TRUE MEANING OF CHRISTMAS. As part of AQD's annual tradition, first grade pupils of three neighboring barangays (Parara, Buyu-an, and Nanga) enjoyed the joyful afternoon filled with games, treats and fun activities. *PHOTO BY JF ALDON*

November-December 2018

Matters inside

Milkfish fry sufficiency program in full swing	
Fish health section offers assistance on fish kill case	2
BFAR staff train on seaweed farming to boost supply	ć
Eel research update: Samples analyzed in Japan	-
Christmas stories	8

www.seafdec.org.ph



Newsletter of the SEAFDEC Aquaculture Department, Tigbauan, Iloilo, Philippines

to future aquaculture collaborations



Participants from SEAFDEC member countries gather during the 41st Program Committee Meeting in Langkawi, Malaysia

LANGKAWI, Malaysia -Member countries requested for various partnerships and collaborations from SEAFDEC/AQD during the Program Committee Meeting last 5 to 7 November 2018.

Following the department's presentation of its accomplishments and ongoing activities for 2018, member countries expressed further to learn more about these projects.

"We request SEAFDEC/ AQD to impart the knowledge on aquaculture technologies by establishing a sharing mechanism," said the Program Committee Member from Myanmar. He also expressed Myanmar's interest in the technology on broodstock management of tiger shrimp.

Mr. Dan Baliao, chief of SEAFDEC/AQD, mentioned the department's plan of

reinstituting the Aquaculture Development for Southeast Asia (ADSEA) to serve as a forum for sharing and discussion.

"The workshop [ADSEA] will not only share information on aquaculture technologies but will also serve as a venue to identify the strategies to ensure sustainable and responsible aquaculture in the region," said Baliao.

Continued from previous page ...

Thailand, on the other hand, requested to collaborate with SEAFDEC/AQD on projects focusing on fish health management specifically in the conduct of training courses. Noting the achievements of the department in successful transport of milkfish juveniles, Thailand also requested for SEAFDEC/AQD to share the techniques for transporting broodstock as it is an essential protocol for milkfish seed production.

"SEAFDEC/AQD had been practicing safe and effective way of transferring broodstock for a long time and we are happy to share it with Thailand," said Chief Dan Baliao during the PCM discussions. Information and technologies on production of hybrid broodstock for grouper, tissue culture of seaweeds, using alternative feeds, and findings on Tilapia Lake Virus were also requested by Malaysia wherein Baliao expressed his interest to collaborate upon the country's request.

Commended accomplishments

Accomplishments and progress made by SEAFDEC Aquaculture Department were noted and commended by fellow member countries.

"In behalf of the Philippines, I am extending my appreciation to the services rendered by



Philippine delegates BFAR and AQD officers Mr. Rafael Ramiscal, Ms. Elymi-Ar-J Tuñacao, Mr. Dan Baliao, Dr. Nestor Domenden, Dr. Takuro Shibuno (former AQD Deputy Chief), Dr. Leobert de la Peña, Dr. Koh-ichiro Mori, and Ms. Joesyl Marie dela Cruz during the committee meeting

SEAFDEC/AQD to the country's aquaculture programs," said Dr. Nestor Domenden, Program Committee Member for the Philippines, during the meeting. The department's activities were also endorsed to be presented in the upcoming SEAFDEC Council Meeting in March 2019. **a** - JM DELA CRUZ

Expert talks on eel at freshwater biodiversity symposium



AQD expert Dr. Maria Lourdes Aralar talks on the proper management of eel resources

Dr. Maria Lourdes Aralar, SEAFDEC/AQD's expert on freshwater aquaculture, was tapped as one of the speakers for the "2nd Philippine Symposium on Freshwater Biodiversity and Ecosystems (PSFBE)" held at the Institute of Biology, University of the Philippines (UP) Diliman, Quezon City.

Dr. Aralar talked about the "Sustainable Utilization, Management, and Conservation of Tropical Anguillid Eel Resources" in one of the parallel sessions on 11 December 2018, the first day of the four-day symposium. During her talk, Dr. Aralar mentioned that the pressure on tropical anguillid eels was due to the decline of the American, European, and Japanese eels. She further explained that "the demand for tropical anguillid eels is expected to further increase significantly in Japan, Korea, Taiwan, and China."

