

# TECHNO Bulletin

The official newsletter of the Industrial Technology Development Institute published semi-annually

## DOST-ITDI among world's 2016 R&D 100 Finalists



Ms. D. Tañafranca (L), PTD Chief, and Ms. A. Briones (R), CED chief, received the awards.

The DOST-ITDI made it to the list of 2016 R&D 100 Awards, joining the ranks of 100 finalists comprising of world-renowned R&D (research and development) agencies, companies, and universities from around the globe.

*"By becoming an R&D 100 Award Finalist, your institution is now a member of a select R&D community recognized for their excellent contributions to advancing science and technology,"* said Bea Riemschneider, Editorial Director, ABM Science Group, The R&D 100 Awards Committee and R&D Magazine. *"You should be very proud,*

*indeed, of your exemplary R&D achievements and the teams that are responsible for these new products."*

Now on its 54th year, the R&D 100 Awards, also often referred to as the "Oscars of Invention" honors the 100 most innovative technologies and services, e.g., promising new products, processes, materials, or software developed throughout the world and introduced to the market the previous year. Awards are based on each project's technical significance, uniqueness, and usefulness compared to competing technologies or services.

Started in 1963, the R&D 100

Awards honorees are recognized for exemplary accomplishments from across five categories: Analytical/ Test, IT/Electrical, Mechanical Devices/Materials, Process/Prototyping, and Software/Services.

The DOST-ITDI was awarded for its innovative projects under the *Process/Prototyping* category, namely:

1. Pack of Hope RTE Chicken Arroz Caldo as First Stage Disaster/ Relief Food; and,
2. Philippine Mosquito Ovicidal/ Larvicidal (OL) Trap System: DOST Anti-Dengue Device.

This year's R&D 100 Award Winners were presented with their honors at the annual black-tie awards dinner last November 3, 2016 at the Gaylord National Resort and Convention Center in Oxon Hill, Maryland, Washington, D.C.

The finalists were selected by an independent panel of more than 50 judges and represented many of



## DOST-ITDI at 115 celebrates "Noon, Ngayon, Bukas"

*Over a century of pump priming S&T, through untiring efforts of experimentation, research and development to generate technologies that provide solutions to the needs of its various stakeholders the industry in particular, essays ITDI's way of achieving its vision, mission, and mandate.*

The Industrial Technology Development Institute (ITDI), a multi-disciplinary Research and Development Institution (RDI) under the Department of Science and Technology (DOST) celebrated 115 years of business on July 1, 2016 with the theme "Noon,

*Ngayon, Bukas."*

From its humble beginnings in 1901, it has grown into a globally competitive institution providing R&D and technical services to micro, small, and medium scale (MSMEs) industries, government, private sector, and academe.

*"It gives me honor to lead a highly motivated and innovative institution like ITDI. Since its founding in 1901 it*



Director Azanza (R) shares limelight with former directors and guests.

*it continues to thrive and has been ably pushing forward science and technology to where it is now. It*



# ITDI joins DOST-NSTW 2016 nationwide open-door celebration

After many years of celebrating the National Science and Technology Week (NSTW) at the national and regional levels separately, the DOST-NSTW 2016 was a nationwide, simultaneous celebration brandishing the theme “*Juan Science, One Nation.*”

In this fashion ITDI, along with other agencies and regional offices under the DOST system nationwide, held from July 25 to 29 a week-long blast of S&T activities and programs showcasing their many accomplishments and current projects, all aiming to show what S&T can do for the country, and ultimately, for every *Juan*.

ITDI's offering for the event had the following components: a combined modular and interactive exhibit, technology fora, techno-demo, open house, and a clients' exhibit. It carried the subtheme, “*ITDI: Meeting people and industry needs through home-grown science,*” which it

assayed in five major areas, namely:

1. Developing world class products from local resources and materials by means of the DOST Food Innovation Center (FIC) Main and abaca fiber-reinforced composite material used in tricycle driver's roof or ‘*Tryk ni Juan*’;
2. Ensuring safety of foods and processes using a thermal validation system for ready-to-eat (RTE) foods, biological testing, and compact wastewater treatment system for quick service restaurants (QSRs);
3. Making available local alternatives for health and wellness such as natural health supplements and personal care products from turmeric (*Curcuma longa*), and nutritious milk and shake from rice;



