



# SEAFDEC NEWSLETTER

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## EDITORIAL

For the third quarter of 2015, various events facilitated the recasting of the role of SEAFDEC in continued the sustainable development of fisheries in the Southeast Asian region. One very significant event was the 42<sup>nd</sup> Anniversary of AQD of which various activities were organized including an aquaculture clinic and traditional lecture series. Another important activity during the quarter was the realization of a cooperation between SEAFDEC and the United States Agency for International Development (USAID) for the promotion of the “Oceans and Fisheries Partnership” which is aimed at “increasing the ability of regional fishery organizations to conserve marine biodiversity and combat IUU fishing in the Asia Pacific region” to ensure sustainable fisheries and sustainable of the oceans for food security.

Several regional and sub-regional meetings were conducted, which include

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## U.S. Secretary of State announces the Oceans and Fisheries Partnership project

During the 22<sup>nd</sup> ASEAN Regional Forum in Kuala Lumpur, Malaysia on 6 August 2015, U.S. Secretary of State *John Kerry* announced the launching of Oceans and Fisheries Partnership (USAID Oceans) project by the U.S. Agency for International Development with an initial financial commitment of \$4.3 million that will combat illegal, unreported, and unregulated (IUU) fishing and seafood fraud in the Asia-Pacific region. “*The catch documentation and traceability system established by the USAID Oceans will improve the transparency of Asia's seafood supply chains, ensuring that fish is legally and sustainably harvested,*” said Secretary Kerry. “*Traceability is an essential part of our global fight to conserve marine resources and protect the health of our oceans.*”



*U.S. Secretary of State John Kerry announcing the Ocean and Fisheries Partnership at the 22<sup>nd</sup> ASEAN Regional Forum*

According to the USAID Press Office, USAID is partnering with SEAFDEC and the Coral Triangle Initiative (CTI) to strengthen regional sustainable fisheries management by developing catch documentation and traceability system to

*(Continued on Page 2)*

## The Counselor of the Embassy of Sweden in Bangkok visits SEAFDEC Training Department

*Ms. Anne-Charlotte Malm*, the Counselor and Head of Regional Development Cooperation in Asia-Regional Asia and Myanmar, the

Embassy of Sweden in Bangkok and her party paid an official visit to SEAFDEC Training Department (TD) on 17 September 2015. SEAFDEC Secretary-General and Chief of TD *Dr. Chumnarn Pongsri* led the SEAFDEC senior staff to welcome the Counselor.



*Ms. Anne-Charlotte Malm, the Counselor of the Embassy of Sweden in Bangkok and her party observing the fish passage model at the Training Department*

The role played by SEAFDEC and TD on the regional fisheries development and significant achievements particularly those supported by the Swedish Government were presented by the Secretary-General. Moreover, issues of mutual interests were discussed, and subsequently, a tour to observe the TD facilities and the M.V. SEAFDEC was conducted for the guests.

## EDITORIAL

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the End-of-Project on Traceability Systems for Aquaculture Products in the ASEAN Region organized by MFRD which came up with the Draft of Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region; the 5<sup>th</sup> Meeting of Gulf of Thailand Sub-region to enhance sub-regional cooperation in managing transboundary resources; the Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region which served as a forum to exchange the lessons learned and experiences on fisheries resources enhancement; and Experts Group Meeting on Development of RPOA-Capacity for preparing the Draft RPOA-Capacity that aimed to support the management of fishing capacity in the region.

Various training courses were also conducted including the training course on Essential Ecosystem Approach to Fisheries Management (E-EAFM) providing the basic knowledge on the EAFM process; and the training-of-trainers on hatchery of blue swimming crab; and on-site training on energy saving and safety at sea for improving the operations and working conditions onboard fishing vessels. Moreover, SEAFDEC also received a number of visitors including the Counselor of the Embassy of Sweden in Bangkok who paid official visit to TD and observed the TD facilities and the M.V. SEAFDEC. With this issue of the SEAFDEC Newsletter, SEAFDEC wishes to announce that the Inland Fishery Resources Development and Management Department (IFRDMD) has already moved to its new office premises located in Palembang, Indonesia. ✠

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on our Newsletter to  
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## U.S. Secretary of State announces the Oceans and Fisheries Partnership project

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track species at high risk of being illegally traded or mislabeled. This system will harness the latest science, technology and innovation to ensure that fish, shrimp and other marine resources are legally caught and properly labeled. Eliminating IUU fishing, which undermines efforts to conserve and manage shared fish stocks, will level the playing field for legitimate fishers and ensure the sustainability of our shared ocean resources.

*“Combating illegal, unreported and unregulated fishing in Asia and the Pacific is vital to conserve the region’s incomparable and irreplaceable marine resources,”* said Todd Sorenson, Acting Mission Director for the USAID Regional Development Mission for Asia. *“The efforts of USAID Oceans, SEAFDEC, the*

*CTI, and their partners will have positive impacts on livelihoods, food security and economic growth in the region.”*

It is estimated that over 200 million people in Asia are directly or indirectly dependent on fisheries resources for food and income. Nearly half of the people in Southeast Asia get more than 20 percent of their animal protein from fish.

Combating IUU fishing has recently been among the top priority works of the ASEAN-SEAFDEC Member Countries; and it is anticipated that this “USAID Oceans” would supplement the on-going initiatives of the region in combating IUU fishing, and thus ensure that fishery resources would be utilized in a more sustainable manner in the future. ✠

## TD implements a series of EAFM activities

The SEAFDEC Training Department (TD) organized the National Training Course on Essential Ecosystem Approach to Fisheries Management (E-EAFM) from 6 to 10 July 2015 in Rayong Province, Thailand. Twenty-five trainees from the Department of Fisheries of Thailand participated in the course, which focused on the basic knowledge of EAFM process and how this can assist in decision-making for responsible and sustainable capture fisheries. Moreover, understanding the principles of co-management and how to foster cross-sector coordination was imparted to trainees through practice of the crucial skills of effective communication, facilitation and conflict management.

Moreover, the Ecosystem Approach for Fisheries Management Leaders, Executives and Decision Makers Materials Writeshop was also organized from 13 to 17 July 2015 in Bangkok, Thailand by TD in collaboration with REBYC-II CTI project, BOBLME and NOAA. The said Writeshop aimed to discuss the development of Leaders, Executives and Decision Makers (LEAD) materials and ways to improve the E-EAFM course being extended across the region. LEAD Working Group from SEAFDEC, NOAA, and BOBLME participated in the Writeshop, which came up with the final draft EAFM LEAD materials and pre-testing mechanism, and the updated E-EAFM materials and process for updating the course manuals. ✠



LEAD Working Group discussing the development of EAFM LEAD materials

## Management measures for inland fisheries rehabilitation and natural stock enhancement enforced in Cambodia

In the Statement of the Royal Government of Cambodia on the National Fisheries Sector Policy, signed by the country's Prime Minister on 15 June 2005, the fisheries sector has been recognized as crucial to the people's livelihoods and national economy. Such policy statement also established the Royal Government's enduring vision for the fisheries sector, which emphasized on "Management, conservation, and development of sustainable fisheries resources to contribute to ensuring people's food security and to socioeconomic development and enhancing the people's livelihoods and the nation's prosperity." The policy and vision of the fisheries sector is primarily governed by the Law on Fisheries passed by the Royal Government and signed by His Majesty the King of Cambodia in 2006. Guided by the Law on Fisheries, the Fisheries Administration of Cambodia in

collaboration with its relevant stakeholders has been conducting activities that include combating illegal fishing in the country's water bodies. Starting in 2015 and under the supervision of the Delegate of the Royal Government of Cambodia and Director General of the Fisheries Administration *H.E Eng Cheasan*, crackdowns against illegal fishing have been conducted by the Fisheries Administration in the inland fisheries domains during the closed season from 1 June to 30 September for North of *Tonle Chaktomok* parallel (Latitude: 11° 33' 259"N), and from 1 July to 31 October for South of *Tonle Chaktomok* parallel (Latitude: 11° 33' 259"N). Such actions are aimed to enhance fish stocks and secure the fish broodstocks during the spawning season, as well as strictly enforce the Fisheries Law especially the provisions on fisheries resource rehabilitation and stock enhancement.

