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EDITORIAL

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The quarter witnessed various episodes in the region's fisheries development. One of the very significant events during the quarter was the celebration of the 40th Anniversary of AQD, which kicked off with a motorcade and tree planting followed by medical mission and bloodletting, conduct of lecture series on aquaculture development, putting up of a mall exhibit, book launching and technology forum, and culminated with a special forum to honor dedicated employees and to listen to stakeholders' testimonials.

In another fisheries arena, SEAFDEC moves on with the conduct of several human resource development activities that included the End-of-Project Seminar on the Utilization of Freshwater Fish for Value-added Products; training on mud crab culture, sustainable fishery resource management, community-based fisheries management, and energy optimization and safety at sea; and workshop on management information system for deep sea fishery resources database. In addition, On-the-job-Training Workshop

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Thailand announces the organization of ASEAN Fisheries & Aquaculture Conference and Exposition 2015

The Department of Fisheries (DOF) of Thailand officially announced through a Press Conference on 23 September 2013, the organization of the ASEAN Fisheries & Aquaculture Conference and Exposition with the theme "ASEAN Seafood for the World" in Bangkok, Thailand in 2015. The conduct of this Conference and Exposition was initially agreed upon during the 45th Meeting of the SEAFDEC Council in April 2013, and subsequently received full support from the 21st Meeting of the ASWGFi in July 2013.

Officiated by the Vice Minister of Agriculture and Cooperatives of including the private sector in Thailand Thailand Mr. Siriwat Kachornprasart, as well as the Ambassadors to Thailand the Press Conference was attended by (or their representatives) for Indonesia, concerned agencies and institutions



Vice Minister of Thailand's Agriculture and Cooperatives, Mr. Siriwat Kachornprasart (middle), viewing the publications displayed at SEAFDEC's exhibition booth after the Press Conference

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SEAFDEC takes part in the 21st ASWGFi Meeting

SEADFEC during the 21st Meeting of mechanism. the ASEAN Sectoral Working Group

SEAFDEC Secretary-General Dr. on Fisheries in Vientiane, Lao PDR Chumnarn Pongsri and Deputy Secretary- on 24-26 July 2013. The Meeting General Mr. Hajime Kawamura together discussed various fisheries-related with SEAFDEC officers represented initiatives undertaken under the ASEAN

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Participants in the 21st ASEAN Sectoral Working Group on Fisheries

EDITORIAL

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on project planning monitoring and evaluation using the result-based management (RBM) approach was conducted providing a forum for SEAFDEC researchers and technical officers to enhance their knowledge and skills in project planning, monitoring and evaluation based on the RBM approach.

Another equally important activity during the quarter was the continued crusade of SEAFDEC to promote increased awareness of agencies in Japan on the progress of SEAFDEC programs and activities as well as on the status of the establishment of the new SEAFDEC IFRDMD. While providing the agencies with updated information, the SEAFDEC Secretariat also sought the continued cooperation of the Japanbased Technical Support Committee for SEAFDEC and enhanced financial support from the Government of Japan especially through its Trust Fund budget for SEAFDEC activities. Such an occasion also served as an opportunity for SEAFDEC to congratulate Japan and the ASEAN on the 40th Anniversary of the ASEAN-Japan Friendship and Cooperation, and to express the wish for enhanced partnership during the next 40 year and beyond.

In a related development, the Department of Fisheries (DOF) of Thailand initiated efforts to organize the ASEAN Fisheries & Aquaculture Conference and Exposition as proposed during the 45th Meeting of the SEAFDEC Council in April 2013. After receiving the full support from the 21st Meeting of ASWGFi, the DOF of Thailand officially announced through a Press Conference, the organization of the ASEAN Fisheries & Aquaculture Exposition and Conference with the theme "ASEAN Seafood for the World" which is scheduled tentatively in early 2015. \mathbb{X}

SEAFDEC Newsletter is available at www.seafdec.org.

You can also send your comment on our Newsletter to

secretariat@seafdec.org.

Thailand announces the organization of ASEAN Fisheries & Aquaculture Conference and Exposition 2015

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Lao PDR, Malaysia, and the Philippines, and officials from SEAFDEC as coorganizer of the Conference. Activities that followed the Press Conference included Thai seafood cooking demonstrations, display of exhibition booths by relevant agencies/institutions in Thailand including SEAFDEC, and conduct of a seminar session where government, public and private sectors including major Thai fishery-related business sectors, e.g. marine capture fisheries, shrimp aquaculture, discussed and shared views on the issues and challenges in driving the fisheries sector of Thailand towards sustainability in the future.



The ASEAN Fisheries & Aquaculture Conference and Exposition "ASEAN Seafood for the World" is tentatively scheduled in 2015, and the official website would be launched in early \mathbb{X}

TD takes part in Thailand's fishery exhibition

Department of Fisheries of Thailand reefs, artificial sea grass beds and rafthas been organizing the national fishery rope culture of green mussel along with exhibition "Pramong Nomklao" as a the activities from the Queen's project in symbol of bowing before the Royalty. For 2013, the exhibition was organized from 28 June to 7 July at the Future publications, brochures, VCDs and Park Department Store in Pathumthani Province, north of Bangkok. Dubbed in Thai as "Pramong Nomklao" or "fisheries submission", the event coincided with Princess Chulabhorn's 56th birthday.

For several years, SEAFDEC Training Department has been taking part in this national recognition. This year, shown at SEAFDEC booth of the

For 25 consecutive years, the fair were models of crab bank, artificial Petchburi Province, all prepared by TD. With the distribution of various technical souvenirs to the audience, SEAFDEC's visibility had been promoted.

> The national event was inaugurated by Her Royal Highness Princess Chulabhorn Walailak on 28 June. As a benevolent gesture, all incomes incurred from the fair were contributed to the Chulabhorn Research Institute which is popularly known for its cancer research.