Dr. Aralar also added that the sustainable utilization in terms of conservation and fisheries management of eel resources is very crucial since the catadromous eel supply for the world market is dependent on the wild fisheries. Also, the techniques for full life cycle aquaculture of eel for commercial use are yet to be developed.

As a step in addressing this issue, Dr. Aralar also presented the project of SEAFDEC in collaboration with the Fisheries Departments/Bureau of ASEAN countries with funding support from Japan-ASEAN Integration Fund titled "Enhancing Sustainable Utilization and Management Scheme for Tropical Anguillid Eel Resources in Southeast Asia."

Aside from being a resource speaker of the event, Dr. Aralar also served as a moderator in one of the parallel sessions and an evaluator of the poster session. She is also part of the organizing committee of this symposium wherein she is a member of the Scientific Program Committee and PSFBE Awards Committee.

The 2nd PSFBE was hosted by UP Diliman's Institute of Biology together with University of Sto. Tomas, Ateneo de Manila University, Laguna Lake Development Authority, DA-National Fisheries Research and Development Institute, DENR-**Biodiversity Management** Bureau, Association of Systematic Biologists of the Philippines, and the USAID Philippines in cooperation with the International Society for Limnology.

- RH LEDESMA



Dr. Maria Lourdes Aralar together with other invited speakers answer questions from the participants

Milkfish fry sufficiency program in full swing



SEAFDEC/AQD staff holds one of the newly-procured milkfish broodstock at Tigbauan Main Station

Due to the insufficient supply of both wild-caught and hatcherybred fry, SEAFDEC/AQD recently acquired additional 78 milkfish broodstocks to support the Philippine government's "Bangus Fry Sufficiency Program".

The acquisition will augment the existing milkfish broodstock of more than 300 being maintained in AQD's stations in Tigbauan, Iloilo and Igang, Guimaras. To date, AQD has produced and distributed over 16 million pieces of fry excluding the 380,000 produced in a newly-built hatchery in Sagnay, Camarines Sur.

The significant decline of milkfish fry left milkfish producers with no option but to depend heavily on private and government milkfish hatcheries and, to some extent, imported fry from Indonesia.

AQD, together with BFAR, will implement several legislation that mandate the establishment of multi-species marine hatcheries in various regions of the country. The hatcheries are designed to produce 25 million milkfish fry annually. The design was also intended to allow fry production of other marine species, depending on the discretion of the local government who will eventually take over the ownership and operation of the hatchery.

The operation of this multi-species marine hatcheries have been integrated into the "Bangus Fry Sufficiency Program" launched by DA-BFAR early this year. The program seeks to address the country's dependence on imported milkfish fry by reducing importation by about 85%.

As part of the program, AQD will conduct on-site aquaculture technology training in various parts of the Philippines. **a**

- MET ALDON/JM DELA CRUZ

Galunggong, tilapia production vital for PH food security

The National Academy of Science and Technology, Philippines (NAST PHL) gathered scientists and policymakers to stress the importance of *galunggong* or roundscad and tilapia during a forum held last 7 November 2018 in Diliman, Quezon City.

SEAFDEC/AQD scientist Dr. Ma. Lourdes Cuvin-Aralar, who attended the forum in behalf of Chief Dan Baliao, urged local aquaculturists to intensify the production of the aforementioned commodities.

Baliao also suggested in a statement that milkfish can be a good alternative for *galunggong* considering there are existing government projects that focuses on the improvement of its supply. "I am pretty sure if production of bangus and tilapia will be intensified, they can command a much lower price than the controversial *galunggong*."

SEAFDEC/AQD has been stepping up promotion of its aquaculture technologies especially in terms of production to help augment the dwindling capture fisheries.

NAST PHL is an attached agency to the Department of Science and Technology (DOST) to serve as adviser to the President of the Republic of the Philippines and the cabinet on policies concerning science and technology in the country. The Science Policy and Information Forum aimed to:

- i. Educate the invitees regarding the importance
 - of *galunggong* and tilapia

for the country's food security;

- ii. Identify the issues/ reasons why the supply of *galunggong* and tilapia have dropped in the country and why prices for the commodities have increased; and
- iii. Formulate
 recommendations to
 sustain the supply of
 galunggong and tilapia
 in the country for food
 security for submission
 to legislators and other
 concerned sectors. a

 MET ALDON/JM DELA CRUZ



Tilapia produced at AQD's nursery

Fish pathologists discuss issues on aquatic diseases

In order to address key aquatic animal health issues in the region, the Asia Regional Advisory Group on Aquatic Animal Health gathered at the 17th Advisory Group Meeting (AGM 17) held last 13-14 November 2018 in Thailand.