The results of the campaign reveal that besides strengthening and raising the awareness of target fishers on the Fisheries Law and regulations, illegal and destructive activities such as the use of "mosquito's drainage", poles, and fishing gears made of mosquito nets, had been drastically minimized as these gears are being confiscated and immediately destroyed. More importantly, thousands of tons of various species of fish fingerlings have been released into water bodies through the efforts of the country's fishery officers. With such development, it is expected that stocks of freshwater fishes would be drastically increased and livelihoods of fishers also improved in the upcoming open season as the released fish fingerlings would be allowed to grow and produce the next generations of offspring. ❖

## SEAFDEC staff training liaised by Marino Forum 21

Information Officer of SEAFDEC Secretariat, *Ms. Saivason Klinsukhon* spent a fortnight in Japan to take part in the training program on "Modeling and Forecasting Annual Fisheries Production" with support from the Japanese Trust Fund. Organized by Marino Forum 21 of Japan during 3-17 September 2015, the program was aimed at enhancing the capacity of SEAFDEC staff working on the compilation of statistics at regional level. Specifically, the program was meant to make the participant understands better the nature of fishery statistics, particularly the available tools and methodologies

that can address problems relevant to the utilization and analysis of existing data and translating such data into useful information, as well as to gain knowledge in coming up with comprehensive information that would be useful and beneficial for countries in the region. The training course culminated with a study visit to the Fisheries Research Agency of Japan (FRA), Fisheries Agency (FA), Shimane Prefecture Government, Sakaiminato Fisheries Management Office, Japan Fisheries Information Service Center (JAFIC), and relevant organizations in Japan, where discussions were made on methodologies, tools, and process/mechanism of analyzing fishery data and information based on existing data (limited data) in Japan.

During the same period, *Ms. Yanida Suthipol* from SEAFDEC Training Department (TD) also attended another training on "Port State Control and Other Measures to Prevent IUU Activities in Japan." Study visits and discussions were arranged for her to learn on the roles and experiences of various agencies in Japan,

*i.e.* Shimane Prefecture Government; Sakaiminato Fisheries Management Office; Seto Inland Sea Fisheries Management Office; Furuno Electric Co, Ltd.; Organization for the Promotion of Responsible Tuna Fisheries (OPRT); Yaizu Fishing Port; Fisheries Agency; and JAFIC. Through this training, the TD staff would be acquainted with measures and tools that are used to prevent and combat IUU fishing in Japan, as well as the measures being applied for management of tuna resources and protection of fishery resources that could also be applicable for countries in the Southeast Asian region.

Also arranged by Marino Forum 21 for enhancing the capacity and experience of the staff of SEAFDEC/AQD, MFRDMD and IFRDMD were training programs on High Density Culture of Marine Phytoplankton using Photobioreactors; Collection and Utilization of Oceanographic Information Affecting to Fishing Grounds Distribution of Pelagic Species; and Inland Fisheries Resource Management and Conservation, respectively. ❖



*SEAFDEC officer practicing the use of available tools for analysis fisheries data*

# DEPARTMENTAL ACTIVITIES

## Establishing Community Fisheries Museums to promote a sustainable society

Many people know and have visited SEAFDEC/AQD's FishWorld Museum, but not as many know its original name when it was established in 1993 as "AQD Museum of Aquatic Biodiversity." The visitor center is a museum of natural heritage - one of those permanent sections that collect, exhibit, and interpret the things of this world, both tangible and intangible. Museums are needed to connect with our humanity, our past, present, and future. And now museums are expected to contribute to sustainable development more directly.

The International Council of Museums (ICOM), a non-government organization since 1946 with members of about 30,000 institutions and museum professionals worldwide, establishes standards for museums; recommends positions on emergent issues; advances knowledge; and promotes training, cooperation, and communication to preserve the world's cultural and natural heritage. AQD's FishWorld Museum joined the ICOM 2015 Philippine Conference on Museums for a Sustainable Society at the University of Saint La Salle, Bacolod City, Philippines on 18-21 August 2015. The Speakers included the ICOM members from Philippine museums, from UNESCO, Iron Museum of Korea, and several



*Left-Right: AQD's FishWorld Museum; and visitors observing the collection at the exhibition hall*

managers of living museums (city, farm, island) working with communities for sustainable development. AQD's FishWorld Museum already integrates sustainability practices in its operations and has a long-running science and environment education program (since 1995) involving many schools. But more can be done if so mandated.

AQD's FishWorld also joined the "Zero In Workshop #3 on Establishing Community Museums" also in Bacolod City on 25-28 August 2015, together with 60 other museum workers from around the country. The highly knowledgeable and helpful resource persons for "Zero In 3" were from Bahay Tsinoy, Museo Pambata, Ayala Museum, Lopez Museum, and Ateneo Art Gallery. "Zero In" is a consortium of the country's premier private museums sharing the vision that museums have the

responsibility to promote understanding and appreciation of our cultural, historical, and natural heritage through education and community engagement. In its second decade, "Zero In" conducts workshops that bring together museum workers who share experience and wisdom, and move on to develop more dynamic, engaging, and inviting cultural centers and museums all over the country.

All the collections of AQD FishWorld Museum are in the process of being accessioned and catalogued, with curated exhibitions on marine megafauna and biodiversity set up at AQD stations; exhibition texts and labels for all galleries being written; and more hands-on activities developed. Although the museum depends largely on visitor fees, it will continue to engage the Filipino public and contribute to sustainable development. ✦

## TD organizes fishing vessel operations training course

SEAFDEC Training Department (TD) in collaboration with the Vocational Education Commission of Thailand organized a four-month "Training Course on Fishing Vessel Operations" from 29 September 2015 to 12 February 2016. Fifteen students from Tinsulanonda Fisheries College, Songkhla Province attended the training course which aimed to provide skills to students and share with them the relevant experiences and skills which they can use for their work in the future.

