

# SEAFDEC AQD Matters

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

## Projects under GOJ Trust Fund V evaluated



**Panel of evaluators** (L-R, first four): Prof. Carlos Baylon of UP Visayas, Dr. Clarissa Marte of ISDA, Dr. Mitsuru Ootake of FRA-Japan, and Dr. Jurgenne Primavera of ZSL



Mr. Akito Sato and Dr. Teruo Azuma, GOJ trust fund managers for SEAFDEC and AQD, respectively

I like SEAFDEC because I am part of it," says Mr. Akito Sato, "but I love SEAFDEC more now after seeing the presentations of AQD researchers on the progress of their studies funded by the Government of Japan Trust Fund (GOJ-TF)." Mr. Sato is the assistant trust fund manager based at the SEAFDEC Secretariat in Bangkok, who, along with four other experts, evaluated project activities implemented by AQD in 2010 under the GOJ-TF program. The *Annual progress meeting* was held 19-21 January 2011 in Tigbauan, Iloilo. "Much has been done even with limited funds."

The presentations in the meeting comprised 32 studies which are centered on the four thematic areas under GOJ-TF, namely: (1) promotion

of sustainable and region-oriented aquaculture practices; (2) resource enhancement of internationally threatened and over-exploited species in Southeast Asia through stock enhancement; (3) accelerating awareness and capacity-building in fish health management in Southeast Asia; and (4) food safety of aquaculture products in Southeast Asia. AQD co-funds these studies.

The other reviewers included Professor Carlos Baylon of the University of the Philippines Visayas, Dr. Clarissa Marte of the Integrated Services for the Development of Aquaculture (ISDA), Dr. Mitsuru Ootake of the Fisheries Research Agency (Japan), and Dr. Jurgenne Primavera of the Zoological Society of London (ZSL). They

collectively noted the need for AQD to intensify technology transfer on good aquaculture practices, considering both the social milieu and environment sustainability. The impact of AQD training and technology transfer activities, they said, should likewise be assessed.

Dr. Teruo Azuma, trust fund manager for AQD projects and AQD's Deputy Chief, expressed his gratitude to all the study leaders, technical assistants, and the rest of AQD staff for their support. He acknowledged the reviewers' remarks, saying that: "We will continue to disseminate more skills and information on our outcomes to fisherfolk and fishfarmers, and also to promote human capacity building activities towards food security and economic prosperity in Southeast Asia."

## GAPs mean food safety

AQD Chief Dr. Joebert Toledo notes that AQD and its partners will continue to work toward sustainable development and responsible stewardship of aquaculture resources through research and the promotion of appropriate aquaculture technologies and information relevant to Southeast Asia



Good aquaculture practices (GAPs) mean production of safe aquaculture products for human consumption. This is the consensus of 17 experts from SEAFDEC member countries who attended the *International seminar on food safety in aquaculture in*

*Southeast Asia* on 22 January in Iloilo, Philippines. The seminar was hosted by AQD and funded by GOJ-TF, and was intended to share new information on food safety in Southeast Asia.

Food safety has become an important issue because most of the food fish that people

are eating already comes from aquaculture; according to FAO, 43% of the world's fish supply in 2008 is from aquaculture. Under fish culture conditions and without GAPs, microbiological contaminants, antibiotic residues, chemical contaminants, and parasites



**Morning session lecturers** (above, L-R): Ms. Consuelo Baltazar (Philippine Bureau of Fisheries & Aquatic Resources), Dr. Bah Piyan Tan (Department of Fisheries - Malaysia), Engr. Nelson Golez (Central Philippine University), Dr. Rolando Pakingking Jr (AQD). They introduced the status of food safety in Southeast Asia, including how far the countries have gone in terms of good aquaculture practices, fish health management, and HACCP



**Afternoon session lecturers** (above right, L-R): Ms. Josette Gonzaga and Ms. Margarita Arnaiz (AQD), Ms. Neo Shan Yu (SEAFDEC Singapore), Ms. Mukda Uttarapong (Department of Fisheries-Thailand), Ms. Simeona Regidor (BFAR), Ms. Kaylin Corre and Dr. Leobert de la Peña (AQD). They discussed the tools in evaluating food safety, policy regulations, and AQD's strategy for training & information on food safety

can become problems. GAPs is an integrated approach to fishfarming that includes, among others, appropriate fish health management and effluent management practices that would no longer necessitate the use of antibiotics and other harmful products.

