



# SEAFDEC NEWSLETTER

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## EDITORIAL

The significant event during the final quarter of 2019 was the “Forty-second SEAFDEC Program Committee Meeting” (42PCM) which was convened to discuss and review the projects implemented by SEAFDEC in 2019 and endorse the projects and activities for 2020. Back-to-back with the 42PCM was the “Twenty-second FCG/ASSP Meeting” which addressed the important issues that impact the sustainability of the fisheries sector in the ASEAN Member States, and came up with policy recommendations for endorsement to the higher authorities of SEAFDEC and the ASEAN.

During this quarter, the SEAFDEC-Sweden Project organized its “End of the Project Meeting,” highlighting the overall achievements and deliverable results of the Project which focused on strengthening capability on management

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## SEAFDEC convenes the Forty-second SEAFDEC Program Committee Meeting and Twenty-second FCG/ASSP Meeting



The “Forty-second Meeting of the SEAFDEC Program Committee” (42PCM) was organized on 11-13 November 2019 in Chiang Mai, Thailand to review the projects implemented by SEAFDEC in 2019 and endorse the projects and activities for 2020. Hosted by the SEAFDEC Training Department (TD) in cooperation with the SEAFDEC Secretariat, the 42PCM reviewed the progress and achievements

of 23 ongoing projects under the FCG/ASSP Mechanism, comprising 21 projects that are categorized based on the SEAFDEC Program Thrusts, and two Special Projects. Out of these projects, 20 projects would be completed by December 2019, while three projects would be continued in 2020. The 42PCM also reviewed the 13 new projects under the FCG/ASSP Mechanism,

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## Workshop on 5-year achievement of IFRDMD organized

SEAFDEC/IFRDMD organized the “Workshop on 5-Year of IFRDMD’s Achievement” in Jakarta, Indonesia on 8-9 October 2019. The Workshop was officiated by the SEAFDEC Secretary-

General, *Ms. Malinee Smithrithee*, and the Director of Research Center of Fisheries of the Ministry of Marine Affairs and Fisheries of Indonesia. *Mr. Waluyo Sejati Abutohir*. Representatives



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## EDITORIAL

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of fisheries and habitats, management of fishing capacity, and combating IUU fishing through regional and sub-regional cooperation.

In connection with the completion of several projects in 2019, SEAFDEC organized regional events including the “Regional Workshop on Lessons Learned from Application of Ecosystem Approach to Fisheries Management (EAFM) in Different Learning Sites” that came up with ways forward to promote EAFM implementation in the Southeast Asian region; “Regional Workshop on Fisheries Resources Enhancement and Habitat Conservation”; “Regional Workshop on Facilitating Fisheries Activities Information Gathering through the Introduction of Community-based Resources Management/Co-management in the Southeast Asian Region” which focused on identifying the problems/challenges as well as obtained recommendations toward the development/improvement of fisheries information gathering through CBRM/Co-management approach; “End of Project Meeting of Community-based Resources Management” that came up with recommendations and ways forward in sustaining the inland fisheries management activities; and “Workshop on IFRDMD’s 5-year Achievements” which focused on the activities related to inland capture fisheries and catadromous eels undertaken since its establishment in 2014.

Furthermore, SEAFDEC also sustained the conduct of training courses on milkfish, mangrove crab, and abalone culture as well as continued the efforts to generate aquaculture technologies including the development of low-cost feeds for milkfish and tilapia and refinement of the technology for seed production and rearing of silver tharapon. ❖

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## SEAFDEC convenes the Forty-second SEAFDEC Program Committee Meeting and Twenty-second FCG/ASSP Meeting

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ten Departmental Programs, and one Other Program that would commence in 2020. In addition, the 42PCM also discussed the progress of the revision of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 as directed by the SEAFDEC Council during its 50<sup>th</sup> Meeting in 2018, as well as the draft procedures for establishment of cooperation between SEAFDEC and other organizations. Results of the review of the projects implemented in 2019 and the programs of activities proposed for 2020 were submitted for endorsement to the “22<sup>nd</sup> Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (22FCG/ASSP),” which was organized back-to-back with the 42PCM.

Convened on 14-15 November 2019, the 22FCG/ASSP highlighted

on the follow-up actions carried out by SEAFDEC and the ASEAN Member States (AMSs) on the directives of the 51<sup>st</sup> Meeting of the SEAFDEC Council, meetings of the ASEAN bodies related to fisheries, and other meetings of SEAFDEC held in 2019, and also the status of programs and activities under the FCG/ASSP mechanism that were implemented by SEAFDEC in 2019 and those for implementation in 2020 as endorsed by the 42PCM, the progress of proposals under FCG/ASSP framework, and important issues that impact on the sustainability of the fisheries sector in the AMSs. The results and recommendations of the 22FCG/ASSP would be submitted to the SEAFDEC Council for approval and to the ASEAN Sectoral Working Group on Fisheries (ASWGFi) for endorsement to the higher authorities of the ASEAN. ❖

## Workshop on 5-year achievement of IFRDMD organized

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from the ASEAN Member States, officials and researchers of IFRDMD, as well as representatives from relevant institutions in Indonesia also attended the Workshop.

The Workshop Keynote Remarks was delivered by *Prof. Ir. Sjarief Widjaja*, Alternate SEAFDEC Council Director for Indonesia and Director of Agency for Marine and Fisheries Research and Human Resources. *Prof. Widjaja* subsequently presented the “Long Time Achievement Award in Inland Fisheries Research and Inland

Fisheries Management Building” to *Dr. Chumnarn Pongsri*, former Secretary-General of SEAFDEC in 2009-2015. It was during his term of office that IFRDMD was established. At this event, *Dr. Chumnarn*, was also invited to present the Key Message depicting the important considerations for ensuring the sustainable development of inland capture fisheries in the Southeast Asian region.

Also, the result of works of IFRDMD focusing on a wide range of subjects on inland capture fisheries and catadromous eels undertaken since its establishment in 2014 were summarized and presented at the event. ❖



From left to right: *Prof. Ir. Sjarief Widjaja*, *Dr. Chumnarn Pongsri*, and *SEAFDEC Secretary-General Ms. Malinee Smithrithee* during the awarding of token of appreciation to *Dr. Chumnarn*



## SEAFDEC participates in the 2<sup>nd</sup> ASEAN Meeting on Combating IUU Fishing in Partnership with the EU



*SEAFDEC Secretary-General Ms. Malinee Smithrithee (right) during the ASEAN Meeting on Combating IUU Fishing in Partnership with the EU*

Hosted by the Department of Fisheries of Thailand in collaboration with the ASEAN Secretariat, the “Second ASEAN Meeting on Combating IUU Fishing in Partnership with the EU” was convened on 13-14 December 2019 in Bangkok, Thailand.

The Meeting aimed to adopt the Terms of Reference on ASEAN Network for Combating IUU Fishing (AN-IUU) and Rules and Procedures of the AN-IUU, as well as to discuss the steps toward the establishment of the AN-IUU. The Meeting was attended by the representatives from the ASEAN Member States and other organizations who are implementing activities in relation to combating IUU fishing.

The representatives from SEAFDEC: *Ms. Malinee Smithrithee*, Secretary-General; *Mr. Akito Sato*, Deputy Secretary-General; and *Dr. Worawit Wanchana*, Policy and Program Coordinator of the Secretariat attended the Meeting. SEAFDEC presented its three regional initiatives related to combating IUU fishing, including the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain, the Regional Fishing Vessels Record, and the ASEAN Catch Documentation Scheme. ☒

## SEAFDEC participates in the 17<sup>th</sup> Session of the COFI Sub-Committee on Fish Trade

SEAFDEC Secretary-General, *Ms. Malinee Smithrithee*, together with the Special Advisor, *Mr. Masanami Izumi*, and Senior Policy Officer, *Ms. Pattaratjit Kaewnuratchadasorn*, took part in the 17<sup>th</sup> Session of the Sub-Committee on Fish Trade of the Committee on Fisheries (17COFI:FT), which was hosted by the Kingdom of Spain and the Food and Agriculture Organization of the United Nations (FAO) on 25-29 November 2019 in Vigo, Spain.

