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The Fifty-fifth Meeting of the SEAFDEC Council



At the kind invitation of the Government of Myanmar through its Department of Fisheries as the host, the Fifty-fifth Meeting of the SEAFDEC Council (55CM) was convened on 9 and 11 May 2023 through the online platform. In attendance were the Council Directors and delegates from the SEAFDEC Member Countries, as well

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EDITORIAL

One of the highlighted events of the second quarter of 2023 is the Fifty-fifth Meeting of the SEAFDEC Council where the progress of activities of SEAFDEC in 2022 as well as the proposed program of activities to be undertaken in 2023 were reported. Upon noting the progress of the development and implementation of several regional fisheries policies and frameworks, the Council also approved the draft report of the Monitoring and Evaluation of the Implementation of the RES&POA-20230 and supported its submission to the ASWGF.

During this quarter, SEAFDEC continued to organize regional events including the mid-term review meeting and training workshop on enhancing food safety and quality on the application of the High Pressure Processing (HPP) technology to fish and fishery products as well as on regulations and standards related to ready-to-eat raw fish and fishery products. Several training and workshops were also

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SEAFDEC pays courtesy call to Thai Ambassador to Brunei Darussalam



(Left–right) SEAFDEC Secretary-General, Ms. Malinee Sminthrithee at the Thai Embassy in Brunei Darussalam informing the Ambassador of Thailand, Her Excellency Boosara Kanchanalai; Minister Counsellor, Mrs. Aidsada Sundaramani; and Counsellor, Miss Kantaga Buraphatanin of the SEAFDEC works in fisheries management in the Southeast Asian region

The SEAFDEC Secretary-General, Ms. Malinee Sminthrithee, paid a courtesy call to the Ambassador of Thailand, Her Excellency Boosara Kanchanalai, and officials at the Thai Embassy in Brunei Darussalam on 9

June 2023. On this occasion, SEAFDEC and the Thai Embassy exchanged information on the investment and trade opportunities between Thailand and Brunei Darussalam, especially in

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EDITORIAL

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organized to enhance the capacity of the SEAFDEC Member Countries, SEAFDEC staff, and fisheries students with the topics including eco-friendly practices for sustainable fisheries resources management, basic marine engineering, freshwater aquaculture, sandfish aquaculture, eACDS application for small-scale fisheries, gender mainstreaming in the fisheries sector, and development of the EAFM plan.

SEAFDEC also continued to get involved with collaborating organizations including Symposium on Sustaining Marine Biodiversity through Blue Economy which served as the platform to share knowledge and experiences in marine biology, ecology, management, and conservation. SEAFDEC also attended the 32nd Meeting of the Animal Committee and 18th Meeting of the ASEAN Working Group on CITES and Wildlife Enforcement to share information on measures implemented by the Southeast Asian countries in managing and conserving shark resources and fisheries, current status of management and conservation in the region, and regional needs in the form of building capacity; the 37th Session of the Asia-Pacific Fishery Commission (APFIC) which highlighted the ongoing collaboration between FAO and SEAFDEC on stock assessment, fisheries subsidies, and new projects to be funded by GEF. SEAFDEC also attended the Regional Workshop on Development of Management and Conservation Plan for the Mekong Freshwater Dolphin and Biodiversity to share its expertise in fisheries management, conservation practices, and sustainable development in the context of the Mekong River and its freshwater dolphin populations.

Another important activity was the courtesy call of SEAFDEC Secretary-General to the Ambassador of Thailand in Brunei Darussalam to exchange information on the investment and trade opportunities between Thailand and Brunei Darussalam especially in agriculture and fisheries.



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The Fifty-fifth Meeting of the SEAFDEC Council

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as the SEAFDEC Secretary-General, SEAFDEC Deputy Secretary-General, and officials from the SEAFDEC Secretariat and Departments.

The Opening Session of the 55CM was presided over by the Director-General of the Department of Fisheries Malaysia and SEAFDEC Council Director for Malaysia, *Dato' Adnan bin Hussain*. Subsequently, the Council unanimously elected the Council Director for Myanmar, *Mr. Wai Lin Maung*, as the Chairperson of the SEAFDEC Council for the Year 2023–2024.

On the regional initiatives in combating illegal, unreported and unregulated (IUU) fishing, the Council acknowledged the progress made by SEAFDEC in sustaining the Regional Fishing Vessels Record (RFVR) Database for vessels 24 meters in length and over, promoting the electronic ASEAN Catch Documentation Scheme (eACDS), and enhancing regional cooperation for the implementation of port State measures.

It also noted the intergovernmental collaboration to combat IUU fishing in Southeast Asia focusing on information-sharing platforms developed under the ASEAN Network for Combating IUU Fishing (AN-IUU), RFVR Database, and Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU).

The Council also took note of the progress of the implementation of the Port States Measure Agreement by the Food and Agriculture Organization of the United Nations (FAO) and the updated information on the FAO Global Information Exchange System (GIES) and FAO Voluntary Guidelines for Transshipment which were recently endorsed during the 35th Session of FAO Committee on Fisheries. SEAFDEC was then urged to provide technical support to the Member Countries, especially on

the utilization of GIES for inspection activities and implementation.

The Council congratulated SEAFDEC on its achievements of the genetic population and life history study for Kawakawa (*Euthynnus affinis*) in the region, and encouraged SEAFDEC to consider progressing from activities on assessing the status of stock and identifying the genetic characteristics of the species to activities on developing a Harvest Strategy/Management Procedure as a way forward to the sustainable management of neritic tunas in the region. The Council also discussed international fisheries-related issues including the proposals of commercially-exploited aquatic species to amend the CITES Appendices as well as the issues related to marine debris, microplastics, and abandoned, lost, or otherwise discarded fishing gear (ALDFG) in Southeast Asia.

Moreover, the Council approved the draft Report of the Monitoring and Evaluation of the Implementation of the RES&POA-2030 and supported its submission to the ASEAN Sectoral Working Group on Fisheries and higher authorities through the ASEAN Mechanism. Lastly, the Council acknowledged that SEAFDEC has become a member of the International Monitoring, Control, and Surveillance.