At AQD, studies on food safety are funded by GOJ-TF and AQD, including (1) the determination of withdrawal periods of antibiotics in shrimps, milkfish and other freshwater fish species; (2) the surveillance of chemical contaminants in aquaculture products like feeds as well as chemical residues in aquaculture systems and cultured fish; (3) investigation

of the situation of antibiotics/chemicals usage and regulations in aquaculture; and (4) establishment of guidelines on the proper usage of antibiotic and chemicals in aquaculture.

AQD's laboratory and research facilities are capable of conducting microbiological, chemical, and PCR-based analyses used in monitoring food safety. AQD's analytical procedures and protocols are verifiable by third-parties; in particular, AQD has passed the Inter-Laboratory Calibration Test (ring test) for the detection of shrimp viruses conducted by the World Organization for Animal Health (OIE) through the University of Arizona (USA).

Governments in Southeast Asia have taken measures to ensure food safety to protect its public. Thailand and the Philippines, for example, are monitoring residues of harmful substances in fish and inspecting aquafarms. Farms that passed the set standards for GAPs are certified as safe sources of food fish.

Participants included representatives from Cambodia (1), Malaysia (1), Myanmar (1), Thailand (2), Singapore (3), and the Philippines (10) and 30 AQD researchers and staff.

The seminar was organized by Dr. RM Coloso (chair), Dr. M Catacutan, Ms. M Arnaiz, Ms. KG Corre (members), and Dr. Azuma (adviser).

## AQD renews agreement with Sagay Marine Reserve

On 26 January, AQD renewed its agreement with PAMB-SMR (Protected Area Management Board for the Sagay Marine Reserve) in Negros Occidental, Philippines. AQD Chief Dr. Joebert Toledo and Deputy Chief & GOJ-TF Manager Dr. Teruo Azuma signed for AQD; while Hon. Congressman Alfredo Marañon

III of Negros Occidental (2nd district) and PAMB-SMR Co-chair & Sagay City Mayor Hon. Leo Rafael Cueva signed for SMR.

The Sagay marine reserve covers 32,000 ha and is a "no take" zone in the Visayan Sea. It has been host to AQD's program on stock enhancement since 2001.

The third, renewed agreement stipulates the collaborative activities and terms of reference for 2011 to 2014. The agreement covers research studies, resource assessment and stock enhancement, all of which aim to determine the status of the resources in the reserve and test the feasibility of stock enhancement interventions. In particular, the studies on (1) *Socioeconomic analysis and identification of strategies for managing released stocks of abalone and sea cucumber in SMR* of Dr. ND Salayo; (2) *Community-managed sandfish (Holothuria scabra) sea ranching and stock release* of Ms. MF Nievaes; (3) *Stock enhancement of the donkey's ear abalone (Haliotis asinina) in SMR* of Dr. Ma. JH Lebata-Ramos; and (4) *Stock*

*enhancement of seahorses (Hippocampus comes and H. barbouri)* of Ms. SM Buen-Ursa are being conducted.

Witnesses to the signing in Sagay City included AQD research head Dr. Evelyn Grace DJ Ayson, AQD stock enhancement co-project leader Dr. Junemie Ramos, Sagay City Environment - Natural Resources Officer (CENRO) & SMR Superintendent Mr. Mayo Antonio Cueva, and Molocaboc Brgy Chair Hon. Antonio Pasaylo.

Meanwhile, the oath-taking of the BFARMC (Barangay Fisheries and Aquatic Resources Management Council) of Molocaboc took place after the signing. BFARMC is now headed by Hon. Carlos Batayola. The formation and election of council officers has been encouraged by and formed part of the activities of AQD's stock enhancement program, and done in collaboration with SMR. The officers were elected by 48 fishers on 23 November 2010 with barangay officers, SMR, Northern Negros State College of Science and Technology and AQD staff as witnesses.

(L-R) Mr Mayo Antonio Cueva, Dr Teruo Azuma, Mayor Leo Rafael Cueva, and Brgy Chair Antonio Pasaylo



The Molocaboc BFARMC together with LGU officials



PHOTOS COURTESY OF TERUO AZUMA

## AQD asked to prioritize activities during PCM

The PCM (or the *Program Committee Meeting*) which assesses the progress of the four SEAFDEC departments yearly, has advised AQD to disseminate the results of four of its high-impact studies.

The 33rd PCM was held 30 November to 4 December 2010 in Bangkok, Thailand back-to-back with the *13th Meeting of the Fisheries Consultative Group of the ASEAN-SEAFDEC Strategic Partnerships (FCG-ASSP)*.

