



AQD Matters



In-house newsletter of the SEAFDEC Aquaculture Department, Tigbauan, Iloilo



Christmas message from the AQD Chief

Everyone I am sure is up-to-date with current headlines, and some developments are kind of worrying, especially the recent massacre in Mindanao, and in view of the coming national elections. So “Christmas around the world” is an apt theme for 2009. And why is that?

The world is full of diversity – different faiths (Christians, Muslims, Hindus), different colors of people, different politics. Even in Christendom, there is a variety of forms of worship. “Christmas around the world” forces us to think not only of this diversity but also of what we have in common. And what exactly do we have in common with peoples around the world? It is -- family.

Family – father, mother, siblings, children, cousins, even our househelp – people we take care of on a daily basis, people we actually work for, to send to school, to feed, to clothe, to shelter, to try to make happy and content, to share both pain and blessings, to share personal history with. Some family members we may have lost this year but they are still with us in our hopes for a better future; and on the children, we even pin our genetic future. Wherever and however Christmas is celebrated around the world, it is with family and for a very special family, the family of Jesus Christ.

But families never survive in isolation; there is a greater society that connects us all, that we are obliged to protect, assist and cherish. Immediately embracing us is our SEAFDEC family. Through SEAFDEC, we and our families become part of an advocacy – poverty alleviation and food security. We became part of a greater whole, and we have good reasons to celebrate.

Our SEAFDEC family has, overall, done well in 2009. We continued to reach out to our stakeholders and share technologies and expertise with the international science community through our attendance in important global and regional meetings and through the 22 science journal articles that our researchers have published this year. We reached out through 25 sessions of on-site and on-station training courses and community consultations; we reached out through 24 popular multi-media packages and through our monthly updated website.

In research, we have generated new knowledge with 93 studies conducted this year, most of which are funded by the Philippines, the others funded by our collaborative partners including GOJ to whom we owe our heartfelt thanks and appreciation for their support. Research breakthroughs may not

be earthshaking but they are there, steady and sure. Let me cite an example for those who were not in yesterday’s GOJ-TF4 progress meeting. The Japanese evaluators were particularly happy with the vaccine for viral nervous necrosis. They also said that research is a difficult process but that AQD has done it in the “correct, step-by-step process”.

We also proudly take note that one of our young researchers in stock enhancement was honored in Japan as an outstanding scientist, and another researcher working on seaweeds won the best paper award in basic research that was competitively given by the Philippines. Three more researchers were given recognition by their respective professional societies. Never doubt then that our research quality continues to be at par with the best R&D institutions in the world.

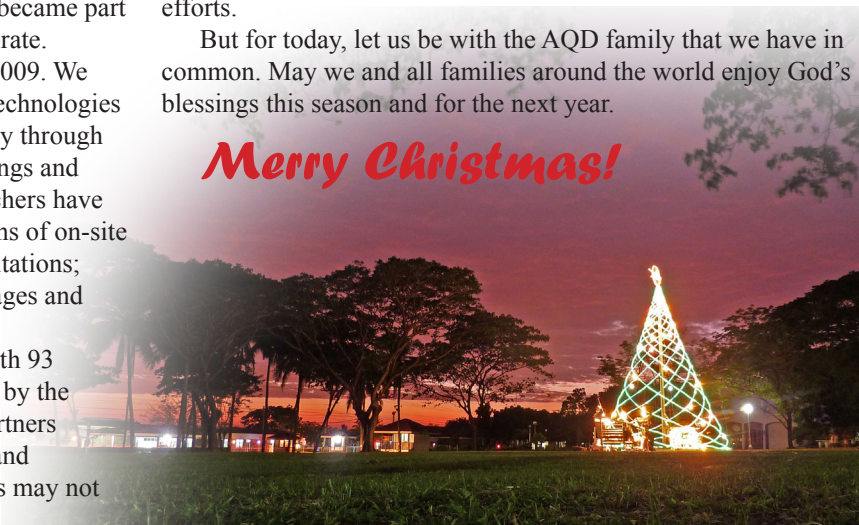
We have done well for our stakeholder family in 2009, but what comes next in 2010?

In March, AQD will organize the RTC or regional technical consultation on aquaculture in Bangkok which will be our input to the 2011 fisheries consultation in Southeast Asia. Back-to-back with that is the GAP meeting or the Good Aquaculture Practices meeting, also in Bangkok. In April, we will organize for FAO, the Food and Agriculture Organization, their expert meeting on feeds and this will be done in Manila. These are big events and everyone’s cooperation is needed.