4. Responding to calamity challenges through safe, no-prep, no-cook, without drinkable foods like Emergency Food Reserve (EFR) arroz caldo using packaging

## ITDI races for President Duterte's first 100 days

*Hotly racing to the finish, government and private institutions are in a pike as they gather human and material resources in order to answer the challenge of newly elected President Rodrigo Roa Duterte's call for “real change” where shoring of the country's economic and social needs in his first 100 days are of the highest.*

*The President has included these in his top priorities, aside from battling criminality and waging war against illegal drugs.*

At ITDI, where its scientific and technological programs serve as drivers of industry growth, some 400 of its staff members worked to accomplish the following. Albeit it has made significant progress during the period, it continues its efforts past the President's first 100 days.

- **Developed and deployed 30 units of a low-cost, foldable, and modular-type rainwater collection system.** Ideal as stand-by during water-dry months, it can filter and store

1,000 liters for non-potable domestic use. Half of the units were installed in Districts V and VI of Quezon City; 5 units in the DOST Compound and 2 other barangays in Bicutan; 3 each in Nueva Ecija and the Mt. Province; and a unit each in Sta. Cruz, Manila, Pampanga, Misamis Oriental, and Laguna.

- **Produced 82,000 pouches of Ready-to-Eat (RTE) Chicken Arroz Caldo in Retort Pouch for DSWD's stockpile and other users.** A first-stage disaster food, tagged as “Pack of Hope,” it is a no-prep, no-cook food that can be consumed without drinks. With a shelf-life stability of one year, its light weight packaging structure is designed to withstand water submersion and aerial drops at 800 to 1000 feet in flooded or disaster zones. Meanwhile, RTE smoked fish rice meal is now ready for adoption/commercialization.

- **Inaugurated on September 29, 2016 a Fluidized Bed Gasifier System for power generation of Raw Brown Sugar Milling Company, Inc. (RBSMCI) in Pamplona, Negros Oriental.** FBGS is supported by a 50 kg/hr carbonizer, which was developed by the Chemicals and Energy Division of ITDI. This provides the gasifier with biomass fuel in the form of carbonized sugarcane bagasse.
- **Installed 15 units of tricycles with abaca fiber-reinforced composite roof and body for performance field tests.** A low density, low heat conductivity material, abaca's high strength fibers are renewable and environment-friendly. Beneficiaries of the units are members of the tricycle operators and drivers association and private tricycle school services in Bicutan, Taguig City.
- **Developed and market tested a multiple-high barrier packaging**



## TSD eyeing use of techno auditing, business modeling systems for 2017

FMS - flexible, manageable, supportable - are the new buzzwords in technology transfer and commercialization.

The Industrial Technology Development Institute (DOST-ITDI), through its Technological Services Division (TSD-ITDI), recognizes that Philippine businesses need to be all three if it wants to remain relevant to the needs of their rapidly growing industry.

Nevertheless, the reality of increasingly stricter international trade compliancy and regulatory issues as well as tight budgets can force small and medium enterprises in the country out of business.

TSD is thus going bold in 2017. It is looking to implement a paired process -- that of knowing what you

have or technology auditing and where you are going or business modeling -- to ensure greater business success.

With TSD business development section head Lorelle A. Barracol, TSD Chief Nelia Elisa C. Florendo apprised some 30 staff members on those two points in an echo seminar held on October 21, 2016.

A first in the institute, Barracol introduced technology auditing as a method of evaluating its technological capacity/viability, procedures, and needs. By characterizing and assessing ITDI's developed technologies, it can better identify their strong and weak



points.

*"TSD will conduct the technology audit in collaboration with external consultants, the management, and R&D groups. Our aim is to be able to rank ITDI technologies according to their commercial viability and propose action plans from there,"* Barracol added.

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## ‘Tryk ni Juan’ goes green, uses roofs from abaca fiber

*In support of green manufacturing processes, DOST-ITDI (Industrial Technology Development Institute) is promoting use of composite materials for industrial applications using locally abundant natural fibers like abaca.*

Accordingly, Dr. Marissa A. Paglicawan, project leader at the Materials Science Division, started development in 2010 of an abaca fiber-reinforced composite for use in fabrication of tricycle driver's roof and sidecar. Abaca fibers and resin were combined to form the composites.



