



DOST turns over Php 400k-worth of Salt Production facility to DMMMSU-FRTI

BACNOTAN, LA UNION- The Department of Science and Technology Region 1(DOST 1) awarded a salt production facility and salt iodizing machine worth Php 400,000.00 to Don Mariano Marcos Memorial State University- North La Union Campus- Fisheries Research and Training Institute (DMMMSU-NLUC-FRTI) on July 6, 2022 at DMMMSU-NLUC, Paraoir, Bacnotan La Union.

ALAM MO BA?

Ang Multi-fuel Dryer ni Prof. Zaldy Fernandez ng Mariano Marcos State University (MMSU) ang nanalo ng UNLAD Award for Outstanding Utility Model sa ginanap na 2022 National Invention Contest and Exhibits (NICE).

Ang imbensyon na ito ay isang dryer machine na nagsusunog ng iba't ibang variety ng fuels, katulad ng kahoy, uling, sawdust, rice hulls, maize stalks, sugarcane stalks, coconut shells at iba pa. Ito ay ginagamit sa pagdry ng isda, prutas, cereals, mga dahon tulad ng malungay at tabako, garments at mga baked goods. Maaari rin itong maging oven o multi-fuel dryer na kayang magproseso ng various materials via heat convection.



[read more in page 14](#)

DOST 1 welcomes new scholars

The Department of Science and Technology Region 1 (DOST 1), through the Regional Science and Technology Human Resource Development Program Center (RSTHRDPC), kicked off the month-long activities for the DOST scholars on July 1 and 2, 2022, at the Hotel Ariana, Paringao, Bauang La Union, and the DOST Regional Office, respectively.

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WHAT'S INSIDE?

- DOST 1 installs AWS in Salcedo, Ilocos Sur; capacitates users on system monitoring
- DOST 1 awards electric dehydrator to Kabulig Farmers Association.

and more...

EDITORIAL PAGE

Good day, mga ka-agham!

I am pleased to inform you that starting this July, the Ilocos S&T Trends will be published monthly. This is to keep you more frequently informed on DOST 1's scientific, technological and innovative interventions in the region.

This month of July, we celebrated Nutrition Month and National Disaster Risk Reduction and Management month. In order to demonstrate our unity during these events, we have set aside a few activities. The DOST-Food and Nutrition Research Institute (DOST-FNRI) and Nutridense Food Manufacturing Corporation (NFMC) made guest appearances on the weekly radio interview program of DOST 1 and DZAG Radyo Pilipinas Agoo, to promote the importance of eating a healthy, balanced diet and to highlight the role DOST 1 plays in preserving a body that is sufficiently nourished with the necessary vitamins and minerals. Two weeks of the radio show were devoted to the NDRRM celebration in order to highlight the efforts of DOST 1 in addressing the community resilience to disasters. In order to understand how the Automated Weather Station (AWS) installed by DOST 1 in their municipality has affected their disaster preparedness, planning, and daily activities, a glimpse on the visit of DOST 1 to Sugpon, Ilocos Sur was shown. In this newsletter, you can read more about their testimonies and learn how your local government unit (LGU) might gain from them as well.

Here are some further highlights from the areas of Kabuhayan, Kaayusan, Kalusugan, and Kinabukasan:

Kabuhayan...

Many firms have benefited from the DOST 1 Small Enterprise Technology Upgrading Program (SETUP) throughout this month of July. To mention a few, a producer of chocolate, a company that mills rice, a manufacturer of empanadas, a farmers' association, and a few other businesses in the food and metals industries. You may learn more about how the program will aid in the improvement of their production.

Kaayusan...

To further enhance the local government's preparedness for disasters, DOST 1 has deployed an AWS in the municipality of Salcedo, Ilocos Sur, as a dedication to NDRRM month. Likewise, DOST 1 carried out an Internal Quality Audit with the help of its leaders and unit heads in order to uphold its ISO 9001:2015 Certification and to better improve the internal operations of the agency. As you read on, the results of the action will become clear. As you read on, you will know more about the findings of the activity.

Kalusugan...

DOST 1 gave Iron Fortified Rice (IFR) to a community in Pangasinan and a few non-governmental organizations in an effort to promote wellness and health through science and technology. Additionally, DOST 1 has teamed up with the Philippine Red Cross to provide Occupational First Aid Training to selected participants in Ilocos Norte since the organization believes in furthering the capacity of accountable people in positions of responsibility.

Kinabukasan...

DOST 1 greeted new DOST scholars from all around the region with enthusiasm, remembering that "the youth are the hope of the fatherland." To personally welcome the incoming "Iskolars ng Bayan", a series of orientations, signing of scholarship contracts and forums rolled over the four (4) provinces of region 1.

With the aid of science, technology, and innovation, DOST 1 is openly prepared to serve almost all of the community's sectors in an effort to harness a more sustainable and developed region.

These, and a lot more await you, in this July Ilocos S&T Trends issue.

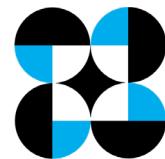
Take pleasure in reading, and I'll talk to you soon again, on our August newsletter!

***Maluhay ang DOST, Maluhay ang Region 1!
Maluhay ang DOST 1!***



CARLA JOYCE B. CAJALA

Editor-in-Chief, Ilocos S&T Trends



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ICIEERD kicks-off R&D Caravan in Northwestern University

By: Sharmaine Patacsil-Santos



The Ilocos Consortium for Industry, Energy and Emerging Technology Research and Development (ICIEERD), in partnership with the Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) kicked-off the "Research and Development Caravan: Capacitating the Higher Education Institutions on Writing Industry, Energy, and Emerging Technology Research Proposals" with the pilot institution - Northwestern University (NWU) in Laoag City, Ilocos Norte on July 1, 2022.

The R&D Caravan aims to capacitate the researchers of consortium member-institutions specifically those from the Higher Education Institutions in writing and producing viable research projects in the industry, energy and emerging technologies sectors as stated by the outgoing ICIEERD R&D Chair, Engr. Samuel S. Franco of Mariano Marcos State University (MMSU) in the rationale of the activity.

The ICIEERD together with the DOST-PCIEERD will visit each member-institutions to work hand-in-hand to perform functions for the development of national competence in research and development strategic areas of industry, energy and emerging technology sectors in the region, particularly on the development and implementation of programs for

the optimal utilization, transfer and commercialization of technologies and other research outputs.