Next year also, we will continue to improve AQD’s internal management so we can work in better harmony with each other. There are areas of excellence but there are also areas that can be tweaked some more. It is best for all to note that we have strategic plans that must bear fruit in 2012, and that’s only three years from today. Our stakeholder family outside awaits our best efforts.

But for today, let us be with the AQD family that we have in common. May we and all families around the world enjoy God’s blessings this season and for the next year.

Merry Christmas!



Christmas Messages

Dr. Teruo Azuma, Deputy Chief

Happy Christmas! In the last Christmas time, I have not imagined that my new life will start in Philippines a few months later. And until now, I cannot believe that I am really standing here like this, and thus having a fabulous time with you as a member of the AQD family. I'm really happy.

This year we have a very variety of experiences. Not only something glad but also something tough actually happened. Through such various experiences, I think we learned a lot of things, to which we should express our gratitude and/or sympathy more and more.

Now, I'm really wishing to thank God and everyone as well for our happiness because we can celebrate Christmas peacefully like this. Merry Christmas!

Ms. Renee Valencia, AFD OIC

Merry Christmas and Happy New Year to all!!!

Dr. Evelyn Grace Ayson, RD Head

Maligayang Pasko, mga kaibigan!!!!

Sana sa 2010 matupad lahat ang ating inaasam!!!! Kaya huwag habaan ang listahan.....

Mr. Renato Agbayani, TID Head

Nothing can dampen the Filipino spirit in celebrating Christmas. Not "Ondoy" or "Pepeng", not a massacre or hostage-taking. We always look forward to Christmas, a season of joy, love, sharing, and forgiving. As we move on towards 2010, let's bring with us the spirit of hope and unity that we as a nation shall overcome all these trials and challenges and rise as one strong and democratic country. Malipayon nga Paskua sa aton tanan.

Ms. Jocelyn Ladja, on behalf of TVDD

This holiday brings us another hope and wishes for a better new year. A hope for a better technology-oriented production projects that will bring more funds to the Department. A wish for a PINK of HEALTH for SEAFDEC employees because "health is wealth". And a wish for all of us especially TVDD staff to remember that every person is unique, and only GOD Almighty can tell that one person is better than the other!

ENJOY THE HOLIDAY!

Christmas opening salvo

December 1, 2009



AQD started the Christmas season with a lantern parade and the ceremonial lighting of Christmas decorations last December 1. The AFD group bested others in a nativity scene contest with their portrayal of this year's theme "Christmas around the world" (right).



Guimaras milkfish training draws to a close

The Season-long training course on milkfish cage culture (Phase 2) draw to a close last December 10 at the Nueva Valencia Municipal Gymnasium last.

One hundred twenty two fisherfolk from Nueva Valencia Brgys. Igang, Magamay, San Antonio, and Sto. Domingo successfully completed the training course which took off May this year.

Present to award the certificates of training to the participants were Nueva Valencia Mayor Hon. Alex Araneta, Citi Philippines Asst. Vice President for Corporate Affairs Ms. Mai Gacilo Sangalang, Petron Foundation Executive Director Ms. Marilou Erni, Petron Iloilo Depot Manager Mr. Francis Denuna, Petron Foundation staff Ms. Kelly Cedeño, AQD Chief JD Toledo, and TID Head Mr. RF Agbayani.

During the program, two fisherfolk organizations from Brgy. San Antonio also received checks in the amount of P22,208.82 representing their profit shares in their last fish cage production run.

Another round of harvests are expected by February next year from the milkfish cages of Brgys. Igang, Magamay, and Sto Domingo.

Mr. Agbayani meanwhile revealed to the fisherfolk that while the day marked the end of the training course that taught them the aquaculture technology, the *Mariculture livelihood program for Guimaras fisherfolk* will still continue in order to teach them business management skills.

"We will partner with an NGO that will handle training courses on enterprise development as well as some community organizing activities."

Mr. Agbayani adds that a socioeconomist from AQD will also continue to visit the communities to monitor the profitability of the livelihood program.

"We will then look for partners in microfinance and market linkaging to complete the whole process."

Among the many fisherfolks who offered a message of thanks to Petron, Citi, the LGU, and AQD was Mr. Nelson Gonzaga, chairman of the Magamay Small Fisherfolks Association who also expressed his hopes for the future of the project.