With that, the Council appreciated the cooperation and collaboration between SEAFDEC and other regional/international agencies/organizations, particularly the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO/RAP). At the closing session, the Council expressed appreciation to the Government of Myanmar for hosting the 55CM and announced that the Fifty-sixth Meeting of the SEAFDEC Council in 2024 would be hosted by the Government of the Philippines.



SEAFDEC pays courtesy call to Thai Ambassador to Brunei Darussalam

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agriculture and fisheries. Moreover, *Ms. Malinee* informed the Thai Embassy officials of SEAFDEC works that support the ASEAN Member States in several areas of fisheries management,

particularly the regional efforts to combat IUU fishing in Southeast Asia.

The courtesy call to the Thai Embassy was a side activity of SEAFDEC after

Ms. Malinee served as the Keynote Speaker during the Sustaining Marine Biodiversity through Blue Economy Symposium organized on 6–8 June 2023 at the Universiti Brunei Darussalam.



SEAFDEC supports the development of management and conservation plan for the Mekong freshwater dolphin

SEAFDEC Secretary-General, *Ms. Malinee Smithrithee*, and Policy and Program Coordinator of the SEAFDEC Secretariat, *Dr. Worawit Wanchana*, participated in the “Regional Workshop on Development of Management and Conservation Plan for the Mekong Freshwater Dolphin and Biodiversity” organized by the Fisheries Administration of Cambodia on 24–25 May 2023 in Siem Reap, Cambodia. The Workshop was also attended by representatives from the countries along the Mekong River (*i.e.* Cambodia and Thailand) as well as from Indonesia, Myanmar, and China where the Mekong freshwater dolphin and similar species can be found.

During the Workshop, SEAFDEC shared its expertise in fisheries management, conservation practices, and sustainable development in the context of the Mekong River and its freshwater dolphin populations. SEAFDEC also highlighted the role of the dolphins as indicator species for assessing ecosystem health; thus, emphasizing the need for a comprehensive management and conservation plan. Subsequently, the Workshop identified

several threats to dolphin populations, including illegal fishing practices and overfishing practices, harmful fishing methods, dam construction, habitat degradation, pollution from agricultural runoff and industrial waste, climate change, and increasing boat traffic. Therefore, the Workshop concurred that the establishment of protected areas along the Mekong River is a crucial step for safeguarding the species and their habitats and underscored the urgency of developing a comprehensive management and conservation plan.

Freshwater dolphins play a crucial role in maintaining the balance of the food chain, regulating fish populations, and controlling diseases, and their conservation ensures the well-being

of aquatic ecosystems, biodiversity preservation, and protection of other endangered species. Besides, dolphins hold cultural significance and contribute to the social identity of local communities. Collaborative efforts among governments, local communities, non-government organizations, and stakeholders are essential to implement sustainable practices to regulate fishing activities and address habitat degradation. The involvement of SEAFDEC in the Workshop demonstrated its support for the conservation and sustainable management of aquatic resources in the Southeast Asian region, including the Mekong River dolphin and biodiversity.



PH lawmakers invite AQD Chief to meeting on proposed gov't hatcheries



The House Committee on Aquaculture and Fisheries Resources of the Philippines invited SEAFDEC/AQD Chief, *Mr. Dan Baliao*, to the initial deliberations on bills establishing multispecies fish hatcheries and fish ports in several sites across the country. The invitation was extended by the Committee Chairman, *Rep. Alfredo Marañon III*, of the 2nd

District of Negros Occidental. *Mr. Baliao* shared his expert opinion on 17 house bills that were the subject of the hearing held at the House of Representatives in Quezon City on 31 May 2023.

For years, SEAFDEC/AQD has been assisting the Bureau of Fisheries and Aquatic Resources in conducting feasibility studies for hatcheries, training for hatchery operations, and research and development.



DEPARTMENTAL ACTIVITIES

IFRDMD staff attend technical information training in Iloilo, Philippines



The technical services staff from SEAFDEC/IFRDMD attended a series of training sessions to enhance their capacity in network security, repository management, and social media management. The Training was

organized online and in person on 6–9 June 2023 with two participants and five observers and on 20–23 June 2023 at SEAFDEC/Aquaculture Department (AQD) in Tigbauan, Iloilo, Philippines with two participants, respectively. The

resource persons were staff from the Training and Information Division of AQD.

During the Training session on network security, the trainees enhanced their skills to protect data and information from threats. For repository management, the trainees learned how to efficiently organize the IFRDMD publications in the repository. For social media management, the training session covered designing and creating interactive content and infographics to increase the visibility of the organization, attract more followers, and provide informative content. ❖

Medical mission held for fishers near AQD Igang Marine Station



As part of the commemoration of its 50th anniversary, SEAFDEC/AQD organized a medical mission on 28 April 2023 at Brgy. Magamay Covered

Gym in Nueva Valencia, Guimaras, Philippines. A total of 70 fishers from the three barangays neighboring the AQD Igang Marine Station, namely: Igang,

Magamay, and Pandaraonan, benefited from free medical services.

Six doctors and three nurses from various hospitals and medical institutions in Panay Island volunteered and generously lent their services through free consultations and medications. The Department of Health-Antique Province also donated medicines and vitamins. In addition to the free medical services, AQD conducted a health seminar and donated first-aid kits to the three beneficiary barangays. ❖

TD welcomes visitors from university, fishery association



SEAFDEC/TD is regularly visited by various groups of people. During their visit, the guests are informed of the role of SEAFDEC in the Southeast Asian region and are allowed to observe the facilities and equipment of SEAFDEC/TD. On 21 April 2023, 38 visitors including students and lecturers from the School of Agricultural Technology,

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Capacity Building on Sustainable Fisheries Resources Management for University Students

SEAFDEC/TD organized the “63rd Short-term Training Course on Eco-friendly Fisheries for Sustainable Fisheries Resources Management for University Students” from 19 to 26 April 2023 at its premises in Samut Prakan, Thailand. The Training was participated by 20 students from three universities in Thailand (*i.e.* Kasetsart



University, Burapha University, and Prince of Songkla University) as well as two universities in Japan (*i.e.* Hokkaido University and Tsuda University). The Training was composed of lectures and practicals in the fishing workshop and onboard M.V. SEAFDEC 2 as well as a field survey in a fishing community. In addition to enhancing the understanding

of the students of fishing gear and oceanography, the Training also served as a venue to establish a network of students from different universities. The Training was an activity under the departmental program “Promotion on Strengthening of SEAFDEC Visibility and Enhancing Human Capacity Building” of SEAFDEC/TD. ❖

Tailor-made training course on basic marine engineering and seamanship for students

SEAFDEC/TD organized a series of tailor-made training courses in Samut Prakan, Thailand in response to the request of the Faculty of International Maritime Studies, Kasetsart University, Sriracha Campus.