NWU President and ICIEERD Chairperson Ferdinand S. Nicolas warmly welcomed and thanked the participants for taking the time to join the activity. Dr. Maricon Magbuwal-Guillermo, a faculty researcher of NWU acknowledged the participants both from onsite and virtual. The caravan was joined mainly by the researchers from NWU, ICIEERD R&D Committee members, North Luzon Philippines State College (NLPSC), Ilocos Sur Polytechnic State College (ISPSC), PhilRice-Batac, Pangasinan State University (PSU), Department of Trade and Industry and DOST RO 1.

The ICIEERD Priority thrusts for 2017-2022 was presented by the DOST-1 Regional Director and ICIEERD Co-Chair Armando Q. Ganal. He mentioned some possible research ideas that can be developed and also those completed projects under the presented thrusts. Dr. Eric S. Parilla, VP for Research, Community and Social Development, NWU also presented their institutions R&D Plans and previously conducted researches.

Speakers from PCIEERD joined the caravan to present – Engr. Carluz R. Bautista, ICIEERD Manager and Mr. Ruel I. Pili, Regional Consortia Project Manager. Engr. Bautista presented and discussed on the PCIEERD priority areas and its sectoral roadmaps on energy and utilities systems, industrial technologies, emerging technologies,

and science communication. He also presented some of the funded researches under the council.

On the other hand, Mr. Pili discussed on the PCIEERD Regional Consortia Operations, with PCIEERD Administrative Order No. 2018-043 dated July 10, 2018, which aims PCIEERD to establish, develop and maintain local and international technical cooperation linkages. The program aims to address regional development through S&T. Also, he mentioned on the ongoing Call for Research Proposals on Human Resource and Institution Development Programs which will end by 5:00PM on July 15, 2022. He encouraged the researchers to take advantage of the said call.

On the second part and highlight of the program, as the host institution, NWU researchers were tasked to present their concept proposals for evaluation. The following proposals were presented: 1) Flood Detection, Warning and Monitoring System for Laoag City by Engr. Rolly Ramos, 2) High Lift Pumping system by Engr. Lloyd Delaraga, and 3) Improving of Monitoring, Extraction, and Processing of Sand Gravel by Engr. Glorina Curameng. The proponents noted on the given comments and recommendations by the panelists and were advised to incorporate it to their research proposals for higher chance of approval.



111 Pangasinan students are now officially DOST Scholars

By: Monique C. Esguerra

111 qualifiers of the 2022 Undergraduate Science and Technology Scholarships in the Province of Pangasinan are now officially Department of Science and Technology - Science Education Institute (DOST-SEI) scholars after signing the Scholarship Agreement on July 7-8, 2022, at the Pangasinan State University (PSU) Convention Hall in Lingayen town and Monarch Hotel in Calasiao, Pangasinan respectively.

The DOST I, through the Regional S&T Human Resource Development Program Center, conducted a Scholarship Orientation and Signing of Scholarship Agreement to the qualifiers and their parents to orient them on their responsibilities as scholar.

DOST 1 Regional Director Armando Q. Ganal welcomed the new scholars through a video message, while DOST Pangasinan Provincial Director Arnold C. Santos said, "Being a scholar, you already carry the name of DOST, be responsible and good luck to your chosen career."

Ms. Venus P. Andaya, the Regional Scholarship Technical staff, oriented them about their privileges, policies, and obligations as scholars. These

new S&T scholars, as well as the ongoing scholars, will be enjoying the stipend at P7,000 per month across all disciplines. They are also entitled to tuition fee subsidy; learning materials and connectivity allowance; clothing allowance; thesis allowance; one economy-class roundtrip fare per year for those studying outside of their home province; graduation allowance; and a premium group accident insurance.

Scholars must enroll in any of the University of the Philippines campuses; or in State Universities and Colleges (SUCs); or private Higher Education Institutions (HEIs) recognized by the Commission on Higher Education (CHED) as Centers of Excellence or Centers of Development; or with Federation of Accrediting Agencies of the Philippines (FAAP) Level III accreditation for the S&T priority programs they will enroll in.

DOST-SEI scholars are required to render service in the country preferably along their fields of specialization after graduation for a period equivalent to the number of years they enjoyed the scholarship as a return service.

Dr. Dexter R. Buted, Pangasinan State University (PSU) President, cited about the "Sumasaludo ako sa mga scholars, sapagkat nandito kayo at may dapat kayong patunayan" (I salute the scholars because you are here and you have something prove). "Godspeed to the DOST because you are part of the education of the scholars," he added.



DOST 1 Awards Electric Dehydrator to Kabulig Farmers Association

By: Christian Jastine V. Mendoza



The Department of Science and Technology (DOST-1) through Provincial Science and Technology Center- La Union (PSTC-LU) awarded two (2) Electric Dehydrator worth Php 43,700.00 to Kabulig Farmers Association last July 8, 2022 as part of the implementation of Community Empowerment thru Science and Technology (CEST) Program in the Municipality of Santol, La Union.

Kabulig Farmers Association (KFA), headed by Ms. Ralyn N. Zambrona, is a federation of three (3) farmers' association in Santol, La Union that processes Banana products. Last year, DOST 1, through CEST program, provided a training on Ube processing to utilize Brgy. Lettac Sur's abundant production of the root crop. Ms. Imma G. Estabillo, Associate Instructor III and a Food Tech expert from DMMMSU-MLUC, taught KFA members how to process Ube chips, wine, and halaya.

Aside from additional Ube products, KFA members also participated on the conduct of Seminar on Current Good Manufacturing Practices (cGMP) to certify them on cGMP requirement and to improve their production processes in general. To continually assist them on their economic enterprise development, DOST 1 awarded two (2) Electric Dehydrator to increase their Ube chip production.

The intervention sees an increase to KFA's Ube chips productivity thus increase its sales upon project implementation.

The Department of Science and Technology through CEST program will continue to maximize the potential of every abundant resources in its scope of communities to ensure responsible consumption and production (SDG 12) and for decent work and economic growth (SDG 8).



DOST 1 conducts Free Calibration in Bayambang, Pangasinan

By: Monique C. Esguerra

The Department of Science and Technology Regional Office 1 (DOST-1), through the Provincial Science and Technology Center (PSTC) - Pangasinan conducted a two-day free calibration service to 40 primary and secondary schools in Bayambang, Pangasinan on July 18-19, 2022.

According to Ms. Venus M. Bueno, RND, LGU Bayambang Municipal Nutrition Action Officer, they requested the assistance of DOST-Pangasinan as they want to ensure the accuracy of all weighing scales used in all the schools in the municipality.