"*Kabay pa nga ining programa mangin madinuagon asta sa sunod nga mga henerasyon sang aton mga kabataan. Kag kabay, nga ining programa, indi kita mag-kanya-kanya kundi ini tanan buligan naton para sa kauswagan sang aton asosasyon*" (I hope that this program will remain successful up until the next generation of our children. And I hope that we will not do this project individually, but let us help each other for the progress of our association).



Fisherfolk receive their certificate of training from AQD, Citi, Petron, and Nueva Valencia LGU officials



Brgy. San Antonio fisherfolk organization representatives show their checks. With them is Ms. Mai Sangalang of Citi Philippines



Ms. DH Tormon verifies the results of her socioeconomic surveys with the fisherfolk from the three barangays covered by the *Mariculture livelihood program for Guimaras fisherfolk*



Guests from Petron and Citi visit the three milkfish cages of Brgys. Igang, Magamay, and Sto. Domingo

GOJ-TF funded projects reviewed

The Annual progress meeting on the program under ASEAN-SEAFDEC Consultative group mechanism funded by the Government of Japan Trust Fund in SEAFDEC/AQD was held last December 9-10 at the TID Conference Room.

A total of 32 studies comprising 3 projects were evaluated during the meeting. The three projects were (1) Development of fish disease surveillance system; (2) Development of technologies and human capacity building for sustainable aquaculture; and (3) Stock enhancement for threatened species of international concern.

Present to evaluate the projects were Dr. Motohiko Sano and Dr. Koichi Okuzawa of the Fisheries Research Agency (Japan). Mr. Tadahiro Kawata from the SEAFDEC Secretariat was also present to give his comments.

Proponents participating in the meeting were scientists and research staff from AQD, UP Visayas, the Development of Fisheries Administration (Cambodia), Department of Fisheries (Myanmar), Research Institute for Aquaculture 2 and 3 (Vietnam), Research



Dr. Motohiko Sano (left) and Dr. Koichi Okuzawa (middle) give their feedback regarding the studies. Mr. Tadahiro Kawata (right) gives his comments.

Institute for Freshwater Aquaculture (Indonesia), and Inland Aquatic Animal Health Research Institute (Thailand).

With 2009 being the final year for GOJ-TF 4, Dr. Azuma expressed his gladness because the initial objectives of the program were “well accomplished” through the endeavors of all study leaders, proponents, technical assistants, and all other staff

involved in the activities.

“Considering the valuable contribution of these studies not only to fishers and farmers but also to natural stocks and their environments, results we have obtained through this program should be disseminated more and more, verified in the real fishing area and farming site, and further improved if necessary in the future.”

AQD presents in ISAFE 2009

Training Section Head Ms. KG Corre and Devcom Section Head Ms. MT Castaños represented AQD in the *International symposium*

on aquaculture & fisheries education (ISAFE) which was held last November 27-30 at the Asian Institute of

Technology (AIT) Conference Center in Pathumthani, Thailand.

Ms. Corre and Ms. Castaños, who made the trip with support from AquaFish CRSP and AQD, gave an oral presentation on “Experiential learning and book development: the case of SEAFDEC Aquaculture Department.”

Participating educational institutions except those from Vietnam and China shared a common decline in their

fisheries enrollment. This was attributed to students choosing the more popular IT and business courses. Educators agreed to encourage student exchange programs to enhance their students’ on-the-job-training experience.

ISAFE brings together speakers from all over the world to discuss the status of aquaculture, fisheries education, and how education could support the aquaculture industry.



AQD presents; work @ SEAFDEC meeting; in Kota Kinabalu

B Acosta



Participants of the 32nd Program Committee Meeting held in Kota Kinabalu, Malaysia

Representatives of ASEAN and SEAFDEC Member Countries, regional and international organizations and officials of the SEAFDEC Secretariat and Departments gathered together last November 16-20 in Kota Kinabalu, Malaysia for the *32nd SEAFDEC Program Committee Meeting (PCM)* and *12th Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnerships (FCG-ASSP)*.

AQD Chief Dr. Joebert Toledo, Deputy Chief Dr. Teruo Azuma, RD head Dr. Evelyn Grace Ayson, TID head Mr. Renato Agbayani, and Special Departmental Coordinator Ms. Belen Acosta represented AQD in the meetings.

During the PCM, Dr. Azuma, Dr. Ayson and Mr. Agbayani presented the progress of AQD programs and activities implemented in 2009 as well as the plans for 2010. The Program Committee acknowledged the achievements made by AQD in 2009 and endorsed its planned activities for 2010.

