strategic Plan
<ul style="list-style-type: none"> ➤ Capacity of Member Countries on ecological risk assessment and effective monitoring needs to be assessed and strengthened 	<ul style="list-style-type: none"> ➤ Conduct proper behavioral conditioning of stocks prior to release ➤ Promote regular and long-term continuous monitoring to determine effectiveness ➤ Develop effective marking techniques for stock enhancement <ul style="list-style-type: none"> • Determine appropriate tags for proper identification of released stocks and for effective long- term monitoring ➤ Based on needs of Member Countries, enhance their capacity on the application of decision-making tools for stock release (e.g. ecological risk assessment tool) 	<ul style="list-style-type: none"> ➤ Implementing effective institutional frameworks, policy instruments for the release of stocks, monitoring and enforcement mechanisms at national and local levels ➤ Developing and implementing capacity building programs on the application of decision-making tools for stock release
Sub-theme 3: Aquaculture-based Enhancement and Restoration		
<ul style="list-style-type: none"> ➤ Genetic, health and biodiversity considerations <ul style="list-style-type: none"> • Indiscriminate stocking or translocation of non-indigenous species/stocks poses adverse genetic and health risks ➤ Lack of seed production techniques and facilities intended for enhancement and restocking activities 	<ul style="list-style-type: none"> ➤ Importance of the genetic and health information of species should be well recognized to minimize genetic effects, transfer of diseases and protect biodiversity ➤ Increase government investments and solicit donor contributions for aquaculture R&D and related facilities to support wide-scale and high-impact stock enhancement and restocking initiatives 	<ul style="list-style-type: none"> ➤ Formulating mechanism that will ensure that stocks for release are healthy/disease-free (for instance, thru health certification) and will not pose genetic risks ➤ Strengthening IEC (information, education and communication) activities to enhance public awareness on genetic and health risks related to stock release and the need for precautionary measures following relevant Guidelines developed and promoted by FAO. ➤ Fostering strong collaboration among R&D institutions, national and local government, and local communities on initiatives that will support wide-scale and high-impact stock enhancement and restocking initiatives

REGIONAL GUIDELINES ON TRACEABILITY SYSTEM FOR AQUACULTURE PRODUCTS IN THE ASEAN REGION

I. EXECUTIVE SUMMARY

The Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region is the major output of the Japanese Trust Fund V project on Traceability System for Aquaculture Products in the ASEAN Region. The Guidelines had been developed through a series of workshops, participatory and consultative process involving fishery officials from the ASEAN-SEAFDEC Member Countries organized under the Marine Fisheries Research Department (MFRD) Programmes. The Guidelines was finalized and adopted by senior fishery officials from Member Countries at the End-of-Project (EOP) Meeting held on 26 – 27 August 2015 in Singapore.

The Guidelines which was drafted based on consensus of and in accordance to the collective inputs and efforts from all the ASEAN-SEAFDEC Member Countries will serve as a common platform and reference for Member Countries in their implementation of traceability for aquaculture products. The Guidelines comprise of eleven Chapters and one Annex. The first six Chapters serve as an introduction and includes the background, scope, acronyms, terms and definitions used in the Guidelines, traceability principles, advantages of traceability implementation and the types of traceability systems, to provide a better understanding of the basic elements and focus of the Guidelines; the next two Chapters describe the issues and challenges faced by industry in the region with respect to traceability implementation and recommendations. Chapter IX describes a generic supply chain for aquaculture products which identifies the various stakeholders involved in the aquaculture production, distribution, trade and retail of the aquaculture products (fish and shrimp). Finally, Chapter X provides the actual guidelines for Member Countries in their implementation of traceability for aquaculture products and highlight where traceability information is critical as well as the responsibilities of individual stakeholders to ensure that traceability along the supply chain is established. The last Chapter XI lists the references used in the Guidelines while the Annex is a listing of competent authorities responsible for implementing and regulating traceability of aquaculture products in the ASEAN-SEAFDEC Member Countries.

At the 18th FCG/ASSP Meeting held in November 2015 in Manila, Philippines, the Guidelines was endorsed without further comments or amendments.

II. REQUIRED CONSIDERATION BY THE COUNCIL

The 48th Meeting of the Council is requested to consider and endorse the Guidelines for consideration by the 24th ASWGFⁱ and high-level authority of ASEAN in order to promote and enhance the implementation of traceability system for aquaculture products in the region.

REGIONAL GUIDELINES ON TRACEABILITY SYSTEM FOR AQUACULTURE PRODUCTS IN THE ASEAN REGION

Post Harvest Technology Department
Agri-Food and Veterinary Authority of Singapore

Marine Fisheries Research Department
SouthEast Asian Fisheries Development Center



REGIONAL GUIDELINES ON TRACEABILITY SYSTEM FOR AQUACULTURE PRODUCTS IN THE ASEAN REGION

CONTENTS

I.	Background
II.	Scope
III.	Acronyms, Terms and Definitions
IV.	Traceability Principles
V.	Advantages of Traceability Implementation
VI.	Types of Traceability Systems
VII.	Issues and Challenges
VIII.	Recommendations
IX.	Generic Supply Chain for Aquaculture Products
X.	Regional Guidelines on Traceability System for Aquaculture Products
XI.	References
Annex I	List of Aquaculture Traceability Competent Authority in ASEAN region

I Background

The Codex Alimentarius Commission (2004) defines traceability or product tracing as “The ability to follow the movement of a food through specified stage(s) of production, processing and distribution”. In an increasingly complex food system, traceability has become the major tool to deal with issues/problems associated with food safety and quality assurance, thus allowing business to prevent risk and gain consumer trust.

The strengthened ties between countries across the globe encourage and facilitate bilateral trade. It is not uncommon for food to travel thousands of miles to reach a market. In trade, records of traceability are used as proof of compliance to food safety, bio-security and regulatory requirements; these records also ensure quality and other contractual requirements are fulfilled. Thus it is imperative that traceability of food products be strengthened to support food safety worldwide. In the situation such as a food recall, robust traceability systems allow efficient tracing of affected products throughout the supply chain.

ASEAN exports a significant volume of aquaculture fish and fish products annually to regional and global markets. As traceability becomes a trade requirement for eligibility to export aquaculture products to the major markets, such as Japan, European Union (EU) and United States of America (USA), establishing reliable traceability system is crucial for the sustainable development of aquaculture industry in ASEAN. To tap into the demand for aquaculture fish these markets, several large scale aquaculture companies in ASEAN are able to comply with the stringent export requirements. Governments and organizations around the world have also been developing different systems on seafood traceability e.g. TraceFish (EU), TraceShrimp (Thailand). Some countries in the ASEAN region which are major seafood exporters, such as Thailand (shrimps) and Viet Nam (catfish), have begun implementing of traceability systems for their aquaculture products.

Beside stringent regulatory requirement, the greatest pressure for businesses to implement traceability system for aquaculture products has been coming from the general public. A new generation of educated consumers with higher level of awareness drives a growing market demand for food safety, security and sustainability for aquaculture products. Consumers are getting more and more cautious over what they eat – whether the food comes from a safe and sustainable source, and whether production, transportation, and storage conditions can ensure food safety and quality.

In view of these developments, the Southeast Asian Fisheries Development Center (SEAFDEC), under its Marine Fisheries Research Department (MFRD) Programmes, has initiated and implemented a project on traceability for aquaculture products in the ASEAN region. The project is in line with the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 which has been endorsed at

the ASEAN-SEAFDEC Conference 2011 and with the SEAFDEC Program Thrust II: Enhancing Capacity & Competitiveness to Facilitate International and Intra-regional Trade. The goal of the project is to enhance the competitiveness of the ASEAN's aquaculture products through the implementation of traceability system in the aquaculture production and supply chain.

The expected outcomes of the project are envisaged to be the establishment/promotion of traceability programmes for aquaculture products in the ASEAN member countries and enhanced capability and knowledge on the development and implementation of traceability systems for aquaculture products in the member countries. A major deliverable of the project is this Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN region which has been developed in consultation with the ASEAN-SEAFDEC Member Countries.

DRAFT

II Scope

Traceability is a component of a food safety management system. Traceability in the aquaculture supply chain aims to ensure the safety and quality of aquatic organisms and, to verify that they are farmed in compliance with national or international management requirements or to meet national security and public safety objectives. In order to facilitate trade with specific countries such as the United States of America (USA), the European Union (EU), as well as Japan, traceability has also become a vital tool and requirement for necessary market penetration.

Traceability implementation can be mandatory or voluntary depending on the governmental or private sector initiatives or obligations. Nonetheless, whether or not it is a regulatory requirement, traceability is now a common feature in international trade of fish and fish products.

Most of the ASEAN member countries stipulate the pre-requisites of traceability application in their aquaculture industry. National standards, circular, laws and regulations for traceability are among national programmes stipulated by most of the ASEAN member countries. According to the FAO Expert Panel Review 5.2 on “Servicing the aquaculture sector: role of state and private sectors”, to encourage traceability application/ implementation, government could provide training and promote capability building on traceability requirements and system. Other roles of government include provision of infrastructure facilities and financial incentives to enhance implementation of traceability system to improve safety and productivity.

Government can also involve by regulating the aquaculture industry on areas such as farming, by promoting or imposing the adoption of best practices e.g. Good Aquaculture Practice (GAP). For manufacturing of aquaculture products, food safety requirement, such as, Hazard Analysis Critical Control Point (HACCP) is commonly required. Relevant documents, namely, Movement Document (MD) used in the aquaculture supply chain for traceability management can be regulated.

On the other hand, private sector of aquaculture industry should comply with regulatory provisions to support governmental initiatives and programmes and to ensure product traceability. They need to ensure that proper information and records pertaining to the various stakeholders in the aquaculture supply chain provided to the government are accurate documented and maintained throughout the supply chain.

This Regional Guidelines is drafted based on consensus of and in accordance to the collective inputs and efforts from all participating ASEAN-SEAFDEC member countries namely, Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.

The Regional Guideline consists of a series of introductory review of the importance of traceability in the aquaculture supply chain as well as the fundamental principles behind traceability that link to the adoption of traceability systems in aquaculture supply chain in the context of the ASEAN region. This document also includes a generic supply chain of aquaculture products. It highlights points where traceability information is critical as well as the responsibilities of individual stakeholder to ensure that traceability along the supply chain is not broken.

The generic aquaculture supply chain has been developed from two rounds of consultations with the ASEAN Member Countries. It was subsequently drafted after two Regional On-site Training Workshops held in 2011 and 2013. During the workshops, the participating ASEAN member countries as well as invited traceability experts from the region were consulted and a consensus was reached on development of the generic supply chain of aquaculture products for fish and shrimp.

The critical components or requirements that need to be traced for each specific stakeholder in the generic supply chain were also deliberated upon. These were subsequently translated and incorporated into the Regional Guidelines to serve as a reference guide for ASEAN member countries for implementing traceability system. Member Countries have the prerogative to decide on the nature of the traceability system they would like to implement be it mandatory or voluntary, as well as the degree of regulation of the various stakeholders in the supply chain.

III Acronyms, Terms and Definitions

Aquaculture

Aquaculture refers to the farming of aquatic organisms such as fish, molluscs, crustaceans, and echinoderms. This involves some forms of intervention in the rearing process to enhance production, such as regular stocking, feeding and protection from predators. Farming also implies individual or corporate ownership of or rights resulting from contractual arrangements to the stock being cultivated primarily for livelihood and business activities. In addition, aquatic organism harvested by an individual or corporation, that has owned them throughout their rearing period as a common property resource, with or without appropriate licenses, are considered as the harvest of fisheries.¹

Aquaculture Production

Aquaculture production refers to the production (or culture) of aquatic organisms for consumption, for use as raw materials to process other products, or for trade. It also includes the production of aquatic organisms, such as fishes and hatchery output, which are quantified by numbers instead of weight.²

Aquaculture Workers

This term broadly refers to individuals employed to handle aquaculture-related work such as repairing ponds, floating fish farms and net cages, as well as feeding of aquatic animal and providing and maintaining water supply. However, it does not include individuals who are employed solely for aquaculture management including planning and accounting.¹

Chemical Input

Chemical input refers to synthetic substances applied to ponds, coastal fish farms or hatcheries to alter the living environment of aquatic organisms in order to enhance growth of the cultured organisms. The growth enhancement can be achieved through increasing fertility, reducing or eliminating extraneous and unwanted organisms, promoting growth of beneficial organisms or preventing and managing diseases. These chemical input includes application of lime, inorganic fertilizers, pesticides, algicides, fungicides, bactericides and antibiotics, veterinary drugs, etc.³

Competent Authority

Officially designated national authority having the competence to enforce relevant national and international food safety regulations or control measures.

Downstream

This refers to looking backwards in the supply chain towards an earlier link.⁴

Feeds

Materials given to cultured aquatic animals for the purpose of nourishing them. Such materials could be wet, dry, live, natural and unprocessed biomass or formulated from a variety of ingredients.⁵

Good Manufacturing Practices (GMP)

Those procedures for a particular manufacturing operation which practitioners of and experts in that operation consider to be the best available using current knowledge.⁶

Hazard Analysis Critical Control Point (HACCP)

HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.⁷

Internal Traceability

Internal traceability refers to the ability to keep track of what happens to a product, its ingredients and packaging within a company or production facility.⁴

External Traceability

External traceability refers to the ability to keep track of what happens to a product, its ingredients and packaging in the entire or part of a supply chain outside the company or production facility.⁴

International Standard Organisation (ISO)

ISO is the organization responsible for standardization of products quality in general, including standards for food quality.

Middlemen

The middlemen collect and buy aquaculture products from farm or fisherman and sell them to fishery processing plants or retailers at different stages along the supply chain. This system could be of multiple levels where there are some “middlemen” to other “middlemen”.

Movement Document (MD)

MD is an obligatory document required by the competent authority for the issuance of health or other certificates (seed MD, fry MD, fish or shrimp MD). It records the details history of the aquatic organisms during cultivation.

Responsible Aquaculture

Responsible aquaculture encompasses (i) the use of appropriate and efficient production technologies and proper transformation processes to value add aquaculture products, and (ii) the application of appropriate commercial practices, including postharvest handling, processing and marketing, to provide consumers with good-quality products.¹

Traceability

Traceability refers to the ability to follow the movement of a aquaculture product through specified stage(s) of production, processing and distribution (CODEX). It includes the ability to trace the history, application or location of an entity by means of recorded identification.⁸

Trade Unit (TU)

Trade units shall be identified by unique codes. There should be no other trade units that share the same number along the supply chain of the aquaculture products. Trade units can be identified based on information recorded along the supply chain when stakeholders bring in supplies of aquaculture products and trade their immediate products onwards.

Upstream

This refers to forward direction in distribution along the supply chain which would eventually reach the final consumer.⁴

-
- ¹ Adapted in parts from: *[Regional Guidelines for Responsible Fisheries in Southeast Asia: Responsible Aquaculture. Southeast Asian Fisheries Development Center, 1999, Page 5]*
 - ² Adapted in parts from: *[Regional Guidelines for Responsible Fisheries in Southeast Asia Responsible Aquaculture. Southeast Asian Fisheries Development Center, 1999, Page 6]*
 - ³ Adapted in parts from: *[Regional Guidelines for Responsible Fisheries in Southeast Asia Responsible Aquaculture. Southeast Asian Fisheries Development Center, 1999, Page 8]*
 - ⁴ *[Traceability of Finfish Products- Specification on the Information to be Recorded in Farmed Finfish Distribution Chains. ISO 12877:2011, Switzerland: International Standards, 2013, Page 1]*
 - ⁵ Adapted in parts from: *[Petersen, Arni, and David Green. Seafood Traceability: A Practical Guide for the U.S. Industry. North Carolina: National Fisheries Institute, Inc and North Carolina Sea Grant, n.d., Page 11]*
 - ⁶ Adapted in parts from: *[FAO, Implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing, International Plan of Action- IUU, 2002, <http://www.fao.org/docrep/005/y3536e/y3536e00.htm#Contents>]*
 - ⁷ *[U.S. Food and Drug Administration, Hazard Analysis & Critical Control Points (HACCP), 07/05/2013, <http://www.fda.gov/food/guidanceregulation/haccp/default.htm>]*
 - ⁸ *[Traceability of Finfish Products- Specification on the Information to be Recorded in Farmed Finfish Distribution Chains. ISO 12877:2011, Switzerland: International Standard, 2013, Page 1].*

IV Traceability Principles

Traceability is characteristically recognised by the requirement of all stakeholders along an aquaculture supply chain to be able to trace “one step before” and “one step after” each individual stage of aquaculture chain. In general, traceability is the ability to provide linkage of vital information across each stakeholder to ensure that the aquaculture product is able to be traced effectively. Internal traceability involves sharing and linking of traceable data, such as information of ingredients or raw materials, at various stages of the supply chain of aquaculture products within a company. On the other hand, external traceability involves the sharing and linking of traceable data throughout the supply chain of aquaculture products, whereby the data traced is typically be transferred to the next stakeholder of the supply chain.

All traceable Trade Units (TU) throughout the aquaculture product supply chain would be uniquely identified by each stakeholder, this is known as *Unique identification*. TUs that move from one chain to another are commonly identified based on their batch or lot numbers. These batch or lot numbers should be verifiable whenever necessary.

Data recording and record maintenance are crucial to ensure transparency of information and to allow the tracking of movement of aquaculture products along the supply chain. All stakeholders involved in the value chain of aquaculture product are required to establish and maintain a robust record keeping system to ensure efficient tracking of data and information. These stakeholders, namely, hatcheries, feed millers, chemical suppliers, farmers, processors, distributors, middlemen, exporters and retailers need to ensure that the sufficient data or records are kept such that the previous sources and immediate recipients of aquaculture products could be identified.

V Advantages of Traceability Implementation

By implementing traceability system which includes keeping proper records throughout the supply chain of aquaculture products, transparency of product information are guaranteed for all stakeholders. This allows greater sense of security to consumers who are at the receiving end of the supply chain. Reliable information and comprehensive documentation also allow timely information sharing with as well as prompt and effective intervention by relevant competent authorities should problems arise.

In times of massive aquaculture product recalls, traceability system implemented allows timely identification of batch affected or stakeholder involved along the supply chain. The traceability enables prompt verification of records. Through effective identification of root cause of food incidents, the impact can be minimised.

Implementation of traceability system in aquaculture industry enables efficient inventory management as well as improvement of product quality. Unique identification of aquaculture products accelerates logistic arrangements, improves storage requirements and facilitates communication/information sharing. A robust traceability system is effective for business to save cost and for quality assurance.

Traceability is now a trade requirement imposed by the United State of America, European Union and Japan for granting eligibility to export aquaculture products to these markets. Thus implementing traceability system in aquaculture industry could further strengthen the international trade of aquaculture products.

VI Types of Traceability Systems

Traceability systems could be paper-or computer-based or a mixture of both.

Paper-based Traceability system

Paper-based traceability system has traditionally been practised by stakeholders along the supply chains of aquaculture products. This system is suitable and feasible for companies of smaller scale due to its low operational cost and ease of maintenance. Moreover as these companies deal on with limited products, such system is sufficient for their product tracing. However, paper-based traceability system requires more storage space for the archived documents and is inefficient (especially during product recalls). Manual retrieval of information through massive piles of stored and archived documents is time consuming, labour intensive and tedious.

In the context of ASEAN, aquaculture industries in most of the Member States adopt and practise paper-based traceability system. For example, Movement Document (MD) is commonly employed by ASEAN Member States. In Thailand, the Fry Movement Document (FMD) and MD, consist of critical details which the stakeholders need to record and maintain. Such information will then be shared with the next stakeholder in the supply chain.

The information found in the FMD is as follows:

- Reference number (province, day, month, year, farm code)
- Name of Hatchery/ Hatchery Owner
- ID card no./ Registration no./ Name
- Type of aquatic species
- Pond number and size
- Fry volume (tonnes and pieces/kg)
- Size of harvest
- Indication of whether the farm is certified Code of Conduct Standards (COC) or Good Aquaculture Practices (GAP)

For the FMD tracing from buyer to farmer, the information includes the following:

- ID card no./ Registration no./ Name
- Farmer's address

- Quantity of purchase
- Date of purchase

Usually, FMD will be followed by MD. A typical MD includes the following:

- FMD no.
- Production volume
- Farmers involved

Electronic and Computerised Traceability system

Bar-coding system

The bar coding system is the more common form of electronic traceability system applied along the supply chain of aquaculture products. The bar coding system normally is coupled with computerised systems. This form of traceability system is swift and efficient as information can be easily recorded in and retrieved from computerised database. This system is fast in information retrieval, a characteristic much needed for product recall. In addition, this system does not require much storage space, unlike the case of a paper-based traceability system.

Radio Frequency Identification (RFID) System

Radio Frequency Identification (RFID) systems is the emerging technology for electronic traceability system. Unlike bar codes adhered to product packaging that are exposed to the environment, RFID tags are normally embedded within the packaging of the product. The bar code labels on the packaging could be easily damaged causing inaccuracy in data capturing. Moreover, in a pallet full of products, individual scanning of barcode labels is time-consuming. On the other hand, a pallet full of products with embedded RFID tags could be read by an automated reader at one scan. With RFID, product identification is seemingly more efficient and precise. However, a drawback of RFID system is that it is relatively costly and may not be feasible for small-scale companies to adopt.

With growing export demands on efficiency and accuracy, a handful of ASEAN Member States are steadily moving towards the use of electronic and computerised traceability systems. The “TraceShrimp” system, which is used by the Thailand’s shrimp aquaculture industry, is an example of such system. This system offers flexibility for tracking and maintenance of electronic record from various stakeholders along the supply chain of aquaculture products. The TraceShrimp system serves as a platform for sharing product information and links individual stakeholders through a secure and automated product tracking system as well as confidential online data exchanges within the Thailand’s shrimp industry.

Comparison of Traceability Systems

In general, company size is the key factor that determines the type of traceability systems to be adopted. Some companies may have in place both paper-based and electronic/ computerised traceability systems, while some may only have one system.

Table 1: Comparison of Traceability Systems*

Types of traceability systems	Advantages	Disadvantages
Paper-based	<ul style="list-style-type: none"> • Based on existing quality assurance/ stock control documentation systems • Inexpensive to implement • Flexible in terms of the processing systems to which it can be applied • Data input is easy and precise 	<ul style="list-style-type: none"> • Manually intensive • Reliant on correct procedural operations • Trace-back of information is time-consuming and difficult • Records cannot be easily reviewed
Electronic traceability system	<ul style="list-style-type: none"> • Automatic data input • Easy to link additional information, e.g. temperature record • Real-time availability of information • Generation of records and reports is fast and the format can be customised to suit particular situations • Transfer of information to other links in supply chain is simple 	<ul style="list-style-type: none"> • Expensive equipment • Paper-based barcode labels are easily damaged under harsh condition of production • Use of RFID technology is limited, and reading rates are not yet 100%

*Adapted from Petersen, Arni, and David Green. *Seafood Traceability: A Practical Guide for the U.S. Industry*. North Carolina: National Fisheries Institute, Inc and North Carolina Sea Grant, n.d.

VII Issues and Challenges

The status of traceability system implementation for aquaculture products differs among the participating ASEAN member countries. For countries that already have in place robust traceability system that permits them to export aquaculture products to European Union (EU) or the United States (US), they have established certain degree of legal framework as well as advanced computerised traceability systems to track the aquaculture products from farm to fork. On the other hand, member countries that are in the process of implementing the traceability system have been enhancing their capabilities by building up legal framework for traceability implementation and introducing traceability system to the industries through government support such as regulatory enforcements, education and training. Despite the progress made, to have wider implementation of traceability system for aquaculture products, the industry (especially small scale stakeholders) in ASEAN region are still facing the following issues and challenge:

Lack of resources

In the context of ASEAN, the supply chain of aquaculture products is known as a trade filled with individual small scale stakeholders (i.e. Hatcheries, Feed mill, Farmers, Middlemen, etc.). These stakeholders, under those bigger players, usually face challenges in maintaining their product quality. The lack of resources makes it difficult for them to maintain relevant records of their products.

Due to the small size and limited income of small scale stakeholders, their operations are often tightly run without the presence of spare manpower or funds. Record keeping, a key component of traceability system will result in the need for more operating processes. This inadvertently translates to the need to hire more manpower to fill up this new jobs related to establishing or maintaining the traceability system. Hiring of manpower requires funds which small scale stakeholders lack.

Lack of awareness

Another key factor that challenges the implementation of traceability system for aquaculture products in ASEAN is the lack of knowledge. The key stakeholders in the supply chain of aquaculture products are unaware about the benefits and advantages of having traceability system in their operation. Also some traditional stakeholders are averse to change or reluctant implement traceability system for their operations.

VIII Recommendations

Resources

It is well known that adoption of technology is effective in increasing productivity. However, if stakeholders in the aquaculture product supply chain are lack of resources and/ or funding, paper-based traceability systems would suffice. Local competent authorities may encourage paper documentation by providing templates of records in local language for each stage of aquaculture supply chain (i.e. Hatcheries, Feed mill, Farmers, Middlemen, Buying Stations/Collection Centres, Processing Plants and Retailers).

Several stakeholders may also jointly purchase simple equipment or technology to assist them in data keeping (i.e. Barcode printer and reader). This will help reduce the cost of traceability implementation on individual stakeholder.

Awareness

Most of the small-scale aquaculture stakeholders may be unaware of the potential advantage on implementing traceability. At the same time, they may also be oblivious to the impending risks that they may face in times of a severe food incident. Thus it is imperative that relevant competent authorities to advocate the importance of traceability implementation to ensure safety and security of aquaculture products.

The knowledge and technology transfer can be accomplished through various means such as a series of road shows, stakeholder's forum, training courses or workshops. The approach should strategically cover each province and the message should be to reiterate the fundamentals of traceability and its importance to their business. Information, education campaign through flyers and other forms of reading materials written in local language is also an effective tool.

Complexity of supply chain

Aquaculture farmers should consider liaising with middlemen who are able to maintain records of their distributed products within the supply chain. In doing so, the supply chain becomes less complicated and easier to manage.

Government should consider registering and licensing middlemen. Training and dialogue sessions may be arranged to educate middlemen on proper record keeping and handling of aquaculture products. The importance of keeping track of aquaculture products "a step before" and "a step after" each stakeholder in the supply chain could be reiterated and emphasized.

Legal framework

To overcome this issue, the government may develop a legal framework completed with guidelines and models to aid the adoption of traceability by the various stakeholders. Under this legal framework, each of the stakeholders must be properly registered and licensed in order to partake in the trade within the aquaculture supply chain.

To support the enforcement of the new legal framework, it is important for government to build up its capabilities (e.g. establish a department to be in charge of ensure proper implementation, as well as conducting audits for traceability systems). In addition, it is also important to strengthen the national extension service system to provide sufficient guidance to the stakeholders.

DRAFT

IX Generic Supply Chain for Aquaculture Products (fish and shrimps) in the ASEAN Region

This generic supply chain of the aquaculture products identifies the various stakeholders involved in the aquaculture production, distribution, trade and retail of aquaculture produce such as fish and shrimps. These are the stakeholders who should generate and hold the information necessary for traceability.

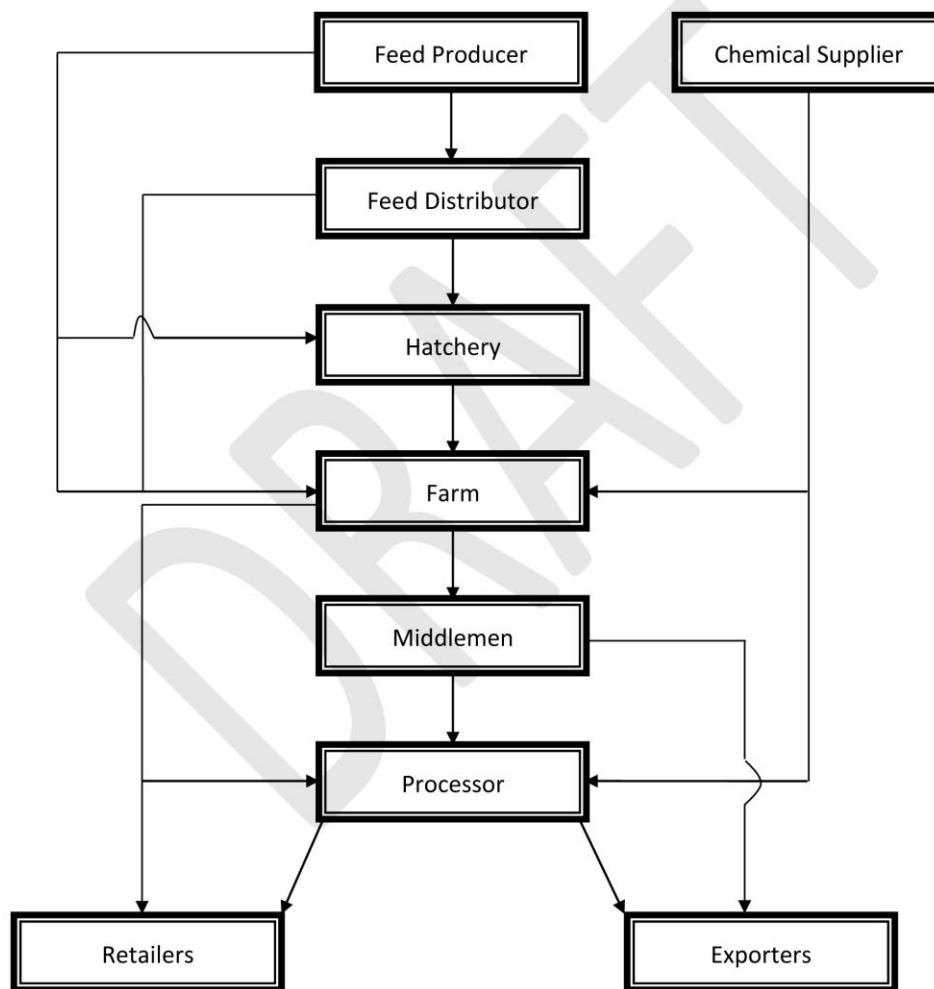


Figure 1: Generic Supply Chain for Aquaculture Products (fish and shrimps) in the ASEAN Region.

X Regional Guidelines on Traceability System for Aquaculture Products in ASEAN region

Member states within the ASEAN region should establish/promote and maintain records, both individually and regionally through an integrated approach, that are sufficient to identify the immediate previous sources and immediate subsequent recipients of the aquaculture products. The documented information should be archived and kept for at least 2 years.

Table 2: Regional guidelines

Stakeholder	Regional Guideline
<p>Feed producer</p> <p>Member states should establish and maintain effective record-keeping practices as early as from the fish feed used. Regardless of the source of aquaculture products, be it locally reared in fish farms or imported from foreign sources, feed mill related information should be identifiable upon tracing. The feeds product traded should be identified as the TU.</p>	<ol style="list-style-type: none"> 1) Member states should compile and update all information pertaining to source feed mill, inclusive of name, address, contact number and regulatory certificate of the feed miller. 2) Member states should recommend that feed producers be responsible to maintain record covering relevant feed mill related information on the following: <ul style="list-style-type: none"> • Manufacturing and expiry dates • List of feed ingredients • Batch and lot number of products • Quantity of supply (Weight) • Feed types and its main composition • Registration certification of processing facility 3) Any other relevant or additional certifications from competent authority or regulatory body should be kept in place as well.
<p>Distributor</p> <p>Member states should adopt an integrated approach to the development, maintenance and updates of record keeping pertaining to the distributions and movement of aquaculture</p>	<ol style="list-style-type: none"> 1) Member states should recommend all distributors to keep records of suppliers and buyers through invoices or receipts or equivalent, as well as the information regarding the names of the transporter's immediate previous source and immediate subsequent recipient, origin and destination points, date shipment received and date released, number of packages, description of

<p>products related activities. Distributors are known to be responsible for the distribution of bulk sales or bulk auction, particularly with feeds involved as the TU from feed miller down the supply chain.</p>	<p>freight, route of movement and transfer point(s) of shipment.</p> <p>2) Member states should recommend that apart from the relevant information obtained during the midst of the distribution processes, any incoming source related information such as the following should also be recorded, established and maintained by distributors:</p> <ul style="list-style-type: none"> • Registration number • Batch number of the source • Registration number of the source • Records of transportation of bulk auction • Movement Document (MD) • Distribution List
<p>Hatchery</p> <p>Member states should recognise the importance of hatcheries, where it involves the receiving of the seeds of aquaculture product and subsequent grow out into fish seedlings or fish fry as a new TU. This could range from a few thousand to several hundred thousand fishes being passed down the supply chain.</p>	<p>1) Member states should recommend that the hatcheries establish and maintain records on the following:</p> <ul style="list-style-type: none"> • Origins of broodstock or seed • Hatchery registration number/ ID • Invoice number • Batch number • Health certificate from the source country's competent authority where the source hatchery is stationed • Movement Document (MD) • List of Buyers <p>2) Member states should recommend that the import of aquaculture fry should be from registered suppliers and not from unaccredited or unlicensed suppliers. This would include proper record-keeping by the hatcheries of the suppliers' information for traceability purposes.</p>
<p>Chemical supplier</p> <p>Member states should establish and maintain information and records associated with materials used that are from external</p>	<p>1) Member states should establish appropriate mechanisms for monitoring of any drugs and chemicals used in aquaculture, based on the national list of banned drugs and chemicals that are specific to the member countries themselves, as well as the list of authorised drugs and chemicals</p>

<p>sources to the main domain of the supply chain. The identified TU could be the supply of the various chemical substances or supplements at the receiving end, i.e. the different stakeholders such as fish farms and fish processing plants.</p>	<p>permitted by each member country.</p> <p>2) Member states should recommend that all drugs and chemical suppliers execute accurate record keeping for chemical and drug supplies related information. The records should be established and maintained. The information may include the following:</p> <ul style="list-style-type: none"> • Product origins • Product label • Contact details and information such as name and address of supplier • Certification for authorised supplier by the relevant Competent Authority • Registration number of the authorised supplier by Competent Authority • Registration of the veterinary drug or chemical by the Competent Authority • Certification for veterinary drug or chemical on Good Manufacturing Practices GMP or HACCP certified factory • Invoice and license number of the lot of product • Distribution list
<p>Farm</p> <p>Aquaculture products within the region could be raised from fingerlings or seeds bred at the hatchery or through imports from hatchery for better quality control. Member States should establish legal framework, laws and regulations to ensure farms or hatcheries comply with regional guidelines or global standards in farming activities. Locally reared aquaculture products with commercially acceptable or marketable size are the common TU identified.</p>	<p>1) Member states should ensure the information of grow-out are accurately recorded and maintained by all farmers, and these information includes:</p> <ul style="list-style-type: none"> • Farm registration number / ID • Origins of seed • Species • Time and date of harvest • Location of harvest • Quantity of harvest • Production lot (size/age/weight) • Destination of harvest • Feeds and feeding records (i.e. source and quantity of feed (kg); relevant details of feed such as date of production of feed and use-by date, feeding regime) • Supplement/Medication records (i.e. antibiotic withdrawal regime)

	<ul style="list-style-type: none"> • Relevant quality assurance records (i.e. certification of analysis of feed concerning any addition of any chemical inputs, etc.) <ol style="list-style-type: none"> 2) Member states should recommend that farmers maintain these necessary records and information with regard to any of the farm activities. The information should be easily retrieved for verification during regular national audit programmes, or other mechanisms under the government regulatory framework. 3) Member states should recommend that aquaculture farmers to have efficient record keeping and traceability by utilising MD. This would facilitate information sharing and traceability beyond the aquaculture farms. All necessary certification arising from laboratory analysis should also be retained and documented properly.
<p>Middlemen</p> <p>Member states should be aware of number of tiers of “middlemen” –within the aquaculture supply chain. Reared aquaculture products with commercially acceptable or marketable size from the fishermen or farms are the common TU identified.</p>	<ol style="list-style-type: none"> 1) Member states should maintain proper record to keep track of all middlemen related information, including the tiers of middlemen. This include the following details, such as: <ul style="list-style-type: none"> • Middlemen ID • Farm registration number/ID • Dates of purchase for each aquaculture species • Volume of purchase for each aquaculture species • Purchase and distribution information • Movement document 2) Member states are recommended to put in place a mechanism that could track and maintain proper documentation and record of the aquaculture products from various stakeholders during the distribution process as many middlemen could be involved in the distribution activities. Hence MD should be in place. Distribution list should also be maintained. 3) Member states should recommend that stakeholders along the supply chain to deal only

	<p>with middlemen or distributors of marketable aquaculture products, who are registered by the relevant Competent Authority in order to ensure effective traceability of the aquaculture products.</p>
<p>Processor</p> <p>Member states should establish/promote and maintain legal framework and regulations for the processors to follow as processing of aquaculture products are performed differently in the ASEANn region, either through processing plants and establishments or direct processing at the fish farms. Processed aquaculture products are the common TU identified.</p>	<ol style="list-style-type: none"> 1) Member states should recommend that processors to adhere to GMP, furthermore, processing plants or establishments should be encouraged or recommended to have HACCP in place. All these standards should be coupled or enhanced with good hygiene practices, International Organisation of Standardisation (ISO) and health certifications, to increase product quality and safety in the mid-stream of the aquaculture product supply chain. 2) Member states should recommend that the processors obtain relevant information and maintain proper records including the following details: <ul style="list-style-type: none"> • Establishment registration/Approval number • List of suppliers • List of buyers • Batch and production numbers • Relevant labelling and packing records (product description, manufacturing and best before dates) • Destination • Registration numbers of previous stakeholder prior to receiving the product from previous source • Transaction invoices and receipts • All transportation or delivery records. 3) Member states should recommend processing plants to establish and maintain internal record keeping for all laboratory results/ quality and safety monitoring records of the necessary raw materials, intermediates, and end products along the processing line(s). Record keeping should include records of batch or container number, date of

	processing and other critical parameters.
<p>Retailer</p> <p>Retailers should be recognised as the suppliers to the public or consumers, not to other stakeholders upstream of the supply chain. Member states should establish laws and regulations for retailers to follow, particularly in accurate record keeping, since they are likely to break down TU received, package, label or modify the nature of the aquaculture products before marketing the products. The immediate TU could be in the form of processed aquaculture products or packaged aquaculture products with appropriate labelling.</p>	<ol style="list-style-type: none"> 1) Member states should recognise retailers as part of the critical supply chain stakeholders for aquaculture products. Relevant details and information of the retailers should be in place, and this includes license or registration number. 2) Member states should recommend that registered retailers establish and maintain record keeping on their sale transactions, through invoices, delivery or purchase orders or equivalent for traceability purpose. 3) When breaking bulk to retail packaging, member states should recommend that all retailers adopt appropriate labelling of individual retail pack that shows the source of the produce and ensure traceability to source.
<p>Exporter</p> <p>Exporters trade and sell processed or unprocessed aquaculture products as TU to other businesses where they do not alter the nature of the TU. New TU could be created if other stakeholders are at the receiving end where the TU could be broken down, processed and modified. Member states should enforce and ensure accurate documentation and communication of information throughout the production chain given that the exporter is either positioned at the end of the chain or at the beginning of another</p>	<ol style="list-style-type: none"> 1) Member states should maintain proper documentation on the exports of aquaculture products. The relevant information needed from transportation of aquaculture products from middlemen/processors include the following: <ul style="list-style-type: none"> • batch number, • Identification number of vehicles, • date of loading • identification (ID) number for the products • source of origin, • quantity (kg), • health certificate 2) Member states should take practical measures to help and provide basic infrastructure assistance for the exporters to enable assurance of precise data recording and enhance speed of traceability of origin. Ideally, individual containment should be catered to individual. Should different types of lots

<p>chain with their TU exported.</p>	<p>be mixed, there should be proper tagging of the particular container holding the products. The tag of the container should include the various identification information of the different lots.</p> <p>3) Member states should recommend that exporters establish and maintain MD, precise data record keeping on the registration and identification of the product, health certificate, and invoice of the product and accurate product label, for effective information sharing and traceability.</p> <p>4) The details and information of the importers/buyers of the aquaculture products should also be properly documented in order to maintain an integrated approach for traceability of products.</p>
--------------------------------------	---

DRAFT

XI References

- [1] Petersen, Arni, and David Green. *Seafood Traceability: A Practical Guide for the U.S. Industry*. North Carolina: National Fisheries Institute, Inc and North Carolina Sea Grant, n.d.
- [2] *Regional Guidelines for Responsible Fisheries in Southeast Asia*. Southeast Asian Fisheries Development Center, 1999.
- [3] *Traceability of Finfish Products- Specification on the Information to be Recorded in Farmed Finfish Distribution Chains*. ISO 12877:2011, Switzerland: International Standards, 2013.
- [4] Van, Nguyen Quynh. *Traceability System of Fish Products-Legislation to Implementation in Selected Countries*. National Fisheries Inspection and Veterinary Directorate (NAFIQAVED)- Viet Nam Ministry of Fisheries, 2004.
- [5] Washington, Sally, and Lahsen Ababouch. *Private Standards and Certification in Fisheries and Aquaculture-Current Practice and Emerging Issues*. FAO Fisheries and Aquaculture Technical Paper, Rome, Italy: FAO Fisheries and Aquaculture Department, 2011.
- [6] U.S. Food and Drug Administration, Hazard Analysis & Critical Control Points (HACCP), <http://www.fda.gov/food/guidanceregulation/haccp/default.htm>, 2013.
- [7] Huss, Hans Henrik. *Assessment and management of seafood safety and quality*. Daya Books, 2007.
- [8] *Handbook for Introduction of Food Traceability Systems (Guidelines for Food Traceability)* Food Marketing Research and Information Centre (FMRIC) 2008
- [9] *Traceability for Seafood U.S. Implementation Guide*, National Fisheries Institutes in association with GS1, March 2011
- [10] Vincent Andre. *Review and Analysis of Current Traceability Practices*. FAO Committee on Fisheries, Sub-Committee on Fish Trade, 2014
- [11] *Best Practice Guidelines on Traceability*. FAO Committee on Fisheries, Sub-Committee on Fish Trade, 2014
- [12] TraceShrimp, Thailand. <http://www.thaitraceshrimp.com/traceshrimpv4/index.jsp#>, 2005

- [13] *Implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing*, FAO, International Plan of Action- IUU, <http://www.fao.org/docrep/005/y3536e/y3536e00.htm#Contents>, 2002
- [14] *Servicing the aquaculture sector: role of state and private sectors* (Expert Panel Review 5.2), FAO, Rome and NACA, Bangkok, 2010
- [15] Jill E. Hobbs, *Consumer Demand for Traceability*, International Agricultural Trade, Research Consortium, April 2003
- [16] BFAR Administrative Circular No. 251, Series of 2014. *Traceability System for Fish and Fishery Products*. Department of Agriculture. Bureau of Fisheries and Aquatic Resources, 2014.