The four areas for proactive dissemination include:

- (1) Plant-based substitutes of fish meal (phyto-protein) for use in commercial feed formulations
- (2) Technologies on giant freshwater prawn, mud crab and seaweeds and their dissemination through training
- (3) Guidelines on the use of antibiotics & chemicals in aquaculture, and capacity building in this area

AQD Chief, Dr. JD Toledo (middle) responds to questions during the discussions on AQD programs. With him are Deputy Chief Dr. Teruo Azuma and training & information head Mr. Renato Agbayani. Also in attendance are research head Dr Evelyn Grace de Jesus-Ayson, technology verification & demonstration head Dr. Ma. Rowena Eguia, and special departmental coordinator Ms. Belen Acosta. The AQD officials presented the progress of AQD's programs



Participants of the 33rd Program Committee Meeting include representatives from SEAFDEC Secretariat and Departments and FAO-RAP

## AQD attends RTC in Thailand

AQD Chief Dr. JD Toledo and Igang station head Mr. Albert Gaitan attended the *ASEAN-SEAFDEC Regional technical consultation (RTC) on international fisheries-related issues* organized by the SEAFDEC Secretariat 18-20 January in Bangkok.

The consultation discussed the sustainable growth of fisheries in Southeast Asia, including a catch certification or catch documentation scheme.

## AQD helps draft plans-of-action for 2012-2020

As part of the preparations for holding the *ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020* in June 2011, the SEAFDEC Secretariat organized the first meeting of a committee that would draft the *Resolution and Plans-of-Action for the Next Decade* from 20 to 21 December 2010 in Samut Prakan, Thailand.

Representatives of the SEAFDEC Secretariat and Departments (AQD, MFRDMD and TD) attended the meeting, with Dr. Somboon Siriraksophon (Policy & Program Coordinator of SEAFDEC Secretariat) as Chair. AQD scientist Dr. Relicardo Coloso and special departmental coordinator Ms. Belen Acosta represented AQD.

The drafting committee consolidated the outcomes of the series of SEAFDEC technical consultations and surveys (regional and national) to come up with the first draft.

- (4) Ways to mitigate the impacts of climate change on aquaculture Concerning the *FCG-ASSP Meeting*, international fisheries-related issues were discussed as well

as the preparations for the ASEAN-SEAFDEC conference scheduled in June 2011 (see box).

AQD will host the next PCM and FCG-ASSP meetings this November.

- B ACOSTA



PHOTO COURTESY OF BACOSTA

# AQD trains fisheries officers in Myanmar on feed and fish health management



AQD conducted two on-site training in Yangon, Myanmar for the staff of the country's Department of Fisheries and members of a fishfarmers' federation.

Conducted from 24 to 26 November was the *Farm-based feed preparation and feeding management* course (53 participants) in Hlaw Gar Fishery Station and from 6 to 8 December was the *Fish health management* course (14 participants) in Aquatic Animal Health and Disease Controlling Section in Tharketa.

Both courses focused on freshwater species, were funded by the Government of Japan –

Trust Fund and were organized by AQD in collaboration with Myanmar DOF. Freshwater species are the primary fishery products in Myanmar as the country has huge inland waters. The cultured species include the grass carp, common carp, mrigal, rohu, climbing perch, walking catfish, snakehead murrel, and snakeskin gourami.

Resource persons for the feed course included AQD

researchers Dr. Mae Catacutan & Dr. Veronica Alava; while DOF Director-General Mr. U Khin Ko Lay, DOF aquaculture head Mr. U Htun Win, DOF's Dr. Kyaw Kyaw and AQD training head Ms. Kaylin Corre arranged and facilitated the course.

Dr. Edgar Amar, Dr. Rolando Pakingking Jr & Ms. Gregoria Pagador on the other hand taught the fish health course.

Dr. Mae Catacutan (3rd from left) explains the feed ingredients used and the preparation process. Participants try their hand at feed formulation



Ms. Gregoria Pagador (left, in black) demonstrates the basic methods for detecting parasites with emphasis on zoonotic parasites. Dr. Rolando Pakingking Jr. (in yellow) gives a lecture on detection of bacterial pathogens



KG CORRE

PHOTOS COURTESY OF G PAGADOR

# AQD conducts mud crab culture seminar in Brunei

AQD scientists Dr. Emilia Qunitio and Dr. Fe Dolores Estepa conducted a three-day seminar on mud crab culture (22-24 November 2010) under the sponsorship of the Department of Fisheries - Brunei Darussalam.