Visitors observing the models of crab bank, artificial reefs, artificial seagrass beds and raft rope culture of green mussel at Pramong Nomklao

Promoting continued awareness of agencies in Japan on SEAFDEC programs and activities

SEAFDEC team, comprising the Secretary-General Dr. Chumnarn Pongsri, Deputy Secretary-General Mr. Hajime Kawamura, Assistant Trust Fund Manager Mr. Hidenao Watanabe, and Fisheries Technical Officer Ms. Virgilia T. Sulit (also the Managing Editor of Fish for the People), went on a mission trip to Japan on 5-9 August 2013. The mision trip aimed to: express appreciation to relevant agencies in Japan and their respective officers for the continued support accorded to SEAFDEC; provide information on the status of the newly proposed SEAFDEC Department, the Inland Fishery Resources Development and Management Department (IFRDMD), and seek assistance for its operationalization; promote profound and mutual understanding and awareness of the activities of SEAFDEC especially with the members of the Technical Support Committee (TSC) for SEAFDEC and to seek the continued cooperation of the TSC in the future activities to enhance benefits of the ASEAN countries; express the felicitations of SEAFDEC for the 40th Anniversary of the ASEAN-Japan Friendship and Cooperation, and the wishes of SEAFDEC for intensified relationship for the next 40 years; and reiterate SEAFDEC's request for financial support from the Government of Japan especially the Japanese Trust Fund budget for SEAFDEC activities,



Courtesy call of SEAFDEC team on the new Director-General of the Fisheries Agency of Japan, Mr. Kazuyoshi Honkawa

the JTF will continue to be in the most Friendship and Cooperation in December efficient and effective manner for the maximum benefit of SEAFDEC and the hope for enhanced partnership in the Member Countries.

During the discussion with officers of the Ministry of Foreign Affairs (MOFA) in Tokyo, the possibility for SEAFDEC to submit project proposal(s) to seek funding support from the ASEAN-Japan Fund through MOFA was advanced. SEAFDEC was also requested to consider taking part and providing inputs during the International Seminar on Smallscale Freshwater Aquaculture Extension to be organized by JICA in Bangkok, Thailand on 2-5 December 2013, to pave the way for the revival of the JICA and SEAFDEC collaboration. The mission trip also provided SEAFDEC with the opportunity to congratulate Japan and the ASEAN on the occasion of the

giving the assurance that utilization of 40th Anniversary of the ASEAN-Japan 2013, where SEAFDEC expressed the future. On the part of SEAFDEC as the technical arm of the ASEAN on fisheries development, MOFA was assured that implementation of programs and activities by SEAFDEC in the ASEAN countries would be continued in order that sustainable development of fisheries for food security and eradicating poverty in Southeast Asia is attained.

> At the Fisheries Agency of Japan (FAJ) in Tokyo, SEAFDEC was assured that FAJ will exert efforts to secure funds for SEAFDEC to include allocations for the new SEAFDEC Department to be established in Indonesia. SEAFDEC was also requested to explore the possibility of conducting studies on the Anguillid eel species, particularly Anguilla bicolor bicolor in collaboration with the Fisheries Research Agency (FRA) of Japan. On the progress of development of the SEAFDEC/ IFRDMD, SEAFDEC was requested to compile benchmark information on the status and trend of inland fisheries in the Southeast Asian region to justify the request of FAJ for a new Japanese Trust Fund (JTF) 6 on inland fisheries development. Finally, SEAFDEC was also requested to consider improving its JTF project documents, especially the project objectives to ensure that good achievements are attained and reported.

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(Above) During the courtesy call on TUMSAT President Dr. Nobuaki Okamoto, Vice-President Dr. Tomoji Takamasa, and TUMSAT officers; and (Left) During the courtesy call of SEAFDEC team on the President of FRA Dr. Toshihiko Matsusato, and FRA Officers in Yokohama, Japan

DEPARTMENTAL ACTIVITIES

Dialogue with Hong Kong on sustaining the LRFFT

Interim Secretariat of the Regional statistics related to imports of LRFF Live Reef Food Fish Trade (LRFFT) Intergovernmental Forum, together with supporting partners i.e. the US CTI Support Program and the World Wide Fund for Nature-Coral Triangle Global Initiative (WWF-CTGI), met with Senior Officials of Hong Kong Government's Agriculture, Fisheries and Conservation Department (AFCD) on 5-9 August 2013, to present the region's effort of ensuring sustainable utilization and trade of live reef food fish through the "Resolution on Sustainable LRFFT for the Southeast Asian Region and CTI-CFF Member Countries" adopted in early 2013.

On the possible collaboration with Hong Kong, AFCD suggested that a study tour with informal forum/dialogue/ roundtable discussion with stakeholders including AFCD be organized to share

Officials from SEAFDEC as the information on programs, activities and in Hong Kong, in order to come up with priorities or recommendations for Hong Kong and CTI-CFF countries to pursue with. The team also visited a fish farm (Aquaculture Technologies Asia Ltd.), which applies recirculating system to prevent fish from viruses and pollutants.



The mission to Hong Kong, led by the Secretary-General of SEAFDEC Dr. Chumnarn Pongsri

Tailor-made training for Shanghai Ocean University



TD conducted a Tailor-made Training Course on Sustainable Fisheries Management Evolution for 23 students from Shanghai Ocean University of China on 17-19 July 2013. Highlighting on coastal fisheries management in Thailand, the training also included a study trip to Samut Sakorn Province to observe firsthand the operation of a rope and net making factory, Talay Thai fishing market, and Samut Sakorn Coastal Fisheries Research and Development Center.

Tailor-made training for Sri Lankan fisheries officers

TD organized a weeklong "Study Tour and Knowledge Sharing Program Accentuating on Community-based and Coastal Fisheries Management in Thailand" for six trainees from Sri Lanka's Department of Fisheries and the Post Tsunami Coastal Rehabilitation H.M. Queen Sirikit's and Resource Management Program, starting on 8 September 2013. Apart from the subject on community-based and coastal fisheries management, the training also covered the concepts of

ecosystem approach to fisheries management (EAFM) and responsible fisheries. The trainees also observed the Sea Farming Project under initiatives in Petchburi Province, Thailand.





AQD joins coastal clean-up

In support of the world-wide celebration of the "Month-of-the-Ocean" every September, SEAFDEC/ AQD cleaned up the beach fronting its Tigbauan Main Station in Iloilo on 18 September 2013. Everyone was happy to have helped Mother Earth in a small way!



