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EDITORIAL

During the last quarter of 2020, SEAFDEC organized several important events, such as the "Forty-third SEAFDEC Program Committee Meeting" which discussed and reviewed the progress and achievements of SEAFDEC programs, projects, and activities implemented in 2020 and those proposed for 2021. In addition, the "Twenty-third Meeting of the Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP)" was also organized to address the policy considerations that are significant to the fisheries sector of the region.

Specially during this quarter, the ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030) were adopted by the ASEAN-SEAFDEC Senior Officials and Ministers, and would serve as policy framework and direction to guide the region's fisheries development towards

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SEAFDEC convenes the Forty-third SEAFDEC Program Committee Meeting



Participants of the 43PCM

The "Forty-third Meeting of the projects in 2020 and the programs to Program Committee of SEAFDEC organized on 10-12 November 2020 through an online meeting platform, in cooperation with the SEAFDEC Departments to review the implemented

be undertaken in 2021. The 43PCM Program Committee (43PCM)" was reviewed the progress and achievements of 16 ongoing projects under the FCG/ ASSP Mechanism and three 3 new hosted by the SEAFDEC Secretariat projects scheduled to commence in 2021. Subsequently, the progress and

(Continued on Page 2)

SEAFDEC organizes Twenty-third Meeting of FCG/ASSP



Participants of the 23FCG/ASSP Meeting

Fisheries Consultative Group (FCG) of the ASEAN-SEAFDEC Strategic Partnership (ASSP)" or the 23FCG/ ASSP was organized by SEAFDEC through the online platform from 17 to

The "Twenty-third Meeting of the 18 November 2020. The 23FCG/ASSP was co-chaired by Acting Director of the Department of Fisheries of Brunei Darussalam, Ms. Noraini Haji Anggas on behalf of the current Chairperson of

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EDITORIAL

(Continued from Page 1)

sustainability and enhance the contribution of fisheries to food security and livelihood of people in the region in the coming decade.

SEAFDEC continued the conduct of several regional events including the "Regional Technical Consultation on RPOA-Capacity" which updated the implementation of national and regional plan of action in respective AMSs. During the "First Core Experts Meeting on Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region" and the "First Core Expert Meeting on Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region," the results of previous projects were shared and the planned activities of present projects from 2020 to 2024 were discussed. Other regional event was the "Sixth Meeting of the Scientific Working Group on Neritic Tunas Stock Assessment in the Southeast Asian Waters" where the stock status of neritic tunas in the region and the future workplan were discussed.

Furthermore, SEAFDEC organized the virtual Inter-Departmental Workshop to deliberate the conduct of the "Study on Impacts of COVID-19 Pandemic on the Fisheries Sector of ASEAN-SEAFDEC Member Countries" and to seek the consideration of the questionnaire, workplan, and timeframe of the Study.

Moreover, several trainings and workshops were also organized to enhance the capacity of SEAFDEC staff and those from the SEAFDEC Member Countries. The trainings/workshops include gender analysis, development of fisheries management plan, and fish handling techniques.

SEAFDEC/AQD welcomed its new Deputy Chief and co-manager of the Japanese Trust Fund, Dr. Savaka Ito. His term would be from 1 October 2020 to 30 September 2022. ×

SEAFDEC Newsletter is available at www.seafdec.org.

You can also send your comments on our Newsletter to secretariat@seafdec.org.

SEAFDEC convenes the Forty-third SEAFDEC Program Committee Meeting

(Continued from Page 1)

Programs and three Other Programs, Meeting of the Fisheries Consultative and the seven Pipeline Projects Group of the ASEAN-SEAFDEC were also reviewed and noted. The Strategic Partnership (FCG/ASSP), recommendations and comments of the and will be submitted to the SEAFDEC 43PCM were submitted for endorsement Council during its 53rd Meeting in through the ASEAN Sectoral Working 2021. Group on Fisheries (ASWGFi) as

achievements of 10 Departmental appropriate during the Twenty-third

SEAFDEC organizes Twenty-third Meeting of FCG/ASSP

(Continued from Page 1)

the ASEAN Sectoral Working Group on SEAFDEC Program Committee. The and Departments.

programs and activities implemented by SEAFDEC in 2020, the 23FCG/ASSP endorsed the programs proposed for 2021 under the FCG/ASSP Mechanism that had been scrutinized by the recentlyconcluded Forty-third Meeting of the

Fisheries (ASWGFi) and the Secretary- 23FCG/ASSP also considered the General of SEAFDEC, Ms. Malinee implementation and provided guidance Smithrithee. The participants of the on the policy documents under the FCG/ Meeting include the representatives ASSP Mechanism and other issues that from the ASEAN-SEAFDEC Member are of importance to the fisheries sector Countries, representatives from the of the ASEAN-SEAFDEC Member ASEAN Secretariat, as well as the Countries. The main issues deliberated SEAFDEC Secretary-General and during the 23FCG/ASSP included Deputy Secretary-General, and senior combating IUU fishing, promotion of officials of the SEAFDEC Secretariat sustainable fisheries and aquaculture, ensuring the food safety and quality of fish and fishery products, fish trade-While concurring with the related issues, and other emerging issues. recommendations of the 43PCM on the The results and recommendations of the Meeting would be submitted to the Fifty-third Meeting of SEAFDEC Council in 2021 and to the ASEAN for consideration and policy support in the implementation of future activities.



SEAFDEC joins ASEAN-FEN Webinar 2020



SEAFDEC was represented during the "ASEAN-FEN Webinar 2020" which was organized by the ASEAN Fisheries Education Network (ASEAN–FEN) on 10-11 October 2020. The Webinar served as platform for knowledge sharing on the novel and innovative findings related to fisheries and aquaculture, and featured 26 speakers from nine countries who presented the research findings including

the impacts of COVID-19 to fisheries and aquaculture sector.

On the first day of the ASEAN–FEN Webinar 2020, SEAFDEC Secretary-General, Ms. Malinee Smithrithee, delivered the keynote speech on SEAFDEC Initiatives and Contribution to Fisheries in ASEAN. She highlighted the important role of SEAFDEC in providing support to the ASEAN Member States (AMSs) to undertake various programs and activities for the protection of the region's seas and inland aquatic resources for sustainable fisheries development. The SEAFDEC initiatives include exploration

(Continued on Page 3)

M.V. SEAFDEC mission on deployment of tsunami buoy in the Andaman Sea and **Indian Ocean**



SEAFDEC/TD in cooperation with the National Disaster Warning Center (NDWC) under the Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior of Thailand, deployed new units of tsunami warning system including the SAIC Tsunami Buoy (STB) in the Indian Ocean during 16–25 November 2020 and Easy-to-Deploy (ETS) in the Andaman Sea during 27–29 November 2020. Prior to the deployment of the tsunami buoy, an official event was organized which was opened by the representative from DDPM on 16 November 2020 at Phuket Deep Sea Port, Phuket Province, Thailand. TD has been supporting the NDWC in the deployment and maintenance of the tsunami warning system since 2006. \gg

SEAFDEC joins ASEAN-FEN Webinar 2020

(Continued from Page 2)

of marine resources and demonstration of innovative energy saving and post harvest technologies in research vessels of SEAFDEC, management of transboundary fish species, capacity building and trainings on fisheries and aquaculture. In addition, She then mentioned the continued activities of SEAFDEC to support the AMSs by utilizing the on-line platforms in the conduct of meetings, workshops, trainings, and others during the COVID-19 pandemic. In the end, she commended the role of ASEAN-FEN in knowledge and information sharing which is of vital importance to support the fisheries and aquaculture sector in the Southeast Asian region.