DRAFT

Annex I List of Aquaculture Traceability Competent Authority in ASEAN

Country	Name of Government Agency	Contact Details of Government Agency	Person-in-charge	Designation	Contact Details of Person-in-charge
Cambodia	Department of Aquaculture Development (DAD), Fishery Administration (FiA) Ministry of Agriculture Forestry and Fisheries (MAFF)	Address: # 186, Preah Norodom Blvd, Phnom Penh 12301 Cambodia	Thay Somony (Mr)	Director of DAD, FiA, MAFF	Tel: (855) 12 829 971 Email: monyangko@gmail.com
	Department of Fisheries Post-harvest Technologies (DFPTQ), Fisheries Administration (FiA), Ministry of Agriculture Forestry and Fisheries (MAFF)		Chhoun Chamnan (Dr.)	Director, Department of Fisheries Post-harvest Technologies (DFPTQ) Fisheries Administration (FiA) Ministry of Agriculture, Forestry and Fisheries (MAFF)	Tel: (855) 23 224800 Email: Chhouchamnan@gmail.com

Indonesia	Directorate General of Aquaculture, Directorate of Fish Health and Environment, Ministry of Marine Affairs and Fisheries	Address: Menara 165 Building, 15th Floor, Jalan TB Simatupang, Kav 1 Cilandak Timur, Jakarta	Dr. Reza Shah Pahlevi	Head of Sub-directorate of Residue Control	Tel: 62-81317432328 Email: pahlevi.reza.nrmp@gmail.com
	Agency for Fish Quarantine and Quality Control, Centre for Quality Management, Ministry of Marine Affairs and Fisheries	Address: Kementerian Kelautan dan Perikanan, Jalan Merdeka Timur No 16, Jakarta	Victor Immanuel		Tel: 62-21-3860527/ 62-811646567
Lao PDR	Department of Livestock and Fisheries/Division of Fisheries/ Aquaculture Development Section	Address: P.O. Box 6644, Vientiane 01000, Lao PDR	Mr. Douangtavanh Sysombath	Head of Aquaculture Development Section	Tel/Fax: +856-21-217 869 Email: d_sysombath@yahoo.com
Malaysia	Fisheries Biosecurity Division, Department of Fisheries Malaysia, Ministry of Agriculture & Agro-Based Industry Malaysia.	Address: Fisheries Biosecurity Division, Department of Fisheries Malaysia, Ministry of Agriculture & Agro-Based Industry Malaysia, Putrajaya MALAYSIA	Fauzidah Binti Othman (Mdm)	Head of Fish and Public Health Section	Tel: +603-8870-4000 Fax: +603-8890-3794 Email: Fauzidah@dof.gov.my

	Food Safety and Quality Division, Ministry of Health Malaysia	Address: Food Safety and Quality Division, Ministry of Health Malaysia, Putrajaya MALAYSIA	Noraini binti Dato' Mohd Othman (Mdm)	Senior Director, Food Safety and Quality Division	Tel: 03-88833888 Fax: 03-88893341 Email: noraini_othman@moh.gov.my
Myanmar	Ministry of Livestock, Fisheries and Rural Development, Department of Fisheries	Address: Office No (36), Nay Pyi Taw, Myanmar.	Aye Aye Thein (Mrs)	Deputy Director of Department of Fisheries	Tel: +95-9-420029947 Email: ayeayethein36@gmail.com
Philippines	Bureau of Fisheries & Aquatic Resource (BFAR) Fish Health Management and Quality Assurance Section (FHMQAS) Fish Inspection Unit (FIU)	Address: 860 Arcadia Bldg., Quezon Avenue, Quezon City, Philippines. Address: 860 Arcadia Bldg., Quezon Avenue, Quezon City, Philippines	Simeona E. Regidor (Ms.) Dennis E. Tiotangco (Mr.)	Chief, FHMQAS Head, FIU	Tel: (63)02 448 5432 Email: simeona03@yahoo.com Tel: (03)02 4116015 Email: dtiotangco@yahoo.com
Singapore	Agri-Food & Veterinary Authority of Singapore	Address: JEM Office Tower, 52 Jurong Gateway Road #14-01 Singapore 068550	-	-	Tel: (65) 6805 2992 Email: AVA_Email@ava.gov.sg

Thailand	Traceability for Coastal fishery products (shrimp) Department of Fishery, Marine Shrimp Culture Research and Development Institute.	Address: Department of Fishery, Central Kaset, Jatujak, Bangkok 10900	During the selection	Director of Marine Shrimp Culture Research and Development Institute	Tel: +66 2579 3682 Email: thaishrimp@hotmail.com
Viet Nam	Department of Aquaculture (DoA)	Address: No 10 Nguyen Cong Hoan str, Hanoi, Viet Nam	Mr. Pham Khanh Ly	Deputy Director of Aquaculture Department	Tel: + 84 913 043 532 Email: phamkhanhly2007@yahoo.com.vn; bangtam291@gmail.com

**REGIONAL POLICY RECOMMENDATIONS ON EARLY MORTALITY SYNDROME
(ACUTE HEPATOPANCREATIC NECROSIS DISEASE) AND OTHER TRANSBOUNDARY
AQUATIC ANIMAL HEALTH DISEASES**

I. 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 development and enhancement of the ornamental fish trade. The Early Mortality Syndrome (EMS) or currently known as Acute Hepatopancreatic Necrosis Disease (AHPND) is one of the diseases that resulted in heavy mortalities of cultured shrimp in several Southeast Asian countries, where one million people depend on shrimp aquaculture for their livelihoods. EMS outbreaks resulted in the significant drop in shrimp production in Malaysia, Thailand and Viet Nam. Last 22-24 February 2016, over 60 delegates representing the technical experts, the ASEAN Member States and Japan, regional and international organizations and private sector gathered in Makati City, Philippines to discuss the EMS/AHPND and other transboundary diseases affecting the Southeast Asian region and how these should be managed to improve aquatic animal health and ensure sustainability of aquaculture operations. This regional meeting assessed the status of AHPND in ASEAN Member States, identified gaps, priority areas for R&D collaboration, regional policy recommendations and enhanced the cooperation among Member Countries, regional/international organizations and other relevant stakeholders on initiatives that support aquatic animal health. This document presents the outcomes of the meeting.

II. INTRODUCTION

The SEAFDEC Council, during its meeting in April 2014 recommended that aquatic animal health management, including control and prevention of transboundary aquatic animal diseases, be included in formulation of future programs of SEAFDEC and its partners in the region. At the Regional Technical Consultation on Aquaculture held in 2010 in Bangkok, Thailand, disease diagnosis, control, monitoring and surveillance of aquatic animals was identified as a priority area in ASEAN and SEAFDEC Member Countries from 2011-2020. One of the recommended plan of actions under this priority area is to strengthen collaborations among agencies (public and private, industry stakeholders, regional and international organizations) to support national efforts in controlling serious disease outbreaks. Recognizing the pressing need for sustained regional efforts to address this priority area and to support the initiatives related to enhancing food security and safety within the ASEAN Member States, the Aquaculture Department of the Southeast Asian Fisheries Development Center and Government of the Philippines (Department of Agriculture-Bureau of Fisheries and Aquatic Resources) jointly organized the ‘Regional Technical Consultation on EMS/AHPND and other Transboundary Diseases for Aquatic Animal Health Management’.

III. HIGHLIGHTS OF THE MEETING

Through the financial support from the Government of Japan administered by the ASEAN Secretariat (Japan-ASEAN Integration Fund), the meeting was convened in Makati City, Philippines on 22-24 February 2016 to take stock of the status of EMS/AHPND and other transboundary diseases, identify issues and research gaps, and discuss the region’s R&D policy directions including areas for regional cooperation. The regional consultation brought together over 60 participants from various stakeholder groups who are into aquaculture planning and/or R&D on aquatic animal health. The participants included delegates from Japan, ASEAN Member States (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam), technical experts/scientists, and representatives from international and regional organizations (NACA, FAO, OIE and SEAFDEC) and private sector (shrimp aquaculture farmers/entrepreneurs).

The following are the outputs of the meeting:

- 1) Country reports on the current status of EMS/AHPND and other emerging diseases in farmed shrimps in ASEAN Member States (AMS) and Japan. Information were obtained on the prevalence of disease, diagnostic methods employed, approaches used (both successful and failed approaches in managing the disease), scientific research done and research gaps.
- 2) Policy recommendations and priority areas for R&D collaboration to address the gaps.

Regional Policy Recommendations

Issues/Gaps	Regional Policy Recommendations
Legislative and policy frameworks	<ul style="list-style-type: none"> ○ Develop a national Strategy and Policy Framework ○ Member Countries should work to harmonize legislation and regulation related to aquatic animal health management including the legislation for trans-boundary movement of live aquatic animals
<ul style="list-style-type: none"> ○ Strategy for prevention, control, and biosecurity ○ 	<ul style="list-style-type: none"> ○ Compliance with good aquaculture practices to maintain optimal environmental conditions during the culture period. ○ Establish effective prevention system on EMS/AHPND and other diseases ○ Marker-assisted selective breeding ○ Development of vaccine against AHPND ○ IgY as feed additive (based on experiments, high concentration of IgY in egg yolk can reduce the mortality of shrimp due to presence of antibody to toxin) ○ Nano-bubble technology: ozone nano-bubble can prevent AHPND ○ Pond bottom management: use of central drain system ○ Phage therapy
	<ul style="list-style-type: none"> ○ Develop and implement the Guidelines on Health Management and Good Practices to Prevent EMS/AHPND and other trans-boundary diseases
	<ul style="list-style-type: none"> ○ Strictly implement the reporting system to relevant authorities and/or Competent Authority at country, regional and international levels <ul style="list-style-type: none"> ✓ Early warning system ✓ Monitoring system ✓ Information for the regular report, annual report
	<ul style="list-style-type: none"> ○ Emergency preparedness and contingency plan: should be the responsibility of Competent Authority; ○ Funds should be made available as joint endeavor by private and public sectors
Detecting the EMS/AHPND disease	<ul style="list-style-type: none"> ○ Diagnostic methods: should follow the OIE guidelines ○ Develop tool kits ○ Ensure availability and capacity of laboratory services, either public or private
Research and Development program at regional and national levels	<ul style="list-style-type: none"> See details in Attachment - output of Session 3 (Technical Workshop)
Cooperation among relevant stakeholders	<ul style="list-style-type: none"> Strengthen cooperation arrangements of the following: <ul style="list-style-type: none"> ○ ASEAN Member States (AMS) and international/regional organizations such as OIE, FAO, NACA and SEAFDEC ○ ASEAN Network of Aquatic Animal Health Centres (ANAAHC); in addition to cooperation arrangements, ANAAHC should also: <ul style="list-style-type: none"> ✓ assess the status and find ways on how the network could be assisted in implementing its activities ✓ identify what centers should be involved in ANAAHC per country ✓ mobilize all aquatic animal health centers ○ Public-private cooperation at national levels ○ Cooperation among shrimp industries in the ASEAN Region
Capacity building program	<ul style="list-style-type: none"> ○ This should also include technology transfer from AMS to another AMS
Awareness building	<ul style="list-style-type: none"> ○ Enhance awareness of farmers and relevant stakeholders on R&D developments in transboundary diseases (especially on management and control)

IV. REQUIRED CONSIDERATION BY THE COUNCIL

1. The Council is requested to take note of the progress made in aquatic animal health management particularly on efforts related to addressing issues on EMS and other transboundary diseases.
2. The Council is requested to endorse the Regional Policy Recommendations, including the recommendations formulated during the technical workshop (see **Appendix 1**)



ASEAN Regional Technical Consultation on EMS/AHPND and Other Transboundary Diseases for Improved Aquatic Animal Health Management in Southeast Asia Makati City, Philippines | 22-24 February 2016

Session 3. Technical Workshop: Issues, Gaps and Recommendations

Facilitated by: Drs. Eduardo Leaña, NACA and Somboon Siriraksophon, SEAFDEC

The Technical Workshop was undertaken based on the country and expert presentations on the status, recent issues and gaps on the management, prevention and control of AHPND (and other shrimp diseases), as well as from the discussions and comments made by the participants. The aim of the Technical Workshop was to formulate interventions and recommendations to address the important issues that were raised, and to develop policy recommendations that will be presented to the ASEAN for endorsement. The workshop mainly focused on Early Mortality Syndrome/Acute Hepatopancreatic Necrosis Disease (EMS/AHPND) with few comments and suggestions for Hepatopancreatic Microsporidiosis caused by *Enterocytozoon hepatopenaei* (HPM-EHP).

Based on the inputs from AMS representatives, private sectors and invited experts, the following issues were considered for future actions/studies on AHPND and HPM-EHP:

- AHPND
 - Use of live feeds for broodstock (specifically polychaetes), as these were proven to be carriers of the pathogen;
 - Copy SPF (*Penaeus vannamei*) hatchery - effect on inbreeding/genetic erosion on susceptibility to AHPND; breeding programs are long-term, usually highly expensive and need sufficient resources, therefore, they should be carefully planned and efficiently implemented and sustained;
 - Misconception about SPF shrimps and its use; ban on SPF broodstock and live shrimp products from AHPND-affected countries;
 - Vertical transmission of AHPND bacteria (broodstock to postlarvae);
 - Toxin plasmid transfer to other *Vibrio* species and possibly other bacterial pathogens that are common in the aquatic/rearing environment; *V. harveyi* and *V. owensii* were already reported to carry the AHPND toxin plasmid;
 - Environmental risk factors for spread and outbreak of AHPND;
 - Mixed infection with other shrimp pathogens (Covert Mortality Disease or CMD, EHP, White Spot Syndrome Virus or WSSV);
 - Efficacy of green water technology in prevention of AHPND infection; currently being practiced in Viet Nam and the Philippines with some degree of success;
 - Issue on extensive/non-registered farms: risk that they may pose to the spread and occurrence of the disease;
 - Probiotics: locally produced vs. imported; issue on banning probiotics for use in prevention of AHPND;
 - Biosecurity capacities of countries to prevent the entry of the pathogen;
 - Emergency preparedness and contingency planning;
 - Sharing of information and experiences among countries affected and not affected by the disease;
 - Lack of disease surveillance in processing plants and the wild population
 - Antimicrobial resistance;

- Certification of Aquatic Animal Health (AAH) Professionals (other than veterinarians); and,
- Cooperation of government and producers in prevention and management of AHPND. Strengthen government and private sector partnership. Learn from the farmer experience and understand science behind and disseminate;
- HPM-EHP: The following are the possible research areas for better understanding of the pathogen and disease mechanisms, as well as preventive and control measures:
 - Identification of the reservoir of the pathogen to include live feeds other crustaceans that are common in the aquatic environment;
 - Detailed study on the effect of the pathogen on growth and survival of infected shrimps;
 - Preventive and control measures;
 - Co-infection with other important pathogens of shrimps (viral and bacterial), and its association to other shrimps diseases (*e.g.* White Feces Syndrome, AHPND).

The suggested interventions and recommendations for the above issues are summarized in the attached Matrix Table (see Appendix 2)

The group then developed and adopted the Policy Recommendations which will be presented to the SEAFDEC Council during its 48th meeting in Viet Nam this April. The summary of Policy Recommendations is presented in the main document (see pages 2-3 of this working paper).

MATRIX FOR AHPND WORKSHOP (Technical)

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
Live Feeds (specifically polychaetes)	Use of live feeds for broodstock (specifically polychaetes)-as these were proven to be carriers of the pathogen	Survey of polychaetes (<i>Morphysa</i> sp.) in the pond environment – Assess susceptibility to AHPND and other pathogens Preference for polychaete species living in mud sediment (than those in sandy sediment) Use of non-live polychaete (frozen, pasteurized, etc.) Trace source of polychaetes Processing techniques for live polychaetes to reduce bacteria load prior to feeding -deuration, disinfection and other treatments Develop regulations on importation of polychaetes	Study on transmission of AHPND bacteria from polychaetes to shrimp (to be completed before any intervention should be done) Refine sampling procedures for PCR detection of AHPND bacteria Develop genetic markers on susceptibility of polychaetes to AHPND bacteria Research on mass production of polychaetes in a more biosecure environment. Develop and implement regulations on importation of live polychaetes to include health certificate (absence of major shrimp	SEAFDEC, NACA and concerned AMS	S to M

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
			pathogens)		
SPF Broodstock	Copy SPF (<i>P. vannamei</i>) hatchery - effect on inbreeding/genetic deterioration on susceptibility to AHPND Breeding programs are usually long-term, highly expensive and need sufficient resources, therefore, they should be carefully planned and efficiently implemented and sustained	Assess possible inbreeding/genetic deterioration in <i>P. vannamei</i> and correlate with disease susceptibility and outbreaks	Assess existing stocks (especially broodstock) of <i>P. vannamei</i> for signs of inbreeding/genetic deterioration Need to develop molecular genetic markers for disease resistance: Marker-assisted breeding More understanding on SPF/SPR/SPT to prevent bringing in exotic diseases – provide guidance to government	AMS, SEAFDEC, Donor agencies, NACA	M to L
	Misconception about SPF shrimps and its use Ban on SPF broodstock and live shrimp products from AHPND-affected countries	Information awareness on what SPF really is in terms of its health status (under biosecure facilities and under farm-level environments); to include information on “High-Health” shrimps	Disseminate relevant information on SPF, SPR and SPT	AMS, SEAFDEC, NACA	S
Pathogens and Disease Outbreak	Vertical transmission of AHPND bacteria (broodstock to PLs)	Clear understanding on AHPND Vp vs other strains of Vp.	Study on vertical and horizontal transmission of AHPND bacteria	Concerned AMS, SEAFDEC AQD	M
	Toxin plasmid transfer to other <i>Vibrio</i> species and possibly other	Detect AHPND-associated toxin plasmid in other <i>Vibrio</i> species	Study on the ecology of vibrios under the <i>Vibrio</i>	SEAFDEC AQD,	M

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
	bacterial pathogens that are common in the aquatic/rearing environment <i>V. harveyi</i> and <i>V. owensii</i> were already reported to contain the AHPND toxin plasmid	and other bacterial pathogens	<i>harveyi</i> clade where <i>V. parahaemolyticus</i> , <i>V. harveyi</i> and <i>V. owensii</i> (all found to harbor the toxin plasmid) belong Study on conditions that will trigger the virulence of AHPND bacteria Study on environmental conditions that facilitate plasmid transfer, and on virulence of plasmid-containing bacteria to susceptible shrimps species	AMS Research Institutes	
	Environmental risk factors for spread and outbreak of AHPND	Interventions on water quality management to maintain low levels of AHPND bacteria	Implement BMPs focusing on water and feeding management	AMS, Private Sectors	S
	Mixed infection with other shrimp pathogens (CMD, EHP, WSSV)	Screen AHPND-affected shrimp samples for presence of other pathogens to check mixed infection	Multi-infection study: effect on mortality and histopathological features of the hepatopancreas	SEAFDEC AQD, AMS Research Institutes	S to M
Grow-out; Preventive Measures	Efficacy of green water technology in prevention of AHPND infection (being practiced in Viet Nam, Philippines)	Review previous results of the technology on prevention of luminous vibriosis in <i>P. monodon</i> ; many detailed studies were already undertaken, especially on its effect on	More science-based analysis on the mechanisms involved in green water technology which might be directly correlated to prevention of	Concerned AMS	S

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
		microbiota in the pond environment.	AHPND.		
	Issue on extensive/non-registered farms: risk that they may pose to the spread and occurrence of the disease	More attention and guidance should be provided to small scale/extensive culture farmers/sectors as they represent the weak link in the system posing high risk for diseases. These include (but not limited to) non-registered farms, farmers from rural communities, and small-scale farms (in terms of farm area) practicing monoculture of shrimps.	Promotion of public awareness programs to encourage small scale farmers to share/report disease outbreaks (if any) to nearest authority in their area.	Concerned AMS	S
	Probiotics? Locally produced vs. imported probiotics Probiotic ban	Understanding how probiotics work in the aquatic environment and its relation in preventing AHPND occurrence Use of probiotics with proven efficacy in reducing the risk for AHPND occurrence.	Proper research needed on the efficacy and utilization of locally-produced probiotics Researchable areas on its application on different targets such as pond bottom, water, shrimp and feed incorporation	Concerned AMS, SEAFDEC AQD	S to M
Border Control and Biosecurity	Biosecurity capacities of countries to prevent the entry of the pathogen	Establishment or improvement of quarantine systems, especially at the border control facilities Revisit or review existing national policies and regulations for inclusion of aquatic animal	ASEAN: Develop a legal framework for the implementation of the ASEAN Guidelines on SOP for Responsible Movement of Live Aquatic Animals	SEAFDEC, NACA and AMS	M to L

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
		health	Implementation of ASEAN Shrimp GAP and GAqP by AMS, in line with their respective national GAPs (if any)		
	Emergency preparedness and contingency planning	Develop and/or implement national aquatic animal health management strategies for appropriate emergency response during any disease outbreaks (including known and emerging diseases)	Capacity building on emergency preparedness and contingency planning, especially among less developed countries in the ASEAN	AMS, FAO, SEAFDEC	M to L
Other Issues	Sharing of information and experiences among countries affected and not affected by the disease	Encourage farmers (especially private sectors, with successful experiences in preventing AHPND) to share their experiences to relevant authorities and other shrimp farmers including effective preventive measures, important interventions to control spread of the disease, etc.	Information sharing and education programs for shrimp farmers	SEAFDEC AQD, NACA, Private Sectors, AMS	M to L
	Lack of disease surveillance in processing plants and the wild population	Countries should consider to include processing plants (especially processing wastes) in AHPND surveillance	Develop national regulation on surveillance of processing plants (for shrimps and other aquatic products) Follow and implement OIE guidelines on disease	Concerned AMS, FAO, SEAFDEC, NACA	S to M

AHPND					
Stage/Phase	Problems (Issues)	Possible intervention (priority areas from 2016 onwards)	Recommendations	Responsible Agency	Timeline S (Short): 1-2 years M (Medium): 2-5 years L (Long): > 5 years
			surveillance among wild populations		
	Antimicrobial Resistance	Implementation of appropriate regulations on the use of veterinary drugs and other chemicals	Assist in the implementation of and strict compliance to ASEAN Guidelines on the Use of Chemicals in Aquaculture Assessment of antimicrobial resistance of major bacterial pathogens of shrimps (and fish)	AMS,	M to L
	Certification of Aquatic Animal Health (AAH) Professionals (other than veterinarians)	Need to develop and implement Guidelines/Certification Scheme for registration and accreditation of AAH professionals	Assist national governments in developing Guidelines/ Certification Scheme for registration and accreditation of AAH professionals	AMS, NACA, OIE, FAO	M to L
	Cooperation of government and producers in prevention and management of AHPND. Strengthen government and private sector partnership. Learn from the farmer experience and understand science behind and disseminate	Strengthen public and private partnership. Efficient communication between researchers and government (Competent Authority) on research updates/findings for proper dissemination to private sectors (if necessary)	Prepare checklist/guidelines for the farmers such as risk factors and risk management practices coming from AHPND affected countries	AMS, Private Sectors, Key Research Institutes, SEAFDEC	S to L

Hepatopancreatic Microsporidiosis caused by *Enterocytozoon hepatopenaei* (HPM-EHP)

For HPM-EHP, there was not much discussion on how to manage the disease, except on one comment from Indonesia about the detailed procedure for the Wet Mount Method developed by Prof. Tim Flegel's team (Mahidol University, Thailand). Some of the recommendations in the above table, however, can be applied for this emerging disease, especially on border control, emergency preparedness and contingency planning. Specific researchable areas at present, as recommended by Prof. Flegel, to better understand the pathogen involved and the disease mechanism include the following:

- Identification of the reservoir of the pathogen to include live feeds and other crustaceans that are common in the aquatic environment;
- Detailed study on the effect of the pathogen on growth and survival of infected shrimps;
- Preventive and control measures; and
- Co-infection with other important pathogens of shrimps (viral and bacterial), and its association to other shrimps diseases (e.g. White Feces Syndrome, AHPND).

HIGH-LEVEL CONSULTATION ON REGIONAL COOPERATION IN SUSTAINABLE FISHERIES DEVELOPMENT TOWARDS THE ASEAN ECONOMIC COMMUNITY: COMBATING IUU FISHING AND ENHANCING THE COMPETITIVENESS OF ASEAN FISH AND FISHERY PRODUCTS

Progress on Preparation for the Joint ASEAN-SEAFDEC Declaration

I. EXECUTIVE SUMMARY

The Concept Note for the High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products was addressed at the 47th Meeting of the SEAFDEC Council and later supported by the 23rd Meeting of the ASWGFi (as appeared in the Report of 47CM)

This paper aims to update the preparatory process particular the organization of the multi-stakeholders consultation that was held in Bangkok, Thailand on 1-2 March 2016 to review the fisheries situation and the emerging issues that hinder the sustainable development of fisheries in the region as well as the progress of actions taken by the region, and recommend practical steps toward addressing such issues. The results from the Stakeholders Consultation are served as basis for formulating the First Draft of “Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products”, during the Drafting Committee Meeting held on 3-4 March 2016 back to back after the Stakeholders Consultation.

The First Draft of the Joint ASEAN-SEAFDEC Declaration developed by the Drafting Committee is submitted to the SEAFDEC Council of Directors by mail for consideration one month before the 48th Meeting of the SEAFDEC Council (**Appendix 1**).

II. REQUIRED CONSIDERATION BY THE COUNCILS

The 48th Meeting of the Council is requested to take note progress for formulating the First Draft of “Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products”. The Council is also invited to advise and comments to SEAFDEC and Drafting Committee for finalization of the First Draft before submission to the ASEAN-Secretariat for further action.

Report
Meeting of the Committee on Drafting of the Joint ASEAN-SEAFDEC Declaration for Regional Cooperation on Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products

3-4 March 2016, Bangkok, Thailand

1. The Meeting of the Committee on Drafting of the Joint ASEAN-SEAFDEC Declaration for Regional Cooperation on Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products was organized on 3-4 March 2016 in Bangkok Thailand. Opened by the Secretary-General of SEAFDEC, the Meeting was participated in by the Drafting Committee Members from the ASEAN-SEAFDEC Member Countries, SEAFDEC Secretary-General, Deputy Secretary-General, Senior Officials and staff of SEAFDEC Secretariat, TD, AQD, MFRDMD and IFRDMD. The list of participants appears as Annex 1.
2. The Meeting was aimed at preparing the “First Draft Joint ASEAN-SEAFDEC Declaration for Regional Cooperation Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products” to be adopted by the SOM-level officials during the “High-Level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products” scheduled on 3 August 2016 in Bangkok, Thailand.
3. The representative from the Philippines, *Atty. Annaliza A. Vitug*, was unanimously elected as Chairperson of the Meeting.
4. The Agenda of the Meeting was adopted as appears in Annex 2.
5. The Committee took note of the “Recommendations on the Practical Steps Towards the Issues for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products (**Annex 3**), which was adopted by the Stakeholders’ Consultation organized on 1-2 March 2016 in Bangkok, Thailand. Developed by representatives from fisheries-related public and private sectors attending the Stakeholders’ Meeting, the Recommendations were also used as inputs for the development of the draft Joint Declaration.
6. With regard to the Recommendations reached during the Stakeholders’ Consultation, the representative from Indonesia expressed the commitment to share Indonesia’s best practices and experience with the ASEAN Member States on labor in fishing industries, including protection of labor rights. In particular, he mentioned that Indonesia has already issued Ministerial Regulations No. 35 in 2015 on the Human Rights System and Certification in the Fisheries, which was entered into force on Human Rights Day on 10 December 2015.
7. The Drafting Committee Members then discussed and agreed on the “First Draft Joint Declaration for Regional Cooperation on Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products” which appears as Annex 4.
8. The Drafting Committee Meeting noted that the “First Draft Joint Declaration” would be submitted to the SEAFDEC Council for consideration and comment during its 48th Meeting to be organized on 4-8 April 2016 in Nha Trang, Viet Nam; and subsequently to the 24th Meeting of the ASEAN Sectoral Working Group on Fisheries to be organized in June 2016.
9. The Drafting Committee Meeting also took note of the request of SEAFDEC Secretariat for the Chair of the Drafting Committee Meeting to present the First Draft Joint Declaration to the SEAFDEC Council during its 48th Meeting in Nha Trang, Viet Nam on 4-8 April 2016.

10. The Meeting of the Committee on Drafting of the Joint Declaration for Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products, was declared closed by the Secretary-General of SEAFDEC on 4 March 2016.

LIST OF PARTICIPANTS

BRUNEI DARUSSALAM

Ranimah A. Wahab (Ms.)

Acting Deputy Director of Fisheries and
SEAFDEC National Coordinator
for Brunei Darussalam

Department of Fisheries
Ministry of Primary Resources and Tourism
Muara Fisheries Complex
Simpang 287-53
Jalan Peranginan Pantai Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2772787
Fax: +673 2771063/2770065
E-mail: ranimah.wahab@gmail.com

Noorizan Haji Abd Karim (Ms.)

Head, Capture Fisheries Industry Division

Department of Fisheries
Ministry of Primary Resources and Tourism
Muara Fisheries Complex
Simpang 287-53
Jalan Peranginan Pantai Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2770066
Fax: +673 2771063/2770065
E-mail: noor6263@gmail.com,
noorizan.karim@fisheries.gov.bn

CAMBODIA

Dr. Kao Sochivi (Ms.)

Deputy Director – General,
Fisheries Administration

Fisheries Administration, Cambodia
#186 Preah Norodom Blvd.
Chamcar Mon, P.O. Box 582
Phnom Penh, Cambodia
Tel: +855 16850003
E-mail: kaosochivi@yahoo.com

INDONESIA

Yunus Husein

IUUF Task Force

Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No. 16
Mina Bahari Building II, Jakarta, Indonesia
Tel: +62 21 3519070
E-mail: yunus.husein@gmail.com

Sheila Ardiyanti Wasito (Ms.)

Task Force on Combating illegal Fishing

Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No. 16
Mina Bahari Building II, Jakarta, Indonesia
Tel: +62 878 2300 9388
E-mail: sheilawasito@gmail.com

Lilly Aprilya Pregiwati

Director,
Bureau of International Cooperation and
Public Relation

Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No. 16
Mina Bahari Building II, Jakarta, Indonesia
Tel: +62 (21) 351 9070 ext 7433
Fax: +62 (21) 3864293
E-mail: birokeramas@kkp.go.id

JAPAN

Hirohide Matsushima
Assistant Director

Fisheries Management Division
Fisheries Agency of Japan
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo, Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: Hiro_matsushima500@maff.go.jp

Jiro Hyugaji
Assistant Director, Overseas Fisheries
Cooperation Office,
International Affairs Division and
SEAFDEC National Coordinator for Japan

Fisheries Agency of Japan
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo, Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: jiro_hyugaji750@maff.go.jp

LAO PDR

Akhane Phomsouvanh
Deputy Director of Fisheries Division and
SEAFDEC National Coordinator for Lao PDR

Division of Fisheries
Department of Livestock and Fisheries
P.O. Box 6644, Vientiane 01000
Lao PDR
Tel/Fax: +856 21 217869
E-mail: akhane@live.com

MALAYSIA

Dr. Hj. Mazuki bin Hashim
Director of Aquaculture Development

Department of Fisheries Malaysia
Block 4G2, Wisma Tani Precinct 4
Federal Government
Administrative Centre 62628
Putrajaya, Malaysia
E-mail: mazuki@dof.gov.my

Nur Fadhlina Chan binti Mahadie Chan (Ms.)
Fisheries Officer

International Section
Planning and Development Division
Department of Fisheries Malaysia
Block 4G2, Wisma Tani Precinct 4
Federal Government
Tel: +603 8870 4321
Mobile: +6017 954 6774
Fax: +603 8889 1195
E-mail: fadhlinachan@gmail.com

MYANMAR

Dr. Kyaw Kyaw
Deputy Director

Department of Fisheries, MLFRD
No. 36 Office Zong, Naypyidaw
Myanmar
Tel: +95 7782865279
E-mail: Kyaw.72@gmail.com

PHILIPPINES

Atty. Annaliza A. Vitug (Ms.)
Chief Fishing Regulations

Bureau of Fisheries and Aquatic Resources
PCA Building, Elliptical Road
Quezon City, Philippines
Tel: +63 24266532
Fax: +63 24266532
E-mail: annalizavitug@gmail.com

SINGAPORE

Dr. Cheryl Goh (Ms.)
Senior Executive Manager

Agri-Food & Veterinary Authority of Singapore
52 Jurong Gateway Road, #13-01
Singapore 608550
Tel: +65 68052939
E-mail: Cheryl_goh@ava.gov.sg

THAILAND

Dr. Suttinee Limthammahisorn (Ms.)
Chief,
Oversea Management and Economic
Cooperation Group Fisheries Foreign
Affairs Division

Department of Fisheries
Fisheries Foreign Affairs Division, DOF
Jatujak, Bangkok
Tel: +668 5070 6587
E-mail: suttinet@gmail.com

VIET NAM

Nguyen Viet Manh
Director,
Science Technology and international Cooperation

Directorate of Fisheries
10 Nguyen Cong Hoan, Ba-Dinh
Hanoi, Viet Nam
Tel: +84 4 37245374
Fax: +84 4 37245120
E-mail: manhvn.htqt@mard.gov.vn

SEAFDEC

The Secretariat

Dr. Kom Silapajarn
Secretary General

P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: + 66 29406326
Fax: +66 29406336
E-mail: sg@seafdec.org

Hajime Kawamura
Deputy Secretary General

E-mail: dsg@seafdec.org

Dr. Magnus Torell
Senior Advisor

E-mail: magnus@seafdec.org

Dr. Somboon Siriraksophon
Policy and Program Coordinator

E-mail: somboon@seafdec.org

Nualanong Tongdee (Ms.)
Information Program Coordinator

E-mail: nual@seafdec.org

Akira Bamba
Assistant Trust Fund Manager

E-mail: bamba@seafdec.org

Dr. Worawit Wanchana
Assistant Policy and Program Coordinator

E-mail: worawit@seafdec.org

Dr. Taweekiet Amornpiyakrit
Senior Policy and Program Officer

E-mail: taweekiet@seafdec.org

Ylva Mattsson (Ms.)
Fisheries Policy Expert

E-mail: ylva@seafdec.org

Pattaratjit Kaewnuratchadasorn (Ms.)
Program Manager

E-mail: pattaratjit@seafdec.org

V. T. Sulit (Ms.)
Technical Fisheries Officer

E-mail: sulit@seafdec.org

Saivason Klinsukhon (Ms.)
Information Officer I

E-mail: saivason@seafdec.org

Sawitree Chamsai (Ms.)
Policy and Program Officer I

E-mail: sawitree@seafdec.org

Suwanee Sayan (Ms.)
Policy and Program Officer II

E-mail: suwanee@seafdec.org

Aquaculture Department (AQD)

Dr. Felix G. Ayson
Chief,

Tigbauan Main Station (TMS)
Tigbauan Iloilo 5021, Philippines
Manila Office:
Rm 102, G/F, PSSC Building
Commonwealth Avenue
Diliman, Quezon City 1101, Philippines
Tel/Fax: +63 33 3307001 (Main Office)
Tel/Fax: +63 2 9277825 (Manila Office)
E-mail: fgayson@seafdec.org.ph

Mae R. Catacutan
Head,
Nutrition and Feed Development

Tigbauan 5021
Iloilo Philippines
Tel/Fax: +63 33 3307001 (Main Office)
Tel/Fax: +63 33 3307002
E-mail: mrc@seafdec.org.ph

Marine Fishery Resources Development and Management Department (MFRDMD)

Abdul Razak Latun
Research Officer

Taman Perikanan Chendering
21080 Kuala Terengganu
Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6174042
E-mail: abdulrazaklatun@seafdec.org.my

Mazalina Bte Ali (Ms.)
Research Officer

Taman Perikanan Chendering
21080 Kuala Terengganu
Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6174042
E-mail: mazalina@seafdec.org.my

Inland Fishery Resources Development and Management Department (IFRDMD)

Dr. Satoshi Honda
Deputy Chief,
SEAFDEC/IFRDMD

Jl. Gubernur H.A. Bastari No.8
Rt. 29 Rw. 07 Kel. Silaberanti
Kec. Seberang Ula I 30257 Palembang
South Sumatra, Indonesia
Tel: +62 811 719715
Fax: +62 711 5649601
E-mail: HONDA.Satoshi@affrc.go.jp

Training Department (TD)

Bundit Chokesanguan
Information and Training Division Head

P.O. Box 97, Phrasamutchedi Post Office
Samutprakan 10290, Thailand
Tel: + 66 24256100
Fax : +66 24256110 to 11
E-mail: bundit@seafdec.org

Isara Chanrachkit
Capture Fisheries Technology Division Head

E-mail: isara@seafdec.org

SECRETARIAL OF THE MEETING

Matinee Boonyintu (Ms.)

E-mail: matinee@seafdec.org

Nathacha Sornvaree (Ms.)

E-mail: natha@seafdec.org

Kornkanok Havanon (Ms.)

E-mail: kornkanok@sefdec.org

PROVISIONAL ANNOTATED AGENDA AND TIMETABLE

Time	Agenda	Notes
3 March 2016 (Thursday)		
08:30-09:00	Registration	
09:00-09:10	Opening of the Meeting	<i>Secretary-General of SEAFDEC welcomes the participants and provides the opening address</i>
09:10-09:20	Election of a Chairperson of the Drafting Committee	<i>Secretary-General leads for election of a Chairperson of the Drafting Committee (from among all 11 Countries Drafting Committees)</i>
09:20-09:30	Adoption of the Agenda	<i>Elected Chairperson</i>
09:30-10:30	Discussion on the Results/Policy Recommendations from the Stakeholders Consultation	<i>PPC/Secretariat introduces Results including policy recommendations from the Stakeholders Consultation</i>
10:30-11:00	Group photo and refreshment break	
11:00-12:00	Introduction of the Joint Declaration Template	<i>PPC/Secretariat introduces the template of the Joint Declaration for consideration and further discussion by the Drafting committees</i>
12:00-13:30	Lunch break	
13:30-15:10	Drafting of the Joint Declaration	<i>Chairperson leads discussion for drafting of the Joint Declaration by the Drafting Committees</i>
15:10-15:40	Refreshment break	
15:40-17:00	Continue Drafting of the Joint Declaration	<i>Chairperson leads discussion for drafting of the Joint Declaration by the Drafting Committees</i>
18:30-20:30h	Reception Dinner	<i>The Secretary-General of SEAFDEC invites all Drafting Committees and other participants to the Reception Dinner at a Restaurant (Venue will be informed later)</i>
4 March 2016 (Friday)		
09:00-10:30	Continue Drafting of the Joint Declaration	<i>Chairperson leads discussion for drafting of the Joint Declaration by the Drafting Committees</i>
10:30-11:00	Refreshment break	
11:00-12:00	Continue Drafting of the Joint Declaration	<i>Chairperson leads discussion for drafting of the Joint Declaration by the Drafting Committees</i>
12:00-13:30	Lunch break	
13:30-15:00	Finalize the Draft of the Joint Declaration	<i>Chairperson leads discussion for finalizing of the Joint Declaration by the Drafting Committees</i>
15:00-15:30	Refreshment break	
15:30-15:50	Other business	<i>If any</i>
15:50-16:10	Way Forward for the endorsement process of the Joint Declaration	<i>PPC/Secretariat informs the Meeting for consideration and comments</i>
16:10-16:20	Closing of the meeting <ul style="list-style-type: none"> • Remarks from a Chairperson • Closing speech by SG/SEAFDEC 	

Remarks:

All SEAFDEC Technical Departments that responsible on the subject-related to Combating IUU Fishing and Enhancing of the Competitiveness of ASEAN Fish and Fishery Products need to provide the inputs when any inquiry is made from the Drafting Committees

Recommendations on the Practical Steps Towards the Issues for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products

*Adopted by the Stakeholders' Consultation
1-2 March 2016, Bangkok, Thailand*

RECOMMENDATIONS

I. Combating IUU Fishing in the Southeast Asian Region

1.1 Strengthening MCS programs in national laws and regulations for combating IUU fishing

Challenges: limited budget and manpower for enforcement of laws and regulations, geographical features such as long coastline and large archipelagos, pending maritime boundary issues, scattered/small-scale nature of fisheries; need cooperation with other enforcement agencies

Existing regional instruments/tools:

- Regional Fishing Vessels Record for Vessels (RFVR) 24 meters in length and over, including database for RFVR

Recommendations:

- Ensuring that provisions in national laws and regulations are supportive to actions for combating IUU fishing (MCS, VMS, port monitoring, co-management, etc.)
- Enhancing cooperation among relevant national agencies within the country for enforcement of laws and regulations for combating IUU fishing (e.g. vessels registration, MCS actions, PSM implementation)
- Establishing and strengthening organizations of small-scale fishers, buyers and middlemen to enhance their compliance with laws and regulations
- Undertaking information, education and communication campaign, and capacity building programs to enhance the implementation of laws and regulations for combating IUU fishing
- Strengthening the implementation of appropriate national systems to replace open access to fisheries, e.g. vessels registration, fishery licensing and fisheries co-management
- Consider including “carrier vessels” in national regulations and RFVR as these vessels are the main supplier of illegal migrant workers that cause human trafficking at sea and catch from IUU fishing
- Consider including vessels less than 24 meters in length in the RFVR and its database (appropriate category to be considered in the future)

1.2 Enhancing traceability of fish and fishery products from capture fisheries

Challenges: requirements from major markets, e.g. EU and US, as well as intra-regional markets, for traceability of products from capture fisheries and preventing entry of products from IUU fishing into the supply chain

Existing regional instruments/tools:

- ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain
- ASEAN Catch Documentation Scheme (ACDS) (on-going development)

Recommendations:

- Developing comprehensive measures by AMSs to prevent the entry of products from IUU fishing into the supply chain
- Promoting the adoption and implementation of “ASEAN Catch Documentation Scheme (ACDS)” to enhance traceability of fish and fishery products, enhancing understanding and capacity of stakeholders on the implementation of the system (especially small-scale fishers), and development of electronic system to support the implementation of ACDS; and enhancing the acceptability of ACDS by major importing markets.