Students from Kasetsart University visit TD facilities



Thirty two students from the Faculty of Economics and 104 from the Faculty of Fisheries of Kasetsart University, Thailand visited the Training Department (TD) on 28, 30 and 31 August 2013. After being briefed on the roles and functions of SEAFDEC, the students visited TD facilities such as the Fishing Workshop to observe models of commercial fishing gears, e.g. purse seine, gill net, push net, etc., tradition fishing gears, modern fishing technology. e.g. deep-sea trap, longline, squid jigging, etc., as well as fishery resources conservation tools such as Turtle Excluder Device (TED) and Juvenile and Trash Excluder Device (JTED). The students also went onboard the M.V. SEAFDEC to observe its facilities. \gg

AQD reviews projects and strategizes for 2014

To ensure the relevance of its R&D program, AQD held its annual "Inhouse Review and Planning Meeting" from 19 to 20 September 2013 at its main station in Iloilo, Philippines. In attendance were AQD's partners (BFAR-National Fisheries Research & Development Institute and DOST-PCAARRD) and AQD's senior staff. This meeting was preceded by two meetings, on commodities and on thematic programs that were held in August, for updates on the industry and R&D status of important commodities and the progress of individual research projects. The meetings also ensure that R&D activities address the needs of the industry.

"AQD is in the position to help national governments in addressing food security", noted AQD Chief Dr. Felix Ayson. "We have carefully generated science-based technologies in aquaculture. There is always a stamp of AQD in the region". He summarized AQD's topmost strategies as follows: (1) technology extension in situ, where AQD provides the inputs like feeds and in return gets the needed data on feed performance and environmental parameters during the culture period,







Three sets of AQD meetings on commodities, thematic areas and project reviews in August and September 2013 to map out its strategic plans for 2014

while private sector partners provide the operational funds, fingerlings, staff and gets the proceeds; (2) closer cooperation and information sharing among staff to enable AQD to raise the public's awareness of science-based technologies; and (3) securing more R&D grants to work with institutions having similar vision of sustainable aquaculture and avoid duplication of efforts.

Food safety: what experts and stakeholders say





A total of 150 aquaculture and food safety experts, scientists, representatives and observers from 11 countries attended the "International Workshop on Food Safety of Aquaculture Products in Southeast Asia". Held from 8 to 9 May in Iloilo City, the Workshop was organized by AQD with funding from the Japanese Trust Fund. Representatives from the SEAFDEC Member Countries reported on the status of food safety while academia and government bodies presented ten studies.

Left-above: Ribbon-cutting to signal the opening of exhibit; and Left-below: Member Countries report on the status of food safety measures

The Workshop noted that most countries had already formulated their respective legal frameworks to monitor and control chemicals used in aquaculture, and that registration systems have been established with registered establishments and fish farms that are allowed to export. The European market is the common target of all Member Countries. The contributed papers revolved around edible mushroom extracts to control shrimp melanosis, use of heat to control food-borne human pathogens in ceviche recipes, selenoneine as detoxifier of methyl mercury, rejection of ethoxyquin-loaded shrimp shipment to Japan, and the complexity of the issue of agro-chemicals in fisheries.

On mud crab: AQD organizes training, signs accord

SEAFDEC/AQD trained eight technicians and instructors of Aklan State University, Cavite State University, Davao del Norte State College, and local government unit (LGU) of Tagum City on "Mud crab hatchery and nursery" from 23 Sept to 09 October 2013 at AOD main station in Iloilo. All had only kind words for the AQD trainers and appreciation for the course that was successfully conducted.

In related development, AQD and LGU-Tagum City in the island of Mindanao signed an agreement on 23 September for AQD to provide technical assistance to Tagum's mud crab hatchery and nursery operations. AQD's assistance is part of the project



Measuring a mud crab broodstock

on "Promotion of mud crab hatchery & nursery technologies in selected sites" funded by DOST (Department of Science & Technology) which is meant to accelerate the adoption of sciencebased technology by stakeholders.





Signing the MOA between LGU-Tagum City and AQD

National training course on fisheries data management system for Indonesia



TD organized the National Training Course on Fisheries Data Management System in Jakarta, Indonesia on 2-3 July 2013. The training aimed to enhance the national capacity of fisheries officials of the Ministry of Marine Affairs and Fisheries (MMAF) of Indonesia for improving management through improved fisheries data system. After the training, the trainees would be able to incorporate this system into their current efforts towards the development of their national fisheries information system. Meanwhile, the MMAF Indonesia will conduct internal discussion in order to come up with the possible areas for future collaboration with SEAFDEC on this matter.

Angola? What is AQD doing there?

Technical assistance. AQD's ABOT AquaBusiness or Agree-build-operatetransfer Program has gone beyond Southeast Asia to the African continent. MicroTREND Enterprises of Luanda, Angola, requested AQD to assess the site of a proposed tilapia hatchery, nursery and grow-out operation in Quanza Norte. AQD sent researcher Mr. Dan Baliao from 4 to 10 June 2013, and he noted that: "Aquaculture in Angola is smallscale and focused on inland freshwater aquaculture both by the communities and the private sector".

The 10-ha Luanda site was found feasible, with a good freshwater source and some structures (e.g. concrete gate) already in place. AOD's recommended further noted, is typical of a free- or reservoir for tilapia production in





design of farm operations, Mr. Baliao flowing impounded freshwater pond



Above: AQD assessing the site of a proposed tilapia farm in Luanda site in Angola; and Left: The investor, local guide, and officers of MicroTREND Enterprises (Photos by D Baliao)

the Philippines. He suggested that, in addition to Oreochromis niloticus, freshwater prawn could also be raised in the farm. Next to site evaluation is the implementation of farm improvement and cropping cycle plans.

In-house training on project planning, monitoring and evaluation using RBM approach

collaboration with TD convened an "Onthe-job Training Workshop on Project revisiting project logical frameworks and Planning, Monitoring and Evaluation" on 4-8 September 2013 in Petchburi Province, Thailand. Supported by SEAFDEC-Sida project, this Workshop was facilitated by resource persons, Mr. Voravate Chonlasin and Ms. Narumon Wangnai from the Asian Institute of Technology (AIT). A total of 33 staff who are program/project leaders, researchers, and technical officers attended in the to obtain comments for improvement and Workshop.