Disease-afflicted seaweed farms see hope with help of scientists



A seaweed farmer in Tigtabon, Zamboanga City, Philippines, shows his fixed off-bottom seaweed farm growing Kappaphycus alvarezii, a source of carrageenan used in food, drinks, and cosmetics

Seaweed farming is at the centerpiece of a worldwide effort by scientists to better address the outbreak of diseases SEAFDEC/AQD, as part of the UK Research and Innovation (UKRI)–Global Seaweed Star Project, is working to better understand the outbreaks of "ice-ice" have inflicted losses worth as much as 15 percent of the total seaweed production.

institutions in the United Kingdom materials. including the National History Museum, Scottish Association for Marine Science (SAMS), and Centre for Environment, Fisheries and Aquaculture Science (Cefas), are developing methods and tools to detect and diagnose diseases and pests that limit seaweed production yields.

Seaweed samples from 16 farming sites in the Philippines were collected and examined. Histology and electron microscopy were used to diagnose diseases and pests before using polymerase chain reaction (PCR) to confirm the presence of epiphytic filamentous algae (EFA) disease by detecting their DNA. Results were then forwarded to partners in the United Kingdom to be added to the planned open-access, Digital Atlas of

Anatomy and Pathology of Seaweeds (DAPS) and the Seaweed Holobiome Data Repository (SHoRE).

Findings would be integrated with those of other researchers' works on policies, genetics, and socioeconomics, to conduct a Sharing Best Practices (SBP) event in key seaweed growing areas around the Philippines wherein among other strategies, brochures, and information about seaweeds would be also produced and distributed. The endgoal is to provide free access to reference materials on farm management and biosecurity measures to everyone and promote information dissemination in the scientific community.

AQD Research Division Head, and pests that are plaguing the farms. Dr. Leobert de la Peña, stressed that interventions such as the use of prophylactics should be developed to Challenge Research Fund (GCRF) Global reduce the impact of seaweed pests and diseases should they eventually make their way into farming sites disease (IID) and epiphyte infestations in despite biosecurity measures and risk seaweed farms in the Philippines which management. AQD Chief, Mr. Dan Baliao, added that addressing the disease issue first is critical before focusing on the expanded production of tissue-culture AQD, along with University of based plantlets for distribution to farms the Philippines Visayas and partner without access to good quality planting

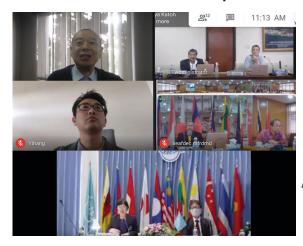
> The Global Seaweed Star project was initiated on 1 October 2017 and funded by UKRI-GCRF. Expected to end by 31 December 2021, the Program brings together an international team of experts in science, policy, and economics across the United Kingdom, Philippines, Malaysia, Tanzania, and Canada.



The whitened tip of the seaweed Kappaphycus alvarezii is a typical sign of "ice-ice" disease, a major cause of losses in seaweed farms

DEPARTMENTAL ACTIVITIES

SEAFDEC holds its 2020 Department Chiefs' Meeting



SEAFDEC Secretary-General and Deputy Secretary-General (below), Department Chiefs and Deputy Chiefs (above) during the online Department Chiefs' Meeting

The "SEAFDEC Departments Chiefs' Meeting" was convened on 3 December 2020 through Google Meet, and was attended by the SEAFDEC Secretary-General, Deputy Secretary-General, the SEAFDEC Department Chiefs and senior officials from the Secretariat, TD, MFRD, AQD, MFRDMD, and IFRDMD. After discussing the followup actions to address the directives of

the 52CM, 43PCM, and 23FCG/ASSP, the Meeting also noted the endorsement of the Resolution and Plan of Actions on Sustainable Fisheries for Food Security for ASEAN Region Towards 2030 and that this document has already been uploaded to the SEAFDEC Repository.

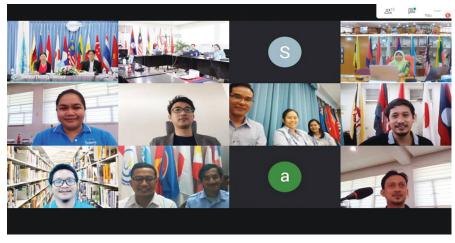
Furthermore, the SEAFDEC Secretariat also plans to organize an

online consultation in early 2021 for the development of a Roadmap for the Adoption of the Resolution and Plan of Action which would be reported to the 53CM for consideration. For the information-related matters, the Meeting took note of the results of the 21st Meeting of SEAFDEC Information Staff Program, especially on the issues that need to be considered by the concerned Departments, such as those related to the proposed Departmental Repository Self-service Hosting at AQD for the repositories of SEAFDEC Secretariat, TD, and MFRDMD. Meanwhile, the Meeting concurred with the other issues raised by the SEAFDEC Secretariat, such as those on the preparation of SEASOFIA 2020, and also the updated workplan of the Study on Impacts from Coronavirus-2019 Pandemic on Fisheries Sector of the ASEAN-SEAFDEC Member Countries. X

Twenty-first Meeting of SEAFDEC Information Staff Program convened

SEAFDEC organized the "Twentyfirst Meeting of SEAFDEC Information Staff Program (21ISP)" from 30 November to 1 December 2020 through Google Meet. The 21ISP was attended by the SEAFDEC Secretary-General, Deputy Secretary-General, senior officials as well as information-related officers from the Secretariat, TD, MFRD, AQD, MFRDMD, and IFRDMD.

During the Meeting, the progress and achievements of the implementation of the Information Strategies for Enhancing SEAFDEC Visibility and Communication in 2020 were reviewed. Moreover, the Meeting also provided recommendations on the preparation and enhancement of SEAFDEC information tools/activities in 2021 which include regular information materials, annual report, Special Publication "Fish for the People," Calendar 2022, websites,



SEAFDEC officials and staff during the Twenty-first Meeting of SEAFDEC Information Staff Program convened on 1 December 2020

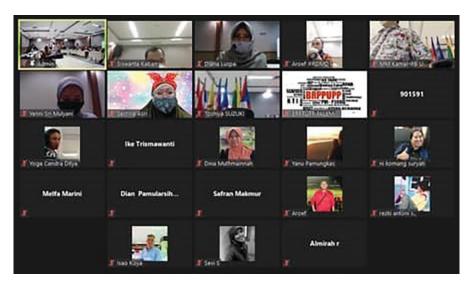
and institutional repositories. Other information-related matters including particularly those that need policy the progress of hosting of institutional repositories and revision of the Notes for Writing and Editing SEAFDEC Documents were also raised during the Meeting.

