

ILocos S&TRENDS

The Official Newsletter of the Department of Science and Technology Regional Office I.

APRIL - JULY 2020

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HEAL



DOST 1, MODULHAUS INC.
RE-FABRICATES SPECIMEN
COLLECTION BOOTHS, DONATE
THESE IN HEALTH INSTITUTIONS

See page 2

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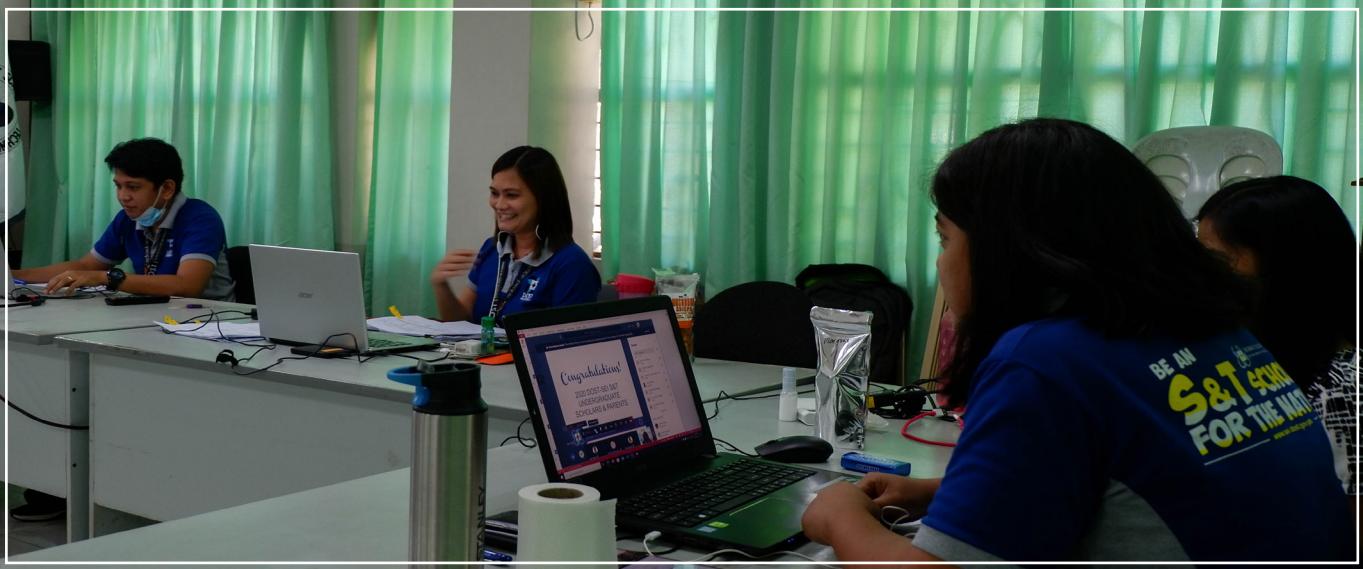
The Department of Science and Technology Region 1 (DOST 1), in partnership with Mr. Richard Chan of ModulHaus Inc., donated 9 Specimen Collection Booths (SCBs) to medical institutions in Region 1 in support to the fight against the Covid-19 pandemic.



Fabricated by Modulhaus Inc., the SCBs are patterned after the original design of Futuristic Aviation and Maritime Enterprise, Inc., featuring a built-in nitrile gloves, well-lit and air-conditioned booth, and a protective glass barrier.

The SCBs were delivered to the City Government of San Fernando, La Union, Ilocos Training and Regional Medical Center, La Union Medical Center, City Government of Dagupan, Pangasinan Provincial Hospital, City Government of Vigan, Ilocos Sur Provincial Hospital – Gabriela Silang, and Gov. Roque B. Ablan, Sr. Memorial Hospital in Ilocos Norte.

DOST 1 remains supportive of the frontliners as they continue to spearhead our country's battle against Covid-19. Our doors remain open to potential partners and donors. DOST 1 is positive that when we work as one, #WeHealAsOne.



DOST 1 FORMALLY WELCOMES NEW S&T QUALIFIERS, HOLDS ONLINE ORIENTATION

Adrienne Margaux Q. Dolores



DOST-1 Scholarship Unit staff organized an online orientation to new S&T scholarship qualifiers via Microsoft Teams.

The students and their parent or guardians are familiarized with the various benefits they will enjoy as DOST Scholars such as a monthly living allowance of Php 7,000, tuition and other fees not exceeding Php 20,000 per semester for students enrolled in private schools, book allowance of Php 10,000 per academic year, one-time uniform allowance of Php 1,000, one economy class roundtrip fare per year for those studying outside their home province, and group health and accident insurance.