Recognizing the importance of these programs in generating aquaculture technologies that will help address the needs of the Member Countries, the Committee recommended that AQD continue to disseminate important findings and extend technical assistance to the Member Countries, particularly on the following aspects:

- Use of plant meals as alternative to fish meal in aquaculture feeds;
- Seed production, nursery and grow-out techniques for mud crab;
- Seed production techniques for sea bass;
- Seed production and

hatchery techniques for grouper;

- Grow-out and hybridization techniques for abalone;
- Techniques for grow-out culture of milkfish;
- Management protocol to remove the off-flavor in tilapia before harvesting; and
- Techniques for grow-out and mass propagation of seaweeds.

Apart from presentations on the progress and plans of various SEAFDEC programs, the other issues discussed that have direct relevance to AQD's work were the implementation of initiatives of the ASEAN in: (1) the development of the ASEAN integrated food security framework, (2) climate change and its impact on fisheries and aquaculture, (3) the outcomes of the 2nd Regional Advisory Committee Meeting on Fisheries Management, and (4) organization of the *ASEAN-SEAFDEC Conference on sustainable fisheries for food security towards 2020*.

The next PCM and FCG meeting will be held in Thailand sometime in 2010, to be hosted by the SEAFDEC Training Department.

Echo seminar for AAs

AQD administrative assistants Ms. Kimberly Dianne Caumban, Ms. Nira Grace Llona, and Ms. Merlinda Junio gave an echo seminar of the *2009 Summit for secretaries and administrative professionals* they attended last May 13-14, at CSB Hotel, Manila.

The echo seminar was held at the TID Conference room last November 4.

The seminar dwells on topics that could aid administrative professionals to be more efficient in their work. Some of the topics discussed were: (1) mastering of emotions,



(2) basic competencies of secretaries, (3) developing effective business conversation skills, (4) personal excellence thru creative thinking, (5) enhancing working space, (6) how to be glamorous in challenging times, (7) success essentials of effective secretary and administrative professionals, and (8) seven steps forward in career advancement.

Guests @ AQD

FFRC officials

AQD welcomed guests from the Freshwater Fisheries Research Centre (FFRC) of the Chinese Academy of Fishery Sciences (CAFS) last November 24.

The party was composed of FFRC Deputy Director Prof. Ge Xianping, Chief of Research & Development Prof. Zhu Jian, and Chief of External Relations Prof. Min Kuanhong.

The objectives of their visit were to discuss recent research developments at FFRC and AQD; transfer of new research technologies; and formulate strategies on the effective and efficient exchange of knowledge between the two institutions. The FFRC guests were particularly interested in carp culture.

After a courtesy call on AQD Chief Dr. Joebert Toledo, Deputy Chief Dr. Teruo Azuma, and RD head Dr. Evelyn Grace Ayson; the guests also met with RD senior staff Dr. Gilda Lio-Po, Dr. Fe Dolores Estepa, Dr. Mae Catacutan, Dr. Ma. Junemie Hazel Ramos, Ms. Perla Eusebio, and Ms. Didi Baticados at the OC Conference Room.

During the meeting, Prof. Ge remarked that of the 50 national projects being implemented in China, only five were allotted for the fisheries sector, particularly on tilapia, carps, flounders and shellfish.

He also noted that FFRC has been very successful in genetically improving varieties of carp, resulting to improved growth rate, increased disease resistance, and improved flesh qualities.



From left: FFRC's Prof. Zhu Jian, Prof. Ge Xianping, and Prof. Min Kuanhong with AQD Chief Dr. Joebert Toledo

After the meeting, the visitors were given a tour of AQD facilities by Dr. Ayson, Dr. Edgar Amar, Ms. Baticados and Ms. Gwen Anuevo.

FFRC guests also toured BFS and had a meeting with BFS senior staff.

BFS Associate researcher Mr. Manuel Laron presented to the visitors an overview of the Carp research and training activities at AQD prepared by Dr. Ma. Rowena Eguia.

On that same day, the visitors had lunch with BFS head Engr. Emil Aralar and proceeded to BFAR Tanay to meet with Dr. Adelaida Palma who presented some information on carp production in the Philippines.

On the second day of their visit in Manila, BFS associate researcher Mr. Ruel Eguia accompanied them to the Laguna Lake Development Authority where they were briefed on carp aquaculture in Laguna lake.