The training course consisted of six subjects, namely: (1) ship construction and stability; (2) marine communication; (3) laws and regulations of navigation; (4) navigation technology practices; (5) marine machinery technology and practices; and (6) fishing gear technology and practices. Moreover, as part of the practical session, the students also had the opportunity to conduct hands-on practice onboard the M.V. SEAFDEC and the M.V. Plalung, and joined the study visit to various shipping facilities relevant



to the training subjects to enhance their experience which is necessary for their future career. ✦

## IFRDMD moves to its new office premises

IFRDMD had already moved to its new spacious office buildings located at Jl. Gubernur H.A. Bastari no 08 Rt 29, Rw 07 Kelurahan Silaberanti, Kecamatan Seberang Ulu 1, Jakabaring, Palembang-30252, Sumatera Selatan, Indonesia.

On the first of August 2015, IFRDMD welcomed the SEAFDEC Secretary-



General *Dr. Chumnarn Pongsri*, and also Policy and Program Coordinator *Dr. Somboon Siriraksophon*, Senior Advisor *Dr. Magnus Torell*, and Information Program Coordinator *Ms. Nualanong Tongdee*, at its new office building. During an informal gathering, IFRDMD research projects were discussed, and the Secretary-General gave some information about the latest technologies and research in inland fisheries. ❖

## SEAFDEC Secretary-General represents SEAFDEC during the World Water Week

The SEAFDEC Secretary-General *Dr. Chumnarn Pongsri* together with *Dr. Magnus Torell* attended the “World Water Week” organized by the Stockholm International Water Institute (SIWI) in Stockholm, Sweden from 23 to 28 August 2015. With the theme “Water for Development”, the event included a seminar session on “Management of large rivers to secure functions of coastal ecosystem” convened by the Swedish Agency for Marine and Water Management (SwAM) on 26 August 2015. The discussion focused on the



*Dr. Chumnarn Pongsri presenting a paper during the session convened by SwAM*

need for new management strategies and action plans for protection of globally important rivers systems, in order to come up with possible measurements and policy recommendations to secure the productive capacity of coastal aquatic ecosystems. Analysis of possible sustainable use of available water resources for hydropower, forestry, agriculture, fisheries, aquaculture was also included in the discussion.

During the session, Dr. Chumnarn presented a paper on “Consideration for the Management of Fisheries in Mekong River Basin and Inland Capture Fisheries in the Southeast Asian Region,” that outlines the issues to be considered to improve and ensure the sustainable contribution of aquatic habitats to fisheries, taking the Mekong River Basin as a case. Under the same session, the former CEO of Mekong River Commission (MRC) Mr. Hans Guttman also presented a paper on “Management of the Lower Mekong River Delta and the Value of Fish Resources.” ❖

## TD organizes on-site training on energy saving and safety at sea in Cambodia



Supported by the Japanese Trust Fund, the SEAFDEC Training Department (TD) organized “the On-site Training on Energy Saving and Safety at Sea for Small Fishing Vessels” from 29 September to 1 October 2015 in Preah Sihanouk Province, Cambodia. Thirty-seven fisheries officers and relevant stakeholders participated in the training course, which aimed to enhance the participants knowledge on the methods and techniques in energy saving and safety at sea in fishing activities as well as improving the working conditions onboard fishing vessels. ❖

## TD joins exhibition at Burapha University



The SEAFDEC Training Department (TD) joined the “Science Week Exhibition” of Burapha University Chanthaburi Campus on 18-20 August 2015 at the university’s campus in Chanthaburi Province, Thailand. TD’s booth presented fisheries activities with the theme “Fishery Oceanographic Survey and Deep Sea Fisheries.” With the distribution of various technical publications, brochures, and fishery-related souvenirs, the visibility of SEAFDEC had been promoted to more than 3,000 stakeholders in the audience. ❖

## 2015 SEAFDEC Mission Team visits Japan

The 2015 SEAFDEC Mission Team to Japan led by SEAFDEC Secretary-General, *Dr. Chumnarn Pongsri* and Deputy Secretary-General and Japanese Trust Fund Manager *Mr. Hajime Kawamura*, and joined by Assistant Trust Fund Manager *Mr. Akira Bamba* and Fisheries Technical Officer, *Ms. Virgilia T. Sulit*, paid courtesy visits to and met with heads and officers of concerned agencies and institutions in Japan from 29 June to 2 July 2015. During the

visits, courtesy calls and meetings, the SEAFDEC Mission Team was able to express the gratitude and appreciation of SEAFDEC for the continued support and assistance of the Government of Japan that enabled SEAFDEC to enhance its activities on the sustainable development of fisheries in the Southeast Asian region. In addition, commitment for enhanced support for the activities of SEAFDEC as well as enhanced collaboration and cooperation with SEAFDEC had been

assured, while additional assistance had also been gained from prospective supporters. On 29 June, the SEAFDEC Mission Team took part in the Meeting of the Technical Support Committee for SEAFDEC which was organized by “Marino Forum 21.” Thereafter, the Mission Team met with heads and officers of various agencies and institutes such as Tokyo University of Marine Science and Technology (TUMSAT), Rural Development Department of Japan International Cooperation Agency (JICA), Fisheries Agency of Japan (FAJ), Country Assistance Planning Division of the International Cooperation Bureau of the Ministry of Foreign Affairs (MOFA), and Fisheries Research Agency (FRA). The Mission Team had also the chance to meet with renowned researchers and professors from the University of Tokyo and obtained the positive response of the researchers to assist SEAFDEC in its activities related to the identification of harmful algal blooms (HABs) in the Southeast Asian region. ☒



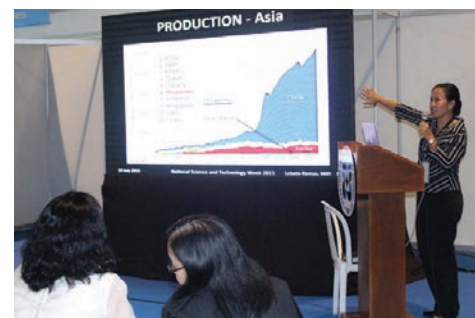
*Left-Right: The 2015 SEAFDEC Mission Team during the courtesy call on the new President of TUMSAT, Dr. Toshio Takeuchi; and SEAFDEC Secretary-General and Deputy Secretary-General during the meeting with HABs experts, Dr. Yasuwo Fukuyo (right) and Dr. Mitsunori Iwataki (left) of the University of Tokyo*

## SEAFDEC/AQD joins the National Science and Technology Week 2015

The SEAFDEC Aquaculture Department (AQD) joined the celebration of the “National Science and Technology Week (NSTW)” on 24-28 July 2015 at SMX Convention Center in Pasay City, Philippines.

With the theme “Strategic Industry Program for Agricultural Growth (SIPAG) ni Juan,” the exhibit highlighted on how science and technology (S&T) is infused in agri-aqua-natural resource commodities to improve productivity, product quality, and profitability and thus raise the living standards of farmers, fishers, and other stakeholders.

The exhibit featured various commodities including: banana, mud crabs, oysters, abaca, Halal goat, and a plant growth promoter processed from seaweeds or from crabs and shrimp shells. Also featured is a video of Benham Rise, declared as part of the Philippine



*Dr. Rolando Pakingking (left) and Dr. Junemie Lebata-Ramos (right) presenting AQD's R&D activities during the National Science and Technology Week 2015*

Extended Continental Shelf and now under the PCAARRD-funded program on Exploration, Mapping and Assessment of Deep Water Areas. Backed by researchers, scientists and seasoned dive specialists from different universities, the program seeks further exploration of resources available in the territory.