*"The project is a collaborative research activity between ITDI and the Korea Institute of Materials Science - Association of Southeast Asian Nation (KIMS-ASEAN)," explained Paglicawan. She added, "Composite materials are made from two or more constituent materials such that, when combined, produce a material with harmonized characteristics suitable for structural applications. Using abaca not only "greens" structural parts manufacturing in automotive and other industries, it also explores new uses of other natural fibers."*

The project capitalizes on the abundance of abaca, which is both cheap and environment-friendly. Endemic in the Philippines, it is considered as one of the strongest sources of natural fibers that is more resistant to salt water decomposition than most vegetable fibers.

### Industry switches to natural fiber

Because fibers are stronger and stiffer, environment-friendly, and sustainable, these are now considered an important class of materials. Even more so because properties of composites can be tailor-made depending on their purpose.

Recently, abaca fiber has been found to be good energy-saving replacement for glass fibers in automobiles. Mercedes Benz has been using abaca fiber - reinforced polypropylene composites instead of glass fiber to reduce weight of automotive parts. On the other hand, Daimler Chrysler used them as under floor protection in passenger cars.

In a 2011 study, Girones et al. claimed that *"the use of abaca fiber instead of glass fiber reduces the weight of automotive parts, bringing about 60 percent savings in energy (use) and (thus) reducing CO<sub>2</sub> emissions."* Such green attributes are helping the industry keep air clean while reducing production costs.

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## DOST-ITDI among... *from p. 1*

industry's leading R&D companies and national laboratories, as well as, many newcomers to the R&D 100 Awards.

### About the R&D 100 Awards

Popularly known as the "Oscars of Invention," the R&D 100 Awards identify and celebrate the top technology products of the year throughout the globe. Widely recognized in industry, government, and academia as a mark of excellence for the most innovative ideas of the year, the R&D 100 Awards is the only industry-wide competition rewarding the practical applications of science.

Since 1963, the R&D 100 Awards program has identified revolutionary technologies newly introduced to the market. Past winners have included sophisticated testing equipment, innovative new materials,

chemistry breakthroughs, biomedical products, consumer items, and high-energy physics spanning industry, academia, and government-sponsored research.

Aside from the five categories - Analytical/Test, IT/Electrical, Mechanical Devices/Materials, Process/Prototyping, And Software/Services; the R&D 100 Awards have recognized four new Special Recognition categories for the last two years, namely: Market Disruptor Services, Market Disruptor Products, Corporate Social Responsibility, and Green Tech.

### About OL-Trap/ Pack of Hope RTE

Developed by ITDI's Chemicals and Energy Division (CED), OL-Trap is an anti-dengue device that helps control the population of the *Aedes*

mosquitoes through its ovicidal and larvicidal effect that prevents the next generation of mosquitoes from developing to the adult stage.

It has been successfully commercialized and rolled out nationwide in households and public schools. A dengue vector surveillance website ([dengue.ph](http://dengue.ph)) was also established to provide information on mosquito density data as well as warning alerts, health advisory, and actions to be undertaken.

Meanwhile, ITDI's Packaging Technology Division (PTD) developed the Pack of Hope Ready-to-Eat (RTE) Chicken Arroz Caldo as a disaster mitigation/relief food that can be immediately made available to hungry disaster/calamity survivors and providers of services (medical, military personnel, and volunteer groups) within the next 48 hours.

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## DOST-ITDI at... *from p. 1*

*is because we believe in our resources' capability - our employees, scientists, technical experts backed by state-of-the-art facilities that enable us to strengthen and sustain our business and services,"* said Dr. Maria Patricia V. Azanza, ITDI Director.

Aside from three newly developed technologies, i.e., food product prototyping from local resources, ready-to-eat disaster relief food, and abaca fiber-reinforced composite material for tricycle roofs, ITDI has also established seven laboratory testing facilities that now cater to the various needs of its clientele, giving results that are reliable and conforming to industry and international standards.

Among these are:

1. Biological testing laboratories for bioassay and other similar tests;
2. Metrology in Chemistry for analysis of trace metals;
3. NanoLab for material development at the nano level;
4. Packaging Technology Laboratory for packaging design and development;
5. ADMATEL or Advanced Device and Materials Testing Laboratory for materials testing and failure analysis;

6. National Metrology Laboratory for measurements and calibration. NML is accredited by Deutsche Akkreditierungsstelle or DAkkS of the Federal Republic of Germany to perform calibrations in the fields of mass, temperature, pressure, and electricity; and
7. Food Innovation Center (FIC) Main. Established this year, it uses four DOST-developed food processing machines to spray dry, freeze dry, vacuum fry, and pasteurize/sterilize various food products using locally grown resources. FIC Main provides also product development services through training to local food processors nationwide.

