

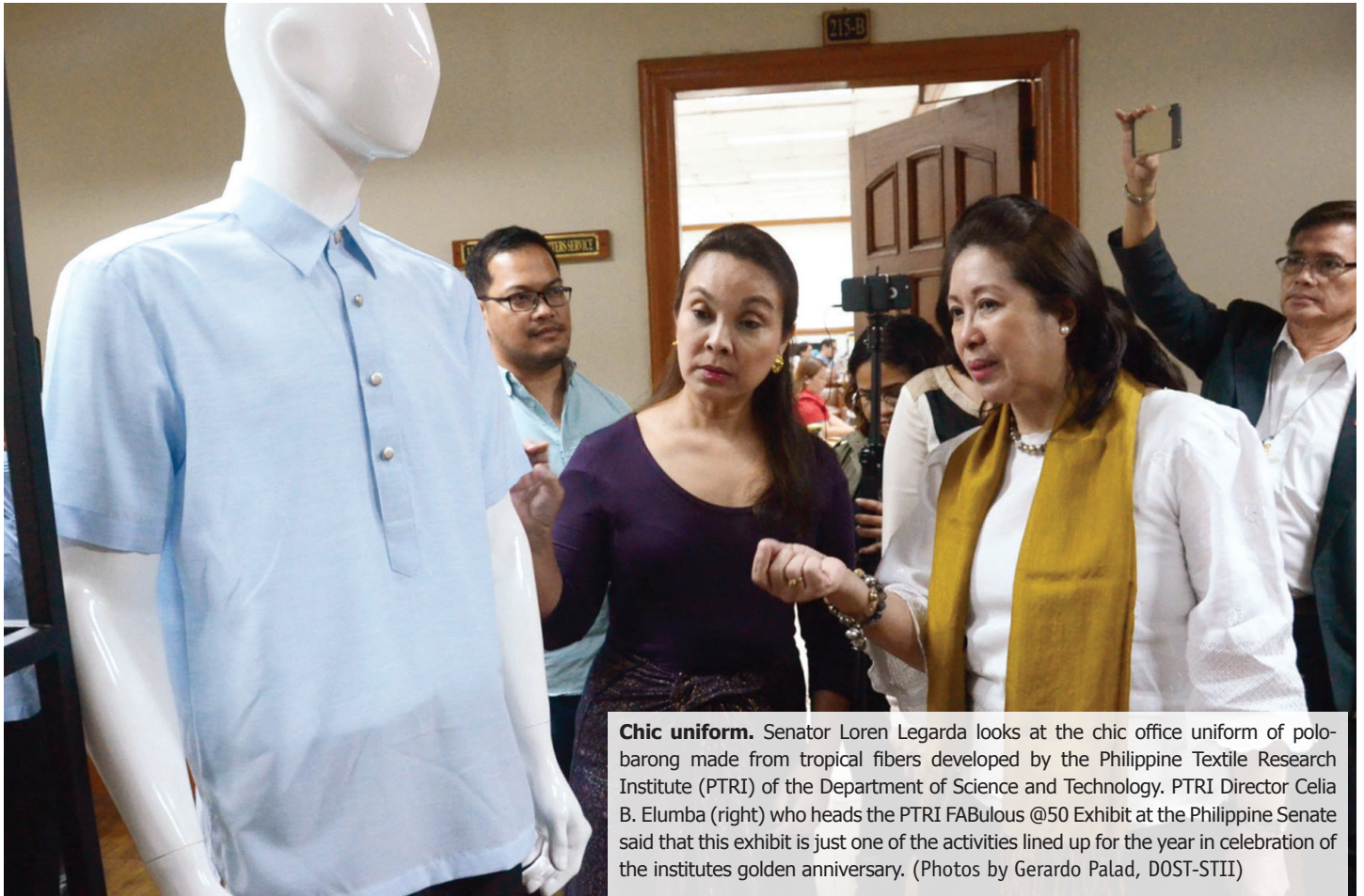
10 years of bringing
S&T good news

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Sen. Legarda keeps up support to DOST's local tropical fibers

By Rodolfo P. De Guzman, DOST-STII



Chic uniform. Senator Loren Legarda looks at the chic office uniform of polo-barong made from tropical fibers developed by the Philippine Textile Research Institute (PTRI) of the Department of Science and Technology. PTRI Director Celia B. Elumba (right) who heads the PTRI FABulous @50 Exhibit at the Philippine Senate said that this exhibit is just one of the activities lined up for the year in celebration of the institutes golden anniversary. (Photos by Gerardo Palad, DOST-STII)

A known advocate of ethnic textile and clothing, Senator Loren Legarda recently congratulated the Philippine Textile Research Institute (PTRI) of the Department of Science and Technology (DOST) for the Institute's untiring work in developing new technologies and promoting the use of natural fibers for clothing and fashion accessories.