Mr. Julian R. Viray, Project Assistant and point-person for calibration services calibrated a total of 68 units of combined beam balance, salter scales and infant weighing scales to utmost standards for free. A total of Php23,120.00 value of assistance was rendered to the LGU.

As mandated by law through RA 8180, otherwise known as the downstream or industry deregulation act of 1996 and Executive Order No. 377, DOST should prescribe calibration and verification intervals of all measuring instruments used in petroleum products. Through this mandate, the DOST established a Regional Metrology Laboratory (RML) to provide calibration services for Mass, Temperature, Pressure, Length, electricity and small volume. It uses state of the art calibration equipment and instruments, as well as calibration methods that conform to national & international standards. RML's main purpose is to ensure accuracy of measuring equipment by providing standard quality calibrating service to every Filipinos.

DOST-1, with its commitment to protect consumers from unfair trade practices, ensures that businesses and establishments adhere to standards of volume and mass calibration. Clients who are interested to avail the services may contact the PSTC at 0917-840-8234/ 0998-962-0227 or send an e-mail at pangasinan2@region1.dost.gov.ph.



DOST 1 conducts Productivity Seminar in the City of San Fernando La Union

By: Carla Joyce Cajala and Rio Dyan B. Adviento



The Department of Science and Technology Region 1 (DOST-RO1) through its Gender and Development (GAD) unit kicked off its 2-day training activity for women entrepreneurs and women-led barangay associations in the City of San Fernando, La Union on July 7, 2022, at the Provincial Science and Technology Center – La Union (PSTC-LU).

The training was held ahead of the oneSTore.ph Hub's launching and to empower the women in creating and improving their products.

PSTC-LU Provincial Director Jonathan M. Viernes welcomed everyone to the event and urged them to take advantage of the chance to learn and advance their knowledge and abilities.

Engr. Edison M. Acosta outlined the DOST1 initiatives, projects, and activities in order to provide them an overview of the agency. Technical Services Assistant Regional Director Racquel M. Espiritu provided a summary of the two-day conference, which starts with a lecture on current good manufacturing practices (cGMP) on the first day.

A total of thirty (30) representatives from different barangays and two (2) enterprises from the City of San Fernando actively participated in the said event.

Mr. Hero D. Galamgam, Science Research Specialist I of DOST1, talked about the Basic Food Hygiene, Current Good Manufacturing Practices and Food Safety Hazards. He emphasized

on the significance of handwashing and the basic principles of keeping a hygienic and clean production area.

After the lecture, the attendees together with the DOST1 staff visited the Ube Producers Association in Barangay Langcuas to give a glimpse of the production area and provide the participants with insights and ideas in organizing and maintaining a production area.

The 2-day commenced with lectures on Food and Drug Administration License-to-Operate (LTO) Guidelines and Requirements, Mandatory Packaging and Labeling Requirements, DOST-1 Packaging and Labeling Assistance, Packaging and Labelling Suppliers and Women Entrepreneurship in Digital economy through DOST's oneSTore.PH.

During the last day of the event, Ms. Myla R. Postadan, Licensing Officer III of the Food and Drug Administration enlightened the listeners about the guidelines of securing Food and Drug Administration- License to Operate (FDA-LTO).

On the other hand, Mr. Michael John C. Maquiling, Science Research Specialist II and head of the Information Technology Services and Management (ITSM) Unit imparted information about the Mandatory Packaging and Labeling Requirements and DOST1 Packaging and Labeling assistance.

To maintain linkages to various suppliers, DOST1-GAD staff, Ms. Rio Dyan B. Adviento introduced the different packaging and labeling suppliers who can help them improve their production. Lastly, DOST 1 Assistant Regional Director for Technical Services Ms. Racquel M. Espiritu shared the essence of the seminar, giving emphasis that it is a preparatory activity for the opening of the oneSTore.ph hub in the City of San Fernando, La Union.

To conclude the two-day seminar, San Fernando City Local Economic and Business Development (LEBDO) head, Ms. Rizalyn Medrano encouraged the participants to focus and work on their respective income generating products (IGPs) for possible inclusion once the oneSTore.ph hub is established in the city.

This is aligned with SDG 8 on Decent Work and Economic Growth, which ensures the attainment of higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labor-intensive sectors.



DOST 1 installs AWS in Salcedo, Ilocos Sur; capacitates users on system monitoring

By: Joseph Eisma



As part of the implementation of the Department of Science and Technology - Community Empowerment Thru Science and Technology (DOST - CEST) Program in Region 1, the Provincial Science and Technology Center - Ilocos Sur (PSTC-IS) facilitated the deployment and training of the Automated Weather System (AWS) to the Local Government Unit of Salcedo, Ilocos Sur on July 26, 2022.

According to Engr. Jordan L. Abad, Provincial S&T Director, the provision of the AWS is part of the Disaster Risk Reduction and Management / Climate Change Adaptation (DRRM/CCA) of the CEST program. "NaKaSaGaNa: Naglilinang ng Kahandaan sa Sakuna Gamit ang Napapanahong-teknolohiya" This aims "to capacitate the communities through timely weather data preparedness and resiliency during calamity especially during typhoons", Engr. Abad added.

The deployment aims to strengthen, enhance knowledge, and appreciation of the Science and Technology programs, projects, and activities through the provision of the S&T intervention to the people

as well as provide them mechanism for disaster preparedness mitigation. In addition, the intervention will help the community in monitoring the weather conditions, crop advisories, predictions, and plans for more resilient community.

Five (5) DRRM personnel of LGU Salcedo were capacitated on the installation and training on the operation and maintenance of the station.

Hon. Graziella Gironella-Itchon, Mayor of Salcedo expressed her gratitude to the DOST. "Agyaman kami iti DOST ta ti ili mi a Salcedo ti maysa a napili nga maikkan iti weather station tapno makatulong iti DRRM response unit ti Munisipyo iti kasta, mapadaras iti panagiwaragawag iti impormasyon kadagiti kailyanmi" (We are grateful to doST because our town of Salcedo is one of those chosen to provide the weather station to help our municipality's DRRM response unit by providing information to our countrymen more quickly), Mayor Itchon said.

Mr. Raymond Ardee F. Soriano, Science Research Specialist I and DRRM personnel of DOST Regional Office 1, served as the resource person during the activity.