The workshop aimed to enhance the knowledge and capacity of SEAFDEC Secretariat and TD staff on project planning, monitoring and evaluation using the results-based management (RBM) approach. The Workshop started with brief related tasks that would pave the way for improved knowledge on key concepts and applications of

The SEAFDEC Secretariat in RBM approach in monitoring and enhance the application of the knowledge evaluation (M&E) of programs/projects, incorporating them in M&E methods and tools; setting of aims, objectives and preparation of M&E plan using RBM approach; identification of indicators for measuring progress and success of on-going projects; and matrix of M&E indicators. At the end, participants presented their project proposals developed through the Workshop in order



gained in their future works.





Above: Group presentation of project proposal as part of their outputs from the workshop; and Left: Participants together with resource persons of the training workshop

Promoting continued awareness of agencies in Japan on SEAFDEC programs and activities (Continued from Page 3)

the Yokohama-based FRA, of which the existing MOU with SEAFDEC would terminate in February 2014, SEAFDEC was requested to make the necessary arrangements for the signing of the renewed MOU, preferably in Bangkok, Thailand. SEAFDEC was also informed that the FRA is considering the dispatch of short-term experts to IFRDMD as well as long-term expert to serve as Deputy Chief in spite of the decreasing number of inland fisheries experts within the FRA.

At the Tokyo University of Marine Science and Technology (TUMSAT) in Tokyo, SEAFDEC was informed that TUMSAT is enhancing efforts to develop the capability of human resources in the ASEAN countries, where SEAFDEC would be tapped to carry out this task of SEAFDEC. Nevertheless, he also

During the discussion with officers of with support from TUMSAT. Moreover, assured SEAFDEC that FAJ would in response to the request of SEAFDEC, TUMSAT in collaboration with JICA is considering to provide support for the conduct of training courses on fisheries resource management and coastal-based management in the ASEAN countries.

> SEAFDEC Council Director (CD) for Japan and Deputy Director-General of FAJ in Tokyo, the need to review the functions of SEAFDEC was expressed by the CD for Japan as this could strengthen the organization and make the SEAFDEC operations efficient and cost-effective. He also expressed the concern about the recommendation of could alter the fundamental structure

continue to secure funds for SEAFDEC in spite of the current financial situation of Japan. Furthermore, the Marino Forum 21 in Tokyo also assured SEAFDEC of continued assistance, especially in the capacity building of fisheries researchers and staff from the Member Countries. During the discussion with the In general, SEAFDEC requested the Government of Japan which has the capital resources, technologies and human resources, to continue extending assistance to the ASEAN countries through SEAFDEC to pave the way for the strengthened capacity of the ASEAN countries. This would enable the countries to enhance their contribution to the sustainability of the ASEAN-Japan the Third SEAFDEC Review to have Friendship and Cooperation as it soars an independent Secretariat as the impact high into the next 40 years and beyond.



SPECIAL REPORT

"Japanese Trust Fund II: Chemical and Drug Residues in Fish and Fish Products in Southeast Asia – Biotoxins Monitoring in ASEAN Region" Project

By SEAFDEC/MFRD

Consumption of a variety of shellfish and fish has led to an increasing number of human intoxications around the world. Around 400 poisonous fish species exist and, by definition, the substances responsible for the toxicity of these species are biotoxins. Marine biotoxins represent a significant and expanding threat to human health in many parts of the world. The impact is visible in terms of human poisoning or even death following the consumption of contaminated shellfish or fish, as well as mass killings of fish and shellfish, and death of marine animals and birds. The Codex Alimentarius Code of Practice for Fish and Fishery Products (CAC/RCP 52-2003) defined biotoxins as poisonous substances naturally present in fish and fishery products or accumulated by animals feeding on toxin producing algae, or in water containing toxins produced by such organisms.

Monitoring seafood for toxicity is essential to manage the risks. However, there are several limitations in monitoring for toxicity such as variation in toxin content between individual shellfish, different detection and even extraction methods for

The project is in line with the following resolution and plan of action as endorsed at the ASEAN-SEAFDEC Conference of 2011:

Resolution 21: Improve technologies and facilities to ensure fish quality assurance and safety management systems, taking into account the importance of traditional fishery products and food security requirements, and promote the development of fishery products as an alternative supplementary livelihood for fisheries communities.

Plan of Action D61: Strengthen fish quality and safety management systems that support the competitive position of ASEAN fish products on world markets, including moving towards ISO/IEC 17025 accreditation of national fish inspection laboratories, strengthening capacity and acknowledging the recognized national laboratories, risk analysis and equivalence agreement such as the Mutual Recognition Agreement (MRA) and promote the implementation of the quality and safety management systems among small and medium enterprises in the ASEAN region.

Plan of Action D63: Promote and conduct training programs and develop training materials to upgrade the technical skills and competencies of personnel in the public and private sectors on fisheries post-harvest technology and food safety management system.

the various toxins requiring a decision on which toxins should be tested for, and the frequency of sampling to ensure that toxicity does not rise to dangerous levels in temporal or spatial gap between sampling times and locations. Furthermore, the growing harvest of non-traditional shellfish (such as moon snails, whelks, barnacles, etc.) may increase human health problems and management responsibilities.

In an effort to address the issue of marine biotoxins threat to human health in the ASEAN countries, the Marine Fisheries Research Department (MFRD) implemented a project on "Chemical and Drug Residues in Fish and Fish Products in Southeast Asia – Biotoxins Monitoring in ASEAN Region" under the Japanese Trust Fund II program to increase the attention in expanding and improving initiatives to monitor, detect and share information on marine biotoxins in order to reduce the public health risks associated with the consumption of contaminated shellfish and fish in the region.

The objectives of this project are to:

- Upgrade regional laboratory capabilities and credibility for testing of DSP, PSP and TTX biotoxins through conduct of a regional training course on methodologies for Member Countries and 1-year survey in Member Countries;
- (2) Establish biotoxins monitoring programs in Member Countries for routine surveillance testing of fish and fisheries products especially in those countries that do not have such programs; and
- (3) Improve knowledge and understanding on levels of biotoxins occurrences and incidences in fish and fisheries products in the ASEAN region and facilitate exchange of information among Member Countries by establishing a directory of biotoxins experts and responsible persons/national authorities in each Member Country.