The qualifiers can enroll in any state university, college, and other higher education institution recognized by the Commission on Higher Education as Centers of Excellence or Centers of Development or with FAAP Level III accreditation, and to priority science and technology courses.

They were also presented with the guidelines of the scholarship agreement such as compliance to scholarship obligations and other policies.

The qualifiers who wish to push through with the scholarship grant are set to visit the Provincial S&T Centers in their respective provinces for the actual signing of the scholarship agreement.

DOST 1, through the Scholarship Unit remains committed to guiding and catering to the needs of the scholars amid the uncertainty and limitations brought by the pandemic. Even with the present constraints, DOST 1 proactively creates ways to make sure our scholars are well-informed and guided.



NEW DOST-SEI SCHOLARS SIGN AGREEMENT WITH DOST 1

Adrienne Margaux Q. Dolores

The new DOST Science Education Institute (DOST SEI) S&T qualifiers, together with their parents, formalized their scholarship agreement with the Department of Science and Technology (DOST) in a contract signing held at the DOST 1 Regional Office and Provincial S&T Centers (PSTCs).

Qualifiers are scheduled in batches to adhere to social distancing. Strict health and safety protocols such as sanitation, taking of body temperature, and wearing of face masks are also being imposed.

The scholars visited the regional office, along with their parents, to sign their contracts and accomplish all requirements needed for the agreement. Scholars residing outside of La Union signed their contracts at the respective Provincial S&T Centers in their hometowns. The contract signing was facilitated by PSTC staff while the DOST 1 Scholarship Unit assisted them in filling up the forms via Microsoft Teams.

A total of 385 scholars signed the agreement, 256 are availing the RA 7687 or the Science and Technology Scholarship Act of 1994 while 129 are scholars under the DOST-SEI Merit Scholarship Program.

To avail the scholarship, the scholars must pursue a Bachelor of Science degree program in any of the priority S&T courses. The scholars will enjoy allowance on tuition and other school fees not exceeding to Php 40, 000 per academic year, a monthly stipend of Php 7, 000; book allowance, one-time clothing allowance, one economy class roundtrip fare per year for those studying outside of their home province, thesis allowance, and group accident insurance.



DOST SEI 2020 Scholarship qualifiers, together with their parents and guardians, formalize agreement with DOST.

Upon graduation, each scholar must render service in the country along their field of specialization for a period equivalent to the years they have enjoyed the scholarship.

DOST 1 ensures that no student is left behind as we all go through the new normal. Student-scholars are always well updated and guided by DOST 1 through the Scholarship Unit.

LA UNION MUSHROOM GROWERS GET DOST ASSISTANCE FOR TECH UPGRADING

Katrina F. Ronquillo

Composed of thirty-seven (37) women farmers from Brgy. Cabarsican, the Cabarsican City of San Fernando Rural Improvement Club was formed in 2015 but did not flourish due to mismanagement. Through the initiative of its active member and now its incumbent president, Ms. Victoria O. Martinez re-established the association and had it registered with the Department of Labor and Employment (DOLE) in 2018.

To widen her knowledge on agriculture and livestock, she joined various seminars and trainings sponsored by the Office of the City Agriculturist. In May 2019, the Office of the City Agriculturist sponsored a training on mushroom production and was actively participated by the members of the association. To practice what they have learned from the training, the members then agreed and decided to pursue oyster mushroom production as a start-up business for their association to earn income. The association received a parcel of land thru the donation of their adviser, Mr. Henry Nullar where they established the mushroom farm and vermicomposting facility.

As a way to support and assist its constituents, the City Government of San Fernando granted raw materials and crates to the association for them to start their mushroom cultivation business. Their produce became a hit in the community that there are times when they cannot accommodate orders of clients due to limited production. In the preparation of raw materials, their production workers manually chop rice straw which takes much time. This also compromises their safety since they use a machete or locally known as bolo knife in chopping the raw materials. The workers use an improvised steel container for the pasteurization of the mushroom fruiting bags which makes the process time-consuming. To address these concerns, the association sought the assistance of the DOST through its Grants-in-Aid (GIA) Program. The Program funded the assistance amounting to PhP110,000.00



DOST 1 headed by Dr. Armando Q. Ganal awards financial assistance to Micayla's Mushroom Farm and Cabarsican City of San Fernando Rural Improvement Club.

for the purchase of one (1) unit multi-purpose shredder and one (1) unit fabricated autoclave with pressure gauge. With these identified S&T-related interventions, manual chopping of rice straw is eliminated, and faster pasteurization process is attained.