The “Tailor-made Training Course on Basic Marine Engineering” was organized from 8 to 12 May 2023 for 35 students. The Chief Engineer, *Mr. Theerawat Paiwal*, and the relevant staff of M.V. SEAFDEC who served as the resource persons for the Training delivered lectures on vessel engines, electrical systems, and hydraulic systems. Successively, the “Tailor-made Training Course on Basic Seamanship” was organized from 15 to 19 May 2023 for 33 students. The knowledge of vessel structure, safety at sea, navigation



bridge, and so on was imparted by the Chief Officer of M.V. SEAFDEC 2, *Mr. Aussawin Buachuay*, and his team.

Moreover, the observation of M.V. SEAFDEC and practical on seamanship onboard M.V. SEAFDEC were also included in the Training Courses. It is anticipated that the students could

apply the knowledge and experience they gained from the Training Courses in their jobs in the future. The conduct of the Training Courses was under the departmental program “Promotion on Strengthening of SEAFDEC Visibility and Enhancing Human Capacity Building” of SEAFDEC/TD. ❖

TD welcomes visitors from university, fishery association

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King Mongkut’s Institute of Technology Ladkrabang were welcomed by TD. The students toured the Fishing Workshop and M.V. SEAFDEC to gain more knowledge and experience in fishing

gear and fishing technology. Moreover, seven members of the Purse Seine Fishery Association in Thailand were welcomed at TD on 26 May 2023. After exploring the Fishing Workshop,

Marine Engineering Workshop, and M.V. Plalung, the fishers learned about the new technology and equipment to reduce the workforce in purse seine operations. ❖

AQD intensifies round scad research, stocks up on more breeders



Collection of round scad using purse seine in Antique, Philippines



Storing round scad in plastic bag in foam box to transport to AQD experimental facilities

After receiving approval to operate a purse seine from the town Mayor, SEAFDEC/AQD partnered with a local fishing company to locate and capture live round scad (*Decapterus* spp.), which is an important food fish in the Philippines. AQD collected the fish from Hamtic, Antique, Philippines from 10 to 12 May 2023 to stock up on breeders and refine transport strategies. The collected broodstock were immediately transported by sea and land to experimental facilities at AQD Tigbauan Main Station. On the second night of collection, the broodstock were acclimated in temporary net cages mounted on an outrigger boat before making the two-hour trip to Tigbauan, Iloilo, the following day.

AQD successfully spawned round scad in 2021 and grew limited numbers to early-fingerling size in 2022. The ongoing broodstock collection aims to scale up experiments and achieve commercially-viable numbers of fingerlings for grow-out. ❏

AQD upgrades skills of freshwater fish farmers



A total of 66 fish farmers with existing backyard facilities gained additional knowledge on fish farming during a three-day on-site training course on freshwater aquaculture organized by SEAFDEC/AQD on 9–11 May 2023 in Mina, Iloilo, Philippines. AQD partnered with the Bureau of Fisheries and Aquatic Resources (BFAR)-Region 6 and the

local government of Mina to deliver lectures and practical sessions on tilapia, catfish, and giant freshwater prawn culture, including biology and ecology, broodstock and hatchery management, and nursery and grow-out operations. Additional topics of the Training include fish diseases, basic financial analysis, and ornamental fish breeding to guide

the fish farmers in farm management and promote livelihood options.

The Training was one of the activities of the Joint Mission for Accelerated Nationwide Technology Transfer Program (JMANTTP) where AQD conducts techno-caravans, field demonstrations, and hands-on training to introduce economically viable, environment-friendly, and socially equitable aquaculture technologies. The JMANTTP is being carried out with the assistance of the BFAR, local government units, and other government agencies to facilitate the transfer of technologies and promote additional and alternative sources of income for fish farmers, entrepreneurs, and other stakeholders. ❏

Sandfish culture training for the Pacific Community

The Pacific Community, an international development organization of 27 Pacific island countries and territories, requested SEAFDEC/AQD to conduct training on sandfish aquaculture. Recognizing the potential of sandfish as an ideal species for aquaculture in their areas, trainees from Papua New Guinea, Fiji, Kiribati, and French Polynesia completed the Training Course on Sandfish (*Holothuria scabra*) Seed Production, Nursery, and Management on 15 May–1 June 2023 in the Philippines.

The lectures and practical demonstrations covering sandfish biology, broodstock collection and management, natural food organisms, spawning induction, egg collection, larval rearing, nursery systems management, grow-out culture, and processing were delivered by experts from AQD. The lectures were held at the AQD Tigbauan Main Station while site visits were done at the AQD Igang Marine Station (IMS) in Guimaras and Brackishwater Station in Dumangas,

Iloilo. The practical training sessions on sea ranching, nursery pen harvest, and sea ranch monitoring took place at the IMS and Molocaboc Island in Sagay City, Negros Occidental.

Sandfish is a species of sea cucumber prized as seafood, especially in Asia. Currently, the sandfish culture training course is the most popular training program of AQD completed by six batches of trainees since the beginning of 2023. 



FishWorld joins campaign on marine turtle conservation

SEAFDEC/AQD FishWorld took part in an information, education, and communication campaign on Marine Turtle Protection and Conservation on 18 May 2023 at Barangay Cabasi, Guimbal, Iloilo, Philippines. The Officer-in-Charge of the FishWorld Museum, *Ms.*

Hananiah Sollesta-Pitogo, was one of the speakers at the event organized by the Department of Environment and Natural Resources-Community Environment and Natural Resources Office of Guimbal (CENRO-Guimbal) in line with the Month of the Ocean celebration.

measuring 75 cm in length and 70 cm in width was found in Guimbal and subsequently released the next day after it was given the tag PH 1764.