The Session was attended by approximately 100 delegates from 48 FAO Member Countries and observers from intergovernmental and non-governmental organizations. The 17COFI:FT provided the forum for the Member Countries to review the progress of the international trade of fish and fishery products by FAO and the countries, as well as to seek the guidance on future work priorities.

The highlights of the Session covered various trade-related topics such as information on markets and trade and networking with FISHINFONetwork, quality and safety of fish and fishery products, small-scale fisheries on value chains, post-harvest operations and trade, FAO guidelines for catch documentation scheme, and ongoing work on food fraud, traceability system, and CITES-related activities. The discussions also included the recent developments

in fisheries value chains and link to trade, recent trade agreements and cooperation between FAO, WTO, and other organizations as well as social responsibility in fish value chains, trade in fisheries services, among others.

During the Session, SEAFDEC made the statement including the Southeast Asian regions experiences and commitments. *Ms. Malinee* highlighted SEAFDEC’s activities on supporting the ASEAN Member States (AMSs) in addressing the global and emerging issues such as the 2030 Agenda for Sustainable Development Goals, regional cooperation on combating IUU fishing, traceability system, capacity building on the PSM, EAFM, stock assessment for management of transboundary species, and so on. Moreover, she also informed the Session that regional guidelines and management tools for the region had been developed to support the AMSs in implementing the actions to ensure the safety of fish and fishery products, as well as legality and prevention of fish and fishery products from IUU fishing across the supply chain. She reiterated that SEAFDEC would continue to work closely with FAO and with other international organizations in assisting the AMSs to achieve the common goal for the sustainable use of fisheries resources and for the well-being of people in Southeast Asia. ☒



*SEAFDEC Secretary-General Ms. Malinee Smithrithee, and SEAFDEC Special Advisor, Mr. Masanami Izumi during the COFI session on fish trade*

# DEPARTMENTAL ACTIVITIES

## Twentieth Meeting of SEAFDEC Information Staff Program

From 15 to 17 October 2019, the SEAFDEC Aquaculture Department (AQD) hosted the “Twentieth Meeting of SEAFDEC Information Staff Program (ISP)” in Puerto Princesa City, Palawan, Philippines. The ISP Meeting reviewed the implementation in the year 2019 of the Information Strategies aimed at enhancing the visibility of SEAFDEC. Recommendations and suggestions were also made for the SEAFDEC

Secretariat and Departments, to raise their awareness on the security of data stored in the websites and other social media. Moreover, since the Departments have established their respective institutional repositories, the Meeting requested the SEAFDEC Secretariat to revise the draft of the template for monitoring the repositories and for the Departments to conduct effective analysis of their respective repositories in the future.



## SEAFDEC holds its 2019 Department Chiefs' Meeting

SEAFDEC Secretariat organized its “Departments Chiefs' Meeting (DCM)” on 16 November 2019 in Chiang Mai, Thailand. The Meeting was attended by the SEAFDEC Secretary-General, Deputy Secretary-General, the SEAFDEC Department Chiefs and senior officials from the SEAFDEC Secretariat and Departments.

At this DCM, the follow-up actions from the 51<sup>st</sup> Meeting of SEAFDEC Council, 42PCM, and 22FCG/ASSP were discussed. Moreover, the draft Resolution and Plan of Actions on Sustainable Fisheries for Food Security for ASEAN Region Towards 2030 and its linkages with the new projects were also discussed. For Monitoring

the Implementation of the SEAFDEC Gender Strategy, the DCM agreed that information based on the template including the summary of the progress of the implementation of the Gender Strategy should be provided in the SEAFDEC Annual Report 2019 and onward. In addition, the workplan of the SEASOFIA 2022 was also discussed, especially the timeline and responsibility of the Departments in developing the outline and content. The DCM also took note of the Procedures for Establishment of Cooperation between SEAFDEC and Other Organizations, Guidelines on Procurement of Products and Services of SEAFDEC, and template for Reporting of JTF 6 Phase I Project Achievements.



## Internal Workshop for 2019 RFPN Members



The “Internal Workshop for Special Assignment of RFPN Members” was organized by SEAFDEC Secretariat on 17-19 December 2019 at Prachuap Khiri Khan, Thailand with support from the Japanese Trust Fund (JTF). The RFPN Members together with officials of the SEAFDEC Secretariat, visited the Coastal Aquaculture Research and Development Regional Center 2 in Samut Sakhon Province where they had the chance to observe the activities of the Center, especially for aquatic animal species such as sea anemone, grouper, sea bass, and sea cucumber. This was followed by the visit to the Sea Farming Royal Project Initiated by HM Queen Sirikit in the coastal Province of Phetchaburi, where they were informed of the activities on zero waste farming system that were promoted to address the problems about the dwindling marine resources.

In 2019, the RFPN Members were also tasked to develop their respective country profiles on fish trade. This is part of the Secretariat's actions to follow-up on recommendations of the Council for SEAFDEC to exert efforts in updating the synthesis of the development of international fish trade. At this Workshop, results of such tasks were presented and commented, and it was agreed that the final versions of the respective documents would be uploaded to the SEAFDEC website before the next Meeting of the SEAFDEC Council in 2020.





## Marine Eco-label Japan advocated through international seminar

SEAFDEC, with support from Japan Fisheries Association, organized the “International Special Seminar on Marine Eco-Label Japan” at the SEAFDEC Secretariat in Bangkok, Thailand on 26 November 2019. The Seminar was aimed at introducing and sharing the fishery eco-label initiatives in Japan, and discussing the possibilities of extending the concept of Marine Eco-Label Japan or MEL Japan and sustainability certification to Thailand as well as to the Southeast Asian region. Officials and staff from relevant governmental agencies, associations, academes, and private sectors in Thailand and Japan, as well as officials of SEAFDEC Secretariat and Training Department attended the Seminar.

Recognizing the importance of sustainability of the marine resources



Participants queried and discussed with the presenter during the MEL Seminar

for the future generations, the MEL Japan was developed in 2007 and has recently been benchmarked with the Global Sustainable Seafood Initiative (GSSI) standards. During the Seminar, several similarities of fisheries situation in Japan and Southeast Asian countries were reiterated, *e.g.* fisheries activities are undertaken mostly by small-scale fishers using small-sized fishing boats, activities at landing sites are labor

intensive involving several middlemen, catches comprise diverse species, and so on, making certification schemes that may be applicable for large-scale/single-species fisheries elsewhere not applicable in this region. Moreover, the regional tool on enhancing traceability of fish and fishery products in the Southeast Asian countries, such as the ASEAN Catch Documentation Scheme, was also introduced during the Seminar. ❖

## IJM Foundation staff visit SEAFDEC/TD



Staff of IJM Foundation were introduced on fishing gear technology and vessel operation

The staff from the International Justice Mission (IJM) Foundation, Thailand visited SEAFDEC/TD on 8 December 2019. The role and activities of SEAFDEC, fishing gear technology development and fishing vessel operation were introduced to the Foundation staff. The visitors observed the TD facilities, especially the M.V. PLALUNG which was designed to serve as a prototype of fishing practices that ensure safety, sanitation, and decent working and living conditions of the vessel crew. The IJM Foundation is a global organization with the goal of eliminating the slave trade. ❖

## University students and lecturers visit TD facilities

SEAFDEC/TD welcomed students and lecturers from the Faculty of Fisheries, Kasetsart University and Faculty of Marine Technology, Burapha University (Chantaburi Campus) on 5 October 2019 and 26 October 2019, respectively, to enhance their knowledge and experiences on fisheries outside the classroom. The visitors learned about TD, its roles and activities conducted in the region, and observed the facilities such as the fishing workshop and the M.V. SEAFDEC. The students from Kasetsart University were given a special lecture on types of fishing in Southeast Asia, while the students from Burapha University attended the special lecture on situation of fisheries in Southeast Asia and practiced fishing gear and net repair. ❖



## SEAFDEC Mini-marathon “Run for the SEA”



SEAFDEC/TD organized the SEAFDEC Mini-marathon “Fisherman Run” under the theme “Run for the SEA” on 8 December 2019 in Samut Prakan, Thailand with more than 1,000 runners and walkers participating. This annual activity is organized by TD to encourage its staff and the public to improve their health and at the same time promote the visibility of SEAFDEC to the public.