- Ensuring that ACDS once endorsed by AMSs would not create unnecessary burden, cost or lengthy process for importers/exporters, *e.g.* combined forms, harmonize international requirements with market requirement of respective countries
- Undertaking information, education and communication campaign, and capacity building programs to enhance the implementation of required actions

1.3 Managing Fishing Capacity

Challenges: the need to manage/balance fishing efforts taking into account declining status of the fishery resources, and establish conservation measures; high level of fishing capacity is also caused by over-investment, high benefit shared to people engaged in fishing activities, and provision of subsidies that increase fishing capacity

Existing regional instruments/tools:

- Regional Plan of Action for Managing Fishing Capacity (on-going development)

Recommendations:

- Supporting the finalization and adoption of the RPOA for Managing Fishing Capacity
- Undertaking national/regional resources surveys and making the information on the standing or available fish stocks openly accessible to fishers, to facilitate access of fishers in fishing areas and for management of fishing capacity
- Considering that there are several guidelines proposed and developed by SEAFDEC, SEAFDEC should consider providing technical support to countries in the implementation of such guidelines after adoption, as well as in following-up the implementation of such guidelines by AMSs

1.4 Implementing Port State Measures

Challenges: The need to prevent landing of fish and fishery products from IUU fishing activities from all foreign fishing vessels

Existing regional instruments/tools:

- Regional Cooperation for Implementation of PSM (on-going development)

Recommendations:

- Promoting the implementation of Port State Measures (PSM), and make fishing ports in respective countries ready to implement PSM
- Providing regional capacity building program to support implementation of PSM by AMSs (similar to the training on Vessel Inspection On-board organized by Singapore in 2015, but longer period and more in-depth), including training course for port inspectors and managers; and providing technical support for the conduct of national training courses by the respective AMS

1.5 Enhancing regional cooperation

Challenges: management of shared stocks could not be done by single country (*e.g.* fishing vessels of Country A, catch from Country B waters, and transship at sea and land in Country C), declining shared stocks; unsettled maritime boundary issues

Existing regional instruments/tools:

- Bi-lateral and Tri-lateral Cooperation for Combating IUU fishing (proposed by SEAFDEC)

Recommendations:

- Fostering regional, sub-regional and bilateral dialogue/cooperation, also involving other relevant national agencies, *e.g.* patrol unit, port authority, to enhance transboundary cooperation for combating IUU fishing, particularly poaching of fishing vessels across the border of the respective countries, transshipment/transportation of fish and fishery products across the border (at sea or on land)

- Exploring the development of appropriate regional cooperative mechanism to facilitate dialogue and settlement of issues that may arise from laws and regulations of particular country that affect other countries, and harmonize regional fisheries policies among AMSs, *e.g.*:
 - o Banning or limiting the issuance of fishing license to foreign vessels -- through bi-lateral dialogue with concerned countries
 - o Innocent passage of vessels -- by providing information on navigational lanes
- Conducting collaborative fishery resources survey as basis for management of straddling/ migratory stocks, and pilot implementation of fisheries co-management in transboundary areas
- Developing RPOA-IUU for ASEAN (aside from the existing RPOA for Asia-Pacific) should be considered
- Enhancing sharing of information among coastal States, port States and flag States to facilitate actions for combating IUU fishing

II. Enhancing Competitiveness of ASEAN Fish and Fishery Products

2.1 Addressing quality and safety requirements

Challenges: emerging requirements for quality and safety, and high costs for accreditation of products

Existing regional instruments/tools:

- ASEAN Guidelines for the Use of Chemical in Aquaculture and Measures to Eliminate the Use of Harmful Chemicals
- Mutual Recognition Arrangement Platforms
- ASEAN Shrimp GAP

Recommendations:

- Developing/adopting regional/ASEAN standards for quality and safety of fish and fishery products that meet with market requirements and acceptable by importing markets
- Development of ASEAN branding/labeling to provide incentives (for quality, safety, traceability, social responsibility, etc.) and enhance accessibility of ASEAN fish and fishery products

2.2 Addressing issues on labor in fisheries sector

Challenges: need to improve working conditions of labor in fisheries (at sea and processing plants) to meet standards requirements, address illegal and unfair practices for migrant workers; human trafficking and human rights issues; emerging market driven requirements for improving labor standards and conditions; and the issues on labor fall under several agencies and only few actions could be undertaken by fisheries-related agencies

Existing regional instruments/tools:

- ASEAN Declaration on the Protection and Promotion of the Rights and Migrant Workers

Recommendations:

- Reviewing of domestic labor laws and regulations to meet with standards for safety at sea and working condition, especially in the aspects of hygiene and availability of freshwater onboard, minimum age for different kinds of work, minimum rest hours to ensure safety of fishing crews
- Undertaking actions to eliminate human trafficking and other human rights related crimes; and legalize migrant workers in fishery (by both sending and recipient countries), by having strict control (at the border and at sea)
- Conducting training (by sending and receiving countries) to enhance the capacity of workers in undertaking works in fisheries (fishing operation, works in processing plants) before sending to receiving countries.
- Conducting consultation to share experiences of Thailand on Good Labor Practices (developed in cooperation with ILO) with other AMSs
- Ensuring fair labor practices and profit sharing for fishers onboard
- Strengthening cooperation among relevant national agencies within the country (*e.g.* with Ministries of Labor, Law, etc), as well as cooperation (bi-lateral and multi-lateral) for actions to address labor issues

- Developing the “ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector”

2.3 Enhancing traceability of fish and fishery products from aquaculture

Challenges: traceability becomes trade requirement for AMSs to export aquaculture products to major markets

Existing regional instruments/tools:

- Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region (final draft for endorsement)
- ASEAN Good Aquaculture Practice (GAqP)
- ASEAN Shrimp GAP

Recommendations:

- Consider implementing ASEAN traceability system and good aquaculture practices for fish and fishery products, that are harmonized with major importing markets but simplified, with certification scheme (based on regulation of respective countries) that could be recognized by major importing markets
- Development of ASEAN unified approach to address traceability requirements for exporting fish and fishery products (*e.g.* shrimps) to US market
- Encouraging farms and processing plants (for fish meal and aquaculture feed) to monitor and record their respective raw materials, *e.g.* to assure that they are not derived from IUU fishing activities, not harvested from critical fishing grounds, and meet quality standards requirements
- Addressing problem on mix up of raw materials (*e.g.* fish by-catch) from several sources that results in difficulty for tracing the origins of fish, *e.g.* through establishment of organization for small-scale fishers and middlemen for supplying fish by-catch for processing plants, application of catch documentation scheme to facilitate tracking the origins of fish by-catch
- Developing simplified guidelines to facilitate implementation of traceability of aquaculture products by fish farmers and middlemen, and extending support from government to private sector in the implementation of the Guidelines
- Recognizing the contribution from aquaculture to rural economy of the respective AMSs and in providing fish supply to lessen the burden on capture fisheries; and considering establishing technical committee to provide advice for sustainable aquaculture activity in each area.

WAY FORWARD

- The aforementioned recommendations should be incorporated in the draft Joint Declaration, and once adopted, the Joint Declaration should be made into practice and implemented by the Member Countries.
- SEAFDEC with support from Japan and various partners (Sweden, USAID, etc.) should strengthen its efforts to support AMSs’ programs to combat IUU fishing and enhancing the competitiveness of ASEAN fish and fishery products

LIST OF PARTICIPANTS

BRUNEI DARUSSALAM

Ranimah A. Wahab (Ms.)
Acting Deputy Director of Fisheries and
SEAFDEC National Coordinator
for Brunei Darussalam

Department of Fisheries
Ministry of Primary Resources and Tourism
Muara Fisheries Complex
Simpang 287-53 Jalan Peranginan Pantai Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2772787
Fax: +673 2771063/2770065
E-mail: ranimah.wahab@gmail.com

Noorizan Haji Abd Karim (Ms.)
Head,
Capture Fisheries Industry Division

Department of Fisheries
Ministry of Primary Resources and Tourism
Muara Fisheries Complex
Simpang 287-53 Jalan Peranginan Pantai Serasa
Muara BT1728, Brunei Darussalam
Tel: +673 2770066
Fax: +673 2771063/2770065
E-mail: noor6263@gmail.com,
noorizan.karim@fisheries.gov.bn

CAMBODIA

Dr. Kao Sochivi (Ms.)
Deputy Director-General,
Fisheries Administration

Fisheries Administration, Cambodia
#186 Preah Norodom Blvd. Chamcar Mon,
P.O. Box 582 Phnom Penh, Cambodia
Tel: +855 16850003
E-mail: kaosochivi@yahoo.com

Pau Ferber
Director

Marine Conservation Cambodia
Kep Oceanarium, Kep Town
Kep Province, Cambodia
Tel: +855 16715444
E-mail: DREAMS4DIVERS@gmail.com

Chheng Chhun
Fisherman

The Bakoung Commune, Mondul Seyma District,
Koh Kong Province
Tel: +855 909979346

INDONESIA

Alza Rendianni
Senior Policy Analyst for Regional Cooperation

Bureau of International Cooperation
and Public Relation
MMAF Republic of Indonesia
Jl. Medan Merdeka Timur No. 16
Mina Bahari Building II, Jakarta, Indonesia
Tel: +62 21 3519070 ext. 7510
E-mail: alzarendian@gmail.com
multilateralmmaf@gmail.com

Dwi Agus Siswa Putrate
Secretary General,
Indonesia Tuna Long Line Associations

Indonesia Tuna Long Line Associations (ATLI)
Jalan Ikan Tuna Raya Timur, Palabuhan Benoa
Denpasar Bali, Indonesia
Tel: +62 361 724932
Fax: +62 361 725099
E-mail: atli.bali@gmail.com

Abdullah Habibi
Fisheries and Aquaculture Improvement Project
Manager

WWF Indonesia
Graha Simatupang Bldg, Tower 2 Unit C
7th floor Jl. TB Simatupang Kav C-38
South Jakarta 12540, Indonesia
Tel/Fax: +62 21 782 9461
E-mail: ahabibi@wwf.id

Wawan Ridwan
Director of Coral Triangle

WWF Indonesia
Graha Simatupang Bldg, Tower 2 Unit C
7th floor Jl. TB Simatupang Kav C-38
South Jakarta 12540, Indonesia
Tel: +62 8119910082
Fax: +62 217829462
E-mail: wridwan@wwf.id

JAPAN

Hirohide Matsushima
Assistant Director

Fisheries Management Division
Fisheries Agency of Japan
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo, Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: Hiro_matsushima500@maff.go.jp

Jiro Hyugaji
Assistant Director, Overseas Fisheries
Cooperation Office,
International Affairs Division and
SEAFDEC National Coordinator for Japan

Fisheries Agency of Japan
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo, Japan
Tel: +81 3 67442367
Fax: +81 3 35020571
E-mail: jiro_hyugaji750@maff.go.jp

LAO PDR

Akhane Phomsouvanh
Deputy Director of Fisheries Division and
SEAFDEC National Coordinator for Lao PDR

Division of Fisheries
Department of Livestock and Fisheries
P.O. Box 6644, Vientiane 01000 Lao PDR
Tel/Fax: +856 21 217869
E-mail: akhane@live.com

MALAYSIA

Dr. Hj. Mazuki bin Hashim
Director of Aquaculture Development

Department of Fisheries Malaysia
Block 4G2, Wisma Tani Precinct 4
Federal Government
Administrative Centre 62628
Putrajaya, Malaysia
E-mail: mazuki@dof.gov.my

Nur Fadhlina Chan binti Mahadie Chan (Ms.)
Fisheries Officer

International Section
Planning and Development Division
Department of Fisheries Malaysia
Block 4G2, Wisma Tani Precinct 4
Federal Government
Tel: +603 8870 4321
Mobile: +6017 954 6774
Fax: +603 8889 1195
E-mail: fadhlinachan@gmail.com

MYANMAR

Dr. Kyaw Kyaw
Deputy Director

Department of Fisheries, MLFRD
No. 36 Office Zong, Naypyidaw
Myanmar
Tel: +95 7782865279
E-mail: Kyaw.72@gmail.com

Dr. Toe Nandar Tin (Ms.)
Vice Chairperson

Myanmar Fisheries Federation
Corner of Bayint Naung Rd. and
Say War Set Yore St.
West Gyogone, Yangon, Myanmar
Tel: +95 9 5148265
E-mail: toenandartin@gmail.com

Hla Win
Advisor

Myanmar Fisheries Federation
Corner of Bayint Naung Rd. and
Say War Set Yore St.
West Gyogone, Yangon, Myanmar
Tel: +95125572
E-mail: hlwin.dofmm@gmail.com

PHILIPPINES

Atty. Annaliza A. Vitug (Ms.)
Chief Fishing Regulations

Bureau of Fisheries and Aquatic Resources
PCA Building, Elliptical Road
Quezon City, Philippines
Tel: +63 24266532
Fax: +63 24266532
E-mail: annalizavitug@gmail.com

Teresita N. De Jesus (Ms.)
Director, Inter-Island Deep Sea Fish

Inter-Island Deep Sea Fishing Association (IDSFA)
IDSFA Bldg. Navotas Fish port Complex
Navotas City, Philippines
E-mail: eaterry101@gmail.com

Rosanna Bernadette B. Contreras (Ms.)
Executive Director

SOCKSARGEN Federation of Fishing and
Allied Industries, Inc.
Mezzanine Floor, Market 3 Building
General Santos Fish Port Complex
Tambler, General Santos City, Philippines
Fax: +63 835529736
E-mail: fishing.federation@gmail.com

SINGAPORE

Dr. Cheryl Goh (Ms.)
Senior Executive Manager

Agri-Food & Veterinary Authority of Singapore
52 Jurong Gateway Road, #13-01
Singapore 608550
Tel: +65 68052939
E-mail: Cheryl_goh@ava.Government.sg

Belinda Ting (Ms.)
Second Vice President

Seafood Industries Association Singapore
Blk 3017 #01-34 Bedok North St. 5
Singapore 486121
Tel: +65 98307344
E-mail: mrslee_sias@yahoo.com.sg

Matthew Low
Deputy General Secretary

Seafood Industries Association Singapore
Tel: +65 67796332, +65 81814352
Fax: +65 67792701
E-mail: matthew@hongfood.com.sg

THAILAND

Chuanpid Chantarawarathit (Ms.)
Chief,
International Cooperation Group

Department of Fisheries
50 Kaset Klang, Chatuchak
Bangkok 10900, Thailand
Tel/Fax: +66 2 5620529
E-mail: chuanpidc@gmail.com

Phakthorn Niamsaeng

Thai Tuna Industry Association
170/19, 8th floor, Ocean Tower 1 Bldg
New Ratchadapisek Rd. Klongtoey
Bangkok 10110
Tel: +66 2 661 8992 3
Fax: +66 2 661 8994
E-mail: ttia@thaiyuna.org

Songsang Patavanich
Advisor

Thai Overseas Fisheries Association
9, 11 Rama II Soi 30, Bangmod
Jomthong, Bangkok 10150
Tel: +66 2 452 1264, +66 2 480 2116-7
Fax: +66 2 452 1265
E-mail: tofa_bkk@yahoo.com

VIET NAM

Nguyen Viet Manh
Director,
Science Technology and international Cooperation

Directorate of Fisheries
10 Nguyen Cong Hoan, Ba-Dinh
Hanoi, Viet Nam
Tel: +84 4 37245374
Fax: +84 4 37245120
E-mail: manhnv.htqt@mard.gov.vn

Nguyen Hoai Nam
Deputy General Secretary

Viet Nam Association for Seafood
Exporters and Producers (VASEP)
10 Nguyen Cong Hoan, Ba-Dinh
Hanoi, Viet Nam
Tel: +84 4 37715055
Fax: +84 4 37715084
E-mail: namnh@vasep.com.vn

Huynh Quang Huy
Member of Executive Committee,
Viet Nam Fisheries Society

President of Fisheries Society
of Binh Thuan province
380 Thu Khoa huan str. Phan Thiet city
Binh Thuan prov., Viet Nam
Tel: +84 913932291
E-mail: huythihuyhn@yahoo.com.vn

OBSERVERS

Embassy of Sweden

Maja Forslind (Ms.)
Manager

Regional Private Sector Collaboration
Development Cooperation Section
Embassy of Sweden, Bangkok
One Pacific Place, 11th Floor
140 Sukhumvit Road, Bangkok
Tel: +66 (0)2 263 72 90
Mobile: +66 87 831 44 39
E-mail: maja.forslind@gov.se

The United States Agency for International Development The Oceans and Fisheries Partnership (USAID OCEANS)

Nives Mattich (Ms.)
Deputy Chief of Party

USAID Oceans
Tetra Tec Suite 2-3, Level 9, Zuelling House 1
Silom Road, Bangrak District
Bangkok 10500 Thailand
Tel: +662 231 8301 to 06
E-mail: nives.mattich@oceans-partnership.org

SEAFDEC

The Secretariat

Dr. Kom Silapajarn
Secretary General

P.O. Box 1046, Kasetsart Post Office
Bangkok 10903, Thailand
Tel: + 66 29406326
Fax : +66 29406336
E-mail: sg@seafdec.org

Hajime Kawamura
Deputy Secretary General

E-mail: dsg@seafdec.org

Dr. Magnus Torell
Senior Advisor

E-mail: magnus@seafdec.org

Dr. Somboon Siriraksophon
Policy and Program Coordinator

E-mail: somboon@seafdec.org

Nualanong Tongdee (Ms.)
Information Program Coordinator

E-mail: nual@seafdec.org

Akira Bamba
Assistant Trust Fund Manager

E-mail: bamba@seafdec.org

Dr. Worawit Wanchana
Assistant Policy and Program Coordinator

E-mail: worawit@seafdec.org

Dr. Taweekiet Amornpiyakrit
Senior Policy and Program Officer

E-mail: taweekiet@seafdec.org

Ylva Mattsson (Ms.)
Fisheries Policy Expert

E-mail: ylva@seafdec.org

Pattaratjit Kaewnuratchadasorn (Ms.)
Program Manager

E-mail: pattaratjit@seafdec.org

V. T. Sulit (Ms.)
Technical Fisheries Officer

E-mail: sulit@seafdec.org

Saivason Klinsukhon (Ms.)
Information Officer I

E-mail: saivason@seafdec.org

Sawitree Chamsai (Ms.)
Policy and Program Officer I

E-mail: sawitree@seafdec.org

Suwanee Sayan (Ms.)
Policy and Program Officer II

E-mail: suwanee@seafdec.org

Aquaculture Department (AQD)

Dr. Felix G. Ayson
Chief,
SEAFDEC/AQD

Tigbauan Main Station (TMS)
Tigbauan Iloilo 5021, Philippines
Manila Office:
Rm 102, G/F, PSSC Building
Commonwealth Avenue
Diliman, Quezon City 1101, Philippines
Tel/Fax: +63 33 3307001 (Main Office)
Tel/Fax: +63 2 9277825 (Manila Office)
E-mail: fgayson@seafdec.org.ph

Mae R. Catacutan
Head,
Nutrition and Feed Development

Tigbauan 5021 Iloilo Philippines
Tel/Fax: +63 33 3307001 (Main Office)
Tel/Fax: +63 33 3307002
E-mail: mrc@seafdec.org.ph

Marine Fishery Resources Development and Management Department (MFRDMD)

Abdul Razak Latun
Research Officer

Taman Perikanan Chendering
21080 Kuala Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6174042
E-mail: abdulrazaklatun@seafdec.org.my

Mazalina Ali (Ms.)
Research Officer

Taman Perikanan Chendering
21080 Kuala Terengganu, Malaysia
Tel: +60 9 6175940
Fax: +60 9 6174042
E-mail: mazalina@seafdec.org.my

Inland Fishery Resources Development and Management Department (IFRDMD)

Dr. Satoshi Honda
Deputy Chief,
SEAFDEC/IFRDMD

Jl. Gubernur H.A. Bastari No.8
Rt. 29 Rw. 07 Kel. Silaberanti
Kec. Seberang Ula I 30257 Palembang
South Sumatra, Indonesia
Tel: +62 811 719715
Fax: +62 711 5649601
E-mail: HONDA.Satoshi@affrc.go.jp

Training Department (TD)

Bundit Chokesanguan
Information and Training Division Head

P.O. Box 97, Phrasamutchedi Post Office
Samutprakan 10290, Thailand
Tel: + 66 24256100
Fax: +66 24256110 to 11
E-mail: bundit@seafdec.org

Isara Chanrachkit
Capture Fisheries Technology Division Head

E-mail: isara@seafdec.org

SEAFDEC RFPN MEMBER

Heng Samay
RFPN-Cambodia

P.O. Box 1046, Kasetsrat Post Office
Bangkok 10903, Thailand
Tel: +66 29406326
Fax: +66 29406336
E-mail: samay@seafdec.org

Reynaldy Indra Syahputra
RFPN-Indonesia

E-mail: reynaldy@seafdec.org

Phongsavanh Sengsomphou (Ms.)
RFPN-Lao PDR

E-mail: phongsavanh@seafdec.org

Dr. Saw Mya Linn (Ms.)
RFPN-Myanmar

E-mail: sawmyalinn@seafdec.org

Marlon B. Alejandro
RFPN-Philippine

E-mail: marlon@seafdec.org

Natedow Wisesso (Ms.)
RFPN-Thailand

E-mail: natedow@seafdec.org

Nguyen Huong Tra (Ms.)
RFPN-Viet Nam

E-mail: huongtra@seafdec.org

SECRETARIAL OF THE MEETING

Matinee Boonyintu (Ms.)

E-mail: matinee@seafdec.org

Nathacha Sornvaree (Ms.)

E-mail: natha@seafdec.org

Kornkanok Havanon (Ms.)

E-mail: kornkanok@seafdec.org

First Draft
(adopted by Drafting Committee Members on 3 March)

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

WE, the Senior Officials of ASEAN-SEAFDEC Member Countries met on the occasion of the “High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products,” in Bangkok, Thailand on 3 August 2016;

Recognizing the provisions in international instruments such as the United Nations Convention on the Law of the Sea (UNCLOS, 1982), the UN Conference on Environment and Development (UNCED, 1992), and the FAO Code of Conduct for Responsible Fisheries (CCRF, 1995);

Guided by the 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 people as the focus of the ASEAN Community building process;

Bearing in mind that fisheries in the Southeast Asian region had developed rapidly during the last decade contributing significantly to the improved economy of the region, however, IUU fishing seriously threatens the sustainability of the region’s fisheries management and conservation measures, fishery resources and aquatic ecosystems, as well as economic viability and food security;

Aware of the existing national, regional and international initiatives in combating IUU fishing undertaken by the ASEAN Member States (AMSs), relevant Regional Fisheries Management Organizations (RFMOs), and international/regional organizations;

Recalling the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region adopted by the ASEAN-SEAFDEC Ministers and Senior Officials responsible for fisheries during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 “Fish for the People 2020: Adaptation to a Changing Environment” held in June 2011;

Conscious of the need to meet food safety and quality requirements; and develop ASEAN standards in line with relevant regional and international instruments such as the Codex Alimentarius Commission and the Agreement on Sanitary and Phytosanitary (SPS) Measures, ASEAN Guidelines for the Use of Chemicals in Aquaculture and Measures to Eliminate the Use of Harmful Chemicals, Mutual Recognition Arrangement Platforms, ASEAN Good Aquaculture Practice (GAqP), ASEAN Shrimp GAP;

Taking into consideration relevant provisions on working conditions of labor in fisheries sector of the International Labour Organization (ILO), International Maritime Organization (IMO), Food and Agriculture Organization of the United Nations (FAO), and the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers;

DO HEREBY AGREE, without prejudice to the sovereign rights, obligations, and responsibilities of ASEAN-SEAFDEC Member Countries under relevant international laws and arrangements, to combat IUU fishing in the Southeast Asian region and enhance the competitiveness of ASEAN fish and fishery products by:

Strengthening Monitoring, Control and Surveillance (MCS) programs under national laws and regulations for combating IUU fishing and enhancing cooperation among relevant national agencies within the country for effective implementation of laws and regulations for combating IUU fishing;

Intensifying capacity building and awareness-raising programs, including information, education and communication campaigns;

Enhancing traceability of fish and fishery products from capture fisheries through the implementation of the “ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain,” and “ASEAN Catch Documentation Scheme for Marine Capture Fisheries”;

Enhancing traceability of aquaculture products, through the implementation of all ASEAN GAPs with certification scheme based on regulations of respective countries, and ASEAN traceability system that are harmonized with those of major importing countries;

Managing fishing capacity with a view to balance fishing efforts taking into account the declining status of the fishery resources in the Southeast Asian region, and establishing conservation measures based on scientific evidence;

Promoting the implementation of port State measures through enhanced inter-agencies and regional cooperation in preventing the landing of fish and fishery products from IUU fishing activities from all foreign fishing vessels, and encouraging the use of the “Regional Fishing Vessels Record (RFVR)”;

Enhancing regional cooperation in managing trans-boundary fisheries resources through regional, sub-regional, and bilateral arrangements in combating IUU fishing, particularly poaching by fishing vessels, transshipment and transportation of fish and fishery products across borders of respective countries;

Regulating the quality and safety of ASEAN fish and fishery products all throughout the supply chain to meet standards and market requirements as well as acceptability by importing countries, and development and promotion of ASEAN seal of excellence/label; and

Addressing issues on labor, human rights, and human trafficking in the fisheries sector in the Southeast Asian region through strengthened cooperation among relevant national agencies within the country as well as establishing regional, sub-regional and bi-lateral cooperation, and supporting the development and implementation of the “ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector.”

WE HEREBY DECLARE AND COMMIT THAT

This Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products be put into practice and implemented by the ASEAN-SEAFDEC Member Countries; and that SEAFDEC with support from donors and collaborating partners, strengthens its efforts to support AMSs’ programs to combat IUU fishing and enhancing the competitiveness of ASEAN fish and fishery products.

This Joint Declaration is signed on 3 August 2016 by:

Brunei Darussalam	Japan	Republic of the Union of Myanmar	Kingdom of Thailand
Kingdom of Cambodia	Lao People’s Democratic Republic	Republic of the Philippines	Socialist Republic of Viet Nam
Republic of Indonesia	Malaysia	Republic of Singapore	

**PREPARATION FOR
SOUTHEAST ASIAN STATE OF FISHERIES AND AQUACULTURE
(SEASOFIA) 2017**

I. BACKGROUND

Information on the status and trends of fisheries is widely recognized as crucial in serving as basis for sustainable development and management of fisheries. SEAFDEC throughout the past decades had undertaken several activities to compile various forms of fishery-related data and information, *e.g.* regional fishery statistics based on the national statistics data provided by the Southeast Asian countries, as well as other data and information from different SEAFDEC programs/projects. In order to ensure that the outputs from these initiatives could be integrated or digested into information that support the development and management for sustainable fisheries of the region, SEAFDEC in 2010 undertook a pilot exercise in developing the publication on “The Southeast Asian State of Fisheries and Aquaculture” or “SEASOFIA”. Such endeavor was meant to provide platform for compilation of synthesized data and information generated from various programs of activities, while incorporating other data and information available in the region, in order to provide better understanding on the status and trends of fisheries and aquaculture of the region. The first SEASOFIA was published in 2012.

While taking into consideration the usefulness of the SEASOFIA especially as a tool in providing a platform for integrating regional data and information and in coming up with information to support policy planning and management of fisheries, the SEAFDEC Council during its 44th Meeting agreed that the SEASOFIA could be published on a regular basis, *i.e.* every 5 years. It was also suggested that future production of the publication should be done in close coordination with other agencies that produce similar publications in order to avoid possible redundancies of the contents. Specifically, the SEASOFIA could focus on the analysis of the specificity of fisheries in the Southeast Asian region and could include the reasons behind the changing trends of fishery production in respective Southeast Asian countries. An analysis of the respective countries’ policy directions and management policies, as well as of over-exploitation or under-exploitation of stocks should also be included in the publication. In order to minimize production costs and enhance dissemination, the publication could be produced in electronic format, *e.g.* in CD-ROM format or make the publication accessible through the SEAFDEC website.

II. SEASOFIA 2017

In line with the directives given by the SEAFDEC Council, the Secretariat therefore plans to prepare the next SEASOFIA to be published in 2017. The following outline of SEASOFIA 2017 was proposed by SEAFDEC Secretariat and Departments:

Topic
Part I. Status and Trends of Capture Fisheries and Aquaculture in SEA
1. Global Production and Utilization of Fish
2. Fishery Production of SEA
3. Production from Marine Capture Fisheries of SEA <ul style="list-style-type: none"> 3.1 Economically Important Species <ul style="list-style-type: none"> 3.1.1 Tunas 3.1.2 Small Pelagic Species (<i>e.g.</i> scads, mackerels, anchovies, sardines, etc.) 3.1.3 Crustaceans and Molluscs 3.1.4 Demersal Fish Species 3.2 By Types of Fishing Fleets
4. Production from Inland Capture Fisheries of SEA
5. Aquaculture Production of SEA <ul style="list-style-type: none"> 5.1 Mariculture 5.2 Brackishwater Culture 5.3 Freshwater Culture
6. Fish Processing Industry <ul style="list-style-type: none"> * <i>Subject to contribution from MFRD</i>

Topic
7. Fish Trade
7.1 Global Trading of Fish and Fishery Products
7.2 Southeast Asian Export-Import of Fish and Fishery Products
8. Summary
Part II. Issues and Challenges in Sustainable Fisheries Development of the Southeast Asian Region
1. Marine Fishery Resources
1.1 Important Pelagic Fishery Resources
1.1.1 Tunas
1.1.2 Scads
1.1.3 Mackerels
1.1.4 Anchovies
1.1.5 Sardines
1.2 Important Demersal Fishery Resources
1.2.1 Species as Raw Materials for Surimi
1.2.2 Live Reef Food Fish Species
1.3 Deep Sea/Offshore Fisheries Resources
1.3.1 Status and Trend
1.3.2 Deep sea shrimps
1.3.3 Oceanic squids
1.4 Challenges and Future Direction
2. Inland Fishery Resources
2.1 Status, Issues and Concerns
2.1.1 Inland Fisheries for Food Security and Poverty Alleviation
2.1.2 Data/Information Collection on Inland Fisheries
2.1.3 Extract of Priority Issues from Different Countries/Areas
2.1.4 Impacts of Water Barrier Construction on Inland Fisheries
2.1.5 Inland Fisheries vs. Aquaculture
2.2 Challenges and Future Direction
2.2.1 Habitat Conservation
2.2.2 Negative Effect of Freshwater Aquaculture
3. Species Under International Concern
3.1 Sharks and Rays
3.2 Eels
3.3 Sea Turtles
3.4 Sea Cucumbers
3.5 Seahorses
3.6 Coral Reef Ornamental Species
3.7 Challenges and Future Direction
4. Utilization of Fishery Resources
4.1 Status, Issues and Concerns
4.1.1 Product Quality, Safety, and Traceability of Fish and Fishery Products
4.2 Challenges and Future Direction
5. Fishery Management
5.1 Management of Fishing Capacity and Combating IUU Fishing
5.1.1 Stock Assessment
5.1.2 Fishing Vessel Registration and Fishing Licensing
5.1.3 Traceability of Capture Fisheries (including Certification)
5.1.4 Port Monitoring and Port Inspection
5.1.5 MCS Systems and Network
5.1.6 Legal and Institutional Matters
5.1.7 Transboundary Issues
5.1.8 Other Management Measures (<i>e.g.</i> zoning, seasonal prohibition, etc.)
5.2 Management of Inland Capture Fisheries
5.3 Responsible Fishing Practices
5.3.1 By Catch Reduction and Management
5.3.2 Optimizing Energy Use in Fisheries
5.3.3 Reducing the fossil fuel use and Carbon emission
5.4 Community-based Fishery Management Approach in the SEA Region

Topic
5.5 Application of EAFM for Fisheries Management
5.6 Habitats Protection and Coastal Fishery Resources Enhancement
5.7 Challenges and Future Direction
6. Aquaculture Development
6.1 Control and Prevention of Present and Emerging Transboundary Aquatic Animal Diseases
6.2 Overcoming the Fish Meal Dependence in Aquaculture
6.3 Producing and Distributing Good Quality Seed
6.4 Producing Safe and Quality Aquaculture Products
6.5 Addressing Environmental Concern Due to Intensification of Aquaculture and Climate Change
7. Vulnerability of Fisheries to Climate Change
8. Fisherfolks, and Workers in Fishing Activities (on-board)
8.1 Safety at sea, working condition and safety on-board of fishing vessels
9. Human Resources in Fisheries
Part III. Outlook of Fisheries and Aquaculture for the Southeast Asian Region
1. Outlook of Fisheries and Aquaculture
2. Future Direction and Way Forward

Publication Team

Advisory Board

- SEAFDEC Secretary-General and Chief of SEAFDEC/TD
- SEAFDEC Deputy Secretary-General and Deputy Chief of SEAFDEC/TD
- Chief of SEAFDEC/MFRD
- Chief of SEAFDEC/AQD
- Chief of SEAFDEC/MFRDMD
- Chief of SEAFDEC/IFRDMD
- SEAFDEC Senior Advisor

Editorial Board

- Administration and Finance Coordinator, SEAFDEC Secretariat
- Information Program Coordinator, SEAFDEC Secretariat
- Policy and Program Coordinator, SEAFDEC Secretariat
- SEASOFIA Coordinator of SEAFDEC Secretariat
- SEASOFIA Coordinator of SEAFDEC/TD
- SEASOFIA Coordinator of SEAFDEC/MFRD
- SEASOFIA Coordinator of SEAFDEC/AQD
- SEASOFIA Coordinator of SEAFDEC/MFRDMD
- SEASOFIA Coordinator of SEAFDEC/IFRDMD
- Fisheries Technical Officer, SEAFDEC Secretariat

Production Team

- Ms. Nualanong Tongdee, Information Program Coordinator, a.i.
- Ms. Virgilia T. Sulit, Fisheries Technical Officer
- Ms. Saivason Klinsukhon, Information Officer-I

Contributors

- SEAFDEC National Coordinators
- Others (to be listed)

III. WORKPLAN AND TIMEFRAME

Activity	2015			2016												2017			
	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A
• Discussion on proposed outline of SEASOFIA2017 at 16 th ISP Meeting																			
• Submit the proposed outline to 38 th PCM																			
• Preparation of inputs from contributors																			
• Submission of inputs from contributors to the Secretariat																			
• Harmonization of inputs																			
• Discussion among SEAFDEC staff on the draft content				Making use of existing SEAFDEC gathering and events, & extra events															
• Finalization of the draft content																			
• Circulation of the draft Member Countries through NC for comment																			
• Finalization of content and layout for publishing																			
• Publication available for the 49 th Council Meeting																			

IV. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note on the outline for the SEASOFIA 2017. The Council may wish to provide further directives for the production of SEASOFIA by SEAFDEC.

THE 50TH ANNIVERSARY OF SEAFDEC

I. BACKGROUND AND INTRODUCTION

SEAFDEC was established on 28 December 1967 “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.” In the span of about 49 years, SEAFDEC has been promoting sustainable development of fisheries in Southeast Asia. As such, SEAFDEC has attained monumental technological advancements that veered the course of the region’s fisheries development towards sustainability. Through diligence and perseverance, SEAFDEC has been able to reap the fruit of its hard work obtaining greatness in terms of the quality of its achievements. To date, SEAFDEC continues to amass adequate technologies that would arm the Southeast Asian stakeholders with methodologies and systems to support their efforts in undertaking sustainable fisheries and aquaculture as well as in coming up with safe and quality fish and fishery products that would eventually secure the niche of such products in the regional and global markets.

In 2016 therefore, SEAFDEC would be almost at the end of its 5-decade cycle of promoting sustainable fisheries development in Southeast Asia. This is therefore an occasion for SEAFDEC to look at its achievements and successes, and take lessons from its experiences for future advantages before getting into the threshold of its golden jubilee, when the new door of opportunity would open for SEAFDEC as its 5-decade cycle door closes. This is also an opportune time for SEAFDEC to make plans for its Golden Jubilee in order to commemorate the occasion with activities that reflect what SEAFDEC has done for the region in terms of sustainable development in fisheries and aquaculture, and in enhancing the competitiveness of fish and fishery products from the Southeast Asian region. This would also be an appropriate time for SEAFDEC to set its foresight towards new horizons.

II. PROPOSED ACTIVITIES

During the SEAFDEC Department Chiefs’ Meeting convened on 28 November 2015 in Manila, Philippines, the following activities were suggested, which would be carried out by the SEAFDEC Secretariat and Departments, for the celebration of the 50th SEAFDEC Anniversary:

1. Production of **Coffee Table Book** (by SEAFDEC Secretariat), to be launched during the 49th Meeting of the SEAFDEC Council in 2017, please refer to *Appendix 1*
2. Designs for the **50th Anniversary logo** (to be solicited from all Departments through a contest for all SEAFDEC staff, the shortlisted designs for final selection of the best logo during the 48th Meeting of the SEAFDEC Council), please refer to *Appendix 2*
3. **Souvenirs** to commemorate the SEAFDEC Golden Jubilee (by Departments) for distribution in 2017
4. Special session devoted to the Golden Jubilee **during the 49th Meeting of the SEAFDEC Council in 2017**, with Video on SEAFDEC milestone achievement, launching of Coffee Table Book, and poster exhibition on SEAFDEC achievements and advancements in sustainable fisheries
5. Exhibition of SEAFDEC achievements and advancements in sustainable fisheries after the 49th Meeting of the SEAFDEC Council in 2017
6. Each Department to incorporate the 50th Anniversary of SEAFDEC in conducting respective activities to enhance the visibility of SEAFDEC (refer to example of events in *Appendix 3*)
7. Celebration of the 50th Anniversary of SEAFDEC in Bangkok, Thailand on 28 December 2017

In addition to the incorporation of the 50th Anniversary of SEAFDEC, Special Events (*e.g.* one-day forum be organized by SEAFDEC Departments and Secretariat with the participation of the Council) may also be considered. Nevertheless, this is subject to further directive from the Council.

III. PROPOSED WORKPLAN

Activities/Outputs	2016												2017											
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D			
1. Production of Coffee Table Book																								
- Preparations (compiling/ summarizing inputs)																								
- Actual Production of Coffee Table Book (editing, layouting, printing)																								
- Launching during 49 th CM																								
- Distribution																								
2. Designs for 50 th Anniversary Logo																								
- Contest period (until end of Feb)																								
- Shortlisted designs for final selection by Council																								
- Use of Logo in SEAFDEC letterheads, information materials																								
3. Production of souvenirs for distribution to SEAFDEC staff and relevant stakeholders																								
4. Special Session on SEAFDEC Golden Jubilee during 49 th CM																								
5. Exhibition of SEAFDEC achievements and advancements																								
6. Departments to incorporate the 50 th Anniversary of SEAFDEC in respective events to enhance the visibility of SEAFDEC																								
7. 50 th SEAFDEC Anniversary Celebration (28 December)																								

IV. REQUIRED CONSIDERATION BY THE COUNCIL

The SEAFDEC Council is requested to approve the aforementioned activities planned for the celebration of the 50th Anniversary of SEAFDEC in 2017, and provide recommendations to enable the SEAFDEC Secretariat and Departments to carry out their respective plans of activities.

The Council is also requested to select the best Anniversary Logo design which would be used by the SEAFDEC Secretariat and Departments in all official communications as well as in all information materials produced by SEAFDEC.

The Council may provide directives on the conduct of a special event for 50th Anniversary of SEAFDEC, including the possibility for the use of MRC for this activity.

Proposal on Production of SEAFDEC Golden Anniversary Coffee Table Book

I. Background

Having been established on 28 December 1967, SEAFDEC would celebrate its Golden Jubilee on 28 December 2017. The mission of SEAFDEC “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,” had been pursued through the programs and activities of the Secretariat and five Technical Departments under the guidance of the SEAFDEC Council of Directors representing the Fisheries Agencies of its eleven Member Countries. All throughout its 50 years of existence in the region, SEAFDEC has been persistent in promoting sustainable development of fisheries in Southeast Asia, majestically attaining monumental technological advancements that veered the course of the region’s fisheries development towards sustainability.

At the 16th Meeting of the SEAFDEC Information Staff Program (16 ISP Meeting) in Kuala Lumpur, Malaysia on 26-28 October 2015, the IPC Office at the Secretariat submitted a Concept Note on the Production of Coffee Table Book as one of the projects that could be undertaken to commemorate the 50th Anniversary of SEAFDEC. After the discussions, the 16 ISP Meeting endorsed the Concept Note and suggested that a detailed proposal should be developed for consideration by the forthcoming Department Chiefs’ Meeting (DCM) in November 2015 in order to come up with an agreement on the contents and banner title as well as on the inputs that would be required from the Departments. This proposal on the Production of SEAFDEC Golden Anniversary Coffee Table Book is therefore submitted for discussion and consideration of the DCM so that the IPC Office could kick-start with the detailed activities as planned.

2. Objectives, Outcomes and Outputs

Overall objectives: To commemorate the 50-year anniversary of SEAFDEC through the production of the publication that portrays the 50-year journey of SEAFDEC in supporting sustainable development of fisheries in the Southeast Asian region

Expected outcomes:

- 1) Achievements of SEAFDEC as leader in regional fisheries development is instilled in the minds of readers;
- 2) Stories of people involved in regional fisheries development with the support of SEAFDEC are heard; and
- 3) Visibility of SEAFDEC as technical arm of ASEAN in sustainable fisheries development is enhanced.

Expected Outputs: The “SEAFDEC Golden Anniversary Coffee Table Book” to be made available by the 49th Meeting of the SEAFDEC Council in April 2017.

3. The SEAFDEC Golden Anniversary Coffee Table Book

A coffee table book is literally a non-fiction and pictorial reading material to inspire conversation among guests, and SEAFDEC had come up with coffee table books thrice, the first when SEAFDEC celebrated its 20 years in 1987, the second during its Silver Jubilee in 1992, and the third when SEAFDEC was already three decades in the region. Since SEAFDEC is now entering the threshold of its 50th year in fisheries development, it is therefore an opportune time for SEAFDEC to come up with a special coffee table book to commemorate its 50th Anniversary. Although the project would be spearheaded by the IPC Office, production of this special coffee table book would require the involvement of the Departments, especially in terms of providing historical information and accomplishments as well as in making sure that such information are accompanied with the necessary photographs.

To be produced as an easy reading material in hard copies as well as in electronic format with lots of pictures, the coffee table book would target as main audience, the special guests of SEAFDEC, libraries, fishers'/fish farmers' associations, big fish traders, fish processors, and other relevant organizations. Furthermore, important personalities who have made a difference in regional fisheries development would be interviewed to tell their stories on the role of SEAFDEC in sustainable development of fisheries in Southeast Asia, and what they foresee about the region's fisheries development in the future.