During the two-day meeting, the group addressed key aquatic animals health issues in Asian countries, updates from OIE, regional disease reporting systems, emerging aquatic animal disease problems, implementation of the Asia Regional Technical Guidelines and ways to further strengthen regional and international cooperation.

Dr. Eleonor Tendencia, SEAFDEC/AQD's Fish Health Section head, discussed AQD's aquatic animal health programs to partner agencies.

AGM 17 was followed by the OIE Regional Experts



AQD scientist Dr. Eleanor Tendencia [sitting; first from the left] participated in the 17th Advisory Group Meeting on Aquatic Animal Health 13-14 November 2018

Consultation on Aquatic Health on 15-16 November 2018. Dr. Tendencia shared the need for capacity building for fish health staff and pledged to assist other member countries if it is needed. "Following the capacity building, AQD could train personnel from other member countries on disease detection and diagnosis and even accept samples for disease diagnosis," she said. This the led to the discussion of future collaborations on fish health between AQD and other OIE members. a - MET ALDON / JM DELA CRUZ

PHOTO COURTESY OF ET TENDENCIA

Fish health section offers assistance on fish kill case

ALABEL, Saranggani -SEAFDEC/AQD Fish Health Section staff responded to a milkfish mortality case last 19 November 2018.

A fish cage operator suffered losses in late October due to heavy mortality of 500 to 800 fish per cage. This was succeeded by daily losses with mortality ranging from at least ten to more than 600 milkfish.

The team, AQD senior technical assistant Mr. Demy Catedral and senior technician Ms. Ma. Maila Peniero, randomly sampled at least five fish especially from cages with high mortality and were then dissected for bacterial analysis. Internal organs were also preserved in fixatives for detection of viral infections such as viral nervous necrosis and red seabream iridovirus. Samples were also preserved for histology and electron microscopy analyses done at AQD's laboratories.

During dissection, abnormal enlargement of some portions of intestines was observed in most milkfish samples. Enlarged portions were filled with transparent fluids. Tests are still ongoing to check the possible causative agents of the fish kill.

- MET ALDON / JM DELA CRUZ



Few of the fish cages with high mortality in Alabel, Saranggani last 19 November 2018

SEAFDEC/AQD trains aquaculturists in Palawan



AQD chief Dan Baliao talks about providing technical assistance to intensify aquaculture of milkfish and other important commodities

"It has been my obsession to really help both small and big fish farmers to work together to improve fish production. I will continue AQD's legacy of providing technical assistance to interested stakeholders through information dissemination and training."

That was the gist of the message Chief Dan Baliao gave during the opening ceremony of the milkfish production training of DA-BFAR aquaculturists and staff at the Office of the Provincial Agriculturist last 26 November 2018 in Puerto Princesa City, Palawan.

Milkfish is one of the most important fish species that is being cultured in the Philippines. About 90% of total fishponds in the Philippines are milkfish farms contributing significantly to the total fish production.

The Philippines used to be the world's largest milkfish fry producer until Indonesia took the lead. The decline of milkfish production was attributed to poor management practices, shortage in the supply of wild caught fry and hatchery-bred fry. The degradation of fry grounds and decrease of *sabalo* population also contributed to the decline.

SEAFDEC/AQD and BFAR will jointly pool resources and technical expertise in order to implement activities aimed at attaining the objectives of the said legislation. Research is ongoing to increase the volume of fry from local hatcheries and improve fry quality and performance to make the industry competitive.

At the moment, there are more than 300 milkfish breeders, including 78 recently acquired ones, are being maintained at AQD in Tigbauan Main Station and Igang Marine Station.

Milkfish hatchery fry production will enable milkfish producers to get best quality milkfish fry rather than taking fry from the wild. The *sabalos* at AQD's Tigbauan Main Station weigh 20 kilos being the heaviest and 39 years old being the oldest. "AQD is up for the challenge to help the Philippines produce 1.2 billion milkfish fry annually by 2022 to meet BFAR's Bangus Fry Sufficiency Program," Baliao added.