The income generated from this activity was donated to nine schools around TD as scholarship grants, and to Prasamutchedi Sawathayanon Hospital to buy much needed medical equipment. ❖

## Environment-friendly tiger shrimp farming pushed

With its premium taste and superior economic value, tiger shrimp is being pushed as an alternative species to farm alongside the popular whiteleg shrimp or *vannamei*. The tiger shrimp's potentials were underlined by *Mr. Dan Baliao*, Chief of SEAFDEC/AQD during the 12<sup>th</sup> Philippine Shrimp Congress in Bacolod City, Philippines. The AQD Chief said that tiger shrimp has good attributes of its own like better taste and better price compared to *vannamei*. However, the industry was ill-prepared for intensification of its culture in the nineties and there were no guidelines to support the rapid expansion of the shrimp industry.

The use of unapproved chemicals and release of untreated wastewater into the environment was rampant then,



*Mr. Dan Baliao, Chief of AQD, pushes for environment-friendly tiger shrimp farming during the 12<sup>th</sup> Philippine Shrimp Congress in Bacolod City on 20 November 2019*



*The different components of environment-friendly shrimp farming by AQD as illustrated in a diorama at the 12<sup>th</sup> Philippine Shrimp Congress in Bacolod City, Philippines*

triggering the occurrence of different diseases that plague the industry until now.

Even before the year 2000, AQD started to advocate environment-friendly culture of tiger shrimp such as the polyculture with finfish species to cater to farmers who prefer to farm extensively, or monoculture using the semi-intensive method. The AQD culture method uses green water technology that stabilizes water quality and naturally suppresses the harmful luminous and other *Vibrio* bacteria that cause massive mortality in shrimps. This was achieved by stocking tilapia and milkfish in the same water where the shrimps are grown.

Meanwhile, water discharged from shrimp ponds are first treated by a series of baffles that help settle suspended particles, and the introduction of

bioremediators such as seaweeds and the filter-feeding oysters and mussels.

The AQD Chief also stressed the importance of proper pond management and the observation of proper biosecurity to keep out the pathogens that can potentially wipe out entire pond operations.

Strict implementation of proper hygiene and sanitation in the pond facility reduces the risk of introducing shrimp pathogens. Foot baths for personnel and tire baths for vehicles must be installed at every entrance while crab fences around shrimp ponds and bird scare devices would keep out crabs and birds known to be carriers of diseases. Water and shrimp samples are also religiously monitored for physico-chemical parameters and pathogens, from stocking of the larvae until harvest. ✦

## Scientist invents new hatchery technology to save endemic 'ayungin'

The declining population of the silver therapon (*Leiopotherapon plumbeus*), a freshwater fish also called "ayungin" in the Philippines where it is endemic, is set to get a boost after SEAFDEC/AQD Scientist devised a new system of growing its larvae in captivity. Silver therapon is regarded as one of the most valuable edible native freshwater species because of its tasty flesh. Despite the declining trend in the wild stocks of silver therapon, demand for this food fish species remains high. It is sold from US\$ 4 to US\$ 16 per kilogram when dried and around US\$ 10 per kilogram when

fresh depending on the season and catch. The hatchery technique was developed by *Dr. Frolan A. Aya*, which was granted a patent by the Intellectual Property Office of the Philippines (IPOPIL) last 17 October 2019. The patent, which was published in Volume 22 Number 124 of IPOPIL's official gazette released on 20 November 2019, was made possible through the efforts of AQD's Innovation and Technology Support Office headed by *Dr. Roger Edward Mamauag*.

The hatchery technology, just like other technologies developed by AQD, will be for free and open to fish farmers

interested to venture in silver therapon culture.

*Dr. Aya* said that he will continue to do refinements of the technology for seed production and rearing of silver therapon and later demonstrate the technology to fisherfolk. Also, a manual on the biology and hatchery rearing is already in the pipeline.

He also said that he plans to do the commercial production as well as the development of nursery and grow-out technology for this important fishery resource. ✦



## Private company partners of AQD aid members of a coastal community



Participants tour AQD's Igang Marine Station at Guimaras on 19 November 2019

To develop the potential of marine fisheries in coastal villages, SEAFDEC/AQD conducted two batches of training courses on milkfish, mangrove crab, and abalone culture last 18-20 and 25-29 November 2019.

Forty-five trainees from Aroroy, a coastal town in Masbate Province, were funded by Filminera Resources

Corporation (FRC) and Philippine Gold Processing & Refining Corporation (PGPRC) to attend the training course as part of their social development and management programs.

AQD Chief *Dan Baliao* acknowledged the initiative to help the people and noted that it was the first time that a private company sponsored local fish farmers

to be trained at AQD. The aims of FRC and PGPRC were for the selected beneficiaries to learn effective and efficient aquaculture technologies from AQD and avoid relying from natural stocks in the wild.

During the five-day training course, experts from AQD shared the useful and practical information like biology and ecology of the cultured species as well as efficient technologies on seed production, hatchery, nursery, and grow-out. The trainees also experienced actual hatchery exercises at AQD's Tigbauan Main Station.

*Mr. Roque Betita*, a fisherman from Aroroy said they have always wanted to join training courses. He thanked the trainers and instructors at AQD for patiently answering all their questions.



## Australian envoy visits ACIAR projects at AQD

Ambassador *Steven Robinson* and his delegation from the Australian Embassy in Manila, Philippines visited AQD on 9 October 2019 to see the progress of the projects supported by the Australian Centre for International Agricultural Research (ACIAR).

The Australian Government has two recent projects with AQD, on giant grouper and sea cucumber, both through (ACIAR). SEAFDEC Scientist *Dr. Evelyn Grace Ayson*, Researcher *Peter Palma*, and Associate Scientist *Dr. Jon Altamirano* briefed Ambassador *Robinson* about the long-standing partnership between AQD and ACIAR and the recent accomplishments of the projects.

The Ambassador toured AQD's hatchery facilities for sea cucumbers and grouper, and learned about their life cycle and potentials when farmed. The Ambassador was accompanied by

his spouse, *Ms. Rhonda Robinson*, and officers from ACIAR, the Australian Department of Foreign Affairs and Trade, and Australia Awards. Since the 1990s, the Government of Australia has been supporting AQD in various other projects such as mangrove crab culture technologies as well as micropropagation of seaweeds.



*Ambassador Steven Robinson of the Australian Embassy in Manila with his spouse who is holding a sandfish breeder, at the sea cucumber hatchery during his visit to AQD Tigbauan Main Station on 9 October 2019*

## Young minds zoom into bacteria and shrimp cells at science expo

Future scientists may be in the making as pupils and students from the Philippines trained their eye on identifying different types of bacteria at the AQD booth during the Regional Science and Technology Week (RSTW) expo. The AQD Fish Health Section staff guided the visitors as they used a compound microscope and eyepiece camera to differentiate between *bacilli* and *cocci*, gram-positive and gram-negative bacteria, as well as healthy and diseased shrimp hepatopancreas using prepared slides. Aside from using the microscope, the guests also availed of different SEAFDEC/AQD flyers and brochures that were distributed for free during the event.

The RSTW is an annual exhibition organized by the Philippine Department of Science and Technology Region 6. This year's event was held at the Iloilo Convention Center, Iloilo City, Philippines on 21-25 October 2019.