Features:

- Easy reading style
- Meant for light reading
- Attractive with lots of pictures portraying the role of SEAFDEC in fisheries development in the region for the past 50 years
- Expected role of SEAFDEC in the next 50 years
- Available in electronic format

Target audience:

- Special SEAFDEC guests
- Libraries
- Fishers'/Fish farmers' associations
- Big fish traders
- Fish processors
- Other relevant organizations

Strategy:

- Interview of relevant stakeholders, e.g. training alumni who have become successful in fisheries and aquaculture ventures, former SEAFDE staff who have retired from the service
- Interview of former Council Directors and Secretary-Generals of SEAFDEC
- Compile insights and foresights of stakeholders as outsiders seeing SEAFDEC
- Outsourcing only for the lay-out (optional)

Target production: 500 copies of hard-print publication, plus electronic format in CD-ROM

Suggested contents:

Foreword	Secretary-General's reaction about the book, signed by SG
Preface	Introduction of the book
Message	Inspirational works about the book, signed by the Council Chair
Introduction	Background and rationale, and essential information
Body	
• <i>Historical Context</i>	<ul style="list-style-type: none"> • Uncovering the past (focus on milestones) • Creating an engine for growth in fisheries and rebuilding the fisheries resources • Pursuing quality technologies and information • Shaping regional and national policies • Networking and collaborating
• <i>Technological Evaluations</i>	• People who have made a difference in the region's fisheries development (refer to suggested <i>Questions</i> for the interview)
Conclusion	• Aiming for healthier environment, balancing social and environmental development
• <i>Towards new horizons</i>	<ul style="list-style-type: none"> • Exploring new frontiers and new resources • Developing strategic vision and areas of expansion
• <i>Afterword</i>	Enriching comment about the book and how it was developed, signed by DSG
Other Relevant Information	<ul style="list-style-type: none"> • SEAFDEC Council Directors: 1968-2017 • SEAFDEC Secretary-Generals and Deputy Secretary-Generals: 1969-2017 • Chiefs and Deputy Chiefs of SEAFDEC Departments since 1969, as applicable until 2017

Suggested Questions for the interview of people who have made a difference:

- What role did you play in the development of sustainable fisheries in Southeast Asia?
- Do you think SEAFDEC was going somewhere great during your time?
- What was your perception about SEAFDEC's direction and future?
- Where would SEAFDEC be in the next 5-10 years?
- Any words of advice to SEAFDEC?

Options for banner title:

- 1) SEAFDEC at 50: Quest for fisheries sustainability in Southeast Asia continues
- 2) SEAFDEC at 50: Influencing the next 50 years of excellent fisheries development
- 3) SEAFDEC at 50: Half-a-century journey into fisheries transformation
- 4) SEAFDEC at 50: Half-a-century of achievements, memories, and starting something again
- 5) SEAFDEC at 50: Milestones and way forward in sustainable fisheries development
- 6) SEAFDEC: 50 years of significance in Southeast Asian fisheries development
- 7) SEAFDEC: 50 years of legacy in sustainable fisheries development
- 8) SEAFDEC: 50 years of revolutionizing fisheries in Southeast Asia
- 9) SEAFDEC: 50 years hence, a new cycle of fisheries development
- 10) SEAFDEC: 50 years' pursuit of excellence in fisheries development

*A **banner title** is a book title in large font size that appears at the cover of the book

Features of a banner title:

- Should be catchy, punchy and action-oriented
- Should be short (not more than 10 words)
- Should convey the message that the book intends to tell
- Should grab the attention of the readers and draw them to the book
- Could be a statement that answers questions or problems addressed in the book

Required actions and inputs from Departments:

- a **Assign appropriate Department staff**, e.g. Information-related Officer (1), Cameraman (1), to coordinate with IPC Office (by 18 December 2016)
- b **Prepare Departmental inputs** (by early June 2016):
 - Historical information to include milestones and short write-up for every milestone, as well as write-up on transitions and changes in terms of thrusts that Departments underwent
 - Historical pictures on Department's activities from establishment to the present with accompanying captions and short write-ups, and pictures during transitions
 - Pictures of Department Chiefs and Deputy Department Chiefs with short write-ups on their roles and accomplishments
- c Identify **personalities to be interviewed** especially those who have made a difference in fisheries development, and arrange date and venue of interview; and assign Department counterpart staff to assist IPC Office staff in recording and summarizing result from the interview (by September 2016)
- d **Support IPC Office in the preparation of draft layout** and suggest improvements including editing and proof reading (by March 2017)
- e **Identify appropriate recipients** of book based on agreed target audience with respective addresses, and send to IPC Office (by March 2017), and assist in distribution of the book to target audience (April-June 2017)

4. Activity and Workplan

Description of activity:

- a. *Seek the commitment and support of Departments in providing necessary inputs for the coffee table book*

b. Conduct informal consultations between IPC Office staff and concerned staff of Departments to: discuss and compile significant milestones; discuss and compile historical photographs on SEAFDEC activities during the past 50 years; and identify appropriate personalities to be interviewed

IPC Office staff will travel to Departments to gather, compile and analyze Departmental inputs, e.g. milestones and historical photographs in accordance with the respective functions of the Departments, and discuss the required inputs with Departments' staff identified to assist the IPC Office staff. Prior to the travel of IPC Office staff, the Departments should have already identified the appropriate personalities to be interviewed (maximum of five per Department), and set the schedule of interview, which should be timed with the IPC Office staff visit.

Note: Suggested counterpart Departments' staff to assist IPC Office staff: Information Officer (1) to coordinate Departmental inputs and Cameraman (1) to take photos and video clips

c. Record and summarize what the concerned personalities as outsiders, say about SEAFDEC, its past, present and future

IPC Office will make preliminary analysis of information provided by the interviewees based on inputs provided.

d. Produce the coffee table book in easy reading style with lots of pictures and significant milestones, as well as about what others have to say, after comments from concerned

IPC Office staff will make preliminary lay-out of coffee table book based on inputs from Departments as well as from interviewees and circulate draft lay-out to senior staff of SEAFDEC Secretariat for comments and improvement as and where necessary. After improvements are done based on aforementioned comments, the improved draft layout will be circulated to the Departments for additional comments, if necessary.

The consensus of the Departments on the improved draft lay-out would be sought during the 17th Meeting of the SEAFDEC Information Staff Program in Indonesia in 2016, after which further improvements might be necessary, including proof reading of the galley proof.

If necessary and if suggested, the job of finalizing the lay-out may be outsourced to professional printers from the region.

Final draft lay-out would be circulated to the SEAFDEC Council of Directors for comments and endorsement by *ad referendum* and the final lay-out of the coffee table book would be submitted for endorsement during the 49th Meeting of the SEAFDEC Council in 2017.

After the SEAFDEC Council shall have endorsed the final draft for printing, quotations for printing the coffee table book would be sought. The most qualified bidder will be given the task to do the printing of the coffee table book.

e. Request major target audience to assist in disseminating information about SEAFDEC to stakeholders under their respective domains

In a cover letter that would be inserted in each copy of the coffee table book, recipients would be requested to disseminate the information contained in the book to their respective constituents. Such recipients would also be asked to display the book in racks or tables in strategic areas that are accessible and easily seen by prospective readers.

Workplan:

Activity	2015	2016				2017	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2
a. Seek the commitment and support of Departments in providing necessary inputs for the coffee table book	ISP, DCM						
b. Conduct informal consultations between IPC Office staff and concerned staff of Departments to: <ul style="list-style-type: none"> • Discuss and compile significant milestones • Discuss and compile historical photographs on SEAFDEC activities during the past 50 years • Identify appropriate personalities to be interviewed 							
c. Record and summarize what the concerned personalities as outsiders, say about SEAFDEC, its past, present and future							
d. Produce the coffee table book in easy reading style with lots of pictures and significant milestones, as well as about what others have to say, after comments from concerned							49 C M
e. Request major target audience to assist in disseminating information about SEAFDEC to stakeholders under their respective domains							

5. Budgetary Requirement

The budget for preparation, production and dissemination of the book should be from the Minimum Regular Contribution (MRC).

Activity Plan	Expenditures			Total (US\$)
	2015	2016	2017	
a. Seek the commitment and support of Departments in providing necessary inputs for the coffee table book	150			150
b. Conduct informal consultations between IPC Office staff and concerned staff of Departments to discuss and compile necessary inputs		3,400		3,400
c. Record and summarize what the concerned personalities as outsiders, say about SEAFDEC, its past, present and future		150	150	300
d. Produce the coffee table book in easy reading style with lots of pictures and significant milestones, as well as about what others have to say, after comments from concerned			*5,700	5,700
e. Request major target audience to assist in disseminating information about SEAFDEC to stakeholders under their respective domains			1,450	1,450
TOTAL	150	3,550	7,300	11,000

* 500 copies of 150-pages book, 4 colors and hard bound

50th SEAFDEC Anniversary Logo

Design 1



Design 2



Design 3



Design 4



Design 5



Proposed AQD activities to Commemorate the 50th SEAFDEC Anniversary

Mollusk Congress - An ASEAN Mollusk Conference will be organized sometime in 2017 to report on the progress of R&D in mollusks and identify the gaps and areas for collaboration. Specifically for AQD, the meeting will feature the results of studies on abalone, mussel and oyster funded by the Philippine Department of Science and Technology and conducted from 2014 to 2016. Mollusk experts from ASEAN countries will also be invited to share their experiences in mollusk biology, ecology and culture. The 3-day meeting is expected to be held in the newly built Multi-purpose Hall of SEAFDEC/AQD in Tigbauan Main Station (TMS).

Forum with Aquaculture Farmers/Practitioners- A one day technology forum with private sector aquaculture farmers, practitioners will be held in July 2017 at AQD's TMS to commemorate AQD's Anniversary and SEAFDEC's 50th year Anniversary. During this forum, partners from private sector will also be invited as co-sponsors to cover partly the expenses. Apart from free lunch, information materials about SEAFDEC and AQD in particular will also be disseminated.

Directory of Training Alumni – One of the important milestones of AQD is its achievements on training. To provide information on how this initiative of the Department has contributed so far to building the capacity of the various countries (particularly the ASEAN Member States), alumni of AQD from all over the world will be invited to update their data at the Training Section of SEAFDEC/AQD. A link at the AQD website has been created for this purpose. A training alumni directory (yearbook type) will be published featuring trainees who have attended training courses at AQD for the past 4 decades and their present status. This will also include photos of training activities of the past and the present. The directory will be launched in 2017.

SEAFDEC at '50' Globe - A revolving globe emphasizing Southeast Asian countries on one side and SEAFDEC at 50 on the other side will be put up at AQD's TMS from January 1 to December 31 2017. This is to remind everyone about this important phase of SEAFDEC and to further commemorate its 50 years existence. The globe will be positioned in the middle of AQD field fronting the Fish World building and will be lighted at night.

HUMAN RESOURCE AVAILABILITY AND PRIORITY NEEDS FOR CAPACITY BUILDING IN FISHERIES

(Based on SEAFDEC Questionnaire Survey on Human Resources in the ASEAN Member States)
By Regional Fisheries Policy Network (RFPN)

I. EXECUTIVE SUMMARY

This report provides an evaluation of the current availability of expertise and priority needs of the ASEAN Member States (AMSs) for capacity building in fisheries based on results of the SEAFDEC Questionnaire Survey conducted in 2015. The said survey, which served as a follow-up to a previous similar survey carried out by SEAFDEC in 2010, was carried out in response to the request of the SEAFDEC Council during its 47th Meeting in 2015, for SEAFDEC to update the available human resources in fisheries in the region. The survey questionnaires for the study were made available on the SEAFDEC website, while hard copies were also sent by mail to the AMSs.

Based on the limited responses, the information was compiled with respect to gender, rank or position, age group, educational attainment, and areas of specialization. The years of experience of the respondents in certain areas of specialization and the relevance or importance of the subjects in various fishery areas could not be put together because of inadequate responses.

The survey was able to gather information from 701 respondents from the AMSs with Myanmar having the highest number of respondents (247), followed by Thailand (175) and Malaysia (102). The other countries had less than 80 respondents with Lao PDR having only one (1) respondent. The gender of the respondents was not significantly different with 353 male and 348 female respondents. Classified into rank or position of the respondents in their respective offices, about 44% of the respondents are Technical Staff, 19% are Senior Fishery Officers, and 11% are either Chief Fishery Officers or Supervising Fishery Officers. However, at the time of the survey about 26% of the respondents did not indicate the levels or positions that they are currently holding.

By age group, majority of the respondents (24%) belong to 41-45 age group, 16% in the 31-35 age group, and 15% in the 36-40 age group. It should be noted that about 17% belong to the senior age group, *i.e.* 51-55 and 56-60 age groups, who could be retiring in 5-10 years time since in some countries the retirement age is at 60 years old while in other countries, it is 65 years old. It is worth noting that about 15% of the respondents belong to the younger generation, *i.e.* in age groups 20-25 and 26-30, who could be trained to enhance their capabilities and rise in the position ladder and continue to improve their career paths. Once trained, the young staff could contribute to the numbers of experts in fisheries in the region.

In terms of educational attainment, most of the respondents earned their Bachelor's Degrees (59%). In addition, 24% graduated with Master's Degrees of which Thailand accounts for 29% and Malaysia contributes 22%. Some respondents completed their Ph.D. degrees (6%) with a few having undergone post-graduate studies. Of the total respondents with Ph.D. degrees, Thailand had the highest number comprising about 39%. Moreover, about 5% of the respondents received diplomas or certificates while 7% indicated others which could be in courses other than fisheries or their equivalent.

As for the respondents' areas of specialization, about 37% specialize in aquaculture, 18% in research and development, 14% in resource management, and 9% in policy planning and legislation. The remaining 22% specialize either in inland/marine capture fishery, post-harvest technology, bio-security, fishery extension, fisheries engineering or in fishery information. On the number of experts in specific subjects within the areas of specialization, the survey showed that 34% of the respondents are experts in aquaculture in general, 20% are experts in fisheries management, 14% in legislation and policy, and 11% in aquatic ecology. The other 21% are experts either in capture fisheries, post-harvest, food safety, fisheries economics, or fisheries engineering.

In view of the low turn-out of responses, the data compiled from the Questionnaire Survey cannot reflect the real situation of the available human resources in the AMSs, thus, the survey did not achieve its objectives. In fact, the numbers of respondents are far below the actual numbers of technical personnel or staff in each AMS.

Nonetheless, based on feedbacks from the AMSs, difficulties were encountered by the respondents in accomplishing the Questionnaire due to poor access to the internet, as well as in differentiating “expert” from “expertise.” Moreover, the respondents also indicated some problems in obtaining information on the length of experience in the particular area of specialization considering that most of them have been transferred from one unit to another. Suggestions were however raised by the respondents on the possibility of providing incentives or honorarium to data gatherers or enumerators as means of improving the data collection process. On another note, from the data compiled, the AMSs are encouraged to find the ways and means of sending their respective young staff to further studies or training especially in their fields of specialization related to fisheries, in order to amass the experts needed in the fisheries sector of the Southeast Asian region.

II. HUMAN RESOURCE AVAILABILITY AND PROORITY NEEDS FOR CAPACITY BUILDING IN FISHERIES

1. Background

Fisheries is one of the important sectors providing substantial contribution to food security for countries in the Southeast Asian region. The importance of fisheries is very well recognized as one of the priority sectors that could accelerate the ASEAN economic integration as well as the ASEAN community building. However, it is has become necessary to identify and review the availability of expertise and priority needs of the countries for capacity building, in order that the compiled information could be used to enhance collaboration among the ASEAN Member States (AMSs) since one country with the necessary expertise would have the capability of assisting the other countries in terms of exchanging experts and sharing of expertise.

The availability of human resources especially the fishery experts is a pre-requisite for the development of a dynamic and complex fishing industry. Strategies have to be formulated and developed to achieve sustainable utilization of fisheries resources, thus, qualified and capable personnel are needed to implement fisheries policies at the regional and national levels. Proper training and capacity-building of government fishery personnel are therefore of great importance to properly address the problems and key issues in fisheries. In response to the request from the SEAFDEC Council during its 47th Meeting in 2015 for SEAFDEC to update the available human resources in fisheries of the AMSs, a Questionnaire Survey was conducted in 2015 as a follow up to the study conducted in 2010 on the Existing Human Resources in the AMSs.

From the conclusion and recommendations of the 2010 Survey, it could be seen that most of the AMSs lack expertise in addressing new emerging issues such as new fishery technologies, among others. Moreover, some of the difficulties relevant to the 2010 Survey included unclear definition of the term “expert” and low response to the survey from the AMSs. Furthermore, recommendations were raised for national and regional level management to consider establishing policies and plans to support long-term human resource development in fisheries. It was also suggested that support should also be provided in enhancing the knowledge and expertise of fishery officers and relevant stakeholders, especially on the new emerging problems that the countries have to face under the new world of globalization.

In order to get a better picture of the available expertise in each areas of fisheries in the AMSs as well as provide better orientation for capacity building to develop the fishery industry of the AMSs, this Human Resource Survey was conducted by SEAFDEC in 2015. As a follow-up to the 2010 Survey, this online 2015 Survey also took into consideration the recommendations of the 2010 Human Resource Survey.

2. Scope and coverage

The “Survey on the Human Resources Availability and Priority Needs for Capacity Building Related to Fisheries in ASEAN Member States” was undertaken through the use of survey questionnaire available on the SEAFDEC website, and in hard copies distributed to each Member Country through the postal services. The questionnaire focused primarily on nine scopes of fisheries, namely: 1) aquatic ecology, 2) capture fisheries, 3) fisheries management, 4) aquaculture, 5) postharvest, 6) food safety of fish and fishery products, 7) fisheries economic, 8) fisheries engineering, and 9) legislation and policy, with more detailed subjects elaborated under each scope (see *Appendices*). This Survey is meant to collect information on the current human resource availability in AMSs focusing on the areas of specialization and to identify the gaps and areas where human resources are limited and where capacity building would be needed.

By definition, **technical staff/personnel** refers to an individual holding technical position in fisheries agencies and who had graduated with degrees or certificates or diploma in fisheries and/or fisheries-related sciences specializing on any of the scopes mentioned above. Meanwhile, **experts** are the technical personnel working in the field of fisheries with more than 10 consecutive years of experience. On the other hand, **area of specialization** means the actual job, which a technical fishery staff/personnel is assigned to acquire the relevant experience.

3. Objectives

The 2015 Survey is aimed at determining the availability of experts and expertise in various areas pertaining to fisheries and identifying the training needs of fishery agencies in the AMSs for capacity building.

4. Methodology

A. Survey Design

The “Survey on Human Resources Availability and Priority Needs for Capacity Building Related to Fisheries in the ASEAN Member States” makes use of the following approaches:

1. Online access to questionnaires (link to SEAFDEC website) for Form 1 - Fisheries Agency Questionnaires. The questionnaires are provided in two (2) languages, *i.e.* in English and in the respective national languages of the AMSs.
2. Hard copies of the questionnaires are also sent by mail to the Council Directors and National Coordinators of the SEAFDEC Member Countries in order to address the inadequacy of internet access.

B. Data Collection

1. SEAFDEC circulates the information to all AMSs for respective responsible persons to access the survey online as well as accomplish the hard-copy questionnaires.
2. SEAFDEC requests the responsible persons of respective Member Countries to distribute the Questionnaire Forms to fisheries-related agencies through the SEAFDEC National Coordinators of the countries.

5. Results of the Survey on Human Resource Development in the AMSs

A. Ranks and Gender by Country

Based on the information gathered from the online questionnaires of the ten (10) AMSs during the period from mid 2015 to early 2016, the numbers of respondents classified by ranks and gender have been compiled as shown in **Table 1**. In spite of low turn-outs, the Survey was able to get 701 respondents from the AMSs, with Myanmar having the highest number of respondents at 247, followed by Thailand with 175, Malaysia with 102 respondents, Cambodia with 62, Philippines with 38, Indonesia with 35, Viet Nam with 18, Singapore with 14, Brunei Darussalam with nine (9), and Lao PDR with only one (1) respondent. It could be deduced from the abovementioned information that the numbers of respondents are far below the actual number of technical personnel/staff in each country. This could be attributed to a problem of some countries in accessing the internet.

Nevertheless, it is also worth noting that in the case of Myanmar, the respondents made use of the hard copy forms to be able to provide the necessary information. As a result, Myanmar had the highest number of respondents out of the ten (10) AMSs. One of the reasons for the low turn-out of responses could also be the multi-tasking of some experts/technical staff, giving them insufficient time to open emails or do some web surfing. Malaysia and Thailand placed second and third in the most number of respondents, respectively, but still such numbers are even less than one-half of their total numbers of technical personnel and experts. Cambodia, Philippines, Indonesia, and Viet Nam provided less than 80 respondents each, despite the efforts of their respective members of the Regional Fisheries Policy Network to aggressively disseminate the information and the questionnaires to their countries.

For the rank and gender of the respondents by country, Myanmar had the highest number of Chief Fishery Officers at 16, of which 11 are males and 5 are females. Thailand placed second with eight (8) male and five (5) female respondents, Cambodia with eight (8) male and one (1) female, Malaysia with only three (3) male respondents, Philippines with two (2) respondents, 1 male and 1 female, and Indonesia with 1 male respondent. Thailand indicated the highest number of Supervising Fishery Officers with three (3) males and nine (9) females. For Senior Fishery Officers, Malaysia had 48, while Lao PDR had no respondents.

For the Technical Staff, Myanmar still had the highest number at 123, of whom 46 are males and 77 are females. Thailand had 79, of whom 28 are males and 51 females. The Philippines came third with 13 male and 13 female respondents. Others in this case, refer to respondents with different positions but working as technical personnel in the AMSs.

Table 1: Respondents by Rank and Gender

Country	Chief Fishery Officer		Supervising Fishery Officer		Senior Fishery Officer		Technical Staff		Others		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Brunei Darussalam	-	1	-	-	-	2	3	3	-	-	3	6
Cambodia	8	1	2	-	7	-	20	5	18	1	55	7
Indonesia	1	-	-	-	1	1	9	9	8	6	19	16
Lao PDR	-	-	-	-	-	-	-	1	-	-	-	1
Malaysia	3	-	6	-	26	22	10	7	11	17	56	46
Myanmar	11	5	6	4	15	13	46	77	39	31	117	130
Philippines	1	1	2	1	2	1	13	13	3	1	21	17
Singapore	-	-	-	1	-	1	1	1	8	2	9	5
Thailand	8	5	3	9	17	24	28	51	10	20	66	109
Viet Nam	-	-	-	3	1	2	5	5	1	1	7	11
Total	32	13	19	18	69	66	135	172	98	79	353	348

B. Age Group by Country

Classifying the respondents by age groups (**Table 2**), the results show that the highest number of experts belongs to the 41-45 age group at 168, followed by the 31-35 age group with 111, age group 46-45 with 89, and 26-30 age group with 87 respondents. This implies that there are more young technical staff and experts in the AMSs. It should also be noted that the age groups 61-65 and above 65, had the lowest numbers of respondents, and that most of experts in these age groups would be approaching the retirement age, *i.e.* 60 years old in some countries and 65 years old in other countries.

Table 2. Respondents by Age Group

Country/Age Group	20-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	> 65	Total
Brunei Darussalam	-	1	3	-	-	2	2	1	-	-	9
Cambodia	-	15	4	7	20	12	4	-	-	-	62
Indonesia	3	9	15	3	3	-	1	1	-	-	35
Lao PDR	-	1	-	-	-	-	-	-	-	-	1
Malaysia	-	9	19	11	27	10	14	12	-	-	102
Myanmar	10	30	31	41	56	32	25	22	-	-	247
Philippines	6	4	4	6	5	3	3	5	2	-	38
Singapore	-	2	2	-	4	2	-	2	1	1	14
Thailand	2	13	27	30	49	28	16	10	-	-	175
Viet Nam	-	3	6	5	4	-	-	-	-	-	18
Total	21	87	111	103	168	89	65	53	3	1	701

Comparing the number of respondents from the AMSs by age group, Myanmar has the highest number of experts in all age groups with a total of 247 respondents, followed by Thailand with a total of 175 respondents, of which 30 respondents were in the 36-40 age group, 49 in the 41-45 age group, 28 in the 51-55 age group, while the remaining 68 respondents belong to the other age groups. Malaysia has a total of 102 respondents, majority of them in the 41-45, 31-45 and 51-55 age groups.

C. Educational Background by Country

As shown in **Table 3**, most of the respondents had Bachelor's Degrees that also seemed to dominate the overall educational background of technical personnel in each AMS. However, comparing by country, majority of the staff had Master's and Doctorate degrees, especially Thailand with 48 respondents who finished Master's degrees and 14 with Ph.D. degrees, followed by Malaysia with 37 who finished Master's degrees and 6 with Ph.D. degrees. These indicate that many technical staff and experts in some countries are highly educated.

Table 3: Respondents by Educational Background

Country	Certificate	Diploma	Bachelor's Degree	Master's Degree	Doctorate Degree	Post Doctoral Degree	Others or no answer	Total
Brunei Darussalam	1	4	3	1	-	-	-	9
Cambodia	1	2	19	27	4	-	9	62
Indonesia	0	6	15	7	2	-	5	35
Lao PDR	-	-	1	-	-	-	-	1
Malaysia	3	7	43	37	6	2	4	102
Myanmar	2	1	207	23	5	-	9	247
Philippines	1	2	19	14	2	-	-	38
Singapore	-	-	6	5	3	-	-	14
Thailand	6	2	84	48	14	-	21	175
Viet Nam	-	-	8	5	1	-	4	18
Total	14	24	405	167	37	2	52	701

D. Experts by Age Group by Country

Corresponding to the given definition of an expert, *i.e.* technical personnel working in the field of fisheries for more than 10 years of experience, results of the survey indicated that the highest number of experts belongs to the 41-45 age group with 74 respondents, followed by 46-50 with 44, 51-55 with 35, and the 56-60 age group with 33 respondents (**Table 4**). Above 65 and 26-30 age groups had the least numbers of respondents with one (1) each. It is interesting to note that there are available experts in the AMSs belonging to 31-35 age group although there are also experts who would be approaching the retirement age in the next 4 to 5 years. This therefore implies that there is really a need to encourage and tap younger staff to become experts in their own fields of specialization. Nevertheless, the low response of the online survey from many countries would not make it possible to reflect the current and real situation of the number of experts in the Southeast Asian region.

Table 4. Experts by Age Group

Country/Age Group	20-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	> 65	Total
Brunei Darussalam	-	-	-	-	-	-	1	1	-	-	2
Cambodia	-	-	-	-	8	6	-	-	-	-	14
Indonesia	-	-	1	-	1	-	-	-	-	-	2
Lao PDR	-	-	-	-	-	-	-	-	-	-	0
Malaysia	-	-	-	2	13	5	10	8	-	-	38
Myanmar	-	1	7	9	28	20	12	16	-	-	93
Philippines	-	-	-	5	2	-	3	4	2	-	16
Singapore	-	-	-	-	1	1	-	-	2	1	5
Thailand	-	-	2	3	20	12	9	4	-	-	50
Viet Nam	-	-	-	1	1	-	-	-	-	-	2
Total	0	1	10	20	74	44	35	33	4	1	222

E. Areas of Specialization by Country

As shown in **Table 5**, results of the survey showed that aquaculture has the most number of respondents at 260, while there were no respondents for fishery port development and management. In other areas, research and development has 128 respondents while the numbers of respondents in resource management were quite limited at 98. The highest number of respondents with specialization in aquaculture was from Thailand at 107 while Myanmar had 92, but there were no respondents from Indonesia for aquaculture, neither did Lao PDR, and Brunei Darussalam.

Table 5: Respondents by Area of Specialization

Countries	Areas of Specialization																				Total			
	Aquaculture		Inland/ Marine capture fishery		Post-harvest		Resource Management		Bio-security		Policy, Planning and Legislation		Fishery Extension		Fisheries Engineering		Fishery Information		Fishing Port development & management			Research & Development		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		M	F	
Brunei Darussalam	-	1	1	1		1	2	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	9	
Cambodia	13	3	4	-	-	-	2	-	-	-	13	-	8	1	2	-	2	-	-	-	-	11	3	62
Indonesia	-	-	4	3	2		4	3	-	-	2	1	-	-	-	-	1	1	-	-	-	6	8	35
Lao PDR	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	0	1	-	-	-	-	1	
Malaysia	13	6	-	2	-	1	12	1	3	-	4	12	6	2	-	-	2	2	-	-	-	19	17	102
Myanmar	39	53	6	3	1	5	35	27	4	10	12		1	8	-	-	14	8	-	-	5	6	247	
Philippines	11	5	3	6	-	1	4	1	-	1	-	-	2	2	-	-			-	-	-	1	1	38
Singapore	3	3	-	-	1	-	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	3	1	14
Thailand	45	62	2	2	2	2	1	1		2	1	4	1		2			1	-	-	12	35	175	
Viet Nam	1	2	1	-	-	-	2	-	-	-	1	3	-	1	-	-	2	5	-	-	-	-	18	
Total	125	135	21	17	6	10	63	35	7	13	34	32	18	14	4	-	21	18	-	-	57	71	701	
	260		38		16		98		20		66		32		4		39		0		128			

Note: The experts are considered according to their current areas of specialization

F. Experts by Subject within Areas of Specialization by Country

Based on number of respondents in the online survey, Thailand has more experts than other countries and Lao PDR lacked of experts due to no respondents except for its current RFPN member. As shown in **Table 6**, Thailand has 297 experts, followed closely by Myanmar with 266, and Malaysia with 165 experts. Moreover, for the number of experts by area Aquaculture has 301 experts from the AMSs, Fisheries Management with 179 experts, Legislation and Policy with 127 experts. It should be noted however that in some areas, the numbers of experts are insufficient, *i.e.* in Fisheries Engineering with only 27 experts and Fisheries Economics with only 12.

Table 6: Experts by Subject within Areas of Specialization

ASEAN Member States	Aquatic ecology	Capture fisheries (marine and inland)	Fisheries management	Aquaculture	Post-harvest	Food safety of fish and fisheries products	Fisheries economics	Fisheries engineering	Legislation and policy	Total experts
Brunei Darussalam	-	-	-	-	1	-	-	-	4	5
Cambodia	7	2	21	12	-	-	-	-	7	49
Indonesia	-	-	-	-	4	1	-	-	1	6
Lao PDR	-	-	-	-	-	-	-	-	-	-
Malaysia	36	14	30	49	6	3	5	6	13	165
Myanmar	15	8	91	74	5	-	3	-	73	266
Philippines	5	9	5	10	3	2	-	2	1	34
Singapore	6	5	2	8	10	13	1	7	14	66
Thailand	28	7	30	139	31	30	3	12	14	297
Viet Nam	1	-	-	9	-	-	-	-	-	10
Total	98	45	179	301	60	49	12	27	127	898

*One respondent can be an expert in more than 1 subject in each area of specialization (see *Appendices*)

G. Expertise by Age Group and Gender

As for the gender of experts, results showed that majority of experts are males and when it comes to age groups, most of experts are between 36 and 60 years old (**Table 7**).

Table 7: Respondents with Expertise by Gender and Age Group

Area of Specialization	Gender			Ages								
	Total	Male	Female	25-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	>65
Aquatic ecology	98	68	30	2	1	2	38	13	17	23	1	1
Capture fisheries (marine and inland)	45	30	15	1	-	5	7	13	10	7	2	-
Fisheries management	179	130	49	1	5	21	55	36	26	34	1	-
Aquaculture	301	187	114	1	9	40	86	54	47	63	1	-
Post-harvest	60	36	24	-	-	8	29	3	5	15	-	-
Food safety of fish and fisheries products	49	27	22	-	-	4	23	6	6	10	-	-
Fisheries economics	12	11	1	-	-	1	4	-	2	5	-	-
Fisheries engineering	27	27	0	-	-	8	12	1	1	5	-	-
Legislation and policy	127	98	29	3	8	8	34	20	23	31	-	-
Total by ages and gender	898	614	284	8	23	97	288	146	137	193	5	1

*One respondent can be an expert in more than 1 subject in each area of specialization (see *Appendices*)

H. Conclusion

From the initial evaluation of the results of the survey, it was shown that out of 701 respondents who participated in the online survey, the number of Technical Staff was highest at 307, while Chief Fishery Officer and Supervising Fishery Officer had the lowest respondents at 45 and 37, respectively. The number of male respondents is higher than that of females in most of the ranks except in Technical Staff. When it comes to the ages of experts, it can be seen that the age groups with the most number of experts are from 41 to 60. This is reasonable because of the requirements that an expert should have worked continuously for 10 years in the same field of specialization. However, there is a good sign in the high numbers of experts belonging to two age groups: 41 – 45 with 74 experts and 46-50 with 44, as this implies that the experts have spent more time in the fields with their expertise. The numbers of experts over 50 years old are alarmingly quite high, *i.e.* 35 experts in 51-55 age group and 33 in 56-60 because these experts would soon be approaching the retirement age. It is therefore necessary for the AMSs to provide capacity development for the younger staff considering that the number of young experts under

40 years old is quite low at 20 for the 36-40 age group and 10 for 30-35. Once trained, the younger staff could take over the responsibilities of the older staff when they retire from the service.

It is also worth noting that the numbers of experts in each country differ when it comes to the number of respondents. Myanmar, Thailand and Malaysia have the highest numbers of experts because they have the highest numbers of respondents, while Lao PDR has only 1 respondent. Looking at the inputs from the AMSs, it could be seen that most of the region's experts are in aquaculture, followed closely by fisheries management, and legislation and policy.

Finally, it should be considered that the low responses of the AMSs had made it impossible to reflect the real situation of human resources working in the fisheries sector in the Southeast Asian region. In other words, the survey was not able to achieve its target. Nonetheless, through the evaluation of the responses from the AMSs no matter how low these may be, each country should encourage the young staff to go on further studies or undergo rigid training courses in their respective fields of specialization in order to have more fishery experts in the region in the future.

III. REQUIRED ACTION BY THE COUNCIL

The Council is requested to take note of the results of the said survey, and provide the view for usage of the results.

STATEMENT

By Dr. Muhammad Lukman

Technical Coordinator, Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)

His Excellency,

Dr. Kom Silapajarn, the Secretary General of Southeast Asian Fisheries Development Center (SEAFDEC),

Mr. Chairperson of the SEAFDEC Council Meeting,

Delegates of SEAFDEC Member Countries,

Distinguished Participants,

Ladies and Gentlemen,

It is an honour for me to be in this very important meeting, the 48th Meeting of the Southeast Asian Fisheries Development Center (SEAFDEC) Council. On behalf of the Executive Director of Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) Regional Secretariat, Dr. Widi A. Pratikto, I would like to extend my heartfelt gratitude to the SEAFDEC Secretariat for inviting the CTI-CFF Regional Secretariat to attend this meeting and my appreciation for well-prepared meeting, providing us with this wonderful venue in the coastal city of Nha Trang. I would also like to express my appreciation for support and collaboration to the Oceans and Fisheries Partnership between the United States Agency for International Development (USAID), the SEAFDEC and the CTI-CFF. And, my deep appreciation is addressed as well to all participants for their presence and contribution in the Meeting.

Distinguished Mr. Chairperson and Delegates,

As you may know that the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) is a multilateral partnership formed in 2009 and currently consists of six countries, namely Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor-Leste. The CTI-CFF developed a living and non-legally binding document entitled the Regional Plan of Action (RPOA) in order to sustain extraordinary marine and coastal resources by addressing crucial issues such as food security, climate change and marine biodiversity in the Coral Triangle region. Under this RPOA, there are five (5) goals to be addressed and achieved in the region of Coral Triangle as follows:

- 1) Priority Seascapes designated and effectively managed;
- 2) Ecosystem Approach to Management of Fisheries (EAFM) and other marine resources fully applied;
- 3) Marine Protected Areas (MPAs) established and effectively managed;
- 4) Climate Change Adaptation (CCA) measures achieved; and
- 5) Threatened Species status improving.

Distinguished Mr. Chairperson and Delegates,

The CTI-CFF has been actively engaging with other regional and international forums since its establishment back in 2009, including with the SEAFDEC, in order to align RPOA's goals and activities with international and regional commitments. The collaboration between the CTI-CFF and SEAFDEC officially started when both parties signed a Memorandum of Understanding (MoU) on 3 April 2015. The MoU is aimed to formalize relevant collaborative efforts in fostering Research and Development (R&D) in fisheries in the countries around the Coral Triangle region. The area of cooperation under this MoU would be Human Resources Development, Research and Development, Consultancy and Information Management and Network.

Following up the MoU, CTI-CFF and SEAFDEC had met twice, 3 August 2015 in Jakarta Indonesia and 15 February 2016 at SEAFDEC Secretariat in Bangkok Thailand, in order to streamline the way of work for implementing the MoU. Both parties, referring to the respective minutes of meeting, discussed and

agreed on the areas for future collaborative activities under the respective EAFM-related RPOA of CTI-CFF namely Ecosystem Approach to Fisheries Management (EAFM), Combating IUU Fishing for Trans boundary & Port State Measures (PSM), COASTFISH, Traceability (*e.g.* under Oceans project), Tuna Governance and Coral Fish in Live Reef Food Fish Trade (LRFFT) to be applied to wild capture fisheries in Southeast Asia and the Pacific region. Moreover, the CTI-CFF also met with the team of Oceans and Fisheries Partnership along with USIAD/RDMA in early March 2016 to discuss possibility on the catch documentation and traceability (CDT) systems and sustainable fisheries management plans (SFMP) to support EAFM, including the necessary of recruiting CDT and EAFM experts.

With a view to formulate collaborative activities, the CTI-CFF has developed a set of activities related with EAFM to be discussed with the SEAFDEC for further finalizing by both parties. It may be noted that further collaborative activities between CTI-CFF and SEAFDEC would require Letter of Agreement (LOA) which should elaborate the responsibilities of each Party for the agreed upon activity, schedule of activities and budgetary allocations. In this regard, it is our hope that CTI-CFF and SEAFDEC may finalize the draft of LOA soon in the near future.

Distinguished Mr. Chairperson and Delegates,

Looking back at where CTI-CFF and SEAFDEC started, and looking forward to where they should be headed, we believe that the LOA will be set as a formal step of tangible implementation of the MoU, particularly EAFM activities including CDT system for combating IUU fishing and sustainable fisheries management.

In view of the foregoing and taking into account the crux of MoU between CTI-CFF and SEAFDEC, there is a need for the pragmatic approach and commitment of the state of cooperation. In order to do so, we hope that collective efforts from CTI-CFF and SEAFDEC will provide concrete activities that integrate the elements of mutual collaborations into comprehensive approaches for CTI-CFF programmes and activities, in particular under EAFM.

We are confident that through our constructive cooperation we will succeed in reaping the fruits of our endeavors in the near future in sustaining fisheries management. Moreover, we are also of the firm belief that collective engagement between CTI-CFF Regional Secretariat, SEAFDEC Secretariat, CTI-CFF and SEAFDEC Member States, Partners and Observers in our collective regional cooperation will play a significant role in improving the situation by leaps and bounds, with clear positive impact on the state of implementation of the Regional Plan of Action (RPOA) of CTI-CFF.

To conclude, we wish all the success of this meeting and look forward to having a productive collaboration with SEAFDEC.

Thank you for your kind attention,

STATEMENT

By Mr. David Brown

*Regional Fisheries Programme Consultant,
Food and Agriculture Organization of the United Nations (FAO)*

Chairman of SEAFDEC Council,
Secretary-General and Chief of the Training Department (TD, SEAFDEC) Dr. Kom Silapajarn,
Distinguished SEAFDEC Council members,
SEAFDEC colleagues,
Delegates from regional organizations and arrangements,

On behalf of Kundhavi Kadiresan, Assistant Director General and Regional Representative of the Food and Agriculture Organization of the United Nation of Regional Office for Asia and the Pacific, FAO would like to thank SEAFDEC for inviting FAO to this meetings and providing the opportunity to give a statement regarding areas of cooperation and coordination between FAO, SEAFDEC and Member Countries.

FAO appreciates the contribution made by SEAFDEC to strengthening regional cooperation and the significant work it has carried out in the last year. Including the 5 ASEAN SEAFDEC thrust areas of: 1) Developing and promoting responsible fisheries for poverty alleviation and food security, 2) Enhancing capacity and competitiveness to facilitate international and regional trade, 3) Improving management concept and approaches for sustainable fisheries 4) Providing policy and advisory services for planning and executing management of fisheries and 5) Addressing international fisheries related issues from a regional perspective.

FAO congratulates SEAFDEC on its support to council members in combating IUU fishing in the region. FAO also promotes the application of Port State Measures in this context as a vital part of sound fisheries management frameworks. Port state measures link to both vessel registries and effective catch documentation schemes, which are both important areas for regional collaborative effort in capacity building and technical support.

FAO is also pleased to hear of the progress now being made by SEAFDEC and members on the regional record of fishing vessels.

FAO appreciates the cooperation with SEAFDEC in providing the Regional Facilitation Unit for the joint execution of the Strategies for Trawl fisheries Bycatch Management (REBYC II). This regional project has seen important capacity development in the region and progress made in developing strategies for addressing the challenge in managing complex trawl fisheries. In addition, SEAFDEC has worked with the BOBLME project in developing and rolling out the EAFM training course including to countries outside the project areas such as Philippines.

SEAFDEC's cooperation in the regional development of capacity for EAFM is to be congratulated and the roll out of country specific training is an excellent development.

FAO is pleased to see synergies with many other parts of the SEAFDEC programmes.

SEAFDEC's ongoing cooperation with FAO on regional workshops and meetings is welcomed including participation in the recent APFIC RCFM and 34th Session in Sri Lanka.

FAO welcomes the interest shown by council members to support implementation of the adopted "Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication". FAO is interested to collaborate with SEAFDEC and council members on promoting and implementing these guidelines.

FAO looks forward to further strong collaboration on a range of forthcoming GEF projects to be implemented during the coming years including BOBLME-2 (Strategic Action Plan Implementation), Inland Fisheries in Palembang and Indonesian Seas Large Marine Ecosystem Project to name but a few.

The FAO Blue Growth initiative is an important element on the sustainable development of Fisheries and Aquaculture in the region to address the projected gap in supply in the coming years. The recent APFIC RCFM as shown that Blue Growth is broader than just aquaculture.

FAO is committed to supporting SEAFDEC and its Members Countries in their plans to address the new SDG's (and in particular SDG 14).

FAO is pleased to note the areas of cooperation that have been identified by the 38th Programme Committee as reported to the 48th Meeting of the SEAFDEC Council.

FAO reaffirms its commitment to working with and building collaboration with SEAFDEC in the coming years.

Lastly, I would like to thank our hosts the Ministry of Agriculture and Rural Development and Khanh Koa Province, Viet Nam, for their excellent arrangements and warm hospitality for this 48th Meeting of the SEAFDEC Council.

Thank you.