DOST's GIA is designed to contribute to the productivity improvement and quality of life of Filipinos by generating and promoting appropriate technologies and strengthening the participation of various S&T sectors in research and development. Furthermore, the GIA Program involves the establishment of technology-based businesses through the provision of technology, equipment and upgrading and its target customers are organized groups, associations, cooperatives, local government units (LGUs).

On the other hand, Mr. Santiago B. Aquino, owner/manager of Micayla's Mushroom Farm located at Brgy. Cabaritan Sur in Naguilian, La Union, started his mushroom farming business after attending a technology training on mushroom production. Encouraged by the impressive and profitable performance of his mushroom fruiting bags, Mr. Aquino expanded his mushroom growing house which can now accommodate 10,000 fruiting bags. The firm has regular clients from other municipalities of the Province. The firm supplies fruiting bags to its clients from Baguio City and other nearby barangays for their own supply and fresh oyster mushrooms to mushroom processors in La Union.



3 LA UNION MUSHROOM GROWERS EMPOWERED THROUGH DOST SETUP, RECEIVES MACHINERY ASSISTANCE

Princess P. Abuan

The mushroom business in the Philippines is apparently a burgeoning business with enormous commercial potential as much as it targets a basic need especially during these trying times to fight the Covid19 pandemic.

However, mushroom cultivation and processing in each operation consists of many sequential steps that are crucial and important if success is to be achieved. Fortunately, a nationwide strategy of DOST, Small Enterprise Technology Upgrading Program (SETUP), is providing Micro, Small, and Medium Enterprises (MSMEs) with technology innovations to improve their products and services, operations and increase their productivity and competitiveness.

Recently, three (3) micro-scale mushroom growers in La Union benefited from the program.

Mr. Jefte Dangalan, owner of Tessie Mushroom House Food Products located in Brgy. Saytan in the Municipality of Pugo was provided with rice straw shredder, bag filling machine, substrate mixer, and stainless-steel food grade working tables and assisted in the microbial analysis of the mushroom chips.

Likewise, Ms. Josephine Bilan, owner of Jobi's Food Products operating in Brgy. San Joaquin Sur in Agoo was provided with



DOST 1 La Union delivers machinery assistance to Tessie Mushroom House Food Products, Jobi's Food Products, and Micayla's Mushroom Farm.

bag filling machine, substrate mixer, de-oiling machine, continuous band sealer, and stainless steel food grade working tables as well as microbial analysis of the mushroom chips.

Lastly, Mr. Santiago Aquino, owner of Micayla's Mushroom Farm in Brgy. Cabaritan Sur, Naguilian was provided with bag filling machine, substrate mixer, and fabricated autoclave with pressure gauge.

Truly, DOST's SETUP envisions MSMEs to become smarter and able to level up their production standards and improve the quality of their products despite the economic effects brought by the Covid-19 pandemic. DOST 1 continues to support the region's entrepreneurs through science, technology and innovations.

Nevertheless, Ms. Bilan motivates her fellow mushroom growers to be positive and work hard for something they wanted to achieve.

ILOCOS NORTE FIRMS UNDERGO VIRTUAL TECHNOLOGY NEEDS ASSESSMENT VALIDATION

Katrina F. Ronquillo

The Department of Science and Technology (DOST) through the Small Enterprise Technology Upgrading Program (SETUP) held its first virtual Technology Needs Assessment (TNA) validation to four (4) micro, small, and medium enterprises (MSMEs) from the Province of Ilocos Norte through an online video conferencing platform on May 27, 2020.

The firms that were assessed are Laoag Graphics Engineering Designs from Laoag City; Fab Printline and General Merchandise and Laring's Meat Product & Other Food Products from the City of Batac; and Camanga Upland Multi-Purpose Cooperative in Badoc, Ilocos Norte. Considering the implementation of the general community quarantine in the Ilocos Region and in observance of the field operations protocols of the DOST under the 'new normal', the TNA validation was made possible sans personal visit to the location of the prospect beneficiary.

The Small Enterprise Technology Upgrading Program is the flagship program of the DOST focused on technology transfer and commercialization that is geared towards providing innovation system support to micro, small, and medium enterprises. As such, the Technology Needs Assessment tool has been developed to equip the Department in the identification of the technological requirements that will bridge the gap between the enterprise's visions and goals vis-à-vis its status quo. The TNA is a systematic process to establish the identified strengths and weaknesses of an enterprise that will then lead to the provision of DOST interventions and innovations.