## IFRDMD organizes 2019 Government of Japan Trust Fund Projects: Annual Progress Meeting

SEAFDEC/IFRDMD convened the “2019 Government of Japan Trust Fund Projects: Annual Progress Meeting” on 18 December 2019 in Palembang, Indonesia. Three evaluators, namely: *Dr. Shoichiro Yamamoto* from the National Research Institute of Fisheries Science, Japan, *Dr. Duto Nugroho* from the Ministry of Marine Affairs and Fisheries Indonesia, and *Mr. Isao Koya* from SEAFDEC Secretariat, were invited to evaluate the projects being implemented by IFRDMD. The Meeting was chaired by *Dr. Takuro*

*Shibuno*, IFRDMD Deputy Chief and Assistant JTF Manager, and attended by researchers and administrative staff. The project leaders presented the 2019 achievements of two projects “Promotion of Responsible Utilization of Inland Fisheries in Southeast Asia” and “Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia.” The evaluators recommended that the project activities need to highlight more on achieving scientific findings as baseline to enhance community awareness



*IFRDMD Chief Dr. Arif Wibowo (left) presenting the certificate to an evaluator*



*Discussion during the 2019 Government of Japan Trust Fund Projects: Annual Progress Meeting*

of the importance of inland fisheries. Likewise, for 2020-2024, two new projects “Management scheme of inland fisheries in the Southeast Asian region” and “Sustainable utilization of Anguillid eel in the Southeast Asia region” were also presented and scrutinized. It was recommended that both new projects should update the database on profiles of fisheries under their respective focus in the region and publish research results in international journals. ❖

## Philippine gov’t commends AQD’s aquaculture research

The Philippine Technical and Administrative Committee (PTAC) commended SEAFDEC/AQD for its continued efforts to create aquaculture technologies that will benefit fish farmers. During the 28<sup>th</sup> PTAC Meeting on 9 October 2019 in Pasay City, Philippines, *Ret. Commodore Eduardo Gongona*, the Director of the Bureau of Fisheries and Aquatic Resources (BFAR) expressed support to provide AQD with more resources for its programs and projects in the coming years.



*Ret. Commodore Eduardo Gongona, Director of the Bureau of Fisheries and Aquatic Resources (left) and AQD Chief Baliao (beside Mr. Gongona) discuss possible research areas in aquaculture during the 28<sup>th</sup> PTAC Meeting*

One of the most commended projects for 2019 is the development of low-cost feeds for milkfish and tilapia which were successfully verified through field-testing for cages and ponds in different locations. *Dr. Roger Edward Mamauag*, AQD scientist and head of the Technology Verification and Extension Division reported that they successfully reduced the cost of feeds by 30 percent compared to commercial feeds available in the market. The low-cost feeds

by AQD also showed higher growth and weight performance compared to commercial feeds. Director *Gongona*, in his capacity as PTAC Chairman, expressed his appreciation for this development and requested to AQD to move forward with the mass production of the formula while BFAR will assist in looking for demo-farms to test the feeds.

On the other hand, *Prof. Encarnacion Emilia Yap*, Dean of the College of Fisheries and Ocean Fisheries of the University of the Philippines Visayas, expressed the concern that aside from budget allocation for research and

extension, AQD scientists should be compensated well, calling them the “lifeblood of AQD.” This was supported by Director *Gongona* as he believed that scientists should be supported and given incentives. AQD also presented the progress of 49 studies under its departmental and regional programs as well as special projects in collaboration with the Philippine Government. The PTAC is a committee tasked to coordinate activities between AQD and the Philippine Government as host country and comprised representatives from relevant government agencies. ❖



## Algal paste promoted in Agrilink

SEAFDEC/AQD promoted its algal paste products during Agrilink, the Philippines' largest agribusiness exhibition, at the World Trade Center, Pasay City, Philippines which gathers hundreds of local and international exhibitors from the agriculture, food, and fisheries industries. Associate Researcher, *Ms. Annie Franco* of the AQD Larval Food Laboratory entertained queries from fish farmers and hatchery operators, some visiting Agrilink specifically to see the algal paste products. She explained that algal paste is produced from fresh microalgae which upon removal of the seawater

became concentrated so it can be stored for later use. Aside from its use as direct feed, the algal paste may also be used as backup in case live food cultures collapse such as during extreme weather conditions.

AQD currently produces algal paste in five species - *Nanochlorum* sp., *Chaetoceros calcitrans*, *Tetraselmis tetraathele*, *Isochrysis galbana*, *Chlorella sorokiniana*, and *Thalassiosira* sp. Along with the algae paste, the analytical and diagnostic services of AQD were also promoted. The AQD Bookstore also distributed publications and an aquarium

display of live eel juveniles (*Anguilla marmorata*) grabbed the attention of passersby. In recent years, Agrilink is reported to gather 25,000 visitors during each of its 3-day annual exhibitions.



*AQD's algal paste products along with samples of live food cultures were on display during the 26<sup>th</sup> Agrilink*

## FAO sends Tanzanian staff to the Philippines for mangrove crab and milkfish culture training

Upon the request of the Food and Agriculture Organization of the United Nations (FAO), AQD organized trainings on crab and milkfish culture for four Tanzanian technical staff who will be in-charge of the marine hatchery being set up by FAO in Zanzibar, Tanzania. The training courses were conducted simultaneously from 4 to 13 November 2019 with lectures and practical activities conducted by AQD experts.

*Mr. Juma Shaaban*, who attended the milkfish training, said their learnings were vital to their aquaculture sector in Zanzibar because they will also share their new knowledge, skills, and modern techniques to their technicians and throughout the aquaculture sector in Zanzibar.

*Mr. Khamis Hassan Ali*, who attended the training on mangrove crab, said they

hope to apply the knowledge in Tanzania to improve the industry of mangrove crab and to reach a good level, beginning with their hatchery.



## IFRDMD organizes in-house trainings on drone utilization and R Program

IFRDMD organized the "In-house Training on Drone and Its Utilization on Inland Fisheries" in Palembang, Indonesia on 18-20 November 2019 in order to learn the basic techniques for using drones and its application in taking aerial photos/videos and acquiring more information on inland fisheries.



*IFRDMD staff during the IFRDMD in-house training on drone utilization*

The resource person of this Training was the lecturer and habitat mapping expert from the Institut Pertanian Bogor (IPB) University, *Mr. Beginer Subhan*, who was assisted by *Mr. Prakas Santoso*, a Master's degree student of IPB University. The participants were the staff from IFRDMD, Research Institute for Inland Fisheries and Extension, and students from Sriwijaya University. During the Training, the participants learned and practiced taking videos and photographs by using drone in the field, and analyzed the data from videos and photographs.

Furthermore, on 25-28 November 2019, the "In-house Training on Inland Fisheries Data Visualization Using R Program" was held to enhance the capacity of IFRDMD researchers who are responsible for field data collection on

data analysis. The R program for analyzing statistical data helps build visualizations with minimal codes and flexibility. The Trainer was *Mr. Kamaluddin Kasim*, researcher from the Research Center for Fisheries, Ministry of Marine and Fisheries Indonesia. The Training covered the topics on: 1) data cleaning, sorting, and filtering; 2) data importing and exporting; 3) designing the GGPlot data visualization and animation; and 4) analyzing the SPR, CPUE, and MSY. During the Training, the participants analyzed the data under the projects "Promotion of responsible Utilization of Inland Fisheries in Southeast Asia" and "Enhancement of Sustainability of Catadromous Eel Resources in Southeast Asia." The IFRDMD researchers are expected to be able to produce scientific papers after the Training.



# SPECIAL REPORT

## Implementation of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain in Southeast Asia

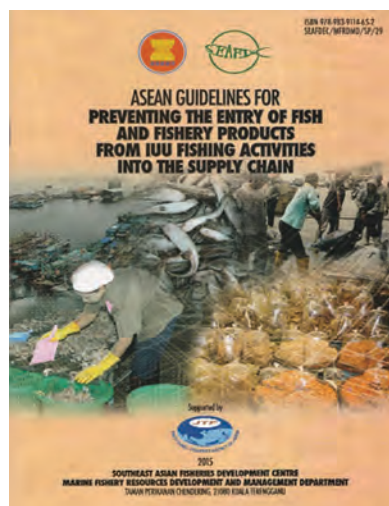
by SEAFDEC/MFRDMD

SEAFDEC implemented various activities that aim to control IUU fishing in the region, one of which was the project “Combating IUU Fishing in the Southeast Asian Region through Application of Catch Certification for International Trade in Fish and Fishery Products.” With financial support from the Japanese Trust Fund (JTF), the Project was carried out by the SEAFDEC Marine Fishery Resources Development and Management Department (SEAFDEC/MFRDMD) from 2013 to 2019. The objectives of the Project are to: 1) strengthen cooperation among ASEAN Member States (AMSs) in combating IUU fishing, 2) study the existing fishing and trading practices in small-scale fishery in the region, 3) analyze associated problems in compliance with the EC Regulation No. 1005/2008 in the region, and 4) suggest a possible catch certification system for large- and small-scale fisheries to ensure only non-IUU/legal fish and fishery products are traded in the region.