The results from the 21ISP, support from SEAFDEC, would be submitted to the SEAFDEC Department Chiefs' Meeting in 2020 for consideration and directives. X

IFRDMD organizes Annual Meeting

SEAFDEC/IFRDMD has been implementing projects funded by the Government of Japan Trust Fund (JTF) since 2015. In 2020, the second phase of 5-year program supported by JTF started with two projects: 1) Management scheme of inland fisheries in the Southeast Asia Region; and 2) Sustainable Utilization of Anguillid Eel in the Southeast Asia Region. In this regard, IFRDMD organized the "2020 Government of Japan Trust Fund Projects Annual Progress Meeting" on 9 December 2020 to report the achievements of the projects in 2020 and the planned activities in 2021. The virtual and face-to-face Meeting was attended by 20 IFRDMD researchers and officers.

IFRDMD Chief, Dr. Arif Wibowo, opened the Meeting and informed that although some activities in 2020 could not be undertaken as planned, IFRDMD still has the support from



the SEAFDEC Member Countries to Indonesia, Dr. Mohammad Mukhlis achieve good results from the Projects. Moreover, IFRDMD invited the group leader of Inland Fisheries Research Division, Japan Fisheries Research and Education Agency, Dr. Takashi *Yada*, and lecturer at Aquatic Resources Management Department, Fisheries and Marine Science Faculty, IPB University,

Kamal, to evaluate the ongoing Projects and provide suggestions for future projects. Finally, the IFRDMD Deputy Chief, Mr. Toshiya Suzuki, closed the Meeting and wished that the planned activities in 2021 would be successfully conducted even during the COVID-19 pandemic. ×

IFRDMD shares research results on TV program





SEAFDEC/IFRDMD staff, Mr. Dwi Atminarso and Ms. Melfa Marini during the program by BRSDM TV

SEAFDEC/IFRDMD participated in a sharing session program arranged by BRSDM TV. The sharing session program was meant for sharing the results of researches on fisheries, aquatic environment, among others to improve the capability of the researchers and officers from the Ministry of Marine Affairs and Fisheries, Republic of Indonesia.

The researchers from IFRDMD, Mr. Dwi Atminarso and Ms. Melfa Marini shared the results of their studies. Mr. Dwi presented the study "The Importance to Maintain River Connectivity to Increase Inland Fisheries Productivity" on 4 November 2020. In addition, Ms. Melfa made a presentation on the "Application of Mark D-Loop Region for Identifying Anguillid Eel Stocks in Three Regions of Southeast Asia" on 2 December 2020. The recorded events could be accessed on the YouTube channel of BRSDM TV.

Trawl fishers visit SEAFDEC/TD

On 2 December 2020, SEAFDEC/ TD welcomed three trawl fishers who sought the assistance of TD in building their capacity and increasing their knowledge of trawl operation. The fishers represented the Ranong Fisheries Association with members who are trawlers in Ranong Province, Thailand.

During the visit, TD introduced its missions and roles, as well as the technologies on trawl operation including saving energy and fuel, and fish handling onboard. The visitors also observed the flumetank demonstration on the relevance of water current to trawl operation. \gg

AQD staff trained on effective presentation skills



A panel evaluates the online lecture of a participant as part of the training on presentation skills

In the face of an increasing demand for online training courses and webinars, AQD conducted the "Training Workshop on Effective Presentation Skills" on 9-11 December 2020 at AQD Tigbauan Main Station. The three-day training workshop was participated by 15 staff from different AQD offices to enhance their skills in communicating, presenting, and using video conferencing software.

The information staff delivered online lectures and demonstrations covering concepts on communication, slideshow preparation, video conferencing software, sourcing and citing data, and online training courses, and the context of AQD's training program.

During the Workshop, the participants prepared their 10-minute presentations, which were then individually presented through the Zoom platform. A panel of critics provided feedback and suggestions to individual presenters to further enhance their performance.

The Government of Japan Trust Fund supported the Training, which was the second activity in 2020 after a first batch of trainees completed a similar course in July 2020. ×

SEAFDEC participates in the Second Regional Inception Phase Meeting for the SCS SAP Project

SEAFDEC, led by the Secretary-General Ms. Malinee Smithrithee, took part in the "Second Regional Inception Phase Meeting" for the project "Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand" or the SCS SAP Project on 4 December 2020. The Meeting was attended by officials of the UNEP/GEF, UNOPS, SEAFDEC, and other concerned agencies, as well as representatives from the participating countries, namely: Cambodia, China, Indonesia, Philippines, Thailand, and Viet Nam. The Meeting discussed the progress of the SCS SAP Project including inception reports, and reviewed the workplan, current budget, and status of national activities.

During the First Inception Phase Meeting organized on 30 July 2020, the Project arrangements and requirements were presented, and this was followed by bilateral meetings with national teams and concerned organizations, and coordination and consultation within SEAFDEC and UNOPS.



the respective participating countries. It is expected that through the Second Inception Phase, the Project would come up with National Implementation Report (NIR) of the respective countries, Regional Implementation Report (RIR) detailing all activities and work plan, and such outputs would serve as basis for the subsequent Project Implementation Phase which is expected to commence in the second quarter of 2021.

SEAFDEC signed the Project Cooperation Agreement with the UNEP/ GEF in January 2018, to serve as the Executing Agency for the 5-year SCS SAP Project. The Project is funded by the UNEP-GEF and co-executed by X

IFRDMD officers participate in anguillid eels workshops



Participants during the eel workshop

The Indonesian Society for Tropical Eels (ISTEs) organized the "3rd ISTEs National Workshop" on 14-15 October 2020 through teleconference hosted in Jakarta, Indonesia. More than 60 participants from all over Indonesia attended the Workshop including officers, researchers, lecturers, businesspeople, and university students.

On the first day of the Workshop, the researchers from IFRDMD, Ms. Ni Komang Suryati and Ms. Melfa Marini, presented the achievements of the studies sponsored by Japan Trust Fund VI, namely: "The Anguillid Eels Stock in Indonesia" and "The Genetic of Anguillid Eels in Indonesia," respectively. During the Workshop, the participants were divided into workgroups to develop the roadmap of ISTEs in producing holistic results from anguillid eel studies in Indonesia.

Furthermore, Ms. Ni Komang Suryati served as a resource person during the "Workshop of Data Collection of Anguillid Eels Fishery" in Sukabumi, West Java on 17 November 2020. Ms. Komang presented the method of data collection on eel fisheries used by IFRDMD. The Workshop was organized by the Marine and Fisheries Department Office of Sukabumi through a combination of virtual and faceto-face meeting, which was aimed at synchronizing and coordinating with relevant stakeholders who collect data on anguillid eel fisheries in Sukabumi Regency and its surroundings.

