

The 3rd Regional Scientific and Technical Committee Meeting for the SEAFDEC/UN Environment/GEF Project on Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and the Gulf of Thailand

> 5th – 7th February 2020 Classic Hoang Long Hotel, Hai Phong City, Viet Nam

ADOPTED REPORT OF THE MEETING

AGENDA 1: OPENING OF THE MEETING

1.1. WELCOME AND OPENING ADDRESS

1.1.1. WELCOME ADDRESS BY CURRENT CHAIRPERSON (2019)

1. Mr. Valeriano M. Borja, Chairperson of the Regional Scientific and Technical Committee for 2019, welcomed all participants. He was grateful for the participants ' presence despite Coronavirus pandemic, while he expressed his gratitude to the Government of Vietnam, the Directorate of Fisheries (D-Fish). He sincerely wished that the meeting would carry out successfully.

i. OPENING ADDRESS BY PROJECT DIRECTOR

- 2. Dr. Somboon Siriraksophon, Project Director, expressed his gratitude to Mr. Le. Tran Nguyen Hung, Deputy Director of Conservation and Aquatic Resources Development, Directorate of Fisheries (D-Fish) for his support for hosting the 3rd Meeting of the Regional Scientific and Technical Committee. He welcomed all participants to Hai Phong City, Viet Nam, one of the fisheries refugia sites. He thanked all Committee and Regional experts who joined the meeting even though they were aware of the epidemic of Coronavirus, not only in Southeast Asia but around the world. Accordingly, he suggested all participants take care of themselves during the stay in Hai Phong City. He believed that all participants stay safe and enjoy the stay mentioned above.
- 3. He also informed the Committee the meeting objectives were to update all progress works having done by all partners and the SEAFDEC PCU. He then encouraged all Committee and regional experts to participate in the discussion actively. The good results of this meeting would reflex the Midterm Evaluation at the end of 2020.
- 4. He also expressed his most profound appreciation for UNEP and SEAFDEC/Training Department for supports and sincere wish for a successful meeting. He then declared the meeting open at 09:00 am.

1.2 INTRODUCTION OF MEMBERS

5. Mr. Valeriano M. Borja, the current Chairperson, noted that there were some new members of the RSTC and invited the participants to introduce themselves to the meeting. The list of participants attached as <u>ANNEX 1</u> to the report.

AGENDA 2: ORGANISATION OF THE MEETING

2.1 DESIGNATION OF OFFICERS FOR 2020

- 6. Dr. Somboon Siriraksophon informed the Committee on the Rules of Procedure for the election of the Chairperson, vice-chairperson, and rapporteur from amongst the members to serve their duties for one year, as mentioned in the TORs for RSTC adopted at the first meeting of the Project Steering Committee held in December 2018. The rules stated further that officers should be eligible for reelection no more than once in the same year. Mr. Valerianno M.Borja from the Philippines, Dr. Ngurah N. Wiadnyana from Indonesia, and Mr. Richard Rumpet from Malaysia who had served as a Chairperson, a Vice-Chairperson and an official Rapporteur respectively, during 2019, are, therefore, all eligible for re-election in 2020.
- 7. The current Chairperson, Mr. Borja, invited the Committee to nominate the new Chairperson, Vice-Chairperson and Rapporteur for the RSTC3 2020. The results were 1) Ms. Praulai Nootmorn, 2) Mr. Nguyen Thanh Binh, and 3) Sallehudin bin Jamon were nominated and elected as the Chairperson, the Vice-Chairperson and the Rapporteur respectively, during 2020.
- 8. A new Chairperson, Ms. Praulai Nootmorn, gave her first speech before the meeting started.

2.2 DOCUMENTATION AVAILABLE TO THE MEETING

9. Dr. Somboon Siriraksophon introduced the documentation available to the meeting by referring to document SEAFDEC/UNEP/GEF/FR-RSTC.3 INF.4. He informed the Committee that most of the documents had been circulated one week in advance of the meeting and were uploaded to the project web site (https://fisheries-refugia.org/3rd-rstc-meeting/3rd-rstc-doc) as shown in ANNEX 2. More papers waited to be the inputs during the meeting would be uploaded after the meeting.

2.3 ORGANISATION OF WORK

10. Mr. Somboon Siriraksophon briefed the participants on the administrative arrangements for the conduct of the meeting and the organization of work as appears in the SEAFDEC/UNEP/GEF/FR-RSTC.3_INF.1 and SEAFDEC/UNEP/GEF/FR-RSTC.3_INF.2a-b, respectively.

AGENDA 3: ADOPTION OF THE MEETING AGENDA

- 11. The Chairperson, Ms. Praulai Nootmorn invited the Project Coordinating Unit, Dr. Somboon Siriraksophon, to introduce the Provisional Agenda appeared as SEAFDEC/UNEP/GEF/FR-RSTC.3 INF.2b and asked members to propose any amendments or additional items for further consideration by the Committee.
- 12. Dr. Somboon Siriraksophon added that the country might have decided earlier which target species selected alignment with the establishment of fisheries refugia. Therefore, the PCU expected the meeting could update and finalize the list and location of species and tentative refugia sites

through the consultation and involvement of relevant stakeholders to support the development of fisheries refugia profile of each target species.

- 13. He also pointed out the meeting results should reflex the preparation for the Mid-term Evaluation, which is expected by the end of 2020.
- 14. The meeting adopted the agenda and timetable without amendments as ANNEX 3.