As a crucial step in the enrolment of an MSME into the SETUP, the enterprise must first signify its interest in availing for assistance. An initial on-site technology needs assessment will be undertaken by the Provincial Science and Technology Center to the potential SETUP beneficiary. A regional-level validation



Present during the online TNA Validation were Regional Director Dr. Armando Q. Ganal, Assistant Regional Director for Field Operations Dr. Ismael D. Gurtiza, SETUP Coordinator Ms. Adelisa C. Florendo, Ilocos Norte Provincial Director Jonathan M. Viernes, and Pangasinan Satellite Office Officer-in-charge Jennifer C. Fernandez.

will be conducted to verify the information relevant to the identification of the needed technologies of the requesting firm. Normally, the regional TNA validation team of the DOST-1 makes an on-site visit and interview to the applying firm. An appraisal report will be prepared by the Regional Program Management Office (RPMO) to sum up the recommendations of the regional validators and determine if the enterprise is qualified for the Program. Upon qualifying, the enterprise or proponent submits a comprehensive project proposal with complete documentary requirements that will be subjected for evaluation of the Review and Technical Evaluation Committee (RTEC), a third-party technical consultants accredited by the DOST who will be evaluating the viability of the project proposal for the SETUP assistance and endorse its approval to the DOST Regional Director.



EXTENSION OF TECHNOLOGICAL INTERVENTIONS PUSHES THROUGH IN LA UNION

Princess P. Abuan

Micro Small and Medium Enterprises (MSMEs) can play a significant role in the sustainable growth and development of the country. It is an evident and well-accepted fact that MSMEs can contribute a lot to employment generation and in industrial production. However, most MSMEs are facing problems such as poor infrastructure, lack of capital, low technology levels, lack of access to modern technology, and many more that make them uncompetitive in the market.

To address this, the Small Enterprise Technology Upgrading Program (SETUP), one of the flagship programs of DOST, is implementing the SETUP to reach out to Filipino entrepreneurs. It aims to enhance operational efficiency and boost productivity and competitiveness. The program enables firms to address their technical problems through technology interventions and innovations.

With the holistic approach of SETUP, MSMEs assisted in the Province of La Union were provided with appropriate equipment and technical assistance and consultancy services.

One of them, Jaypee's Bakeshop, was provided with three-deck gas oven, 2-door upright chiller, spiral mixer, stainless steel food grade working table, and stainless steel cooling racks, training on current good manufacturing practices, and assistance to FDA License-To-Operate application.

On the other hand, Adong Pande Monay Bakery was given a three-deck gas oven and assistance to FDA License-To-Operate application.

"Akala ko hanggang pangarap na lang na magkaroon ng equipment na ganito, possible pala. Salamat sa tulong ng DOST at unti-unti nang natutupad ang mga pangarap ko", the grateful owner of Jaypee's Bakeshop, Mr. John Paul Naoe said.





DOST 1 delivers units for the mushroom production upgrading of Sawang-Bamban Indigenous People's Association, Inc. of Infanta, Pangasinan

DOST 1 BACKS SAWANG-BAMBAN INDIGENOUS PEOPLES' ASSOCIATION OF INFANTA, UPGRADES MUSHROOM PRODUCTION

Edward E. Ugale

The Department of Science and Technology Regional Office 1 (DOST 1), through its Provincial Science and Technology Center in Pangasinan (PSTC - Pangasinan) headed by Engr. Arnold C. Santos, provided a 1 unit of Mechanized Mixer, 1 unit of Shredding Machine, and 1 unit of Autoclave to the Sawang-Bamban Indigenous People's Association, Inc. of Infanta, Pangasinan as interventions to their Mushroom Production business.

The technology assistance is part of the Community-Based Project of DOST 1 which provides technology upgrade to community-based associations, non-government organizations and cooperatives that want to improve their businesses or livelihood projects. The program aims to help organizations and cooperatives acquire equipment to enhance and increase their production, thus, also increasing the potential income of their members.

Mr. Julian R. Viray and Mr. Edward E. Ugale, Project Assistants of PSTC - Pangasinan, personally delivered the said equipment, along with the fabricator, Mr. Marcos M. Aquino. They also provided hands-on training on the operation and maintenance of the equipment.

These technologies will help the indigenous people of Sawang-Bamban, Infanta, Pangasinan to start a livelihood program through mushroom production and have an alternative source of income for their members. Thus, attaining the primary goal of the program – to achieve sustainable economic growth and development



through the funding of relevant Science and Technology undertakings and help associations and cooperatives in facilitating job creation, sustainable employment, and social development.

Other cooperatives and associations who are interested to know more about the program and wanted to avail the assistance may visit Pangasinan Science and Technology Center at Lingayen, Pangasinan or the nearest provincial S & T centers in their area.

P1.3 MILLION FUND ASSISTANCE RELEASED TO MSMES IN LA UNION, TO BOOST PRODUCT IMPROVEMENT

John Benedict C. Marasigan

The Department of Science and Technology - Regional Office No. 1 (DOST-1), through the Provincial Science and Technology Center – La Union (PSTC-LU), awarded a total of Php 1,310,900.00 to four micro, small and medium enterprises (MSMEs) in La Union for the year 2020.