The SEAFDEC/AQD delegation consisted of scientists *Dr. Emilia Quintio*, *Dr. Junemie Lebata-Ramos*, *Dr. Rolando*

*Pakingking*, *Dr. Fe Dolores Estepa*, *Ms. Jocelyn Ladja* and Technical Assistants working under the various commodities highlighted during the science fair. AQD delegation facilitated the discussion on the aquaculture commodities.

The 5-day event was open to all Science & Technology enthusiasts, students, academicians, researchers, inventors, innovators, professionals and the general public. ☒

## SEAFDEC/AQD celebrates its 42<sup>nd</sup> Anniversary

The Aquaculture Department (AQD) of SEAFDEC celebrated its 42<sup>nd</sup> Anniversary from 6 to 10 July 2015 with the theme “Ensuring aquaculture sustainability through technology innovations, promotion of good aquaculture practices and multisectoral involvement.” The celebration included among others lectures and aquaculture clinic. The speaker of the traditional Dean Domiciano K. Villaluz Memorial Lecture was *Dr. Ikuo Hirono*, Professor from the Laboratory of Genome Science of the Graduate School of Marine Science and Technology, Tokyo University, Japan who discussed about the recent advances in AHPND caused by *Vibrio* species.

Dr. Hirono explained that the Early Mortality Syndrome or EMS in shrimp also technically known as Acute Hepatopancreatic Necrosis Disease (AHPND) is caused by unique strains of *Vibrio parahaemolyticus* that have transferrable virulent plasmid carrying toxin genes, where a plasmid is a small DNA molecule within a cell that is physically separated from the chromosomal DNA and can replicate independently. Although the genome of AHPND strains of *V. parahaemolyticus* from Thailand, Mexico, Viet Nam, and China have been determined by several different groups of researchers, the group of Dr. Hirono developed the conventional PCR and LAMP methods

using a primer set that targets the PirA-like toxin genes of *V. parahaemolyticus*. He added that at present, the diagnostic methods that his group developed for AHPND has an accuracy of 100%. Recently, his group also characterized the toxin genes of AHPND *V. parahaemolyticus*, and observed that its plasmid contains two toxin genes that code for toxin A and toxin B, consisting of 110 and 438 amino acid residues, respectively. After constructing the recombinant plasmid carrying both the genes for toxins A and B, his group found that a *V. parahaemolyticus* non-AHPND strain N7 which does not carry a plasmid and a strain FP11 which carries a plasmid but not coding the toxin genes were transformed with the plasmid carrying both toxins A and B genes. The transformed N7 and FP11 strains killed the whiteleg shrimp, *Litopenaeus vannamei* just like the AHPND strain. When the whiteleg shrimps were fed commercial feed containing formalin-killed AHPND strain of *V. parahaemolyticus* and after feeding for a couple of days, all of the whiteleg shrimps died, indicating that toxins A and B are the virulent factors of AHPND *V. parahaemolyticus*.

Dr. Hirono continued that the region encoding the toxin genes is composed of approximately 6 kbp which exhibit terminal inverted repeats of about 1.2 kbp. The repeats encode insertion sequence



*Dr. Ikuo Hirono, the speaker of this year DK Villaluz Memorial Lecture*

(IS), where the IS encodes transposase and is identical to other reported strains of *V. parahaemolyticus*. The non-virulent strains carrying the plasmid completely lack the toxin region, but possess an IS. Interestingly, the group of Dr. Hirono found that the virulent strains also possess the region lacking toxin genes but have a single IS, suggesting that the IS might have transposase activity and is involved in the deletion and/or insertion of the toxin genes.

Furthermore, in their recent experiment, the group of Dr. Hirono found another *Vibrio* species carrying the same plasmid as that of the AHPND *V. parahaemolyticus*. This *Vibrio* species also killed the whiteleg shrimp similar to the AHPND *V. parahaemolyticus*. This recent findings seem to indicate that the transferrable virulent plasmid is spreading in the *Vibrio* species in shrimp ponds. Thus, Dr. Hirono and his group are currently trying to develop prevention methods against AHPND. ❖

## SEAFDEC joins the Workshop on Developing Fisheries Information to Support Marine Spatial Planning in Myanmar

Information Officer of SEAFDEC Secretariat *Ms. Saivason Klinsukhon* together with *Dr. Than Than Lwin*, Regional Fishery Program Network Member for Myanmar attended the “Workshop on Developing Fisheries Information to Support Marine Spatial Planning” in Tanintharyi Region, Myanmar on 30 September 2015. Organized by the Department of Fisheries of Myanmar in collaboration with Smithsonian Institute (SI) and Fauna & Flora International (FFI), the Workshop aimed to discuss the 2016 work plans for improving fisheries data collection on regional fisheries and develop the marine spatial plans in the Tanintharyi

Region. The Workshop was attended by representatives from the Department of Fisheries, Dawei, Myeik and Kawthaung Districts in Tanintharyi Region, relevant stakeholders, and SEAFDEC.

The Workshop reviewed the pilot study from the first year of Smithsonian Institute’s work in Tanintharyi Region, especially the new technology for small-scale fisheries data collection, and other tools. Since the new technology and tools could facilitate data collection as well as reflect traceability system and help combat IUU fishing, these could be disseminated to the ASEAN countries through capacity



building. The Workshop also proposed the pilot areas for the management of economically important species of lobster and mud crab species in Tanintharyi Region, and development of Android application to improve the management of regional fisheries and development of marine spatial plans for the Tanintharyi Region. ❖

# SPECIAL REPORT

## Strategic Plans of Action for Fishery Resources Enhancement in the Southeast Asian Countries

By SEAFDEC Training Department



The ASEAN-SEAFDEC Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020, adopted in June 2011, stipulated the need for the Southeast Asian countries to “optimize the use of inshore waters through resources enhancement programs such as promoting the installation of artificial reefs and structures, encouraging coordinated and effective planning for coastal fisheries management programs, undertaking environmental impact assessment studies, restocking of commercially important fish species, as appropriate, and give priority to human resources development for the implementation of such programs.” SEAFDEC through its Training Department (TD) and Aquaculture Department (AQD) has been conducting projects to promote resources enhancement through two approaches. One is through the improvement of critical habitats/nursing grounds of fishery resources, and the other is through direct enhancement of the fishery resources by artificial propagation techniques. The experiences of SEAFDEC from the implementation of these projects as well as the relevant initiatives undertaken by the Member Countries were presented at the “Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region” organized on 27-30 July 2015 in Pattaya, Thailand, to serve as basis for development of the “Strategic Plans of Action for Fishery Resources Enhancement in the Southeast Asian Countries.”

The Southeast Asian countries are blessed with high productivity of fishery resources because of the rich ecosystems in both marine waters and wetlands. Nevertheless, commercially important fishery resources in the region have declined due to the over-exploitation of resources and degradation of habitats. Recognizing the need to enhance the fisheries resources in the jurisdictions of the respective Southeast Asian countries as well as their transboundary areas, SEAFDEC organized the “Symposium on Strategy for Fisheries Resources Enhancement

in the Southeast Asian Region” on 27-30 July 2015 in Pattaya, Thailand with support from the Japanese Trust Fund. Participated by more than 80 participants from SEAFDEC Member Countries, the Symposium was meant to serve as an avenue for sharing of experiences and lessons learnt from resources enhancement initiatives undertaken by SEAFDEC and the countries, as well as for imparting of knowledge from renowned experts on the subject to serve as basis for the development of the way forward for implementing resources enhancement initiatives in the Southeast Asian region.