Attended by more than 85 participants, the seminar included lectures on biology, hatchery construction, hatchery & nursery operation and grow-out of mudcrab, and soft-shell crab farming. The participants also visited an indoor soft-shell crab production facility.

The news about AQD's training in Brunei landed in the *Brunei Times* on 23 November 2010 (both print and website, see left) and in the *Borneo Bulletin* (far left) on 26 November



[L-R] Dr. FD Estepa and Dr. ET Qunitio with Dr. Celia Pitogo who previously headed AQD's fish health section and is now the Director of Aquatic Animal Health of the Integrated Aquaculture International (IAI) in Brunei. The AQD scientists also visited the IAI facilities and DOF's shrimp breeding facilities for larval rearing

Participants in the seminar on culture of mud crab at DOF - Brunei



# AQD conducts seaweed farming workshop

A workshop on *Small-scale aquaculture and livelihood ventures* was conducted in Pandan, Antique from 26 to 27 January. It was attended by 30 participants of which 21 were fishers, seven were government employees, and two were Peace Corps Volunteers.

AQD's Mr. Albert Gaitan and Ms. Rovilla Luhan were the resource persons who discussed

cage culture/feeding and seaweed farming, respectively. A practical session on the raft method of seaweed planting and cage preparation was also conducted.

The workshop was sponsored by AQD, AquaFISH CRSP, BFAR, and the local governments of Pandan & Libertad. Also present during the workshop were research head Dr. Evelyn Grace de Jesus

Ayson who is the lead person in the AquaFISH CRSP project in collaboration with North Carolina State University, training head Ms. Kaylin Corre, and technical assistants Mr. Kenneth Tibubos and Ms. Jonalyn Mateo.

Ms. Peg Herring, faculty of the Oregon State University documented the activity on behalf of AquaFISH CRSP.

Ms. Rovilla Luhan (right in black) demonstrates the proper way of tying seaweed seedlings. Mr. Albert Gaitan (far right) gives a lecture on cage culture and feeding



J. MATEO

# AQD attends forums on shellfish, stock enhancement and aquaculture

AQD scientist Dr. Junemie Hazel Leбата-Ramos attended the *13th International conference on shellfish restoration* from 17 to 20 November 2010 in Charleston, South Carolina, USA on a partial grant from Sea Grant Consortium and AQD.

Dr. Ramos presented her study on *Stock enhancement of abalone, Haliotis asinina, in Sagay Marine Reserve: Baseline assessment of wild population and establishment of release strategies.*

AQD research head Dr. Evelyn Grace de Jesus-Ayson along with AQD scientist Dr. Ma. Junemie Hazel Leбата-Ramos and AQD visiting scientists Dr. Satoshi Watanabe and Dr. Jacques Zarate attended the JIRCAS workshop on

*Sustainable stock management and aquaculture technology suitable for Southeast Asia* in Tsukuba, Japan, from 7 to 8 December. Dr. Ayson chaired the workshop's aquaculture session and presented a paper on AQD's R&D initiatives on sandfish. Two papers on sandfish / black tiger shrimp co-culture were presented by Dr. Ramos and Dr. Watanabe, while Dr. Zarate presented his study on the relationship between nutritional condition and digestive enzymes in sandfish. The three AQD studies are being funded by JIRCAS.

AQD scientist Dr. Ma. Lourdes Cuvin-Aralar presented her paper on the *Effect of stocking size and feeding rates on the growth of Macrobrachium rosenbergii*

Dr. Satoshi Watanabe presents his study at the JIRCAS workshop (top). Dr. EDJ Ayson and Dr. JHL Ramos during their site visit to an indoor white shrimp facility in Myoko City (above)



Dr. JHL Ramos (rightmost) with some of the organizers and participants during the informal discussion about the next conference. Dr. Richard DeVoe (3rd from left) is the Executive Director of South Carolina Sea Grant Consortium; Dr. Dorothy Leonard (4th from left) is with the Ocean Equities, and Dr. Elaine Knight (6th from left) is also with the South Carolina consortium



Dr. Aralar (left) with conference convener Dr. Michael New (center) and a participant from Bangladesh (right)

*cultured in lake-based cages at the 2011 Asia Pacific aquaculture conference and Giant prawn 2011* held 17-20 January in Kerala, India. Her co-authors are Ms. Alma Lazartigue and Mr. Emiliano Aralar. The conference focused on the status and production of the giant freshwater prawn, and was attended by more than 700 participants from more than 40 countries.