DOST 1 participates in National Disaster Resilience Month celebration with DOST-ASTI and PHIVOLCS

By: Carla Joyce B. Cajala

CITY OF SAN FERNANDO, LA UNION- In celebration of the National Disaster Resilience Month, the Department of Science and Technology Region 1 (DOST 1), together with DZAG Radyo Pilipinas Agoo, featured the various technologies and innovations of the DOST- Philippine Institute of Volcanology and Seismology (DOST-PHIVOLCS) and DOST- Advanced Science and Technology Institute (DOST-ASTI) on their weekly radio program titled Tekno Presyensa: Syensya ken Teknolohiya para kadagiti Umili, on July 21, 2022.

DOST 1 Regional Director Armando Q. Ganal commended the accomplishments of the regional office and provincial S&T centers in the areas of Kabuhayan, Kaayusan, and Kinabukasan before getting into the major highlight of the program. He commended the staff and unit leaders on their good practices in keeping up with the attainment of the agency's goals, as shown during the recently-conducted Internal Quality Audit of DOST 1.

Dr. Teresito C. Bacolcol, Director III of DOST-PHIVOLCS, talked about the technologies used to

monitor, warn and alert the public in times of earthquakes, tsunamis, volcanic eruptions and other related phenomena like landslides. Apart from the technologies he staged, Dr. Bacolcol also imparted their activities on public awareness, community preparedness and disaster risk reduction.

Meanwhile, Engr. Gerwin P. Guba, Supervising Science Research Specialist of DOST-ASTI cited the technologies used by the agency to undertake research and development activities aimed at strengthening and modernizing information and communications technology and microelectronics. He shared about the three (3) projects that they are currently working on which are the a) Meteorological Data Acquisition Stations for Information Dissemination (MASID) Project, b) Understanding Lightning and Thunderstorms (ULAT) Project, and c) Philippine Earth Data Resource Observation (PEDRO) Center.

The guests encouraged the public to be prepared at all times and keep safe at all times. Disaster can happen anytime, it is uncontrollable, however, with the right response

and preparation, its effects could be reduced and mitigated. The technologies presented also need to be densified and maintained regularly in order to maximize its efficiency.

Disaster Prevention and Mitigation, which aims to lessen the impact of disasters through updated forecast, monitoring, deployment of Early Warning Systems, Hazard and Risk Assessment, Hazard Mapping, and effective planning, is one of the Disaster Risk Reduction and Management (DRRM) Thematic Pillars that DOST and its partner agencies remain committed to as the lead agency.



PROGRAM HOSTS:

MR. ANTONETTO LIGGIO DOST-North Luzon	MR. MICHAEL JOHN C. MAQUILING Science Research Specialist II DOST	MR. CARLA JOYCE B. CAJALA Project Assistant II DOST
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DOST 1 provides aid to chocolate producer in Alcala, Pangasinan

By: Catherine L. Lictao



The Department of Science and Technology Region 1 (DOST1), through the Provincial Science and Technology Center in Pangasinan, conducted a training on chocolate processing at DANNY PEREGRINO PABUNAN (DPP) Cacao Farm on July 18, 2022, at Barangay Kisikis, Alcala, Pangasinan.

The training aims to improve product stability on chocolate products of DPP Cacao Farm.

Prof. Imma Concepcion G. Estabillo, Chairperson of Bachelor of Science in Food Technology (BSFT) Department of Don Mariano

Marcos Memorial State University-Mid La Union Campus (DMMMSU-MLUC), started her presentation on Good Manufacturing Practices (GMP) and its importance to the food manufacturer. She discussed the process in making chocolate from harvesting, fermentation, drying, roasting, grinding, refining, tempering, molding and packaging. During the hands-on demonstration, she said that in chocolate production, it is important to follow the step-by-step process, in order to produce quality products. She also demonstrated how to use the butter extractor that is existing in the firm for them to efficiently produce cocoa butter and cocoa powder.

One of the goals of DOST is to expand Science and Technology Innovation (STI) assistance to communities and the production sector, particularly to Micro, Small, Medium Enterprises which is also in line with the Sustainable Development Goal 9 (SDG9) - Industry, Innovation and Infrastructure.





DOST 1 staff and assisted Firms complete Occupational First Aid Training in Ilocos Norte

By: Gael Myca A. Dacanay

Two (2) Provincial S&T Center – Ilocos Norte (PSTC IN) staff and 13 firms assisted by the Department of Science and Technology Region 1 (DOST1) completed the two-day Occupational First Aid Training conducted by the Philippine Red Cross (PRC) – Ilocos Norte Chapter on July 20-21, 2022 at the Philippine Red Cross, Laoag City, Ilocos Norte through the initiative of the DOST 1 through the Disaster Risk Management and Health Services Unit (DRMHSU).

The activity attended by 15 participants, is the first batch of the region-wide training for were trained as First Aiders and were taught on the basic and practical lifesaving skills which can be applied during workplace emergencies. The 16-hour lecture demonstration covered wound and burn treatment, recognizing and controlling bleeding, immobilizing fractures, moving and lifting victims, and other fundamental lifesaving

The training included series of return demonstration on how to properly perform the basic skills in first aid such as cardiopulmonary resuscitation which allows the rescuer to resuscitate a cardiac arrest victim by keeping oxygen flowing to their brain until help arrives or the person recovers, management of choking where the first aider shall perform the necessary procedures to clear a blocked airway, management of suspected spinal or head injury, management of wound, bleeding and burns through using the different bandaging techniques, and step-by-step lifting procedure.

"Safety is our priority. Remember the ABC (Airway, Breathing, Circulation). Welcome to First Class First Aiders!" said Mr. Jedmark Morido of the PRC Safety Services/ Disaster Management Service.

DOST1's DRMHSU will facilitate the next batches of trainings to the



provinces of Pangasinan, La Union, and Ilocos Sur during the succeeding months in support to the SDG 11 – Sustainable Cities and Communities and will continue to lead in prospering resiliency in the workplace and in the community.



DOST turns over Php 400k-worth of Salt Production facility to DMMMSU-FRTI

By: Carla Joyce B. Cajala

from page 1...

DMMSU-NLUC Chancellor, Dr. Junifer Rey E. Tabafunda, greeted the attendees to the historic event and offered his sincere gratitude to all the various team players of the project.

According to Dr. Angelina T. Gonzales, Officer-in-Charge of the Office of the Vice President for Research and Extension at DMMMSU, an ordinary technology that can be used every day is preferable to an amazing technology that cannot be used in daily life. She emphasized that innovations should be relevant, resizable according to the needs of the users, and reproducible for different uses. Dr. Gonzales applauded the organizations' initiative in producing iodized salt because it can aid in tackling malnutrition.