AQD librarian is 2020 PRC Outstanding Professional Awardee



Mr. Stephen Alayon

The Head of the SEAFDEC/AQD Library and Data Banking Services Section, Mr. Stephen Alayon, joined the roster of Outstanding Professional Awardees chosen by the Professional Regulation Commission (PRC) of exchanges and donations of textbooks and the Philippines. Under the Business Education and Social Services Cluster. Mr. Alavon was the sole librarian bestowed with the award.

Year Award is the highest recognition conferred to individuals who excelled

and contributed significant impacts to society in their line of expertise.

Under his leadership at the AQD Library, Mr. Alayon pioneered numerous projects that remarkably contributed to information dissemination in the field of aquatic science. Along with his colleagues, he developed the AQD Institutional Repository, wherein thousands of research papers and other references produced by SEAFDEC were made freely accessible to the public.

Moreover, Mr. Alayon also facilitated references to different fisheries schools across the Philippines. As the current President of the International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC), The Outstanding Professional of the he initiated the distribution of the IAMSLIC Digital Library (digital library boxes) to 35 state universities and colleges around the country. The digital

library boxes contained over 26,000 digitized publications from SEAFDEC, Secretariat of the Pacific Community, Aquatic Commons, and OceanDocs repositories that users can access freely using their smartphones or personal computers without the need of Internet connection.

Aside from his contributions to disseminating relevant aquatic science information, Mr. Alayon also spearheads NcelLIBERation, a group of volunteers who organize libraries in jails to provide inmates with quality reading materials.

Mr. Alayon thanks his teammates at the AQD Library for their cooperation, dedication, and support, without which the projects and outreach programs would not have been possible. He says the award is both a huge responsibility and an honor and that he hopes to serve as a role model for other young librarians. ×

Gender in fisheries survey in Buriram, Thailand



SEAFDEC/TD in coordination with the Department of Fisheries (DOF), Thailand conducted the preliminary

survey on gender in fisheries in Ban Subsomboon Village, Buri Ram Province, Thailand from 4 to 6 December 2020 under the project "Small-scale Fisheries Management for Better Livelihood and Fisheries Resources." The survey was carried out through discussion among 17 local key persons including members of the local community, DOF officers, and TD staff. Information on Aquatic Animal Food Bank of Subsomboon group, which was established in 2017 and supported

by the DOF, Thailand was obtained to initiate activities on mobile hatchery. Moreover, it was also found that the community is supporting two groups of women: one group is for working women to enhance and develop their skills on their occupations and alternative jobs; and the other group is for marginalized women (e.g. teenage mothers, victims of violence, jobless) to empower them and strengthen their abilities in undertaking their livelihood. ×

Site training on Gender in Lao PDR

SEAFDEC/TD in collaboration with the Department of Livestock and Fisheries (DLF) of Lao PDR conducted the "Site Training for Enumerators on Gender Concept and Analysis and Development of a Data Collection Protocol" from 15 to 17 December 2020 in Bolikhamxay Province, Lao PDR, under the project "Gender Dimension in the Value Chain of Small-scale Fisheries and Aquaculture in Southeast Asia" supported by Food

and Agriculture Organization of the United Nations (FAO). The Training was aimed at introducing the gender concept and gender in fisheries and aquaculture to DLF officers and developing tools for data collection on gender. The 16 participants of the Training were staff from TD and DLF. After the Training, TD continued to supervise the DLF staff through the online platform, in collecting data at the project site.



SEAFDEC Gender focal person, Ms. Jariya Sornkliang (left), and participants during the training (right)

Black tiger shrimp production update

Tiger shrimp, Penaeus monodon, was harvested from the SEAFDEC/ AQD Dumangas Brackishwater Station on 6 November 2020. The culture run was part of the continuing verification studies to provide the private sector and government agencies with environmentfriendly approaches to growing the prized seafood.

AQD Chief, Mr. Dan Baliao, stressed that pond preparation, healthy shrimp seeds, biosecurity, close monitoring of shrimp and water parameters, as well as proper feeding management were essential to achieving good yields.

The Director of Bureau of Fisheries and Aquatic Resources (BFAR) Region 6, Ms. Remia Aparri, who witnessed the harvest along with other BFAR staff, expressed her support to AQD and looked forward to working with AQD to revive the tiger shrimp industry in the country.



Asian Regional Consultation on Development of Guidelines for Sustainable Aquaculture

The Head of SEAFDEC/AQD Research Division, Dr. Leobert D. de la Peña, joined the roster of technical experts during the "Asian Regional Consultation on Development of Guidelines for Sustainable Aquaculture (GSA)" organized from 30 November to 2 December 2020. The Meeting was held online and hosted by FAO Rome, Italy, as part of a series of consultations held Asia.

worldwide to prepare a practical guide for government authorities and policymakers in implementing the Code of Conduct for Responsible Fisheries (CCRF). During the Workshop, the participants evaluated the current policies and practices, as well as examined possible studies as part of continuous efforts to secure sustainability in aquaculture across X

AQD assists in protection of sea turtle nest

The technical staff of FishWorld at AOD lent their expertise upon the discovery of a sea turtle nesting site on 24 October 2020 in the village of Atabayan, Tigbauan, Iloilo, Philippines. With the assistance of local people, 68 turtle eggs were retrieved from the original nest and transferred to a few meters higher ground to keep them

from the rising tide and stray dogs that gathered around. AQD identified the hatchlings as those of olive ridley turtles and guided the local people to secure the relocated nest while the eggs incubated. Towards the end of November 2020. three hatchlings surfaced from the nest and were immediately released to the



The carapace length of an olive ridley turtle hatchling is recorded by staff of the SEAFDEC FishWorld before its release to the sea



An olive ridley sea turtle (Lepidochelys olivacea) hatchling preparing to make its way to the sea

Socialization Event to promote SPEECTRA

SEAFDEC/IFRDMD collaborated Regent of Muara Enim Regency, Mr. with the Research Institute for Inland H. Juarsah; Chairman of the Agency Fisheries and Extension (RIIFE) to for Marine and Fisheries Research and organize the socialization event on 17 Human Resources/SEAFDEC Alternate October 2020 in Patra Tani, Muara Council Director for Indonesia, Prof. Dr. Enim Regency, South Sumatra Province, Sjarief Widjaja; Head of the Fisheries Indonesia to promote the Special Area Research Center, Ms. Yayan Hikamayani; for Conservation and Fish Refugia Head of the Center for Extension of (SPEECTRA) concept. The event was Marine and Fisheries, Dr. Lilly Aprilia organized in a marginal floodplain Pregiwati; Head of South Sumatra modified by RIIFE and IFRDMD to Department of Fisheries, regional serve as a SPEECTRA pilot model for officers, experts, local fishers, as well flood plain fisheries management. The as staff from RIIFE and IFRDMD. The

attendees of the event include the Acting state officials together with officers and

members of the local communities also planted trees at the SPEECTRA location. SPEECTRA is an artificial rehabilitation ecosystem model in floodplain area such as deep pool which functions as a fishery protection or sanctuary area.