Legarda witnessed the fashion creations of different well-known designers in the country as they showed off their unique designs using

local natural fibers during the 50th anniversary celebration of DOST-PTRI called FABulous @50, TELA Pilipinas: Beyond Gold held at the Philippine Senate, GSIS Building in Pasay City.

Senator Legarda said that using natural fibers empowers indigenous peoples communities to put their traditional arts and crafts like the *ikat*, the *t'nalak*, *abel iloko*, the *piña*, and others in the mainstream textile industry.

"We are very grateful for all the support that Senator Legarda has been giving PTRI especially

in promoting local textile and in particular the passage of the law on mandating the use of Philippine tropical fibers as government office uniforms. Now, on our 50th year anniversary we are pushing for the promotion of natural fibers and natural dyes from non-traditional sources that are abundant in the countryside," stated PTRI Director Celia B. Elumba.

Exhibited were works of designers who have been PTRI's partner-collaborators for the past years. One of these is Jean Avellanosa-

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Antiqueño MSMEs receive DOST technical assistance

By Liz M. Lamazan, DOST VI



DOST Secretary Fortunato de la Peña (middle) leads the granting of technical assistance to MSMEs in Antique. Joining him are DOST VI Regional Director Rowen Gelonga (sixth from left) and DOST-Philippine Textile Research Institute Director Celia Elumba (far left). (DOSTVI-LMLamazan)

San Jose, Antique - The Department of Science and Technology Regional Office VI through the Antique Provincial Science and Technology Center granted technical assistance to six micro small and medium enterprises (MSMEs) with under its Small Enterprise Technology Upgrading Program (SETUP).

Among the beneficiaries were CMYK Test Print Advertising and Supply, Process Foundation Panay, Inc., MEEEM-JON Malunggay Products, Jomil 21 Peking Duck Poultry Farm, Servano Bakeshop, and Middle East Furniture Manufacturer.

DOST's banner program SETUP seeks to address technological constraints through technical assistance for the upgrading of

production facilities, technology trainings, and consultancy services.

This package of S&T interventions is geared towards improving product quality, production efficiency, good manufacturing practices, and generating employment.

Under this program, the beneficiaries repay the total cost of the financial assistance to the government for three years without interest.

SETUP boosts its efforts on food processing, furniture, gift, decors and handicrafts, aquatic and marine, horticulture/agriculture, metals and engineering, information and communications technology/electronics, and health products and services.

For 2017, some 25 MSMEs in the region will be granted with technology upgrading

assistance amounting to Php38,200,000. These MSMEs are bound to intensify the country's labor force, generate innovative products and services that cater to global and domestic markets and serve as key players in stepping up the value chain of the business sector.

The granting of the financial assistance which gathered some local government units, technical experts, national government agencies, and students, was conducted during the Technology Forum held in line with the conduct of the 2017 Technology Caravan.

Sen. Legarda...
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Dee, fashion and textile designer from the DLSU-College of St. Benilde, who showed her "Di-Matinag" (Unwavering) design based on the fashion trend of the 1960s. It is a design using the custom-made fabric of the cotton-abaca blend and handwoven in an ikat-binakol technique.

Meanwhile, island wear fashion designer Twinkle Ferraren showed her creations that used natural and indigenous materials with her modern take on the "polo-barong", a staple office wear made from pineapple-abaca-cotton-silk fiber naturally dyed using colorants derived from the talisay (*Terminalia catappa*) tree.

Also on exhibit were Narda's Naturals coming from the highlands of the Cordilleras. Its Creative Director, Lucia Capuyan-

Catanaes, came up with a new product line composed of shawls, ponchos, and fabrics made from homegrown cotton blended with abaca/pineapple leaf fibers and colored with natural mahogany, turmeric, and cogon dyes.

The use of Philippine tropical fibers is fast gaining momentum in the local textile scene with more fashion designers using natural materials like abaca, pineapple, cotton, and silk fabrics for their creations. These locally available materials are woven by indigenous people from different communities in the country.

The PTRI TELA Exhibit was also visited by Senator Cynthia Villar and different stakeholders, such as officials from the National Museum and other textile organizations.

ABOUT US

The DOST Digest is published by the Science and Technology Information Institute- Department of Science and Technology
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DOST offers new food products from innovation centers

By Edgilyn R. Alcasid, DOST-NCR

With the result of the recent awards organized by DOST's Industrial Technology Development Institute (ITDI) with support of the Philippine Council for Industry, Energy, and Emerging Technology Research and Development (PCIEERD), the DOST's Food Innovation Centers (FICs) may be the newest places to hunt for newly-developed innovative and nutritious food products.