To accommodate the request of the Philippine government for more fingerlings and fry, AQD aims to at least triple the milkfish breeders housed in the station. Improvement of facilities is also ongoing *e.g.* additional concrete tanks to support the production of milkfish and other marine fish.

With AQD geared towards production-oriented research activities, Baliao believes that this will enhance capture fisheries that has since been dwindling for the past years. It is now well recognized that aquaculture remains to be an important source of fish. Only aquaculture has the potential to fill the gap being left by the dwindling supply from capture fisheries. **a**

- MET ALDON / JM DELA CRUZ

IFRDMD staff learns algae culture techniques from AQD



Algal containers at AQD's natural food laboratory

The Inland Fishery Resources Development and Management Department (IFRDMD) of SEAFDEC in Palembang, South Sumatra, Indonesia requested a specialized training course on algal culture from the Aquaculture Department (AQD) in Tigbauan, Iloilo, Philippines.

The training course was held on 4-6 December 2018, and covered topics on the biology and culture of plankton.

Mr. Muhtarul Abidin, SEAFDEC/IFRDMD fisheries technical staff, intended to apply the knowledge gained during the training course when he returns to Indonesia where he hopes algal culture will lead to more jobs and business opportunities.

"I am interested in algae culture because it fits into my field of work as in the identification of plankton and my desire to develop it," Mr. Abidin stated.

"In this training, I studied the culture of green algae, brown algae, and *Brachionus*. For the lecturers in SEAFDEC/ AQD, in my opinion, it is quite good and they provided innovation for me to work and succeed in algae culture in Indonesia," he added. **a** - DEVCOM

BFAR staff train on seaweed farming to boost supply



BFAR trainees experience seaweed culture at AQD's Igang Marine Station in Guimaras

To intensely address the problem on the shortage of quality seed material (propagules) and increase productivity and profitability within the seaweed sector, nine technical staff of the Philippine Bureau of Fisheries and Aquatic Resources (BFAR) attended a 10-day training course at SEAFDEC/AQD.

The technical staff assigned in BFAR-operated Seaweed Culture Laboratories (SCLs) participated in the training course on micropropagation and nursery operations of the seaweed *Kappaphycus* was held on 26 November to 5 December 2018. The training included lectures and practical activities on seaweed biology, ecology, culture and farming economics.

"We are aiming to produce more seaweeds for Region 6 through micropropagation. We were sent here in SEAFDEC because we are going to use their technology and apply in our laboratory to produce more seaweeds," said Ms. Jhonamer Descalsota, one of the technical staff from BFAR who attended the training.

Micropropagation is a technique used at SEAFDEC/ AQD to mass-produce seaweed plantlets that, under the right conditions, grow faster and are more disease-resistant than the traditional seaweed cuttings. "Through

micropropagation, we can come up with a solution regarding the decline of the stocks. From this technology that the SEAFDEC introduced to us, we can assure that we can deliver well-nourished and new plantlets for a new generation of the seaweeds industry of the Philippines," said Mr. Muhaimin Maharail, regional seaweeds coordinator of BFAR Region 9.

Meeting production targets

Mr. Dennis Brylle Balamabao from BFAR-CARAGA Region shared how the training can help solve the problem on their laboratory's low seaweed production.

"Because of this training, I think, we'll be guided on what to do to meet our target production; at the same time, this training will also lead us to reach out to the farmers and provide them with good quality seaweed propagules from the laboratory," Balamabao said.

"We learned a lot from the history to the trends, the status, problems to be encountered, as well as future aspects. SEAFDEC is very good at accommodating us; they have shared their technologies so that our regions can give the production that the country needs, increasing the capability of every regional office," Mr. Phillip John Foronda from BFAR Region 1 stated.

Meanwhile, Maharail said that while their region is the third highest producer of seaweeds in the Philippines, most of their production still comes from natural growth. As for seaweed farming, it is still in its infancy and needs further development.

"The seaweeds production [in Region 9] is highly dependent on natural growth and sometimes this cannot sustain the needs of the region. Luckily, SEAFDEC enjoined the BFAR technicians to be trained here in SEAFDEC so we acquired the knowledge from the laboratory starting from micropropagation until the sea-based state. For our region, it is beneficial, and the technology is very efficient," Maharail added.