"Spaghetti" fed to shrimp in bid to cut aquaculture cost



A worker gathering bundles of "spaghetti algae" (Chaetomorpha linum) grown in a hatchery wastewater catchment facility in Tigbauan, Iloilo

Humans are not the only ones who enjoy eating spaghetti-shrimps, too. Researchers are using the nutritious green "spaghetti algae" in fish and shrimp feeds as part of a broader move to bring down the cost of expensive aquafeeds which account for over half the expenses of farmers. The ultimate aim of using spaghetti algae, or any other alternative ingredient, in aquafeed is to bring down the feed cost in aquaculture. The use of alternative ingredients, especially if these are locally available and sustainably produced, may considerably reduce the cost of formulated feeds.



A close-up shot of Chaetomorpha linum, also known as "spaghetti algae," aptly named for its pasta-like appearance

Chaetomorpha linum, also known as "spaghetti algae" or "green hair algae," derived its common name from its wiry and rigid strands, forming a loosely entangled mass resembling cooked pasta noodles. It is being considered as a potential source of nutrition because it has a protein content of up to 17 percent is optimized, the fermented spaghetti and contains various health-promoting bioactive compounds. The algae grows year-round and can tolerate a wide range of environmental conditions. While growing, spaghetti algae also absorbs excess nutrients from aquaculture wastewater, thereby helping to reduce pollution.

In an SEAFDEC/AQD-funded research which is scheduled to be completed in 2020, various amounts of the algae were included in aquafeeds, partially substituting soybean and fishmeal which are more expensive imported ingredients. The feeds, containing between zero and 18 percent processed spaghetti algae, were then tested for 90 days on juveniles of tiger shrimp. The results were promising as shrimp survival and growth were normal with up to 12 percent spaghetti algae in their diet although the best level appeared to be at 6 percent.

AQD would continue to improve the quality of the spaghetti algae feed by using lactic acid bacteria, yeast, and fungi to ferment it before including it in feeds. Fermentation improves the nutritional quality of alternative protein sources. Once the fermentation protocol algae could then be produced in largescale quantities. The spaghetti algae would also later be tested as a potential feed source for tilapia and milkfish.



AQD researcher bags Dr. Elvira O. Tan Award

The researcher and leader of the Marine Fish Commodity Team at AQD, Mr. Peter Palma, recently bagged the prestigious Dr. Elvira O. Tan Awards - Outstanding Published Paper in the Aquatic Science Category for a paper that studied the sexual development of the hermaphrodite fish and debunked presumed norms on the origin of the male giant grouper. Titled "Reproductive development of the threatened giant grouper Epinephelus lanceolatus," the paper was published in the Aquaculture Journal last July 2019. It presented evidence that male giant grouper do not need to pass through a female stage at an earlier stage in their lives, contrary to the belief that males only arise from mature females. Mr. Palma and his co-authors monitored the caged giant grouper in



Mr. Peter Palma, recipient of the 2020 Elvira O. Tan Award for the Aquatic Science Category

the Philippines and Viet Nam for over three years to establish the onset of their sexual maturity in hopes of promoting the breeding and farming of the fish over their capture from the wild.

His research paper was selected by the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development to receive the award, a recognition conferred to studies that made significant impacts in their respective fields.

AQD Chief, Mr. Dan Baliao commended Mr. Palma for his recent achievement, stressing the importance of quality research in advancing the aquaculture industry. Mr. Palma said that determining the stage of sexual maturity of giant grouper is fundamental when it comes to captive breeding. Now, he is determined to conduct more studies and expand the literature on reproductive biology of fishes in the Philippines as there is still a lot to do. 黑

SPECIAL REPORT

Enhancing Food Safety and Competitiveness of Seafood Products: HPP Protocols for Seafood and Regional Guidelines on GMP & GHP for Sushi and Sashimi

by SEAFDEC/MFRD

Fisheries and aquaculture are key industries in the Southeast Asian region which serve as main source of food and livelihood for many people. The ASEAN Member States (AMSs) account for a quarter of global fish production, making the region a significant producer of fish and fishery products. Increasingly, fish and fishery products are exported globally, as demand for fish has risen all around the world. However, seafood is a highly perishable product, with several chemical and biological changes occurring immediately after capture and/or harvest. Due to irreversible processes such as microbiological metabolism, oxidative reactions, and enzymatic activity, the quality of seafood deteriorates quickly resulting in loss of economic and nutritional value. In order to safeguard the freshness and safety, extend shelf life, and maintain quality and economic value of seafood products from catch or harvest to consumer, it is essential that good handling practices are in place as well as new preservation technologies are adopted.

In recent years, consumers highly prized convenience which led to the increasing demand for ready-to-cook (RTC) foods and ready-to-eat (RTE) meals. Some examples of such products include sushi, sashimi, shucked shellfish, and readyto-cook seafood in sauce. One of the technologies that can be used in the production of RTC and RTE foods is high pressure processing (HPP), a cold pasteurization technique whereby sealed products are subjected to high pressures transmitted by water. Due to the high pressure, microorganisms that may cause food spoilage such as bacteria, viruses, yeasts, molds, and parasites are inactivated, thereby extending the shelf life of products. The absence of heat also means that the nutrition and texture of the food products are preserved, allowing consumers to enjoy a better sensorial experience when consuming pasteurized food using HPP. In the realm of seafood, HPP may also have additional uses in shucking and deshelling of mollusks and crustaceans, increasing the ease and convenience of consumers enjoying these foods.

Other RTE foods such as sushi and sashimi are also gaining popularity worldwide. These delicacies, which consist of fresh fish that is thinly sliced and consumed raw with soy

sauce, pose a higher microbiological risk compared to cooked foods. Therefore, it is critical that there are appropriate good manufacturing and handling practices (GMP & GHP) in place for the production of sushi and sashimi in order to mitigate such risks, while maintaining the quality, freshness, and nutritional content of the products.

Hence, the development of HPP Protocols for Seafood as well as Regional Guidelines on Good Manufacturing and Handling Practices (GMP & GHP) for Sushi and Sashimi are the two tracks of the project "Enhancing Food Safety and Competitiveness of Seafood Products" supported by the Japanese Trust Fund VI Phase II. The development of these regional protocols and guidelines would not only increase the confidence of consumers in the safety of fish and fisheries products from the AMSs, but also enable producers to reach a wider market by equipping them with knowledge of utilizing HPP to produce RTC and RTE foods.