Recently, DOST's ITDI and PCIEERD recognized the Most Innovative Products developed from the Food Innovation Centers (FIC) technologies and came up with exciting new products developed using in-house equipment such as water retort, vacuum fryer, spray dryer, and freeze dryer.

The award is part of DOST's program in developing the competence of FIC managers and technical personnel, particularly in product development and innovation. The DOST aims to achieve this by providing more detailed trainings on important aspects of food processing such as product development, food safety and regulations, food packaging, nutrition labeling, product costing, and marketing strategies.

"We have done a project on building up the confidence of our personnel in the FICs. As such, we would like to culminate this project by looking at the competence of our personnel in terms of their development of prototypes which we would find most innovative," said Dr. Maria Patricia Azanza, DOST-ITDI director, after the initial screening which came up with five food products from each technology.

The finalists were further tested in terms of the innovativeness, market viability, consumer acceptability, and soundness of process. Judges came from the academe, public and private organizations and institutions.

The winners

For the Most Innovative Products for water retort technology, Tea Tums, developed by students and professors of the University of the Philippines Diliman, got the title. These are healthy, ready-to-drink juices made from lemongrass and calamansi blend infused with turmeric, and ginger. All ingredients are known to have potential health benefits. Cagayan State University-Carig Campus placed second in this category through Uved, a traditional Ivatan food made from banana roots. The product is attractive to health-conscious consumers and travelers. It is also developed with a longer shelf-life so tourists visiting Batanes can buy it as pasalubong.

Region II bagged awards under the freeze drying technology: Gracilaria won as the Most Innovative Product, while Arius got the second place. Gracilaria is a kind of seaweed mass produced in Buguey, Cagayan that can be used as flavoring or processed as seaweed chips. Arius, on the other hand, is a tree that can grow

anywhere in the Philippines but can only bear fruit in Batanes due to climate conditions. Its fruit gives off natural food colorants that can substitute imported berries.

For spray-dried products, Sea Grapes Powder or lato of the Zamboanga State College of Marine Science and Technology in Region IX nabbed the Most Innovative Product. It claims to have natural salty, peppery taste which can be used as flavoring for chips, noodles, and baked products. Also, it can be mixed with beverages. Bukolyte, developed by the Philippine Women's College-Davao in Region XI, then got the second place in this category. Bukolyte is powdered form of the coconut water with no artificial flavor and preservatives added made from young coconuts.

Lastly, the Most Innovative Product for vacuum frying technology went to Crispy Sprouted Monggo of Region II which claims to contain more nutrients compared with ordinary monggo. It can provide energy and help strengthen the immune system of lactating or pregnant women. Fried Mayahini or barinday of Eastern Visayas State University in Region VIII was awarded as the second Most Innovative Product for this category. In the process of frying, Fried Mayahini retains its natural and nutritional qualities, thus it can be an alternative to unhealthy chips available in the market.

For the special awards, Region II received the "FIC with the Most Number of Qualifying Products" with their seven food product entries. Another special award, the "Industry Choice Award", is given to Regions II and IX for Crispy Sprouted Monggo and Sea Grapes Powder, respectively. This award recognizes product(s) that scored high in the following criteria: novelty, consumer appeal, manufacturing feasibility, and price competitiveness.

The Challenge

Commercialization of these food products poses the biggest challenge after the awarding ceremonies. Dr. Rowena Cristina L. Guevara, DOST Undersecretary for Research and Development, recognizes this challenge in her closing message. To the judges, she says that they can do much in helping promote these food products as they came from different sectors of the society.

"I believe that we have the products to make the Philippines food secure. Making these available, affordable, and accessible will only happen if we have the FICs," said Usec. Guevara.

What are FICs?

Food Innovation Centers were developed in 2015 housing five DOST-developed technologies, namely: vacuum packaging machine, water retort, vacuum fryer, spray dryer, and freeze dryer. The spray dryer transforms liquids into powder instantly, while the freeze dryer produces dried

materials that prolongs shelf life and enables a more convenient way of transporting these materials. The water retort machine improves shelf-life of food products even in non-refrigerated conditions, and the vacuum fryer creates crunchy products that are low in fat and high in fiber with minimal changes in color and flavor.

As of 2016, DOST has established 10 FICs nationwide located at the NCR and in Regions 2, 4B, 6, 7, 8, 9, 10, 11 with the main FIC located at ITDI, DOST Compound. FICs are open to scientists, technologists, and academicians who are in need of the said technologies.