The project commenced in 2009 and was envisaged to be completed in 2012. A Regional Technical Consultation meeting was held in Singapore to initiate the 4-year project. The three-day meeting on 26-28 August 2009 provided an overview of biotoxins monitoring in the ASEAN Member Countries. The meeting deliberated on the project scope and planned for all the project activities and time schedule. In total, 19 participants from the ASEAN Member Countries (except Brunei Darussalam) and eight MFRD officers participated in

the meeting together with Dr. Toshiyuki Suzuki, a Japanese expert from the National Research Institute of Fisheries Science, who served as the resource person for the project.

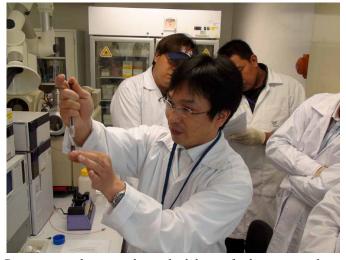
A Regional Training Course on Biotoxins Analyses was conducted the following year on 28 June - 7 July 2010 at the Veterinary Public Health Centre of the Agri-Food & Veterinary Authority of Singapore (AVA) to build up Member Countries' technical capability. Under the guidance of the lead trainers, Dr. Toshiyuki Suzuki and Dr. Ryuichi Watanabe from the National Research Institute of Fisheries Science, Japan, as well as Dr. Yasukatsu Oshima from Kitasato University, the course participants learnt 5 methods for biotoxins analyses which included:

- Multi-component testing of Diarrhetic Shellfish Poisoning (DSP) and lipophilic toxins Yessotoxin (YTX), Pectenotoxins (PTX) by High Performance Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS);
- Paralytic Shellfish Poisoning (PSP) by High Performance Liquid Chromatography (HPLC); and
- Tetrodotoxin (TTX) by LC/MS/MS.

In addition, two commercial companies were invited to conduct the training on rapid methods testing for DSP and PSP.



Participants in the 2010 Regional Training Course on Biotoxin Analyses in Singapore



Participants observing the methodologies for biotoxin analysis



Participants in End-of-Project Seminar in Singapore in 2012

Following the training, nine Member Countries (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) participated in a one-year biotoxins monitoring survey in their respective countries from 2011 to 2012. Cambodia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore and Thailand conducted PSP monitoring in Green Mussel (*Perna viridis*), Indonesia and Vietnam conducted PSP monitoring in Baby Clam (*Meretrix* spp.). Myanmar and Singapore also conducted ASP and DSP in Green Mussel (*Perna viridis*) in their surveys. The surveys found mostly negative results for PSP in the species monitored.

The survey results and reports from the participating countries were collated and published into a Technical Compilation,

which also included Member Countries' survey methodologies and recommendations, as well as a discussion on the problems and challenges encountered during the surveys and a directory of biotoxins experts and responsible persons/national authorities in each Member Country. The publication will serve as a useful reference and resource tool for Member Countries in



their efforts to implement biotoxins monitoring. The project concluded with an End-of-Project (EOP) Seminar held on 20-21 November 2012 in Singapore.

The successful completion of the project saw the upgrading of regional laboratory capabilities and credibility in DSP, PSP and TTX biotoxins testing as well as the establishment of biotoxins monitoring program for fish and fisheries products' routine surveillance, which was particularly beneficial for countries which originally do not have such programs in place. The project also helped to increase general knowledge and understanding on the levels of biotoxins occurrences and incidences in the ASEAN countries through the biotoxins monitoring surveys and the sharing of information among the Member Countries.

REGIONAL PROGRAMS

RTC on Chemical & Drug Residues in Fish and Fish Products in Southeast Asia - Biotoxins Monitoring in ASEAN Region: ASP, AZA and BTX

MFRD successfully convened the RTC on "Chemical and Drug Residues Trust Fund (JTF-VI) for 2013-2017, the in Fish and Fish Products in Southeast Asia - Biotoxins Monitoring in ASEAN Region: ASP, AZA and BTX" on 24-25 July 2013 in Singapore. The RTC was attended by representatives from all ASEAN countries, as well as Mr. Hidenao Watanabe from the SEAFDEC Secretariat, and Dr. Toshiyuki Suzuki from the National Research Institute of Fisheries Science, Japan as resource person for this project.

project objectives are: (1) to upgrade the regional laboratory capabilities and credibility testing of Amnesic Shellfish Poisoning (ASP), Azaspiracids (AZA) and Brevetoxin (BTX) biotoxins for fish and fisheries products through the conduct of a regional training course on testing methodologies for the ASEAN countries, and a 1.5 year biotoxins monitoring survey in the Member Countries; (2) to establish biotoxins

A new project under the Japanese monitoring programs for ASP, AZA and BTX biotoxins in the Member Countries for routine surveillance testing of fish and fisheries products, especially in those countries that do not have such programs; and (3) to improve knowledge and understanding on levels of ASP, AZA and BTX biotoxins occurrences and incidences in fish and fisheries products in the ASEAN countries and facilitate exchange of information among countries.

> The RTC deliberated and decided on the project scope, activities and time schedule; and identified the training needs of the Member Countries, the content, venue and trainers for the regional training course. The regional training course is scheduled in June 2014 in Singapore in collaboration with the Veterinary Public Health Laboratory of the Agri-Food and Veterinary Authority, Singapore. Key project leaders were also identified for each Member Country.



Participants attending in the RTC on Chemical and Drug Residues in Fish and Fish Products in Southeast Asia



Regional Core Expert Meeting on Combating IUU Fishing through Application of Catch Certification

Core Expert Meeting on Combating of the EC Regulation 1005/2008 to IUU Fishing in the Southeast Asian SEAFDEC Member Countries; and the Region through Application of Catch draft Regional Guidelines to Prevent Certification for International Trade in Landing, Import and Export of IUU Fish and Fishery Products" in Kuala Lumpur, Malaysia on 7-9 October 2013, with support from the Japanese Trust Fund.