CENRO-Guimbal Head, *Mr. Vicente Mellizas Jr.*, referred to AQD as its partner in rehabilitating stranded and rescued sea turtles and thanked the research center for its consistent support and help. Meanwhile, *Ms. Sollesta-Pitogo* assured that AQD is willing to help and assist and make its facilities available in case there will be more turtles stranded. 

To raise public awareness in the town that frequently reports marine turtle sightings, *Ms. Sollesta-Pitogo* taught the residents of Guimbal the importance of properly handling stranded marine turtles which plays a vital role in their conservation. On 8 May 2023, a turtle



SPECIAL REPORT

Utilizing advanced technology in fishery resources surveys: features and capabilities of EK80

SEAFDEC/Training Department

Scientific echosounders support reliable and non-invasive methods for measuring fish abundance, both in freshwater and marine environments (Demer *et al.*, 2017; Simmonds & MacLennan, 2005). Over the past decades, the precision, accuracy, efficiency, and timeliness of echosounders have evolved. Currently, the EK80 is the most high-end scientific echosounder with modern specifications (**Box 1**) considered an international standard for hydroacoustic surveys and fish stock assessment.

Box 1. Specifications of the echosounder EK80

- Microsoft Windows operating system
- Single and/or split-beam transducers
- Dedicated built-in application for calibration
- High-range resolution and long-range performance for resolved single targets responding to the target frequency continuously
- Operational range between 10 kHz and 500 kHz measure volume backscattering strength (S_v) and target strength (TS) continuously over the entire band
- Improved information on the acoustic characteristics of targets, target species, angle, and size of orientation
- Capable of assessing fish stock through biomass estimation and observing fish behavior and distribution with real-time data collection (S_v and TS) and the association of aquatic organisms with sea bottom environment oceanographic parameters
- Real-time echo integration and target strength analysis in an unlimited number of layers
- Storage of raw data for replay or analysis in one of several post-processing software packages
- Several post-processing alternatives are available for rapid survey analysis and reporting
- Real-time data is displayed on the monitor enhancing the efficiency of the data collection process

SEAFDEC/TD has been conducting surveys on marine fishery resources in Southeast Asia for sustainable management through the use of research vessel M.V. SEAFDEC 2. With budget support from the Japanese Trust Found VI-II, the EK80 system (**Box 2**) was installed on M.V. SEAFDEC 2 in 2021, which was envisaged to be highly beneficial in gathering information during marine fishery resources surveys.

Box 2. EK80 system installed on M.V. SEAFDEC 2

- EK80 processor unit with EK80 software
- EK80 split beam wideband transceivers for 38 kHz, 120 kHz, and 200 kHz
- Copper calibration sphere 38 kHz (TS -33dB, 60 mm), 120 kHz (TS -40.4 dB, 23 mm), and 200 kHz (TS -45.1 dB, 13.7 mm)
- Tungsten calibration sphere (38.1 mm)

Nevertheless, using EK80 requires an understanding of the system. Thus, relevant technical staff from TD trained on hydroacoustics in Japan in Kamisu and onboard Taka Maru in Tateyama, from 7 to 19 November 2022. Subsequently, a series of training courses were conducted by TD on the principles and methods of EK80 and principles and methods of EK80 for fisheries acoustic survey on 20–25 March 2023 and 29 May–2 June 2023, respectively in Samut Prakan, Thailand. In the first training course, the resource persons were from SEAFDEC/IFRDMD and Research Institute for Marine Fisheries, Indonesia and the trainees were researchers from Thailand and TD. In the second course, the resource persons were from the Japan Fisheries Research and Education Agency and the trainees were from Indonesia, Malaysia, Thailand, and TD.

The trainees practiced calibration and noise measurement as well as data collection and analysis (**Figure 1**). The calibration can be operated successfully in all three EK80 transducers with the accepted calibration error of 0.06, 0.19, and 0.33 for 38 kHz, 120 kHz, and 200 kHz, respectively. **Figure 2**, shows the example of the EK80 calibration of the transducer at 38 kHz. Moreover, noise was also measured because it is a critical issue that may lead to uncertainty in data estimation. Low-frequency noise generated by vessel engines may lead to an underestimated fish abundance due to the avoidance of fish, while high-frequency noise may cause a higher and lower estimation in some hydroacoustic variables, such as S_v (Takao & Furusawa, 1995). **Figure 3** depicts that as the vessel speed increased and the noise at different frequencies and water depths also increased. This information can be used for planning the survey by determining the optimum speed and depth during the data collection on the target resource (TS).



Figure 1. Trainees learn to calibrate and measure the noise of EK80

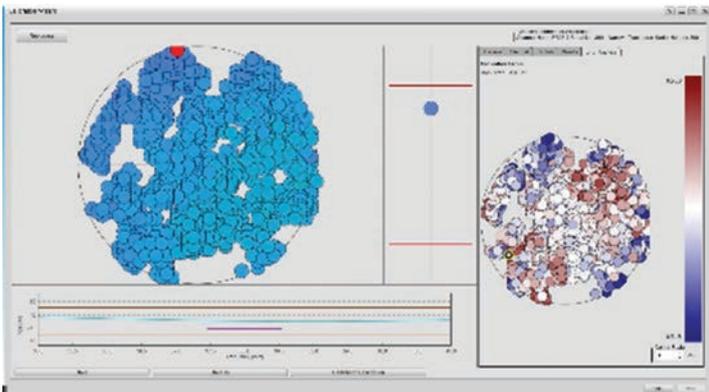


Figure 2. Calibration of EK80 at 38 kHz

Utilizing EK80 would lead to substantial improvements in the marine research capabilities of M.V. SEAFDEC 2 by significantly reducing the time and costs of data collection while obtaining precise and reliable data. This advanced device has versatile features and various capabilities including species identification and biomass and distribution estimation; plankton observation; habitat mapping; and fish behavior identification. The efficient data collection process would allow surveys to cover larger areas in a shorter time, leading to a better understanding of marine ecosystems and species.

Moreover, the accuracy and reliability of data obtained through EK80 would contribute to more informed decision-making and policy formulation in the conservation of marine fishery resources in the region.