AGENDA 4: REPORT OF THE PROJECT DIRECTOR ON WORK PROGRESS

- 15. Dr. Somboon Siriraksophon presented the progress of regional activities during the past six months until the end of 2019, implemented by SEAFDEC PCU in cooperation with all country partners. The report appeared in <u>ANNEX 4.</u>
- 16. He introduced preparatory works and the four regional meeting organizations which took place in May, September, and November 2019. He informed the updates on the Fisheries Refugia Websites: status of country's implementation and technical reports, meeting materials, country profiles, and preparation for GIS mapping on the web site.
- 17. He highlighted the work progresses on the establishment of Fisheries Refugia by country and the development of Regional Guidelines on indicators for the management of fisheries refugia and Regional Action plan for Sustainable Fisheries Management of Transboundary Species: Indo-Pacific Mackerel.
- 18. He congratulated Viet Nam for the Ministry of Agriculture and Rural Department (MARD) had approved the yearly project budget plan in October 2019. Besides, he noted that the NFRC and NTSC had the first meeting in January 2020 to give direction and instruction to implementing agency to prepare the project detailed budget plan to get MARD approval and promote the project implementation in 2020 onward. He then encouraged the National Lead Agency for Viet Nam to start implementing the project as soon as possible due to less than two years for implementation of the project.
- 19. Dr. Somboon Siriraksophon summarized the list of relevant stakeholders, e.g., national institutions, local government, inter-agency, fisher organization, private sectors, NGO, and others who involved in the project activities in each country as appeared in the working paper. Regarding this, he then requested all countries to confirm the lists and logos, so PCU could finalize and prepare for the Mid-term evaluation.
- 20. He reported the percentages of work completion implementing by the country and the PCU in the past two years. He highlighted that Cambodia's work was outstanding, and he stressed that the presentation of this indicator was meant to encourage the country to continue its ongoing projects. He also informed the meeting that this issue would be analyzed and addressed again with the budget spent and outputs, at the 4th Meeting of the Regional Scientific and Technical Committee scheduled in 2020.
- 21. Referring to the changing of Committee due to retiring, he informed the meeting that Malaysia nominated new focal points not only for National Scientific and Technical Focal Point (NSTFP) but also National Focal Point (NFP). Moreover, Indonesia will soon nominate a new NFP, Dr. Aulia Riza Farhan, S.T., M.Sc., to replace Dr. Joni Haryadi D., M.Sc. The PCU will wait for the official nomination letter.

22. Mr. Valeriano M. Borja suggested that the participants should update their ongoing work completion since there must have been many activities done in the prior period.

AGENDA 5: PRESENTATIONS BY THE NATIONAL SCIENTIFIC AND TECHNICAL COMMITTEE ON THE PROGRESS WORK OF THE PROJECT ACTIVITIES AT THE NATIONAL LEVEL AS OF 31 DEC. 2019

5.1 CAMBODIA

- 23. Mr. Leng Sy Vann presented the status of the project implementation at selected three fisheries refugia sites in Koh Kong, Kampot, and Kep Provinces. In his presentation, the management and coordination structure, including national and provincial institutions. At the national level, it is the Technical Working Group on Fisheries chaired by Director General of Fisheries Administration and some Sub-Group on Fisheries are under the Technical Working Group on Fisheries chaired by one of Deputy Director General of Fisheries Administration, and which fisheries *refugia* is in the one of Sub-Group on Fisheries naming Sub-Group on Conservation and Economic. At the provincial level, it is the Provincial Management Committee chaired by Provincial Governor and the Technical Working Group for site-level is under the Provincial Management Committee chaired by Provincial Deputy Governor. The management mechanisms have been built in order to coordinate and operate marine fisheries management as well as fisheries *refugia* sites in Cambodia. Besides, the policy and legal basis for the development of Fisheries Refugia are the key concerns. Also, the concept of fisheries refugia had integrated into national fisheries policy and legal basis, including the law of Fisheries, National Plan for Action, a 10-year strategy for fisheries conservation to ensure fisheries management effectively as appears in ANNEX 5.
- 24. He also reported that in 2019 the Minister of the Ministry of Agriculture, Forestry, and Fisheries officially promulgated the Indo-pacific Mackerel Fisheries Refugia in Koh Kong Province on 16 September 2019 and a 5-year management plan for marine fisheries management area (MFMA) for blue swimming crab in Kep Province. was approved and signed officially by Director General of Fisheries Administration and Kep Governor on 3 February 2020.
- 25. With regards to fisheries management measures, he mentioned that there are two Committee for management of fisheries refugia have been established at the provincial level in KEP: 1) Management Committee chaired by Provincial Governor and 2) Technical Working Group chaired by Provincial Deputy Governor. For Koh Kong Province, Provincial Governor will approve the management committee for Indo-pacific mackerel refugia in the 1st Quarter of 2020.
- 26. Mr. Leng Sy Vann also informed the meeting that FiA collaborated with Fisheries Administration Cantonment (FiAC) to patrol and crack down illegal fishing in the MFMA and Fisheries Refugia Sites. Besides, they conducted the protocol of closed fishing season of blue swimming crab in KEP Province through awareness building and local media such as posters dissemination and distribution to fishers, community fisheries, and local authority.
- 27. For the biological and geographic information of each fisheries refugia presented here, the SEAFDEC/PCU will keep the records of discussions in the Fishery Profile Session appears in the agenda 6.
- 28. Mr. Weerasak Yingyuad pointed out that some committee structures involving in the national fisheries refugia project. However, he observed that some committee structures were only from the Fisheries Administration. He, therefore, suggested to include academic institutions who could look

over the work of the existing agencies. In reply, Mr. Leng Sy Vann explained that the educational institutions were under the research section, not the management section. Also, the project asked many inter-agencies/institutions to join the Committee, such as Provincial Police, NGOs, Provincial Line Departments, Military Police, Maritime Police Department, Local Authorities, and Private Sector to cooperate with the management.

5.2 MALAYSIA

- 29. Mr. Sallehudin bin Jamon presented the country progress of two Refugia sites in Malaysia: 1) Spiny Lobster (*Panulirus polyphagus*) Refugia in Tanjung Lemen, east Johor and 2) Tiger Prawn (*Penaeus monodon*) Refugia in Kuala Baram, Sarawak as appears in <u>ANNEX 6</u>.
- 30. For spiny lobster, the *Panulirus polyphagus is dominant species* in Tanjung Lemen, east Johor, the main activities in 2019 were 1) Collection of lobster landing data from fisherman jetties; 2) 195 fishing hauls of spiny Lobster surveys by commercial trawlers via observer onboard program; 3) Socioeconomic studies of fishing communities; 4) conducting the EAFM workshop for proposed lobster refugia sites and management measures.
- 31. The results from observer onboard program show the distribution and abundance of spiny lobster, particularly *Panulirus polyphagus*, which recommends the 1400 km² or equivalent to 140,000 Hectares for spiny lobster fisheries refugia area for further consideration by relevant stakeholders and government.
- 32. He also informed the meeting on the results of socio-economic surveys of fishers covering eight fishing villages in Pahang and Johor States during 2018-2019, revealed that 88.25 % of 165 respondents agreed with the establishment of refugia as proposed by Department of Fisheries of Malaysia (DoF). And 66.7% of respondents agree not to conduct fishing operations targeting spiny lobster during its breeding season. A 98.5% agreed that DoF should discuss with fishers about the demarcation area and management measures for the establishment of refugia before any action. Additionally, the result of the survey showed that 72% of the respondents were well aware of the refugia concept.
- 33. He added that the Refugia team conducted the Workshop on Ecosystem Approach Fisheries Management (EAFM) in the Air Papan Resort, Mersing, Johor State during the 4th quarter of 2019. Thirty-six fishers participated, learned, and shared information on how to manage the refugia for spiny lobster in the proposed tentative refugia site.
- 34. He also introduced the budgetary allotment for the fisheries refugia project in 2019.
- 35. For the Tiger Prawn refugia in Kuala Baram, Sarawak, Mr. Sallehudin presented the main activities in 2019 were: 1) collection of adult tiger prawn in Batu 1 (landing site) and Krokop market; 2) juvenile tiger prawn survey at three main rivers as nursery areas; 3) adult tiger prawn survey at sea by trawl-net; 4) establishment of a Refugia gallery for tiger prawn at Fisheries District Office, Miri, Sarawak; and 5) socio-economic assessment based on the survey in 2016.
- 36. The results from 22 operations by trawl surveying for adult tiger prawn show the distribution and abundance of adult tiger prawn that are useful for identifying the demarcation area for tiger prawn Refugia, which is estimated about 295 nm² (equivalent to 76,400 Hectares). Besides, he shows the density of juvenile appeared at three rivers, namely 1) Pasu river, 2) Lutong river, and 3) Sibuti river.