Attended by the representatives from SEAFDEC Member Countries, the SEAFDEC Deputy Secretary-General, the representatives from SEAFDEC Secretariat, as well as the Chief, Deputy Chief and officials from MFRDMD, the Meeting discussed the existing fishing and trading practices by small-scale

MFRDMD organized the "Regional fisheries in the region; the impacts Fish and Fisheries Products. In addition, discussion was also made on the basic requirements for the formulation of the ASEAN Catch Documentation System.





SEAFDEC at the Pacem in Maribus XXXIV International Forum

SEAFDEC supported the International Ocean Institute (IOI) in the conduct of the "Pacem in Maribus XXXIV International Forum on Sustainable Governance of the Ocean" on 4-6 September 2013 in Bangkok, Thailand, to discuss issues and challenges on how the sustainability of the ocean could be achieved. The Forum addressed important and emerging global, regional and national issues on the impacts of climate change and ocean related hazards, water and flood management policy implications, protection, mitigation and adaptation; follow-up of the outcome of Rio+20, implementation of UNCLOS and related instruments in the Southeast Asian region; integrated ocean webbased geographical information system; leadership seminar on science on tsunami for today's society and its input to society security and sustainability; and the youth dialogue "The Ocean We Want" on the rights of youth in sustainable development.

Representing SEAFDEC during the Forum were SEAFDEC Secretary-General Dr. Chumnarn Pongsri, and SEAFDEC Special Advisor Dr. Magnus Torell. During the Opening Ceremony,



Dr. Chumnarn delivered a message outlining the issues on sustainable utilization of marine fishery resources, particularly the initiatives undertaken in the region in conjunction with the UNCLOS and relevant Instruments and Agreements that had been put into practice to ensure the sustainability of marine resources. He also presented the activities undertaken by SEAFDEC to support the Member Countries in sustainable development of fisheries under the context of the CCRF.



Workshop on management information system to manage deep sea fishery resources database



A 2-day Workshop on Management Information System was organized by SEAFDEC/TD at its premises in Samut Prakan starting from 23 September 2013. The Workshop was attended by 15 participants from the Department of Fisheries (DOF) of Thailand and TD staff directly responsible for updating and maintenance of the database, particularly the deep-sea fishery resources database designed and developed by TD as a collaborative project with the DOF. During the Workshop, participants learned firsthand on the procedures for updating and maintenance of database. as well as the distribution of a particular set of information among active users.



SEAFDEC Secretariat takes part in the 5th AFCF

Dr. Magnus Torell and Dr. Somboon Siriraksophon at the 5th Meeting of the ASEAN Fisheries Consultative Forum (AFCF) on 22-23 July 2013 in Vientiane, Lao PDR. The Meeting discussed the prioritized activities for ASEAN cooperation on fisheries under the Strategic Plan of Actions (SPA) in 2011-2015 which are inline with the ASEAN Economic Community (AEC) Blueprint Guideline and AEC measures. While reporting on the progress of works undertaken to support the ASEAN countries in the implementation of the SPA, SEAFDEC proposed two issues for consideration by the AFCF: one is the establishment of the Regional Fishing Vessel Record for vessels

the management tools to combat IUU of the ASEAN Catch Documentation System to enhance the international and intra-regional trade in fish and fishery products among the ASEAN countries.

Specifically for the AFCF cluster on Fishing Capacity and Responsible Fisheries Practices, SEAFDEC agreed to support and provide a platform for ASEAN Member States to discuss and finalize the Guidelines for Management of Fishing Capacity under the SEAFDEC framework on development of regional fishery policy for the ASEAN countries. It was also noted that the cluster on Capacity Building is broad and cuts-

SEAFDEC was represented by 24-meter in length and over, as one of across several issues, e.g. national policy on fisheries management, poverty fishing; and the other is the development alleviation and specific training for CLMV countries. As SEAFDEC already had several training programs related to the requirements of ASEAN Member States, it was suggested that Lao PDR as lead country of this cluster may consider focusing on HRD program specifically for the CLMV countries, such as HRD for promotion of community-based fisheries management, sustainable aquaculture development, and postharvest technology, particularly the technology on value-added fish and fishery products. These proposed areas would also be linked with the existing programs of SEAFDEC. \gg

TD to organize a conference on collaborative research survey in the Central Gulf of Thailand

2013 was a cooperative work between SEAFDEC and researchers from several fishery resources and environmental survey as well as training on marine sciences for a number of graduate and under-graduate students. The activity was supported by the PTT Exploration and Production Public Company Limited, specifically providing fuel for the cruise.

Research findings in the fields of physical, chemical, and biological oceanography as well as fisheries resources and meteorology will be presented to the public during the

SEAFDEC from 14 March to 12 April Research Survey on Fisheries Resources For more detailed information on the and Marine Environmental in the Central Conference, visit http://www.seafdec. Gulf of Thailand, scheduled on 11-12 or.th/index.php/downloads/cat view/7universities in Thailand to carry out December 2013 at the Department of events 2013/21-conference.

The 30-day cruise of the M.V. Conference on the Collaborative Fisheries Campus in Bangkok, Thailand.



SEAFDEC takes part in 2nd CTI-CFF Regional Priorities Workshop in Manado

The Senior Advisor of SEAFDEC Dr. Magnus Torell and Program Manager Ms. Pattaratjit Kaewnuratchadasorn attended the 2nd CTI-CFF Regional Priorities Workshop held from 20 to 22 August 2013 in Manado, North Sulawesi Province of Indonesia. The Workshop was hosted by the Government of Indonesia in collaboration with the CTI-CFF Interim Regional Secretariat, and was attended by CTI Member Countries, comprising Malaysia, Indonesia, Philippines, Papua New Guinea, Timor Leste, and Solomon Islands. Other organizations also joined the Workshop, such as GIZ, UNEP, WorldFish Center, WWF, VSO, and SEAFDEC.

During the Workshop, SEAFDEC provided an extensive presentation on regional programs, particularly under the ASEAN-SEAFDEC Strategic Partnership (ASSP), to support the ASEAN countries in ensuring sustainable fisheries in the region. Experience was also shared on the roles of SEAFDEC Secretariat to strengthen cooperation with other fisheries-related organizations at the regional and international levels. ×

Community-based fisheries management training in the Philippines

Aquatic Resources (BFAR) organized an in their jurisdiction.