Recognizing that resource enhancement through habitat improvement and management, as well as artificial propagation and stock release of the region’s economically important species are the effective approaches that would help protect and restore the aquatic resource habitats and target stocks, the Symposium therefore identified and adopted the strategic plans of action for the implementation of fishery resources enhancement activities in the Southeast Asian region (**Table 1**). ❖



Participants during the panel discussion at the Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region, in Pattaya, Thailand



**Table 1.** Strategic Plans of Action for Fishery Resources Enhancement in the Southeast Asian Countries

FISHERY RESOURCES ENHANCEMENT THROUGH HABITAT IMPROVEMENT AND MANAGEMENT	FISHERY RESOURCES ENHANCEMENT THROUGH ARTIFICIAL PROPAGATION AND STOCK RELEASE
<b>A) Artificial Reefs Management</b>	<b>A) Potential and Limitations of Stock Enhancement and Restocking</b>
<ol style="list-style-type: none"> <li>1. Developing Regional Guidelines on Best Practices for Installation of the Artificial Reefs (ARs)</li> <li>2. Integrating fisheries management measures/principles in ARs management programs</li> <li>3. Integrating ARs in policies and plans for coastal and offshore fisheries resources conservation, management and development</li> </ol>	<ol style="list-style-type: none"> <li>1. Developing Regional Guidelines or criteria for feasibility assessment and improvement and disseminating the Guidelines to Member Countries [Note: the Guidelines will take into considerations the elements for higher success of restocking and stock enhancement covering the technical (choice of species, biology/life cycle of species, sustainable supply of quality seeds/stocks), environmental (suitability of site), social/institutional (involvement and strong support of local communities, local government agencies and research institutions), and economic aspects (funds)].</li> <li>2. Formulating a 'Strategy or Framework for sustainability of stock enhancement initiatives' and disseminating this Framework to Member Countries</li> </ol>
<b>B) Integrating Fisheries and Habitat Management</b>	<b>B) Release Strategies and Ecological Interaction with Natural Stocks</b>
<ol style="list-style-type: none"> <li>4. Promoting the establishment of fisheries <i>refugia</i> as a tool for integrating fisheries and habitat management</li> <li>5. Conducting scientific research programs and stakeholders consultation to support the identification of suitable sites and establishment of fisheries <i>refugia</i> for target species, and coming up with scientific evidence that harmonize with local knowledge to serve as basis for developing appropriate management measures</li> <li>6. Ensuring the sustained participation of key stakeholders in the planning, sites selection and development of management measures for fisheries <i>refugia</i></li> <li>7. Enhancing regional and sub-regional collaboration for the establishment of fisheries <i>refugia</i> system for transboundary fish stocks management</li> </ol>	<ol style="list-style-type: none"> <li>3. Establishing release protocols/guidelines based on scientific findings and in accordance with existing policy instruments/regulations</li> <li>4. Implementing effective institutional frameworks, policy instruments for the release of stocks, monitoring and enforcement mechanisms at national and local levels</li> <li>5. Developing and implementing capacity building programs on the application of decision-making tools for stock release</li> </ol>
<b>C) Degradation of (fish) Habitats in the Southeast Asian Region</b>	<b>C) Aquaculture-based Enhancement and Restoration</b>
<ol style="list-style-type: none"> <li>8. Making habitat restoration a priority at national levels</li> <li>9. Developing the best practice guidelines on habitat restoration for different water resources such as inland and marine, in conjunction with fisheries resources enhancement programs</li> <li>10. Rebuilding sustainable fish populations in restored habitats</li> <li>11. Undertaking baseline studies based on indigenous and scientific knowledge</li> <li>12. Conducting impact assessment of lost natural habitats, and raising the awareness of stakeholders on conservation and protection of the natural habitats</li> </ol>	<ol style="list-style-type: none"> <li>6. Formulating mechanism that will ensure that stocks for release are healthy/disease-free (for instance, through health certification) and will not pose genetic risks</li> <li>7. Strengthening IEC (information, education and communication) activities to enhance public awareness on genetic and health risks related to stock release and the need for precautionary measures following relevant Guidelines developed and promoted by FAO.</li> <li>8. Fostering strong collaboration among R&amp;D institutions, national and local government, and local communities on initiatives that will support wide-scale and high-impact stock enhancement and restocking initiatives</li> </ol>



*Some activities under SEAFDEC projects on resources enhancement: (left) Dog conch releasing at Sriboya Island, Krabi Province, Thailand; and (above) Installation of artificial reefs activity in Nam Houm Reservoir, Lao PDR*

# REGIONAL PROGRAMS

## Regional Inception Workshop on the Promotion of Sustainable Fisheries Resources Enhancement Measures orchestrated by SEAFDEC

Mobilizing the outputs of the SEAFDEC Symposium on Strategy for Fisheries Resources Enhancement in the Southeast Asian Region, the “Regional Inception Workshop for JTF-6 Program on the Promotion of Sustainable Fisheries Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia” was organized by SEAFDEC on 31 July 2015 in Pattaya, Thailand. Funded by the Japanese Trust Fund, the Inception Workshop was attended by representatives from Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam, as well as from the SEAFDEC Secretariat, TD, MFRDMD, and IFRDMD; and the RFPN members as observers.

The issues and concerns discussed during the Inception Workshop were based mainly on the results of the three



*SEAFDEC Secretary-General, Dr. Chumnarn Pongsri chairing the Inception Workshop for the JTF-6 project*

activities carried out by SEAFDEC under the JTF-5 Project on the Promotion of Sustainable Fisheries Resources Enhancement Measures in Critical Habitats/Fishing Grounds in Southeast Asia from 2010 to 2014. In addition, the relevant experiences of the Member Countries presented during the Symposium, as well as inputs from the Southeast Asian countries with regard to

their initiatives in managing, enhancing and protecting fisheries resources were taken into consideration for the plan under the activities of the new JTF-6 Project.

As a result, implementation of the activities lined up under the JTF-6 Project could be pursued starting in 2015 taking into consideration the suggestions made by the Workshop on appropriate project sites, effective resources enhancement tools/measures and rehabilitation plans for various critical habitats/fishing grounds. It was noted that as activities under this project would focus on selected sites, information on similar initiatives undertaken by the countries should also be shared in order that the results could be analyzed; and thus outputs from these activities could serve as basis for other countries to apply similar concepts as appropriate. ❖



*Participants in Regional Inception Workshop on the Promotion of Sustainable Fisheries Resources Enhancement Measures*

## Survey cruise conducted in Malaysia using M.V. SEAFDEC 2

The SEAFDEC Training Department (TD) in collaboration with the Department of Fisheries Malaysia under the country’s program on National Research Survey on Demersal Resources in the Waters of Malaysia organized the research survey

from 21 July to 23 October 2015 in the waters of Kota Kinabalu, Labuan, Miri, Bintulu and Kuching utilizing the M.V. SEAFDEC 2. In the 196 stations for the survey, demersal species sampling by bottom otter board trawl operation

was conducted and in 81 stations for the oceanographic survey, plankton abundance, petroleum hydrocarbons and heavy metals in sediments, and benthic macro-invertebrate community were determined. ❖

## Experts Group Meeting on Development of RPOA-Capacity convened

The “Experts Group Meeting on the Regional Plan of Action for Managing Fishing Capacity (RPOA-Capacity)” was organized by SEAFDEC in Songkhla Province, Thailand on 19-21 August 2015 with co-financial support from the Japanese Trust Fund and the SEAFDEC-Sweden Project. The Meeting was attended by regional/national fisheries management experts from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam, as well as experts from SEAFDEC MFRDMD, TD and Secretariat. The Meeting was aimed at preparing the zero-draft RPOA-Capacity that could be used to support the management of fishing capacity in the Southeast Asian region.