STATEMENT

By Dr. Cherdasak Virapat

Director-General, Network of Aquaculture Centres in Asia-Pacific (NACA)

Chairperson,
Distinguished Delegates at the 48th Meeting of the SEAFDEC Council,
Delegates from regional and International Organizations,
Ladies and Gentlemen,

Greetings from Network of Aquaculture Centres in Asia-Pacific

On behalf of NACA, I would like to express my sincere gratitude to SEAFDEC for inviting NACA to participate at the 48th Meeting of the SEAFDEC Council and for the Government of Viet Nam for kind hospitality and effective arrangement in organization of the meeting at the coastal city of Nha Trang.

I wish to take this opportunity to congratulate SEAFDEC for significant achievements during the past years and would like to sincerely welcome Dr. Kom Silpajarn for being appointed as a Secretary General of SEAFDEC. Please ensure that NACA will collaborate and cooperate with SEAFDEC under your leadership and commitment to implement future works for the benefit of the member governments.

NACA's development objectives are to promote rural development through sustainable aquaculture and aquatic resources management. NACA seeks to improve the livelihoods of rural people, reduce poverty and increase food security. NACA's work is based on five thematic programmes, namely; aquatic animal health; sustainable farming systems; genetics and biodiversity; food safety, quality and certification; and emerging global issues including response to climate change and three cross-cutting programmes on education & training; gender; and information and communications.

I would like to inform you that NACA is seeking collaboration with SEAFDEC in development projects, organization of conferences, and various technical training courses in the near future as follows:

1. The NACA Regional Lead Centre in the Philippines

At the 12th Session of the Technical Advisory Committee of NACA held during 10-12 March 2015 in Thailand, NACA had discussed with Director of the NACA Regional Lead Centre in the Philippines reactivating collaboration through the establishment of an MoU between NACA and SEAFDEC Aquaculture Department in Iloilo, Philippines in particular areas of training and education, information sharing and exchange and sustainable aquaculture development in areas of the farming of fishes, crustaceans, mollusks and seaweeds, as well as aquaculture feed development, etc. The draft MoU has been under consideration by the SEAFDEC Aquaculture Department. In addition, the SEAFDEC Aquaculture Department will also consider putting up a signage of it's NACA Regional Lead Centre at the Department. I hope that this can be made in a timely manner.

2. Capacity building programme in Aquaculture Governance

Good aquaculture governance should be part of a guiding principle for sound policies, strategies and action plans incorporating the principles of an ecosystem approach to aquaculture and effective linkages between governmental policies and sustainable management of aquaculture.

NACA is in the process to develop a syllabus of its capacity building programme in Aquaculture Governance for the Asia-Pacific Region and will collaborate with its partners including SEAFDEC to implement such a training programme. NACA would like to propose that the training course should be considered including fisheries component so that it will be a comprehensive programme in fisheries and aquaculture governance.

3. The Celebration of the Silver Jubilee of NACA on 3 August 2016, organizations of ASEAN Fisheries and Aquaculture Conference and Exposition 2016 & 11th Asian Fisheries and Aquaculture

Forum during 4-6 August 2016 and the Global Conference on Climate Change Adaptation within Fisheries and Aquaculture, Experiences on the Ground during 8-10 August 2016 in Bangkok, Thailand

The Department of Fisheries, Thailand and SEAFDEC in collaboration with the Asian Fishery Society (AFS) and NACA will co-organize the ASEAN Fisheries and Aquaculture Conference & Seafood Exposition 2016 jointly with the 11th Asian Fisheries and Aquaculture Forum from 4 to 6 August 2016 at the Bangkok International Trade and Exhibition Centre in Bangkok, Thailand. Major themes of the Conference include 7 parallel sessions, namely; Governance; Education & Training; Sustainable Intensification of Aquaculture; Response to the Impacts of Climate Change; Sustainable Fisheries; Seafood, Post-Harvest Technology and Food Safety; and 6th Global Symposium on Gender in Aquaculture & Fisheries (GAF6). For the last thematic session, we are looking for financial support for participating women from developing countries. It is expected that there will be around 350 oral presentations and 200 posters at the technical forum.

NACA will take this opportunity to celebrate its Silver Jubilee Anniversary on 3 August 2016 at the Surawadi Building in Bangkok, Thailand. In addition, NACA in collaboration with FAO and partners including SEAFDEC will co-organize the Global Conference on Climate Change Adaptation within Fisheries and Aquaculture, Experiences on the Ground, 8-10 August 2016 in Bangkok, Thailand. For further information, kindly visit the NACA website at www.enaca.org.

I hope that NACA and SEAFDEC will find these opportunities to strengthen their collaborations and coordination in these aquaculture development activities in the very near future. Thank you.

WORKING STRUCTURES BETWEEN USAID-OCEANS AND SEAFDEC



USAID | ASIA
FROM THE AMERICAN PEOPLE





The Oceans and Fisheries Partnership

Photo credit: Len Garces, USAID Oceans

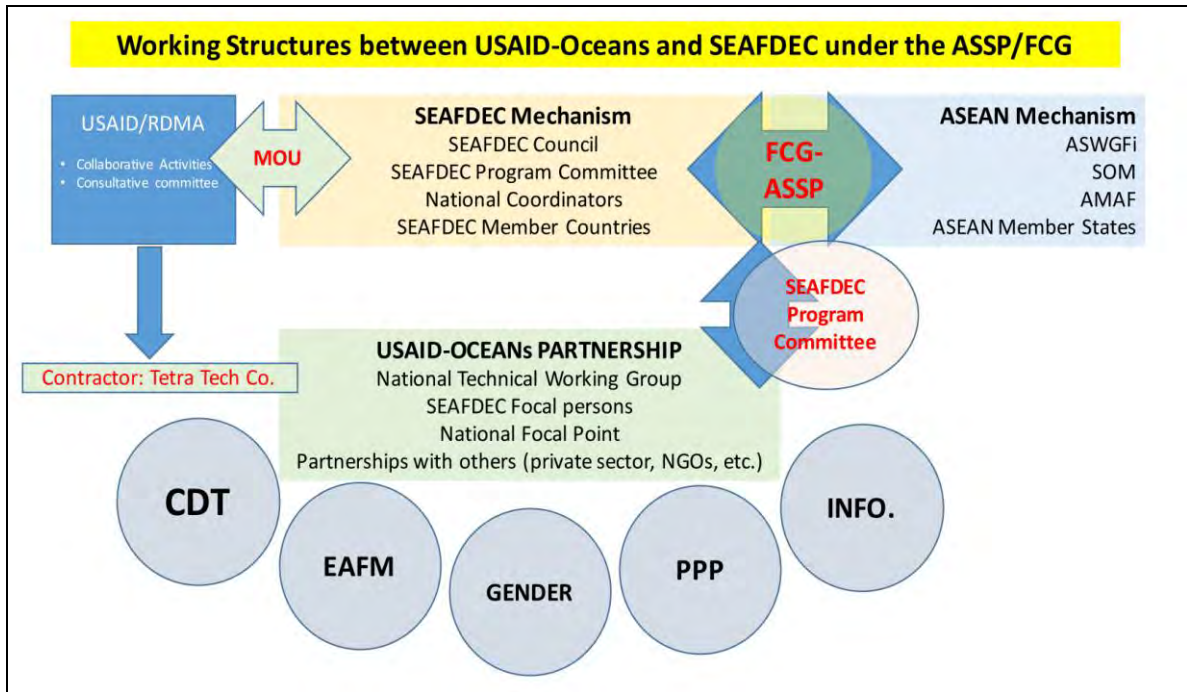
Key Work Components

Core:

- CDT development, demonstration and expansion

Support/Cross-Cutting:

- Sustainable fisheries management
- Capacity-building
- Partnership development



SEAFDEC MINIMUM REGULAR CONTRIBUTION (MRC) IN 2016

I. BACKGROUND

During the 47th Meeting of the SEAFDEC Council, the Council was informed of the Proposed Amendment of the SEAFDEC Financial Regulations to reflect the Minimum Regular Contribution (MRC), has been put into practice since 2007, and agreed that Financial Regulation 4.1 should be amended to read:

4.1 The annual contributions from Member Countries in the form of Minimum Regular Contribution (MRC) shall be made in United States Dollars, not later than 31 March of the current fiscal year. The method to calculate the MRC from Member Countries should be unanimously agreed upon by the Council.¹

¹ The Financial Regulation 4.1 was amended by the decision of the SEAFDEC Council at its Forty-seventh Meeting in 2015 to reflect the Minimum Regular Contribution (MRC), which was put into practice since 2007. The explanatory notes and formula used in computing the MRC appears as *Appendix 1*. Adjustment of the MRC could be proposed for consideration by the SEAFDEC Council as and when necessary.

The SEAFDEC Council further noted that based on the computation of the MRC as agreed by the Council, the amount of MRC from Indonesia would be reduced as the adjustment factor for host countries could now be applied for Indonesia. This would result in changes of the MRC from the other countries to compensate that of Indonesia's. In this connection, the Council requested the SEAFDEC Secretariat to calculate the new amount of MRC for each Member Country and circulate to the Member Countries for the new MRC to be applied starting in 2016.

After the Council Meeting, the Secretariat recalculated the new amount of MRC for each Member Country, and issued a letter (Our ref: SGC150410, dated 10 April 2015) to inform all Council Director on the new calculation of the MRC which should be applied starting in 2016. The amount of MRC, which was applied in 2015 and to be applied in starting 2016 as well as responses from some Member Countries, appears as follow:

Country	MRC in 2013-2015	New MRC starting 2016	Responses from countries
Brunei Darussalam	7,000	7,000	Agree with the new MRC for 2016
Cambodia	11,000	12,000	
Indonesia	58,000	52,000	
Japan	280,000	280,000	(Already paid)
Lao PDR	5,000	6,500	
Malaysia	21,000	21,500	
Myanmar	21,000	22,500	Will pay the old rate of MRC in 2016, and apply the new rate in 2017
Philippines	25,000	25,000	
Singapore	13,000	13,500	
Thailand	33,000	33,000	Agree with the new MRC for 2016 (Already paid)
Viet Nam	26,000	27,000	
Total	500,000	500,000	



II. REQUIRED CONSIDERATION BY THE COUNCIL

1. Member Countries are requested to inform of the country's situation to secure the MRC for the year 2016 at the rate informed by SEAFDEC.
2. The Council is requested to provide directives for SEAFDEC to proceed on MRC for 2016.

PLANS OF OPERATION AND PROGRAMS OF WORK OF SEAFDEC DEPARTMENTS AND SECRETARIAT

I. INTRODUCTION

1. The SEAFDEC Council, during its 45th Meeting in 2013 and subsequent 46th Meeting in 2014, raised some concerns on the duplication and overlapping of programs and activities among SEAFDEC Departments. The Council also viewed that some of the programs proposed by SEAFDEC Departments are not directly in line with the mandates of SEAFDEC and thus, the SEAFDEC programs should be refocused to address the priorities and needs of the Member Countries, as well as the arising global issues and requirements. During such Meeting, the SEAFDEC Departments were also asked to prioritize their programs of activities in order that responsibilities, staff and funds could be appropriately allocated.

2. In response to the recommendations of the SEAFDEC Council, SEAFDEC organized the “Inter-Departmental Workshop for Preparation of SEAFDEC Strategic Plan of Operation” in Bangkok, Thailand from 1 to 3 October 2014. The Workshop was attended by the Secretary-General, Deputy Secretary-General, and senior officials of SEAFDEC Secretariat, as well as the Chiefs, Deputy Chiefs and Special Departmental Coordinators from TD, AQD, MFRD, MFRDMD, and IFRDMD. The Workshop concluded with the SEAFDEC Strategic Plan of Operation including Programs of Work that was used as basis for the development of the respective Departments’ Plans of Operation and Programs of Work.

3. The SEAFDEC Strategic Plan of Operation has been grouped to correspond to the priority issues adopted by the Council at its 46th Meeting in 2014. The priority issues were grouped into seven Components as shown below:

Component 1:	Fisheries management
Component 2:	Fishing technologies and practices
Component 3:	Post-harvest technology and trade-related issues
Component 4:	Sustainable aquaculture
Component 5:	Fisheries information and statistics
Component 6:	Human Resource Development
Component 7:	Inland Fisheries

4. Taking into consideration the aforementioned circumstances, the Plans of Operation and Programs of Work for TD, MFRD, AQD, MFRDMD, IFRDMD and Secretariat were revised and proposed for consideration at the 47th Meeting of SEAFDEC Council (47CM). However, the Council Director for Malaysia expressed the view that the proposed revision of the function and program of work of TD seem to infringe the original mandate of MFRDMD.

5. In addition, The Council Director for Japan also shared his observation that some priority areas of the Member Countries are not well-linked with the program of work proposed by SEAFDEC.

6. As for the proposed new organization structures of the SEAFDEC Secretariat and Training Department proposed at the 47CM, Thailand through the Department of Fisheries, as the host government of TD expressed some reservations on this matter, and suggested that the new structures would be internally discussed in detail with the SEAFDEC Secretariat and TD. After an agreement would be reached between Thailand and SEAFDEC Secretariat and TD, the new revised organization structures would be circulated to the Council Directors for approval by *ad referendum*.

7. After the discussion during the 47CM, the Council requested all the Member Countries to provide their comments on the Plans of Operation and Programs of Work of the SEAFDEC Departments and Secretariat to the SEAFDEC Secretariat by 8 May 2015. The Council also requested the Secretariat to accommodate the comments and send the revised Plans of Operation and Programs of Work, together with a tabulation clearly delineating the roles of the Departments and indicating the areas for cooperation, to the Member Countries by May 2015 for consideration and endorsement.

II. FINAL REVISIONS OF THE PLANS OF OPERATION AND PROGRAMS OF WORK

8. After the 47CM, SEAFDEC Secretariat received some comments from Japan, Malaysia, and Singapore on the Revised Plans of Operation and Programs of Work within May 2015.

9. In connection with the comments made by the Council Director for Malaysia, SEAFDEC Secretary-General, Dr. Chumnarn Pongsri together with Policy and Program Coordinator and Information Program Coordinator from the Secretariat made a courtesy visit to DOF/Malaysia in June 2015 to discuss and finalize the respective Plans of Operation and Programs of Work of TD and MFRDMD.

10. On the proposed new organization structures of the SEAFDEC Secretariat and Training Department, after a meeting between representatives from the Secretariat and TD including the new SEAFDEC Secretary-General Dr. Kom Silapajarn in February 2016, the Council Director for Thailand agreed on the proposed structures with some amendments.

11. The final revisions of the Plans of Operation and Programs of Work of TD, MFRD, AQD, MFRDMD, IFRDMD, and Secretariat are appended as Appendix 1 - Appendix 5, for endorsement at the 48CM in Nha Trang, Viet Nam.

III. REQUIRED CONSIDERATION BY THE COUNCIL

The Council is requested to take note of the proposed revisions as well as to provide comments and directives on the proposed revisions of Plans of Operation and Programs of Work for TD, MFRD, AQD, MFRDMD, IFRDMD, and Secretariat which are appended as Appendix 1 - Appendix 5, of working documents for the 48th Meeting of SEAFDEC Council.

**PLAN OF OPERATION AND PROGRAM OF WORK:
TRAINING DEPARTMENT (TD)
(REVISED 2015_after 47CM)**

I. PLAN OF OPERATION

1. The Training Department has the following functions:
 - (i) To train fishery personnel of Member Countries and other countries in various aspects of sustainable capture fisheries, optimum utilization of fishery resources, resource enhancement, coastal and small-scale fishery management and emerging issues concerns, in order that available fishery resources would be effectively and rationally utilized;
 - (ii) To undertake research and development (R&D) on fishing grounds, fishing gear improvement, statistics and socio-economic aspects related to marine capture fisheries, to facilitate the management and sustainable utilization of fishery resources in the Southeast Asian region; and
 - (iii) To develop and promote regional fisheries information to the Member Countries for policy consideration at national level and sub-regional areas.
2. The Government of Thailand provides the Training Department, in accordance with the provisions of the Article 11 of the Agreement Establishing the Center, as appears in Appendix I.
3. The Government of Japan provides the Training Department, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as appears in Appendix II.
4. In accordance with Article 13 of the Agreement Establishing the Center, the Training Department, in consultation with the Secretary-General, seeks financial and technical assistance from potential donor governments and agencies, to enable it to fulfill its functions and the objectives of the Center.

II. THE PROGRAM OF WORK

The Training Department focuses on capture fisheries with the prime concerns on fisheries resources enhancement and applications of new concepts and tools for fisheries resources management. The Department is responsive to the immediate needs of the SEAFDEC Member Countries and to the emerging issues such as climate change, combating IUU fishing, and others. Being the SEAFDEC's training center, the Department is keen to develop more systematic and robust training platform that addresses long-term strategies for in-house staff development programs and capacity development programs for the ASEAN Member States (AMSs).

A. Program of the Training Department

1. *Developing innovative fisheries management tools based on EAFM concept (in collaboration with MFRDMD)*
 - Strategy-1.1: Promote EAFM concept suitable within ASEAN region's context
 - Strategy-1.2: Raise awareness and support the application of EAFM in the AMSs by developing operational guidelines
 - Strategy-1.3: Promote co-management/community-based fisheries management
2. *Reducing IUU fishing activities in the ASEAN region (in collaboration with MFRDMD)*
 - Strategy-2.1: Assess the current status of IUU fishing vessels and examine the negative impacts in the AMSs and the whole region

Strategy-2.2: Develop fisheries management tools to support efforts in combating IUU fishing, such as the Regional Fishing Vessels Record, among others.

Strategy-2.3: Support the development and use of effective IUU fishing counter-measures in collaboration with AMSs and relevant regional/international organizations

3. *Developing tools and effective solutions to reduce post-harvest losses onboard and energy optimization*

Strategy-3.1: Research on practices that lead to post-harvest losses in different types of fishing activities in the AMSs

Strategy-3.2: Develop effective solutions to reduce post-harvest losses at sea (onboard fishing boats) and recommend to AMSs the effective methodologies for fish handling onboard

Strategy-3.3: Support AMSs in educating fishers and fishing operators on methods to reduce losses and improve fish handling onboard

Strategy-3.4: Develop effective solutions on energy saving for the fisheries sector

4. *Developing appropriate fisheries management tools and facilitate initiation of policy recommendations to enhance fisheries resources*

Strategy-4.1: Collaborate with academic institutions in AMSs to review the scientific data and information on critical habitats of historical life cycle of fish

Strategy-4.2: Develop fisheries management and resource enhancement tools and engage stakeholders in decision-making processes

Strategy-4.3: Engage AMSs to adopt appropriate tools and policy recommendations for fisheries resource enhancement

Strategy-4.4: Continuously promote the implementation of appropriate fisheries resource enhancement tools and recommendations in AMSs

5. *Establishing human resource development platform to enhance technology transfer on fisheries management and development*

Strategy-5.1: Develop HRD platform and standard processes to deliver capacity development programs and modules

Strategy-5.2: Map training needs and develop 5-year training master plan for SEAFDEC and government staff in the AMSs

Strategy-5.3: Mobilize resources for implementation of capacity development programs

Strategy-5.4: Update capacity development programs regularly in accordance with emerging needs in AMSs and the region

B. Strategy, Activities and Linkage to Relevant Prioritized Issues¹

Program/Strategy	Activities	Linkage to Relevant Prioritized Issues
Program 1: Developing innovative fisheries management tools based on EAFM concept (in collaboration with MFRDMD)		
Strategy-1.1: Promote EAFM concept suitable within ASEAN region's context	<ul style="list-style-type: none"> Implement pilot project and research on the impacts of EAFM concept and its application based on economic, human and ecosystem dimensions Strengthen human capacity of AMSs on the concept of EAFM and its application Support AMSs fisheries management through the application of EAFM concept 	Component 1.1 Component 2.1

¹ Regional Prioritized Issues that were recommended and endorsed by all SEAFDEC Member Countries at 46th Meeting of the SEAFDEC Council Director, 1-4 April 2014 (See **Appendix III** for reference)

Program/Strategy	Activities	Linkage to Relevant Prioritized Issues
Strategy-1.2: Raise awareness and support the application of EAFM in the AMSs by developing operational guidelines	<ul style="list-style-type: none"> • Develop operational guidelines of EAFM and its application appropriate for the region • Encourage AMSs to apply the EAFM operational guidelines through the use of extension campaign and promotional materials 	Component 1.1 Component 1.3
Strategy-1.3: Promote co-management/community based fisheries management	<ul style="list-style-type: none"> • Conduct R&D activities to support sustainable livelihoods • Develop capacity building on co-management, rights-based fisheries, community-based fisheries management and its application in fisheries management. 	Component 1.5 Component 7.2
Program 2: Reducing IUU fishing activities in the ASEAN region (in collaboration with MFRDMD)		
Strategy-2.1: Assess the current status of the IUU fishing vessels and examine their negative impacts in the AMSs and the whole region	<ul style="list-style-type: none"> • Survey and assess the current status of IUU fishing vessels and examine their negative impacts in the AMSs and the whole region in collaboration with AMSs 	Component 1.2
Strategy-2.2: Develop fisheries management tools to support efforts in combating IUU fishing, such as the Regional Fishing Vessels Record, among others	<ul style="list-style-type: none"> • Collaborate with AMSs in developing ASEAN policy recommendations and guidelines on IUU fishing countermeasures • Facilitate and assist AMSs in implementing activities to follow up ASEAN policy recommendations and guidelines on IUU fishing countermeasures 	Component 1.7
Strategy-2.3: Support the development and use of effective IUU fishing countermeasures in collaboration with AMSs and relevant regional/ international organizations	<ul style="list-style-type: none"> • Define appropriate countermeasure tools to reduce IUU fishing in AMSs in collaboration with AMSs and relevant regional/ international organizations • Continue updating, and make use of the RFVR database and the like to reduce IUU fishing in AMSs • Strengthen and enhance human capacity building on addressing the negative impacts of IUU fishing and promoting relevant countermeasures to combat IUU fishing in AMSs 	Component 1.2 Component 1.7
Program 3: Developing tools and effective solutions to reduce post-harvest losses onboard and energy optimization		
Strategy-3.1: Research on practices that lead to post-harvest losses in different types of fishing activities in the AMSs	<ul style="list-style-type: none"> • Identify the main issues and problems on the quality and economic loss caused by poor onboard handling of marine products in AMSs • Research and survey on the marketing chain of the marine product 	Component 2.2
Strategy-3.2: Develop effective solutions to reduce post-harvest losses at sea (onboard fishing boats) and recommend to AMSs the effective methodologies for fish handling onboard	<ul style="list-style-type: none"> • Find solutions (plans/methods/technologies/ incentives) to reduce the post-harvest losses, improve fish handling onboard and value added of the marine product through research and development programs in collaboration with AMSs 	Component 2.2
Strategy-3.3: Support AMSs in educating fishers and fishing operators on methods to reduce losses and improve fish handling onboard	<ul style="list-style-type: none"> • Provide technical and extension support to AMSs through human capacity building programs • Publicize extension materials on reducing post-harvest losses and effective fish handling onboard • Develop and conduct monitoring and evaluation processes on the reduction of post-harvest losses 	Component 2.2

Program/Strategy	Activities	Linkage to Relevant Prioritized Issues
	and effective fish handling onboard	
Strategy-3.4: Develop effective solutions on energy saving for the fisheries sector	<ul style="list-style-type: none"> • Conduct research and development on marine engines for fishing vessels with energy optimization and minimum impact to environment 	Component 2.3 Component 2.1
Program 4 : Developing appropriate fisheries Management tools and facilitate initiation of policy recommendations to enhance fisheries resources		
Strategy-4.1: Collaborate with academic institutions in AMSs to review the scientific data and information on critical habitat of historical life cycle of fish	<ul style="list-style-type: none"> • Develop Scientific/Technical Working Group Network to review the scientific data and information on critical habitat of historical life cycle of fish 	Component 5.2 Component 5.3
Strategy-4.2: Develop fisheries management and resource enhancement tools and engage stakeholders in decision-making processes	<ul style="list-style-type: none"> • Apply EAF concept in developing fisheries management and resource enhancement plans 	Component 1.1 Component 1.4
Strategy-4.3: Engage AMSs to adopt appropriate tools for fisheries resource enhancement	<ul style="list-style-type: none"> • Develop platform to promote appropriate fisheries resource enhancement tools • Encourage AMSs to adopt appropriate fisheries resource enhancement tools 	Component 1.1
Strategy-4.4: Continuously promote the implementation of appropriate fisheries resource enhancement tools and recommendations in AMSs	<ul style="list-style-type: none"> • Develop series of activities and promotional materials for the implementation of appropriate fisheries resource enhancement tools in AMSs • Support the implementation of appropriate fisheries resources enhancement tools and recommendations in AMSs 	Component 1.1
Program 5: Establishing human resource development platform to enhance technology transfer on fisheries management and development		
Strategy-5.1 Develop HRD platform and standard processes to deliver capacity development programs and modules	<ul style="list-style-type: none"> • Develop HRD platform and standard processes to deliver human capacity development programs and modules. 	Component 6.1
Strategy-5.2 Map training needs and develop 5-year training master plan for SEAFDEC and government staff in the AMSs	<ul style="list-style-type: none"> • Identify and prioritize training needs and develop (5 years) training master plan for SEAFDEC and government staff in the AMSs 	Component 6.1
Strategy-5.3 Mobilize resources for implementation of capacity development programs	<ul style="list-style-type: none"> • Establish AMSs trainers team and network to address emerging issues through the Training of the Trainers programs • Support AMSs by mobilizing resources for implementation of capacity development programs 	Component 6.1
Strategy-5.4 Update capacity development programs regularly in accordance with emerging needs in AMSs and the region	<ul style="list-style-type: none"> • Develop series of human resource capacity building programs in line with the training master plan and emerging needs in AMSs and the region • Develop appropriate materials (guidelines, textbooks, toolkits and others) to support human resource capacity building programs 	Component 6.1

III. ORGANIZATION OF TRAINING DEPARTMENT (TD)

The Training Department Chief shall be responsible for the administration and operations of the Department. Under the Chief are the following Offices and Divisions.

1. Research and Development Division

The Research and Development Division (RDD) shall be responsible for the planning and implementation of all research projects and activities of the Department, for providing supportive technical information to the Training Department, and supporting researchers and assistant researchers in the conduct of research/training activities, as and when necessary. The Research and Development Division is composed of 3 Sections as follows:

- Fishing Technology Section;
- Fishing Ground and Oceanography Section; and
- Fisheries Management Section.

2. Training and Research Supporting Division

The Training and Research Supporting Division (TRSD) of the Training Department shall be responsible for ship, marine engineering, information, extension and training that are supportive to technical works of the Department. The Training and Research Supporting Division is composed of 3 Sections as follows:

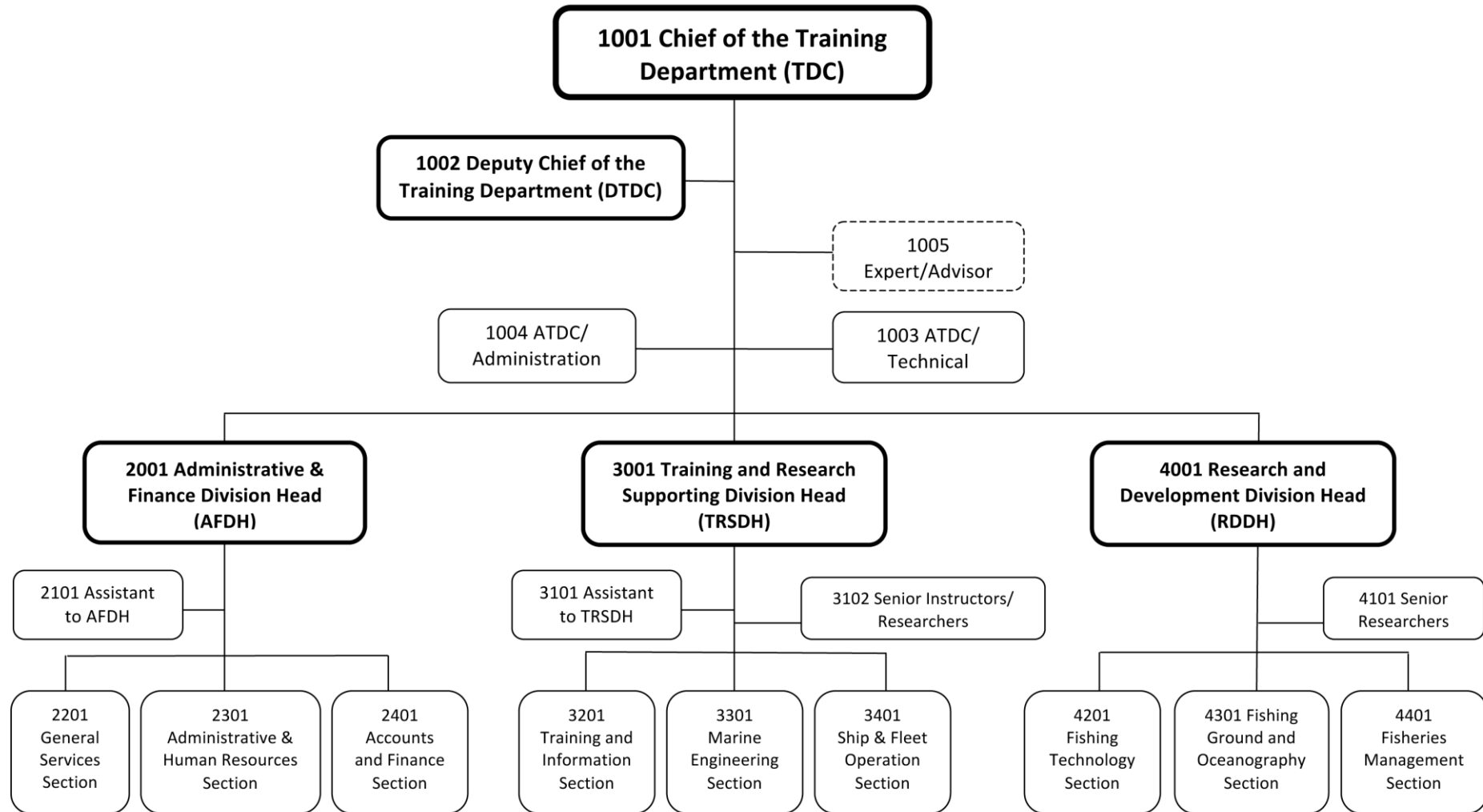
- **Training and information Section;**
- **Marine Engineering Section; and**
- **Ship and Fleet Operation Section.**

3. Administrative and Finance Division

The Administrative and Finance Division (AFD) of the Training Department shall be responsible for the administrative works, personnel affairs, external affairs, including general affairs and maintenance of the Department properties, procurement of equipment, arrangement of living quarters for participants and staff, overall coordination with experts and other Division Heads, administrative supervision and technical works as well as the financial administration of the Secretariat and Training Department. The Administrative and Finance Division is composed of 3 Sections, as follows:

- General Services Section;
- Administrative and Human Resources Section; and
- Accounts and Finance Section.

RE-ORGANIZATION CHART OF THE TRAINING DEPARTMENT



----- Non-permanent position

Appendix I

2. The Government of Thailand provides the Training Department, in accordance with the provisions of the Article 11 of the Agreement Establishing the Center, with the following:
 - (i) An area of land located in Samut Prakan as the site of the Training Department;
 - (ii) Buildings with floor space to accommodate the Training Department, including a trainees' dormitory and other facilities;
 - (iii) Office furniture and equipment, including vehicles;
 - (iv) Services of professional and general staff; and
 - (v) An amount of money as an annual contribution towards the operational expenses of the Training Department; and fellowship funds for Thai trainees.

Appendix II

3. The Government of Japan provides the Training Department, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, with the following:
 - (i) Services of professional staff;
 - (ii) A fully equipped steel training and research purse seiner of 1,178 gross tons, and an FRP purse seiner of approximately 65 gross tons from Japan;
 - (iii) A fully equipped steel fishery research and training vessel of 211 gross tons from Japan
 - (iv) An amount of money in Yen for the purchase of training and research instruments and equipment;
 - (v) An amount of money in U.S. dollars to provide fellowships and training equipment for trainees from Member Countries; and
 - (vi) An amount of money in U.S. dollars as an annual contribution towards the operational expenses of the Training Department.

Regional Prioritized Areas and Issues Adopted by the 46th Meeting of the Council of SEAFDEC

Components/Issues	Rank of Priority
Component 1: Fisheries Management	
1) Conservation and management of fishery resources, taking into consideration tropical specificity of fisheries and applying precautionary approach	1
2) Combating IUU fishing, including encouraging cooperation in the implementation of MCS among countries*	1
3) Enhancing good management practices, e.g. responsible fisheries, EAF; and development of guidelines for fisheries management	2
4) Management of fishing capacity, including shifting from open-access to limited-access	3
5) Promoting community – based fisheries management, co- management and empowering of fishers in fisheries management	4
6) Providing recommendations for management of shared stocks, and resolving conflicts among countries in fisheries outside their respective EEZ	4
7) Harmonization of vessel registration and fishery licensing	5
Component 2: Fishing Technology and Practices	
8) Promotion and awareness building on responsible fishing	1
9) Improving fish quality through on-board fish handling technologies and good practices for small-scale fisheries	2
10) Developing and enhancing the use of automated and mechanized fishing gears and energy saving technologies	3
Component 3: Post-harvest Technology and Trade-related Issues	
11) Improving post-harvest technologies and safety/quality of products for export	1
12) Addressing emerging requirements for traceability/ certification of fishery products for export*	1
13) Preventing trade of IUU fishing products	2
14) Developing new technologies for fishery post-harvest, including value-added products and reduction of wastes	3
15) Enhancing market access of products from small-scale fishers	4
Component 4: Sustainable Aquaculture	
16) Promoting best management practices in aquaculture	1
17) Fish Health Management: transboundary-disease control**	1
18) Development of feeds to reduce dependence on fish meal and fish-based products	2
19) Minimizing impacts of aquaculture on the environment/ biodiversity	3
20) Advancing aquaculture technologies	4
21) Implementing regional guidelines for good aquaculture practices	5
22) Undertaking R&D on aquaculture that are required for different objectives, e.g. for economic development, food security, livelihood improvement, resources enhancement, etc.	6
23) Giving more emphasis on the roles of aquaculture for food security and poverty alleviation, especially using indigenous species, as well as technology verification and extension activities	7
Component 5: Fisheries Information and Statistics	
24) Improving the harmonization and collect/compilation of fishery statistics and information	1
25) Enhancing the analysis, interpretation and analysis of available data and information to provide information status and trends of fisheries and aquaculture, and support science-based policy planning and management of fisheries	1
26) Improving database of fishery information and statistics to facilitate sharing/dissemination of data an information	1
Component 6: Human Resources Development	
27) Assessing human resources requirements of the Member Countries, and providing human resources development program, particularly in the areas where shortage could be envisaged in the future	1

Components/Issues	Rank of Priority
Component 7: Inland Fisheries	
28) Habitat conservation/rehabilitation and resource enhancement for inland fisheries, including inundated forest and wetland	1
29) Co-management, rights-based fisheries, strengthening institutions, alternative livelihood	2
30) Ecosystem approach to inland fisheries	3
31) Enhancing awareness on the importance of inland fisheries, including contribution to food security	4
32) Measures needed to mitigate effects of climate change and to build adaptive capacity	5
33) Indicators for sustainable inland fisheries	6
34) Improving methodologies for collection of data and information on inland fisheries	6
35) Management of fishing capacity and combating IUU fishing	7
36) Enhancing interconnectivity of habitat and mitigating impacts from water infrastructure	8

Remarks

* The high priority level was recommended at the 46CM

** This new issue was raised as high priority at the 46CM

**PLAN OF OPERATION AND PROGRAM OF WORK:
MARINE FISHERIES RESEARCH DEPARTMENT (MFRD) PROGRAMMES
(REVISED 2015)**

I. INTRODUCTION

1. At the 39th Meeting of the SEAFDEC Council in 2007¹, the Council approved the proposal and endorsed the Post-Harvest Technology Centre of the Agri-Food and Veterinary Authority (AVA), Singapore (PHTC/AVA) to be a Collaborating Centre of SEAFDEC to undertake the activities of the Marine Fisheries Research Department (MFRD) under the SEAFDEC regional programmes including those supported by the Japanese Trust Fund.

II. THE PROGRAM OF WORK

2. The purpose of the MFRD Programmes is to enhance the development of fisheries post-harvest technology in the region according to resources available at the PHTC/AVA.
3. The MFRD Programmes and activities cover research and development in fisheries post-harvest technology with focus on sustainable development and food security, including:
 - a. optimizing utilization of available fisheries resources;
 - b. development of value-added fisheries products from under-utilized resources;
 - c. seafood safety such as the monitoring of chemical contaminants such as heavy metals, antibiotic and pesticide residues, marine biotoxins;
 - d. seafood quality assurance, such as handling, quality preservation, application of Hazard Analysis and Critical Control Point (HACCP) and Good Manufacturing Practices (GMP) to fish processing establishment in the region; and
 - e. traceability systems for aquaculture products;
4. The results of the activities will be transferred and disseminated to the region through workshops, training programs, publications, etc.

¹ Paragraphs 43-44 and Annex 15 (pages 85-89) the Report of the Thirty-Ninth Meeting of the Council of the Southeast Asian Fisheries Development Centre, 3-7 April 2007, Cambodia.

**PLAN OF OPERATION AND PROGRAM OF WORK:
AQUACULTURE DEPARTMENT (AQD)
(REVISED 2015)**

I. PLAN OF OPERATION

- (1) The SEAFDEC Aquaculture Department has the following functions:
 - i. To promote and undertake aquaculture research and development (R&D) that is relevant to and appropriate for the Southeast Asian region;
 - ii. To build the capacity of human and institutional resources for aquaculture development;
 - iii. To publish, disseminate and exchange information on aquaculture and responsible practices; and
 - iv. To serve as a regional forum for cooperation and consultation on aquaculture R&D among Member Countries.
- (2) The Government of the Philippines provides the SEAFDEC Aquaculture Department, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as shown in **Appendix I**.
- (3) The Government of Japan provides the SEAFDEC Aquaculture Department, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as shown in **Appendix II**.
- (4) In accordance with Article 13 of the Agreement Establishing the Center, the SEAFDEC Aquaculture Department (AQD), in consultation with the Secretary-General, seeks financial and technical assistance from the Philippine Government and potential donor agencies, to enable it to fulfill its functions and the objectives of the Center.

II. THE PROGRAM OF WORK

With the functions indicated in the Plan of Operation, AQD will implement research, technology verification and demonstration, and training and information activities, as approved by the Council of the Center, in order to promote sustainable aquaculture development in Southeast Asia.

The activities will also include focused targeting of stakeholders in responding to emerging issues that affect sustainable aquaculture development in Southeast Asia. Emphasis of work will be given to the following priorities of the region: (i) development of responsible aquaculture technologies and practices; (ii) responsible use of aquatic resources for the purpose of aquaculture; (iii) adoption of measures to avoid environmental degradation; and (iv) promotion of environmentally sound aquaculture methods and commodities.