As requested by the AMSs, the “ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain” or the “ASEAN Guidelines” was developed by the Project taking into consideration the relevant international trade-related measures that prohibit the marketing of fish and fishery products derived through unsustainable means and from unsustainable sources. The ASEAN Guidelines was drafted during the “Regional Technical Consultation on the Regional Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain” on 23-25 September 2014 in Kota Kinabalu, Sabah, Malaysia.

Subsequently, after incorporating the suggestions made during the 17<sup>th</sup> Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP) in December 2014 and the 47<sup>th</sup> Meeting of the SEAFDEC

Council in April 2015, the final draft of the ASEAN Guidelines was endorsed by the 23<sup>rd</sup> Meeting of the ASEAN Sectoral Working Group on Fisheries (ASWGF<sub>i</sub>) in June 2015 for consideration at high level meeting of the ASEAN in 2015. The ASEAN Guidelines was endorsed by the 37<sup>th</sup> Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry (SOM-AMAF) in August 2015 and finally by the 37<sup>th</sup> Meeting of the ASEAN Minister for Agriculture and Forestry (AMAF) in September 2015.



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

### Implementation of the ASEAN Guidelines in the ASEAN Member States

Voluntary in nature, the implementation of the ASEAN Guidelines depends on the capacity of respective AMSs. One of the activities of the Project was to promote the implementation of the ASEAN Guidelines in the region. In 2017, the “2<sup>nd</sup> Regional Technical Consultation on Promotion of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing



*Participants of the Core Expert Meeting on Combating IUU Fishing in Southeast Asian Region Through Application of Catch Certification for International Trade in Fish and Fishery Product, 7-9 October 2013, Kuala Lumpur, Malaysia*

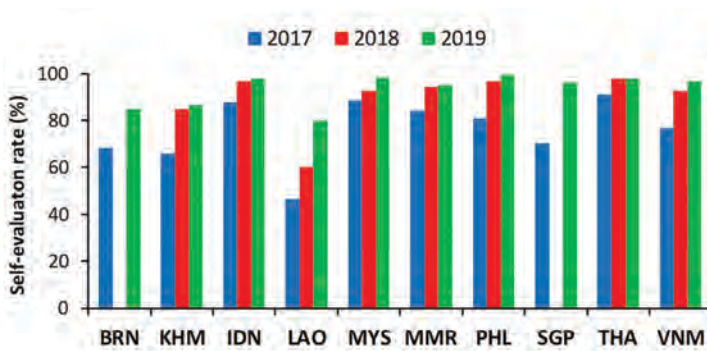


Activities into the Supply Chain” was organized to determine the status of implementation of the ASEAN Guidelines by the respective AMSs through self-evaluation.

Subsequently, the progress of implementation of the ASEAN Guidelines was followed up through self-evaluation during the consultative country visits conducted by MFRDMD in 2018 and at the Terminal Meeting of the Project in 2019.



*Participants of the 2<sup>nd</sup> Regional Technical Consultation on Promotion of the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain*



*Results of the implementation of the ASEAN Guidelines by the ASEAN Member States' self evaluation from 2017 to 2019*

## Ways forward

Although the ASEAN Guidelines has been endorsed and promoted since 2015, some AMSs still need assistance plans in the adoption of the ASEAN Guidelines at national levels. The practical and effective implementation of the ASEAN Guidelines depends on the circumstances in fishing, trading, and other scenarios of respective AMSs. In this regard, MFRDMD would continue extending technical assistance through capacity building activities as requested by the AMSs. Moreover, the AMSs have been asked to consider continuing the self-evaluation of the implementation of the ASEAN Guidelines to keep track of the activities in combating IUU fishing in their countries and in the Southeast Asian region. ☒



# REGIONAL PROGRAMS

## Regional Workshop on Fisheries Resource Enhancement and Habitat Conservation organized



SEAFDEC/TD, with support from the Japanese Trust Fund (JTF), convened the “Regional Workshop on Fisheries Resource Enhancement and Habitat Conservation Measures in Southeast Asia” on 9-12 December 2019 in Kep

Province, Cambodia. The Workshop was aimed at disseminating the results of the Study on Enhancement of Sustainable Management of the Blue Swimming Crab Fisheries to local stakeholders and SEAFDEC Member Countries, and

exchanging information and experiences on resource enhancement activities. The Workshop was attended by 52 participants, who were SEAFDEC staff, representatives from the SEAFDEC Member Countries, resource persons from Japan Fisheries Research Agency and Hokkaido University, and local staff and villagers from Cambodia’s coastal provinces (Koh Kong, Sihanoukville, Kompot, and Kep). The Workshop had combined the lessons learned from the project with those of the Member Countries, resource persons, and other projects, and came up with the ways forward and recommendations for current and future projects on resource enhancement. ❖

## Regional Workshop on EAFM conducted

The “Regional Workshop on Lessons Learned from Application of Ecosystem Approach to Fisheries Management (EAFM) in Different Learning Sites” was convened from 7 to 8 October 2019 in Bangkok, Thailand by SEAFDEC/TD, as one of the activities under the project “Human Resource Development for Sustainable Fisheries.” There were 28 participants attending in the Workshop including the staff from SEAFDEC Secretariat, TD, representatives from SEAFDEC Member Countries, namely; Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, Thailand, and Viet Nam, and representatives from the Food and Agriculture Organization of the United Nations (FAO), National Oceanic and Atmospheric Administration (NOAA), the Oceans and Fisheries Partnership (USAID Oceans), and Mie University, Japan. The objectives of the Workshop were to: 1) share the lessons learned from the implementation of EAFM concept in the Southeast Asian region; 2) identify key factors for the success and failure in the implementation of EAFM concept; and 3) recommend the

ways forward to the better implementation of the EAFM concept.

During the Workshop, each country presented their activities in promoting and implementing the EAFM concept. The Workshop then came up with key success of the Project including: 1) establishment of EAFM core team in the counties; 2) integration EAFM in fishery management plan at community level; and 3) organizing EAFM training courses by the core team in their respective country. In addition, the Workshop also came up with ways forward for promotion of EAFM at the

regional level, namely: 1) continued promotion of EAFM implementation in AMSs; 2) incorporating gender equity and equality in implementing EAFM; 3) establishing the regional EAFM network and national focal points; and 4) development of online learning courses on EAFM. As for the national level, the AMSs were requested to consider to: 1) modifying technical module to make in applicable for respective country; 2) disseminating results of the case studies; 3) mainstreaming EAFM in the national policies; and 4) conducting M&E of the learning sites of EAFM. ❖



*Participants during the Workshop on EAFM*



## Regional Workshop on Information Gathering through CBRM/Co-management

SEAFDEC/TD organized the “Regional Workshop on Facilitating Fisheries Activities Information Gathering through the Introduction of Community-based Resources Management/ Co-management in the Southeast Asian Region” from 22 to 24 October 2019 in Sakon Nakhon Province, Thailand. The Workshop was organized as one of the activities of the project “Enhancing the Compilation and Utilization of Fishery Statistics and Information for Sustainable Development and Management of Fisheries in Southeast Asian Region: Facilitating fisheries activities information gathering through the introduction of Community-based Resources Management/Co-management.” The 54 participants of the Workshop were from the SEAFDEC Member Countries who were senior officers responsible for small-scale fisheries development and/or coastal and inland fisheries management. The Workshop discussed the key factors for successful fisheries



*Participants of the Regional Workshop on community-based resources management*

data and information through CBRM/ Co-management, which included: 1) supportive national fisheries management policies and legal frameworks that enable the promotion of effective co-management; 2) understanding of the co-management concept; 3) active cooperation among members within a community and with relevant local agencies; 4) recognition of community management plans/regulations; and 5)

creation of incentive for collection and reporting data on small-scale fisheries. In addition, the Workshop also came up with the recommendations for future actions, including: 1) packaging of the results from this project; 2) organizing a technical workshop on data collection and analysis; and 3) emphasizing the importance of co-management in the development of regional fisheries policy frameworks. ❖