This Experts Group Meeting was convened in response to the suggestion made during First Regional Technical Consultation (RTC) on Development of Regional Plan of Action for Management of Fishing Capacity in Southeast Asia



which was organized in Kuala Lumpur, Malaysia in February 2015. The First RTC identified the key issues on management of fishing capacity to be considered in developing the RPOA-Capacity.

During the Meeting, experiences and lessons related to measures adopted by the respective countries for management of fishing capacity were shared and used to discuss the pre-zero draft RPOA-Capacity, and to come up with the zero draft of the RPOA-Capacity for

Southeast Asia. During the three-day intensive discussion, the zero-draft RPOA-Capacity came into final form, which would be revisited by the countries in order to finalize the RPOA-Capacity.

The RPOA-Capacity is meant to serve as guide for the management of fishing capacity in the region, and as reference for the development of respective countries’ National Plan of Action for Management of Fishing Capacity (NPOA-Capacity) in the future. ❖

## SEAFDEC convenes a series of national workshops on sharks data collection

To follow-up on the work plan as agreed during the Regional Technical Meeting on Sharks and Rays Data Collection held earlier in May 2015, SEAFDEC convened a series of National Workshops on Sharks and Rays Data Collection, *i.e.* on 19-20 July 2015 in Yangon Myanmar; 22-23 July 2015 in Ranong Province, Thailand; 4-5 August 2015 in Sandakan, Malaysia; 17-18 August 2015 in Cilacap, Indonesia; 21-22 August 2015 in Puerto Princesa, Philippines; 6-8 September 2015 in Preah Sihanouk Province, Cambodia; and 9-11 September 2015 in Vung Tau, Viet Nam. The workshops were participated in by the respective National Technical Coordinators (NTCs) of the participating countries, local enumerators, and observers.

During these workshops, the SEAFDEC Project Team presented the proposed activities and work plan,

followed by visits to designated landing sites. The SOP-sharks, steps for data key-in, and photograph-taking techniques for scientific data collection were introduced and practiced. In addition, the National Sharks Group (NSG), comprising regional shark experts and resource persons from SEAFDEC, NTC of the respective countries, and local enumerators, was established



*National Workshop on Sharks Data Collection, Puerto Princesa, Philippines, 21-22 August 2015*

in each participating country; and the NSG was encouraged to use the mobile handset application to facilitate data collection and correction considering that this could be very useful tool for data validation, especially when the local enumerators are confused and have difficulties regarding species identification, sampling methodology, among others.

After the workshops, activities would pursue with compilation of data collected at selected landing sites of the respective countries. These national workshops are being supported by the EU-CITES project on “Strengthening capacity in developing countries for sustainable wildlife management and enhanced implementation of CITES wildlife trade regulations, with particular focus on commercially exploited aquatic species and production system funded” through the CITES Secretariat. ❖

## Second Working Group Meeting on Tuna Research in Sulu and Sulawesi Seas convened

The “Second Working Group Meeting of the Joint Tuna Research Program in Sulu and Sulawesi Seas (SSSs)” was jointly organized by SEAFDEC and the Government of the Philippines through the National Fisheries Research and Development Institute (NFRDI) and the Bureau of Fisheries and Aquatic Resources (BFAR) on 25-27 August 2015 in Davao City, Philippines with support from the Japanese Trust Fund. Aimed at strengthening the collaborative research among the countries surrounding the SSSs, the Meeting was attended by representatives from the fisheries government agencies of Indonesia, Malaysia, and Philippines; and resource persons *Dr. Tsutomu Nishida* of the National Research Institute for Far Seas Fisheries of Japan, and *Ms. Mahyam Mohd. Isa* from Malaysia. Likewise, representatives from SEAFDEC MFRDMD, Secretariat, TD and RFPN member for the Philippines also attended the Meeting.

One of the important activities of the Meeting was to review the results of the



second M.V. SEAFDEC 2 Cruise survey in the SSSs conducted from 20 March to 13 May 2015 with the objectives of assessing tuna stocks, identifying spawning areas, estimating tuna larvae density and distribution, conducting genetic studies, and appraising the FADs utilization on tuna fisheries. Using the M.V. SEAFDEC 2, this activity was a collaboration among three SEAFDEC Member Countries surrounding the SSSs, namely Indonesia, Malaysia, and the Philippines and focused on three main target species, *i.e.* yellowfin tuna (*Thunnus albacares*), bigeye tuna

(*Thunnus obesus*), and skipjack tuna (*Katsuwonus pelamis*). At the end of the Meeting, it was agreed that a writeshop would be conducted for the completion of the report prior to the 38<sup>th</sup> SEAFDEC Program Committee Meeting in November 2015. This will enable the participating countries of the Joint Tuna Research Program in Sulu and Sulawesi Seas (SSSs) to come-up with one final consolidated report or research publications. The writeshop preparation would be communicated among the Sub-regional Working Group Members by SEAFDEC/TD. ❖

## Meeting on traceability systems for aquaculture products in the ASEAN region convened

Supported by the Japanese Trust Fund, the Post-Harvest Technology Department of the Agri-Food and Veterinary Authority of Singapore as the Collaborating Centre of SEAFDEC for MFRD programs organized the “End-of-Project (EOP) Meeting for the JTF-5 project on Traceability Systems for Aquaculture Products in the ASEAN Region” on 26-27 August 2015 in Singapore. As the last activity of the project, the EOP Meeting was attended by 18 participants from the SEAFDEC Member Countries except Brunei Darussalam and Japan. The participants of the Meeting comprised the SEAFDEC National Coordinators (or their representatives) and Key Project Leaders of the respective Member Countries. During the Meeting, representatives from the Member Countries provided updates on the implementation of traceability systems for aquaculture products in their



respective countries, including issues and challenges encountered during implementation and relevant national activities/programs conducted and/or planned. The draft of the Regional Guidelines on Traceability System for Aquaculture Products in the ASEAN Region was also finalized and adopted by the Member Countries. The adopted Regional Guidelines would be presented

to the upcoming 38<sup>th</sup> SEAFDEC Program Committee Meeting (PCM) and 19<sup>th</sup> Fisheries Consultative Group Meeting in November 2015, and subsequently to the SEAFDEC Council for endorsement. The project’s “Technical Compilation on Traceability Systems for Aquaculture Products in the ASEAN Region” was also discussed and finalized at the Meeting for publication. ❖

## Regional Technical Consultation on Harmful Algal Blooms in the ASEAN Region organized

The “Regional Technical Consultation (RTC) on Harmful Algal Blooms (HABs)” was held in Singapore on 5-6 August 2015 to initiate and plan for the MFRD Programs’ new project component on toxic HABs under the Japanese Trust Fund-6. The RTC was organized and conducted by the Post-Harvest Technology Centre (PHTC) of the Agri-Food and Veterinary Authority of Singapore (AVA) as SEAFDEC’s Collaborating Center for MFRD Programs, and was attended by 20 representatives from 10 ASEAN-SEAFDEC Member Countries.