Mr. S. Alayon poses near one of Juan Luna's masterpieces (*Espana y Filipinas*) at the Lopez Museum & Library

## Seminar on preserving archives

AQD's senior information assistant Mr. Stephen Alayon attended the seminar on *Paper conservation & preservation with observation tour of selected archival institutions* from 16 to 18 November 2010 at the National

Library in Manila. It was organized by the Association of Special Libraries of the Philippines (ASLP) Inc.

Some of the topics discussed were the principles and fundamentals in preservation & conservation, and disaster preparedness/emergency planning.

The participants also toured the National Library, National Archives, National Historical Institute, University of Sto.

Tomas, and Lopez Museum & Library. They were given the opportunity to observe good practices and techniques on mass de-acidification, paper splitting, leaf casting, ink corrosion, freeze-drying, restoration, microfilming, digitization, and other paper conservation and preservation activities.

AQD's membership in ASLP was also renewed.



The participants with resource person Dr. Roque Carballo (seated in the center) and AQD Chief Dr. JD Toledo (seated 6th from left)

## Managing with kindness

**A**QD conducted *Managing with kindness: a seminar on how to be tough and demanding on your people and still be liked by them* on 26 January at AQD's TID Conference Room.

The topics discussed included: (1) the hidden power of kindness, (2) no substitute for hardwork and, (3) promoting kindness in the

workplace. A workshop on identifying the supervisor's management style was also done. Results showed that majority of AQD supervisors obtained the MMMM (medium assertive, medium aggressive, medium accommodating, medium avoidance) style. However, based on the discussion, HLLL (high assertive, low aggressive, low accommodating, and

low avoidance) is the ideal management style.

Dr. Roque Carballo, director of the Institute for Values and Professional Development of Iloilo-based Daguiao Foundation served as the resource speaker.

The seminar was attended by AQD Chief Dr. Joebert Toledo, senior staff, and administrative assistants.

## Retirees

Retirees Mr. Juan Garin Jr (leftmost) and Mr. Leonardo Pineda (rightmost) flanking the administration & finance head Ms. Renee Valencia and AQD Chief Dr. JD Toledo



**T**wo of AQD's Administration & Finance Division's senior staff have retired and are given recognition during the division's Christmas party on 14 December 2010.

Mr. Leonardo Pineda, former Materials and Control Unit Head, turned 60 on 6 November 2010. He had served AQD for 36 years and is now busy with his career as a family man.

Mr. Juan Garin Jr also turned 60 on 9 January 2011 and had given 36 years of loyal service to AQD. Mr. Garin now serves as Head of the Budget & Cashiering Section on a fixed-term contract for one year.

## AQD implements a paperless system

**T**o minimize the excessive use of paper and to ensure efficient processing of documents, AQD has implemented an e-processing scheme in submitting requests for purchases; issuing supplies, materials, & equipment; travel orders; and filing of leave application.

The paperless system has been adopted by AQD since November 2010 and everybody is enjoined to use the AQD webmail to submit the necessary forms.

## Research seminars



**Dr. Heather Koldewey**, Associate Director of Project Seahorse of the Zoological Society of London, UK gave a talk on *Project seahorse: using flagship species for marine conservation* on 18 January.

Due to its charm, seahorses are considered powerful flagship species for marine conservation advocacy, primary because they live in the most critical and highly threatened habitats ~ the coral reefs.

According to Dr. Koldewey, the seahorse population is declining because they are traded for medicine and as live aquarium fishes, with the Philippines as one of the major exporters. She added that their monitoring program in Danajon Reef, an international conservation priority, has proven that the concept of marine sanctuaries can work, and fish species can increase in number, size and diversity. They were also able to implement a collective minimum size limit of 10 cm for seahorses for trading, and this size is now recommended for use in 172 countries.



**Dr. Mitsuru Ototake**, Director of Aquatic Animal Health Division, National Research Institute of Aquaculture (NRIA) of the Fisheries Research Agency (Japan) discussed the *Current status of KHV in Japan: Epidemiology, preventive measures and research results on viral kinetics* on 18 January.

Koi herpes virus (KHV) is considered a new disease but extremely infectious and may cause major mortality in common carp and koi. Dr. Ototake's work showed that some surviving carp are latently infected, may serve as carriers of the virus, and carry the virus in their brain tissues.