- 37. Based on the 2016 socio-economic survey of tiger prawn refugia by UiTM-JPLS, the results show 89 % of the total 231 respondents did not know the fisheries refugia for tiger prawn.
- 38. In the discussions, Dr. Nopporn Manajit pointed out the life cycle map for spiny lobsters, which references to 1996 encyclopedia, may make confusion to people who interested. In this regard, Dr. Somboon Siriraksophon suggested to Malaysia redrawing the life cycle map for spiny lobster per the actual geographic features of east Johor, where the larvae, juvenile, and adult stages of spiny lobster migrated.
- 39. Dr. Somboon Siriraksophon also pointed out the importance of understanding the negative impact of existing fishing gears and practices on larval, juvenile, and spawn lobsters. This knowledge will support the decision on management measures for the establishment of fisheries refugia and protecting each critical stage in the life cycle of lobster.
- 40. The meeting also noted that DOF Malaysia has successfully produced awareness campaign media such as documentary video via broadcasting TV on the importance of fisheries refugia that helped boost understanding among local people. In this connection, Dr. Somboon Siriraksophon requested for sharing of such video but should include the English subtitle to promote on the Regional Refugia Website.

5.3 PHILIPPINES

- 41. Mr. Valeriano M. Borja presented the country's accomplishment report of 2019, including the meetings, workshops, and training held in three fisheries refugia sites, namely: Bolinao, Pangasinan: Masinloc, Zambales; and Coron, Palawan as appears in <u>ANNEX 7.</u>
- 42. The accomplishments in 2019 are as follows:
 - a. Finalized the recommended members and provisional TORs for the Fisheries Refugia Site Management in Coron, and Masinloc;
 - b. Agreed target species for Coron Fisheries Refugia, *Lutjanus argentimaculatus* (mangrove red-snapper);
 - c. Agreed target species for Masinloc Fisheries Refugia, tentatively, Sardinella fimbriata (sardine), Pterocaesio tesellata (one-stripe fusilier), and Auxis thazard (frigate tuna).
 - d. Consolidated threats and issues to fisheries refugia sites in the Municipality of Coron, Masinloc, and Bolinao;
 - e. Adopted the Executive Orders for establishing the Refugia Site Management Committee in Masinloc Municipality and Bolinao Municipality;
 - f. Identified the boundaries of the proposed refugia site for at-sea mapping;
 - g. Consulted with stakeholders in 3 Refugia sites for the terms and agreements on protocols and practices for the development of National Guidelines for the establishment of fisheries refugia for the Philippines;
 - h. Established the Refugia Center at BFAR Provincial Fisheries Office in Masinloc, Zambales;
 - i. The Chairman of the Bolinao RSMC, Hon. Alfonso Celeste provided a room in the Tourism Office of the municipality to serve as the *Refugia* Center in the site;
 - j. Enhanced capacity building for three Refugia sites on drafting of the management plan for fisheries refugia sites through the Essential EAFM concept;
 - k. Involved in the celebration of the 50th Fish Conservation Week by providing the short IEC lecture to Coron School of Fisheries as well as distributed the IEC materials.

- 43. He added the future activities as follows: 1) reproductive biology sampling of identified priority fishes at three sites in July 2020, 2) quarterly Ichthyoplankton survey, 3) the conduct of at-sea mapping of actual fisheries refugia at three locations, 4) presentation of national guidelines on procedures for formal designation and management of fisheries refugia to the NFARMC, and 5) IEC campaign in the coastal villages in 3 fisheries refugia sites. Lastly, he introduced the budgetary allotment for the fisheries refugia project from 2017-2020.
- 44. Dr. Somboon Siriraksophon expressed his gratitude for the Philippines on the drafting of the national guideline for the management of fisheries refugia as it was one of the critical outputs for the fishing refugia's establishment.
- 45. Mr. Weerasak Yingyuad supported and acknowledged the activities that have been implemented by NFRDI, particularly the importance of applying Essential EAFM training to all stakeholders for the development of the fisheries management plan for each refugia site. He implied that the capacity building on EAFM, help relevant stakeholders to thoroughly understand the logical processes for effective management of fisheries refugia.
- 46. About Mr. Borja's presentation, the meeting discussed the case of some refugia sites are within the Marine Protected Areas (MPAs) as "No Take Zone." He suggested during the meeting that the fisheries refugia can be within the MPAs because the species inside MPAs is already well protected by the law.
- 47. The meeting also discussed the issues facing conflict with other agencies for the establishment of fisheries refugia. In this regard, Dr. Somboon Siriraksophon pointed out the proposed fisheries refugia concept is to integrate fisheries and habitat management in which all relevant stakeholders should involve not only fisheries but environmental agencies in the processes.
- 48. Mr. Borja mentioned that in the operations of the establishment of fisheries refugia, the NFRDI usually consulted several stakeholders and Sectors who are involve in coastal management such as provincial sectors, local sectors, federal sectors, etc. He also informed the meeting the involved stakeholders acknowledge the usefulness of fisheries refugia concept but not for sanctuary and MPAs.