Under the new project component on toxic HABs, which was endorsed at the 37<sup>th</sup> SEAFDEC Program Committee Meeting held in Ubon Ratchathani,

Thailand in December 2014, the scope of the existing Japanese Trust Fund-6 project on biotoxins in the ASEAN Region has since then been expanded to include the identification of toxic HAB species as well.

The main objectives of this RTC were to improve the knowledge and understanding on toxic HAB occurrences and incidences in the ASEAN region, as well as to discuss and plan for the project activities of the new project component. In the RTC, the Member Countries presented country reports which described the incidences and occurrences of HABs, as well as existing management systems for HABs in their respective countries. Issues and challenges encountered in HAB

management were also discussed which could be elaborated on in their future plans.

The RTC was supported by resource persons, namely: Emeritus Professor from the University of Tokyo, *Dr. Yasuwo Fukuyo* and Senior Researcher from the National Research Institute of Fisheries and Environment of Inland Sea, *Dr. Hiroshi Oikawa*, who made technical presentations on HABs occurrences in Southeast Asia, methodologies and techniques for identification of HAB species, and HAB monitoring programs in Japan. In addition, the Technical Coordinator from the SEAFDEC Secretariat, *Mr. Tsuyoshi Iwata* also gave a presentation on the administrative system for monitoring and regulating toxins for bivalves in Japan.

The RTC also discussed the scope and implementation of the regional training course on identification of toxic HABs species in the region and agreed on the venue, date, trainer and duration of the training course. The training course will be held in Singapore in 2016. ❖



*Q&A after the presentation of the resource persons on HABs*

## Training on Hatchery of Blue Swimming Crab through SEAFDEC-Sweden Project

The SEAFDEC-Sweden Project facilitated the conduct of the “Blue Swimming Crab Hatchery International Training Course” at the Surat Thani Coastal Fisheries Research and Development Center in Surat Thani Province, Thailand from 10 to 28 August 2015. Considering the economic importance of the blue swimming crab (*Portunus pelagicus*) in the Thailand-Cambodia transboundary areas, the Department of Fisheries of Thailand (DOF) through its Coastal Fisheries Research and Development Division co-organized the training with SEAFDEC with financial support from the Government of Sweden through the SEAFDEC-Sweden Project. The training course is designed to introduce blue swimming crab hatchery technology, and share knowledge and experiences



*Cambodian participants attending in the blue swimming crab hatchery training course*

on blue swimming crab seed production. Specifically, the training was also aimed at building the capacity of officers from the Fisheries Administration of Cambodia in blue swimming crab hatchery operations.

The SEAFDEC-Sweden Project on “Fisheries and Habitat Management,

Climate Change, Social Well-being in Southeast Asia” has been providing platforms for bilateral discussions between bordering countries around the Gulf of Thailand, such as Thailand-Malaysia, Thailand-Cambodia, and Cambodia-Viet Nam. As part of the Project activities, capacity building is promoted with

*(Continued on Page 15)*


# FUTURE ACTIVITIES

Date	Venue	Title	Organizer(s)
<b>2015</b>			
5-7 October	Kuala Lumpur, Malaysia	2 <sup>nd</sup> Task Force Meeting & 6 <sup>th</sup> ASEAN Tuna Working Group Meeting	DOF Malaysia
5-9 October	Brasilia, Brazil	8 <sup>th</sup> Session of the COFI Sub-Committee on Aquaculture	FAO
6-16 October	Rayong Province, Thailand	Regional Training Course on Essential Ecosystem Approach to Fisheries Management (E-EAFM) and Fisheries Extension Methodology	TD
10-18 October	Sakubumi, Indonesia	Workshop on Community Based Capacity Building on Freshwater Aquaculture for Member States - South-South Cooperation	MMAF, Indonesia
12-16 October	Philippines	Training Course on Catfish Hatchery and Grow-out Operations	AOD
26-28 October	Kuala Lumpur, Malaysia	16 <sup>th</sup> Meeting of SEAFDEC Information Staff Program (ISP)	SEAFDEC
26-29 October	Danang, Viet Nam	Regional Workshop on Trawl Fisheries Socio-economics and Update on Country Progress	REBYC-II CTI
2-7 November	Champasak, Lao PDR	Training Course on Essential Ecosystem Approach to Fisheries Management (E-EAFM) for Lao PDR	SEAFDEC-Sweden Project
5-6 November	Kuala Lumpur, Malaysia	1 <sup>st</sup> ASEAN-US Trade and Environment Dialogue: Workshop on Combating Illegal, Unreported and Unregulated (IUU) Fishing	US-ACTI
6-8 November	Qingdao, China	4 <sup>th</sup> Annual World Congress of Aquaculture and Fisheries	WCAF
16-17 November	Bangkok, Thailand	9 <sup>th</sup> Annual Meeting of ASEAN Fisheries Acoustic Society (AFAS)	AFAS
17-18 November	Phuket, Thailand	The Bay of Bengal Large Marine Ecosystem (BOBLME) Project Steering Committee Meeting	BOBLME
17-19 November	Brunei Darussalam	8 <sup>th</sup> Meeting of the Coordination Committee of the Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region	RPOA-IUU
17-19 November	Singapore	Regional Workshop on Cold Chain Management for Seafood	MFRD
17-22 November	Taiwan	Sustainable Fishery Development Workshop 2015	National Taiwan Ocean University
23-25 November	Manila, Philippines	38 <sup>th</sup> SEAFDEC Program Committee Meeting (PCM)	SEAFDEC
24 November - 3 December	Philippines	Training Course on Community-based Freshwater Aquaculture for Remote Rural Areas of Southeast Asia	AOD
26-27 November	Manila, Philippines	18 <sup>th</sup> Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnership (FCG/ASSP)	SEAFDEC
28 November	Manila, Philippines	SEAFDEC Department Chiefs' Meeting (DCM)	SEAFDEC
1-4 December	Penang, Malaysia	International Fisheries Symposium "ASEAN Fisheries 2015: Towards sustainability, advanced technology, and community enhancement"	IFS
14-19 December	Yangon, Myanmar	Training Course on Essential Ecosystem Approach to Fisheries Management (E-EAFM) for Myanmar	SEAFDEC-Sweden Project
15-17 December	Phuket, Thailand	Regional Technical Consultation on Regional Plan of Action for Managing Fishing Capacity	SEAFDEC-Sweden Project
<b>2016</b>			
January (Tentative)	Lao PDR (To be confirmed)	Expert Workshop on Fishway Design Principles to Enhance Sustainability of Inland Fishery in the Southeast Asian Region	SEAFDEC
12-14 February	Colombo, Sri Lanka	34 <sup>th</sup> Session of the Asia-Pacific Fisheries Commission	APFIC
February (Tentative)	Boracay Island, Philippines	Regional Technical Consultation on EMS/AHPNS and Other Transboundary Diseases for Improved Aquatic Animal Health Management in Aquaculture in Southeast Asia	AOD & BFAR
7-11 March	Auckland, New Zealand	5 <sup>th</sup> Global Fisheries Enforcement Training Workshop (GFETW)	International MCS Network
April (Tentative)	Viet Nam	48 <sup>th</sup> Meeting of the SEAFDEC Council	SEAFDEC & Viet Nam
June (Tentative)	Singapore	Regional Training Course on Identification of Toxic Harmful Algal Bloom (HAB) Species	MFRD
3 August	Bangkok, Thailand	High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community	SEAFDEC
4-6 August	Bangkok, Thailand	ASEAN Fisheries Conference and ASEAN Seafood Exposition	Thai DOF, SEAFDEC, NACA