The salt processing facility was formed through the successful collaboration of DOST 1, DMMMSU-NLUC-FRTI, Bestmark Agro-Industrial

Manufacturing, the only accredited fabricator of the salt processing equipment, and JM Manufacturing, a DOST Small Enterprise Technology Upgrading Program (SETUP) beneficiary.

DMMMSU President, Dr. Jaime I. Manuel, Jr. commended DOST 1 for its unwavering assistance with all of their endeavors. True to this, he said that DOST is the third government agency with the highest worth of assistance to the university, and he hopes to work on more projects with them in the future.

Finally, DOST 1 Regional Director Armando Q. Ganal thanked all of the stakeholders for their cooperation and shared the agency's future plans with DMMMSU. He congratulated DMMMSU for contributing actively to all of their initiatives as a team.

The Ribbon-cutting ceremony followed as the Bureau of Fisheries and Aquatic Resources representative

and Aquatic Resources representative Ms. Mea Baldonado joined the team to grace the event.

Meanwhile, after the momentous turnover of the salt iodizing machine, DOST Laboratory Head Lena C. Rosario facilitated a test to determine whether iodine was present in the sample salt. The result turned out to be positive which means that the sample salt has been positively infused with iodine.

Also present during the event are Ms. Grace Monterola and team from JM Manufacturing and Mr. Marcos Aquino and team from Bestmark Agro-industrial Manufacturing.

This endeavor is aligned with the country's aim to support domestic technology development, research and innovation, by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities (SDG 9).



SALT PRODUCTION FACILITY



PRODUCED SALT



SALT IODIZING MACHINE



Upper left to right: PSTC-La Union Provincial Director, Jonathan Viernes, DMMMSU-NLUC Chancellor, Dr. Junifer Rey E. Tabafunda and Lower left to right: DOST 1 Regional Director, Dr. Armando Q. Ganal, DMMMSU President, Dr. Jaime I. Manuel, Jr., Bureau of Fisheries and Aquatic Resources representative Ms. Mea Baldonado and Officer-in-Charge of the Office of the Vice President for Research and Extension at DMMMSU, Dr. Angelina T. Gonzales

DOST 1 stays abreast with its ISO 9001:2015, successfully conducts IQA

By: Carla Joyce B. Cajala

CITY OF SAN FERNANDO, LA UNION- The Department of Science and Technology Region 1 (DOST 1) successfully conducted its Internal Quality Audit (IQA) on July 18-19, 2022 for its Regional Office and on July 14-15, 2022 for its Provincial S&T Centers.

The IQA seeks to evaluate the efficiency and performance of all DOST 1 processes in conformance to ISO 9001:2015 standards and determine opportunities for improvement so that it can continue to support its quality management system.

Mr. Decth-1180 P. Libunao, IQA Head, described the audit's techniques and scope during the opening salvo. In order to retain organizational excellence and customer pleasure, he reminded everyone to participate in this important event that will help the agency discover its strengths, maintain its effective practices, and further develop the processes.

Qualified staff who were acting as auditors of the other units or offices not under their direct supervision facilitated the activity. The auditees complied and cooperated responsibly with the different requirements of the International Organization for Standardization 9001:2015 (ISO 9001:2015), which cover the organizational context, leadership, planning for the quality management system, support, operation, performance evaluation, and improvement.

DOST 1 acquired its ISO 9001:2015 Certification on February 20, 2018 and for years, it remains committed to providing quality products and services to all stakeholders in region 1, within its capabilities and resources, according to standards and all



regulatory and statutory requirements and to continually improve its quality management system through efficient and effective risk management to exceed customer satisfaction.

The most of good practices have been identified and observed throughout the IQA, while just a small number require improvement. The auditees concur to make all necessary efforts to maintain a focus on providing high-quality services and further develop their procedures.

DOST 1 will continue this kind of activities to consistently improve its processes/methods, procedures and routines in carrying out its programs, projects, and activities specifically in providing science and technology transfer services, science and technology information, promotion and advocacy, and S&T Scholarships to the public and its partners to attain its quality policy and objectives.

DOST 1 supports agribusiness in Pangasinan thru Plant Growth Promoter and drying technologies

By: Engr. Eliza Mae E. Fernandez



To promote the use of modern technologies in farming and foster a competitive initiative in agriculture, the Department of Science and Technology Regional Office 1 (DOST 1), through the Provincial Science and Technology Center in Pangasinan (PSTC-Pangasinan) awarded Carrageenan Plant Growth Promoter (PGP) and Portable Solar Dryer (PORTASOL) to farmers association in Pangasinan on July 08, 2022, in Lingayen, Pangasinan.

The two (2) recipient associations are the Maaliguas Balite Sur Farmers Association Inc. and San Carlos Bolosan Farmers Irrigators Association Inc. which are both from San Carlos City, Pangasinan. These associations which are engaged in rice, vegetable, and hybrid corn production received a total of P453,000.00 worth of Carrageenan PGP and PORTASOL under the 2022 Grant-In-Aid Community-Based Project (GIA-CBP) of the DOST.

The Carrageenan PGP is a DOST-Philippine Nuclear Research Institute (DOST-PNRI) technology that has been shown to enhance rice plant potential yield. According to the results of Carrageenan PGP field testing in Sta. Barbara, Pangasinan, it was demonstrated to boost the potential yield of farms that utilize Carrageenan by up to 30% when compared to standard farming methods without Carrageenan PGP. Rice plants treated with Carrageenan PGP have shown resistance to Tungro Virus Disease and Bacterial Leaf Blight.

PORTASOL, on the other hand, was recognized as one of the interventions to address the association's concern about drying their produce. It is a multi-purpose solar dryer with a stackable set of thermal trays for drying of various types of grains to undergo drying process. This will help solve the problems of farmers who do not have concrete pavements for drying grains and will not resort in



using roads or public highways to dry their harvest, which is now prohibited by the Department of Public Works and Highways (DPWH) since it poses a danger to both grain dryers and motorists.

DOST 1 promotes technologies approved by the Regional Development Council and continues to provide support to different industries through provision of technology innovations and equipment. For interested parties who want 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.

DOST 1 takes part in Nutrition Month celebration with DOST-FNRI and Nutridense Food Manufacturing Corporation (NFMC)

By: Carla Joyce B. Cajala



CITY OF SAN FERNANDO, LA UNION- In celebration of Nutrition Month, the Department of Science and Technology Region 1 (DOST 1), in collaboration with DZAG Radyo Pilipinas Agoo, featured the initiatives and updates of DOST-Food and Nutrition Research Institute (DOST-FNRI) to address the nutrition of Filipino families and one of their adopters in region 1 on their weekly radio program titled, "Tekno Presyensya: Syensa ken Teknolohiya para kadagiti Umili", on July 14, 2022.