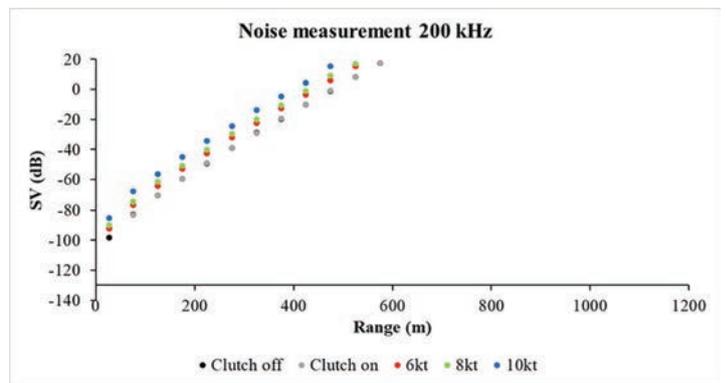
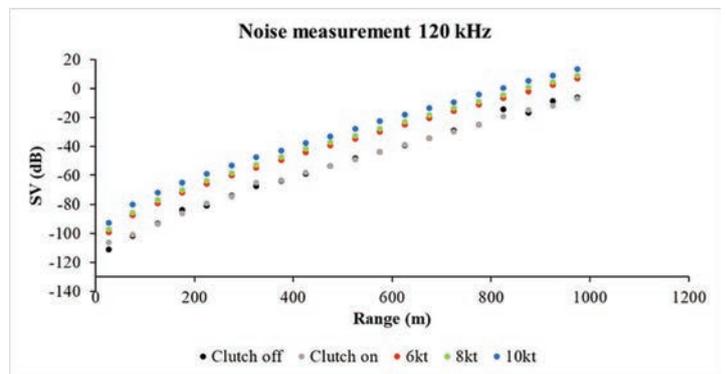
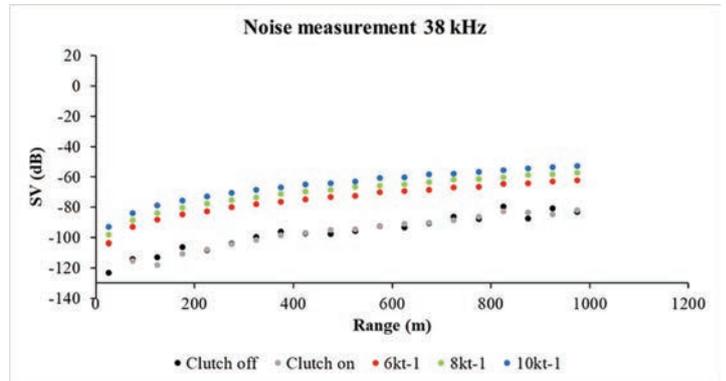


Figure 3. Measurement of noise at different frequencies of EK80

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REGIONAL PROGRAMS

SEAFDEC takes part in the 18th AWG CITES and WE



The representatives from the SEAFDEC Secretariat, Policy and Program Coordinator, *Dr. Worawit Wanchana*, and Senior Policy Officer, *Ms. Pattaratjit Kaewnuratchadasorn*, took part in the open session of the 18th Meeting of the ASEAN Working Group on CITES and Wildlife Enforcement

(AWG-CITES and WE) on 31 May 2023 via the online platform. SEAFDEC was invited as one of the international partners undertaking activities relevant to CITES, particularly on marine resources management. At the open session, SEAFDEC presented its activities in addressing CITES-related issues including the Regional Technical Consultation (RTC) on Development of the ASEAN-SEAFDEC Common Positions on the Proposed Listing of Commercially-exploited Aquatic Species (CEAS) into the CITES Appendices on 30 August–1 September 2022 which came up with the positions

of the countries on the proposed listing commercially-exploited aquatic species (CEAS) into the CITES Appendices *i.e.* *Carcharhinidae* spp., *Sphyrnidae* spp., *Potomotrygon* spp. *Rhinobatidae* spp., *Thelonota* spp., and *Hypancistrus zebra*.

In addition, SEAFDEC provided information on the ongoing projects focused on capacity development, namely: “Research for Enhancement of Sustainable Utilization and Management of Sharks and Rays in the Southeast Asian Region” and “Sustainable Utilization of Anguillid Eels in the Southeast Asian Region.”



SEAFDEC co-organizes Symposium on Sustaining Marine Biodiversity through Blue Economy

The Ministry of Primary Resources and Tourism through the Department of Fisheries of Brunei Darussalam, Universiti Brunei Darussalam, and SEAFDEC co-organized the Sustaining Marine Biodiversity through Blue Economy Symposium on 6–8 June 2023 at the Universiti Brunei Darussalam. The Symposium brought together leaders and renowned speakers from various agencies including governments, international organizations, non-government organizations, and academia to share their knowledge and experiences in the field of marine biology, ecology, management, and conservation. The

Symposium was launched by the Minister of Primary Resources and Tourism of Brunei Darussalam, His Excellency Dato Seri Setia *Dr. Hj Abdul Manaf bin Haji Metusin*.

At the opening session, the SEAFDEC Secretary-General, *Ms. Malinee Smithrithee*, delivered the Keynote Speech highlighting the challenges faced by the marine environment and oceans. She deliberated on the concept of the blue economy which is an integrated and sustainable approach that would help to conserve marine resources and ecosystems, ensuring long-term viability

while fostering economic activities that benefit communities, industries, and nations. She emphasized the key principles of the blue economy that take into account sustainable management of fisheries and aquaculture; research, innovation, and technology; holistic ecosystem-based approach; and collaboration and network, while the participation of women, indigenous communities, and marginalized groups in decision-making processes is crucial for achieving sustainable and equitable development. She urged partnerships and collaborations which would contribute to the development and implementation of blue economy strategies across the region and beyond, with the ultimate goal of the well-being of present and future generations.

During the session Sustainable Fisheries and Aquaculture: Enhancing Marine Biodiversity and Economic Development, the Head of Research and Development Division of the SEAFDEC Training Department, *Mr. Sukchai Arnupapboon*, presented the activities of SEAFDEC in combating IUU fishing in

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SEAFDEC attends 37th Session of the APFIC

The Senior Policy Officer, *Ms. Pattaratjit Kaewnuratchadasorn*, and Program Officer, *Ms. Arpita Karmokar*, participated as representatives from the SEAFDEC Secretariat in the 37th Session of the Asia-Pacific Fishery Commission (APFIC) hosted by the Government of China on 13–15 June 2023 through online and in person meeting in Qingdao, China. The Session was attended by representatives from the APFIC Member Nations, APFIC Secretariat, and one FAO member country as well as observers from regional organizations including SEAFDEC. The regular Session of the APFIC is convened every two years to review the activities of the Commission during the intersessional period.