A. Programs of the SEAFDEC Aquaculture Department

AQD's program of work is categorized into the following:

1. *Supporting the growth of aquaculture sector through development and transfer of responsible and sustainable aquaculture technologies and practices*
 - Strategy1-1: Assess stakeholders' specific needs and requirements for aquaculture technologies
 - Strategy1-2: Develop and transfer appropriate technologies based on priorities of Member Countries
 - Strategy1-3: Strengthen and sustain collaboration and partnerships with relevant stakeholder groups in aquaculture

Strategy1-4: Accelerate adoption of technologies in ASEAN Member States

2. *Strengthening the capacities of the aquaculture sector to enhance technology transfer*

Strategy2-1: Enhance capacity of relevant stakeholders through need-based capacity building programs and information dissemination

Strategy2-2: Generate/publish science-based information that contribute to formulation of policies for sustainable aquaculture

B. Strategy, List of Activities and Linkage to Relevant Prioritized Issues¹

Program/Strategy	List of Activities	Linkage to Relevant Prioritized Issues
Program 1: Supporting the growth of aquaculture sector through development and transfer of responsible and sustainable tropical aquaculture technologies and practices		
Strategy-1.1: Assess stakeholders' specific needs and requirements for aquaculture technologies	<ul style="list-style-type: none"> Conduct of expert consultation meetings/partnership dialogues, survey and desk study to assess the needs and priorities of the Member Countries 	Component 4.1 Component 4.8
Strategy-1.2: Develop and transfer appropriate technologies based on priorities of Member Countries	<ul style="list-style-type: none"> Implementation of Programs/Projects based on identified priorities in the Member Countries 	Component 4.1 Component 4.8 Component 6.1
<i>Sub-strategy-1.2-1:</i> <i>Generate, verify and promote technologies to ensure sustainable production of quality seedstock for aquaculture and stock enhancement</i>	<ul style="list-style-type: none"> Development of good quality broodstock through genetic intervention and implementation of proper stock management protocols 	Component 4.1 Component 4.4 Component 4.5 Component 4.7
	<ul style="list-style-type: none"> Development of schemes for the production, management and maintenance and dissemination of genetically selected and improved stocks 	Component 4.1 Component 4.4 Component 4.5 Component 4.6 Component 4.7
	<ul style="list-style-type: none"> Refinement of hatchery and nursery management methods to increase seed production and improve the quality of seedstocks 	Component 4.1 Component 4.4 Component 4.5 Component 4.7
	<ul style="list-style-type: none"> Establishment and adoption of economically viable seed production system to achieve seedstock sufficiency 	Component 4.1 Component 4.4 Component 4.5 Component 4.6 Component 4.7 Component 4.8
	<ul style="list-style-type: none"> Building the capacity of fishfarmers and other industry stakeholders in appropriate breeding and larval rearing technologies through training and dissemination of relevant information materials 	Component 4.1 Component 4.4 Component 4.5 Component 4.7 Component 4.8 Component 6.1
<i>Sub-strategy-1.2-2:</i> <i>Improve aquaculture production through innovations in nutrition and feeding and fish health management in aquaculture and in maintaining</i>	<ul style="list-style-type: none"> Finding different sources of fish meal and fish oil substitutes and development of effective feeding management schemes that incorporate sound environmental management 	Component 4.1 Component 4.3 Component 4.4 Component 4.5 Component 4.6 Component 4.7

¹ Regional Prioritized Issues that were recommended and endorsed by all SEAFDEC Member Countries at 46th Meeting of the SEAFDEC Council Director, 1-4 April 2014 (See **Appendix III** for reference)

Program/Strategy	List of Activities	Linkage to Relevant Prioritized Issues
<p><i>the environmental integrity of aquaculture</i></p>	<ul style="list-style-type: none"> • Development and refinement of effective dietary formulations for various species at different growth stages 	Component 4.1 Component 4.3 Component 4.5 Component 4.7
	<ul style="list-style-type: none"> • Development and dissemination of effective biosecurity measures that will help keep out exotic pathogens, especially transboundary pathogens 	Component 4.1 Component 4.2 Component 4.4 Component 4.5 Component 4.6 Component 4.7
	<ul style="list-style-type: none"> • Promotion of the wider use of conventional as well as new diagnostic methods, especially for detection of newly reported, emerging diseases 	Component 4.1 Component 4.2 Component 4.4 Component 4.5 Component 4.6 Component 4.7
	<ul style="list-style-type: none"> • Finding effective alternative safe drugs and chemicals to manage aquaculture diseases in lieu of harmful chemicals and drugs 	Component 4.1 Component 4.2 Component 4.4 Component 4.5 Component 4.6 Component 4.7
	<ul style="list-style-type: none"> • Development of marker-assisted breeding programs to address disease issues 	Component 4.1 Component 4.2 Component 4.4 Component 4.5 Component 4.7
	<ul style="list-style-type: none"> • Implementation of capacity building programs including <i>in-situ</i> training on disease diagnostics using level 1,2, and 3 techniques; prevention; and management. 	Component 4.1 Component 4.2 Component 4.4 Component 4.5 Component 4.7 Component 6.1
<p><i>Sub-strategy-1.2-3: Develop environment-friendly aquaculture technologies and promoting responsible aquaculture practices</i></p>	<ul style="list-style-type: none"> • Assessment of impacts of aquaculture on biodiversity and water and sediment qualities in culture areas and adjacent ecosystems 	Component 4.1 Component 4.4 Component 4.6
	<ul style="list-style-type: none"> • Development and promotion of efficient and suitable environment-friendly culture systems 	Component 4.1 Component 4.4 Component 4.5 Component 4.6 Component 4.7
	<ul style="list-style-type: none"> • Development of guidelines, protocols for environmentally safe resource enhancement programs. 	Component 4.1 Component 4.4 Component 4.6 Component 4.7 Component 4.8
<p><i>Sub-strategy-1.2-4: Identify accompanying changes in the environment brought about by the changing climate that may affect the aquaculture sector</i></p>	<ul style="list-style-type: none"> • Conduct research that will generate scientific information on susceptibilities of various aquaculture species to combined effects of increased seawater temperature and acidity 	Component 4.1 Component 4.4 Component 4.5 Component 4.7
	<ul style="list-style-type: none"> • Promotion of public awareness on the possible effects of climate change to aquaculture activities and to fish farmers 	Component 4.1 Component 4.6 Component 4.7 Component 4.8

Program/Strategy	List of Activities	Linkage to Relevant Prioritized Issues
<i>Sub-strategy-1.2-5: Develop and implement social and economic strategies in aquaculture and resource enhancement to secure food and income through stakeholder collaboration</i>	<ul style="list-style-type: none"> Implementation of R&D activities that explore the participatory and community-based modality in promotion of aquaculture technologies in rural areas 	Component 4.1 Component 4.7 Component 4.8 Component 6.1
Strategy-1.3: Strengthen and sustain collaboration and partnerships with relevant stakeholder groups in aquaculture	<ul style="list-style-type: none"> Development of policy guidelines in engaging project partners 	Component 4.1 Component 4.8 Component 6.1
Strategy-1.4: Accelerate adoption of technologies in ASEAN Member States	<ul style="list-style-type: none"> Establishment of strategies that will enhance and sustain partnership arrangements with relevant stakeholders 	Component 4.1 Component 4.8 Component 6.1
	<ul style="list-style-type: none"> Systematic packaging of research results into commercially viable aquaculture technologies 	Component 4.1 Component 4.8 Component 6.1
	<ul style="list-style-type: none"> Development of technology transfer and adoption pathways anchored on well-defined relevant policies, infrastructure and linkages to better equip the ASEAN Member States in adopting new technologies appropriate to their countries 	Component 4.1 Component 4.8 Component 6.1
Program 2: Strengthening the capacities of the aquaculture sector to enhance technology transfer		
Strategy-2.1: Enhance capacity of relevant stakeholders through need-based capacity building programs and information dissemination activities.	<ul style="list-style-type: none"> Review/assessment of impacts, gaps, and training needs; Conduct of the following types of training programs, based on needs assessment: (i) on-site and AQD-based training courses; (ii) on-the-job and research internships; (iii) specialized and client-driven training courses; (iv) distance or e-learning courses; and (v) study tours; 	Component 4.1 Component 4.8 Component 6.1
Strategy-2.2: Generate/publish science-based information that contribute to formulation of policies for sustainable aquaculture	<ul style="list-style-type: none"> Publication of scientific papers, books, proceedings, manuals, policy briefs, and other information materials for target stakeholders Dissemination and exchange of information through: (i) symposia, seminars and workshops; (ii) Library services; (iii) AQD webpage and other forms of social media; (iv) Print and broadcast media; and (v) exhibitions in industry-led congress. 	Component 4.1 Component 4.8 Component 6.1

III. ORGANIZATION OF SEAFDEC/AQD

The Aquaculture Department consists of a Department Chief, a Deputy Department Chief and Department staff. The organizational chart of the Department is in Appendix IV.

The Department Chief is responsible for the administration and overall operation of the Department. Under the Chief are the following offices and divisions:

- (i) **Office of Department Chief** comprises the Office the Deputy Chief, Performance Management Group, Management Information Systems Office, and the Manila Office.
- (ii) **Research Division** is responsible for the research activities of the Department. The Research Division comprises the five Sections: Breeding and Seed Production, Nutrition and Feed Development, Farming Systems and Ecology, Fish Health, and Socio-Economics. The Division operates service laboratories and units; namely, Larval Food Laboratory, Centralized Analytical Laboratory, Fish Health Diagnostics Laboratory, and a Feed Preparation Laboratory and Feed Mill. The Division also operates the Laboratory Facilities for Advanced Aquaculture Technologies (LFAAT) and the Binangonan Freshwater Station.
- (iii) **Technology Verification and Demonstration Division** is responsible for testing the economic viability of various aquaculture technologies and packaging these into commercially viable production systems. The Technology Verification and Demonstration Division comprises the Technology Verification, and Demonstration and Packaging Sections. The Division operates the Dumangas Brackishwater Station and Igang Marine Station.
- (iv) **Training and Information Division** is responsible for the capacity development of human and institutional resources and dissemination of information on aquaculture. This Division comprises the Training, Development Communication, Library and Databanking Services Sections, and Fish world Museum.
- (v) **Administration and Finance Division** is responsible for providing administrative support to the programs and for the financial administration of the Department. It comprises the Human Resource Management, Engineering, Accounting, and Budget- Cashiering Sections and the Materials Control Unit.

Contribution of the Host Government

The Government of the Republic of the Philippines provides the Aquaculture Department, in accordance with the provisions of the Article 11 of the Agreement Establishing the Center, with the following:

- i. A parcel of land situated in the barrio of Buyuan, Municipality of Tigbauan, Province of Iloilo, as the site of Aquaculture Department's Tigbauan Main Station
- ii. A parcel of land situated in the Barrios of Pipindan, Kalinawan and Tapao Point, Municipality of Binangonan, Province of Rizal, as the site of Aquaculture Department's Binangonan Freshwater Station
- iii. Buildings for administrative offices, laboratories, classrooms, dormitories, staff houses, experimental and demonstration ponds; an adequate water system for research, production and drinking.
- iv. Office furniture and equipment, including vehicles;
- v. Services of the following local staff: (a) A Department Chief; (b) A sufficient number of professional staff; and (c) A sufficient number of service staff
- vi. An agreed amount of money as a contribution for the operation of the Department

Contribution of the Government of Japan

The Government of Japan shall provide the Department with the following, in accordance with the provisions of Article 11 of the Agreement Establishing the Center:

- i. Research and training instruments and equipment, or the necessary amount in yen for the purchase thereof from Japan;
- ii. Services of the following Japanese staff:
 - (a) A Deputy Department Chief
 - (b) An appropriate number of professional staff members, to be sent to assume positions in the Department as specifically requested by the Secretary General of the Center
 - (c) An appropriate number of fellowships for trainees from Member Countries.

Regional Prioritized Areas and Issues Adopted at the 46th Meeting of the Council of SEAFDEC

Components/Issues	Rank of Priority
Component 1: Fisheries Management	
1) Conservation and management of fishery resources, taking into consideration tropical specificity of fisheries and applying precautionary approach	1
2) Combating IUU fishing, including encouraging cooperation in the implementation of MCS among countries*	1
3) Enhancing good management practices, <i>e.g.</i> responsible fisheries, EAF; and development of guidelines for fisheries management	2
4) Management of fishing capacity, including shifting from open-access to limited-access	3
5) Promoting community – based fisheries management, co- management and empowering of fishers in fisheries management	4
6) Providing recommendations for management of shared stocks, and resolving conflicts among countries in fisheries outside their respective EEZ	4
7) Harmonization of vessel registration and fishery licensing	5
Component 2: Fishing Technology and Practices	
8) Promotion and awareness building on responsible fishing	1
9) Improving fish quality through on-board fish handling technologies and good practices for small-scale fisheries	2
10) Developing and enhancing the use of automated and mechanized fishing gears and energy saving technologies	3
Component 3: Post-harvest Technology and Trade-related Issues	
11) Improving post-harvest technologies and safety/quality of products for export	1
12) Addressing emerging requirements for traceability/ certification of fishery products for export*	1
13) Preventing trade of IUU fishing products	2
14) Developing new technologies for fishery post-harvest, including value-added products and reduction of wastes	3
15) Enhancing market access of products from small-scale fishers	4
Component 4: Sustainable Aquaculture	
16) Promoting best management practices in aquaculture	1
17) Fish Health Management: transboundary-disease control**	1
18) Development of feeds to reduce dependence on fish meal and fish-based products	2
19) Minimizing impacts of aquaculture on the environment/ biodiversity	3
20) Advancing aquaculture technologies	4
21) Implementing regional guidelines for good aquaculture practices	5
22) Undertaking R&D on aquaculture that are required for different objectives, <i>e.g.</i> for economic development, food security, livelihood improvement, resources enhancement, etc.	6
23) Giving more emphasis on the roles of aquaculture for food security and poverty alleviation, especially using indigenous species, as well as technology verification and extension activities	7
Component 5: Fisheries Information and Statistics	
24) Improving the harmonization and collect/compilation of fishery statistics and information	1
25) Enhancing the analysis, interpretation and analysis of available data and information to provide information status and trends of fisheries and aquaculture, and support science-based policy planning and management of fisheries	1
26) Improving database of fishery information and statistics to facilitate sharing/dissemination of data an information	1
Component 6: Human Resources Development	
27) Assessing human resources requirements of the Member Countries, and providing human resources development program, particularly in the areas where shortage could be envisaged in the future	1



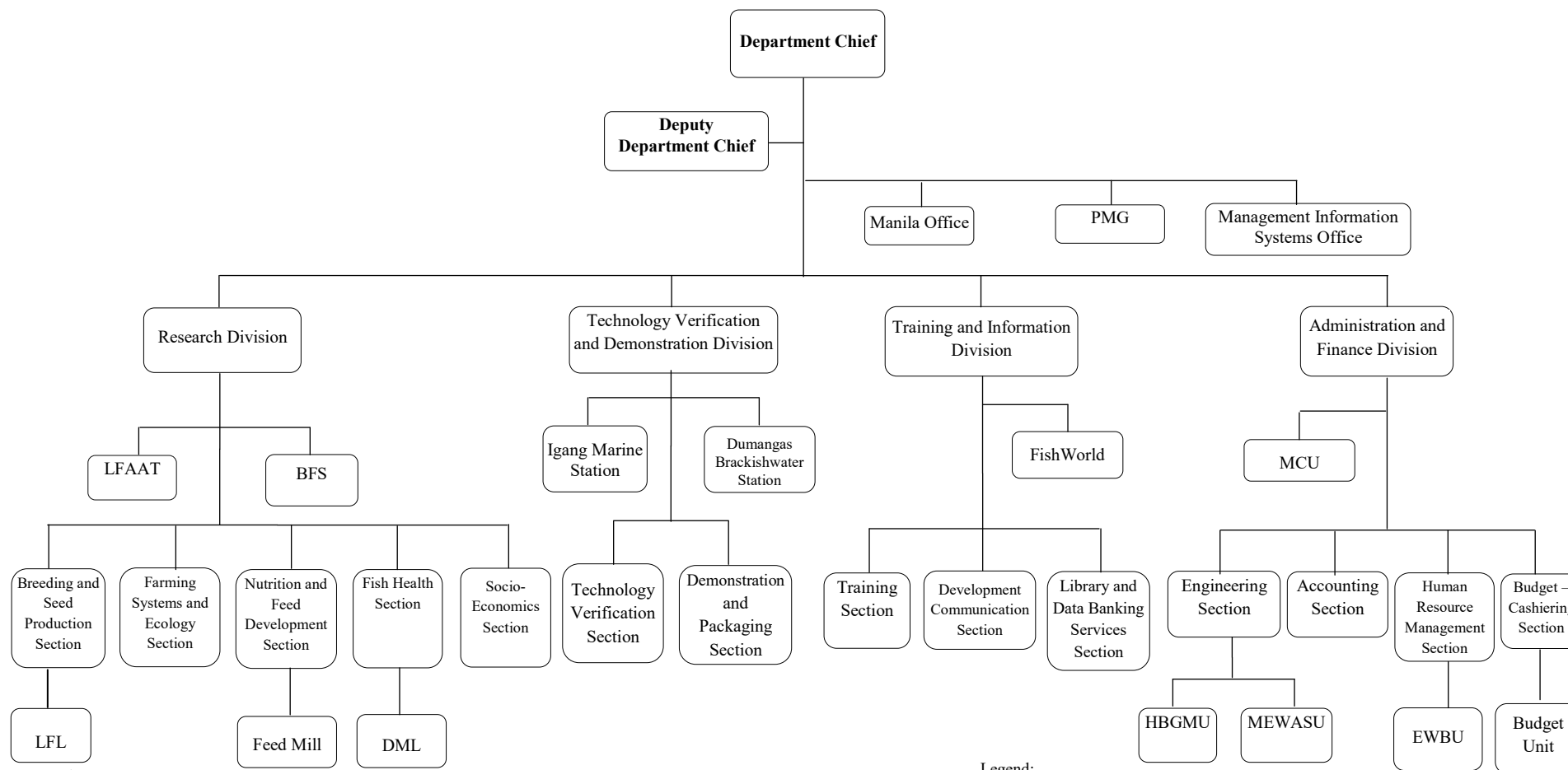
Components/Issues	Rank of Priority
Component 7: Inland Fisheries	
28) Habitat conservation/rehabilitation and resource enhancement for inland fisheries, including inundated forest and wetland	1
29) Co-management, rights-based fisheries, strengthening institutions, alternative livelihood	2
30) Ecosystem approach to inland fisheries	3
31) Enhancing awareness on the importance of inland fisheries, including contribution to food security	4
32) Measures needed to mitigate effects of climate change and to build adaptive capacity	5
33) Indicators for sustainable inland fisheries	6
34) Improving methodologies for collection of data and information on inland fisheries	6
35) Management of fishing capacity and combating IUU fishing	7
36) Enhancing interconnectivity of habitat and mitigating impacts from water infrastructure	8

Remarks:

* The high priority level was recommended at the 46th CM

** This new issue was raised as high priority at the 46th CM

ORGANIZATIONAL CHART OF AQD



Legend:
 LFAAT - Laboratory for Advanced Aquaculture Technologies
 BFS - Binangonan Freshwater Station
 LFL - Larval Food Laboratory
 DML - Diagnostic and Microtechnique Laboratory

Legend:
 PMG - Performance Management Group (Internal Audit)
 MCU - Materials Control Unit
 HBGMU - Housing, Building, and Grounds Maintenance Unit
 MEWASU - Mechanical, Electrical, Water, and Aeration Services Unit
 EWBU - Employees' Welfare and Benefits Unit

**PLAN OF OPERATION AND PROGRAM OF WORK:
MARINE FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT
DEPARTMENT (MFRDMD)
(REVISED 2015)**

I. PLAN OF OPERATION

The Marine Fishery Resources Development and Management Department (MFRDMD) gives priority to fish stocks management in the ASEAN region. It emphasizes on data acquisition and assessing recent status of important fish stocks, especially shared stocks among ASEAN Member States (AMSs). The department will use advanced methods to support fish stock management measures and actions.

(1) MFRDMD has the following functions:

- (i) To provide regional fora for consultation and cooperation in research and management of fishery resources.
- (ii) To coordinate and implement research programmes to support sustainable development and management of fishery resources in AMSs through:
 - Monitoring condition and exploitation of the state of fishery resources.
 - Providing scientific basis and appropriate guidelines.
 - Providing advice on management of fishery resources.
- (iii) To provide expertise in the field of stock assessment and fishery management towards improving the capability of AMSs in sustainable development and management of fishery resource.
- (iv) To publish, disseminate and exchange information through:
 - Regional fora and consultations in research and management.
 - Intensification of publications.

(2) The Government of Malaysia provides the MFRDMD, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as appeared in **Appendix I**.

(3) The Government of Japan provides the MFRDMD in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as appeared in **Appendix II**.

(4) In accordance with Article 13 of the Agreement Establishing the Center, the Marine Fishery Resources Development and Management Department, in consultation with the Secretary-General, may seek financial and technical assistance from potential donor governments and agencies, to enable it to fulfil its functions and objectives.

II. THE PROGRAM OF WORK

With the functions indicated in the Plan of Operation, the MFRDMD will implement research, the related training, and information dissemination activities as approved by the SEAFDEC Council. These activities will serve to promote sustainable development and management of fishery resources in the Southeast Asian region, especially shared stocks. National fish stocks will be covered on request from the respective AMSs.

A. Programs of the SEAFDEC MFRDMD:

1. *Coordinate, collaborate and implement research programmes to support in assessing status of important fish stocks in the region and plan for appropriate interventions in AMSs.*

- Strategy-1.1: Regularly examine existing status and monitor current change of important fish stocks.
- Strategy-1.2: Assess stock of commercially important and/or endangered species.
- Strategy-1.3: Develop mechanism for engaging AMSs to assess and update status of important fish stocks.
2. *Compile, analyse and publish information and reports on status of important fish stocks in the region to be shared with key actors in AMSs.*
- Strategy-2.1: Encourage participation of AMSs to compile information on status of fish stocks of commercially important and/or endangered species
- Strategy-2.2: Report of stock assessment results and provide policy recommendations for management of important fish stocks in AMSs
- Strategy-2.3: Engage AMSs to formulate policies on important fish stocks.
3. *Provide mechanism and guidelines for AMSs to improve the capability in conducting stock assessment at national level.*
- Strategy-3.1: Enable AMSs to formulate stock assessment and related practices
- Strategy-3.2: Update knowledge and skill of AMSs staff to perform methods of stock assessment
4. *Provide mechanism for AMSs to adopt and implement regional policies/ guidelines on important emerging issues on marine fisheries.*
- Strategy-4.1: Facilitate formulation of regional policies and guidelines in response to emerging issues on marine capture fisheries
- Strategy-4.2: Engage AMSs to implement the regional policies and guidelines for ASEAN with technical support from SEAFDEC

B. Strategy, List of Activities and Linkage to Relevant Prioritized Issues¹

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
Program 1: Coordinate, collaborate and implement research programmes to support in assessing status of important fish stocks in the region and plan for appropriate interventions in AMSs		
Strategy -1.1: Regularly examine existing status and monitor current change of important fish stocks.	<ul style="list-style-type: none"> • Monitor catches and analyse catch effort data from commercial fishing vessels. • Collect and compile landing data of important species from all fishing gears at selected major landing areas. • Conduct biological studies of shared major pelagic species to provide information for resources assessment. • Assess important fish stocks for proper development and management of the resources. • Conduct fishery oceanography studies to determine the relationship between physico-chemical parameters of the ocean 	Component 1.1 Component 1.2 Component 1.3 Component 1.4 Component 5.1 Component 5.2 Component 5.3 Component 7.5

¹ Regional Prioritized Issues that were recommended and endorsed by all SEAFDEC Member Countries at 46th Meeting of the SEAFDEC Council Director, 1-4 April 2014 (See **Appendix III** for reference)

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
	<p>water and the pelagic fishery resources.</p> <ul style="list-style-type: none"> • Provide Standard Operating Procedure (SOP) for data collection • Provide database for biological and resource data entry, compilation, updating, and analysis. 	
<p>Strategy-1.2: Assess stock of commercially important and/or endangered species.</p>	<ul style="list-style-type: none"> • Conduct training on taxonomic identification of commercially important and/or endangered species. • Provide books, hand out and booklets on taxonomic identification of commercially important and/or endangered species. • Collect and compile landing data of commercially important and/or endangered species • Provide database for biological and resource data entry, compilation, updating and analysis. • Provide SOP for data collection of commercially important and/or endangered species. • Conduct assessment of commercially important and/or endangered species. 	<p>Component 1.1 Component 1.2 Component 1.3 Component 5.1 Component 5.2 Component 5.3</p>
<p>Strategy-1.3: Develop mechanism for engaging AMSs to assess and update status of important fish stocks.</p>	<ul style="list-style-type: none"> • Conduct training of researchers from AMSs on data collection, fish stock assessment and fisheries management. • Provide training materials on fish stock assessment. • Provide SOP for data collection. • Provide database for biological and resource data entry, compilation, and analysis. • Conduct collaborative fishery resources studies with AMSs. • Provide platform for on-the-job training for researchers and fishery managers of AMSs at the department. • Organize seminars and workshops for information sharing and dissemination. 	<p>Component 1.1 Component 1.2 Component 1.3 Component 1.4 Component 5.1 Component 5.2 Component 5.3</p>
<p>Program 2: Compile, analyse and publish information and reports on status of important fish stocks in the region to be shared with key actors in AMSs</p>		
<p>Strategy-2.1: Encourage participation of AMSs to compile information on status</p>	<ul style="list-style-type: none"> • Conduct training of researchers from AMSs on data collection, 	<p>Component 1.1 Component 1.2</p>

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
of fish stocks of commercially important and/or endangered species.	fish stock assessment and fisheries management. <ul style="list-style-type: none"> • Provide training materials on fish stock assessment • Provide SOP for data collection. • Provide database for biological and resource data entry, compilation, and analysis. • Organize seminars and workshops for information sharing and dissemination. 	Component 1.3 Component 5.1 Component 5.2 Component 5.3
Strategy-2.2: Report of stock assessment results and provide policy recommendations for management of important fish stocks in AMSs.	<ul style="list-style-type: none"> • Organize seminars and workshops for updating status and information sharing on shared stocks. • Organize Regional Technical Consultation (RTC) on developing guidelines on the management of shared stocks. • Assist AMSs on compiling, collating, analyse and interpret data/ information on shared stocks for the purpose of formulating policy recommendations for the management of shared stocks. 	Component 1.1 Component 1.2 Component 1.3 Component 1.6 Component 2.1 Component 5.2
Strategy-2.3: Engage AMSs to formulate policies on important fish stocks.	<ul style="list-style-type: none"> • Organize seminars and workshops for information sharing and dissemination. • Organize Regional Technical Consultation (RTC) on developing guidelines on the management of shared stocks. • Assist AMSs on compiling, collating, analyse and interpret data/ information on shared stocks for the purpose of formulating policy recommendations for the management of shared stocks. 	Component 1.1 Component 1.2 Component 1.3 Component 1.6 Component 5.2
Program 3: Provide mechanism and guidelines for AMSs to improve the capability in conducting stock assessment at national level		
Strategy-3.1: Enable AMSs to formulate stock assessment and related practices	<ul style="list-style-type: none"> • Conduct training of researchers from AMSs on data collection, fish stock assessment and fisheries management. • Provide training materials on fish stock assessment. • Provide SOP for data collection. • Provide database for biological and resource data entry, compilation, and analysis. • Conduct collaborative fishery resources studies with AMSs for 	Component 1.1 Component 1.2 Component 1.3 Component 1.6 Component 5.1 Component 5.2 Component 5.3

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
	<p>the Transfer of Technology.</p> <ul style="list-style-type: none"> • Provide platform for on-the-job training for researchers and fishery managers of AMSs at the department. • Organize seminars and workshops for information sharing and dissemination. 	
<p>Strategy-3.2: Update knowledge and skill of AMSs staff to perform methods of stock assessment.</p>	<ul style="list-style-type: none"> • Regularly conduct training of researchers from AMSs on data collection, fish stock assessment and fisheries management. • Provide updated training materials on fish stock assessment. • Provide updated SOP for data collection. • Provide database for data entering, compiling, analysis and updating. • Conduct collaborative fishery resources studies with AMSs for Transfer of Technology. • Provide platform for on-the-job training for researchers and fishery managers of AMSs at the department. • Organize seminars and workshops for information sharing and dissemination. 	<p>Component 1.1 Component 1.2 Component 1.3 Component 1.6 Component 5.2 Component 6.1</p>
<p>Program 4: Provide mechanism for AMSs to adopt and implement regional policies/ guidelines on important emerging issues on marine capture fisheries</p>		
<p>Strategy-4.1: Facilitate formulation of regional policies and guidelines in response to emerging issues on marine capture fisheries.</p>	<ul style="list-style-type: none"> • Organize seminars and workshops for updating status and information on emerging issues of marine capture fisheries. • Organize Regional Technical Consultation (RTC) on developing guidelines and regional policies in response to emerging issues on capture fisheries. • Assist AMSs on compiling, collating and analyse data/ information in response to emerging issues on marine capture fisheries. • Periodically publish and disseminate information to AMSs in response to emerging issues on marine capture fisheries. 	<p>Component 1.1 Component 1.2 Component 3.2 Component 3.3</p>
<p>Strategy-4.2: Engage AMSs to implement the regional policies and guidelines for ASEAN with technical</p>	<ul style="list-style-type: none"> • Organize Regional Technical Consultation (RTC) on developing National Plan of 	<p>Component 1.2 Component 3.2 Component 3.3</p>

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
support from SEAFDEC.	Action (NPOA) in implementing guidelines for ASEAN. <ul style="list-style-type: none"> • Assist AMSs on implementing the NPOA • Periodically publish and disseminate information to AMSs in response to the status of implementing NPOA and other emerging issues on marine capture fisheries. 	

III. ORGANIZATION OF THE MARINE FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT (MFRDMD)

The Marine Fishery Resources Development and Management Department consists of a Chief, a Deputy Chief, Special Departmental Coordinator and Department staff.

The Chief is responsible for the administration and operation of the Department. Under the Chief are the following Four Sections:

(i) **Administration and Finance Section:** to be responsible for providing administrative support to the Department including general services and maintenance of the Department buildings and research facilities. It will also be responsible for all financial and administrative undertakings of the Department.

The Administrative and Finance Section shall comprise the Administrative Unit and the Finance Unit.

(ii) **Biology and Resource Assessment Section:** to be responsible for the implementation of research activities on biology and resource assessment of marine fishery resources. The activities include marine fishery biological studies, fish stock assessment and genetic study. The assessment on commercially important and/or endangered species is the main focus of the section.

The Biology and Resource Assessment Section shall comprise the Biology and Genetic Unit and Resource Assessment Unit.

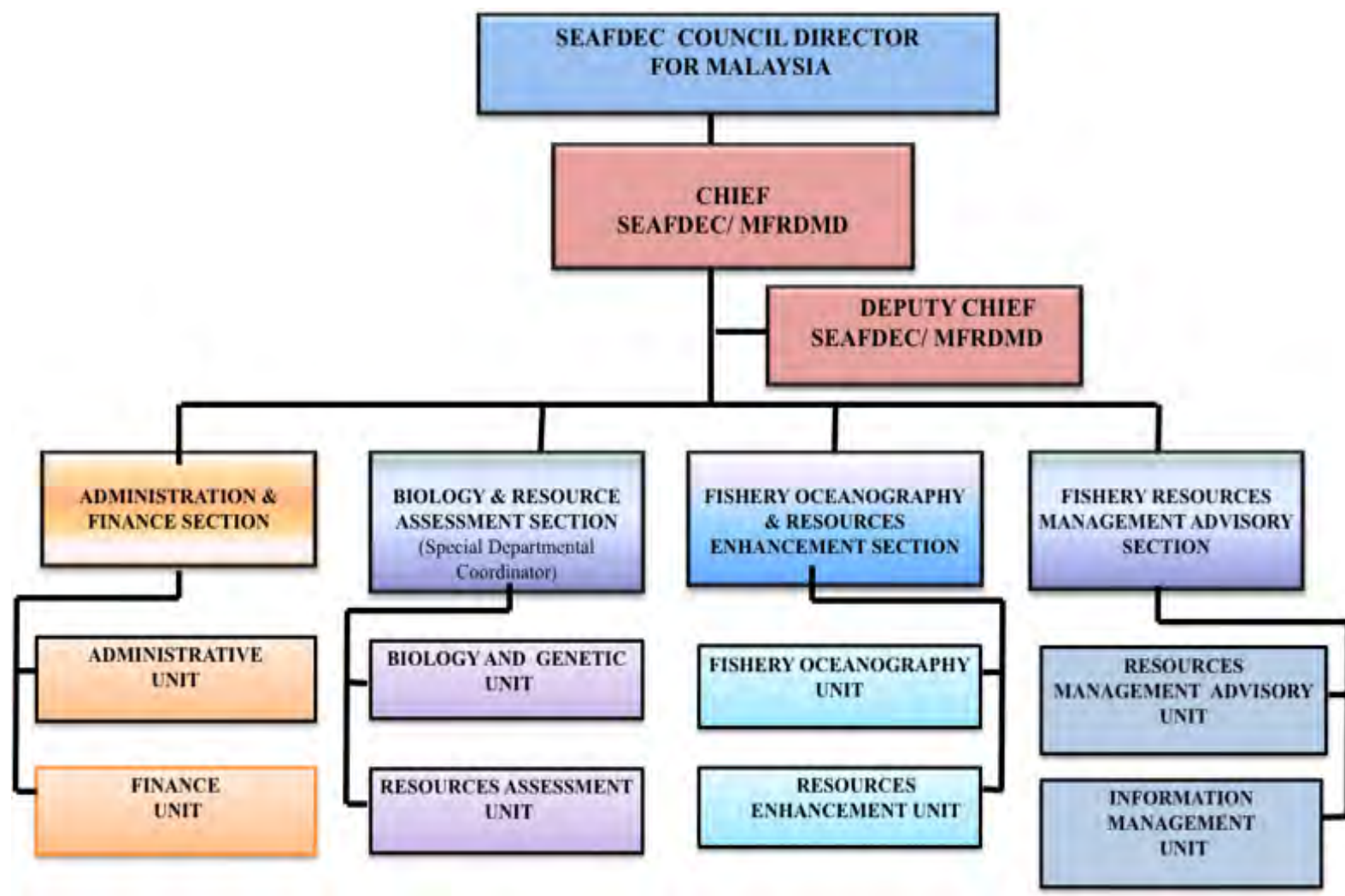
(iii) **Fishery Oceanography and Resources Enhancement Section:** to be responsible for the implementation of research activities on fishery oceanography and resources enhancement studies. The main focus of the section is to determine the relationship between physico-chemical parameters of the ocean waters and the fishery resources; determine suitable sites for the deployment of artificial reefs and the establishment of other resource enhancement measures such as fish refugias and develop mechanisms for assessing the status and effectiveness of these measures.

The Fishery Oceanography and Resources Enhancement Section shall comprise the Fishery Oceanography Unit and Resources Enhancement Unit.

(iv) **Fishery Resources Management Advisory Section:** to be responsible for providing management advice on the exploitation, management and conservation of the marine fishery resources in the EEZ of Member Countries and management of information. The main focus of the section is to compile, collate and disseminate information as well as developing management advices on fishery resources based on the information collected.

The Fishery Resources Management Advisory Section shall comprise Fishery Resources Management Advisory Unit and Information Management Unit.

ORGANIZATION CHART OF THE MARINE FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT (MFRDMD)



Appendix I

The Government of Malaysia provides the MFRDMD, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, with the following:

- (i) Services of the following professional staff;
 - a. A Department Chief, and
 - b. Professional and service staff.
- (ii) Adequate infrastructure facilities for marine fishery resources research, training and information dissemination programs of the MFRDMD; and
- (iii) Appropriate funds towards the operational expenses of the MFRDMD.

Appendix II

The Government of Japan has provided the MFRDMD in accordance with the provisions of Article 11 of the Agreement Establishing the Center, with the following:

- (i) Services of the following professional staff;
 - a. A Deputy Department Chief, and
 - b. An appropriate number of professional staff to implement the Department's programs.
- (ii) An amount of money in Yen for the purchase of research instruments and equipment;
- (iii) Appropriate fellowship grants and an amount of money in U.S. dollars for the purchase of research equipment for scientists from ASEAN Member States to conduct research at the Department and to upgrade the professional and technical expertise of the Department's staff; and
- (iv) An amount of money in US Dollars as an annual contribution for the operational expenses of the Department.

Regional Prioritized Areas and Issues Adopted at the 46th Meeting of the Council of SEAFDEC

Components/Issues	Rank of Priority
Component 1: Fisheries Management	
1) Conservation and management of fishery resources, taking into consideration tropical specificity of fisheries and applying precautionary approach	1
2) Combating IUU fishing, including encouraging cooperation in the implementation of MCS among countries*	1
3) Enhancing good management practices, <i>e.g.</i> responsible fisheries, EAFM; and development of guidelines for fisheries management	2
4) Management of fishing capacity, including shifting from open-access to limited-access	3
5) Promoting community – based fisheries management, co- management and empowering of fishers in fisheries management	4
6) Providing recommendations for management of shared stocks, and resolving conflicts among countries in fisheries outside their respective EEZ	4
7) Harmonization of vessel registration and fishery licensing	5
Component 2: Fishing Technology and Practices	
8) Promotion and awareness building on responsible fishing	1
9) Improving fish quality through on-board fish handling technologies and good practices for small-scale fisheries	2
10) Developing and enhancing the use of automated and mechanized fishing gears and energy saving technologies	3
Component 3: Post-harvest Technology and Trade-related Issues	
11) Improving post-harvest technologies and safety/quality of products for export	1
12) Addressing emerging requirements for traceability/ certification of fishery products for export*	1
13) Preventing trade of IUU fishing products	2
14) Developing new technologies for fishery post-harvest, including value-added products and reduction of wastes	3
15) Enhancing market access of products from small-scale fishers	4
Component 4: Sustainable Aquaculture	
16) Promoting best management practices in aquaculture	1
17) Fish Health Management: transboundary-disease control**	1
18) Development of feeds to reduce dependence on fish meal and fish-based products	2
19) Minimizing impacts of aquaculture on the environment/ biodiversity	3
20) Advancing aquaculture technologies	4
21) Implementing regional guidelines for good aquaculture practices	5
22) Undertaking R&D on aquaculture that are required for different objectives, <i>e.g.</i> for economic development, food security, livelihood improvement, resources enhancement, etc.	6
23) Giving more emphasis on the roles of aquaculture for food security and poverty alleviation, especially using indigenous species, as well as technology verification and extension activities	7
Component 5: Fisheries Information and Statistics	
24) Improving the harmonization and collect/compilation of fishery statistics and information	1
25) Enhancing the analysis, interpretation and analysis of available data and information to provide information status and trends of fisheries and aquaculture, and support science-based policy planning and management of fisheries	1
26) Improving database of fishery information and statistics to facilitate sharing/dissemination of data an information	1
Component 6: Human Resources Development	
27) Assessing human resources requirements of the Member Countries, and providing human resources development program, particularly in the areas where shortage could be envisaged in the future	1

Components/Issues	Rank of Priority
Component 7: Inland Fisheries	
28) Habitat conservation/rehabilitation and resource enhancement for inland fisheries, including inundated forest and wetland	1
29) Co-management, rights-based fisheries, strengthening institutions, alternative livelihood	2
30) Ecosystem approach to inland fisheries	3
31) Enhancing awareness on the importance of inland fisheries, including contribution to food security	4
32) Measures needed to mitigate effects of climate change and to build adaptive capacity	5
33) Indicators for sustainable inland fisheries	6
34) Improving methodologies for collection of data and information on inland fisheries	6
35) Management of fishing capacity and combating IUU fishing	7
36) Enhancing interconnectivity of habitat and mitigating impacts from water infrastructure	8

Remarks

* The high priority level was recommended at the 46CM

** This new issue was raised as high priority at the 46CM

**PLAN OF OPERATION AND PROGRAM OF WORK:
INLAND FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT
(IFRDMD)
(REVISED after 47CM)**

II. PLAN OF OPERATION

1. The Inland Fishery Resources Development and Management Department has the following functions:
 - a) To act as a center for providing guidelines for the proper development and management of inland fishery resources of Member Countries. The inland water systems consist of fresh water, saline water and mixture of them. Those are distributed throughout the land, such as rivers, lakes, floodplains, reservoirs, wetlands, estuaries, and inland saline systems. Their properties and usage are dominated by the permanent, seasonal, or intermittent occurrence of flooded conditions;
 - b) To establish partnership with other organizations, such as Mekong River Commission, to mobilize research results and extend to other Member Countries;
 - c) To develop guidelines of basic data collection for routine monitoring activities of different types of habitat;
 - d) To provide the tools for assessment and management that can be applied in the region;
 - e) To monitor the state and its exploitation of inland fishery resources;
 - f) To provide scientific basis for proper development and management of the inland fishery resources of Member Countries;
 - g) To serve as a regional forum for cooperation and consultation on research, conservation and management of inland fishery resources among Member Countries;
 - h) To coordinate and implement programs to improve the capability of Member Countries in the development, management and conservation of the inland fishery resources; and
 - i) To develop master plan that covers all programs of activities that will be undertaken for sustainable inland fisheries.
2. The Government of Indonesia provides the Inland Fishery Resources Development and Management Department, in accordance with the provisions of the Article 11 of the Agreement Establishing the Center, as appeared in **Appendix I**.
3. The Government of Japan provides the Inland Fishery Resources Development and Management Department, in accordance with the provisions of Article 11 of the Agreement Establishing the Center, as appeared in **Appendix II**.
4. In accordance with Article 13 of the Agreement Establishing the Center, the Inland Fishery Resources Development and Management Department, in consultation with the Secretary-General, seeks financial and technical assistance from potential donor governments and agencies, to enable it to fulfill its functions and the objectives of the Center.

III. PROGRAM OF WORK

A. Program of the IFRDMD

1. *Development of the baseline information on policies and regulations related to inland fisheries in AMSs.*

- Strategy-1.1: Gather and compile information related to inland fisheries policies and regulations from the AMSs
 Strategy-1.2: Provide accessibility of the information through collaboration with the AMSs

2. *Promoting awareness of AMSs on the status of the inland fisheries resources in the region.*

- Strategy-2.1: Assess applicability of existing scientific data and information, and effectiveness of data collection tools
 Strategy-2.2: Develop inland fisheries scientific data collection mechanism and guidelines
 Strategy-2.3: Engage AMSs and relevant agencies in collection of scientific data and generation of useful information for policy formulation
 Strategy-2.4: Increase visibility of IFRDMD as information hub for inland fishery research and development

3. *Formulation of policy recommendations and guidelines on inland fisheries management, in close collaboration with AMSs.*

- Strategy-3.1: Formulate and disseminate policies and guidelines on inland fisheries management in AMSs
 Strategy-3.2: Support adoptability of policies and guidelines on inland fisheries management by the AMSs

B. Strategy, List of Activities and Linkage to Relevant Prioritized Issues¹

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
Program 1: Development of the baseline information on policies and regulations related to inland fisheries in AMSs.		
Strategy-1.1: Gather and compile information related to inland fisheries policies and regulations from the AMSs	<ul style="list-style-type: none"> • Data collection. • Review information. • Database construction. • Workshop. 	Component 6. 1
Strategy-1.2: Provide accessibility of the information through collaboration with the AMSs	<ul style="list-style-type: none"> • Data collection. • Review information. • Database construction. • Workshop. 	Component 6. 1
Program 2: Promoting awareness of AMSs on the status of the inland fisheries resources in the region.		
Strategy-2.1: Assess applicability of existing scientific data and information, and effectiveness of data collection tools	<ul style="list-style-type: none"> • Investigation in Lab. • Field survey. • Data collection. • Review information. • Database construction. • Workshop. 	Component 7. 4 Component 7. 7
Strategy-2.2: Develop inland fisheries scientific data		Component 7. 7

¹ Regional Prioritized Issues that were recommended and endorsed by all SEAFDEC Member Countries at 46th Meeting of the SEAFDEC Council Director, 1-4 April 2014 (See **Appendix III** for reference)

Program/ Strategy	List of Activity	Linkage to Relevant Prioritized Issues
collection mechanism and guidelines	<ul style="list-style-type: none"> • Investigation in Lab. • Field survey. • Data collection. • Review information. • Database construction. • Workshop. 	
Strategy-2.3: Engage AMSs and relevant agencies in collection of scientific data and generation of useful information for policy formulation	<ul style="list-style-type: none"> • Investigation in Lab. • Field survey. • Data collection. • Review information. • Database construction. • Workshop. • Capacity building / training. 	Component 7. 5 Component 7. 6 Component 7. 9
Strategy-2.4: Increase visibility of IFRDMD as information hub for inland fishery research and development	<ul style="list-style-type: none"> • Data collection. • Review information. • Database construction. • Workshop. • Capacity building / training. 	Component 7. 4
Program 3: Formulation of policy recommendations and guidelines on inland fisheries management, in close collaboration with AMSs.		
Strategy-3.1: Formulate and disseminate policies and guidelines on inland fisheries management in AMSs	<ul style="list-style-type: none"> • Investigation in Lab. • Field survey. • Data collection. • Review information. • Workshop. • Capacity building / training. • Dissemination. 	Component 7. 1 Component 7. 2 Component 7. 3 Component 7. 8
Strategy-3.2: Support adoptability of policies and guidelines on inland fisheries management by the AMSs	<ul style="list-style-type: none"> • Investigation in Lab. • Field survey. • Data collection. • Review information. • Workshop. • Capacity building / training. • Dissemination. 	Component 7. 1 Component 7. 2 Component 7. 3 Component 7. 8

IV. ORGANIZATION OF INLAND FISHERY RESOURCES DEVELOPMENT AND MANAGEMENT DEPARTMENT

The Inland Fishery Resources Development and Management Department consists of a Chief, a Deputy Chief and Department staff.