5.4 THAILAND

- 49. Ms. Praulai Nootmorn presented the fisheries refugia areas in Trat and Surat Thani provinces where targeted species are the Indo-Pacific Mackerel and Blue Swimming Crab, respectively, as appears in <u>ANNEX 8.</u>
- 50. She also presented the activities in the past few years: a preliminary survey on fisheries resources and fishing communities in Samui Island, Chang Strait in Trat Province, Stakeholders Consultation in Surat Thani Province. Also, the regular meeting with the Department of Fisheries was held once in three months.
- 51. She also summarized the activity for in-cash co-finance during the past years to support the establishment of fisheries refugia as follows:
 - a. Investigation on the life cycle of Indo-Pacific Mackerel in the Gulf of Thailand;
 - b. Conducted surveys on fisheries resources for assessment of the Maximum Sustainable Yield (MSY), Catch per Unit Effort (CPUE), and stock assessment in the Gulf of Thailand;

c. Conducted fisheries biology, socio-economics, and ecosystems in connection to the existing Fishery Improvement Program (FIP) for blue swimming crab at Ban Don Bay, Surat Thani Province.

5.5 INDONESIA

- 52. Dr. Ngurah Nyoman Wiadnyana updated the country's progress of activities since the project has implemented in the 3rd quarter of 2019. He shows 80% of the activities related to the reviewed works for existing fisheries and coastal habitats information and data to support the comprehensive policy in the establishment of fisheries refugia. The rest 20% of activities were the strengthened cross-sectoral coordination in the establishment and operation of fisheries refugia.
- 53. He also presented the 2020 work plan would be organized accordingly to the component. His presentation is as appears in ANNEX 9.
- 54. Dr. Somboon addressed that, in comparison with the activities done in 2019, the fisheries refugia profiles could be finalized by the end of 2020 through the stakeholder consultations.

5.6 VIET NAM

- 55. Mr. Nguyen Thanh Binh presented overall project budget plan approved by Ministry of Agricultural and Rural Department (MARD) in October 2019 including the establishment of the National Project Steering Committee and National Scientific and Technical Committee after signing of the LOI between SEAFDEC and the Directorate of Fisheries (D-Fish) in May 2019. His presentation appears as ANNEX 10.
- 56. He informed the meeting on tentative three priority Refugia sites as 1) at Bach Long Vy Refugia Site in Hai Phong for small pelagic species and reef fish; 2) at Hon Cau Refugia Site in Binh Thuan targeting for Scombridae and Bivalve mollusks; and 3) at Phu Quoc refugia site in Kien Giang targeting anchovies, Indo-pacific mackerel, and blue swimming crab. He also especially added that the Blue Swimming Crab had already been managed under the Fisheries Improvement Program (FIP) by the cooperation with private companies and WWF.
- 57. The meeting also noted the existing data and information in countries for small pelagic fisheries that remained unidentified. And suggested to the Committee for Viet Nam the review of existing data.

AGENDA 6: FISHERIES REFUGIA PROFILES FOR 15 PRIORITY REFUGIA SITES:

58. Dr. Somboon Siriraksophon updated the meeting on 15 priority refugia sites proposed by six country partners, as appears in Table 1 (as of February 2020), and more details on mapping appear in ANNEX 11.

Country	Refugia Site	Priority species	Remark
CAMBODIA	Кер	Blue swimming crab	
		(Portunus pelagicus)	
	Kampot	Oranges spotted grouper (<i>Epinephelus coioides</i>)	
	Koh Kong	Indo-pacific mackerel,	
		(Rastrelliger	
		brachysoma)	

INDONECIA	Pangka Politung	Mitro cauld	
INDONESIA	Bangka-Belitung	Mitre squid	
		(Uroteuthis chinesis)	
	West Kalimantan	Shrimp	Indian white shrimp,
		(Fenneropenaeus spp.)	banana shrimp ??
MALAYSIA	Tanjung Leman, Johor	Spiny lobster	other Panulirus spp.:
		(Panulirus polyphagus)	P. versicolor
			P. ornatus
			P. Homarus ; and
			P. longipes
	Miri, Sarawak	Tiger prawn	
		(Penaeus monodon)	
PHILIPPINES	Bolinao, Pangasinan	Gloden-spotted	
		rabbitfish	
		(Siganus punctatus)	
	Masinloc, Zambales	Frigate Tuna	
		(Auxis thazard)	
	Coron, Palawan	Mangrove Jack	
		(Lutjanus	
		argentimaculatus)	
THAILAND	Trat	Short, Indo-pacific	
		mackerel,	
		(Rastrelliger	
		brachysoma)	
	Surat Thani	Blue swimming crab	
		(Portunus pelagicus)	
VIET NAM	Bech Long Vi Island,	Small pelagic	will be confirmed later
	Haiphong	species	
		Reef fish	
	Hon Cau Island, Binh	Scombridae	
	Thuan	Bivalve mollusks	
	Phu Quoc Island, Kien	Anchovy species,	
	Giang	Short mackerel	
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- 59. He also refers to the Fisheries Refugia Profile template that all country partners have to provide the input as one of the national outputs for mid-term evaluation in 2020.
- 60. The progress fisheries refugia profiles implemented by country partners are as follows:

6.1 CAMBODIA Fisheries Refugia Profile

- 61. Mr. Leng Sy Vann introduced the refugia profile of three sites with references to the provided template. The detailed information of the refugia profile appears in <u>ANNEX 12</u>.
- 62. He also added some results from the baseline survey of the Indo-pacific mackerel in Koh Kong, which elaborated on the data collection process and provided scientific findings to support the establishment and management of mackerel fisheries in Koh Kong province. The result of the monthly distribution of three target species showed the length at first maturity stages, and particularly the calculated gonadosomatic index (GSI) for males and females of Indo-pacific mackerel. Regarding this, Mr. Leng Sy Vann stressed that the mean GSI of male short mackerel specifically increased from 2.43 to 3.49 during October to November 2019.

- 63. He also pointed out that difficulties were collecting the fish and larvae during, especially in June and July 2019. The assumption that the fish might have migrated to the Thai border. In this regard, Ms. Praulai Nootmorn pointed out that the calculated GSI found in Cambodia is the quite low value when comparing with the GSI in the Thai waters in the Gulf of Thailand. Regarding this, Mr. Leng Sy Vann expressed that it is dependent on using the formulation of GSI calculation. In his case, he used the formulation of GSI calculation (gonad weight*100/body weight). Besides, Dr. Kornravee Aiemsomboon suggested that the fish collection could be checked and compared with landing catch in bordering countries such as in Trat provinces of Thailand and in Viet Nam to confirm the fish distribution and status in June and July 2019. Furthermore, she suggested that the data should be separated monthly. The length and body weight can not guarantee mature development, whereas the GSI is more reliable.
- 64. The species identification for short mackerel was one of the challenges facing by the project in Cambodia. Accordingly, Mr. Leng Sy Vann mentioned that the species identification of collected larval fishes could be at the genus level for mackerel groups. Besides, Dr. Kornravee Aiemsomboon, Chula Longkorn University of Thailand, has supported the DNA study for species identification, and presently it is in the initial process after received the samples and data from Cambodia. In this regard, Mr. Sukchai Arnupapboon informed Cambodia that the SEAFDEC/TD could help with taxonomy work at the species level.
- or. Somboon Siriraksophon suggested that considering the short mackerel as transboundary species, the more accurate data, as well as the standardized data collection, are necessary for those countries involved. He, therefore, suggests the need for collaborative works between Cambodia (Koh Kong Refugia sites) and Thailand (Trat Refugia Site). He informed the meeting that the Project Coordinating Unit would provide a platform of exchanging and sharing the knowledge between relevant countries and institutions to clarify and examine the links for a better understanding of the fish stock status and best solutions for sustainable fisheries management in the future.