The two tracks of the Project would be carried out from 2020 to 2024. However, due to travel restrictions brought about by the COVID-19 pandemic, the inception meetings for





Participants during the Inception Meeting on Guidelines on HPP for Seafood on 6 October 2020 (left) and Inception Meeting for GMP/GHP Sushi & Sashimi on 8 October 2020 organized by MFRD in Singapore through Google Meet (right)

both tracks were conducted virtually in October 2020. During the inception meetings, the representatives from the AMSs shared the current state of adoption of HPP in their respective countries and information on existing local regulations pertaining to sushi and sashimi production. The regional expert on food science from Nanyang Polytechnic of Singapore, *Dr. Gan Heng Hui*, presented the proposed processing flow chart to be included in the GMP & GHP. Furthermore, the scope and range for both tracks of the Project were discussed and agreed by the participating AMSs (*i.e.*, Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam).

As ways forward during 2021-2024, R&D and product development would be undertaken in collaboration with local institutes and industry partners in Singapore for HPP of fish and fishery products. A Regional Training Course on HPP technology would be organized in Singapore for representatives from the AMSs, and the Handbook on HPP of fish and fishery products would be finalized. To round off

the project, a visit to a commercial High Pressure Processing Plant for Seafood is planned in one of the AMSs.

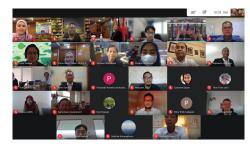
Similarly, training materials would be developed for GMP & GHP for sushi and sashimi, and a Regional Training Course will be conducted in Singapore for representatives from the AMSs. A one-year trial on implementing GMP & GHP would be conducted in the respective AMSs to identify the gaps in manufacturing industries. Subsequently, the Regional Guidelines for GMP & GHP for sushi and sashimi would be finalized.

It is anticipated that the Project would enhance the safety and quality of seafood products in the region through the adoption of the Handbook on HPP of fish and fishery products and Regional Guidelines for GMP & GHP. MFRD looks forward to the smooth implementation of the planned activities and continued collaboration with the AMSs. When the COVID-19 situation is improved, it is hoped that in-person meetings could be conducted at the end of the Project.



REGIONAL PROGRAMS

Regional Technical Consultation on RPOA-Capacity



Participants of the Regional Technical Consultation on RPOA-Capacity

SEAFDEC/MFRDMD convened the Regional Technical Consultation on Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity) on 8 December 2020 via teleconference. The Meeting was attended by representatives from Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam; resource person from FAO Regional Office for Asia and the Pacific (FAO/RAP); and officials from SEAFDEC Secretariat, TD, and MFRDMD. The objectives of the Consultation were to provide updates

regarding the implementation of the RPOA-Capacity in respective ASEAN Member States (AMSs) and establish the way forward for the implementation of national and regional plans of action in the respective AMSs.

During the Consultation, the resource person from FAO/RAP, Dr. Simon Funge-Smith, provided the historical background of the FAO International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity). He commended Malaysia for the successful development of its NPOA-Capacity, and also encouraged other AMSs to carry out similar effort. During the Consultation a concern was expressed that due to the increasing attention on illegal, unreported and unregulated (IUU) fishing, there has been less priority on the fishing capacity even though IUU fishing is linked to fishing capacity as part of concrete bilateral actions. The mechanism to regulate IUU fishing, i.e., the EU yellow and red cards, demonstrated that

regarding the implementation of the fishing fleets regulation could be also an RPOA-Capacity in respective ASEAN indirect mechanism for fishing capacity Member States (AMSs) and establish management.

Moreover, the representatives from the AMSs provided feedback on the implementation of RPOA-Capacity in their respective countries. Presently, Malaysia is developing NPOA-Capacity Plan 3, while Cambodia has developed the NPOA-Capacity in Cambodian language to be implemented from 2020 to 2024. At the same time, Thailand utilized the Fisheries Management Plan to manage fishing capacity. On the other hand, Viet Nam is regulating their fishing capacity through the Fisheries Law 2017. The issues and challenges in developing and implementing the NPOA-Capacity have been also discussed during the Meeting. Most of the AMSs requested technical assistance from SEAFDEC in developing the NPOA-Capacity, fisheries management, training in fishing capacity and stock assessment, and resource and acoustic surveys.

Sixth Meeting of the Scientific Working Group on Neritic Tunas Stock Assessment in the Southeast Asian Waters

SEAFDEC/MFRDMD organized the "Sixth Meeting of the Scientific Working Group on Neritic Tunas Stock Assessment in the Southeast Asian Waters" on 2 December 2020 via Google Meet. The Meeting was aimed at discussing the revised Term of Reference of the Scientific Working Group for Stock Assessment on Neritic Tunas in the Southeast Asian Region (SWG-Neretic Tunas), sharing the results of the regional program "Assessment on Stock Status and Total Catch Available for Neritic Tunas in Southeast Asia," and planning the future workplan. The participants of the Meeting include representatives from Brunei Darussalam, Indonesia, Cambodia, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam; resource

person from Hokkaido University, Japan; representatives from SEAFDEC Secretariat and Training Department; and officials from MFRDMD.

During the Meeting, the Project Coordinator, Mr. Mohammad Faisal Md Saleh, shared the findings of the previous project "Revised Stock Assessment for Two Neritic Tunas in the Southeast Asian Waters." Simultaneously, the senior Research Officer of MFRDMD, Ms. Wahidah Mohd Arshaad, presented the results of the population study of Thunnus tonggol in the Southeast Asian region. The report on the stock and risk assessments of kawakawa (Euthynnus affinis) and longtail tuna (Thunnus tonggol) resources in the waters of Southeast Asia using ASPIC would be



SEAFDEC/MFRDMD officials and staff during the Sixth Meeting of the Scientific Working Group on Neritic Tunas Stock Assessment in the Southeast Asian Waters

disseminated to all the members of the SWG-Neritic Tunas for finalization and would be presented during the upcoming Fifty-third SEAFDEC Council Meeting in 2021 for endorsement.

First Core Experts Meeting on Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region



Participants and resource persons during the First Core Experts Meeting for the project "Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region"

The "First Core Experts Meeting" for the project "Fisheries Management Strategies for Pelagic Fish Resources in the Southeast Asian Region" was organized by SEAFDEC/MFRDMD on 24 November 2020 via Google Meet. The aim of the Meeting was to share the results of the previous project "Comparative Studies for Management of Purse Seine Fisheries in the Southeast Asian Region" as well as to plan the ways forward of the present Project from 2020 to 2024. The Meeting was attended by the representatives from the project participating countries namely: Brunei Darussalam, Cambodia, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam; resource persons from Japan

and Malaysia; representatives from SEAFDEC Secretariat and TD; and senior officials of MFRDMD.

The present Project focuses on the three small pelagic species recommended by the participating countries, namely: Rastrelliger kanagurta, R. brachysoma, and Decapterus sp. During the discussion, the Meeting agreed to appoint two focal persons from the respective participating countries. Furthermore, MFRDMD would organize two regional workshops on stock and risk assessments for small pelagic fishes and neritic tunas in the Southeast Asian region during the period of Project implementation.