They also visited the Frabelle Fishing Corporation (FFC) fish processing plant in Navotas which is one of the major companies involved in bighead carp aquaculture in Laguna lake.

Lastly, they had dinner with FFC President Mr. Francis Tiu-Laurel Sr, his daughter Ms. Faye Bernardo, and their staff together with AQD Chief Dr.

Toledo, TID head Mr. Renato Agbayani, Dr. Eguia, Dr. Nerissa Salayo, and Mr. Eguia.

Micronesian administrator

Mr. Donald David, an administrator of the Office of Fisheries and Aquaculture in Micronesia, toured AQD last November 9. Mr. David visited first the hatchery and laboratory facilities in TMS after his courtesy call to TID head Mr. Agbayani.

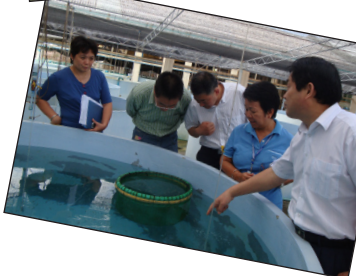
After which, he toured DBS and some private hatcheries within the vicinity. Mr. David was also briefed by Technology verification section head Mr. Rolando Gapasin about DBS projects.

Malacañang staff

Assistant Executive Secretary of Budget and Corporate Affairs Ms. Lynn Moreno (also a panelist of SEAFDEC's budget review) together with other Malacañang staff dropped by TMS last November 11 after attending the Career Executive Service Conference at Sarabia Manor Hotel in Iloilo City.

The visitors inquired about the trainings and other relevant services offered by AQD during their courtesy call to the AQD Chief and the TID head.

They later toured the hatcheries and laboratories in TMS.



ASec Lynn Moreno (3rd from right) and company at the seahorse hatchery and biotech laboratory

Training courses this November

Grouper and pompano seed production



A specialized training course on *grouper and pompano seed production* for Mr. Govindasamy Prabhagar of Singapore was conducted from November 3-14. Lecture topics include broodstock management and spawning, larval rearing, feed formulation and preparation, diseases of marine fish, and disease prevention and control. Lecturers for the training were Dr. Evelyn Grace Ayson, Dr.

Relicardo Coloso, and Dr. Rolando Pakingking.

Mr. Prabhagar also requested half-day training on milkfish deboning where UPV Institute of Fish Processing Technology researcher Ms. Rose Mueda was invited by AQD to conduct the training.

After finishing his training course at TMS, Mr. Prabhagar also attended a special training session on Freshwater aquaculture in BFS.

Algal isolation techniques



Five-day training on *isolation techniques* for algae began in November 9 with two participants from Oversea Feed Company, Cebu namely Ms. Jeanelen Mantos and Ms. Liza Joanne Melendres. Resource persons for the training were Ms. Milagros de la Peña, Ms. Annie Franco, and Ms. Jilla Alcalde.

Fish health management



A month-long training course on *fish health management* for Ms. Salome Shayo of Tanzania also started on November 9.

Topics for this course were disease development in aquaculture, viral diseases, bacterial diseases, fungal diseases, cell culture based detection/titer assay of virus, disease prevention and control, and nutritional diseases.

Dr. Gilda Lio-Po, Dr. Leobert dela Peña, Dr. Celia Pitogo, Dr. Edgar Amar, Dr. Rolando Pakingking Jr, Ms. Eleonor Tendencia, and Ms. Gregoria Pagador were the lecturers.



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Training courses...

Seaweed farming



RT BAUTISTA

The international training course on *seaweed farming* which ran from November 16 to November 23 was attended by seven participants from the Philippines and two participants from Malaysia.



Topics discussed during the training were: (1) overview of the local/global seaweed industry; (2) taxonomy and identification of *Kappaphycus* and *Gracilaria*; (3) seaweed cultivation, disease, crop management and post-harvest; (4) land-based nursery management; (5) economics



of seaweed farming; and (6) preparation of feasibility study.

Resource persons for this training course were Dr. Anicia Hurtado, Ms. Ma. Rovilla Luhan, and Ms. Dianne Hope Tormon.



Training fees for two participants from Malaysia and one from the Philippines were shouldered by the GOJ-TF training fellowship grant.

AQD advisees win in science and engineering fair

AQD advisees bagged the awards for the Life Science Category (both for the individual and team entries) at the *13th Regional science and engineering fair* held last November 19-20 at La Castellana, Negros Occidental.