Future plans

"For our future plans, BFAR shall continuously operate the SCLs in close coordination with SEAFDEC to produce propagules of high quality and quantity for nursery cultivation and/or distribution to requesting clients. BFAR shall also develop a 3-year capability program for SCL personnel that we may sustain the operation of the laboratories," Ms. Ida T. Capacio, Center Chief OIC of BFAR National Seaweeds Technology Development Center (NSTDC), informed.

Last year, the Philippine Department of Agriculture (DA) through BFAR started work on a National Seaweed Program to put the country back as the world's leading producer of seaweeds. According to BFAR, it aims to improve seaweed production by at least five percent annually from 2017-2022.

Other training course participants were Paul John Paguergan from BFAR National Seaweeds Technology Development Center (BFAR – NSTDC); Fariza Haron from BFAR –ARMM Region; Rebecca Rama from BFAR Region 8; Gemma Alipar from BFAR Region 5; and Johnrey Antipaso from BFAR Region 2. a

- DEVCOM



BFAR technical staff train in AQD's seaweed laboratory at Tigbauan, Iloilo

Eel research update: Samples analyzed in Japan

PHOTO COURTESY OF MRR EGUIA



Dr. Eguia works at the Onagawa Field Science Center laboratories

ONAGAWA, Japan – As part of SEAFDEC/AQD's ongoing study on eel, Scientist Dr. Maria Rowena R. Eguia visited the Onagawa Field Science Center to analyze 400 glass eel samples last 30 November to 14 December 2018.

Anguillid glass eel samples collected from Cagayan and General Santos City in the Philippines were processed for species identification and genetic diversity assessment using mitochondrial DNA sequence and short tandem repeats (STR) markers.

Between her laboratory work, Dr. Eguia delivered a lecture to applied marine biology students of Tohoku University about SEAFDEC/ AQD and its research activities. She also talked about the genetic work done on eels in collaboration with Dr. Minoru Ikeda, an Associate Professor of the university.

Dr. Eguia was with Inland Fishery Resources Development and Management Department's staff Ms. Melfa Marini who assisted her while learning DNA barcoding and microsatellite DNA marker analysis.

- JM DELA CRUZ / RD DIANALA

Researchers present results of IMTA study



SEAFDEC/AQD researchers Dr. Nerissa Salayo (seated, leftmost), Dr. Roger Edward Mamauag (standing, 1st row, 3rd from left), and Ms. Raisa Joy Castel and Ms. Rose Ann Diamante (standing, 1st row, 2rd-3rd from right) together with the other participants of the JIRCAS annual meeting held in Myeik, Myanmar on 11-12 December 2018

MYEIK, Myanmar – To be updated on the progress of the research program "Development of technologies for sustainable aquatic production in harmony with tropical ecosystems," the Japan International Research Center for Agricultural Sciences (JIRCAS) had its annual meeting on 11-12 December 2018. Dr Masashi Kodama, JIRCAS research fellow assigned at SEAFDEC/AQD chaired the presentation.

Dr. Nerissa Salayo, study leader of the SEAFDEC/ AQD-JIRCAS collaborative study on "Implementation of Community-Managed Small-Holder IMTA (Integrated Multi-Trophic Aquaculture) Milkfish Mariculture in Guimaras, Philippines," presented the preliminary results of the Sustainable Livelihoods Approach (SLA) that is used as an impact assessment framework of this study. Results from three evaluation periods under this study showed that there was some increment, but variable, in the acquisition of all five livelihood assets (i.e. human, physical, financial, environmental and social).

The results of the biological and environmental aspect of the IMTA study was also presented during the meeting by Dr. Kodama and Ms. Rose Ann Diamante, a technical assistant at SEAFDEC/AQD. They discussed that the modified experimental design compared to the previous runs, yielded good growth and better survival of sandfish alongside milkfish that were grown to marketable size. However, seaweed survival was not that good due to predation.

As for the socioeconomic component of the study, Ms. Raisa Joy Castel, SEAFDEC/ AQD associate researcher, reported that the women of Pandaraonan, Nueva Valencia, Guimaras actively participated in the IMTA activities like making of value-added products such as milkfish in oil and deboned milkfish. She also discussed that developing women's skills continuously in organizing activities, financial planning and marketing can aid them in having a sustainable livelihood.

