



Inside DOST's design hub to develop standards for safer public transpo..... .n2 DOST awards best technopreneurs in MIMAROPA.......p3 DOST irons out cooperation to boost export strength of PH metals &eng'g sector..... InFocus

DOST-IX director gets GAWAD CES Presidential award

By Thelma Emata Diego S&T Media Service, DOST-IX



Dir. Brenda L. Nazareth-Manzano Regional Director, DOST IX

r. Brenda Nazareth-Manzano, regional Director of the Department of Science and Technology Regional Office No. IX received the 2012 GAWAD CES Presidential Award last July 31, 2013 at the Heroes Hall, Malacañang Palace, Manila.

Dir. Brenda or Brenz to her friends and colleagues joined DOST-IX as Regional Director in 1992. As a leader, she takes the initiative in crafting the brand vision for DOST-IX, including the three provincial offices in Ipil, Dipolog City, and Pagadian City, by setting herself as an example of honesty, discipline, fortitude, openness and commitment to quality work.

The CESB recognized the excellent performance of Dir. Brenz based on the following accomplishments during her leadership in DOST-IX:

Dir. Brenz propelled DOST-IX to embark on the journey of organizational transformation in improving government standards by using international benchmarks. She led DOST-

continued on page 3

DOST Academician is 2013 Ramon Magsaysay awardee

By Angelica A. de Leon S&T Media Service, DOST-STII



In a photo courtesy of the Ramon Magsaysay Award Foundation, National Scientist Ernesto Domingo (extreme right) receives the 2013 Ramon Magsaysay Award together with fellow 2013 Ramon Magsaysay awardees (Left to right) Laxmi Puri and Sunita Danuwar representing Shakti Samuha (Nepal), Gov. Habiba Sarabi (Afghanistan), Lahpai Seng Raw (Myanmar), and Adnan Pandu Praja and Abraham Samad representing Komisi Pemberantasan Korupsi (Indonesia). N. S. Domingo is recognized for his efforts in championing health as a shared moral responsibility of all sectors and neonatal hepatitis vaccination which saved millions of Filipinos. The Ramon Magsaysay Award is an annual recognition "honoring greatness of spirit in selfless service to the people of Asia." (Photo courtesy of www.rmaf.org.ph)

n eminent member of the Philippine scientific community, National Scientist and Academician Ernesto 0. Domingo, is among this year's roster of Ramon Magsaysay awardees. Side-byside with other equally competent Asian achievers, Dr. Domingo received the 2013 Ramon Magsaysay Award during ceremonies held at the Cultural Center of the Philippines last August 31, 2013.

Domingo, an advocate of universal health care and involved with major health research activities, is the latest Filipino to be chosen among Asia's most brilliant and selfless achievers to receive the prestigious award considered by many as Asia's version of the Nobel Prize.

Elected in 1992 to the National Academy of Science and Technology, an advisory body of the Department of Science and Technology, Domingo was chosen by the Ramon Magsaysay Award Foundation (RMAF) for "his exemplary embrace of the social mission of medical science and his profession, his steadfast leadership in pursuing 'health for all' as a shared moral responsibility of all sectors, and his groundbreaking and successful advocacy for neonatal hepatitis vaccination, thereby saving millions of lives in the Philippines."

His numerous achievements and resolve to help find solutions to pressing problems in medicine, are indicative of a sterling career that helped shape the local medical community.

DOST's design hub to develop standards for safer public transpo

By Joy M. Lazcano S&T Media Service, STII



DOST Assistant Secretary and DOST-MIRDC Officer-In-Charge Robert O. Dizon (extreme right) leads the formal signing of the memorandum of agreement between DOST-MIRDC and Customized Local Road Vehicle (CLRV) manufacturers in supporting the latter's initiatives in improving structural designs and safety features of these types of motor vehicles. Through this initiative, DOST-MIRDC hopes to see safer and road worthy jeepneys and tricycles plying the thoroughfares in the future. With Asec Dizon are Mr. Diosdado C. Perillo (from L-R) representing the mini-bus, Domingo D. Basilio for AUV, and Arch. Edgardo S. Sarao for the jeepney sector. (Photo courtesy of Ronald L. Agustin, DOST-MIRDC)

Very soon, public utilities such as jeepneys and tricycles plying the streets will be much safer and roadworthy as the Department of Science and Technology (DOST), through its Metals Industry Research and Development Center (MIRDC), establishes a design hub for customized local road vehicles (CLRVs). Said design hub aims to develop and improve standards and safety features for the country's most common modes of transportation, including Asian utility vehicles (AUV) and mini-buses.