## End of Project Meeting on Community-based Resources Management in Lao PDR convened

SEAFDEC/TD convened the “End of Project Meeting on Community-based Resources Management in Lao PDR” on 24 to 25 December 2019 in Vientiane, Lao PDR. The Meeting was aimed at reviewing the achievements and sharing the lessons learned during the 3-year implementation of the project “Facilitating Fisheries Activity Information Gathering through the Introduction of Community-based Resources Management/Co-management” in project sites in

Khammouane Province and Nam Xouang Reservoir. The Meeting was attended by 28 participants including officers from the Department of Livestock and Fisheries (DLF) and local government, members of the Fisheries Management Committee (FMC), and staff from SEAFDEC Secretariat, TD, and IFRDMD. The Meeting came up with recommendations and ways forward in sustaining the inland fisheries management activities in the Project sites as well as in other areas of



Lao PDR, including: 1) sharing some income from middlemen for patrolling to sustain patrolling activities; 2) fisheries laws and regulations should be practiced through participatory approach; 3) awareness building on sustainable use of fishery resources is necessary e.g. sharing information on results from the stock assessment to create the awareness of local people on the overexploitation of the fishery resources. Furthermore, considering that the results of two (2) project sites would be useful, their application and could be expanded to other areas in Lao PDR. ❖



*Participants of the Meeting on community-based resources management in Lao PDR*

## Applicable fish handling techniques promoted through regional training course

SEAFDEC/TD organized the “Regional Training Course on Fish Handling Techniques Applicable to Various Fishing Operations in Southeast Asia” from 4 to 8 November 2019 at its premises in, Samut Prakan, Thailand. Seven participants who had relevant work experience on fish handling and could serve as trainers in the future from the ASEAN Member States attended this Training, which aimed to provide technical knowledge on fish handling techniques applicable to various fishing operations in Southeast Asia.

Imparted during the training was the knowledge on the importance of hygiene, cleanliness and important key



factors contributing to the reduction of post-harvest losses on-board fishing vessels. The subjects introduced during the training included good practices for fish handling techniques on-board, fish storage, and ways to improve fresh

quality at landing site using simple techniques applied to various fisheries in the Southeast Asian region. Moreover, the appropriate and applicable methods for the reduction of post-harvest losses of coastal and offshore fishing vessels and maintaining the freshness of the catch were also introduced to minimize post-harvest losses.

In the end, the participants had enhanced their knowledge and practical skills on the reduction of post-harvest losses which will help reinforce extension and promotion activities in their respective countries. ❖

## One-year sharks data of Cambodia and Myanmar validated

The SEAFDEC Secretariat organized the “One-Year Shark Data Collection Validation Workshop” from 8 to 9 October 2019 in Bangkok, Thailand with funding support from EU through the CITES Secretariat. The Workshop was attended by enumerators from Myanmar and Cambodia for the “EU-CITES Sharks and Rays Data Collection Project” which was implemented by SEAFDEC, concerned officers from the SEAFDEC Secretariat, TD, as well as the resource person from MFRDMD, *Dr. Ahmad Ali*.

Intended to analyze and validate the one-year data collected from two selected landing sites in Cambodia and four sites in Myanmar, the Workshop carried out an initial analysis of the data, and noted certain constraints,

such as the key-in of data had certain typing errors, some scientific names were misspelled, identification of some species was incorrect, etc., that could create difficulties in continuing with the data validation. In this connection, the Workshop recommended that in the future, validation of sharks data collected from the participating countries should be enhanced by updating their respective programs of activities on sharks and rays data collection with technical support from SEAFDEC. Moreover, the Workshop also suggested that Cambodia and Myanmar should consider undertaking follow-up actions in response to suggestions during the Workshop, especially with regard to the future plans and activities that support the improvement of sharks data collection. ❖



*Participants of the Workshop to validate the sharks data of Cambodia and Myanmar*

## Practical Workshop on Stock and Risk Assessments for Tuna in South China Sea



SEAFDEC/TD organized the “Practical Workshop on Stock and Risk Assessments of Yellowfin Tuna (YFT) and Skipjack Tuna (SKJ) in the South China Sea using Software on CPUE Standardizations, Stock-Production Model Incorporating Covariates (ASPIC), Kobe plots and Risk Assessments” from 16 to 20 December 2019, at the Research Institute for Marine Fisheries (RIMF) in Hai Phong, Viet Nam. The 20 participants from RIMF and TD were able to understand the steps on stock and risk assessments of YFT and SKJ in the South China Sea using software on CPUE standardizations, ASPIC, Kobe plots, and risk assessments which are user-friendly or menu-driven. Also, the participants were expected to also apply the skills that they have gained from the Workshop to other fish species. ❖



## Concluding activities of the project on purse seine fisheries management discussed



*Participants of the Final Internal Workshop on Management of Purse Seine Fisheries in Kuantan, Pahang, Malaysia*

At the final stage of the 7-year project “Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region,” MFRDMD organized the “Final Internal Workshop on Preparation of Terminal Report for JTF 6 Project: Comparative Studies for Management of Purse Seine Fisheries in Southeast Asian Region” on 13-17 October 2019 in Kuantan, Pahang, Malaysia. Attended by the MFRDMD staff who were involved in the implementation of the Project, the Workshop discussed the recommendations for the management measures of purse seine fisheries in the Southeast Asian region that correspond to the results of the Feedback Control and Production Model analyses.

In addition, MFRDMD organized a Consultation Meeting with the resource person of the Project, *Dr. Matsuishi*

*Takashi* on 19-20 November 2019 in Kuala Lumpur, Malaysia to finalize the results of the Surplus Production Model and Feedback Control (Rule 2.2)

analyses, as well as review the draft terminal report of the Project.

Furthermore, a research paper “A preliminary study of population genetic structure of spotted sardinella, *Amblygaster sirm* in Malaysian waters” was presented by MFRDMD Research Officer, *Ms. Noorul Azliana Jamaluddin* during the International Fisheries Symposium 2019 on 18-21 November 2019 in Kuala Lumpur, Malaysia.



*MFRDMD Consultation Meeting with Dr. Matsuishi Takashi (third from left)*



*MFRDMD staff presenting the results of the genetic study on Sardinella during the International Fisheries Symposium 2019*

## Regional Core Experts Meeting on Tropical Anguillid Eel Information Sharing

Upon the completion of the Project “Enhancing Sustainable Utilization and Management Scheme of Tropical Anguillid Eel Resources in Southeast Asia” implemented by SEAFDEC from August 2017 to July 2019 with support from the Japan-ASEAN Integration Fund (JAIF), the “Information Paper on Tropical Anguillid Eels” was developed for submission to the 31<sup>st</sup> Meeting of the Animals Committee of CITES scheduled in 2020. Nevertheless, as more issues and concerns on the sustainability of Anguillid eels were raised during the 18<sup>th</sup> Session of the CITES in August 2019, SEAFDEC organized the “Regional Core Experts Meeting on Tropical Anguillid Eel Information Sharing” from 3-4 October 2019 in Samut Prakan, Thailand, to address such concerns.

Attended by delegates from Indonesia, Philippines, and Viet Nam; experts from FAO, Indonesia, Japan and Thailand; private companies; SEAFDEC Secretariat, TD, AQD and IFRDMD, the Core Expert Meeting discussed the areas where improvements could be made on the “Information Paper.” Furthermore, the Meeting also provided

recommendations to refine the new JAIF Eel Project “Development of Stock Assessment Method and Strengthening of Resources Management Measures on Tropical Anguillid Eels in ASEAN Region.” Currently, SEAFDEC is in the process of securing funds from JAIF for this two-year Project which is starting in 2020.



*Participants of the Regional Core Experts Meeting on Tropical Anguillid Eel Information Sharing*

## Working Group Meeting for the project on GIS and RS technology

On 28 November 2019, SEAFDEC organized the “Working Group Meeting on Collecting Data and Analysis and Aquaculture in AMS with GIS and RS Technology” in Vientiane Province, Lao PDR, as part of the project “Strengthening the Effective Management of Inland Fisheries and Aquaculture in AMS with GIS (Geographic Information System) & RS (Remote Sensing) Technology.” Supported by the Japan-ASEAN Integration Fund (JAIF), the Project has the aims of developing methods for monitoring inland fisheries and aquaculture using GIS mapping and RS technology, and investigating the

relationship between the catch amount and the environmental data through GIS mapping.