MYEIK UNIVERSI

≧

During the meeting, Dr. Tsuyoshi Sugita, a JIRCAS research fellow assigned at SEAFDEC/AQD and Dr. Roger Edward Mamauag, a scientist at SEAFDEC/AQD, presented the study on the "Development of Low Fish Meal Feed for Aquaculture Using Alternative Ingredients." Dr. Mamauag discussed that the utilization of poultry by-product meal to replace fish meal in milkfish diets yielded promising results, wherein growth performance parameters and feed conversion ratio was not significantly altered when using an alternative protein source. Dr. Sugita suggested that additional studies should be conducted on other commercially important fish species.

In response to Dr. Sugita's suggestion, Dr. Mamauag shared an overview of alternative ingredients used in the Philippines. He said that studies for the past two decades conducted mostly by SEAFDEC/AQD indicated the availability of scientific findings on these alternative ingredients, however, commercial utilization of these ingredients is not popularly applied. **a** - RH LEDESMA

SEAFDEC/AQD CHRISTMAS CELEBRATION

It is the most wonderful time of the year and SEAFDEC/AQD celebrated Christmas filled with suprises for staff, partners and neighboring barangays.

With the theme "SEAFDEC/AQD: One in spreading love and joy this Yuletide season," the entire community showed commitment to promote peace, joy, generosity and camaderie through Christmas activities beginning with the Lantern Parade and Christmas Tree Lighting. See photos below.

LANTERN PARADE AND CHRISTMAS TREE LIGHTING





Technology Verification and Extension Division



Administration and Finance Division

EXT ON ENTIRE SECTION BY JM DELA CRUZ

Chief Dan Baliao shares his Christmas message to

sage to SEAFDEC/AQD staff and guests



LIGHT IT UP!

Four lanterns, made of recycled materials, took the centerstage during AQD's Lantern Parade. Each lantern is made by four divisions of SEAFDEC/AQD: Research, Technology Verification and Extension, Training and Information, and Administration and Finance.

GIFT-GIVING



As part of the annual tradition, SEAFDEC/AQD shared laughs and cheers to young children of neighboring communities.

The kids were treated to food and drinks and were entertained by a mascot and a magician. They were also gifted with toys and other household necessities.

As AQD's Administration and Finance Division head Ms. Amelita Subosa said, "This [giving joy to children] is the true meaning of Christmas."



THANKSGIVING MASS

SEAFDEC/AQD also celebrated the birth of the Lord with mass at AQD's Multi-purpose Hall on 14 December 2018.

This is also to give thanks to all the blessings received by the Department.



CHRISTMAS PROGRAM

AQD's annual Christmas Program is a celebration for all staff, their families and guests to enjoy. There's food, drinks and entertainment. Prizes were also given to employee through games and raffles.



is published bimonthly by the Development Communication Section SEAFDEC Aquaculture Department Tigbauan, Iloilo, Philippines

> Editor this issue: JM dela Cruz

Contributing writer-photographers: MET Aldon, JF Aldon, JM dela Cruz, RD Dianala, RH Ledesma

> Editorial consultant: RD Dianala

Publications Review Committee: Dr. LD de la Peña, Dr. JP Altamirano, Dr. EC Amar, Ms. JJ Huervana, Dr. RE Mamauag, Dr. ND Salayo, Dr. EA Tendencia

> Circulation to friends of AQD: SB Alayon

For contributions and feedback, kindly email: devcom@seafdec.org.ph

PHOTOS ON ENTIRE PAGE BY DEVCOM SECTION







Deputy Chief Dr. Koh-ichiro Mori and Dumangas Brackishwater Station head Mr. Victor Emmanuel Estilo deliver the welcome and closing remarks, respectively.

Irong-irong Dance Troupe entertains the AQD family with a set of lively dance numbers



SINE-FIESTA

Four films were produced by each division for this year's in-house film festival with the theme "family."

The films includes "Picture Perfect" by RD, "Madmad" by TVED, "Manang" by TID, and "Bb. Gee" by AFD.



Two-time Best Actor winner Ms. Jonalyn Mateo and Best Director winner Ms. Therese Mae Geaga receive their respective awards





TVED's Madmad won Best Poster and RD's Picture Perfect won Best Picture



Technician Mr. Neil Tibubos, winner of the grand raffle prize of *Pangkabuhayan Showcase*, takes photo with Chief Baliao

THEY ARE THE CHAMPIONS!