On-site Training Course on Practical Approach to Community-based Fisheries Management in Coastal Areas of the Philippines, from 15 to 19 July 2013 in Quezon Province. The training course was supervised by officials of TD and BFAR who guided through the training course a total of 27 Filipino fisheries officers. The training was set to take the trainees through both theoretical

SEAFDEC/TD in collaboration with and practical principles to enable them to the Philippine Bureau of Fisheries and serve as trainers for local fishers' groups



Following-up on training for Vietnamese trainers

The SEAFDEC Training Department (MARD) of Vietnam and its Directorate in collaboration with the Ministry of of Fisheries (D-Fish) organized a 5-day



Agriculture and Rural Development follow-up training from 1 to 5 July 2013 in the city of Can Tho in the southern part of Vietnam. Conducted by the resource persons trained last year, this training course was attended by 38 participants from six selected provinces. Using community-based fisheries management as means for fisheries information gathering, the training course featured the same name as that conducted by TD last year for Vietnamese trainers.



Training of Thai fishery officials on sustainable fishery resource management

Thailand's Department of Fisheries Control and Surveillance (MCS) (DOF) organized a 5-day Training participated in the course. Subjects Course on Sustainable Fishery Resources on fishery resources management, Management on 23-27 September 2013 responsible and sustainable fisheries, at the TD's premises in Samut Prakan combating IUU fishing, as well as safety Province. A total of 24 DOF officials at sea, were included in the course.

SEAFDEC/TD in collaboration with responsible for fisheries Monitoring.





On-site training on energy optimization and safety at sea for Myanmar officers

(TD) in collaboration with the Department of Fisheries, Myanmar, organized a 3-day On-site Training on Optimizing Energy and Safety at Sea for Small Fishing Vessels from 23 to 25 July 2013 in Myeik, Myanmar.

A total of 20 trainees from the central and local governments participated in the training course, during which the participants were familiarized with the



Imparting applicable knowledge on energy saving technology and safety at sea to trainees

The SEAFDEC Training Department basic and applicable knowledge on energy saving technology and safety at sea. By training on-site, incorporation of the more ideal technologies and fishing practices into the local fishing tradition could be made more easily. Fuel measuring equipment was used to verify greater fuel efficiency of the new energy saving method compared with the traditional one. To conclude the training, a mini-workshop was organized to discuss the application of the novel knowledge as well as the follow-up activities that should be undertaken at the national and local levels.

> This on-site training was organized under the project on "Optimizing Energy Use and Improving Safety in Fishing Activities" implemented by TD starting from 2013 with support from the Japanese Trust Fund. X

SEAFDEC takes part in the 21st ASWGFi Meeting

(Continued from Page 1)

Specifically, SEAFDEC presented the progress of the projects under the FCG/ASSP in 2012. Of the 25 projects, 9 were completed in 2012 and 16 would be continued in 2013. Subsequently, the Meeting endorsed 6 new projects to be implemented starting 2013, and also the corresponding ASEAN Lead Countries. Moreover, the progress of project on Promotion of Sustainable Aquaculture and Resource Enhancement in Southeast Asia, supported by the Japanese Trust Fund to SEAFDEC, was also reported under the ASEAN Plus Three Cooperation.

Other SEAFDEC initiatives that require policy consideration and support were also raised, namely: Development of Regional Fishing Vessels Record (RFVR) as a tool to combat IUU fishing in the Southeast Asian region; Development of ASEAN Catch Documentation System; and the results of the CITES-CoP16 on Listing of Commercially-exploited Aquatic Species to the CITES Appendices. Currently the RFVR database is being developed by the SEAFDEC and upon endorsement through the ASEAN process, SEAFDEC would conduct a technical consultation to introduce the RFVR database to the Member Countries, and undertake activities to enhance the capacity of countries in providing inputs to the system. On Catch Documentation System, it was emphasized that the System would be simple for implementation by small-scale fishers and other relevant stakeholders, while major importing countries would also be engaged in the development of the System.

The ASWGFi was also informed by the ASEAN Secretariat on the status of the ASEAN-IDB Project on Enhancing Coastal Community Resilience which has been approved for implementation in Brunei Darussalam, Indonesia and Malaysia. X

FUTURE ACTIVITIES

Date	Venue	Title	Organizer(s)
8-10 October	Songkhla, Thailand	2013 Consultation Meeting on Neritic Tuna Regional Cooperation in	Secretariat
6-10 October	Jongkilla, malland	Southeast Asian Waters	Secretariat
14-18 October	Vietnam	National Training Course on Offshore and High Sea Fisheries Management	TD
15-30 October	Iloilo, Philippines	Specialized Courses on Feed Formulation and Seaweed Culture	AQD
22-24 October	Kuala Lumpur, Malaysia	Core Expert Meeting on Management of Sea Turtle Foraging Habitats in Southeast Asian Waters	MFRDMD
23-25 October	Bangkok, Thailand	Regional Workshop on Data Collection Methodology for the Assessment of Shark Stock Status	TD
30 Oct-1 Nov	Petchburi, Thailand	14th SEAFDEC Information Staff Program (ISP) Meeting	Secretariat & TD
4-18 November	Iloilo, Philippines	Specialized Training Course on Seaweed Culture	AQD
4-18 November	Iloilo, Philippines	Specialized Training Course on Feed Formulation	AQD
5-7 November	Bangkok, Thailand	2 nd On-site Training Workshop on Traceability Systems for Aquaculture Shrimp	MFRD
5-19 November	Iloilo, Philippines	Training Course on Shrimp Culture	AQD
10 Nov-25 Dec	Gulf of Thailand	Oceanographic Survey in the Gulf of Thailand and Andaman Sea Using M.V. SEAFDEC	TD & PMBC
11-15 November	Iloilo, Philippines	Specialized Training Course on Fish Health Management in Aquaculture	AQD
18-23 November	Iloilo, Philippines	Training Course on Community-based Mangrove Rehabilitation	AQD
25 Nov-4 Dec	Rizal, Philippines	Training Course on Community-based Freshwater Aquaculture for Remote Rural Areas of Southeast Asia	AQD
25-27 November	Penang, Malaysia	36 th Meeting of SEAFDEC Program Committee	Secretariat & MFRDMD
28-29 November	Penang, Malaysia	16 th Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)	Secretariat
2-5 December	Bangkok, Thailand	International Symposium on Small-scale Freshwater Aquaculture Extension	JICA, NACA, DOF
3-4 December	Thailand	Regional Workshop on Offshore Fisheries in Southeast Asian Waters	TD
9-13 December	Jakarta, Indonesia	Training Course and Workshop on Offshore and High Sea Fisheries Management in Indonesia	TD
11-12 December	Bangkok, Thailand	Conference on the Collaborative Research Survey on Fishery	TD & DOF
		Resources and Marine Environment in the Central Gulf of Thailand	Thailand
11-13 December	General Santos, Philippines	Regional Training Course on Improvement of Tuna Handling	TD
18-19 December	Bangkok, Thailand	4 th Meeting of the Gulf of Thailand Sub-region	Secretariat
		2014	
12-13 February	Philippines	Annual Progress Meeting of the Japanese Trust Fund (JTF-V)	AQD
18-21 February	Phnom Penh, Cambodia	ASEAN Regional Workshop for Facilitating Community-based Resource Management in Coastal and Inland Fisheries	TD & Cambodia
24-28 February	Bergen, Norway	14 th Session of FAO Sub-Committee on Fish Trade	FAO
5-7 March	Iloilo, Philippines	RESA 2014: International Workshop on Resource Enhancement and Sustainable Aquaculture Practices in Southeast Asia	AQD
1-4 April (Tentative)	Singapore	46 th Meeting of the SEAFDEC Council	SEAFDEC & Singapore