The Chief is responsible for the administration and operation of the Department. Deputy Chief supports the Chief. In case of Chief's vacancy, absence or inability to act, the Deputy Chief shall act as the Chief. Under the Chief, there are the following Divisions and Sections:

1. Administration and Finance Section

This section is responsible for providing administrative support to the Department including general services and maintenance of the Department buildings and research facilities. It will also be responsible for all the financial administration of the Department. The Administrative and Finance Division shall comprise the General Affairs Section and the Finance Section.

2. Research and Development Section

These sections are responsible for the implementation of research and development activities on inland fishery resources. The activities include inland fishery biological studies, fishery limnology studies; fish stock assessment and resources exploration as well as fishing gear selectivity studies. Shared stocks of fish resources and conservation of endangered species; research on fisheries policy and management are also conducted by the department. The Research Sections comprises the Biology and Resource Assessment; Fishery, Limnology and Resource Enhancement and Fisheries Policy and Management.

3. Technical Services Section

This section is responsible for library and dissemination, data center and laboratories operation including research programs conducted in the laboratory. The Laboratories comprises Chemical Laboratory, Hydrology Laboratory and Fish Biology Laboratory. Moreover, this section will be responsible for the compilation, collation and dissemination of information and provide management advice on the exploitation, management and conservation of the inland fishery resources of Member Countries.



Appendix I

1. The Government of Indonesia provides the Inland Fishery Resources Development and Management Department, in accordance with the provisions of the Article 11 of the Agreement Establishing the Center, with the following:
 - (vi) An area of land located in Palembang as the site of the Inland Fishery Resources Development and Management Department;
 - (vii) Buildings with floor space to accommodate the Inland Fishery Resources Development and Management Department and other facilities (office furniture and equipment, including vehicles);
 - (viii) Services of the following professional staff and general staff:
 - (a) A Department Chief, and
 - (b) Professional and service staff
 - (ix) An amount of money as an annual contribution towards the operational expenses of the Inland Fishery Resources Development and Management Department.

Appendix II

2. The Government of Japan provides the Inland Fishery Resources Development and Management Department, in accordance with the provision of the Article 11 of the Agreement Establishing the Center, with the following:
 - (i) Service of a Deputy Department Chief; and
 - (ii) An amount of money in U.S. dollars to support Inland Fishery Resources Development and Management Department activities.

Regional Prioritized Areas and Issues Adopted at the 46th Meeting of the Council of SEAFDEC

Components/Issues	Rank of Priority
Component 1: Fisheries Management	
1) Conservation and management of fishery resources, taking into consideration tropical specificity of fisheries and applying precautionary approach	1
2) Combating IUU fishing, including encouraging cooperation in the implementation of MCS among countries*	1
3) Enhancing good management practices, e.g. responsible fisheries, EAF; and development of guidelines for fisheries management	2
4) Management of fishing capacity, including shifting from open-access to limited-access	3
5) Promoting community – based fisheries management, co- management and empowering of fishers in fisheries management	4
6) Providing recommendations for management of shared stocks, and resolving conflicts among countries in fisheries outside their respective EEZ	4
7) Harmonization of vessel registration and fishery licensing	5
Component 2: Fishing Technology and Practices	
8) Promotion and awareness building on responsible fishing	1
9) Improving fish quality through on-board fish handling technologies and good practices for small-scale fisheries	2
10) Developing and enhancing the use of automated and mechanized fishing gears and energy saving technologies	3
Component 3: Post-harvest Technology and Trade-related Issues	
11) Improving post-harvest technologies and safety/quality of products for export	1
12) Addressing emerging requirements for traceability/ certification of fishery products for export*	1
13) Preventing trade of IUU fishing products	2
14) Developing new technologies for fishery post-harvest, including value-added products and reduction of wastes	3
15) Enhancing market access of products from small-scale fishers	4
Component 4: Sustainable Aquaculture	
16) Promoting best management practices in aquaculture	1
17) Fish Health Management: transboundary-disease control**	1
18) Development of feeds to reduce dependence on fish meal and fish-based products	2
19) Minimizing impacts of aquaculture on the environment/ biodiversity	3
20) Advancing aquaculture technologies	4
21) Implementing regional guidelines for good aquaculture practices	5
22) Undertaking R&D on aquaculture that are required for different objectives, e.g. for economic development, food security, livelihood improvement, resources enhancement, etc.	6
23) Giving more emphasis on the roles of aquaculture for food security and poverty alleviation, especially using indigenous species, as well as technology verification and extension activities	7
Component 5: Fisheries Information and Statistics	
24) Improving the harmonization and collect/compilation of fishery statistics and information	1
25) Enhancing the analysis, interpretation and analysis of available data and information to provide information status and trends of fisheries and aquaculture, and support science-based policy planning and management of fisheries	1
26) Improving database of fishery information and statistics to facilitate sharing/dissemination of data and information	1
Component 6: Human Resources Development	
27) Assessing human resources requirements of the Member Countries, and providing human resources development program, particularly in the areas where shortage could be envisaged in the future	1

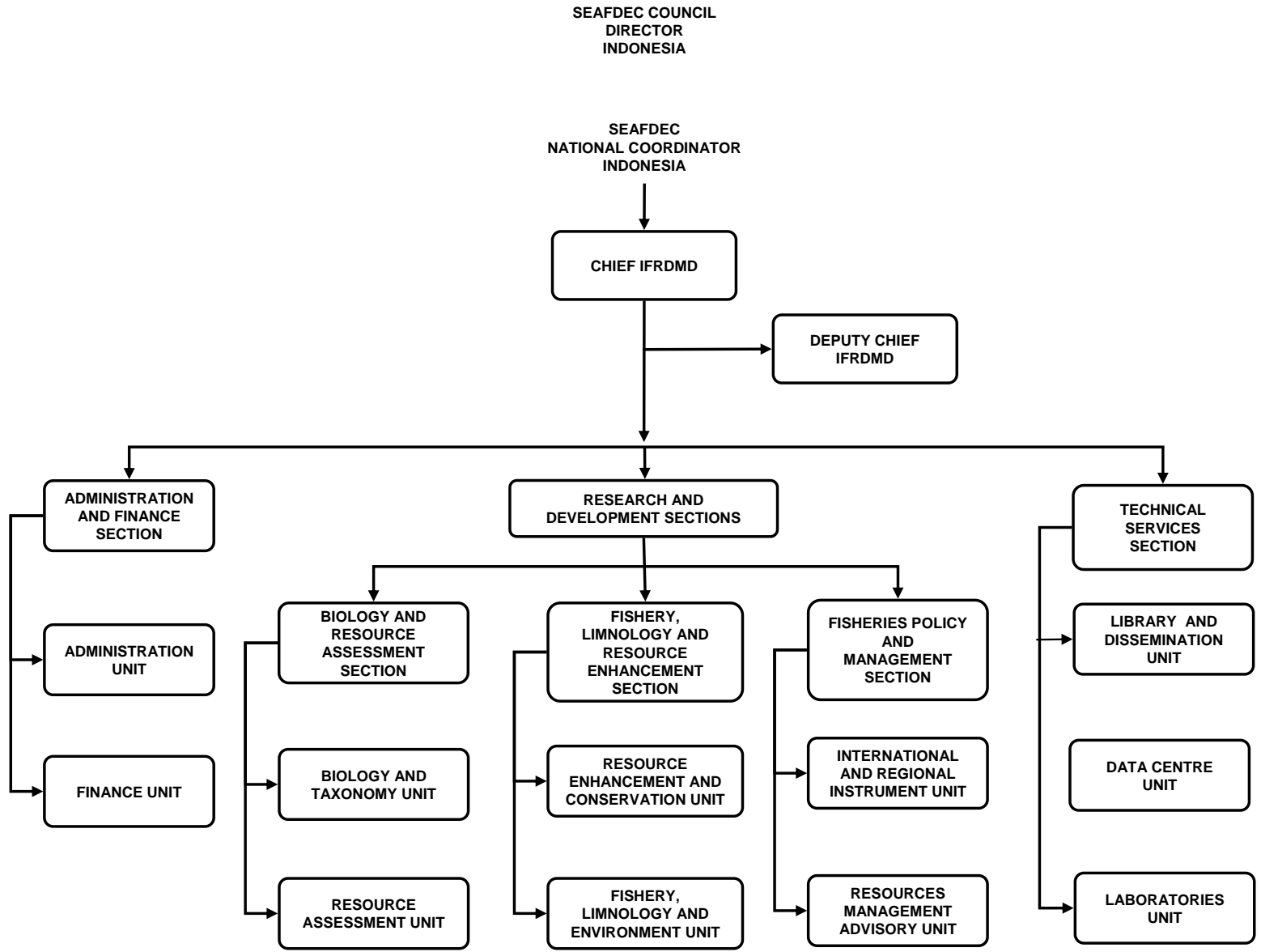


Components/Issues	Rank of Priority
Component 7: Inland Fisheries	
28)Habitat conservation/rehabilitation and resource enhancement for inland fisheries, including inundated forest and wetland	1
29)Co-management, rights-based fisheries, strengthening institutions, alternative livelihood	2
30)Ecosystem approach to inland fisheries	3
31)Enhancing awareness on the importance of inland fisheries, including contribution to food security	4
32)Measures needed to mitigate effects of climate change and to build adaptive capacity	5
33)Indicators for sustainable inland fisheries	6
34)Improving methodologies for collection of data and information on inland fisheries	6
35)Management of fishing capacity and combating IUU fishing	7
36)Enhancing interconnectivity of habitat and mitigating impacts from water infrastructure	8

Remarks

* The high priority level was recommended at the 46CM

** This new issue was raised as high priority at the 46CM



**PLAN OF OPERATION AND PROGRAM OF WORK
FOR SECRETARIAT
(REVISED after 47CM)**

I. PLAN OF OPERATION

1. The operation of the SEAFDEC Secretariat has been undertaken taking into account the directives given by the SEAFDEC Council, and the provisions as stipulated in the Agreement Establishing SEAFDEC, as well as the Administrative and Financial Regulations. During the past decades, the works of the Secretariat have been strengthened on regional policy development along the line with the Resolution on SEAFDEC Strategic Plan (1998), the formalization of the ASEAN-SEAFDEC Strategic Partnership or ASSP (2007), the SEAFDEC Program Framework (2009), and the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region toward 2020.
2. The SEAFDEC Secretariat has the following functions:
 - (i) To serve as the focal point for channeling and implementing the decisions and resolutions of the SEAFDEC Council;
 - (ii) To provide administrative services and facilitate the implementation of the overall activities of SEAFDEC, including organizing the agreed Annual Meetings, and preparing budget requirements and audited consolidated financial reports of the Center;
 - (iii) To facilitate overall planning, implementation, monitoring and evaluation of SEAFDEC programs and projects, based on the SEAFDEC Program Framework, and the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020;
 - (iv) To involve in the implementation of programs and projects, particularly those related to regional fisheries policy, fisheries statistics and information, and other multi-disciplinary programs;
 - (v) To support ASEAN in the development of the common/coordinated positions among countries on important fisheries-related issues, enhancing coordination of projects under the FCG/ASSP mechanism; and seek policy support from the higher authorities of ASEAN on priority fisheries issues;
 - (vi) To strengthen close cooperation between SEAFDEC and the Member Countries, other international/regional organizations and donor agencies in the implementation of programs and projects, as well as to explore financial support to the activities of SEAFDEC; and
 - (vii) To enhance the visibility of SEAFDEC through the appropriate tools and materials.

II. THE PROGRAM OF WORK

3. Programs under the Secretariat were developed taking into consideration for Regional Prioritized Areas and Issues adopted at the 46th Meeting of the Council in 2014 and the emerging issues including fisheries and trade that may impact to the development for sustainable fisheries and aquaculture in the ASEAN region. In addition, programs will support the implementation of the 2011 Resolutions and Plans of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020.

A. Programs of the Secretariat

1. *Supporting and Assisting AMSs and SEAFDEC Departments in Developing the ASEAN/Regional Policies and Guidelines on Fisheries and Aquaculture*

Strategy-1.1: Enhance participation of the Departments and AMSs in policy dialogue and consultation forum for formulation of regional policies and guidelines on fishery and aquaculture

- Strategy-1.2: Encourage rigor engagement of AMSs to support the endorsement of the regional policies and guidelines
- Strategy-1.3: Create buy-in of high authority of ASEAN for the adoption of the regional fishery and aquaculture policies
2. *Development the ASEAN standards, guidelines to enhance intra-regional/international trade and ASEAN Common Positions to address the regional concerned on international fisheries-related issues*
- Strategy-2.1: Benchmark the new standards with prominent international organizations / bodies
- Strategy-2.2: Engage the Departments, AMSs and relevant agencies to formulate guidelines and/or common positions for the ASEAN
- Strategy-2.3: Raise awareness and support adoption of ASEAN standards, guidelines, and common positions by AMSs and relevant stakeholders
3. *Development mechanism/system to monitor the implementation of the adoption of ASEAN regional policies and guidelines*
- Strategy-3.1: Establish regional platform and mechanism for monitoring and evaluation of the effectiveness of the regional policies and guidelines
4. *Strengthening the collaboration and partnership with prominent regional, international organizations and donor agencies*
- Strategy-4.1: Map regional development strategies of SEAFDEC with that of international organizations and donor agencies
- Strategy-4.2: Explore important points of entry to promote regional, international collaborations and partnerships
- Strategy-4.3: Create platform for regular consultations and dialogues with potential international organizations and agencies
5. *Dissemination of fishery and aquaculture data and information for policy formulation*
- Strategy-5.1: Develop tools and mechanism to collect data and generate information that are highly relevant for policy formulation
- Strategy-5.2: Maintain reliability and usability of data and information
- Strategy-5.3: Develop platform and tools to transform data into well-packaged information to support regional and national policy formulation
6. *Ensuring the contribution of resources and strongly support to undertake action on emerging issues*
- Strategy-6.1 Study and consultation for preparing long-term regional plan and resource mobilization plan for emerging issues

B. Strategy, List of Activity and Linkage to Relevant Prioritized Issues¹

Program/Strategy	List of Activity	Linkage to Relevant Prioritized Issues
Program 1: Supporting and Assisting AMSs and Departments in Development the ASEAN/Regional Policies and Guidelines on Fisheries and Aquaculture:		
Strategy-1.1: Enhance participation of the Departments and AMSs in policy	<ul style="list-style-type: none"> Support for participation of SEAFDEC Departments and AMSs in policy dialogues and 	To all regional prioritized areas that concerns on ASEAN/

¹ Regional Prioritized Issues that were recommended and endorsed by all SEAFDEC Member Countries at 46th Meeting of the SEAFDEC Council, 1-4 April 2014 (See **Appendix 1** for reference)

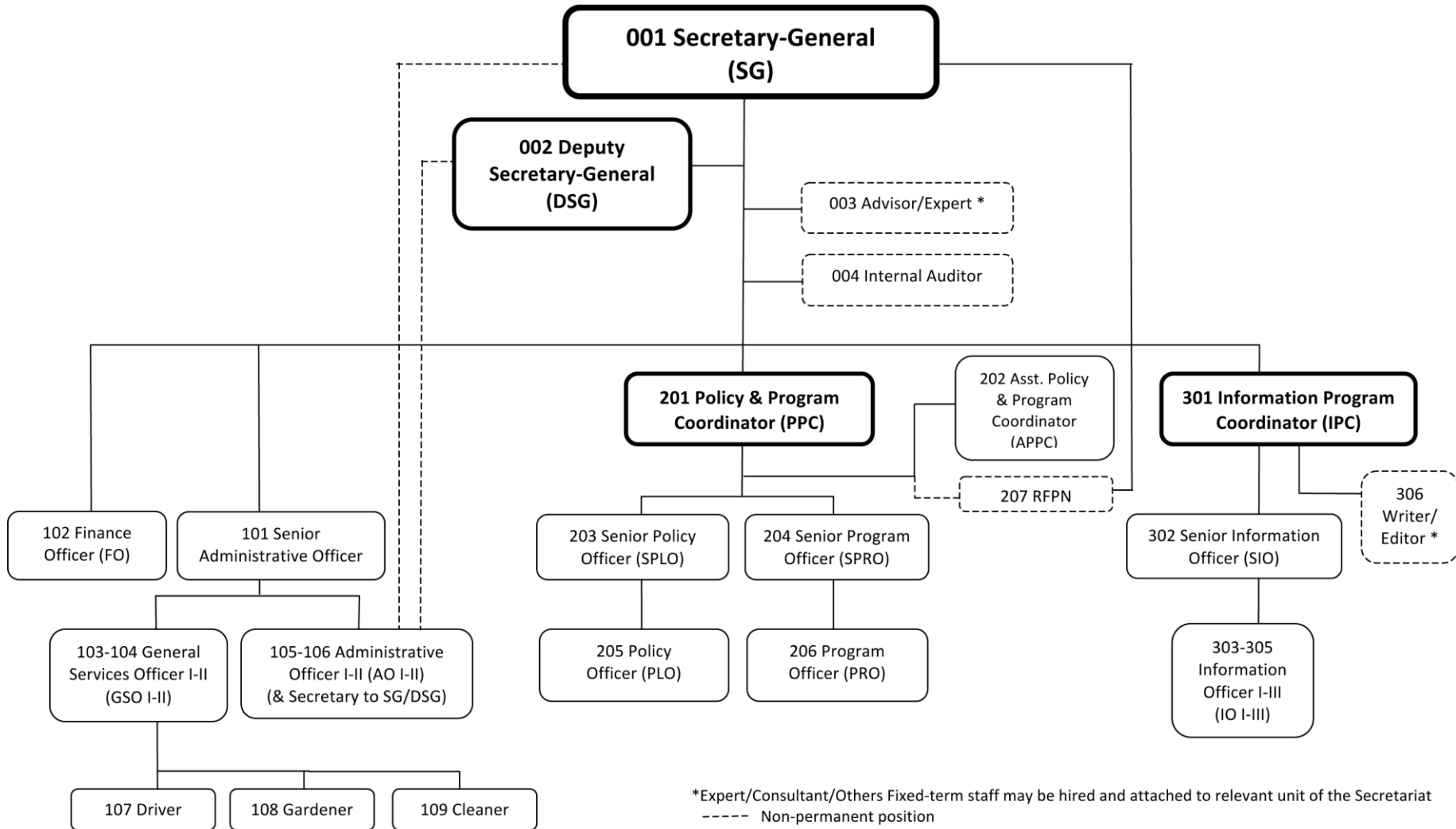
Program/Strategy	List of Activity	Linkage to Relevant Prioritized Issues
dialogue and consultation forum for formulation of regional policies and guidelines on fishery and aquaculture	consultation fora organized by SEAFDEC and other regional and international organization; <ul style="list-style-type: none"> Share information on the relevant events to the Departments and AMSs. 	Regional Policies development. This program also aims to support SEAFDEC Department(s) on capacity building and for in-depth study/analysis of the fisheries and aquaculture-related issues
Strategy-1.2: Encourage rigor engagement of AMSs to support the endorsement of the regional policies and guidelines	<ul style="list-style-type: none"> Provide clear objectives and reasons on the required regional policies and guidelines to AMSs in advance; Consultation visit to provide a brief call to AMSs (if urgent requirement) 	
Strategy-1.3: Create buy-in of high authority of ASEAN for the adoption of the regional fishery and aquaculture policies	<ul style="list-style-type: none"> Develop the Policy Concept Note for consideration of high authority of ASEAN; Strengthen cooperation with ASEAN Secretariat and other relevant authorities to support the adoption. 	
Program 2: Development of the ASEAN standards, guidelines to enhance intra-regional/international trade and ASEAN Common Positions to address regional concerns on international fisheries-related issues		
Strategy-2.1: Benchmark the new standards with prominent international organizations / bodies	<ul style="list-style-type: none"> Address the needs for development of the ASEAN standards/guidelines at the SEAFDEC Council Meeting for consideration and support; Organize the Expert Consultation, Regional Technical Consultation meetings for drafting of the standards/guidelines. 	To all regional prioritized areas that concerns to development of the ASEAN/ Regional Policies and the ASEAN Common or Coordinated Positions to reflect the regional concerns and interest and to address at the International fora.
Strategy-2.2: Engage the Departments, AMSs and relevant agencies to formulate guidelines and/or common positions for the ASEAN	<ul style="list-style-type: none"> Support participation of SEAFDEC Department(s), AMSs and relevant agencies to involve in drafting of the standards/guidelines. 	
Strategy-2.3: Raise awareness and support adoption of ASEAN standards, guidelines, and common positions by AMSs and relevant stakeholders	<ul style="list-style-type: none"> Conduct the awareness building on the needs for ASEAN standards/ guidelines to the relevant stakeholders for their support. 	
Program 3: Development mechanism/system to monitor the implementation of the adoption of ASEAN regional policies and guidelines		
Strategy-3.1: Establish regional platform and mechanism for monitoring and evaluation of the effectiveness of the regional policies and guidelines	<ul style="list-style-type: none"> Use the existing platform of PCM to monitor and evaluate the program that support the implementation of regional policies and guidelines; Develop the monitoring and evaluation worksheet/ online database worksheet for AMSs feedback and report effectiveness, outcomes and lessons from national implementation; Organize meeting(s) in collaboration with the relevant Departments for Monitoring and 	To all regional prioritized areas that concerns to implementation of the adoption of ASEAN regional policies and guidelines. In addition the program will support the Plan of Operation and Program of Work of each Department that needed to monitor and evaluate the

Program/Strategy	List of Activity	Linkage to Relevant Prioritized Issues
	Evaluation of the effectiveness regional policies and guidelines.	effectiveness regional policies and guidelines.
Program 4: Strengthening the collaboration and partnership with prominent regional, international organizations and donor agencies		
Strategy-4.1: Map regional development strategies of SEAFDEC with that of international organizations and donor agencies	<ul style="list-style-type: none"> Develop and disseminate the SEAFDEC development strategies for aquaculture and fisheries in the region; 	To all regional prioritized areas that concerns to collaboration and partnership with other donors; and the Program will support SEAFDEC Departments in implementation of the work plan.
Strategy-4.2: Explore important points of entry to promote regional, international collaborations and partnerships	<ul style="list-style-type: none"> Engage in the regional, international fora and partners annual meetings to explore the important points that may be relevant to the region; 	
Strategy-4.3: Create platform for regular consultations and dialogues with potential international organizations and agencies	<ul style="list-style-type: none"> Conduct the Technical Consultation (TC) meeting(s) regularly to discuss and share information on the current situation, lessons learnt and possible collaboration with organizations and donors. 	
Program 5: Dissemination of fishery and aquaculture data and information for policy formulation		
Strategy-5.1: Develop tools and mechanism to collect data and generate information that are highly relevant for policy formulation	<ul style="list-style-type: none"> Support and encourage SEAFDEC Departments to generate information and data for policy formulation through the regional workshop on relevant subjects /issues; Revise/ and develop the tools and mechanism to compile data, scientific findings and other updated information for policy formulation; 	Component 5; Component 6; Component 7.6 and 7.7
Strategy-5.2: Maintain reliability and usability of data and information	<ul style="list-style-type: none"> Develop the SEAFDEC database systems to pool and link with all data system from the Departments; 	
Strategy-5.3: Develop platform and tools to transform data into well-packaged information to support regional and national policy formulation	<ul style="list-style-type: none"> Support SEAFDEC programs in establishing scientific working group that AMSs are involved for long-term implementation; Consult with potential donors to support the platform for analysis and development of the integral database system for quick assessment. 	
Program 6: Ensuring the contribution of resources and strongly support to undertake action on emerging issues		
Strategy-6.1: Study and consultation for preparing long-term regional plan and resource mobilization plan for emerging issues	<ul style="list-style-type: none"> Consultation with all SEAFDEC Member Countries on possibility to conduct fisheries management surveillance; Develop an effective reporting mechanism for emerging issue Study on needs for the long-term regional plan and resources mobilization plan; Consultation with SEAFDEC 	The program supports the AMSs in case of emerging issues required for the urgent solutions. In addition, the long-term regional plan resource mobilization plan for emerging issues could be useful and supports



Program/Strategy	List of Activity	Linkage to Relevant Prioritized Issues
	<p>Member Countries based on the study to finalize the needs:</p> <ul style="list-style-type: none">• Address the issues at the council meeting for their consideration, comments, and endorsement (if appropriate).	<p>any urgent matter arise in the ASEAN Region.</p>

RE-ORGANIZATION CHART OF THE SEAFDEC SECRETARIAT



*Expert/Consultant/Others Fixed-term staff may be hired and attached to relevant unit of the Secretariat
 ----- Non-permanent position

Regional Prioritized Areas and Issues Adopted by the 46th Meeting of the Council of SEAFDEC

Components/Issues	Rank of Priority
Component 1: Fisheries Management	
1) Conservation and management of fishery resources, taking into consideration tropical specificity of fisheries and applying precautionary approach	1
2) Combating IUU fishing, including encouraging cooperation in the implementation of MCS among countries*	1
3) Enhancing good management practices, e.g. responsible fisheries, EAF; and development of guidelines for fisheries management	2
4) Management of fishing capacity, including shifting from open-access to limited-access	3
5) Promoting community – based fisheries management, co- management and empowering of fishers in fisheries management	4
6) Providing recommendations for management of shared stocks, and resolving conflicts among countries in fisheries outside their respective EEZ	4
7) Harmonization of vessel registration and fishery licensing	5
Component 2: Fishing Technology and Practices	
8) Promotion and awareness building on responsible fishing	1
9) Improving fish quality through on-board fish handling technologies and good practices for small-scale fisheries	2
10) Developing and enhancing the use of automated and mechanized fishing gears and energy saving technologies	3
Component 3: Post-harvest Technology and Trade-related Issues	
11) Improving post-harvest technologies and safety/quality of products for export	1
12) Addressing emerging requirements for traceability/ certification of fishery products for export*	1
13) Preventing trade of IUU fishing products	2
14) Developing new technologies for fishery post-harvest, including value-added products and reduction of wastes	3
15) Enhancing market access of products from small-scale fishers	4
Component 4: Sustainable Aquaculture	
16) Promoting best management practices in aquaculture	1
17) Fish Health Management: transboundary-disease control**	1
18) Development of feeds to reduce dependence on fish meal and fish-based products	2
19) Minimizing impacts of aquaculture on the environment/ biodiversity	3
20) Advancing aquaculture technologies	4
21) Implementing regional guidelines for good aquaculture practices	5
22) Undertaking R&D on aquaculture that are required for different objectives, e.g. for economic development, food security, livelihood improvement, resources enhancement, etc.	6
23) Giving more emphasis on the roles of aquaculture for food security and poverty alleviation, especially using indigenous species, as well as technology verification and extension activities	7
Component 5: Fisheries Information and Statistics	
24) Improving the harmonization and collect/compilation of fishery statistics and information	1
25) Enhancing the analysis, interpretation and analysis of available data and information to provide information status and trends of fisheries and aquaculture, and support science-based policy planning and management of fisheries	1
26) Improving database of fishery information and statistics to facilitate sharing/dissemination of data and information	1
Component 6: Human Resources Development	
27) Assessing human resources requirements of the Member Countries, and providing human resources development program, particularly in the areas where shortage could be envisaged in the future	1

Components/Issues	Rank of Priority
Component 7: Inland Fisheries	
28)Habitat conservation/rehabilitation and resource enhancement for inland fisheries, including inundated forest and wetland	1
29)Co-management, rights-based fisheries, strengthening institutions, alternative livelihood	2
30)Ecosystem approach to inland fisheries	3
31)Enhancing awareness on the importance of inland fisheries, including contribution to food security	4
32)Measures needed to mitigate effects of climate change and to build adaptive capacity	5
33)Indicators for sustainable inland fisheries	6
34)Improving methodologies for collection of data and information on inland fisheries	6
35)Management of fishing capacity and combating IUU fishing	7
36)Enhancing interconnectivity of habitat and mitigating impacts from water infrastructure	8

Remarks

* The high priority level was recommended at the 46CM

** This new issue was raised as high priority at the 46CM

OPERATIONS OF THE M.V. SEAFDEC AND M.V. SEAFDEC 2

I. EXECUTIVE SUMMARY

The Southeast Asian Fisheries Development Center/Training Department (SEAFDEC/TD) operates two training/research vessels constructed with financial support from the Government of Japan. These are the M.V. SEAFDEC and the M.V. SEAFDEC 2. Over the years, these vessels have been utilized mainly for training activities which are aimed at providing intensive practical experiences to enhance the expertise of trainees at sea and ensure effective technology transfer. In addition, the vessels have also been used by the SEAFDEC Member Countries in carrying out national assessments of their respective fishery resources in their EEZs upon request of the countries and other government-related agencies.

In this connection, SEAFDEC/TD has been providing technical assistance and facilities for research and training programs through these two vessels for national/regional activities including: (i) cruises for fishery resources surveys; and (ii) human resources capacity building programs on fishing gear trials, sampling, oceanography, and navigation for both national and regional levels.

An operation plan of the training/research vessels of SEAFDEC/TD is therefore, prepared to report the vessels' milestones, contributions to the efforts of the SEAFDEC Member Countries and the utilization plan of those two vessels for the up-coming year. The utilization plan is submitted to the 48th Meeting of the SEAFDEC Council to seek for their endorsement in order that SEAFDEC/TD would be able to undertake such plan.

II. UTILIZATION OF THE VESSELS

In the case of the M.V. SEAFDEC, it has been recorded that her services had decreased drastically from 100~200 days/year (during 1993 to 2000) to only 25~100 days/year since 2001. This was due to the fact that regular training course onboard M.V. SEAFDEC has been terminated starting 2001. Referring to the record of utilization of the M.V. SEAFDEC over the past 11 years (from 2004 to 2015), her utilization included: (i) fisheries, environmental, and oceanographic survey in several areas such as Gulf of Thailand, Andaman Sea, Indian Ocean, East Timor Sea; (ii) regional research program under technical cooperation with the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC); and (iii) deployment and maintenance of Tsunami Warning System in the Andaman Sea and Indian Ocean under technical arrangement with the National Disaster Warning Center (NDWC) of Thailand.

Meanwhile, the M.V. SEAFDEC 2 has been utilized to assess the fishery resources by means of extensive scientific surveys of the coastal and offshore fishery resources. The vessel is also used to implement various fishery training programs with regard to promoting the utilization of fishery resources in offshore/deep sea fisheries as well as exploration of un-trawlable grounds in the EEZs of the Member Countries.

In a broader sense, the acquisition of the M.V. SEAFDEC 2 has helped in strengthening the technical cooperation as well as the effective fisheries and environmental management in the ASEAN region through the enhancement of research and training capabilities.

For the Year 2015, the M.V. SEAFDEC 2 had served a total of 148 days of which 54 days was mainly for the "Joint Research Program for Tuna Research Survey in Sulu-Sulawesi Seas" upon request from three (3) Member Countries, namely: Indonesia, Malaysia and the Philippines. The activities included oceanographic survey, hydro-acoustic survey and fishing trials. She had also spent 4 days for fishing gear trials (trawl) and trap shipboard training oceanographic survey conducted by university students. Besides, she had spent 86 days for the National Research Survey of Malaysia and another 4 days for the shipboard training under the observers' onboard program of the Department of Fisheries of Thailand.

Table 1 shows the total number of days at sea of the M.V. SEAFDEC 2 since 2004 which was 1,178 days or an average of approximately at 107.0 days/year. The countries that utilized the services of the M.V. SEAFDEC 2 were Brunei Darussalam, Malaysia, Thailand, and Viet Nam for a total of more than 200 days.

Table 1. Number of days at sea of the M.V. SEAFDEC 2 utilized by the Member Countries of SEAFDEC from 2004 to 2015 (unit = number of days)

Year	Brunei	Cambodia	Indonesia	Malaysia	Myanmar	Philippines	Thailand	Viet Nam	Total days
2004	34						14		48
2005	27	13	20	42		46	26	30	204
2006	29		22	29		23	40	30	173
2007					43	40	40		123
2008	31						64		95
2009			30						30
2010	41			45					86
2011	27						24		51
2012								143	143
2013							23		23
2014			28*	3*		23*			54*
2015			54*	86*			8		148
Sub-total	189	13	154	205	43	132	239	203	1,178
Utilization by the Countries	16%	1%	13%	17%	4%	11%	20%	18%	100%
								Total	1,178

Remark: *Mainly for the “Joint Research Program for Tuna Research Survey in Sulu-Sulawesi Seas”

III. OBJECTIVES

In general, the utilization of the research and training vessels M.V. SEAFDEC and M.V. SEAFDEC 2 is mainly for:

- Assisting Member Countries and requesting countries/agencies in conducting research surveys;
- Assisting Member Countries and requesting countries/agencies in building human resources capacity in various technical fields during the cruise surveys based on their request and the competency of SEAFDEC; and
- Providing technical support in order to analyze potential fishery resources

IV. OPERATIONS OF THE TRAINING/RESEARCH VESSELS OF SEAFDEC TRAINING DEPARTMENT IN 2016 AND 2017

➤ M.V. SEAFDEC 2

For 2016, a total of about 10 weeks for 2 cruises is initially proposed for the operation and utilization of the M.V. SEAFDEC 2. The “Shipboard Training for the observers’ onboard program/DOF-Thailand” is proposed to be carried out from 7th to 10th April for 4 days, followed by the “National Survey of Malaysia on Demersal Fish Stock Assessment” which is planned to be carried out for 65 days from 5th May to 9th July 2016.

➤ M.V. SEAFDEC

For 2016, a collaborative research survey has been proposed to be carried by the Bay of Bengal (BOB) and Phuket Marine Biological Center (PMBC) of Thailand for 60 days during 15th October to 17th December 2016. The Deployment Tsunami Warning System in the Indian Ocean and Andaman Sea had been proposed to be carried out from 17 December 2016 to 7 January 2017 (22 days) and 7 to 20 January, 2017 (14 days), respectively.

The proposed annual operation plan of the M.V. SEAFDEC 2 and M.V. SEAFDEC for the Year 2016 and to continue in 2017, appears as **Table 2**.

Table 2 Program of activities of M.V. SEAFDEC 2 and M.V. SEAFDEC for the Year 2016

Vessel's Name	Month-2016												2017
	J	F	M	A	M	J	J	A	S	O	N	D	J
M.V. SEAFDEC 2													
<i>Shipboard training for observers' onboard program/DOF-Thailand (7-10 April, 4 days)</i>													
<i>National Research Survey for Malaysia (5 May to 9 July 2016, 65 days)</i>													
M.V. SEAFDEC													
<i>Research survey, in collaboration with the Bay of Bengal and Phuket Marine Biological Center, Thailand (15 October to 17 December 2016, 60 days)</i>													
<i>Deployment of Tsunami Warning System in Indian Ocean, NDWC of Thailand (17 December to 7 January 2017, 22 days)</i>													
<i>Deployment Tsunami Warning System in Andaman Sea, NDWC of Thailand (7 to 20 January 2017, 14 days)</i>													

V. REQUIRED CONSIDERATION BY THE 48TH COUNCIL MEETING

1. To take note of the proposed plan of operation of the M.V. SEAFDEC in 2016 until 2017,
2. To take note of the utilization of the M.V. SEAFDEC 2 in 2015, and
3. To endorse the proposed plan of operation of the M.V. SEAFDEC 2 in 2016 and 2017 (as continuously program)

COLLABORATIVE ARRANGEMENTS BETWEEN SEAFDEC AND OTHER ORGANIZATIONS

I. SIGNING OF ARRANGEMENTS IN 2015 UNTIL PRESENT

Agency for Marine and Fisheries Research and Development (AMAFRAD), Indonesia

SEAFDEC established a Collaborative Arrangement with the Agency for Marine and Fisheries Research and Development (AMAFRAD) under the Ministry of Marine Affairs and Fisheries, Indonesia for the conduct of joint research activities in inland fisheries in the Member Countries of SEAFDEC. Signed on 14 September 2015, the Collaborative Arrangement would be valid until 31 December 2017. The concrete objectives and scopes of activities, and other detailed research activities are made part of the signed Collaborative Arrangement including the Plans on: 1) Research activities on Catadromous Eel Resources in Southeast Asia; and 2) Cooperative Research Activities on Fisheries and Aquaculture of Tropical Eel in Java Island, Indonesia. Through this Arrangement, AMAFRAD will provide necessary support for the implementation of the planned activities, especially those by scientists, experts and/or researchers from SEAFDEC to conduct their research activities in Indonesia during the tenure of the Arrangement.

Australian Center for International Agricultural Research (ACIAR)

SEAFDEC signed a Letter of Agreement with the Australian Center for International Agricultural Research (ACIAR) on 14 May 2015, for SEAFDEC to carry out an activity on the “Application of fish passage design principles to enhance sustainability of inland fishery resources in the Southeast Asian region”. Through such Arrangement, SEAFDEC received a grant for a 16-month R&D activity starting from May 2015 until September 2016. This activity aims to: (i) develop a regional collaborative approach on fish passage through the conduct of an expert workshop; (ii) design and construct experimental fishway facilities in Thailand; and (iii) provide a pathway for further research to improve knowledge on appropriate designs that could facilitate upstream migration of indigenous fishes. Under this project, a fishway model would be designed to take into consideration the critical parameters, *e.g.* slope, water flow/velocity, pass dimension, which could be adjusted in order to determine the most appropriate design for various conditions. Experiments would be conducted on-station using selected indigenous fish species. The research results would provide the basic information on the considerations for designing fish passes that could be applied for different localities of the Southeast Asian region.

Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)

SEAFDEC signed a five-year Memorandum of Understanding (MOU) for cooperation with the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) on 3 April 2015. The MOU covers: (i) human resources development; (ii) research and development; (iii) consultancy; and (iv) information management and networking. Such MOU would serve as platform for sharing of knowledge and experiences gained from the past works of both CTI-CFF and SEAFDEC for the benefit of the Member Countries of the two organizations. For particular collaborative activities to be undertaken under this MOU, SEAFDEC and CTI-CFF would initiate proposals for specific activities to be carried out through Letters of Agreement, which shall become integral part of the MOU.

Following to the signing of the MOU, discussions had been pursued on possible areas for collaborative activities between SEAFDEC and CTI-CFF. These may include (but not limited to) Ecosystem Approach to Fisheries Management (EAFM), Live Reef Food Fish Trade (LRFFT), Port State Measures (PSM), and Traceability.

Faculty of Science, Hokkaido University (HU), Japan

The cooperation between SEAFDEC and the Faculty of Science, Hokkaido University was first established with the signing of five-year Arrangement for Scientific, Educational, and Technical Cooperation on 7 February 2007, and the Arrangement was extended on 25 February 2011. On 25 February 2016, SEAFDEC therefore signed another 5-year extension of Arrangement with Hokkaido University, Japan to promote cooperation on research and other activities in areas of mutual interest. Activities covers in this Arrangement include: 1) Exchange of information including research publications and library materials; 2) Joint research and training activities; 3) Visits by and exchange of researchers and students; and 4) participation of their respective researchers and students in events on matters of mutual interest.

Food and Agriculture Organization of the United Nations (FAO)

SEAFDEC signed a Letter of Agreement (LOA) with FAO on 15 January 2015 for the “Technical Exchange in Fisheries between Myanmar and Thailand.” Supported by the Bay of Bengal Large Marine Ecosystem (BOBLME) Project of FAO, the LOA facilitated technical exchange of fisheries scientists from SEAFDEC and the Department of Fisheries of Thailand to work with counterparts from Myanmar in investigating the biology and life cycle of hilsa (*Tenualosa ilisha*). In return, Myanmar scientists visited some research facilities in Thailand to obtain experience on this aspect while continuing their work on hilsa. Collection of hilsa juveniles from Myanmar waters was undertaken and the juveniles were subsequently shipped to Thailand for further study.

SEAFDEC/AQD also signed Letter of Agreement with FAO on 4 March 2015 to carry out a Trust Fund Project of the Aquatic Science and Fisheries Abstract (ASFA) on the “Digitization, Open Access Deposition and the Provision of URL’s to Existing ASFA Records of AQD Publications” which was agreed at the 2014 ASFA Advisory Board Meeting. The output of this project would include preservation of AQD documents (publications, bibliographic records and links to full text documents) in digital format, for storage in an open access repository and inclusion in ASFA, making the information widely available to the scientific community.

SEAFDEC/TD also signed another Letter of Agreement with FAO on 16 March 2016 for provision of execution of the project on “Strategies for Trawl Fisheries Bycatch Management” or REBYC-II CTI Project. Under this Agreement, SEAFDEC would organize a series of regional workshops, writeshops, and meetings that are aimed at consolidating and summarizing progress made by the project. The activity under this Agreement would be undertaken during the period from March - June 2016.

Graduate School of Agricultural and Life Sciences, University of Tokyo (GSALS-UT)

The original five-year Memorandum of Understanding (MOU) between SEAFDEC and the Graduate School of Agricultural and Life Sciences, University of Tokyo (GSALS-UT) was signed on 5 November 2004, and the MOU was extended on 15 July 2010. On 9 December 2015, SEAFDEC therefore signed the extension of the MOU with GSALS-UT for the conduct of programs that are of interest to both organizations. Specifically, the MOU aims to encourage direct communication between researchers of the two organizations, and promote academic exchange in information, training and research as well as share knowledge and initiate discussions on matters of mutual interest. While the cooperation and exchange programs set forth in the original MOU remain in force, the extension of the five-year MOU was made retroactive from 15 July 2015.

Islamic Development Bank (IDB)

SEAFDEC developed a project proposal on “Enhancing Coastal Community Resilience for Sustainable Livelihood and Coastal Resources Management” for funding support from the Islamic Development Bank (IDB) in 2007. Target beneficiaries of this project focus on the Muslim communities in the region’s coastal areas of three countries, namely: Brunei Darussalam, Malaysia, and Indonesia. The proposal was submitted to ASEAN Secretariat for consideration and support by ASEAN dialogue partners and IDB since January 2009. Following long communication processes, IDB informed the

ASEAN Secretariat in 2015 that IDB has approved signing the Technical Assistance (TA) Agreement between IDB and SEAFDEC.

Japan International Cooperation Agency (JICA)

The Government of Japan provided to SEAFDEC/TD since 2004 the M.V. SEAFDEC 2 through the Japan's Grant Aid Scheme for Eligible Countries. During the past decade, the vessel has been utilized to support the mission of TD in promoting responsible and sustainable tropical marine capture fisheries in the Southeast Asian region, through the conduct of marine fishery resources and environmental surveys in close collaboration with the Member Countries. After such long service, some equipment in the vessel were found to be no longer efficient and not in proper working condition. Discussion was therefore initiated between SEAFDEC and JICA in 2015 on the possibility of restoring the functions of the M.V. SEAFDEC 2. The draft "Minutes of Discussions on Follow-up Cooperation Study on the Project for Construction of a Fisheries Research and Training Vessel" was developed to provide framework on the roles of each Party in restoring the vessel, which was approved by the SEAFDEC Council by *ad referendum* on 16 November 2015. The Minutes of the Discussion on follow-up activities on this matter was signed on 18 January 2016.