Category	Winners
Lantern Parade	
Best Team	TVED
Best Mascot	TID
Best Big Lantern	AFD
Sine-Fiesta	
Best Actor	Ms. Jonalyn Mateo (RD)
Best Supporting Actor	Ms. Ellen Flor Solis (RD)
Best Director	Ms Therese Geaga (TVED)
Best Poster	Madmad (TVED)
Best Picture	Picture Perfect (RD)
Over-all Winner	TVED



AQD's Multi-purpose Hall was adorned with fun designs converting the venue to a Fun Town.



True to the 'carnival' theme, Training and Information Division head Dr. Edgar Amar won best-dressed (male) for his magician costume reminscent of Hugh Jackman's The Greatest Showman and Human Resource Management Section administrative assistant Ms. Patricia Casiano won bestdressed (female) for her version of Harley Quinn.



Chief Baliao year-end message:

recalls 'challenging yet interesting' 2018; looks forward to a more productive 2019



"This year has been very interesting and challenging because we always had to be on our toes in order to respond to the challenges to produce results," said Chief Dan Baliao in his message during the annual Christmas celebration on 14 December 2018.

As an example, Chief Baliao recalled that this year, he together with all division heads were challenged to produce sufficient fish to feed 100 million Filipinos. The efforts of producing sufficient milkfish fry had commenced this year and will continue in 2019.

The controversial 'galunggong' was also highlighted in the message. "We are into full swing responding to the challenge. I know you are well informed of where we are now in that aspect," Baliao said.

The Chief acknowledged the people who became part of his accomplishments for the last sixteen months. He mentioned Dr. Rolando Platon, former AQD chief, who is behind the conduct of feasibility studies in view of establishing the fifteen legislated multi-species hatcheries nationwide. The multi-million project hopes to address the country's need for seedstocks and fill the gap of dwindling fish production. So far, three completed feasibility studies were turned over to BFAR and LGUs concerned during the Bangus Congress in Iloilo City last October.

Chief Baliao also noted the generosity of the Japanese government, through AQD deputy chief Dr. Koh-ichiro Mori, for several projects have been continuously receiving financial support and sending several AQD staff to Japan.

He also significantly mentioned Research Division head Dr. Leobert de la Peña for always being behind him in getting through with AQD concerns.

Training and Information Division (TID) head Dr. Edgar Amar was also mentioned. According to Chief Baliao, he made sure that programs in TID were carried out. Under his leadersip, the division went beyond the usual chores.

The Chief also thanked Administration and Finance Division head Ms. Amelita Subosa as she ensured smooth and speedy processing of papers and the delivery of materials needed by researchers and support staff.

Researchers who played very important roles in the success of 2018 were also mentioned. Including Dr. Evelyn Ayson, for continually leading innovations under the Marine Finfish Program. Dr. Jon Altamirano and Dr. Edward Mamauag for accomplishments in shellfish studies and for the low-cost broodstock diets, respectively.

The Chief also thanked Dr. Nerissa Salayo for her Community-based Resource Management projects which empowered local communities to appreciate sustainable use of coastal resources. Dr. Eleanor Tendencia was also mentioned for her efforts in responding to the call of the private sectors who encountered diseases of their farmed fishes.

Chief Baliao called on the young and very promising researchers to continue working hard to keep-in-step with the need of the times in the field of aquaculture. The Manpower Development staff also who had been assigned to go on official trips around the country were also recognized. They have been criss-crossing rugged roads to assist LGUs and BFAR in the implementation of Joint Mission for Accelerated Nationwide Technology Transfer Program for Aquaculture project.

Lastly, the Chief gave recognition and appreciation to all AQD staff for helping him out in the smooth implementation of AQD programs and activities.

Since there is no other holiday quite like Christmas, he enjoined everyone to spend the time with their families and be grateful for all the blessings received.

"The tough year that was in 2018 was aptly dealt with and I am proud of what we accomplished together and I look forward that we will go into the New Year with strength and consolidate our position to build on our accomplishments. Let's celebrate that. It's our gift to the Filipino people", Chief Baliao concluded. **a** - MET ALDON