Three MSMEs under the Small Enterprise Technology Upgrading Program (SETUP) received fund assistance worth P1,200,900.00 for technological innovations in their production equipment and facilities to improve product quality and increase productivity and competitiveness. They are as follows: Adong's Pan De Monay of Brgy. Sevilla, City of San Fernando, Jaypee's Bakeshop of Bauang, La Union, and Micayla's Mushroom Farm of Naguilian, La Union.

On the other hand, the Cabarsican City of San Fernando Rural Improvement Club, an association that produces oyster mushroom, was awarded an amount of Php 110,000.00 grant-in-aid. The assistance will enable the association to upgrade the mushroom production process from manual to mechanized through the acquisition of Multi-Purpose Shredder and 200 fruiting bag-capacity autoclave with pressure gauge.

SETUP is one of DOST's flagship programs that encourages MSMEs to adopt technology innovations to improve their operations and boost their productivity and competitiveness. The program enables firms to address technical problems through technology transfer and technology interventions, improving productivity through better product quality, human resources development, cost minimization and waste management, and other operation related activities.

Likewise, the DOST-1 Community-Based Program (CBP) empowers associations and cooperatives to sustain and improve their productive undertakings by identifying abundant commodities that has great potential for production or manufacturing, intended to create livelihood and enhance the standard of living of the community.



Awarding of check of Adong's Pan de Monay, Cabarsican City of San Fernando Rural Improvement Club, Micayla's Mushroom Farm, and Jaypee's Bakeshop

LGU STO. TOMAS, LA UNION RECEIVE FOOD PACKS FROM DOST 1, UNDERNOURISHED CHILDREN PRIORITIZED

John Benedict C. Marasigan

To help in the eradication of malnutrition among infants and children during this time of pandemic, the Department of Science and Technology Regional Office No. 1 (DOST-1) through the Provincial Science and Technology Center – La Union (PSTC-LU) has once again extended its help to its constituents by donating 50 pieces of complementary food packs in the municipality of Santo Tomas, La Union. This will be distributed to undernourished children in the municipality.

Each food pack contains two sachets of RIMO Curls, five sachets of RIMO Instant Blend, ten sachets of Go and Grow Micronutrient Mix, one food-based strategy developed by the DOST Food and Nutrition Research Institute (DOST-FNRI) and four sachets of RIMO Instant Blend Dry Cereal. The food packs were produced by Nutridense Food Manufacturing Corporation located in Sta. Barbara, Pangasinan, a longtime SETUP cooperator of DOST-1 which is known for providing nutritious complementary foods that were made to help in the eradication of malnutrition, micronutrient deficiencies, and obesity.

The donations were received by Ms. Ma. Teresita Quimsur, the municipal health nurse, who expressed the municipality's utmost appreciation to DOST-1 for supporting the LGU's program in combatting malnutrition in the municipality, especially in this time of pandemic.



LGU Sto. Tomas and LGU Bacnotan gladly receives food donations from DOST Region 1

DOST-1 EXTENDS NUTRITIOUS COMPLEMENTARY FOOD PRODUCTS TO LGU BACNOTAN

Heisaboy T. Tubaang

In this time of pandemic, many lives have been immensely affected, and keeping a good health condition is one of the most essential parts to do in fighting out covid-19, especially to older infants, children, and even adults. Hence, DOST-1 backs in donating healthy food products that assure to nourish every consumer.

The Department of Science and Technology Region 1 (DOST-1) through the Provincial Science & Technology Center – La Union, is continuously providing support to the public by donating 50 food packs to the local government unit of Bacnotan last May 27, 2020, in Poblacion, Bacnotan, La Union.

Each food pack is composed of ten pieces Go & Grow Micronutrient Mix, five pieces RIMO Instant Blend, four pieces RIMO Instant Blend Dry Cereal, and two pieces RIMO Curls. These products were produced by the Nutridense Food Manufacturing Corporation (NFMC) in Sta. Barbara, Pangasinan. NFMC is a long-time partner of DOST-1, that produces nutritious, complementary food used in feeding programs as well as in emergencies. Nutridense's products are targeted to eradicating malnutrition and promoting healthy food options for older infants, children, and adults.

Hon. Vice Mayor Divina C. Fontanilla & Municipal Nutrition Action Officer Mr. John Philip Gabriel of LGU Bacnotan were present to receive the donations. They were both nutritionist-dietitians who advocates for nourishing people for a healthier community. They extended their earnest gratitude for the untiring support of the DOST and looks forward for more collaborative S & T projects aimed to benefit the people.