Now 115 years, many say that steering the wheels of ITDI's successes are its employees, whose different fields of expertise make for a powerful and creative tool in developing and producing relevant and useful technologies for every *Juan*.

Through time, ITDI has become one of DOST's critical partners in achieving improved productivity for local industries. Borrowing the words of former DOST Secretary Mario Go Montejo, "*We were able to make Filipino technology work.*"

### Riding 'Tryk ni Juan'

As the first of three, foremost, new technologies, ITDI rode "*Tryk ni Juan*" on July 1 to capture the interest of many. A field-testing activity, the '*tryk*' uses an abaca fiber-reinforced composite as roofing material. These were installed in 15 tricycle units owned by project partner-members of the General Santos Street Lower/Upper Bicutan Taguig Tricycle Operators-Drivers Association, Inc. (GSS-LUBTTODAI).

A press conference followed the '*tryk*' launching ceremony. In the afternoon, a seminar and stakeholders' forum on abaca fiber composite and industrial green composite applications were held.

The anniversary celebration continued on July 4 at the Philippine Trade and Training Center where former NEDA Director-General Dr. Cielito F. Habito shared his perspective on the status of Philippine industries.

A reunion of sorts, several former ITDI Directors recollected on past achievements of the institute that made waves at the time while newly sworn in DOST Secretary Prof. Fortunato dela Pena also came to greet ITDI. (*DDGotis*)



# Andanar, NGAs strengthen govt communication

## ITDI to join natl communication plan creation

Presidential Communications Office Secretary Martin M. Andanar recently bared plans of his office to strengthen government communications between and among national government agencies (NGAs) and their local media counterparts in order to reach more people through a National Communications Policy that will institutionalize information flow from the President and his Cabinet.

Bared during an August meeting in Davao City, Andanar believes that this strategy can break communication blocks at the grassroots level thus enabling easy access to information about government programs and policies.

Along this line, Andanar will be tapping into the Philippine Information

Agency (PIA) and its network of information officers from NGAs as well as the local media to communicate at the community level.

In support, PCO's PIA Director General Harold E. Clavite and Deputy Director General Gregorio Angelo C. Villar re-echoed the plan before 70 media members from CALABARZON and NCR including other guests in the launch of "*Kapihan sa PIA*" held last October 14, 2016 at the Splash Mountain Hotel & Resort, Los Baños, Laguna.

He said that preliminary activities to organize members of the Development Communication Network (DevComNet), which consists of information officers from NGAs and LGUs are moving. PIA will tap the group in the creation

of a national communication plan for the Philippines.

Furthermore, he encouraged *Kapihan* guests to form part of the group when it formally meets in a national conference set for November 2016.

Violeta B. Conoza, head of the Information and Documentation Section (IDS-TSD) at the Industrial Technology and Development Institute (ITDI), agreeing with DG Clavite, listed the many benefits that a national communication plan will provide NGAs like ITDI and local media counterparts.

On the other hand, DDG Villar, referring to media's difficulty in accessing information from LGUs and NGAs, considers a national communication plan as a way to



## ITDI displays energy tech in Powertrends 2016



The Industrial Technology Development Institute (DOST-ITDI), through its Chemicals and Energy Division (CED), together with the Environment and Biotechnology Division (EBD), joined the 11th International Exhibition and Conference on Directions for Energy, Power, and Electricity held on September 21-23, 2016 at the SMX Convention Center, Pasay City where the Department of Energy (DOE) presented new opportunities within the energy sector.

Initiated since 1995, DOE hosted PowerTrends 2016 in coordination with Leverage International (Consultants) Inc. Considered by the energy sector as the most significant power and energy event in the Philippines, this year the Independent Power Producers Forum (IPPF) endorsed and incorporated two major events within PowerTrends. A non-profit organization based in Hong Kong, IPPF consists of senior executives and decision makers from 36 power generation and related firms in Asia, namely, Akin Gump Strauss Hauer & Feld, Bloomberg LP, and the Lautau Group, among others.

The first event Energy Expo, featured new, renewable, and alternative sources of energy, green energy, and energy-efficient technologies. While the second, Electech, presented

the latest technologies for power, energy, electrical, electronics, and lighting for commerce, infrastructure, and homes.