The award-winning paper for the individual category was by Ms. Genessa Buenafe of Oton National High School-Special Science Class. Her paper was about the assay modification for polymerase

chain reaction (PCR) detection of *mecA* gene in methicillin resistant *Staphylococcus aureus*.

Mr. Vincent Tang and Mr. Von Pinaño of Philippine Science National High School-Western Visayas on the other hand, were the winners for the team category. Their study was on methicillin-resistant *Staphylococcus aureus* among children who have attended day care centers in the district of Mandurriao, Iloilo City.

Mr. Tang and Mr. Pinaño's paper also won in the best oral paper competition (high school category) during the *17th Annual meeting and regional scientific convention of the Philippine Society for Microbiology* held last October 22-23 at Punta Villa, Iloilo City.

AQD scientist Dr. Relicardo Coloso and research assistant Mr. Francis Legario were the winners' supervisors.

Research seminar on mud crabs



AQD scientist Dr. Emilia Quinitio presented a paper about the **Domestication of mud crab *Scylla serrata*** last November 5 at RD audio-visual room. She noted a significant decline in both landings and mean capture size of mud crabs and the need for the development of a husbandry technology for the supply of good quality mud crab

broodstock in captivity.

Scylla serrata samples from northern to southern Philippines (Cagayan, Camarines Norte, Samar, and Surigao) were obtained for genetic diversity analysis and domestication.

The result of the study shows that there is no difference in the genetic variability among the four *S. serrata* sources.

This indicates that *S. serrata* from any of the four regions can be used for domestication and selective breeding programs.

First generation (F1) families were produced from Cagayan (1 family), Camarines Norte (6 families), Samar (8 families), and Surigao (9 families). Two F2 families from Samar have been produced.

AQD scientist participates in International symposium on crabs

AQD scientist Dr. Emilia Qunitio participated in the *International symposium on aquaculture biology, and management of commercially important crabs* (ISABMC) last November 8-12 at Shanghai Ocean University, Shanghai, China.

Dr. Qunitio presented a paper on “Domestication of mud crab *Scylla serrata*” which she co-authored with Dr. Ma. Rowena Eguia, Dr.

Fe Dolores Estepa, Ms. Joana Joy dela Cruz, Mr. Eduard Rodriguez, and Mr. Gaudioso Pates (see seminar note on page 8).

Moreover, Dr. Qunitio also presented a poster on the assessment of microsatellite marker variation in four Philippine wild populations of *Scylla serrata* on Dr. Eguia’s behalf.

The poster authors were Dr. Eguia, Dr. Qunitio,

Dr. M Ikeda, Dr. M Kanno, Prof. A Kijima, and Ms. dela Cruz,

As a scientific committee member of the ISABMC, Dr. Qunitio chaired and co-chaired sessions on *Genetics & breeding* and *hatchery & larval culture* respectively.

Participants also had a field trip to Yangchen lake which is famous for Chinese mitten crab (*Eriocheir sinensis*) production.



Dr. Emilia Qunitio (3rd person seated from left) with other symposium participants



A Chinese mitten crab inside a net trap

AQD specialists conduct prawn training in Brunei

AQD scientist Dr. Ma. Rowena Eguia and associate researcher Mr. Manuel Laron conducted an on-site training on breeding and larval rearing of freshwater prawn *Macrobrachium rosenbergii* in Negara Brunei Darussalam. The training was held at Sg Jambu Fish Farm last October 12-November 14 with 25 participants composed of Brunei Fisheries Department staff and local fisheries vocational school faculty.

Brunei Fisheries Department Director Yang Mulia Hajah Hasnah Ibrahim expressed their need for AQD’s technical assistance on freshwater aquaculture technologies and their plans for the Sg Jambu Fish Farm to become a lead center for aquaculture training, production, and research of freshwater species in Brunei.



Dr. Ma. Rowena Eguia (3rd person seated from right and Mr. Manuel Laron (2nd person seated from right) with training participants and officials of the Fisheries Department



Mr. Manuel Laron (above) lectures on site selection and freshwater prawn hatchery design and Dr. Ma. Rowena Eguia (right) presents the current status of the freshwater prawn industry in Asia during the opening ceremony

Snapshots from the AQD Christmas Program

December 11, 2009
TMS Motorpool Garage



The AQD Chief leads in the gift-giving for indigents from nearby communities



AQD employees exchange gifts



The AFD, RD, TVDD, and TID/MG groups (top to bottom rows) in their Christmas presentations. The AFD group garnered first place in the presentation contest.