6.2 INDONESIA Fisheries Refugia Profile

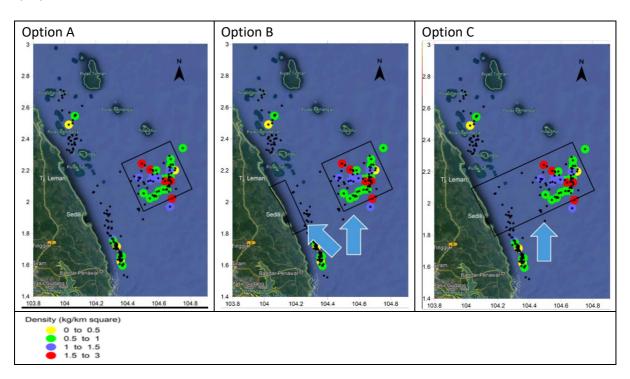
- 66. Dr. Ngurah Nyoman Wiadnyana presented the draft profiles of fisheries refugia in West Kalimantan for shrimps (*Fennerropenaeus spp.*) and Bangka-Belitung for mitre squid (*Uroteuthis chinensis*) based on the reviewed works from existing data and information. In his presentation, the importance of target species based on economic importance in fisheries sectors, he also elaborated type of fishing gears in quantity, the number of fishers involved, social economy and institutions existed, as well as the critical habitat for juvenile shrimps. The details of his presentation appear in <u>ANNEX 13</u>.
- 67. Dr. Ngurah Nyoman Wiadnyana also informed the meeting on existing conservation areas, marine protected areas, and conservation areas of fisheries established in Belitung Regency, Bangka Regency, etc. Particularly the conservation area of fishing in the Bangka Regency, where the habitats of squid are protected. Regarding this, Dr. Somboon Siriraksophon asked how Indonesia is going to link the conservation area to the Fisheries Refugia establishment? In response to this, Dr. Ngurah Nyoman Wiadnyana replied that they would need further scientific data and seasonal data collection and mapping as squids are economically significant, and the use of fishing gears managed under the concept of fisheries refugia.
- 68. Mr. Nguyen Thanh Binh asked what does Indonesia expects to establish fisheries refugia, since many conservation areas exist. In reply, Dr. Ngurah Nyoman Wiadnyana assumes that the government can control the fishing gears since there were so many being operated at the moment and due to

declining of squid stock in the areas. In this connection, Mr. Nguyen Thanh Binh suggested that the refugia should be closed for years to track the growth of squids. But somehow the government may face other problems on illegal fishing during the closing period.

69. Mr. Weerasak Yingyuad suggested that the Fisheries Refugia concept can apply to all marine species. However, it needs involvement from stakeholders. Identifying threats in every stage of the lifecycle, and later accurately identify the resolution and management actions are the key activities. In conjunction with the required actions mentioned in component 1.4 of the project document, the Monitoring Control and Surveillance (MCS) are one of the outputs.

6.3 MALAYSIA Fisheries Refugia Profile

- 70. Mr. Jamil Bin Musel, alternate national scientific and technical Committee for Malaysia, presented the draft profile of fisheries refugia in Malaysia. The profile included population, socioeconomic, number and types of fishing vessels operated in the refugia area, the role of fisheries refugia for sustainable fisheries, number of fishing communities, priority species information including biology, life cycle, mating behavior, stock size and assessment, and GIS mapping. His presentation appears as in ANNEX 14.
- 71. For mud spiny lobster (*Panulirus polyphagus*), he explained the life cycle and migration pattern, which is a significant finding when compared with other biological data. He informed the meeting that the size at first maturity stage based on the Gonadosomatic index and mapping data are essential information to support the decision for area-based management when establishing the refugia for mud spiny lobster.
- 72. He also informed the meeting on proposed three options for candidate fisheries refugia of mud spiny lobster which will be further consulted with all relevant stakeholders as follows:



73. For the Tiger Prawn (*Penaeus monodon*) Refugia in Kuala Baram, the critical habitat linkages in their life cycles are the coral reef offshore of Sibuti National Marine Park and Mangrove in Kuala Baram area.

- 74. Ms. Praulai Nootmorn asked whether Malaysia would select only one target species of the spiny lobsters or include other spiny lobsters. In response to madame chair, Mr. Jamil Bin Musel, in their studies, mentioned that DOF/MY might cover the studies for four species of lobster to help improve the information of mud spiny lobster as dominant species in the same areas. He also informed that in the studies, all caught, including spiny lobsters, were collected using commercial trawlers. The scientists calculated the density of caught by the swipe area of the bottom trawl.
- 75. Mr. Nguyen Thanh Binh added that the exploitation rate in 2017 based on the surveys was impressed (0.2-0.9 year⁻¹) when compared with other results such as biomass (26.3 metric ton), landing weight (2-113 metric ton), and MSY (8-62 metric ton). Mr. Jamil Bin Musel replied that the rate was a result of the seasonal fishing activities. However, the new survey would be conducted again to guarantee the accurate results of the exploitation rate for spiny lobsters.
- 76. Dr. Somboon Siriraksophon suggests that the establishment of refugia for mud spiny lobster as a dominant species of the coastal area of Tanjung Leman should focus on protecting of gravid (eggbearing) lobsters and juvenile lobsters because of threats from some commercial fishing gears. Identification of the period and location that lobster bearing eggs are needed. Protection of lobster larvae by the establishment of refugia may not needs if no threats from fishing gear and practices to the larvae. It is therefore required mapping data that integrated other information to help the final decision on the establishment and proposed management measures in the refugia.