According to Mr. Gabriel, they will repack the food packs to cater wider number of beneficiaries. 78 undernourished children in Bacnotan specifically in Brgy. Pangpang, Ubbog, Nagatiran, Agtipal, Cabarsican, Bacqui, Cabaroan, Lisqueb & Galongen were among the identified beneficiaries of the complementary food donations.

In behalf of DOST-1, OIC-PSTD Engr. Edison M. Acosta of La Union signifies the continuous commitment of the agency in providing support in addressing covid-19 pandemic and hopes that we will soon heal, recover and rise as one.



Distribution of Carrageenan PGP

DOST-I PROMOTES CARRAGEENAN PGP, CONDUCTS PRODUCT LAUNCHING IN CANDON CITY

Junalyn C. Dasugo

The Department of Science and Technology Regional Office 1 (DOST 1), thru the Provincial Science and Technology Center- Ilocos Sur, conducted a product launching of Carrageenan Plant Growth Promoter (PGP) in Candon City, Ilocos Sur last June 24, 2020.

Forty-one (41) farmer-leaders coming from the different barangays of Candon City attended the said product launching. The event was aimed at promoting Carrageenan PGP.

Carrageenan PGP is extracted from red edible seaweed or "guso/ gulamang dagat", (Kanot-kanot or Ruprupuk in Ilocano) and is treated to break down its particle into tiny pieces which are readily absorbed by plants and consumed as a plant food supplement.

The technology was developed through the funding of the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, and was implemented by the DOST - Philippine Nuclear Research Institute and the National Crop Protection Center of the University of the Philippines Los Baños.

Mr. Shubert Rowel John U. Leandado, a technician from St. Ruiz AgroFarm Supply & Gen. Mdse., served as the guest speaker. Mr. Leandado presented the effectiveness and benefits of Carrageenan PGP, emphasizing that Carrageenan PGP increases the yield on rice by 15-30%. The results during the field trial of Carrageenan PGP in Ilocos Sur last 2018 were also presented, showing an increase of 28%. Mr. Leandado also talked about the increase in gross sales, in the amount

of Php 25,000.00 per hectare if they are to use Carrageenan PGP.

Mr. David Wagayen, City Councilor, expressed his gratefulness to DOST hoping for more rice yield this cropping season. Mr. Ramon S. Sumabat, Provincial S&T Director, during his closing remarks, announced the availability of Carrageenan PGP at the PSTC-IS Field Office, Candon City.

The event concluded with the participants receiving 5 Liters each of Carrageenan PGP. The sample products given will be used by the farmers this coming season of rice.

Also present in the product launching were Mr. Angel Amado B. Corpuz, City Agriculturist and Dr. Armando Q. Ganal, DOST 1 Regional Director.



Mr. Leandado discussing the benefits and effectiveness of Carrageenan PGP

TEXTURED VEGETABLE PROTEIN, ENHANCES NUTRITIONAL PROFILE OF PRODUCTS

Laurine R. Sales

Textured vegetable protein (TVP) or textured soy protein is a healthy meat alternative product because it has no fat, saturated fat, or cholesterol. TVP is protein-rich, containing all the amino acids that the body requires. TVP has no flavors and colorings as this is manufactured with defatted soy flour. Thus, it has a long shelf-life and can be stored in an air-tight container.

TVP is also considered a meat substitute in spaghetti sauces, chili, tacos, lasagna, pizza toppings, and even hamburgers. This can also be used as an additive in meat dishes to enhance its nutritional value such as longganisa, sausage, patty, nuggets, and other processed meat products.

Unlike other plant-based protein sources, a $\frac{1}{4}$ cup serving of dry TVP contains around 12 grams of protein. This amount can sustain the daily protein requirement of our body. Consuming TVP instead of red meat as a protein source may lower the risk of diabetes, heart disease, and cancer.

Moreover, TVP contains 57 calories in a $\frac{1}{4}$ cup serving, 24 come from 6 grams of carbohydrates. Most of the contained carbohydrates are supplied by dietary fiber. One serving of TVP would fulfill nearly 12 to 14 percent

of men's daily fiber requirement, while women would receive 14 to 18 percent of their needs.

For the people on a sodium-restricted diet, plain TVP is recommended because it is extremely low in sodium. It has a high concentration of minerals, potassium, and a good source of calcium and phosphorus. It also contains vitamins like folate and vitamin B-9, which our body needs to support the nervous system.

To date, the food industry is rapidly evolving, which drives them to adopt new and promising trends towards healthier and more sustainable food for consumers. TVP is affordable and can be easily found in health stores and online. Since it is cheap and has a variety of health benefits, TVP is on the rise.