Second Inter-Departmental Consultation on Preparation of SEASOFIA 2022



The "Second Inter-Departmental Consultation on Preparation of SEASOFIA 2022" was organized by SEAFDEC Secretariat through Google Meet on 1 October 2020 in Bangkok, Thailand to continue the work plan of SEASOFIA in finalizing the draft outline of SEASOFIA 2022. The Consultation was attended by the SEAFDEC Secretary-General, Deputy Secretary-General, senior officials, and information-related officers from SEAFDEC Secretariat as well as contact persons from TD, MFRD, AQD, MFRDMD, and IFRMD who are responsible for the preparation of their respective inputs for SEASOFIA 2022.

(Continued on Page 15)

First Core Experts Meeting on Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region

SEAFDEC/MFRDMD organized the virtual "First Core Experts Meeting on Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region" on 25 November 2020. The Meeting was attended by representatives from the SEAFDEC Member Countries. namely: Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, and Japan as well as representatives from SEAFDEC/Secretariat, TD, and MFRDMD. The aims of the Meeting were to launch the new project "Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region" supported by the Japanese Trust Fund VI Phase II (JTFVI-II) and to be implemented during 2020–2024; and to present achievements



SEAFDEC/MFRDMD officials and staff during the Core Experts Meeting

project title implemented from 2015 to Meeting also discussed the National 2019.

Program and Policy Coordinator, Dr. Worawit Wanchana, made a presentation on the Current Global Acts, Conservation and Management of Sharks and Rays

of the previous project with the same and Future Direction. Furthermore, the Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks) During the Meeting, SEAFDEC including the status of implementation and issues faced by the countries as well as recommendations for the improvement of the new Project. X

Fisheries socioeconomic survey and development of EAFM plan at pilot learning site in Ranong Province, Thailand

"Small-scale Fisheries Management for Better Livelihood and Fisheries Resources" conducted a series of activities in pilot learning site in Ranong Province, Thailand.

From 5 to 11 October 2020, TD conducted the survey to collect data on the socioeconomic status of fisheries of the pilot learning site at Ban Hat Sai Khao Village in Suk Samran District, Ranong Province, Thailand. This data collection was intended to generate baseline information on the demography and socioeconomic condition of the small-scale fishers at the pilot site to develop the ecosystem approach to fisheries management (EAFM) plan. The



Data collection on the socio-economic status of fisheries in Ranong Province

SEAFDEC/TD team for the project 42 respondents were small-scale fishers who were boat owners and engaged in fisheries activities.

> Moreover, the data validation workshop was also organized on 10 October 2020 with the community members, to confirm the results of the survey including general information, fisheries, gender, and impacts of COVID-19. Furthermore, the fishers stressed their problems on the shallow river mouth that caused difficulty in going to the sea for fishing.

> Subsequent to the survey, TD organized the "Workshop on Development of the EAFM Plan for Ranong Province Learning Site" from 25 to 26 November 2020 in Ranong Province, Thailand. This Workshop was aimed at promoting the EAFM concept to key stakeholders and formulating the concrete EAFM plan to support the appropriate activities on sustainable fisheries management at Ban Hat Sai Khao Village in Ranong Province as pilot learning site of the Project.



Participants during the Workshop on Development of the EAFM Plan for Ranong Province learning site

The Workshop was participated by 16 key stakeholders including the head and community members of Ban Hat Sai Khao Village as well as representatives from Ranong Provincial Fisheries Office, District Fisheries Office, Patrol Unit, District Agriculture Office, Community Development Office, Suksamran District Office, Mangrove Reservation Center, Andaman Coastal Research Station, and Kumpuan Municipality Administration. Through the discussion, the Workshop defined the specific fisheries management area, identified key stakeholders, and analyzed problems in developing the EAFM plan for Ban Hat Sai Khao.



FUTURE ACTIVITIES

Date	Venue	Title 2021	Organizer(s)
19 January	Lao PDR	Data Validation Workshop for the "Project on Gender Dimension in the Value Chain of Small-scale Fisheries & Aquaculture in Southeast Asia" in Lao PDR	TD
21-22 January	Online Training	Online Training on Utilization and Improvement of eACDS Application Version 2 for Fisheries Officers of Myanmar	TD
28 January	Webinar	Webinar on Inland Fisheries Connectivity, Irrigation and Water Management	APFIC&INFOFISH
28 January	Virtual Meeting	Marine and Fisheries Business and Investment Forum: ASEAN Public Private Partnership: Opportunities and Challenges	MMAF, Indonesia
28-29 January	Online Training	Implementing Adaptive Fisheries Management and the Use of the Fish Pass Decision Support Tool	NOAA-TD
1-5 February	Virtual Meeting	34 th Session of FAO Committee on Fisheries	FAO
10 February	Webinar	Webinar on Review of Illegal Fishing in the APFIC Region	APFIC
17-18 February	Teleworkshop	SEAFDEC Inter-Departmental Information Workshop	Secretariat
18 February	Webinar	Webinar on Increasing the Transparency of the Seafood Supply Chain	SAFET
18-19 February	Krabi Province, Thailand	Onsite Training on Promotion of Fish Handling Technique and Labor-saving Equipment for Fisheries, Krabi Province, Thailand	TD
23-24 February	Virtual Meeting	3 rd ASEAN Meeting on Combating IUU Fishing in Partnership with the EU	ASEAN
24 February	Teleworkshop	Regional Workshop on the Study on Impacts of COVID-2019 Pandemic on the Fisheries Sector of the ASEAN-SEAFDEC Member Countries	Secretariat
24 February	Webinar	Webinar on Antimicrobial Resistance (AMR) and Antimicrobial Use (AMU) in Aquaculture in Asia	APFIC&INFOFISH
24-25 February	Online Training	Online Training on Utilization and Improvement of eACDS Application Version 2 for Fisheries Officers of Malaysia	TD
3 March	Online Meeting	Briefing on UNEP GEF Implementing the Strategic Action Program for the South China Sea and Gulf of Thailand (SCS SAP)	TD
10 March	Webinar	Webinar on Multispecies Stock Assessment for Management	APFIC&INFOFISH
25 March	Webinar	Webinar on Aquaculture Innovation in the APFIC Region	APFIC&INFOFISH
31 March	Webinar	Webinar on Subsidies, WTO and Fisheries	APFIC&INFOFISH
March (Tentative)	Onsite training	Implementation of the EAFM Plan in Ranong Province, Thailand on Establishment of Squid Bank	TD
March (Tentative)	Online meeting	Stakeholder Engagement for EAFM in Boeng Tonle Chhmar in Tonle Sap, Cambodia	TD
30 Mar-1 Apr	Online Practical Workshop	Online Practical Workshop on Utilization and Improvement of eACDS Application Version 2 for Fisheries Officers of Brunei Darussalam	TD
6 April	Webinar	Webinar on Information Technology for Small-scale Fisheries	APFIC&INFOFISH
7-9 April	Online Practical Workshop	Online Practical Workshop on Utilization and Improvement of eACDS Application Version 2 for Fisheries Officers of Viet Nam	TD
8 April	Webinar	Webinar on Co-management of Small-scale Fisheries	APFIC&INFOFISH
12, 14, 16 April	Virtual Event	OIE pre-88th GS Information Webinar on Standards Proposed for Adoption	OIE
27-28 April, 11 May	Virtual Meeting	53 rd Meeting of the SEAFDEC Council	SEAFDEC
April (Tentative)	Onsite meeting	Meeting Workshop for Development of the EAFM Plan for Boeng Tonle Chhmar of Tonle Sap, Cambodia	TD & FiA, Cambodia
5-6 May	Online Training	The Online Regional Training Course of Deck Machineries and Hualing Devices to Reduce Manpower in Fishing Vessels and Enhance Safety in Fishing Operations	TD
5-7 May	Virtual Meeting	36 th Session of the Asia-Pacific Fishery Commission (APFIC)	APFIC
19-21 May	Virtual Conference and Exhibition	TUNA 2021 World Tuna Conference & Exhibition "The Global Tuna Industry: Trailblazing through tough times"	INFOFISH