### Update on the ASEAN-SEAFDEC drawing contest (Philippines)

A total of 103 pastel and oil paintings from 41 schools has been submitted to AQD for the ASEAN-SEAFDEC drawing contest (Philippines). The entries came from Bukidnon, Samar, Naga City, Binangonan, Laguna, Lipa City, Cagayan de Oro, and Panay / Iloilo. The submission of entries ended on 31 January.

A two-step judging process will be applied from which: (1) the top 20 will be voted by the AQD community & UP Visayas faculty, and (2) the top four entries will be selected from the top 20 by a panel of seven judges.

The top four will each receive a cash prize of P10,000 and will be exhibited at the *ASEAN-SEAFDEC Conference on sustainable fisheries* in Bangkok, Thailand from 13 to 17 June 2011.

AQD staff can view (and vote on) the drawings at FishWorld from 22 February through 4 March 2011.

## Welcome back!



**Dr. Felix Ayson** is the new program leader of the marine fish program. He acquired his PhD in Zoology specializing in Fish Physiology and Endocrinology from the University of Tokyo, Japan and his MSc and BSc (*cum laude*) in Marine Biology from the University of the Philippines Diliman and University of San Carlos, respectively. Before rejoining AQD, he was Chief Technical Adviser on aquaculture for the UN Food & Agriculture Organization in Rome, Italy from 2007 to 2010.

## AQD's new hires



**Dr. Romualdo Balagapo II** is a Senior Technical Assistant assigned at the Fish Health Section. He obtained his degree in Veterinary Medicine at the De La Salle Araneta University, Manila.



**Ms. Yvonne Salvilla** is an Administrative Assistant III assigned at the Office of the Head, Training & Information Division. She obtained her Bachelors degree in Management at the University of the Philippines Visayas, Iloilo City.



**Ms. Marivic Guevara** is assigned as Financial Officer I at Accounting Section. She earned her BS degree in Accountancy *cum laude* from the Central Philippine University, Iloilo City.

# Two weddings and four babies



Richelle and Joseph with son Undrich Jose



Charlemagne and Joan

The AQD community celebrated with two employees who sought church blessings for their marriages.

Ms. Richelle Tupas-Bautista, Information Assistant assigned at the Training Section, and Mr. Joseph Raymund Bautista, got theirs on 22 December 2010 at the St. John of Sahagun Parish Church in Tigbauan, Iloilo

Mr. Charlemagne Recente, Senior Technical Assistant assigned at the sea cucumber project, and Ms. Joan Monteros-Recente remarried on 8 January 2011 at Sto. Tomas de Villanova Parish Church in Alimodian, Iloilo.

*Xeraiah Elijah*, third child of Ms. Rovelyn Laranja and associate researcher Mr. Joseph Leopoldo Laranja, was born on 8 September 2010 in Guimbal, Iloilo



*Raphaela Nicole Barrido*, first child of Ms. Jovelyn and abalone technician Mr. Raffy Barrido, was born on 30 October 2010, also in Guimbal, Iloilo



*Catalina Elena Bayona*, second child of Ms. Lourdes Bayona and Mr. Nestor Bayona (senior technical assistant), was born on 9 November 2010 at the Western Visayas Medical Center, Iloilo City



*Lorenzo Ursua*, third child of associate researcher Ms. Shelah Mae and Mr. Lope Ursua Jr, was born on 31 December 2010 at the Seaman's Hospital, also in Iloilo City



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## Welcome 2011

As a toast to the new year, AQD staff gathered for a night of songs and dances at the TID conference room on 7 January. Let us all cheer for a more productive 2011!



## Tuesday aerobics

Be fit, be active, join AQD's aerobic exercise every Tuesday at 4:00 to 4:45 PM at the RD lobby (if it rains) or at the open field in front of TID (on sunny days)! The first session was on 11 January with fitness instructor Mr. Noel Tibajares.





# Clara, the major major shark

**O**n 25 January, a whaleshark was entrapped inside the Lim-ao fish coral owned by Dr. Antonio Garibay in Parara, Tigbauan, Iloilo. Mr Ariel Galas, the fisher who caught the shark, immediately reported the incident to AQD FishWorld.

The shark measured 18 feet long, six feet diameter, and with a three feet tail length. With the help of the Bantay Dagat of Tigbauan, *Clara*, the major major shark was then released from captivity.



*Have a safe trip back home, Clara!*



### AQD Matters

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