For the technology promotion of the Textured Vegetable Protein, the Department of Science and Technology Regional Office 1, through its Ilocos Sur Provincial S&T Center will be organizing an awareness seminar which will be scheduled on the month of October this year. Target participants will be the meat processors and other assisted small and medium enterprises in the province.

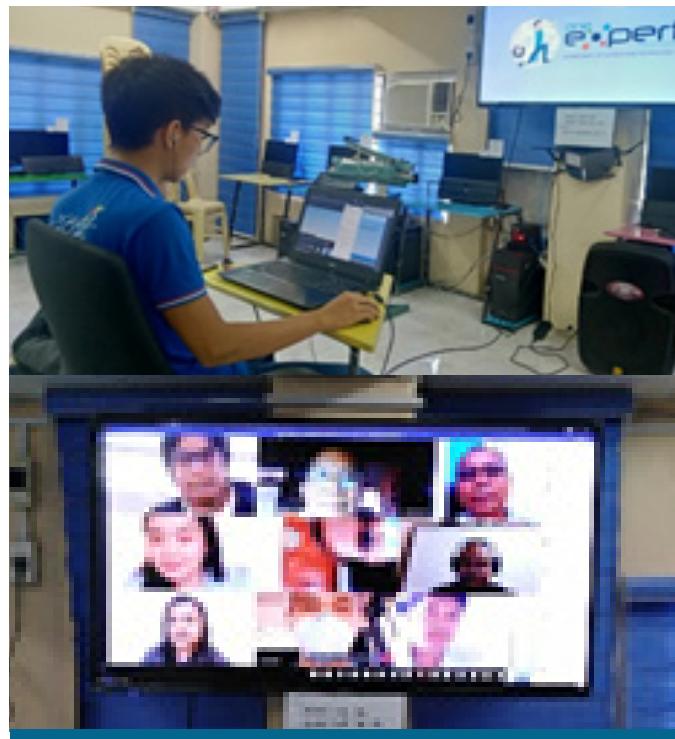
DOST 1 CONDUCTS ONLINE ORIENTATION ON ONEEXPERT NETWORK

Justin N. Madrid

Mr. Deeth 1180 P. Libunao and Mr. Justin N. Madrid of the Department of Science and Technology Region 1 conducted an online orientation on the OneExpert (IE) network pool of S&T experts via Microsoft Teams last July 3, 2020. Twenty-five (25) experts/consultants coming from different agencies and institutions in Region 1 actively participated in the activity. They were also joined by DOST 1 Science and Technology Services personnel.

1E is a one-stop portal for your S&T needs and requests. It is primarily the only public database of S&T experts in the country wherein clients can search online for professionals according to name, location, or field of expertise. It is an interactive web-based nationwide pool of S&T Experts intended to provide technical advice and consultancy services to Filipinos anywhere in the Philippines. The portal comprises the country's scientists, researchers, engineers, and technical people from different agencies/institutions. Said experts are DOST's partners in addressing problems of the country through S&T-based solutions.

The activity aims to give a better understanding of the features and aspects of the OneExpert network and orient the new experts and consultants of the on-going transition into a new phase of the Small Enterprise Technology Upgrading Program (SETUP) implementation – SETUP 2.0. During the activity, the



participants were also able to activate and populate their profile in the 1E network and provide relevant feedback on the new features of the OneExpert network.

Do you want to be part of the growing S&T Philippine Community? Join OneExpert now! To join, submit the following documents: Letter of Intent, Updated Curriculum Vitae, and Training Certificates. You may also login to oneexpert.gov.ph to see all of our technical consultancy services.

DOST 1 REGIONAL STANDARDS AND TESTING LABORATORY LAUNCHES FOOD SAFETY E-SERIES, BENEFITS MSMES IN REGION 1

Adrienne Margaux Q. Dolores

To ensure continued public service despite the persisting pandemic, the Department of Science and Technology Region 1 (DOST 1) through the Regional Standards and Testing Laboratory (RSTL) launched its Food Safety e-series course entitled. "How Safe is Your Food: Ensuring Food Safety Towards the New Normal" last July 22, 2020 through Microsoft Teams.

The e-series is divided into 3 levels: Beginner, Intermediate, and Advanced, with a total of 10 sessions on Food Safety. The e-series will be participated by micro, small, and medium enterprises (MSMEs) in Region 1.