SEAFDEC Inter-Departmental Workshop virtually organized to discuss the proposed Study on Impacts of COVID-19 Pandemic on the Fisheries Sector



SEAFDEC Deputy Secretary-General, Mr. Koichi Honda (left), and SEAFDEC Program and Policy Coordinator, Dr. Worawit Wanchana (right) during the Inter-Departmental Workshop

The "SEAFDEC Inter-Departmental Workshop" to gather views on the conduct of the Study on Impacts of COVID-19 Pandemic on the Fisheries Sector of ASEAN—SEAFDEC Member Countries was organized by the SEAFDEC Secretariat through Google Meet on 7 October 2020. This was aimed at compiling the views from the SEAFDEC Departments on the draft questionnaires prepared by the SEAFDEC Secretariat to determine the impacts of COVID-19 Pandemic on the Fisheries Sector of ASEAN—SEAFDEC Member Countries. Attended by the SEAFDEC Secretary-General, Deputy Secretary-General, senior officials, and Technical Officers from TD, MFRD, AQD, MFRDMD, and IFRDMD, the Workshop discussed and provided comments on the draft questionnaire, and finalized the workplan and timeframe of the Study on Impacts of COVID-19 Pandemic on the Fisheries Sector of Southeast Asian Region.

After the Workshop, the Study Team from the SEAFDEC Secretariat improved the questionnaire based on the views and feedbacks from the Departments, and the results were used as inputs for the Concept Note of the Study on Impacts of COVID-19 Pandemic on the Fisheries Sector of ASEAN–SEAFDEC Member Countries. The Concept Note was submitted to the 43rd Meeting of SEAFDEC Program Committee during 10–12 November 2020 and the 23rd Meeting of Fisheries Consultative Group of the ASEAN–SEAFDEC Strategic Partnership (FCG/ASSP) on 17–18 November 2020 for endorsement.

Second Inter-Departmental Consultation on Preparation of SEASOFIA 2022

(Continued from Page 12)

The Consultation focused on the finalization of the draft outline of SEASOFIA 2022 including the short description of the write-up of each topic, set of questionnaires to gather additional inputs from the ASEAN Member States, and other preparatory work to ensure that the publication would contain useful information on the status and trend of fisheries and aquaculture of the Southeast Asian region.

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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Layout: Sunutta Pudtal

Japanese conservation biologist is new Deputy Chief of AQD

SEAFDEC/AOD welcomed its new Deputy Chief last 20 October 2020. A Japanese scientist with expertise on aquatic conservation biology, Dr. Sayaka Ito, succeeded Dr. Koh-ichiro Mori who served as the Deputy Chief from April 2018 to June 2020. Upon nomination by the Government of Japan and approval of the SEAFDEC Council, SEAFDEC Secretary-General Ms. Malinee Smithrithee appointed Dr. Ito to a 2-year term from 1 October 2020 to 30 September 2022 wherein he will also serve as co-manager of the Japanese Trust Fund for AQD.

The work experience of Dr. Ito include helping establish a researchbased stock management system for the indigenous high-value freshwater prawn in Lao PDR. Immediately prior to his appointment at AQD, he worked for seven years at the Hokkaido National Fisheries Research Institute of the Japan Fisheries Research and Education Agency as the leader of the Stock Enhancement Group



Dr. Sayaka Ito is the new Deputy Chief of AQD to serve a 2-year term from 1 October 2020 to 30 September 2022

where he examined the migration pattern and habitat use of high-value prawn and the environmental characteristics of the kelp (Laminaria) fishing grounds using geographic information system.

the Fishery Division of the Japan International Research Center for Agricultural Sciences from 2006 to 2013 and worked on the stock management

system of prawn in Lao PDR. From 2003 to 2005, he was involved in researches examining non-native freshwater fishes and its interspecific interactions with native fishes in Japan as a Postdoctoral Research Fellow at the Center for Marine Environmental Studies at Ehime University.

Dr. Ito briefly worked as a junior high school science teacher from 2005 to 2006 at Komatsu Junior High School in Saijyo City, Ehime, Japan. From 2002 to 2003, he taught science at the Hanada Junior High School for Handicapped Students in Nagano, Japan.

He has published several research publications from 2000 to 2018, with his major outputs covering stock enhancement and ecology of fluvial He was a senior researcher at prawn. He also conducted studies on different species, such as the Pacific herring, stream goby, and snakeskin gourami. X

> The Resolution and Plan of Action on Sustainable Fisheries for Food

Security for the ASEAN Region

Towards 2030, and QR code for

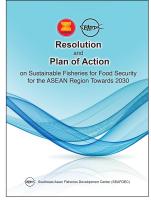
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the RES&POA-2030

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

Considering that the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 (RES&POA-2020) have specific timeframe upto 2020, the SEAFDEC Council at its Fiftieth Meeting in 2018 suggested that this instrument should be reviewed to ensure that it is still up to date. In line with such directive, SEAFDEC supported the ASEAN Member States in reviewing the document to accommodate the emerging issues and challenges in the region's fisheries sector. Results of such review had been used by the AMSs and SEAFDEC in coming up with the draft RES&POA-2030.

Upon thorough review of the draft during the series of meetings organized by SEAFDEC, the final on Agriculture and Forestry on 5 August RES&POA-2030 was considered and 2020 and the 42nd Meeting of the endorsed for adoption by the SEAFDEC ASEAN Ministers on Agriculture and Asian region in the coming decade.











Council during its Fifty-second Meeting Forestry on 21 October 2020, as well in early 2020.

Subsequently, the RES&POA-2030 were adopted by the ASEAN Senior Officials and Ministers during the Special Senior Officials' Meeting of the 41st Meeting of the ASEAN Ministers

as by the Senior Official and Minister responsible for fisheries of Japan ad referendum. It is expected that the adopted RES&POA-2030 would serve as policy framework and direction to guide the region's fisheries development towards sustainability and enhanced

contribution of fisheries to food security

and livelihood of peoples in the Southeast

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