A book for "Filemon"

SEAFDEC/AQD scientist Dr. Nerissa Salayo is one of the authors of the book "Coastal Resources Management: Perspective from the Social Sciences" that was launched on 14 August 2013 in Iloilo City. Coastal Resources Management (CRM) is considered a multidisciplinary concern and the book was written to address current CRM issues. Dr. Salayo, who wrote the chapter about market and fisheries development, said: "The consumer has molded preferences and the knowledge of the market can allow the fishers to sell the right kind of fish". With 41% of the fishing population assumed to be poor, the book aims to change the lives of every Filemon ("Filemon" is the fisher in a Filipino folksong).

According to Chancellor Prof. Rommel Espinosa of the University of the Philippines Visayas (UPV), it is about time for the people and government leaders to "read the insights of the academe (and help) solve issues in CRM". In response, Iloilo Governor Hon. Arthur Defensor, who was also present during the launching, declared his commitment and support for the book and for the academe. "We are doing many things for CRM and believe me, we are succeeding. We will continue to fight the evils that abuse our marine resources", he added.

The authors also include UPV professors Prof. Elmer Ferrer, Prof. Pepito Fernandez, Prof. Alice Prieto-Carolino, Prof. Lenore Polotan-de la Cruz, Prof. Ida Siason and Prof. Rodelio Subade. The book is edited by Prof. Siason.



Launching of Filemon book on Coastal Resource Management

Stakeholders attest to the positive impact of AQD

(Continued from Page 16)

organizing a motorcade and tree planting in July; (2) extending a medical mission and bloodletting with the Philippine National Red Cross in April; (3) holding a lecture series from March to June and the Dean Domiciano Villaluz Memorial lecture in July; (4) putting up a mall exhibit in June, booklaunching activity and technology forum for stakeholders in July; and (5) honoring employees and listening to stakeholder testimonials also in July.

Note for contributors

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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

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Stakeholders attest to the positive impact of AQD's 40 years of R&D

"My experience in SEAFDEC/AQD is very unique (and) very important to my life and to my career", noted Mr. Miao Wei Min of the Bangkok-based FAO/RAP. He earned his Masters of Aquaculture through the AQD-NACA-UPV course for senior aquaculturists. "In the past 40 years, (AQD) has been contributing to the regional aquaculture development in different ways. It conducted a lot of training programs that favor Asia's aquaculturists. Like me, many of them are now very active in the national and regional even global aquaculture development", Mr. Miao said.



AOD held a one-day Farmers' Forum that included selected lectures on its sciencebased aquaculture technologies and a consultation between fishfarmers (sitting at right) and AQD researchers/scientists (left)



AQD's ruby jubilee was graced by high officials of the Philippine government, stakeholders, AQD employees, and the SEAFDEC Secretary-General and Deputy Secretary-General

Mr. Miao's very positive impression of AQD forever gave him a competitive AQD. Entrepreneurs Ms. Salvacion advantage when vying for contracts. Rodriguez and Ms. Tina Hautea, who both run milkfish hatcheries with AQD's technical assistance, attested that "AQD" various activities in Iloilo: (1) joining has greatly influenced the success of Iloilo's "Dinagyang Festival" in January, our business". Fishpond caretakers Mr. strengthening ties with the University Rogelio Villarette and Mr. Anselmo of the Philippines Visayas through Sedotes applauded AQD which trained competitive sportsfest in April, and them in successful fish farm operations. While consulting aquaculturist Mr.

Other aquaculture stakeholders shared Rito Bombeo said that his stint in

AQD marked its 40th year with

(Continued on Page 15)

EOP Seminar on Utilization of Freshwater Fish for Value-added Products

on "Utilization of Freshwater Fish for the SEAFDEC Collaborating Center. fish products. programs was held in Singapore on 11- utilize freshwater fish species for the 12 September 2013 by the Post-Harvest development of value-added products representatives from the project Technology Centre of the Agri-Food and assist in upgrading the processing

The End-of-Project (EOP) Seminar and Veterinary Authority, Singapore as and packaging technology for freshwater Value-added Products" under the MFRD The objectives of this Project were to



The Seminar was attended by participating countries, namely: Lao PDR, Vietnam, Myanmar, and Indonesia, and private sector. The Seminar included presentations on value-added products developed through the project and a networking cum product tasting session. The networking session provided an opportunity for the project's commercial (private sector) cooperants from the participating countries to network with local Singapore industry participants which could lead to business opportunities in the future.