Most innovative food product for water retort technology: Tea Tums (left) got first place while Uved (right) placed second.



Most innovative food product for freeze drying technology: Gracilaria (left) got first place while Arius (right) placed second.



Most innovative food product for spray drying technology: Sea Grapes Powder (left) got first place while Bukolyte (right) placed second.



Most innovative food product for vacuum frying technology: Crispy Sprouted Monggo (left) got first place while Vacuum Fried Barinday (right) placed second.

ZamPen native chicken gives lifeline to inmates

By Lilian B. dela Cruz, DOST-STII

Zamboanga City – ZamPen native chicken is a lifeline not just to farmers and micro entrepreneurs of the Zamboanga Peninsula but also to San Ramon Penal colony inmates who anticipate productive reintegration after serving prison terms.

This is the promising future that this subsector of poultry and livestock industry is offering.

Raising ZamPen native chicken as a science-based countryside alternative livelihood resulted from the collaboration of the Western Mindanao Agriculture and Aquatic Resources Research and Development Consortium (WESMAARRDEC) and project funding agency Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD).

In celebration of its 29th anniversary, WESMAARRDEC held on November 22-23 the ZamPen Native Chicken FIESTA 2016 themed “Manok ZamPen: Livelihood Option for every Juan in the Region.”

Dr. Teresita Narvaez, WESMAARRDEC director, said the event aimed to showcase and promote ZamPen native chicken in Region IX (Western Mindanao) on the concept of Farms and Industry Encounters through Science and Technology Agenda (FIESTA).

Promoting ZamPen native chicken was a package of technology transfer initiatives from production (breeding, handling, care, and management techniques) to commercialization (financing, processing, and marketing).

Dr. Narvaez expressed optimism that the ZamPen native chicken will be profitable for farmers and entrepreneurs because of its gourmet qualities of unique taste and texture; plus, its health benefits will make it a fine choice for consumers, which leads to increase in market demand.



Photo by Lilian B. dela Cruz, DOST-STII

WESMAARRDEC’s Native Chicken FIESTA featured a techno-business forum at the KCC Mall of Zamboanga.

Farmers, entrepreneurs, students and other interested individuals attended to learn the native chicken’s breeding and management technologies from PCAARRD and Western Mindanao State University (WMSU) scientists and researchers.

Mr. Julian H. Payne, President of the Canadian Chamber of Commerce of the Philippines, shared relevant entrepreneurial strategies in his presentation “Best Practices and Sharing of Plans on Native Chicken for Adoption and Commercialization.”

A direct beneficiary of the ZamPen native chicken project is this City’s San Ramon Prison and Penal Farm inmates.

In February 2016, a Memorandum of Agreement was signed WMSU representing WESMAARRDEC, DOST-PCAARRD, and Bureau of Corrections (BUCOR) through the San Ramon penal farm for a research team to study the profitability and sustainability of the ZamPen native chicken as source of livelihood in rural communities.

An offshoot of the study was WMSU’s training for San Ramon inmates on ZamPen native chicken technology and marketing options. The BUCOR reminded that inmates to the project are expected to develop a sustainable livelihood once they leave prison and re-integrate into the community.

The inmates started raising ZamPen chicken in the San Ramon farms with WMSU providing breeders and grower stocks, as well as inputs such as feeds, vaccines, and other medications.

They were also provided technical assistance and other support services in the operation of the project, and in the marketing of live, dressed, and other native chicken products. WMSU also conducts a monthly evaluation on the status of the project.

On Day 3 of WESMAARRDEC FIESTA, media and other interested individuals and groups toured the ZamPen native chicken farm site in San Ramon, observed developments of the project, and interviewed inmate-farmers.

One inmate lined up for release soon said he will step out of prison with renewed hope since he already has something to start a new life with – potential income from ZamPen native chicken.



Students of Master of Science in Development of Communication from University of the Philippines Los Baños together with their dean Dr. Ma Theresa Velasco lead the campaign launch of “DOST Inforserbilis” last December 12, 2016 at the Philippine Science Heritage Center auditorium in Bicutan, Taguig City. It is a communication campaign that aims to gather support from the entire DOST community in raising awareness and basic knowledge of all employees on all DOST agencies’ services. Basically, it envisions a unified information delivery service via various strategies such as an interactive information kiosk at every agency; an online one-stop portal; the development of print materials such as a general guidebook, directories, brochures, and maps; and video tutorials, among others. Alan C. Taule, Chief of Information Resources and Analysis Division of Science and Technology Information Institute, the information and marketing arm of DOST, represented its director, Richard P. Burgos, in receiving the Inforserbilis policy brief. (Photo by Gerardo G. Palad, DOST-STII)