During the Session, *Ms. Pattaratjit* congratulated the Commission for successfully conducting several activities to support the fisheries and aquaculture sector of the Member Nations. She highlighted the ongoing collaboration

between FAO and SEAFDEC over the years, especially the conduct of the series of training workshops on stock assessment for reporting on SDG14 indicators and the development of recommendations for management measures related to the WTO Agreement on Fisheries Subsidies. In addition, she informed the Session of the forthcoming collaborations with FAO/RAP to support the Member Countries in the implementation of two new projects to be funded by Global Environment Facility (GEF) International Waters, namely: “Sustainable Management of Fisheries, Marine Living Resources and their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities” (BOBLME Phase II) and “Promoting the Blue Economy and Strengthening Fisheries Governance of the Gulf of Thailand through the Ecosystem Approach to Fisheries” (GoTFish Project). ✠



SEAFDEC co-organizes Symposium on Sustaining Marine Biodiversity through Blue Economy

(Continued from Page 10)



Southeast Asia for sustainable utilization of marine resources including the ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain, Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over (RFVR Database), electronic ASEAN Catch Documentation Scheme (eACDS), and human capacity development to implement the port State measures and port inspection. ✠

Views of eel fishers in Palabuhan Ratu, Indonesia sought



Under the project “Sustainable Utilization of Anguillid Eels in the Southeast Asia Region” funded by the Japanese Trust Fund VI Phase 2, IFRDMD conducted interviews with 18 eel fishers, including two women, in the Cikaso River and Cimandiri River on 18–19 May 2023. The interviews were conducted to explore the understanding of the eel fishers of the sustainability of eel fisheries in Palabuhan Ratu, Sukabumi, West Java, Indonesia. The eel fishers shared that they obey the government regulation on eel fishing season which is based on the Hijri, an Islamic lunar calendar. They understood that anguillid eels at the glass stage should not be caught every new moon on 27–28 Hijriah for the sustainability of eel fisheries.

During the interview, the glass eels were abundant in the area which allowed the IFRDMD staff to learn about handling glass eels from the catchment area to the shelter. The staff also observed the packaging process of glass eels that will be sent to buyers for cultivation in ponds. The glass eels captured for not more than three days were placed in plastic bags. Then, each plastic bag was administered with oxygen, sealed, and placed in Styrofoam for shipment. ✠

Training on the Use of eACDS Application for Cambodia



SEAFDEC/TD organized the “Training on the Use of electronic Asian Catch Documentation Scheme (eACDS) Application in the Part of Catch Declaration (CD)” from 21 to 22 June 2023 in Koh Kong Province, Cambodia. The Training was attended by officers from the Fisheries Administrative (FiA)

of Cambodia who engage in the eACDS activities. It is expected that the FiA officers who attended the Training will be able to train relevant stakeholders in the future.

The eACDS is a web-based and mobile application for enhancing the traceability system for fish and fishery products from fishing to plate. The utilization of the eACDS supports good governance in fisheries management, particularly monitoring, control, and surveillance in the Southeast Asian region. ❖

Training on eACDS Application for Small-scale Fisheries in Krabi Province, Thailand



SEAFDEC Training Department (SEAFDEC/TD) organized the “Training on electronic ASEAN Catch Documentation Scheme (eACDS) Application in Catch Declaration (CD) Part for Small-scale Fisheries” from 24 to 25 May 2023 in Krabi Province, Thailand. A total of 27 participants including provincial fisheries officers and local fishers from Krabi attended the Training. As an activity under the project “Small-scale Fisheries Management for Better Livelihood and Fisheries Resources,” the Training focused on the verification of Key Data Elements (KDEs) of the eACDS Application in Baan Nai Nang Village, Krabi Province which is the pilot site for the implementation of eACDS Application for small-scale fisheries. Moreover, the participants practiced

using the eACDS Application in the part of Catch Declaration (CD).

The eACDS Application was developed and used mainly for commercial-scale fisheries to support combating illegal, unreported, and unregulated (IUU) fishing in the region. It is recognized that the eACDS Application is one of the management tools to enhance and strengthen the management of the region’s fisheries as well as support the trade of fish and fishery products. The utilization of the eACDS Application in small-scale fisheries would mainly support the compilation of fisheries data and information for fisheries management as well as establish traceability and IUU-free certification to upgrade the value of fish and fishery products from small-scale fisheries. ❖

SEAFDEC takes part in meetings on enhancing fishery statistics and information system

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the Intersessional Meeting, Ms. Saivason reported the progress of relevant SEAFDEC activities from the second half of 2022 until the first half of 2023 including the recommendations from the First and Second Regional Technical Consultations on Fishery Statistics and Information in Southeast Asia, especially on the data submitted to SEAFDEC by the ASEAN Member States (AMSs)

using the FAO questionnaires; capacity building on methodologies for the collection of statistics from small-scale fisheries, and comprehensive analysis of statistical data. She also reported the plan of SEAFDEC to organize the “Third Regional Technical Consultation on Fishery Statistics and Information of Southeast Asia” on 22–24 August 2023 to discuss with the AMSs the

finalization of the revised Regional Framework for Fishery Statistics of Southeast Asia. In this connection, SEAFDEC looks forward to the support of the FAO in streamlining the Regional Framework with standards, definitions, and classifications adopted by the CWP. ❖

Training on Gender Mainstreaming in Fisheries Sector in Viet Nam



SEAFDEC/TD in collaboration with the Directorate of Fisheries (D-Fish), Viet Nam organized the “Training on Gender Mainstreaming in Fisheries Sector” from 25 to 27 April 2023 in Hanoi, Viet Nam. The Gender Focal Person from TD, *Ms. Jariya Sornkliang*, served as the resource person of the Training which was participated by 25 fisheries officers from D-Fish. The participants obtained knowledge of mainstreaming gender in fisheries

management and development programs and projects by learning the tools to integrate gender in fisheries as well as in the workplace. Moreover, the practical session of the Training enhanced the capacity of the participants in identifying gender gaps and issues and promoting gender equity and equality. The Training was an activity under the project “Small-scale Fisheries Management for Better Livelihood and Fisheries Resources.”