6.4 PHILIPPINES Fisheries Refugia Profile

- 77. Mr. Valerianno M. Borja presented the progress works on baseline surveys for fish landing data and larval fish survey in 2019 in three sites: 1) Bolinao, Pangasinan; 2) Masinloc Zambales; and 3) Coron, Palawan as appears in ANNEX 15.
- 78. At Bolinao, He found the different species composition of larval fishes in 8 sampling points along the Bolinao Bay in each quarter of 2019. There were existing measures such as total banning in catching "padas" juvenile rabbit fishes in Bolinao; Closed season during spawning season for the 4th, 5th, and 6th days after new moon for few days consequently only; and Banning of fine-meshed gears catching rabbit fishes.
- 79. At Masinloc, he showed the results of distribution and abundance as well as the species composition of larval fishes from quarterly fish larvae and egg surveys in 2019 in 6 samplings stations of the Masinloc Bay. The results indicated Scombridae larval fishes less than 12% in each quarter, but there was no species identification at the genus and species levels.
- 80. The landing data of Frigate Tuna (*Auxis thazard*) as a target species represented in the Masinloc, Zambales, showed the quantity of landing in 2019 was 7.62 metric tons or about 3.2% of the total landing of 239.37 metric ton.
- 81. At Coron, the target species for this refugia site is mangrove jack snapper (*Lutjanus argentimaculatus*). Mr. Borja reported the filed works on fish data samplings from two selected landing sites: 1) Tagumpay, and 2) Public market. From the presentation, bottom set longline, and fish corral is the main fishing gears for catching demersal fishes as well as the Lutjanidae family. Nevertheless, the meeting noted that mangrove jack as target species in Coron was missing in the landing report.

- 82. The results of fish eggs and larval fish surveys from 7 sampling points around the Coron Bay in each quarter of 2019 presented in family levels.
- 83. After the presentation, several comments, and clarification raised by the Committee as follows:
 - a. For frigate tuna refugia in Masinloc, Dr. Somboon Siriraksophon pointed out the needs of biological data such as length-frequency found in the whole year in comparison with the quantity of catch. Besides, the distribution of Frigate tuna outside Zambales territory to make sure that Masinloc is the best ground for refugia. Also, based on the larval fish survey, there are unclear on the larval fish of frigate tuna in the studied areas. However, either the frigate spawn in this area or not, if there was no fishing gear impact on the larval fishes, so it is no need management measures for fishing gears in this area. Accordingly, the country can focus on the protection of young or juvenile frigate tuna in this area;
 - b. For the mangrove jack in Coron, the meeting noted the crucial habitats located in the Marine Protected Area (MPA). Regarding this, Mr. Nguyen Thanh Binh pointed out that the establishment of refugia covering the MPA is possible if the country wanted to add protocols/measures which aimed to improve fisheries resources and habitats. However, the state should avoid any overlapping efforts;
 - c. Mr. Weerasak Yingyuad said that the definition of MPA, which consists of five categories, NO TAKE ZONE in common, is used to protect the coastal habitat. Still, it would impact fishers since they cannot fish. But the concept of Fisheries Refugia is about the linkage of critical habitat and fishery resources, for example, coral reef area in Koh Chang/Thailand, mangrove area in Koh Kong/Cambodia, seagrass area in Bolinao/Philippines, etc.; and
 - d. In general, identification of target species at the genus and species levels are still the main problems by the technical lead agency due to lack of resource person. This matter is not only faced by the Philippines but also in other participating countries, in response to this PCU will seek assistance from SEAFDEC Training Department to conduct a training course on larval fish identification to those countries funded by the project.

6.5 THAILAND Fisheries Refugia Profile

- 84. Mr. Kampon Loychuen presented fisheries refugia profiles in Trat Province for Indo-Pacific mackerel and in Surat Thani Province for blue swimming crab. In his presentation included geographic characteristics of the studies areas, numbers of Commercial Fishing Vessels, fishing community/institutions, existing management measures, as appears in <u>ANNEX 16</u>
- 85. At Trat province, fisheries Refugia studied site covers 6,400km², including mangrove 162.5km², seagrass 10.2km², coral reef 28.4km², and artificial reef 118km². He presented several types of fishing gear catch Indo-Pacific mackerel and the species compositions of each fishing gear operated off Trat Province. The local fishing community organization includes 28 groups of coastal fisheries, seven groups of offshore fishing, seven groups of fish processing, and five groups on aquaculture. He also informed on the existing fisheries management measures in Trat, which are related to the prohibitions of fishing gears and methods in the coastal areas, 15 fishing grounds, and four aquatic sanctuaries.
- 86. Comparisons between the interview data in 2017, 2018, and 2019 and the existed records in 2014 and 2016 showed the occurrences and size distribution of Indo-Pacific mackerel off Trat provinces. Based on the survey data by research vessels also showed the distributions of larval fish, adult, mature, and fully mature Indo-Pacific mackerel in the studied areas off Trat Province, and the results identified a peak spawning period of Indo-Pacific mackerel in January February in 2018. Accordingly, the Department of Fisheries Thailand proposed a tentative fisheries refugia of Indo-Pacific mackerel for further consultation with relevant stakeholders.

- 87. Mr. Weerasak Yingyuad stated that the occurrences showed the local knowledge from fishers presented scientifically. He described Ban Haad Lek is at the border with Cambodia; therefore, from September to December, the juvenile fish could be found. Around the Koh Kong area could also found juveniles during this period as well. He suggested Cambodia conduct the same data collection. However, the data should be crosschecked with accurate information and also with local knowledge from acknowledged fishers.
- 88. Dr. Somboon Siriraksophon suggested checking compositions of trash fishes from trawl net to see how the distribution of juvenile Indo-Pacific mackerel caught by trawl net.
- 89. Mr. Sallehudin bin Jamon asked about purse seines associated with luring light. Some of the proposed areas, if any effect of lights, in Malaysia, the small fish, they would be blind because of brightness. He questioned if there was any research on the impact of the lights on the fish.
- 90. After a discussion on Indo-Pacific mackerel refugia, Mr. Kampon Loychuen continued his presentation on Blue Swimming Crab Refugia in Surat Thani province. The size of the blue swimming crab was significantly reduced from 14cm of the carapace length in 1987, reduced to 8cm in 2007.
- 91. He informed the meeting on the life cycle, the fecundity, catch compositions by type of fishing gears targeting the blue swimming crab, and distribution and size of the crab in the studied areas in relation to the ecosystem and environmental parameters, e.g., salinity, suspended solids, etc.
- 92. With regards to the small size of the mature crab, Ms. Praulai Nootmorn added that the blue swimming crab, fully matured, its size was tiny even though the healthy ecosystem for blue swimming crabs such as seaweed, seagrass. In this connection, Mr. Sallehudin bin Jamon asked if there was any regulation for mesh size? He also suggested that If putting more fishing pressure, and the mature size would be smaller.
- 93. Mr. Ngurah Nyoman Wiadnyana shared that in Indonesia, there are many types of Blue Swimming Crab. The size of the crab does not change much. The crab spawns all year round.
- 94. Mr. Weerasak Yingyuad added that the blue swimming crab, the juvenile habit in the seagrass, then went out and were threatened by the fishing activities. The diagram should combine both threats and life cycles, and it would be more specific to come up with the management action.
- 95. Ms. Praulai Nootmorn mentioned the best practices and methods for increasing the resource and spawner protection by releasing the gravid crab back to the sea. Thailand is promoting these best practices with engagement and voluntary supports from trawlers.