CED and EBD participated in the Energy Expo event and showed the following:

- Continuous-flow reactor for commercial production of biodiesel using spent vegetable oil;
- Fluidized Bed Gasification System (FBGS), a 100 kW/ hour capacity unit for gasification of biomass such as sugarcane bagasse and sugarcane trash;
- CO<sub>2</sub> capture system using molecular sieve membrane technology for combustion systems; and
- Anaerobic sequencing batch reactor (ASBR) for biogas production.

Furthermore, the Federal Ministry for Economic Affairs and Energy of Germany also joined the event and featured a German pavilion. Other participants include the UK Trade and Investment, Renewable Energy Association of the Philippines, Energy Efficiency Practitioners Association of the Philippines, and GPCCI.

In total, IPPF organized three power events in August 2016 in Hong Kong, Myanmar, and the US. For September, it organized 15 in South Korea (5), China (3), Singapore (3), the Philippines (2), Indonesia (1), and Myanmar (1). In October, it opened 5 events in Singapore (4) and the Russian Federation (1). November saw 9 events in Myanmar (2), France (1), Hong Kong (1), Indonesia (1), Iran (1), Lao PDR (1), Malaysia (1), and Thailand (1). Two events in Iran and the Philippines closed it for December 2016.

IPPF will open January 2017 with two events again in the Philippines and the United Arab Emirates (UAE). March will see five events in Hong Kong, India, Macau, the Philippines, and UAE. Lastly, Germany will open one in June while South Africa will follow in July. (*AMGuevarra*)

## ITDI races... *from p. 2*

**system for vacuum packed/frozen durian.** A collaboration with D' Farmers Market and Rosario Foods in Davao, initial market test results in Davao and Manila indicated high acceptability and no odor migration.

- **Made available testing services for the detection and analysis of packaging-related contaminants used in food contact materials.** New testing services include those for detection of Bisphenol A (BPA) in coated canned foods, acetaldehyde in thermally
- **Developed a wastewater treatment system for quick service restaurants (QSRs).** The system was installed in October 2016 and is being pilot tested in cooperation with the Batangas Dairy Cooperative (BADACO), a milk processing facility.
- **Developed and launched four new FIC products.** The DOST XI Food Innovation Center (FIC) conducted several food taste-tests to determine acceptability of four new fish, vegetable, and meat products, as well as, to standardize their preparation methods using newly delivered water retort units. In addition, it was able to establish the process schedule for tuna congee, *guinisang monggo*, and two variants using crocodile meat as base product. These were launched during the DOST Technology Transfer Day-Mindanao Cluster in December 2016 in Davao City. (DDGotis)

## TSD eyeing... *from p. 3*

On the other hand, Florendo's work on drafting a business model for the institute's technologies is substantiating the two-point process for business success.

She explained, *"By understanding customers and their value, ITDI can help businesses innovate and identify new opportunities that may arise from adopted technologies. Both can then test their target market assumptions."*

Barracol and Cristina B. Candelaria, also of TSD, are two of DOST-PCIEERD's network of 17 technology transfer officers who are working on a technology commercialization capacity-building program for DOST. The program is in cooperation with the Global Commercialization Group (GCG) of the Innovation -

Creativity - Capital (IC<sup>2</sup>) Institute of the University of Texas at Austin.

Baracol, Candelaria, and representatives of nine other DOST line agencies, namely, FNRI, FPRDI, PCAARRD, PCHRD, PCIEERD, PNRI, PTRI, MIRDC, and TAPI compose the program.

Meanwhile, Florendo is one of 15 Filipino scientists and researchers, who participated this year in the Leadership In Innovation Fellowship (LIF), a UK-PH program that translates innovative ideas into viable business enterprises.

She joined a ten-day master classes at the Royal Academy of Engineering (RAEng) in London, England, including a six-month Landing Program at the Asian Institute of Management (AIM) in Manila, Philippines. (AMQuevarra)

## 'Tryk ni Juan'... *from p. 3*

In 2014, the Philippine Fiber Industry Development Authority reported that the country supplied 87 percent of world demand for abaca valued at \$511.33 million. It added, *"The demand is still greater than the supply."*

However, with ITDI now introducing to the three-wheeled vehicle industry lower production costs using fiber-reinforced composites, industry members are predicting bigger prospects as industrial applications edge in traditional uses like cordage making, handicrafts manufacturing, and fashion products, among others.