## Training on Hatchery of Blue Swimming Crab through SEAFDEC-Sweden Project

(Continued from Page 13)

the objective of “improving skills and knowledge of researchers on the application of technology for conservation and management of shared stocks” as deemed necessary under bilateral arrangements.

The Opening of the Training on 10 August 2015 was graced by the presence of officers from SEAFDEC together with senior officers from the Coastal Fisheries Research and Development Division of the Thai DOF. At the end of the training, the trainees were able to acquire improved knowledge and skills in the hatchery operations and grow-out technology of blue swimming crab to ensure the sustainability of the blue swimming crab resources in the respective waters of Cambodia and Thailand, in particular, and in the Gulf of Thailand in general. The training course also enhanced the cooperation and facilitated the sharing of technical knowledge and skills among the ASEAN countries. 

## Fifth Meeting of the Gulf of Thailand Sub-region organized

(Continued from Page 16)

discussing action/activity plan for 2016, the Meeting reviewed the previous recommendations of the 4<sup>th</sup> Meeting of the Gulf of Thailand Sub-region held in December 2013. This included an evaluation of the existing mechanism for cooperation specifically the expansion of bilateral initiatives on transboundary species; promotion of region-wide Monitoring Control and Surveillance (MCS) network; and conduct of comparative studies on laws and regulations among countries within the GOT area and consultations among Cambodia, Malaysia, Thailand and Viet Nam. The important suggestions made during the Meeting included: (1) establishment of the GOT sub-regional fisheries resource management for three transboundary species ranked according to priority, *i.e.* anchovy, Indo-Pacific mackerel, and blue swimming crab; (2) creation of sub-regional focal point for each country in the GOT for sharing information; (3) conduct of continuous capacity building specifically on stock assessment and data collection; and (4) possibility establishment of a hotline for sharing information on IUU fishing and joint cooperation of MCS activities (on country by country basis). It is expected that the outcome from this sub-regional arrangement would include increased understanding of the fishery issues in transboundary areas of the Gulf of Thailand and the ways and means of addressing such issues through joint approaches, with the final goal of promoting effective fishery resources management. Through this collaborative arrangement, cooperation could be built for better management of fisheries in the Gulf of Thailand sub-region. 

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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 SEAFDEC.

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## SEAFDEC co-hosts the Inception Workshop for the Oceans and Fisheries Partnership

The United States Agency for International Development (USAID) and SEAFDEC jointly convened the “Oceans and Fisheries Partnership Inception Workshop” in Bangkok, Thailand on 15-16 September 2015. Officiated by the U.S. Ambassador to ASEAN *H.E. Nina Hachigian*, Mission Director of USAID Regional Development Mission for Asia represented by *Mr. Alfred Nakatsuma*, Deputy Director-General of the DOF Thailand *Dr. Waraporn Prompoj*, and Secretary-General of SEAFDEC *Dr. Chumnarn Pongsri*, the Workshop was attended by delegates from the ASEAN-



*From left to right: SEAFDEC Secretary-General Dr. Chumnarn Pongsri, Deputy Director-General of Thai DOF Dr. Waraporn Prompoj, Mission Director of USAID Regional Development Mission for Asia Mr. Alfred Nakatsuma, and the U.S. Ambassador H.E. Nina Hachigian*

SEAFDEC Member Countries, namely: Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam. Representatives from SEAFDEC Secretariat, TD and MFRDMD; officers from the USAID; and members of the TetraTech which has been contracted with USAID to implement the project, as well as representatives from other regional/international partners, namely: CTI-CFF, FAO, Anova Seafood, GFTC, ANCORS, UN-ACT, Swedish Embassy, WWF-CTI, WWF, and Smithsonian Institute also attended the Workshop which discussed and concretized the activities to be implemented under the project.

At the outset, the strong desire of the U.S. Government to undertake measures against IUU fishing and seafood fraud was expressed by H.E. Nina Hachigian. Such strong will has led to the establishment of a cooperation between USAID and SEAFDEC towards the development of the “Oceans and Fisheries Partnership” which has the overall goal of “*increasing the ability of regional fishery organizations to conserve marine biodiversity and combat IUU fishing in the Asia-Pacific*

*region,”* to ensure sustainable fisheries and sustainability of the oceans for food security.

The core activity of the “Oceans and Fisheries Partnership” would focus on the development of the “Catch Documentation and Traceability (CDT) System” that would advance the existing initiative on ASEAN Catch Documentation Scheme (ACDS), and demonstration of CDT system in selected site(s). At a later stage, the coverage could be expanded to other areas that are important for biodiversity conservation in the Asia-Pacific region. Moreover, aspects on gender, labor and social issues would also be integrated along with the project implementation. It is expected that the project document with more detailed activity plan would be consolidated and submitted for consideration by the SEAFDEC Member Countries at the forthcoming SEAFDEC Program Committee Meeting. It is also anticipated that through the implementation of the project activities, countries in Southeast Asia would be better prepared to comply with the requirements for traceability of fish and fishery products that could emerge in the future. ✦

## Fifth Meeting of the Gulf of Thailand Sub-region organized

SEAFDEC with funding support from the Government of Sweden under the SEAFDEC-Sweden Project organized the “Fifth Meeting of the Gulf of Thailand (GOT) Sub-region” on 28-29 September 2015 in Nonthaburi, Thailand. Representatives from the responsible government agencies of countries around the Gulf of Thailand namely: Cambodia, Malaysia, Thailand and Viet Nam, several international organizations such as the Food and Agriculture Organization - Regional Office for Asia and the Pacific (FAO/RAP), International Union for Conservation of Nature (IUCN), Regional Plan of Action - Illegal, Unreported and Unregulated Fishing (RPOA-IUU)/ Secretariat, Swedish Agency for Marine and Water Management (SwAM), the

United Nations Environment Programme (UNEP); and from SEAFDEC Secretariat, Training Department, and the Regional Fisheries Policy Network (RFPN) Members attended the Meeting.

Aimed at enhancing sub-regional cooperation in managing transboundary resources within the GOT area and

*(Continued on Page 15)*



*Participants attending at the Fifth Meeting of the Gulf of Thailand Sub-region*