AGENDA 7: DATA AND INFORMATION NEEDS TO SUPPORT ACTIVITIES

7.1 FISHERIES STATISTIC FOR EACH TARGET SPECIES: STATUS AND TRENDS AT COUNTRY LEVEL (FROM 1995 TILL PRESENT) AND BIOLOGICAL PARAMETERS

- 96. Dr. Somboon Siriraksophon presented the factsheet on target species compiled from several sources published by FAO, FishBase, etc. to support the partners on drafting Fisheries Refugia Profile for each species. The factsheet consisted of taxonomy, geographic areas, biological information, and other information such as stock, fisheries, threats, etc. as appears in ANNEX 17-27 as follows:
 - Factsheet of Rabbit fish (Siganus fuscescen); ANNEX17

- Factsheet of Banana prawn (Fenneropenaeus merguiensis) ANNEX18
- Factsheet of Blue swimming crab (Portunus pelagicus) ANNEX19
- Factsheet of Frigate tuna (Auxis thazard) ANNEX20
- Factsheet of Goldspotted spinefoot (Siganus punctatus) ANNEX21
- Factsheet of Mangrove red snapper (Lutjanus argentimaculatus) ANNEX22
- Factsheet of Mitre squid (Uroteuthis chinesis) ANNEX23
- Factsheet of Mud spiny lobster (Panulirus polyphagus) ANNEX24
- Factsheet of Orange spotted grouper (Epinephelus coioides) ANNEX25
- Factsheet of Indo-Pacific macekerel or Short mackerel (Rastrelliger brachysoma) ANNEX26
- Factsheet of Tiger prawn (Penaeus monodon) ANNEX27
- 97. He also requested all partners to consider and provide the existing data and information based on scientific research conducted at national and sub-regional levels, which supported the effective management of fisheries refugia in the long term. The suggested contents of Fisheries Refugia Profiles also require fisheries statistic data, particularly fisheries production. So, the cooperation from member countries to provide statistical data of the target species is crucial.
- 98. Mr. Weerasak Yingyuad pointed out that, according to the project outputs as appeared in Component 1.1, the end target was agreement among stakeholders' intervention for all refugia sites, which requires all 15 Fisheries Refugia profiles.
- 99. PCU developed factsheet for each species is aimed to support the country and to update the findings from project implementation for publicity.
- 100. Dr.Somboon Siriraksophon suggested that all six countries should work together to support each other and come up with strategy not only at national but also at regional levels.
- 101. The Chairperson asked the member countries should share the data from their local waters for regional assessment.
- 102. Dr. Somboon encouraged all member countries to insert their workplan for 2020. The PCU is considering to upload such as statistical data to the refugia website. The regional database includes members' activities and GSI mapping. The PCU will ally with member countries for long term objectives.

7.2 REGIONAL WEBSITES/ DATABASE/ PROJECT REPOSITORY

- 103. Dr. Somboon Siriraksophon updated the Regional website based on the online demonstration via URL: https://fisheries-refugia.org. He highlighted the updated webpage for the Regional Meetings during the past year, such as RSTC2, PSC2, Regional Meeting for Indicators, and Regional Meetings for Drafting of Regional Plan of Action for Indo-pacific mackerel, etc. where all working papers and reports were published and uploaded onto the website.
- 104. He also informed that the PCU uploaded the Technical Report and Papers submitted in 2017 to the end of December 2019 on the website.
- 105. For the way forwards, the PCU would further develop database and mapping related to fisheries refugia sites to improve the website. Accordingly, the Committee took note and support the plan.

AGENDA 8: OTHER BUSINESS

8.1 REGIONAL ACTION PLAN FOR MANAGEMENT OF TRANSBOUNDARY SPECIES: INDO-PACIFIC MACKEREL

106. Dr. Somboon Siriraksophon informed the meeting on the status of the Regional Action Plan for Management of Transboundary Species: Indo-pacific Mackerel (*Rastrelliger brachysoma*) in the Gulf of Thailand Sub-Region. Due to the need to improve fish stock and enhance knowledge gaps for effective management, as mentioned in <u>ANNEX 28</u>. the PCU drafted the Regional Action Plan through a series of Technical Consultation Meetings. The Meeting included scientists from various institutions, experts, and managers on fishery policy from six countries, who agreed on the urgent requirement of cooperation for sustainable utilization of Indo-pacific mackerel. He pointed out the importance of the RAP as a guide to all concerned countries to achieve the goal of "Sustainable Indo-Pacific mackerel fisheries in the Gulf of Thailand sub-region through science-based management."

107. He also considered the Regional Action Plan as a supplementary guide to the ASEAN-SEAFDEC Resolution and the Plan of Action towards 2030. He requested all partners to coordinate internally with the higher official level on the endorsement and adoption at the forthcoming SEAFDEC Council Meeting in April 2020, and later by ASEAN through its mechanism. He then encouraged the Committee to coordinate with the SEAFDEC council director in the respective country for support and endorsement at SEAFDEC as well as the ASEAN forum.

8.2 REGIONAL GUIDELINES ON INDICATORS FOR MANAGEMENT OF FISHERIES REFUGIA

108. Dr. Somboon Siriraksophon presented the draft guidelines on Indicators for Management of Fisheries Refugia that addressed at the 1st Regional Meeting held on 9-11 September 2019 at A-One The Royal Cruise Hotel, Pattaya City, Chonburi Province, Thailand as appears in <u>ANNEX29</u>. The guidelines aimed to support partners on the effective management of fisheries refugia established during the project implementation and to ensure that after project-end, the country would continue and increase the number of fisheries refugia in their country based on the agreed indicators.