A farm hectare of 176,594 planted to abaca may need to be boosted as usage of stainless steel, galvanized iron, and polypropylene is replaced by fiber composite.

An excellent substitute roofing material for driver's seat and sidecar of tricycles, ITDI and KIMS further explored use of different abaca treatments, surface modification techniques, and composite production technologies like vacuum-assisted resin transfer molding.

Finally, in June 2015, ITDI, Gnostek Inc., and the General Santos Street Lower/Upper Bicutan Taguig Tricycle Operators-Drivers Association, Inc. (GSS-LUBTTODAI)



signed a memorandum of agreement. The accord assigned Gnostek Inc. as fabricator of the abaca fiber-reinforced composite for tricycle driver's roofs. GSS-LUBTTODAI members serve as recipients/participants in the performance/field-tests.

All further agreed to fabricate 15 roof prototypes and install these on participating motorized units. Actual road stress tests ended in December 2016.

While not only adding greater value to abaca, this innovation also provides opportunities to explore and maximize use of other locally abundant natural fibers for composite fabrication to revitalize the industry. (VBConoza with reports from CSEmolaga/DDGotis)

## ITDI joins... *from p. 2*

technology designed to withstand aerial distribution at 800-1000 feet in flooded or disaster zones; and

5. Building international traceability for globally competitive industries through the National Metrology Laboratory (NML).

Other ITDI national laboratories like the NanoLab, ADMATEL, and Standard & Testing were similarly featured.

On opening day of the celebration at the Bicutan Science Community, product launching of a new automotive material using abaca-reinforced composite for tricycle driver's roof and sidecar and a package of newly-developed food prototypes from FIC Main acquainted all who came at ITDI.

Dr. Maria Patricia V. Azanza, ITDI Director, presented the FIC Main products and Dr. Blessie Basilia, Chief of the Material Science Division, the 'Tryk ni Juan.' Media friends who graced the event had their share of product tasting, a 'tryk' ride,

and an exchange with the experts at the press conference that followed.

DOSTv, The Filipino Weather Channel covered the event. Popular DOSTv character 'Joona' taped an exclusive interview with FIC Main's food technologists and 'Tryk ni Juan' researchers.

Meanwhile, ITDI visitors at its exhibition area were treated to digicasts to make learning about ITDI more fun. Contained in an interactive multi-touch table, the virtual presentation is also multi-sensory and allows one glimpses of the ITDI story at a click or tap of a finger. It allows as many as ten users simultaneous access "to freely navigate and experience information within interchangeable, dimensional, interdisciplinary, and multimedia contexts."

Meanwhile, industry friends and guests attended fora conducted daily during the week, which focused on metrology, cacao and cocoa industry, energy audit, wastewater treatment, RTE arroz caldo, and thermal process validation in canned foods.

Laboratories were also opened to guests including technology demonstrations on personal care products.

Adjudged by visitors and guests as a success, ITDI-NSTW 2016 competed with about 50 other events held around the Bicutan Science Community for visitors' turnout. Additionally, they were asked to rate the events using six categories, namely, Like, Love, Haha, Yay, Wow, and Sad. Nearly 40% said they loved the events while 27% said they liked the events.

ITDI accomplished double its target with total turnout of 4,584. This consisted of 64% participation from academe, 25% from government, 8.50% from private/ business sector, 2% from the general public, and 0.50% from NGOs. Of the event components, the exhibits and open house received nearly 4,000 visitors, 496 attended the five fora, while 113 participated in the technology demonstrations. *(VBConoza with reports from AMGuevarra)*

## DOST-ITDI among... *from p. 4*

It is categorized as a first-stage-disaster-food, which means, ready-to-eat, without preparation and drinkables. The product is conveniently packed in an easy-open-stand-up retort pouch and can be directly consumed from the package. The structure of the retort pouch and transport packaging was tailored to withstand the protocols of the Department of Social

Welfare and Development (DSWD) and Local Government Units (LGUs), which include distribution by land, sea, and aerial drop.

The product had also undergone field testing and validation studies in collaboration with them and had been successfully commercialized. *(VBConoza)*

## Andanar... *from p. 5*

formalize, organize, expand, and modernize linkage among media members, public information officers in LGUs, and information officers in NGAs.