The first session, 5S of Good Housekeeping, was discussed by Ms. Annalie L. Rosales, Senior Science Research Specialist of DOST 1 RSTL. A registered Chemical Technician, Ms. Rosales specializes on food safety, food sensory evaluation, and food science research. During her talk, she explained the concept and importance of 5S in the work area which is Sort, Set in Order, Shine, Standardize, and Systematize. She emphasized the importance of 5S in ensuring food safety, eliminating waste, and avoiding wastage of money, space, equipment, and quality. 5S of Good Housekeeping is the key to having a sterile and orderly workplace that is also a home for clean and safe food products. But to achieve this, commitment and involvement of every member of an enterprise is needed.

The second session, Food Safety Awareness, was conducted by Ms. Cyrille Ann B. Manalon, Science Research Specialist I of DOST 1 RSTL. With expertise on food microbiology and food safety, she discussed food borne diseases, food hazards, and food safety control system in the Philippines. She highlighted that food safety is a shared responsibility, thereby needing the government, food industry, and consumers in ensuring that good practices are always maintained in terms of food handling. Ms. Manalon also presented the 5 keys to Food Safety which are: (1) Keep Clean, (2) Separate raw and cooked food, (3) Cook thoroughly, (4) Keep food at safe temperature, and (5) Use safe water and raw materials. She ended her talk with a bible verse from Ecclesiastes 3:13, reminding us that "everyone should eat and drink and find enjoyment for all his hard work. It is the gift of God".



DID YOU KNOW THAT:

The infographic highlights that foodborne diseases cause almost 1 in 10 people to fall ill, resulting in 33 million healthy life years lost. It also states that foodborne diseases can be deadly, especially in children, with 420,000 deaths annually. The text emphasizes that foodborne diseases are preventable and that everyone has a role to play. The infographic is from WHO's World Health Day 2019.

An estimated 600 million - almost 1 in 10 people in the world - fall ill after eating contaminated food and 420,000 die every year, resulting in the loss of 33 million healthy life years.

Children under 5 years of age carry 40% of the foodborne disease burden, with 125,000 deaths every year.



The Food Safety E-series is set to continue every Wednesday and Thursday until August 20, 2020. This is a part of DOST 1's efforts to ensure that our MSMEs are not left behind even with the limitations of the ongoing pandemic. This is also a testament to our commitment to maintain, develop, and support good practices in science and technology, that will benefit our people.



DOST PANGASINAN AWARDS PORTASOL TO LGU BAYAMBANG

Edward E. Ugale

The Department of Science and Technology Regional Office 1 (DOST 1), through its Provincial Science and Technology Center in Pangasinan headed by Provincial Director Engr. Arnold C. Santos, awarded four (4) units of Portable Solar Dryer (PORTASOL) to the Local Government Unit of Bayambang, Pangasinan last June 4, 2020 as a support for the agricultural industry of the municipality.

With a total of 12,225 hectares of agricultural land, Bayambang is one of the biggest producers of rice in the province. Having the full support of their mayor, Dr. Cezar Quiambao, Bayambang is aggressively upgrading their farming facilities and equipment for its farmers, partnering with different government agencies, such as DOST, for latest technology enhancements.

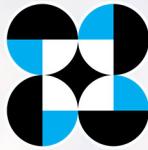
One of the problems of the farmers is the drying of their 'palay' (unhusked rice) grains. Most of them do not have concrete pavements intended for drying grains. They are still using roads or public highways to dry their harvest, which is now prohibited by the Department of Public Works and Highways (DPWH) because it poses a danger to both rice dryers and motorists. Still, they must reduce the moisture content of their palay grains to the level that is appropriate for safe storage.

To help solve this problem, the Pangasinan Science and Technology Center provided PORTASOL, a multi-purpose solar dryer to the municipality. Invented by Francisco O. "Popoy" Pagayon, the Chairman of the Filipino Inventors Society MPC., PORTASOL is a better drying alternative with simple yet outstanding features and advantages as compared to traditional drying

using the concrete pavement. With the multi-tier stack of thermal drying trays, farmers can dry up to 150 kilos of palay per drying session. Standard drying quality can be obtained even if the trays are stacked because it can reduce inherent substrate heat conduction and retention factors for faster drying. It also allows storage ventilation or "aerating" by providing necessary breathing spaces between layers preventing fungal mold, rot, mildew spoilages and pest infestation. PORTASOL is stackable for space-saving multi-level dryer, portable, all-terrain, usable anywhere even on rocky or soggy, and uneven grounds. Aside from palay, it can also be used for drying corn, beans, seeds, nuts, vegetables, fruits and virtually everything that requires drying.

DOST 1 continues to provide support to different industries through provision of technology innovations and equipment. For interested parties who wants to know more about DOST's programs and avail of technology assistance, you can visit the nearest Provincial Science and Technology Centers in your area.





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Telefax: (072) 888-3399

CP #: 0917-840-8695 or 0998-962-0232

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