Fisheries management activities in Kawthaung, Myanmar launched

SEAFDEC/TD in collaboration with the Department of Fisheries (DOF), Myanmar carried out a series of activities on the implementation of the Ecosystem Approach to Fisheries Management (EAFM) at the learning site in Kawthaung District, Myanmar under the project “Small-scale Fisheries Management for Better Livelihood and Fisheries Resources.” The data collection on demographics and socioeconomics was conducted from 1 to 4 June 2023 by interviewing a total of 50 small-scale fishers from the learning site at Chaung Wa Village in Kawthaung District. The data collected would serve as baseline information to develop EAFM plan for the learning site.

Subsequently, the “Key Stakeholder Engagement Workshop on Development of the Ecosystem Approach to Fisheries Management (EAFM) Plan at a Learning Site in Kawthaung, Myanmar” was



organized from 5 to 6 June 2023 in Kawthaung, Myanmar with online mode on 6 June 2023 attended by seven TD staff. There were 18 participants in the Workshop including DOF Myanmar fisheries officers, EAFM core team, and key stakeholders. After learning the EAFM concept, the EAFM plan of Chaung Wa Village was developed by the participants.

Moreover, the awareness-building activity on fishery resource conservation at the learning site was conducted from 7

to 8 June 2023. The activity was intended for the local community to understand the conservation concepts and agree on the establishment of an appropriate conservation zone. Consequently, a signboard was installed depicting the conservation zone and information on the conservation of mangrove crabs. Finally, mangrove crab juveniles were released in the conservation zone to raise awareness among the local community including the students on the importance of coastal and aquatic resources conservation and management.



SEAFDEC extends technical assistance to Lao PDR

The Secretary-General of SEAFDEC, *Ms. Malinee Smithrithee*, along with the Policy and Program Coordinator of the SEAFDEC Secretariat, *Dr. Worawit Wanchana*, and the Head of the Program Planning and Management Division of the Training Department, *Mr. Isara Chanrachkij*, paid a courtesy visit to the Director-General of the Department of Livestock and Fisheries (DLF) of Lao PDR and SEAFDEC Council Director for Lao PDR, *Mr. Kaviphone*

Phouthavong, on 26 April 2023 in Vientiane, Lao PDR.

During the visit, SEAFDEC and DLF officials discussed the technical assistance as well as research and development initiatives that SEAFDEC could extend to Lao PDR to improve fisheries management practices, including community-based fisheries management of the country. They also discussed capacity-building programs for fisheries officers and local communities

to improve their skills and knowledge of fisheries management and conservation, including data collection and gender analysis. Furthermore, SEAFDEC officials visited Luang Prabang Fisheries Office and Tin-chom Fisheries Product Center on 27 April 2023 in Luang Prabang Province to gather information on issues and capacity-building needs at the provincial level focusing on additional income and food security of fishery communities.



FUTURE ACTIVITIES

Date	Venue	Title	Organizer(s)
2023			
4–8 September	Samut Prakan, Thailand	Regional Practical Training Course on Google Earth Engine and Oceanographic Data Visualization	TD
5–8 September	Seoul, Republic of Korea	Sustainable Ocean Initiatives (SOI) Regional Capacity-building Workshop for East, South and South-East Asia	CBD Secretariat
6 September	Palembang, Indonesia	2023 Government of Japan Trust Fund Projects Semi Annual Progress Meeting	IFRDMD
11–15 September	Bergen, Norway	19 th Session of FAO Sub-Committee on Fish Trade	FAO, Norway
18–22 September	BFS, Philippines	Training Course on Catfish Hatchery and Grow-out Operations	AQD
18–27 September	TMS, Philippines	Training Course on Mangrove Crab Nursery and Grow-out Operations	AQD
19–20 September	New York, USA	High-level Political Forum on Sustainable Development under the auspices of the General Assembly	UN
18–28 September	Terengganu, Malaysia	In-house Training Course of Larval Fish and Eggs Identification for Fish-Stock Assessments	MFRDMD
25 September–23 December	TMS, Philippines	Distance Learning Course on Basic Principles of Aquaculture Nutrition (Online)	AQD
3–5 October	Bali, Indonesia	SAFET 2023 Conference: Impact at Scale for a Sustainable and Resilient Future	SAFET
3–6 October	Sabah, Malaysia	On-site Training on Chondrichthyans Taxonomy and Biology	MFRDMD
3–6 October	Sabah, Malaysia	Socio-economic Research on Trade of Sharks and Rays in Sabah, Malaysia	MFRDMD
9–26 October	TMS, Philippines	RECAB 2023: Regional training Course on Advanced Aquaculture Technologies for Commercially Important Commodities in Southeast Asia	SEC & AQD
17–19 October	Melaka, Malaysia	24 th Meeting of SEAFDEC Information Staff Program (ISP)	SEC & MD
Late October - Early November (tentative)	Kyusyu, Japan	Training of Gonad Maturity Analysis and Data Collecting	MFRDMD
Late October - Early November (tentative)	Kyusyu, Japan	Collaborative Acoustic Survey for Spawning Stock Biomass Estimation	MFRDMD
30 October–2 November	Punta del Este, Uruguay	10 th GEF International Waters Conference	GEF
6–9 November (tentative)	Thailand	Regional Training Course on the United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982) in Fisheries Perspective	TD
6–10 November	Geneva, Switzerland	77 th Meeting of the Standing Committee of CITES	CITES
6 November–13 February 2024	TMS, Philippines	Distance Learning Course on Basic Principles of Health Management in Aquaculture (Online)	AQD
13–16 November	Shanghai, China	16 th Annual Meeting of Asian Fisheries Acoustics Society: The International Conference on Underwater Acoustics for Sustainable Fisheries in Asia	AFAS
13–27 November	BFS, Philippines	Training Course on Community-based Freshwater Aquaculture for Remote Rural Areas of Southeast Asia	AQD
20–22 November	Bali, Indonesia	46 th Meeting of SEAFDEC Program Committee	SEC & IFRDMD
23–24 November	Bali, Indonesia	26 th Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)	SEC
25 November	Bali, Indonesia	SEAFDEC Department Chiefs' Meeting	SEC
Early December (tentative)	Terengganu, Malaysia	Workshop on Data Validation and Analysis for Life-history Study on Selected Neritic Tuna Species (Kawakawa)	MFRDMD
Early December (tentative)	Terengganu, Malaysia	Training Workshops on Sharks for Stock Assessment Models	MFRDMD & TD
Early December (tentative)	Kuala Lumpur, Malaysia	Regional Workshop on Stock and Risk Assessment of Seerfish in the Southeast Asian Waters Using ASPIC.	MFRDMD