Similarly, IDS-TSD staff Adelia M. Guevarra suggested inclusion of a skills certification system across the country to certify interested media practitioners as a way to professionalize their contribution. She added this would address the "... skills gap challenge seen among non-communication graduates but are serving as IOs in LGUs and even within the media group" as voiced by Richard Orlain, a radio station owner.

Meanwhile, Raquel Pabalate, a program host at Radio DZJV 1458 kHz, and several others still complained of the lack of access to training and support to logistical needs of media practitioners.

Orlain further said that, "... financial viability of local media channels is being increasingly challenged by the

use of social media in political campaigns or public engagements instead of traditional media" and asked that measures addressing the issue be tackled during the communication plan conference.

DDG Villar rejoined that, "It is crucial that social media be used as an important tool to disseminate news and information to the public and not merely as a venue to promote selfish interests and to boast of private information."

In conclusion, DG Clavite said that "Kapihan sa PIA" in CALABARZON is his first communication venture that showed the many differing interests of communication people in the field.

PIA directly serves the Presidency and the Executive Branch at the national, regional, and provincial levels through information gathering, production and dissemination, and capacity building, among others. *(AMGuevarra)*



## NELIA ELISA C. FLORENDO: Making waves in frontline techno-transfer initiatives through LIF 2



*"I hoped to bring a partnership between the Philippines and the United Kingdom. That was what I was thinking while slightly shivering in trepidation and anticipation of what was going to happen during the next 10 days,"* Nelia Elisa C. Florendo, Technological Services Division Chief recounted upon arriving.

### The Woman with a View

Lady-like but tough, well-dressed from the crown of her head down to the tips of her pedicured toes; these are what usually describe woman bosses. Albeit exhibiting those obvious traits, there are others, which set Ma'am Nelia apart.

Her voice is strong and firm and when she taps the table with her palm especially when meetings get noisy, you will know she is different. Some believe that the "difference" lies in her being motherly. Hmmm ... and what is a mother figure doing in the Royal Academy of Engineering (RAE) then?

Together with 14 other Filipino scientists and researchers, she participated in this year's Leadership In Innovation Fellowship 2 (LIF 2) Program held in London, England, a UK-PH program that translates innovative ideas into viable business enterprises; the Philippines was joined by representatives from Thailand, Columbia, and Vietnam.

The Department of Science and Technology in partnership with the British Embassy through RAE are implementing the LIF Program under the auspices of UK's Newton Fund Program.

Ma'am Nelia remembered that, *"My 10 days last February 2016 were replete with training and mentoring sessions led by prestigious Fellows of the Academy. I must admit that I was just a little bit awestruck to be with RAE's expert trainers. However, I needed to summon my inner strength. I did not want the Philippines and ITDI to look bad."*

She added that they had to develop a business model as well as deliver a competitive pitch of their product or service for commercialization before a panel of experts. *"RAE Fellows taught us how to pitch or sell our chosen technology. When my time came I pitched on the Food Innovation Center as a service facility that assists target groups to develop/innovate food products and improve processes to add value to local resources."*

While most business schools in the Philippines do teach the many ways on how to "model" and pitch one's business, the LIF Program not only brings leading technology entrepreneurs from Newton Fund partner countries to the UK for an intensive training course on innovation, it also provides opportunity to build business-to-business networks with similar enterprises in the UK.

Through Ma'am Nelia's engagement in the Program, her experiential learnings of start-up entrepreneurs and business firms in London will thus pave the way for frontline techno-transfer initiatives to begin at ITDI.

She said that, *"It would be a great challenge to channel our training sessions on business modeling and customer markets to help our researchers be able to relate their innovations to the business world - to equip them in analyzing and establishing their market position in the event of commercialization."*

Now on its second year and with her as one of its second batch of participants, LIF 2 included a three-day Launching Program at the Asian Institute of Management (AIM) in Manila where she attended also a six-month certificate course after her UK training. Here, in-depth sessions focused on operations and finance, valuation, negotiation, and marketing/ sales communication, among others.

Armed with these new learnings, Ma'am Nelia is confident that *"LIF 2, being a whole new level of training, will enable us at TSD to arm our researchers and technology transfer officers with the right knowledge and tools to pursue frontline technology transfer. Our researchers and scientists need to realize that they should be at the fore of commercializing their technologies, for them to serve as enablers of new ideas/ strategies for their customer/market."* (AMGuevarra)

### Our Business Is Industry



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