At the design hub, body structures and designs of said vehicles will undergo finite element analysis (FEA)—a computerized method for predicting how a product reacts to real-world forces such as vibration, heat, fluid flow, and other physical effects.Highly used in aeronautics, biomechanics, and automotive industries to improve initial prototype designs, the method provides a computer visualization of how a motor vehicle deforms during a crash. The computerized procedure comes with an accuracy rate comparable to actual crash testing but is less expensive.

According to DOST Assistant Secretary and DOST-MIRDC Officer-In-Charge Robert O. Dizon, "Safety is an aspect of transportation that always ranks first where issues on passenger and comfort are concerned, DOST-MIRDC supports the metals and engineering industries, including the transportation sector and implements projects that touch on such priority areas."

Asec.Dizon also mentioned that based on studies, the public expressed the need to enhance the customized vehicles' structural design, road worthiness and safety features. He further explained that the partnership among said vehicle players will offer the most needed interventions in laying down the foundations to be improved.

A component of the Innovation Center for Motor Vehicle and Parts Development, the FEA project will conduct 3D modeling of CLRVs and testing for one year before coming up with recommendation for the standards.

For this initiative, DOST-MIRDC partners with customized vehicle players represented by Sarao Motors for jeepneys, DMENG Rich Enterprises for Asian Utility Vehicle makers, Cris Sidecar and Welding Shop for tricycle sidecar manufacturers, and Stow Away Liners for mini-buses.

For years, the CLRV backyard industry has provided customized motor vehicles using imported reconditioned surplus engines and chassis for public transportation amidst the inadequate safety features and questionable roadworthiness.However, these types of PUVs often figure in road accidents and environmental hazards due to the absence of well-defined safety standards. DOST academician... from page 1

After earning his degree from the University of the Philippines Manila in 1961, Domingo specialized in internal medicine at the Philippine General Hospital (PGH) with a subspecialty in gastroenterology hepatology at the Case Western Reserve University in Cleveland, Ohio. In 1967, he joined the faculty of the UP Manila (UPM) College of Medicine.

Among his most outstanding scientific contributions are: elucidation of the nature of schistosome granuloma and its role in hepatosplenic disease, the pathophysiology of hepatosplemic Schistosomiasis japonica in humans, the epidemiology and control of Hepatitis B and the pathophysiology, clinical behavior and treatment of hepatocellular carcinoma in Filipinos.

In particular, he organized and led UPM's Liver Study Group in undertaking major studies on viral hepatitis including Hepatitis A, B, C, D, E and G, and developing technologies associated with the disease. Among these arethe rapid epidemiologic assessment for HbeAG positive individuals, production of diagnostic reagents for the testing of Hepatitis B virus carrier individuals, and microparticle agglutination test for Hepatitis.

Findings from his researches, which saw print in a total of 120 original research papers published locally and abroad, became important material for the formulation and implementation of policies and programs by both the private sector and Department of Health, for Hepatitis B immunization and routine Hepatitis B and C screening of blood for transfusion.

Domingo was also instrumental in the creation and implementation of the clinical fellowship program of PGH's clinical departments and the formation of the Clinical Epidemiology Unit. As Chancellor, he also played a major role in the reorganization of UPM in the late 1980s which eventually paved the way for the creation of the Institutes of Socio-Biomedical Research which later became the National Institutes of Health.

In May 2010, Domingo received the Order of National Scientist, the highest award given to a Filipino scientist by the Philippine government.

The rest of the 2013 Ramon Magsaysay awardees are Lahpai Seng Raw from Myanmar, Habiba Sarabi from Afghanistan,Komisi Pemberantasan Korupsi (Corruption Eradication Commission) from Indonesia,and Shakti Samuha ("Power Group") from Nepal.

DOST IX... from page 1

IX on the attainment of the Philippine Quality Award, implementation of Quality Management System (QMS) that turned the DOST-IX to ISO 9001:2008 in 2010, and the ISO/IEC 17025:2000 accreditation of the Regional Standards and Testing Laboratories.

To strengthen technology promotion and commercialization program in the region, Dir. Brenz encouraged more micro, small and medium enterprises (MSMEs)to avail of the Small Enterprise Technology Upgrading Program (SETUP), DOST's nationwide strategy that encourages and assists MSMEs to adopt technology innovations. SETUP's intervention improves the MSMEs' operations, boosting their productivity and competitiveness. Of the 355 MSMEs successfully assisted, the success rate registered upward trend – from 70 percent in 2008 to 98 percent in 2011.

She also pushed for the development and implementation of various cost-efficient IT based systems that expanded DOST-IX's operations to a very time efficient borderless office.Said systems that include mechanisms in saving time, energy, and costs helped in the austerity measures implemented by the office. Should the office manage paperless transactions, this can be translated to a 95 percent savings on paper and ink expenditures.

Dir. Brenda received a plaque of recognition from President Benigno S. Aquino III and a cash prize of PhP100,000.00.