Attended by the participants from Cambodia, Indonesia, Lao PDR, Myanmar, and Thailand; resource



persons from Tokyo University of Marine Science and Technology (TUMSAT), Ubon Rachatani University, Naresuan University, and Burapha University (Chanthaburi Campus); as well as representatives from SEAFDEC Secretariat and TD, the Meeting was updated on progresses in collection of catch data using logbook, and gathering of historical fisheries data and environmental data based on satellite images. The Meeting also discussed methods of analysis between the catch data and environmental data by satellite for effective fishery management using GIS and RS technology. ❖

## Fisheries *refugia* project convenes the 2<sup>nd</sup> meeting of its Steering Committee

Under the Project “Establishment and Operation of a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand Sea,” SEAFDEC convened the “2<sup>nd</sup> Meeting of the Regional Project Steering Committee (PSC2)” on 5-6 November 2019 in Sarawak, Malaysia. The PSC2 was aimed at

seeking consideration and endorsement on the progress of works at the national and regional levels, including the draft Indicators for Management of Fisheries *Refugia*, Ocean Modelling, and regional workplan on best practices of fisheries gears and methods. Specifically, the draft “Regional Action Plan for Management

of Indo-Pacific Mackerel in the Gulf of Thailand Sub-Region,” which was developed through coordinated efforts with the SEAFDEC-Sweden Project of which the extent of could also covered the South China Sea Sub-region was also presented to the PSC2.



The Fisheries *Refugia* Project is supported by the Global Environment Facility (GEF) and implemented by the United Nations Environment Programme (UNEP) with TD as the project coordination unit. The Project is implemented in six participating countries, namely Cambodia, Indonesia, Malaysia, Philippines, Thailand and Viet Nam. ❖

## Regional Workshop to Review and Finalize the Regional eCDT Technical Guidance Document

On 2-4 December 2019 the USAID/ Oceans and Fisheries Partnership organized the final “USAID Oceans/ SEAFDEC Regional Workshop to Review and Finalize the Regional eCDT Technical Guidance Document” in Bangkok, Thailand to review and finalized the draft “Technical Guidance on the Design and Implementation of eCDT Systems in Southeast Asia” which was developed through a series of national consultations and regional workshops with participating countries.

It is expected that when finalized in early 2020, this Technical Guidance will serve as a regional reference for technology standards, requirements, and processes

for the adoption, implementation, and sustained use of eCDT systems across interested ASEAN Member States in the future. ❖





## On-site training on eACDS application in Myanmar

SEAFDEC/TD in collaboration with the Department of Fisheries of Myanmar, organized the “On-site Training on the Use of the Electronic ASEAN Catch Documentation Scheme (eACDS)” from 9 to 13 December 2019 in Yangon, Myanmar. There were 18 participants who are in charge of the port-in port-



out control and issuance for Catch Declaration (CD), Movement Document (MD), and Catch Certification (CC) attending the Training.

With seven ACDS team members from TD, the Training focused on the use of eACDS application in the part of the port-in port-out until the issuance of CD. Moreover, the key data elements for eACDS database and verification of eACDS application through eACDS implementation plan for 2020 were also discussed. ❖

## Workshop on coordination between Malaysian agencies for implementation of eACDS

The “Workshop on Coordination between Malaysian Agencies for Implementation of electronic ASEAN Catch Document Scheme (eACDS)” was organized by SEAFDEC/TD in cooperation with the Department of Fisheries (DOF) Malaysia from 17 to 18 December 2019 in Kuala Lumpur, Malaysia. There were 20 participants



from the headquarters of the DOF Malaysia, Fisheries Development Authority of Malaysia (LKIM), and Malaysian Quarantine and Inspection Services, pilot site of LKIM in Kelantan and Kuantan, TD, and MFRDMD.

The aim of the Workshop was to introduce the eACDS application to relevant agencies. All participants had the chance to practice the eACDS application in the part of the port-in port-out through request and issuance of Catch Declaration. Furthermore, key data elements for eACDS database and eACDS implementation plan for 2020 were also discussed. ❖

## SEAFDEC takes part in the 34<sup>th</sup> Meeting of the INFOFISH Governing Council *(Continued from Page 19)*

of INFOFISH with a view to facilitating wider efforts toward combating IUU fishing. During the Meeting, Mr. Sato expressed the appreciation of SEAFDEC to INFOFISH for the invitation to attend the Meeting, and looked forward to having closer cooperation in the future. ❖



## SEAFDEC participates in the RPOA-IUU meeting in Cambodia



*SEAFDEC staff during the RPOA-IUU Coordination Committee Meeting*

SEAFDEC/TD participated in the “12<sup>th</sup> Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU) Coordination Committee Meeting” from 26 to 28 November 2019 in Siem Reap, Cambodia. The Meeting was attended by 53 participants from the RPOA-IUU Member Countries and international organizations such as SEAFDEC, International Criminal Police Organization, National Oceanic and Atmospheric Administration of the USA, Commonwealth Scientific and Industrial Research Organisation of Australia, and the European Union.

At the Meeting, the SEAFDEC staff presented the progress of SEAFDEC initiatives toward supporting the implementation of the RPOA-IUU in ASEAN, which focused on activities to combat IUU Fishing in the region such as Regional Fishing Vessels Record (RFVR), capacity building and supporting the implementation of Port State Measures, electronic ASEAN Catch Documentation Scheme (eACDS), and so on.

Moreover, the Meeting discussed several issues such as fisheries management challenges and priorities, importance of involvement and implementation of international regulation, and Joint Statement of RPOA-IUU Member Countries. ❖

# FUTURE ACTIVITIES

Date	Venue	Title	Organizer(s)
<b>2020</b>			
21-23 January	Bangkok, Thailand	Regional Workshop on Gender Integration	USAID Oceans
10-14 February	Bali, Indonesia	28 <sup>th</sup> Session of the Asia and Pacific Commission on Agricultural Statistics	FAO/RAP
24-28 February	Samut Prakan, Thailand	Training Course on Inland Fishing Gears (for DOF Thailand)	TD
18-20 February	Bali Indonesia	Capacity Building on Global Marine Debris Monitoring and Modeling: Supports Protection of the Marine Environment	APEC
28 February	Bangkok, Thailand	Expert Group Meeting on Environmental Change Through Participation	UN
9-13 March	BFS, Rizal, Philippines	Training Course on Tilapia Hatchery & Grow-out Operations	AOD
23-27 March	BFS, Rizal, Philippines	Training Course on Freshwater Prawn Hatchery and Grow-out Operations	AOD
26-27 March	Da Nang City, Viet Nam	International Conference on Sustainable Ocean Economy and Climate Change Adaptation	Gov. of Viet Nam & Norway
26-27 March	Bangkok, Thailand	Regional Seminar on the EU IT CATCH System	DG Mare
13-27 April	TMS, Iloilo, Philippines	Training Course on Sandfish ( <i>Holothuria scabra</i> ) Seed Production, Nursery and Management	AOD
20-24 April	BFS, Rizal, Philippines	Training Course on Carp Hatchery & Grow-out Operations	AOD
21-24 April	Busan, Republic of Korea	3 <sup>rd</sup> Meeting of the Sustainable Ocean Initiative (SOI) Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies	Sust. Ocean Institute
27-29 April	Bangkok, Thailand	Advance Training and Trade in Market Analysis and Fish Supply Chain for the DOF Thailand	INFOFISH
11-15 May	BFS, Rizal, Philippines	Training Course on Freshwater Prawn Hatchery & Grow-out Operations	AOD
24-29 May	Paris, France	88 <sup>th</sup> General Session of the World Assembly of National Delegates of the OIE	OIE
22-26 June	BFS, Rizal, Philippines	Training Course on Tilapia Hatchery & Grow-out Operations	AOD
22 Jun - 28 Jul	TMS, Iloilo, Philippines	Training Course on Marine Fish Hatchery Operations	AOD
23-25 June (Tentative)	Bangkok, Thailand	Regional Technical Consultation on Fishery Statistics: Revision of Regional Frameworks on Fishery Statistics of Southeast Asia	Secretariat
June (Tentative)	Lisbon, Portugal	UN Ocean Conference	UN
July (Tentative)	Iloilo, Philippines	AOD Anniversary	AOD
13-17 July	Rome, Italy	34 <sup>th</sup> Session of FAO Committee on Fisheries (COFI)	FAO
20-21 July	Kuala Lumpur, Malaysia	Core Expert Meeting on Pelagic Fish Resources in the Southeast Asian Region	MFRDMD
22-23 July	Kuala Lumpur, Malaysia	6 <sup>th</sup> Meeting of the Scientific Working Group (SWG) on Neritic Tuna Stock Assessment in the Southeast Asian Waters	MFRDMD
10-14 August	BFS, Rizal, Philippines	Training Course on Tilapia Hatchery & Grow-out Operations	AOD
17 Aug-7 Sep	TMS, Iloilo, Philippines	Training Course on Mangrove Crab Hatchery Operations	AOD
18-20 August (Tentative)	Bangkok, Thailand	Inter-Departmental Workshop on Preparation for SEASOFIA2022	SEAFDEC
29 Aug-3 Sep	Japan	Visiting Japan Fisheries Research and Education Agency	MFRDMD
14-16 September	Kuala Lumpur, Malaysia	Core Expert Meeting for Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region	MFRDMD
21-25 September	BFS, Rizal, Philippines	Training Course on Freshwater Prawn Hatchery & Grow-out Operations	AOD
21-30 September	TMS, Iloilo, Philippines	Training Course on Mangrove Crab Nursery & Grow-out Operations	AOD
12-16 October	BFS, Rizal, Philippines	Training Course on Catfish Hatchery and Grow-out Operations	AOD
October (Tentative)	Belitung, Indonesia (TBC)	21 <sup>st</sup> Meeting of SEAFDEC Information Staff (ISP) Meeting	SEAFDEC
10-12 November (Tentative)	Iloilo, Philippines	43 <sup>rd</sup> Meeting of the Program Committee Meeting (PCM)	AOD
13-14 November (Tentative)	Iloilo, Philippines	23 <sup>rd</sup> Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)	SEAFDEC
15 November (Tentative)	Iloilo, Philippines	SEAFDEC Department Chiefs' Meeting	SEAFDEC