DOST 1 Regional Director Armando Q. Ganal lauded the successes of the regional office and provincial S&T centers in the areas of Kabuhayan, Kaayusan, and Kinabukasan before getting into the major highlight of the program. He commended the staff and unit leaders for working together to meet their goals.

Dr. Imelda Angeles-Agdeppa, the director of DOST-FNRI, provided a brief overview of the agency's most recent initiatives, programs, and activities. She mentioned how they overcame the pandemic and kept on innovating despite it. This was demonstrated by Dr. Agdeppa's reference of Virgin Coconut Oil,

which rose to prominence during the pandemic's peak and has since become a source of great pride for the department. Dr. Agdeppa also spoke about the Iron Fortified Rice and Enhanced Nutribun, which looks to be popular right now. In conjunction with Nutrition Month, she encourages backyard gardening of vegetables and fruits to further preserve a healthy supply of food. She claims that DOST-FNRI's efforts to promote proper nutrition to Filipino families remain robust.

Meanwhile, Mr. Racky Doctor, President of Nutridense Food Manufacturing Corporation (NFMC), discussed the enhanced nutribun and iron fortified rice. NFMC has been a regional active adopter of DOST-FNRI products and innovations. He offered a general summary of the items and the significant nutritional influence they had on their customers.

The DOST-FNRI reformulated the ingredients of the traditional to come up with an "enhanced nutribun" or e-nutribun with softer texture, likable taste, easier for children to hold and bite, and healthier which contains micronutrients, particularly iron and vitamin A. Each serving of E-Nutribun weighing 160-165 grams

per piece, has 504 calories, 17.8 grams protein, 6.08 milligrams iron and 244 micrograms vitamin A. The first variant of Enhanced Nutribun released by the DOST-FNRI was the squash variant which was later followed by the carrot variant in April and the sweet potato variant in October the following year.

On the other hand, Iron Fortified Rice was an initiative of the DOST-FNRI to address the Iron Deficiency Anemia crisis in the country through fortifying the traditional rice produced.

Mr. Doctor talked about the company's feeding programs, which include Enhanced Nutribun and Iron Fortified Rice, and with which considerable gains have been witnessed and reported by the school officials on the children who have received the programs. He stated that his business is dedicated to supporting the DOST-FNRI's initiative to promote healthy eating and address malnutrition in the country.

Those who are interested in becoming an adopter of the various technologies developed by the DOST-FNRI can express their interest by writing a letter to the agency or the DOST regional offices.

DOST 1 welcomes new scholars

By: Carla Joyce B. Cajala

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The RSTHRDPC team composed of Ms. Adelisa C. Florendo, Regional Scholarship Coordinator, and staff, Ms. Venus P. Andaya, Ms. Carla Grace R. Pacheco, and Mr. Nikko S. Ofo-ob, oriented 40 new DOST scholars from the province of La Union along with their parents.

DOST 1 Regional Director Armando Q. Ganal welcomed the students and their parents to the memorable event and urged them to understand very well the provisions that encapsulates the agreement to be signed. Dr. Ganal encouraged them to do well on their studies and be a responsible patriot of the nation.

Ms. Florendo reviewed the agreement while incorporating the pertinent information that needed to be noted. She went in-depth about the scholars' obligations, including specifics about their privileges, stipend, and what to do in various situations.

An open forum followed where the queries and concerns of the parents and students were answered and addressed.

As the RSTHRDPC team welcomed the new scholars to the S&T family, they broke the dullness through the historical 'Batis' song followed by the recitation of the Scholar's Oath.

The formal signing and submission of requirements for the first batch of new DOST scholars took place after the program.

The team is set to conduct various activities as such to all the provinces of the region for the month of July.



DOST 1, LGU-Burgos gear for a successful CEST Program Implementation

By: Carla Joyce B. Cajala and Jerwin M. Ramos



The Department of Science and Technology Region 1 (DOST 1) held a consultative meeting with the Local Government Unit (LGU) of Burgos, La Union to present its regional programs, projects, and activities (PPAs) to the newly-elected Local Chief Executive of the municipality and to talk about its plans for the municipality.

Staff from DOST 1 headed by Provincial Science and Technology Center-La Union (PSTC-LU) Provincial Director Jonathan M. Viernes, and Community Empowerment through Science and Technology (CEST) Project Leader Decth-1180 P. Libunao and representatives from LGU of Burgos led by Mayor Delfin C. Comedis Jr. were present during the meeting.

Mr. Viernes presented an overview of the Small Enterprise Technology Upgrading Program (SETUP), Innovations for Filipinos Working Distantly from the Philippines (ifWDPh), Technology Assistance and Consultancy Services (TACS), Technology Commercialization, CEST, Regional Standards and Testing Laboratories (RSTL) Services, and Scholarship Programs.



On the other hand, Mr. Libunao presented the CEST program which addresses the five (5) component areas namely: Livelihood/ Economic Enterprise Development, Health and Nutrition, Human Resource Development, Environmental Protection and Conservation and Disaster Risk Reduction and Management and Climate Change Adaptation. He listed the preparations made for the CEST program's implementation in the barangays of Lower Tumapoc, Delles, and Linuan.

A planning session was conducted on July 6, 2022, to appropriately identify the interventions needed based on the findings of the Community Needs Assessment that was carried out

on March 28-29, 2022. DOST 1 staff, representatives from LGU Burgos, as well as Don Mariano Marcos Memorial State University, Mid-La Union Campus (DMMMSU-MLUC) took part in the event.

The DOST 1 remains strong in its mandate to provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results therefrom are geared and utilized in areas of maximum economic and social benefits for the people and to support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning (SDG 11).

The Department of Science and Technology Regional Office 1 (DOST-1), through the Community Empowerment through Science and Technology (CEST) unit, facilitated a blended planning meeting between DOST 1, Don Mariano Marcos Memorial State University (DMMMSU), and LGU-Burgos for the implementation of the CEST program in Burgos, La Union following the consultative meeting held on July 5, 2022 with Mayor Delfin C. Comedis Jr.

Results of the conducted community needs assessment in the five (5) entry points of CEST namely: Livelihood/Economic and Enterprise Development, Health and Nutrition, Environmental Protection and Conservation, Human Resource Development, and Disaster Risk Reduction and Management and Climate Change Adaptation were presented during the planning on July 6, 2022 at the DOST Provincial Science and Technology Center, in order for the group to craft a plan, define the roles of stakeholders and identify necessary interventions for the implementation

Following the planning phase, the program's stakeholders determined the appropriate trainings, activities, and S&T interventions based on the needs, issues, and opportunities identified in the CNA for implementation in the community.