Other GAWAD CES awardees include Undersecretary Alicia D. Bala of the Department of Social Welfare and Development; Provincial Director Grace F. Baluyan of the Department of Trade and Industry-Kalinga; Regional Director Arnel B. Garcia of the Department of Social Welfare and Development-Region II; and OIC Schools Division Superintendent Ramir B. Uytico of the Department of Education - Division of Dumaquete City.

The Committee on Awards, chaired by Presidential Communications Operations Office's (PCOO) Secretary Hon. Herminio B. Coloma, Jr, did the final selection.This year's panel of judges include Ateneo de Manila University's School of Government Associate Dean Mario C. Villaverde, People Management Association of the Philippines' Immediate President Arthur Luis P. Florentin, Manila Bulletin Publishing Company's Assistant Editor-in-Chief Vicente Edgardo C. Bartilad, CESB Board Members Antonio D. Kalaw Jr., David Cabanag and Charito Elegir.

A Presidential Award given annually, GAWAD CES was established by virtue of Executive Order No. 715 on March 28, 2008. The award recognizes members in the Career Executive Service for exemplary performance and significant contributions, particularly in the areas of innovation, information and communication technology, social services, administrative reforms and public policy.

DOST awards best technopreneurs in MIMAROPA

By Luisa S. Lumioan S&T Media Service, DOST-STII

ejano's Bakery, a family business that manufactures traditional arrowroot cookies since 1949, was named as 2013 Best Technopreneur by the Department of Science and Technology MIMAROPA Region (DOST IV-B) for the core category in a ceremony held last August 27 atthe Traders Hotel.

The award was conferred in recognition of technopreneurs who, through science and technology, improved their business productivity, profitability, employment and over all contribution to the regional economy.

Located in Sta. Cruz Marinduque, Rejano's Bakery, is owned and managed by Carmelita "Mita" Rejano-Reyes. Desiring to solve the problem of inconsistent supply of arrowroot flour, the main ingredient of the cookies, Mita first sought the help of the DOST IV through the Provincial S&T Center in Marinduque. The DOST grant enabled her to acquire processing equipment that made the processing of arrowroot flour easier.

Encouraged by the improvements brought about by innovations through DOST, she again asked the agency for assistance, this time under the Small Enterprise Technology Upgrading Program (SETUP) in 2006. SETUP is DOST's strategy to encourage and assist SMEs to adopt technological innovations to improve their operations and thus boost their productivity and competitiveness.

Under the program, the enterprise went through current Good Manufacturing Practice (GMP) Training and Audit, and adopted cleaner production technologies which resulted to significantly reducing the LPG consumption by 20 percent, and improving flour production by a whopping 200 percent at the least.

In 2009, the business received another assistance from SETUP to improve packaging and extend product shelf life which increased the product's marketability. The improved packaging enabled Rejano's arrowroot cookies to penetrate the Metro Manila market and boost its sales by 15 percent.

Aside from being a successful enterprise, Rejanos Bakery was also able to provide livelihood to the farmers that supply raw materials for its products.

Meanwhile, the Sama-sama sa Ikauunlad ng Kinabukasan ng ating Pamumuhay (SIKAP), a community organization in Bicas-Bicas, Buenavista, Marinduque, received the 2013 Best Technopreneur for the non-core category. The award is given to the exceptional community based organization in MIMAROPA that were recipients of upgrading support from DOST.

As its livelihood program, SIKAP is into the production of coco sap sugar, which is touted as a better alternative to sugar because of its lower glycemic index.

SIKAP received its training on coconut sugar production from DOST-Industrial Technology Development Institute. Likewise, the members underwent cGMP Food Safety Management Training. SIKAP was also able to establish a GMP-compliant coconut sugar processing facility and enhanced the product quality through appropriate packaging and labeling materials provided by DOST.

The DOST interventions, paved the way for more livelihood opportunities for the community members. SIKAP provides indirect employment to Tuba gatherers, while housewives in the community were the sugar processors. SIKAP generates an average monthly income of P34, 966.



Carmelita Rejano-Reyes (3rd from left) receives the 2013 Best Technopreneur from DOST IV-B Regional Director Josefina P. Abilay (left) during the awarding ceremonies held at Traders Hotel. With them is Provincial Science and Technology Director Bernardo T. Caringal (right) and entrepreneur and radio personality Dr. Carl E. Balita. *(Photo by Ceajay Valerio, S&T Media Service)*



Carmelita Rejano-Reyes, owner of Rejano's Bakery in Marinduque, expresses her deep gratitude to DOST IV-B, during the awarding ceremony for 2013 Best Technopreneur last August 27, at Traders Hotel Pasay City. (Photo by Ceajay Valerio, S&T Media Service)

DOST irons out cooperation to boost export strength of PH metals & eng'g sector

By Framelia V. Anonas S&T Media Service, DOST-STII

The Department of Science and Technology recently formalized cooperation with several partners to lead a coaching program that will help push the export potential and capability of the country's metals and engineering sector. Partnering with DOST and its lead agency in metals and engineering (M&E) research, the Metals Industry Research and Development Center (MIRDC), are the Philippine Export Confederation (Philexport)National, Philexport Cebu, and the Center for the Promotion of Imports from Developing Countries (CBI).