SEAFDEC takes part in meetings on enhancing fishery statistics and information system



The Senior Information Officer of the SEAFDEC Secretariat, *Ms. Saivason Klinsukhon*, attended the “13th Meeting of FIRMS Steering Committee” convened in London, United Kingdom on 26–27 and 30 June 2023. In the same Meeting, the staff from SEAFDEC Training Department, *Mr. Sukchai Arnupapboon* and *Dr. Supapong Pattarapongpan*, attended remotely. Hosted by the North-east Atlantic Fisheries Commission (NEAFC), the Meeting was participated in by 18 partners of the Fisheries and Resources Monitoring System (FIRMS) including SEAFDEC and other two organizations as observers. The aim of the Meeting was to discuss the progress of the activities of FIRMS partners in improving the quality of data and information on the global monitoring and management of fisheries marine resources. During the Meeting, *Ms. Saivason* provided updates on the activities of SEAFDEC related to data collection and stock assessment carried out during 2022–2023, while *Dr. Supapong* presented the results of the project “Collection of Research and Datasets from Data-poor Countries in Southeast Asia Related to SDG Indicator 14.4.1 and Formulation of a Thesaurus for Aquatic Genetic Resource.” In addition, SEAFDEC and Aquatic Sciences and Fisheries Abstracts (ASFA) will continue to collaborate to evaluate the ASFA-SEAFDEC analysis of grey literature for its potential.

Back-to-back with the 13th FIRMS meeting was the “Intersessional Meetings of Aquaculture and Fisheries Subject Groups” on 27–30 June 2023 which served as the forum for agreeing on the common definitions, classifications, and standards for fishery statistics. The Intersessional Meeting also discussed the progress made by Coordinating Working Party (CWP) partners in relation to its scopes and frameworks as well as the activities and achievements of the Aquaculture and Fisheries Subject Groups after the 27CWP in 2022 *i.e.* revision of the CWP Handbook and web pages; works by the ad hoc Task Groups on Catch Concepts, Fishing Effort Concepts, Reference Harmonization for Capture Fisheries and Aquaculture Statistics, Geospatial matters, Workflow/Confidentiality, Small-scale Fisheries, and Aquaculture, and proposed to update the Aquatic Sciences and Fisheries Information System (ASFIS) List of Species for Fishery Statistics Purposes as well as International Standard Statistical Classification of Fishing Gears (ISSCFG). During

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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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SEAFDEC takes part in the 32nd Meeting of Animals Committee of CITES



The SEAFDEC Secretary-General, *Ms. Malinee Smithrithee*, accompanied by Policy and Program Coordinator, *Dr. Worawit Wanchana*, and Senior Policy Officer, *Ms. Pattaratjit Kaewnuratchadasorn*, took part in the 32nd Meeting of Animals Committee (AC32) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) on 19–23 June 2023 in Geneva, Switzerland. The AC32 was attended by CITES Animal Committee members from six geographical regions (Africa, Asia, Europe, North America, Central and South America and the Caribbean, and Oceania), observer parties and organizations, civil society organizations, and non-government organizations. The AC meetings are

convened twice between the meetings of the Conference of the Parties (CoP); and the AC report to the CoP meetings and provide advice to the Standing Committee, as requested.

During the AC32, the discussions focused on CITES trade regulations and compliance, capacity building, and other relevant topics. The AC32 also reviewed the species-specific matters of animals listed in the CITES Appendices including aquatic species (*e.g.* sharks and rays, eels, sea cucumbers, seahorses, marine ornamental fishes, etc.). Moreover, in-session working groups were established during AC32 to discuss specific topics including captive breeding, stony corals, sharks, nomenclature, and Review

of Significant Trade. With regard to aquatic species, SEAFDEC participated in the in-session working group on sharks where more specific issues on sharks and rays were discussed and recommendations were drafted for consideration by the AC32 and further submission to the Standing Committee. In addition, SEAFDEC also expressed interest to join the inter-session working groups on eels and seahorses which will be organized after the AC32.

Furthermore, SEAFDEC served as one of the panelists at the side event organized by FAO titled “Needs and Solutions to Enable Parties to Service CITES Provisions for CoP19 Listed Commercially Exploited Aquatic Species” on 19 June 2023. SEAFDEC also shared information on measures implemented by the Southeast Asian countries in managing and conserving shark resources and fisheries, current status of the management and conservation of sharks and rays in the region, and regional needs in the form of building capacity and finances.



Mid-term review meeting, training workshop on enhancing food safety and quality convened



Under the project “Enhancing Food Safety and Competitiveness of Seafood Products,” the Mid-Term Review Meeting was convened back-to-back with the Regional Training Workshop on High Pressure Processing (HPP) Technology from 20 to 22 June 2022 in Singapore. With support from the Japanese Trust Fund, the Meeting and Training Workshop were organized by the SEAFDEC Marine

Fisheries Research Department (MFRD) Programmes with the assistance of the Singapore Food Agency. The events were attended by representatives from Member Countries including Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam as well as SEAFDEC Deputy Secretary-General, staff from the SEAFDEC Secretariat and MFRD, and resource

person from the School of Chemical and Life Sciences, Nanyang Polytechnic.

During the Meeting, the Member Countries delivered reports on their respective regulations and standards related to ready-to-eat raw fish and fishery products, as well as the results of the pilot trials on GMP and GHP for these products conducted during 2022–2023. Furthermore, the Meeting also reviewed the Regional Guidelines on Good Manufacturing and Handling Practices (GMP & GHP) for Ready-to-Eat Raw Fish and Fishery Products developed by MFRD. For the Training Workshop, the participants learned the applications of the HPP technology to fish and fishery products at Nanyang Polytechnic and observed the HPP technology demonstration at Commonwealth Logistics II Pte. Ltd.