Japan International Research Center for Agricultural Sciences (JIRCAS)

Contract Research Agreements were signed between SEAFDEC/AQD and Japan International Research Center for Agricultural Sciences (JIRCAS) for AQD to implement two contracted research activities from April 2015 until 29 February 2016.

The first Contract Agreement on "Verifying a Combination of IMTA Species in Marine Pen Culture Systems" aims to verify a combination of different aquaculture species for integrated multi-trophic aquaculture (IMTA) in a marine pen system. The capacity of oysters in filtering suspended matters, *imbao* (a species of mangrove clam) in assimilating sulfide, and seaweeds as biofilters in an IMTA system in pens would be verified by comparing the DO, sulfide and nutrient levels in different treatments using different species combinations, and by comparing the growth and survival of all species reared in different treatments.

The second Contract Agreement on "On-farm Strategies for Promoting IMTA through Sustainable Livelihood Approach (SLA) in Guimaras, Philippines" has the specific objectives of identifying the socio-economic opportunities and problems experienced during the on-farm demonstration of IMTA in milkfish mariculture for livelihood improvement in the Philippines; conducting a cost-benefit analysis of IMTA in milkfish mariculture; and recommending management practices, strategies and policies for promoting IMTA in milkfish mariculture in the Philippines.

Tokyo University of Marine Science and Technology (TUMSAT), Japan

The original Arrangement for Academic and Educational Cooperation between SEAFDEC and the Tokyo University of Marine Science and Technology (TUMSAT) was established on 30 June 2004, and was extended on 1 April 2010. SEAFDEC therefore signed on 6 July 2015 an extension of the five-year Arrangement with TUMSAT for the promotion of programs that are of interest between the two organizations. The Arrangement aims to promote academic and educational cooperation in the area of mutual interest. While the cooperation and exchange programs set forth in the original Agreement remains into force, extension of the Arrangement was made retroactive from 1 April 2015.

United Nations Environmental Program (UNEP)

SEAFDEC has developed since 2009 the project proposal on "Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand" for funding support from the Global Environmental Facilities (GEF) through the United Nations Environmental Program (UNEP). The Project focuses on establishing a regional system of fisheries *refugia* by expanding the network of fisheries *refugia* in the South China Sea and Gulf of Thailand for improved management of fisheries and critical marine habitats, with Cambodia, Indonesia, Malaysia, Philippines, Thailand and



Viet Nam as participating countries. GEF Chief Executive Officer (CEO) has already endorsed the project; and the Project Cooperation Agreement was signed by SEAFDEC and UNEP.

Universiti Malaysia Sabah

On 17 March 2015, a Memorandum of Understanding (MOU) between Universiti Malaysia Sabah and SEAFDEC/AQD to encourage and promote collaboration among faculty and staff members for: (i) research, symposia, and other academic pursuits as feasible and mutually agreed; (ii) exchange visits by students as mutually agreed and jointly arranged; (iii) joint research activities when mutually agreed and feasible; and (iv) exchanges of informational materials on education, training, and research matters. The MOU will remain in effect for a period of five years.

University of Santo Tomas, Philippines

SEAFDEC/AQD has entered into a Memorandum of Agreement with University of Santo Tomas, a private institution of higher learning in the Philippines, for a two-year collaborative research project on “Mass production of dsRNA to mitigate WSSV infection in *Penaeus monodon*.” Under such project, AQD is expected to implement the following research project components: (i) Accountability of resistance against WSSV infection among *P. monodon* individuals and (ii) Efficacy of feeds with dsRNA on WSSV-infected *P. monodon* individuals. In addition to collecting data, AQD will collect *P. monodon* specimens from these studies based on an experimental plan agreed upon by SEAFDEC and UST, and would house and maintain the heritability experiments of the project.

II. COLLABORATION UNDER SIGNING PROCESS

Network of Aquaculture Centres in Asia-Pacific (NACA)

Cooperation of SEAFDEC and the Network of Aquaculture Centres in Asia-Pacific (NACA) had long been established with the SEAFDEC/Aquaculture Department (AQD) serving as one of the NACA’s regional lead centers. The collaborative activities between NACA and AQD focused on development of aquaculture technologies and sharing knowledge and experiences through various regional and international events. During the 47th Meeting of the SEAFDEC Council in 2015, NACA informed the SEAFDEC Council on the intention of NACA to revitalize the Memorandum of Understanding for AQD to serve as NACA Collaborating Centre and following on this proposal, the Memorandum of Understanding between NACA and AQD was developed. The formalization of this collaboration would facilitate exchange of information and conduct of collaborative activities between AQD, NACA and other NACA lead centres. In addition, AQD could also be requested to provide technical advice and conduct technical training for NACA member governments and participating network centres, provided that all costs are shouldered by requesting parties. This collaboration would also allow AQD to obtain information on relevant activities undertaken by other organizations that could be mobilized for the Southeast Asian region, while the services of experts and utilization of facilities at AQD could also be optimized in the future.

SEAFDEC has circulated the letter to all Council Directors to seek approval for signing of MOU between NACA and SEAFDEC; and the MOU will be signed in due course.

III. NEW COLLABORATION PROPOSED FOR APPROVAL BY THE COUNCIL

Gifu Prefecture, Japan

SEAFDEC is planning to establish collaborative arrangement with Gifu Prefecture through signing of Memorandum of Understanding between the two institutions to promote educational and technical cooperation for sustainable development of inland fisheries in the Southeast Asian region. Cooperation would be undertaken in areas of mutual interest, particularly in exchange of information; visits by and exchange of staffs for education, research, study and training; and participation of staff in meeting and trainings on matters of mutual interest. The MOU would be effective for five years from the signing date.

IV. REQUIRED CONSIDERATION BY THE COUNCIL

1. The Council is requested to take note of the signing of Collaborative Arrangements between SEAFDEC and Other Organizations in 2015 until present.
2. The Council is requested to take note of the Collaborative Arrangement between SEAFDEC and Network of Aquaculture Centres in Asia-Pacific (NACA), which are under process and would be signed in due course.
3. The Council is requested to consider and approve the signing of Memorandum of Understanding between Gifu Prefecture and SEAFDEC.

**MEMORANDUM OF UNDERSTANDING
BETWEEN
GIFU PREFECTURE
AND
THE SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

The Gifu prefecture (GIFU) and the Southeast Asian Fisheries Development Center (SEAFDEC) hereby agree to promote educational and technical cooperation for the sustainable development of inland fisheries in the Southeast Asian region.

The two (2) institutions will endeavor to cooperate in the areas of mutual interest under the following principles :

1. Cooperation will be promoted in the following activities:
 - 1.1) Exchange of information, including on inland fisheries;
 - 1.2) Visits by and exchange of staffs, officers/researchers for education, research, study, and training; and
 - 1.3) Participation of their respective staffs, officers/researchers in meetings and trainings on matters of mutual interest.
2. Both institutions will encourage direct communication and cooperation, including between their respective staffs.
3. Detailed implementation of any particular activities under this Memorandum of Understanding (MOU) is to be decided through the discussion between both institutions.
4. This MOU is effective for five (5) years, starting on the date of signing by both institutions, and may be reviewed, amended or modified by the consent of both institutions.
5. This MOU may be terminated at any time by mutual consent or by giving six (6) months written notice to the other.
6. Disputes and disagreements relating to this MOU will be resolved through dialogue between the GIFU and SEAFDEC.

In witness whereof, both institutions have executed this MOU on 27th of May 2016, written in duplicate, one (1) original copy of which is kept by each institution.

The Gifu prefecture (GIFU)

The Southeast Asian Fisheries Development
Center (SEAFDEC)

by: _____
Mr. Hajime Furuta
Governor
Gifu prefecture

by: _____
Dr. Kom Silapajarn
Secretary-General
Southeast Asian Fisheries Development
Center

AUDITED CONSOLIDATED FINANCIAL STATEMENT FOR THE YEAR 2014

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
ABRIDGED CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2014 AND 2013

	In US\$	
	2014	2013
REVENUES		
Contributions from:-		
Member governments	8,103,850	7,800,490
Other sources	2,933,072	1,940,026
Other income	766,794	784,074
TOTAL REVENUES	11,803,716	10,524,590
EXPENDITURES		
Operating and Capital Expenditures		
Research	4,360,504	3,723,779
Training	1,027,545	723,813
Information	661,367	569,536
Collaborative	188,710	86,236
Others	976,394	700,134
Administrative	4,068,066	3,252,299
TOTAL EXPENDITURES	11,282,586	9,055,797
EXCESS(DEFICIENCY), For the year	521,130	1,468,793
FUND BALANCE, Beginning of year	7,375,019 ^{1/}	5,937,813
FUND ADJUSTMENT	27,203	2,507
FUND BALANCE, End of year	7,923,352	7,409,113 ^{1/}
REPRESENTED BY:		
Cash and cash equivalents	9,324,514	7,944,280
Other receivables	768,529	376,900
Advances and Deposits	62,158	47,549
Supplies inventory	54,474	71,824
Fuel oil for vessels	94,326	102,768
Prepayments	18,697	25,729
Total Current assets	10,322,698	8,569,050
Reserved budget for vessel periodic maintenance	747	102,889
Termination indemnity fund	2,100,028	1,949,619
Long-term investments	-	217,543
Other noncurrent assets	401,349	337,251
Total Assets	12,824,822	11,176,352
Less: Liabilities		
Accounts and other payables	1,071,500	617,700
Contribution received in advance	1,336,718	856,351
Funds held in trust	393,428	329,689
Total Current Liabilities	2,801,646	1,803,740
Provision for termination indemnity	2,099,824	1,949,619
Total Liabilities	4,901,470	3,753,359
Unrealized gain on available-for-sale Financial Assets	-	13,880
TOTAL NET ASSETS	7,923,352	7,409,113

^{1/} The difference of US\$ 34,094 (US\$ 7,375,019 – US\$ 7,409,113) resulted from the change of rate in US\$ translation.



SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
THE SECRETARIAT
ABRIDGED FINANCIAL STATEMENTS
DECEMBER 31, 2014 AND 2013

	In US\$	
	<u>2014</u>	<u>2013</u>
REVENUES		
Contributions from:-		
Member governments	456,000	438,000
Other sources	86,325	104,043
Other income	<u>(4,402)</u>	<u>10,067</u>
TOTAL REVENUES	<u>537,923</u>	<u>552,110</u>
EXPENDITURES		
Operating and Capital Expenditures		
Information	55,875	41,398
Collaborative	188,710	86,236
Others	-	-
Administrative	<u>199,475</u>	<u>200,041</u>
TOTAL EXPENDITURES	<u>444,060</u>	<u>327,675</u>
EXCESS(DEFICIENCY), For the year	93,863	224,435
FUND BALANCE, Beginning of year	<u>459,933</u> ^{1/}	<u>237,051</u>
FUND BALANCE, End of year	<u>553,796</u>	<u>461,486</u> ^{1/}
REPRESENTED BY:		
Cash and cash equivalents	499,081	442,729
Other receivables	73,041	50,983
Advances and Deposits	5,379	700
Prepayments	<u>1,517</u>	<u>932</u>
Total Current assets	579,018	495,344
Reserved budget for vessel periodic maintenance	<u>747</u>	<u>102,889</u>
Total Assets	<u>579,765</u>	<u>598,233</u>
Less: Liabilities		
Accounts and other payables	<u>25,969</u>	<u>136,747</u>
Total Liabilities	<u>25,969</u>	<u>136,747</u>
TOTAL NET ASSETS	<u>553,796</u>	<u>461,486</u>

^{1/} The difference of US\$ 1,553 (US\$ 459,933– US\$ 461,486) resulted from the change of rate in US\$ translation.

**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
DECEMBER 31, 2014 AND 2013**

	In US\$	
	<u>2014</u>	<u>2013</u>
REVENUES		
Contributions from:-		
Member governments	2,639,462	2,520,273
Other sources	1,415,703	925,302
Other income	148,619	178,876
TOTAL REVENUES	<u>4,203,784</u>	<u>3,624,451</u>
EXPENDITURES		
Operating and Capital Expenditures		
Research	372,793	381,427
Training	861,793	600,690
Information	216,177	226,821
Others	976,394	700,134
Administrative	1,220,636	877,393
TOTAL EXPENDITURES	<u>3,647,793</u>	<u>2,786,465</u>
EXCESS(DEFICIENCY), For the year	555,991	837,986
FUND BALANCE, Beginning of year	<u>4,515,272</u> ^{1/}	<u>3,692,531</u>
FUND BALANCE, End of year	<u>5,071,263</u>	<u>4,530,517</u> ^{1/}
REPRESENTED BY:		
Cash and cash equivalents	6,280,014	5,231,529
Other receivables	80,767	89,623
Advances and Deposits	11,661	13,781
Fuel oil for vessels	94,326	102,768
Prepayments	17,180	24,797
Total Current assets	6,483,948	5,462,498
Termination indemnity fund	<u>2,100,028</u>	<u>1,949,619</u>
Total Assets	<u>8,583,976</u>	<u>7,412,117</u>
Less: Liabilities		
Accounts and other payables	76,171	75,630
Contribution received in advance	<u>1,336,718</u>	<u>856,351</u>
Total Current Liabilities	1,412,889	931,981
Provision for termination indemnity	<u>2,099,824</u>	<u>1,949,619</u>
Total Liabilities	<u>3,512,713</u>	<u>2,881,600</u>
TOTAL NET ASSETS	<u>5,071,263</u>	<u>4,530,517</u>

^{1/} The difference of US\$ 15,245 (US\$ 4,515,272 – US\$ 4,530,517) resulted from the change of rate in US\$ translation.



**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
AQUACULTURE DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
DECEMBER 31, 2014 AND 2013**

	In US\$	
	<u>2014</u>	<u>2013</u>
REVENUES		
Contributions from:-		
Member governments	3,801,431	3,828,829
Other sources	1,431,044	910,681
Other income	<u>622,577</u>	<u>595,131</u>
TOTAL REVENUES	<u>5,855,052</u>	<u>5,334,641</u>
EXPENDITURES		
Operating and Capital Expenditures		
Research	3,987,711	3,342,352
Training	165,752	123,123
Information	389,315	301,317
Administrative	<u>1,440,998</u>	<u>1,161,477</u>
TOTAL EXPENDITURES	<u>5,983,776</u>	<u>4,928,269</u>
EXCESS(DEFICIENCY), For the year	(128,724)	406,372
FUND BALANCE, Beginning of year	2,399,814 ^{1/}	2,008,231
FUND ADJUSTMENT	<u>27,203</u>	<u>2,507</u>
FUND BALANCE, End of year	<u>2,298,293</u>	<u>2,417,110</u> ^{1/}
REPRESENTED BY:		
Cash and cash equivalents	2,545,419	2,270,022
Receivables	613,000	235,071
Advances and Deposits	45,118	33,068
Supplies inventory	54,474	71,824
Other Current Assets	<u>1,721</u>	<u>1,223</u>
Total Current assets	3,259,732	2,611,208
Long-term investments	-	217,543
Other noncurrent assets	<u>401,349</u>	<u>337,251</u>
Total Assets	<u>3,661,081</u>	<u>3,166,002</u>
Less: Liabilities		
Accounts and other payables	969,360	405,323
Funds held in trust	<u>393,428</u>	<u>329,689</u>
Total Liabilities	<u>1,362,788</u>	<u>735,012</u>
Unrealized gain on available-for-sale Financial Assets	-	<u>13,880</u>
TOTAL NET ASSETS	<u>2,298,293</u>	<u>2,417,110</u>

^{1/} The difference of US\$ 17,296 (US\$ 2,399,814 – US\$ 2,417,110) resulted from the change of rate in US\$ translation

**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
MARINE FISHERIES RESOURCES DEVELOPMENT
AND MANAGEMENT DEPARTMENT
ABRIDGED FINANCIAL STATEMENTS
DECEMBER 31, 2014 AND 2013**

	In US\$	
	2014	2013
REVENUES		
Contributions from:-		
Member governments	1,206,957	1,013,388
TOTAL REVENUES	1,206,957	1,013,388
EXPENDITURES		
Operating and Capital Expenditures		
Administrative	1,206,957	1,013,388
TOTAL EXPENDITURES	1,206,957	1,013,388
EXCESS(DEFICIENCY), For the year	-	-
FUND BALANCE, Beginning of year	-	-
FUND ADJUSTMENT	-	-
FUND BALANCE, End of year	=	=
REPRESENTED BY:		
Cash and cash equivalents	-	-
Advances and Deposits	-	-
Total Current assets	-	-
Total Assets	=	=
Less: Liabilities		
Accounts and other payables	-	-
Total Liabilities	=	=
TOTAL NET ASSETS	=	=

UN-AUDITED CONSOLIDATED FINANCIAL REPORT FOR THE YEAR 2015

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF NET ASSETS
DECEMBER 31, 2015 AND 2014

	In US\$	
	2015 (Un-audited)	2014 (Audited)
ACCUMULATED FUND		
As at December 31	<u>7,775,349</u>	<u>7,923,352</u>
REPRESENTED BY:		
Current assets		
Cash in hand and at banks	8,340,729	9,324,514
Other receivables and Advances	832,202	830,687
Supplies inventory	47,261	54,474
Fuel for vessels	98,155	94,326
Prepayments	<u>19,377</u>	<u>18,697</u>
Total Current assets	<u>9,337,724</u>	<u>10,322,698</u>
Reserved budget for vessel periodic maintenance	75,154	747
Termination indemnity fund	1,921,757	2,100,028
Other assets	<u>306,768</u>	<u>401,349</u>
Total Other assets	<u>2,303,679</u>	<u>2,502,124</u>
Total Assets	<u>11,641,403</u>	<u>12,824,822</u>
Less: Liabilities		
Accounts and other payables	871,757	1,071,500
Contribution received in advance	814,321	1,336,718
Funds held in trust	258,219	393,428
Provision for staff termination indemnity	<u>1,921,757</u>	<u>2,099,824</u>
Total Liabilities	<u>3,866,054</u>	<u>4,901,470</u>
TOTAL NET ASSETS	<u>7,775,349</u>	<u>7,923,352</u>

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF CONTRIBUTIONS AND EXPENDITURES
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	In US\$				Total	
	Operating Fund			2015	2014	
	Host Department	MRC	Fellowship Fund	Others Fund	(Un-audited)	(Audited)
CONTRIBUTIONS						
Contributions from :-						
Government of Brunei Darussalam		7,000			7,000	7,000
Government of Cambodia		11,000			11,000	11,000
Government of Indonesia	1,901,308	26,000			1,927,308	26,000
Government of Japan		280,000			280,000	280,000
Government of Lao PDR		5,000			5,000	5,000
Government of Malaysia	921,398	21,000			942,398	1,227,957
Government of Myanmar		21,000			21,000	21,000
Government of Philippines	3,612,410	25,000			3,637,410	3,826,431
Government of Singapore		13,000			13,000	13,000
Government of Thailand	2,762,830	33,000	21,534		2,817,364	2,672,462
Government of Viet Nam		26,000			26,000	14,000
Sub-total	9,197,946	468,000	21,534	0	9,687,480	8,103,850
Other sources	642,540	18,150	1,471	1,705,701	2,367,862	3,699,866
TOTAL CONTRIBUTIONS	9,840,486	486,150	23,005	1,705,701	12,055,342	11,803,716

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
CONSOLIDATED STATEMENTS OF CONTRIBUTIONS AND EXPENDITURES
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	In US\$				Total	
	Operating Fund		Fellowship	Others	2015	2014
	Host Department	MRC	Fund	Fund	(Un-audited)	(Audited)
EXPENDITURES						
Operating Expenditures						
Program of Activities :						
Research	2,421,575			986,065	3,407,640	4,360,504
Training	626,109		18,506	104,217	748,832	1,027,545
Information	372,402	47,514		11,697	431,613	661,367
Collaborative	7,017	188,204			195,221	188,710
Others				378,874	378,874	976,394
	<u>3,427,103</u>	<u>235,718</u>	<u>18,506</u>	<u>1,480,853</u>	<u>5,162,180</u>	<u>7,214,520</u>
Administrative & Capital expenditures	5,611,688	173,151		617,737	6,402,576	4,068,066
TOTAL EXPENDITURES	<u>9,038,791</u>	<u>408,869</u>	<u>18,506</u>	<u>2,098,590</u>	<u>11,564,756</u>	<u>11,282,586</u>
SURPLUS(DEFICIT) FOR THE YEAR	<u>801,695</u>	<u>77,281</u>	<u>4,499</u>	<u>-392,889</u>	<u>490,586</u>	<u>521,130</u>

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

**CONSOLIDATED STATEMENTS OF FUND BALANCE
DECEMBER 31, 2015 AND 2014**

In US\$

	Balance as at January 1, 2015	Adjustment of fund	Surplus (Deficit)	Balance December 31, 2015 (Un-audited)	Balance as at December 31, 2014 (Audited)
Operating fund	4,612,697	-28,488	878,976	5,463,185	5,010,796
Fellowship fund	183,271		4,499	187,770	200,987
Others fund	2,517,283		-392,889	2,124,394	2,711,569
Net	7,313,251 <u>1/</u>	-28,488	490,586	7,775,349	7,923,352 <u>1/</u>

(1) The difference of US\$ 610,101 (US\$ 7,923,352 – US\$ 7,313,251) resulted from the change of rate in US\$ translation

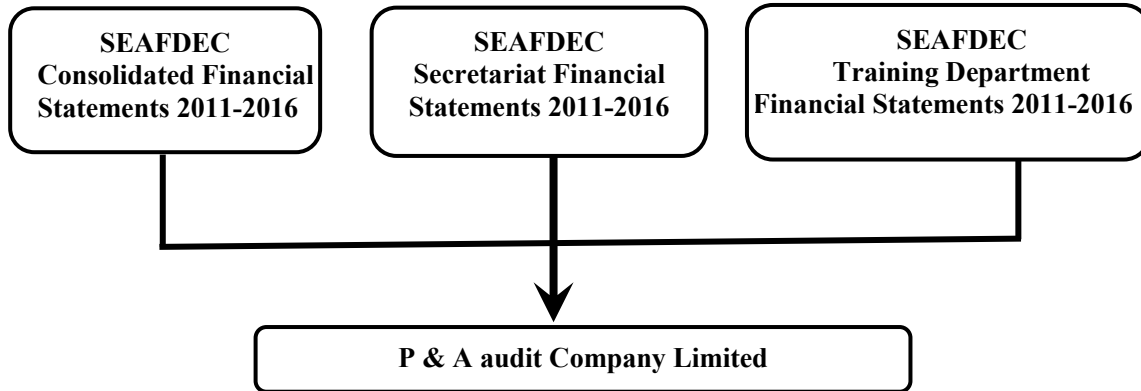
STATUS OF FINAICAL SITUATION FOR THE YEAR 2016
CONTRIBUTIONS RECEIVED FROM SEAFDEC MEMBER COUNTRIES
AS ANNUAL MINIMUM REGULAR CONTRIBUTION (MRC) IN 2016

(In US\$)

Countries	Minimum Regular Contribution (MRC)	Amount Received as at 31 March 2016
Brunei Darussalam	7,000	7,000
Cambodia	12,000	
Indonesia	52,000	
Japan	280,000	280,000
Lao P.D.R.	6,500	
Malaysia	21,500	
Myanmar	22,500	
Philippines	25,000	
Singapore	13,500	
Thailand	33,000	33,000
Viet Nam	27,000	
	500,000	320,000

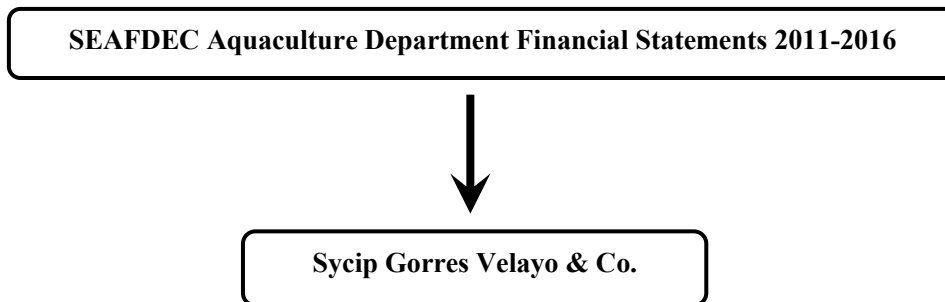
CONTACT PERSONS AND AUDIT FIRMS
FOR SEAFDEC IN 2011 - 2016

CONTACT PERSON AND EXTERNAL AUDIT FIRM



Auditor' name : Mr. Phongtorn Duangphanya
Address : 645 2nd Floor 3P Building
Navamin Road, Klongjan Bangkapi
Bangkok 10240, Thailand
Telephone : (662) 735-5711-2
Fax : (662) 374-1459
Email : pandaaudit2015@gmail.com

CONTACT PERSON AND EXTERNAL AUDIT FIRM



Auditor' name : Ms.Cyril Jasmin B. Valencia
Address : 302 A. Chan Building, Lacson Street
Mandalagan, Bacolod City,
6100 Negros Occidental, Philippines
Telephone : (632) 894-8106
Fax : (632) 818-1377
Email : Cyril.Jasmin.B.Valencia@ph.ey.com

CONTACT PERSON AND EXTERNAL AUDIT FIRM

**SEAFDEC Marine Fishery Resources Development and
Management Department Financial Statements 2011-2016**



Adib Azhar & Co. (AF 1446)

Auditor' name : Mr. Mohd Badaruddin Bin Ismail
**Address : 111C-1,First Floor, Jalan Batas Baru,
20300 Kuala Terengganu,
Terengganu, Malaysia**
Telephone : (609) 624-4616
Fax : (609) 624-5616
Email : adibazharktrg@gmail.com

CONTACT PERSON AND INTERNAL AUDIT DIVISION

**SEAFDEC Inland Fishery Resources Development and
Management Department Financial Statements 2015-2016**



**Indonesia Government Internal Audit
(Inspectorate General IV Division)**

Auditor' name : Mr.HerimawanMasykur F, S.Pi
**Address : Gd. Mina Bahari III Lt. 4-6
Ministry of Marine Affairs and
Fisheries
(Kementerian Kelautan dan Perikanan
RI)
JI Medan Merdeka Timur No.16
Jakarta Pusat 10110, Indonesia
Phone : 021- 352 2310 and Fax : 021-
352 2310**
Email address : herimawanmasykur@gmail.com

PROPOSED BUDGETARY REQUIREMENTS OF THE CENTER FOR THE YEAR 2017

Table 1: Estimated Contributions received by SEAFDEC from Member Countries and Other sources (in US Dollars) in fiscal Year 2016

Sources	Secretariat	Training Department	Marine Fisheries Research Department	Aquaculture Department	Marine Fishery Resources Development and Management Department	Inland Fishery Resources Development and Management Department	Total	
							In US\$	%
Brunei Darussalam	7,000						7,000	0.04
Cambodia	12,000						12,000	0.07
Indonesia	52,000					678,616 ^{h/}	730,616	4.51
Japan	280,000						280,000	1.73
Lao P.D.R.	6,500						6,500	0.04
Malaysia	21,500						1,928,502	11.90
Myanmar	22,500				1,907,002 ^{g/}		22,500	0.14
Philippines	25,000						4,974,381	30.72
Singapore	13,500			4,949,381 ^{f/}			13,500	0.08
Thailand	33,000	3,485,800 ^{d/}	0 ^{e/}				3,518,800	21.72
Viet Nam	27,000						27,000	0.17
Sub-total	500,000	3,485,800	0	4,949,381	1,907,002	678,616	11,520,799	71.12
Others ^{i/}	2,515,626 ^{b/}	956,600 ^{c/}		1,206,642 ^{v/}			4,678,868	28.88
Total	3,015,626 ^{a/}	4,442,400	0	6,156,023	1,907,002	678,616	16,199,667	100%

a/ Including Minimum Regular Contribution (MRC) from all SEAFDEC Member Countries = US\$500,000 (See Annex 1)

b/ Including extra-budgetary sources from Japanese Trust Fund = US\$1,335,126(Excluded MRC=US\$280,000) and Sweden Fund = US\$1,180,500 (See Annex 1)

c/ Including extra-budgetary sources from FAO,EU-CITES,UNEP/GEF,ACIAR and RIHN (Japan) (See Annex 2)

d/ Contribution from Thailand in cash = US\$2,545,800 and kind = US\$940,000 (see Annex 2)

e/ No contribution from Singapore (see Annex 3)

f/ Contribution in cash from Philippines (See Annex 4)

g/ Contribution in kind from Malaysia (See Annex 5)

h/ Contribution in kind from Indonesia (See Annex 6)

i/ Including contributions from non-member governments, international organizations/agencies and miscellaneous receipts.

Table 2 : Estimated Expenditures of the Center for 2016 (In US\$)

Category	SEC ^{1/}	TD ^{2/}	MFRD ^{3/}	AQD ^{4/}	MFRDMD ^{5/}	IFRDMD ^{6/}	Total	%
I Program of Activities								
1.1 Research Programs		489,700		2,955,386			3,445,086	21.27
1.2 Training Programs	5,000	837,800		687,630			1,530,430	9.45
1.3 Information Programs	86,000 ^{7/}	348,000		554,188			988,188	6.10
1.4 Collaborative Programs	150,000 ^{8/}	21,400					171,400	1.06
1.5 Other Programs	2,578,626 ^{9/}	926,600 ^{10/}		708,763 ^{12/}			4,213,989	26.01
Sub-total	2,819,626	2,623,500	0	4,905,967	0	0	10,349,093	63.88
II Administrative and Non-Program Expenditures								
2.1 Operating Expenditures	188,500	878,900		1,214,330			2,281,730	14.09
2.2 Capital Expenditures	7,500			35,726			43,226	0.27
2.3 In-kind Expenditures	196,000	878,900		1,250,056	-	-	2,324,956	14.36
		940,000 ^{11/}			1,907,002	678,616	3,525,618	21.76
Sub-total	196,000	1,818,900	0	1,250,056	1,907,002	678,616	5,850,574	36.12
TOTAL	3,015,626	4,442,400	0	6,156,023	1,907,002	678,616	16,199,667	100%

- Remarks :**
- ^{1/} Secretariat
 - ^{2/} Training Department: The Program of Activities are included administrative and others expenses which are directly related to the programs.
 - ^{3/} Marine Fisheries Research Department
 - ^{4/} Aquaculture Department: The Program of Activities are included administrative and other expenses which are directly related to the programs.
 - ^{5/} Marine Fishery Resources Development and Management Department
 - ^{6/} Inland Fishery Resources Development and Management Department
 - ^{7/} Included cost of the 50th SEAFDEC Anniversary book, update SEAFDEC Introductory Video and produce a new video on SEAFDEC Milestones for the amount of US\$ 15,000
 - ^{8/} Included operation cost, maintenance, insurance and expenses of vessel periodic maintenance for M.V.SEAFDEC 2
 - ^{9/} Included program expenses from Japanese Trust Fund = US\$ 1,335,126 and Sweden Fund = US\$ 1,180,500
 - ^{10/} Included program expenses from FAO,EU-CITES,UNEP/GEF,ACIAR and RIHN (Japan)
 - ^{11/} Construction cost of a new building = US\$ 940,000 (In kind contribution from Thailand)
 - ^{12/} Included program expenses from International , regional , national and other agencies

Table 3 : Expected Contributions received by SEAFDEC from Member Countries and Other sources (in US Dollars) in fiscal Year 2017

Sources	Secretariat	Training Department	Marine Fisheries Research Department	Aquaculture Department	Marine Fishery Resources Development and Management Department	Inland Fishery Resources Development and Management Department	Total	
							In US\$	%
Brunei Darussalam	7,000						7,000	0.04
Cambodia	12,000						12,000	0.08
Indonesia	52,000					746,477 ^{h/}	798,477	5.05
Japan	280,000						280,000	1.77
Lao P.D.R.	6,500						6,500	0.04
Malaysia	21,500				2,002,352 ^{g/}		2,023,852	12.80
Myanmar	22,500						22,500	0.14
Philippines	25,000			5,312,367 ^{f/}			5,337,367	33.76
Singapore	13,500		0 ^{e/}				13,500	0.09
Thailand	33,000	2,711,400 ^{d/}					2,744,400	17.36
Viet Nam	27,000						27,000	0.17
Sub-total	500,000	2,711,400	0	5,312,367	2,002,352	746,477	11,272,596	71.30
Others ^{i/}	2,577,872 ^{b/}	904,000 ^{c/}		1,056,515 ^{v/}			4,538,387	28.70
Total	3,077,872 ^{a/}	3,615,400	0	6,368,882	2,002,352	746,477	15,810,983	100%

a/ Including Minimum Regular Contribution (MRC) from all SEAFDEC Member Countries = US\$500,000 (see Annex 1)

b/ Including extra-budgetary sources from Japanese Trust Fund = US\$1,397,372 (Excluded MRC=US\$280,000) and Sweden Fund = US\$1,180,500 (See Annex1)

c/ Including extra-budgetary sources from UNEP/GEF=US\$874,000 and Others (see Annex 2)

d/ Contribution in cash from Thailand (see Annex 2)

e/ No contribution from Singapore (see Annex 3)

f/ Contribution in cash from Philippines (see Annex 4)

g/ Contribution in kind from Malaysia (see Annex 5)

h/ Contribution in kind from Indonesia (see Annex 6)

i/ Including contributions from non-member governments, international organizations/agencies and miscellaneous receipts.

Table 4 : Proposed Expenditures of the Center for 2017 (In US\$)

Category	SEC ^{1/}	TD ^{2/}	MFRD ^{3/}	AQD ^{4/}	MFRDMD ^{5/}	IFRDMD ^{6/}	Total	%
I Program of Activities								
1.1 Research Programs		500,320		3,152,685			3,653,005	23.10
1.2 Training Programs	5,000	859,710		745,186			1,609,896	10.18
1.3 Information Programs	71,000	355,400		593,316			1,019,716	6.45
1.4 Collaborative Programs	150,000 ^{7/}	76,400					226,400	1.43
1.5 Other Programs	2,655,872 ^{8/}	874,000 ^{9/}		545,386 ^{10/}			4,075,258	25.78
Sub-total	2,881,872	2,665,830	0	5,036,573	0	0	10,584,275	66.94
II Administrative and Non-Program Expenditures								
2.1 Operating Expenditures	188,500	949,570		1,295,587			2,433,657	15.39
2.2 Capital Expenditures	7,500			36,722			44,222	0.28
	196,000	949,570		1,332,309			2,477,879	15.67
2.3 In-kind Expenditures					2,002,352	746,477	2,748,829	17.39
Sub-total	196,000	949,570	0	1,332,309	2,002,352	746,477	5,226,708	33.06
TOTAL	3,077,872	3,615,400	0	6,368,882	2,002,352	746,477	15,810,983	100%

- Remarks:
- ^{1/} Secretariat
 - ^{2/} Training Department: The Program of Activities are included administrative and other expenses which are directly related to the programs.
 - ^{3/} Marine Fisheries Research Department
 - ^{4/} Aquaculture Department: The Program of Activities are included administrative and other expenses which are directly related to the programs.
 - ^{5/} Marine Fishery Resources Development and Management Department
 - ^{6/} Inland Fishery Resources Development and Management Department
 - ^{7/} Included operation cost, maintenance cost, insurance and expenses for vessel periodic maintenance of M.V. SEAFDEC2
 - ^{8/} Included program expenses from Japanese Trust Fund = US\$1,397,372 and Sweden Fund = US\$1,180,500.
 - ^{9/} Included program expenses from UNEP/GEF
 - ^{10/} Included program expenses from International, regional, national and other agencies

ADOPTED PRESS STATEMENT

1. At the kind invitation of the Government and people of the Socialist Republic of Viet Nam, the 48th Meeting of the SEAFDEC Council was held in the magnificent city of Nha Trang, Viet Nam from 4 to 8 April 2016 and hosted by the Directorate of Fisheries of the Ministry of Agriculture and Rural Development of Viet Nam. Situated in the South Central Coast, a capital of Khanh Hoa Province, Nha Trang is widely considered as among cities with the world's most beautiful bays excellent for scuba diving and also for its seafood delicacies that make this city an attractive destination for international tourists contributing to its economic development.
2. In attendance at the Meeting were the Council Directors and their delegations from 11 Member Countries, namely Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam. The Inaugural Ceremony of the 48th Meeting of the SEAFDEC Council was held on 4 April and presided over by *His Excellency Mr. Vu Van Tam*, the Vice Minister of Agriculture and Rural Development, *Ms. Nguyen Thi Thu Nguyet*, the Deputy Director-General of Directorate of Fisheries, Viet Nam, and *Mr. Dao Cong Thien*, the Vice Chairman of Khanh Hoa Provincial People's Committee. The Meeting unanimously elected the Council Director for Viet Nam, *Mr. Nguyen Viet Manh* as the Chairperson of the SEAFDEC Council for the Year 2016-2017, succeeding *Dr. Wimol Jantrarotai*, SEAFDEC Council Director for Thailand who served as the Chairperson of the SEAFDEC Council for the year 2015-2016.
3. While noting the progress and achievements made by SEAFDEC in 2015, the SEAFDEC Council approved the proposed program of activities to be undertaken in 2016, taking into consideration the range of issues that are important for the sustainable development fisheries and require greater attention and cooperation among the countries in the region.
4. On combating Illegal, Unreported and Unregulated (IUU) fishing, the Council noted the progress in the implementation of the "ASEAN Guidelines to Prevent the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain," the use of the "Regional Fishing Vessels Record (RFVR) for vessels 24 meters in length and over" as one of the tools for combating IUU fishing, as well as the plan for pilot implementation of the "ASEAN Catch Documentation Scheme for Marine Capture Fisheries." The Council also provided recommendations toward the development of the "Regional Cooperation for Supporting the Implementation of Port State Measures in ASEAN Region," and the "Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity)" prior to their submission for consideration by the forthcoming 24th Meeting of the ASEAN Sectoral Working Group on Fisheries (ASWGFi). Furthermore, the Council also observed the establishment of bilateral and sub-regional technical cooperation to address transboundary issues including combating IUU fishing that pose a challenge to the neighboring countries.
5. On the activities related to labor aspects, the Council expressed support to the development of the "ASEAN Guidelines on Implementation of Labor Standards for the Fisheries Sector" that takes into consideration the nature of small-scale fisheries in the region. On the requirement of "U.S. Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud," the ASEAN Member States were urged to send their common voice on the Proposed Rule for at-risk species to the U.S. Government through their embassies by 12 April 2016.
6. With regards to the policy recommendations for sustainable fisheries and aquaculture, the Council noted the progress made by SEAFDEC in the implementation of regional policy recommendations, namely the "Regional Plan of Action on Sustainable of Neritic Tunas," the "Regional Policy Recommendations on Conservation and Management of the Eel Resources and Promotion of Sustainable Aquaculture," and the "Regional Policy Recommendations for Development and Use of Alternative Dietary Ingredients in Aquaculture Feed Formulations."
7. The Council also approved the Policy Recommendations on Addressing Early Mortality Syndrome (EMS) and Other Trans-boundary Diseases in Aquaculture," and the "Policy Recommendations and Strategic Plans for the Implementation of Fisheries Resources Enhancement



Activities in the Southeast Asian Region” for implementation by SEAFDEC and the Member Countries. The Council also endorsed the “Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region” for further consideration by the ASWGFi and high-level authority of ASEAN as appropriate. In addition, in addressing the importance and securing the sustainability of small-scale fisheries, the Council expressed support to the development of regional approach to put into practice the “Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Alleviation.”

8. As for the preparation for the High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Toward the ASEAN Economic Community” to be hosted by the Government of Thailand under the theme of “Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products,” the Council approved the Draft “Joint ASEAN-SEAFDEC Declaration” in principle and asked for further refinements before submission for consideration by the ASWGFi and subsequent adoption by the Senior Officials in the High-level Consultation, scheduled on 3 August 2016 in Bangkok, Thailand.

9. On the publication of the “Southeast Asian State of Fisheries and Aquaculture” or SEASOFIA that contains packaged data and information that reflects the fisheries situation of the Southeast Asian region and is to be published in 2017, the Council agreed on the outline of the publication. The Council also supported the conduct of a special event for the 50th Anniversary of SEAFDEC, which would be organized in Thailand with the generous hospitality offered by the Government of Thailand.

10. The Council recognized the close cooperation between SEAFDEC and regional/international partner agencies/organizations in undertaking activities that address the priorities of countries towards sustainable development of fisheries in Southeast Asia.

11. The Council expressed their appreciation to the Government and the people of the Socialist Republic of Viet Nam for the excellent hosting of the Meeting and the warm hospitality accorded to them throughout the event, and announced that its 49th Meeting in 2017 would be hosted by Brunei Darussalam.

For further information, please contact:

Ms. Nguyen Thi Trang Nhung, SEAFDEC National Coordinator for Viet Nam:

trangnhungicd@gmail.com; or

Ms. Nualanong Tongdee, Information Program Coordinator *a.i.*, SEAFDEC Secretariat, Thailand:

nual@seafdec.org.

VOTE OF THANKS TO THE HOST GOVERNMENT

By Mr. Khin Muang Maw

*SEAFDEC Council Director for Myanmar and
Director-General of the Department of Fisheries of Myanmar*

The Chairperson of the SEAFDEC Council,
My fellow SEAFDEC Council Directors,
Distinguished participants,

Ladies and Gentlemen,

On behalf of the SEAFDEC Council Directors, the representatives from our collaborating partners and all the participants attending this Meeting of the SEAFDEC Council, I wish to extend our deepest gratitude and appreciation to the Government of Viet Nam, particularly the Directorate of Fisheries, the Ministry of Agriculture and Rural Development of Viet Nam for their warm hospitality and arrangements that make our stay in Viet Nam very pleasant and comfortable.

Ladies and Gentlemen,

Please allow me, once again, to congratulate the chairperson for his excellent chairmanship that made us accomplish the objectives of this meeting in a very efficient manner.

I would also like to take this opportunity to also expressed appreciation to all the Council Directors for your contribution which allowed this meeting to come up with fruitful outputs, as well as policy and guidance for SEAFDEC to take into account in its future operations for the maximum benefit to the Member Countries.

Last but not least, please allow me to also express my appreciation to the Secretariat of the Meeting, especially to the staff of the Directorate of Fisheries, the Ministry of Agriculture and Rural Development of Viet Nam for their hard work that made our Meeting runs very smoothly and our stay in Nha Trang memorable.

Thank you very much.