The cooperation was formalized in the signing of MOU and MOA held September 9 at the Diamond Hotel in Manila. Signatories of the the MOU and MOA were Sec. Mario Montejo and Asst. Secretary Roberto Dizon representing DOST, Sergio Ortiz Luis representing Philexport National, Dr. Venus Genson representing Philexport Cebu, and Ambassador Ank Willems, deputy head of mission of the Embassy of the Kingdom of the Netherlands in the Philippines, representing CBI.

The two-fold cooperation as spelled out in the Memorandum of Understanding and Memorandum of Agreement among said institutions involved assistance to local M&E sector to be able to tap the European and other regional markets in the context of CBI's Metalworking Asia – Philippines program. It also involved the implementation of a business support organization development (BSOD) program to strengthen relevant organizations for sustainable export development activities. The BSOD program consists of several institutional support modules tailored to the specific needs of selected organizations, countries, and sectors. The firms to undergo the coaching program will be geared to join Asian trades first before embarking into European market, according to Ortiz Luis.

The MOA and MOU likewise laid down DOST's role as the provider of technical assistance and counterpart funds, MIRDC as the program manager and oversight body, and Philexport National as the champion of the program. Meanwhile, Philexport Cebu will lead the conduct of audits, and CBI will provide technical assistance, consultancies, and access to European trade fairs and exhibits. The coaching program will also use CBI modules.

Bullish economy is a welcome sign

"We are taking advantage of (the country's) bullish environment to push the agenda of the M&E sector," explained Ortiz Luis, referring to the positive and raving economic reviews on the Philippines which posted a seven percent growth for the last four quarters.

With a forecast of 7.5 percent expansion that matches China, the Philippines is now recognized as the fastest growing economy in Asia. According to Ortiz Luis, such performance will generate renewed economic interest in the country, fastracking infrastructure and reviving the manufacturing sector.

"We have high hopes for MakiBayan initiated by DOST. Through this program, we hope to have access to technologies vital to the M&E sector," said Ortiz Luis. MakiBayan refers to DOST's program called Makina at Teknolohiya para sa Bayan for the metalworks, machinery, and electronics industries, including the academe, to share technologies, expertise, skills, manpower, and facilities among the partners.

Cooperation to prop up metals industry

Meanwhile, DOST Secretary Mario Montejo said that this cooperation aims to support the principal stakeholders of the metals industry. "DOST will come up with science-based solutions to improve the competitiveness of the country's M&E industry," said Sec. Montejo.

"(The cooperation) is a milestone for the DOST, a bold step that I am optimistic about," he said. "The M&E industry has a very wide scope that includes DOST's priority concerns such as disaster management, climate change, traffic, malnutrition, advanced transport systems, advanced manufacturing, and others."

Sec. Montejo enthuses that this cooperative will result in a much-vibrant M&E sector with improved export potential and capability. "This is a proof that technologies developed by Filipinos are definitely world-class," he said.

Ortiz Luis was equally enthusiastic about the DOST's testing facility called ADMATEL, short for Advanced Device and Materials Testing Laboratory, and the upcoming P300 million establishment for the electronics sector, also to be built in the DOST compound in Bicutan, Taguig City.

Said facilities are designed to meet the manufacturing needs of the M&E, electronics, and microelectronics industries, among others, so that they will no longer send their machines abroad for testing. This saves every company thousands of dollars for testing and shipping costs.

Meanwhile, Netherlands Ambassador Willems looks forward to the end of 2017 when the project is expected "to increase export turnover by four million euros and companies will sustain additional growth of five million euros."

InFocus

In a meeting held at the GMA Network Center, DOST Secretary Mario G. Montejo discussed with Ms. Jessica Soho, GMA7 vice president for News and Public Affairs, possible avenues of partnership to make weather news and advisories clearer and more informative for the benefit of the public. Flanking Secretary Montejo are DOST Assistant Secretary Raymund Liboro, PAGASA OIC Vicente Malano (foreground), and Project NOAH's Dr. Carlos Primo David of Floodnet and Dr. Enrico Paringit of the Disaster Risk Exposure and Assessment for Mitigation. (Photo by Alan C. Taule, S&T Media Service)