- 109. He also requested all Committee and regional experts of the RSTC3 to suggest appropriate methodology and references for further finalization of the guide by the forthcoming PSC3 meeting in 2020.
- 110. Regarding this, the Chairperson suggested the PCU to circulate the template of the indicators' list to each country for inputs in particular methodology needs. She also added that the criteria should be first made then the methodology follows.

8.3 1ST REVISION OF THE CONCEPT NOTE FOR SSFA ON "IMPROVING HEALTHY OCEAN ECOSYSTEMS THROUGH BEST PRACTICES AND FISHING GEAR INNOVATIONS."

- 111. Dr. Somboon Siriraksophon, on behalf of the UNEP, funded, SEAFDEC executed Project for drafting the Concept Note to reflex the need for improving ocean ecosystems, which affected by fishing activities. The 1st Draft of the concept note on **IMPROVING HEALTHY OCEAN ECOSYSTEMS THROUGH BEST PRACTICES IN TRAWL FISHERIES** was addressed at the RSTC2 and PSC2 in May and November of 2019, respectively.
- 112. The meeting noted the changing title of the Concept Note to be "Improving Healthy Ocean Ecosystems through Best Practices and Fishing Gear Innovations" (ANNEX 30). Due to some

participating countries banned trawl fisheries, that is the main reason to propose a broad scope of the project not to focus only on trawl fisheries. He cited that the Concept Note was drafted based on the gap analysis from more than 150 published research papers.

- 113. He summarized the needs for this proposal in Southeast Asia because fisheries sectors are essential, which contributes to economic and social betterment. In 2015, the world's top marine fisheries production was in the region. Lack of effective fisheries management in the past created in huge quantity numbers of fishing vessels and destructive fishing gears results in the damage in fish stocks. The environmental damage caused by fishing activities, traditional trawlers, and other harmful fishing activities is still active. They directly damage the seabed habitats, the spread of marine plastic, debris from abandoned nets, occurrences of microplastics, as well as the increased emission of CO2.
- 114. He requested all partners to consider and provide suggestions to the revised note for finalization of the Concept Note and further development of the full proposal in an attempt to meet the requirement of the DONORs such as Green Climate Funds (GCF), Global Environment Facilities (GEF). The necessary fund was approximately \$50 Million for 5 Years implementation. He also mentioned that, in the case of GCF, the relevant countries of the project had to coordinate with National Designated Authority (NDA) and had to seek "No Objection Letter" for the Project Preparation Facility (PPF).
- 115. Mr. Nguyen Thanh Binh suggested that Trawl Fisheries are practiced over SEA, not just within the South China Sea. The impact of the trawl fisheries, which are the most used fishing gear and ground damages a lot. Therefore, the habitats, nursery, and spawning grounds that locate nearshore should be concerned overall. But when offshore, the debate around the South China Sea is still going on. Dr. Somboon Siriraksophon explained the need for building new habitats or shelters not only in the nearshore but should cover the offshore areas. Recently, many projects have developed for the nearshore area, such as artificial reefs.
- 116. The Chairperson stated that the proposal should not focus only on trawl fishing but cover other fishing that impacts on the ecosystem. She also pointed out the issues in overlapped areas to avoid political problems in the South China Sea.
- 117. Mr. Jamil bin Musel added that this is the challenge for Indonesia since it is about trawls. The bottom trawls are still considered the most operated tools in the industry. This proposal can help us find another option for best practice. Because in Malaysia waters, the stock is left than 10%, the government agreed to eliminate the bottom trawls.
- 118. In this connection, Dr. Somboon Siriraksophon added that the project could subsidize the innovation of improved trawls or fishing gear development. The point is the offshore resources can be applied to many methods to grow in numbers, so it may be an opportunity for this project to develop innovative/friendly fishing gear for the region.
- 119. Mr. Weerasak Yingyuad stated that this project is not about offshore resource enhancement but also covers the study of best fishing practices and innovative technology to reduce the impact assessment from destructive fishing gear/practices.
- 120. Besides, Dr. Somboon Siriraksophon informed the six countries that reference to the agreed Concept Note, in the process of fund seeking from GCF, the participating countries need to develop their proposal relies on the concept notes. Also, SEAFDEC welcomes individual consultation for further discussion for the development of the full project documents.

- 121. Mr. Nguyen Thanh Binh pointed out the sustainable fisheries development requires regional actions, e.g., the seabed or bottom trawls, which are illegal in some parts in Southeast Asia. His concerns are the scope of the project, and engagement of the private sectors, industrial sectors, maritime sectors for controversial face discussion.
- 122. Mr. Nguyen Thanh Binh also suggested that, in some areas, there are historical issues between Cambodia, Viet Nam, so they need the bilateral arrangement. Not for the establishment of MPA, but some kind of baseline cooperation so they don't want to touch upon the international conflicts. Some parts of member countries still hold issues with China's terrestrials.
- 123. The discussion also includes the definition of "off-shore" that could be anywhere the trawls operated.
- 124. After deliberation on the concept note, Dr. Somboon Siriraksophon informed the Committee that this concept note would address at the forthcoming SEAFDEC Council Meeting in May 2020 for their support and endorsement. Taking into consideration, it needs further steps of development for a full project document and submits to UNEP for reviews and approval.

8.4 PROJECT MID-TERM EVALUATION

125. Dr. Somboon Siriraksophon informed the Committee on the proposed Mid-term evaluation by external evaluator under the purview of UNEP and SEAFDEC/PCU at the end of 2020. In this connection, the PCU would further compile all progress and outputs from the NFP and NSTFP via email communication and virtual meeting.

8.5 OTHER MATTER

- 126. In the next meeting, the member countries may need to present past achievements—the first week of November.
- 127. The PCU supported Mr. Binh that the national budget also granted for training and stakeholder consultation at the site level not only for local management boards but also for the project staff from the central office or national lead agency.

AGENDA 9: ADOPTION OF THE REPORT OF THE MEETING

128. As agreed, the rapporteur would circulate the draft report to all participants for suggestions and finalization via e-mail communication. The Committee adopted the amended report .

AGENDA 10: DATE AND PLACE OF THE 4TH REGIONAL SCIENTIFIC & TECHNICAL COMMITTEE MEETING

129. The Committee from 6 countries were requested to propose the date and place of the next meeting. After deliberation, Indonesia offers to host the 4th RSTC in September 2020 in Bangka Belitung Islands

AGENDA 11: CLOSURE OF THE MEETING

WP. 6

130. The Chairperson expressed her gratitude to all participants for their cooperation during the past week, and she stated that she was looking forward to meeting every member country again at the next RSTC meeting. She granted all participants her best wishes.