In closing, Mr. Jonathan Viernes, Provincial Director of PSTC La Union, expressed his sincerest gratitude to partner agencies for participating in the event and hoping to have a successful implementation of CEST program in the municipality. Signing of Memorandum of Agreement (MOA) with partner agencies and newly elected officials will be scheduled.



DOST 1's CSR: Iron Fortified Rice for Sta. Barbara, Pangasinan residents and Charitable Institutions

By:Monique C. Esguerra



The Department of Science and Technology Regional Office 1 (DOST 1), through the Provincial Science and Technology Center (PSTC) in Pangasinan, conducted its Corporate Social Responsibility to some residents and charitable organizations in Sta. Barbara Pangasinan.

A total of 450 kilograms of Iron Fortified Rice (IFR) was awarded to the residents of Barangay Sta. Barbara, beneficiaries of Servants of Charity Programs for the Poor and Silungan na Panangaro Home for the Aged, Persons with Disabilities (PWDs), and Education Assistance Program Scholars.

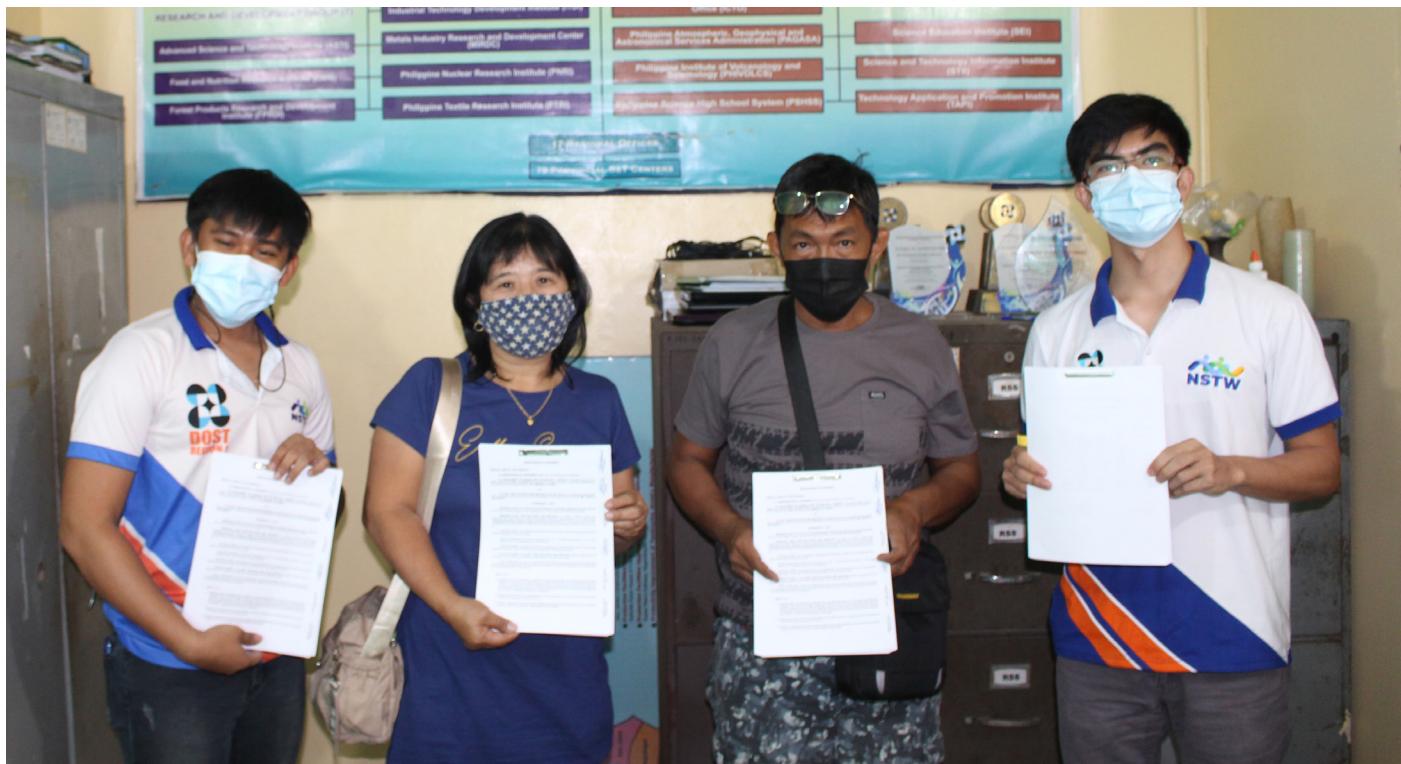
IFR is the only type of rice blended with iron, which is one of the most important minerals in the body. As cited by the Academy of Nutrition and Dietetics, the significant function of iron is to carry oxygen in the hemoglobin or red blood cells throughout the body so cells can produce energy. Thus, it enhances body strength, activates brain performance, and boosts body resistance against sickness. Iron also helps eliminate carbon dioxide from the body.

The DOST's Iron Rice Premix (IRP) and Iron Fortified Rice (IFR) is in line with the Philippine Food Fortification Act of 2000 (R.A. 8976), an act that protects and promotes the right to health for the people and instills health awareness among them.

Fr. Charlton O. Viray, Servants of Charity Local Superior thanked the DOST-I for providing a big help to the beneficiaries of the institution.

DOST-1 inks MOA with Ilocos Sur Manufacturing Firms for Technology Upgrading; sets to release 1.620M innovation fund

By: Laurine R. Sales



VIGAN CITY, ILOCOS SUR – The Department of Science and Technology Region 1 (DOST 1) thru the Provincial Science & Technology Center – Ilocos Sur signed Memorandum of Agreement (MOA) with three (3) manufacturing firms in the province for the Small Enterprises Technology Upgrading Program (SETUP) amounting to Php1,620,000 last July 14, 2022 here.

DOST-1 formally forged the MOA with Dinz Food Products and Nanang Sion Food Products from Vigan City, and Ogoy Tractor Parts and Services from Galimuyod.