## TD participates in workshop on MCS analytics

Two staff from SEAFDEC/TD who are involved in the project on combating IUU fishing participated in “Regional Workshop on Monitoring, Control and Surveillance (MCS) Analytics” from 4 to 8 November 2019 in Kuala Lumpur, Malaysia.

The Workshop which was organized by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in collaboration with the Department of Fisheries (DOF) Malaysia had forty participants that include the representatives from Timor-Leste, Papua New Guinea, and the ASEAN Member States (AMSS) except Singapore, as well as from TD, National Oceanic and Atmospheric Administration (NOAA), and Australian Fisheries Management Authority (AFMA). The Workshop focused on enhancing the awareness of modern data-driven approaches to identify IUU fishing related issues including the use of risk modeling to determine the likely violations and the corresponding potential enforcement actions.

The Workshop aimed to improve the oversight of fishing activities across the Southeast Asian region by enhancing the efficiency of MCS staff at national and regional fisheries management bodies bringing together relevant personnel across the region which would help develop a strong cohesive regional network of fishery analysts, information sharing, and foster regional cooperation in the future. ❖



## SEAFDEC takes part in the 34<sup>th</sup> Meeting of the INFOFISH Governing Council

SEAFDEC was represented by Deputy Secretary-General *Mr. Akito Sato* during at the 34<sup>th</sup> Meeting of the Governing Council of INFOFISH on 16-19 December 2019 in Maldives, where the progress of works of INFOFISH in 2019 on wide range of activities related to trade of fish and fishery products was reported. SEAFDEC and INFOFISH pursued closer cooperation in 2019, particularly through the “Regional Training Course on Port State Measures Implementation for Inspector” conducted by SEAFDEC in July 2019 that also allowed the participation of the members

(Continued on Page 17)

### Note for contributors

The SEAFDEC Newsletter publishes quarterly news on all aspects of fisheries in Southeast Asia. The Editors reserve the right to accept and/or abridge articles based on available space. Anyone wishing to submit an article to the SEAFDEC Newsletter is requested to send it to the Editor in Chief or Editors at the given addresses.

Information in this Newsletter may be quoted only if reference is made to SEAFDEC.

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## End of the SEAFDEC-Sweden Project Meeting convened

The SEAFDEC-Sweden Project convened the “End of the Project Meeting: Fisheries and Habitat Management, Climate Change and Social Well-being in Southeast Asia (2013-2019)” on 30-31 October 2019 in Bangkok, Thailand to sum up the Project results and outputs. The Meeting also highlighted the major achievements, as well as shared the experiences, best practices, and lessons learned from the Project implementation, among the countries and relevant stakeholders.

The two-day Meeting gathered 80 participants from the ASEAN Member States (AMSs), representatives from donors and regional partners namely: Government of Sweden, USAID, FAO/RAP, JTF, UNEP/GEF/Fisheries *Refugia* Project, IUCN, Sustainable Development Foundation, Learning Institute, and CORIN-Asia Cambodia. Moreover, experts and resource persons, officials from SEAFDEC and members of the Regional Fisheries Policy Network were also in attendance. The highlights of the Meeting included the overall achievements and deliverable results that led to the achievement of the



Ms. Malinee Smithrithee, *SEAFDEC Secretary-General* (left) and Ms. Åsa Hedén, *Head of Development Cooperation Regional Asia and the Pacific, Embassy of Sweden* (right) during the *End of the Project Meeting: SEAFDEC-Sweden Project*

Project’s objectives which focused on strengthening capacity among the AMSs on the management of fisheries and habitats, management of fishing capacity, and combating IUU fishing through regional and sub-regional cooperation and on-site cooperation with regional and national partners with special focus in the Andaman Sea, Gulf of Thailand, and the Mekong River Basin sub-regions. In addition, the Meeting also emphasized the successful support of the Project to SEAFDEC and its Member Countries in strengthening their capacity to address several cross-cutting issues

including social well-being, human rights, livelihood, and integration of gender in small-scale fisheries.

The five Sessions that encompassed the Meeting, were: 1) Sustainable Utilization of Transboundary Fisheries Resources; 2) Regional and Sub-regional Cooperation for Management of Fishing Capacity Combating IUU Fishing; 3) Building Awareness and Capability on Livelihoods Diversification options and Adaptation to Climate Change for Poverty Alleviation; 4) Why and what have been undertaken in gender integration; and 5) Looking Back-Looking Forward: the major advantages and the usefulness of a sub-regional platform. During the discussions, the panelists and participants shared their views and current country actions based on the Project results, as well as the challenges and recommendations for future implementation of related projects. Moreover, the Meeting also provided opportunity for regional partners to share their views and ways forward in sustaining the initiatives made by the Project together with the concerned countries and partners. ❖

## Capacity Development Workshop on Stock Status Assessment and Estimation of SDG Indicator 14.4.1 of the Asia Pacific Region organized

The “Capacity Development Workshop on Stock Status Assessment and Estimation of SDG Indicator 14.4.1 for the Asia Pacific Region” was organized from 2 to 4 October 2019 in Bangkok, Thailand and hosted by the SEAFDEC/TD and Food and Agriculture Organization of the United Nations (FAO). The Workshop was attended

by 28 participants including resource persons from the FAO, representatives from the Asia-Pacific countries, and officials and staff from TD and SEAFDEC Secretariat. The Workshop was meant to: 1) raise the awareness of SDG 14.4.1’s significance and global reporting process; 2) provide technical training to national practitioners in data

requirements, data collection process, stock status assessment methods to estimate Indicator 14.4.1; 3) conduct hands-on practices on the stock status assessment method to be developed by FAO; and 4) provide a guide on national assessment and reporting process of Indicator 14.4.1 in compliance with global requirements and standards.



The Workshop came up with recommendations on the use of the Virtual Research Environment (VRE) as a community network for exchanging experiences and skills. The crucial role of SEAFDEC to promote awareness of SDG 14.4.1 and assist the countries in the reporting process was also emphasized. ❖