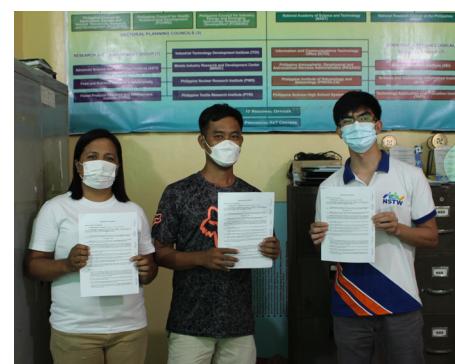
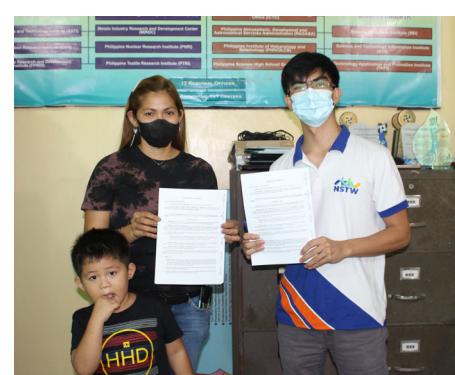
Before signing, Engr. Jordan L. Abad, Officer-in-Charge of the PSTC-IS, presented the contents of the MOA with regards to responsibilities of both parties as he highlighted the monthly monitoring of the agency based on the improvement of the firms in terms of gross sales, employment, and productivity. He also emphasized the terms of refund among others.

After the signing, Ms. Mageline T. Ayson, owner of Dinz Food Products expressed her thanks to the agency for the opportunity to upgrade their production equipment thru the acquisition of 1-unit Stainless-Steel Food Mixer, 1-unit Coconut Stripper, a band sealer, and the provision of packaging and label of their peanut garlic. A total of Php150,000.00 will fund the project.

Ms. Emily P. Pare of Nanang Sion Food Products will be assisted with improved empanada packaging that is food-grade, grease, and heat resistant wrapper and box amounting to Php250,000.00.

Ogoy Tractor Parts and Services, on the other hand, owned by Mr. Nixon Q. Galangco is set to upgrade its services thru the acquisition 1 unit resurfacing Machine, 1 unit lathe machine, and 1 set reboring and honing machine amounting to Php1,220,000.

SETUP is a flagship program of the agency which aims to assist the Micro, Small and Medium Enterprises (MSMEs) through provision of technology-based interventions upgrading their business for increased income and productivity.



Region 1 NICE Winners featured in Tekno Presyensya

By: Carla Joyce B. Cajala



CITY OF SAN FERNANDO, LA UNION- The Department of Science and Technology Region 1 (DOST 1), together with DZAG Radyo Pilipinas Agoo, featured the National Invention Contest and Exhibits (NICE) Winners on their weekly radio program titled, "Tekno Presyensya: Syensya ken Teknolohiya para kadagiti Umili", on July 7, 2022.

The program's first segment, which addressed the accomplishments of the regional and provincial S&T offices in the areas of Kabuhayan, Kaayusan, Kalusugan, and Kinabukasan, was lauded by Mr. Decth-1180 P. Libunao, DOST 1 Senior Science Research Specialist.

Ms. Eileen Fernando of the DOST- Technology Application and Promotion Institute (DOST- TAPI) gave a general description of NICE, its categories, and how it differs from the biennial Regional Invention Contest and Exhibition (RICE) in terms of how it is conducted.

Prof. Zaldy Fernandez of Mariano Marcos State University (MMSU), who won the UNLAD AWARD for Outstanding Utility Model, spoke about the development of his Multi-Fuel Dryer.

The term "multi-fuel dryer" refers, broadly speaking, to dryer equipment or machines that burn a variety of fuels, including wood, charcoal, sawdust, rice hulls, maize stalks, sugarcane stalks, coconut shells, and the like. The aforementioned tool is used to dry fish, fruits, cereals, leaves (including malunggay and tobacco leaves), garments, and baked goods. Although it is built, constructed, and manufactured as a dryer, it can also serve as an oven and/or a multi-fuel dryer to process various materials via heat convection.

On the other hand, Ms. Charissa De Vera, a Faculty Researcher of Pangasinan State University (PSU) discussed their team's winning entry under the Creative Research

Category which won the 3rd place. It is entitled, "Optimization of Mung bean milk-based Mango Beverage" which blends mungbean and mango to come up with a lactose-free milk based drink.

They did not innovate the products on the first try; rather, they underwent several trial and mistakes to polish and achieve the greatest output possible. The guests shared their difficult journey and revealed that success comes with determination, devotion, commitment, and compassion.

Those who are interested in following the victors' lead and showcasing their innovations and inventions can first participate in RICE on 2023, and if their entries win, they can then move on to NICE on 2024.

DOST-1 reinforces livelihood of Women of Brgy. Palisoc in Bautista, Pangasinan

By: Lyngel B. Ulanday



Community Empowerment through Science and Technology (CEST) program of the Department of Science and Technology 1, conducted a training on Chicken meat processing to the Palisoc Women's Association (PWA) of Barangay Palisoc, Bautista, Pangasinan on July 22,2022.

The DOST- Provincial S&T Center in Pangasinan organized the training as a follow up effort to further develop the skills of the PWA members. Last October 2021, the members were trained on proper handling and accurate methods to process pork meat products such as pork tocino, pork longganisa, siomai, and embotido that are now marketed in the barangay. Three (3) processed chicken meat products will be added to their products such as chicken tocino, chicken longganisa, and chicken nuggets.

Twelve (12) members were trained in curing and processing chicken meat. Ms. Imelda P. Soriano, Trainer and owner of Chatita's Food Products, reminded the participants about the steps in food safety. "We must always



follow proper handling, preparation, and storage of our processed meat products specially we are dealing with food," Ms. Soriano emphasized.

The participants were trained on chicken meat processing from the preparation of tools needed for the process, washing and deboning the chicken meat, and measuring the ingredients for each recipe.

Meat grinder, food processor, mixing bowls, and impulse sealer were

Ms. Ana Marie Abaya, the newly-elected President of PWA, said, "Thank you for choosing us (association), We will take this opportunity to grow our business."

Currently, the association has 23 active members. They have been producing meat products after completing their training last year and affirms their commitment in sustaining the CEST program's advocacy to empower the women in the community.

DOST-1 upgrades Color Sorter of Cabugao Rice Mill; capacitates workers on machine operations

By: Laurine R. Sales



@DOSTILOCOS SUR



CABUGAO, ILOCOS SUR – Torres Rice Mill, a rice milling firm here, integrated the latest sorting technology to improve the quality of its milled rice through the Department of Science and Technology Small Enterprises Technology Upgrading Program (DOST-SETUP) and capacitated four (4) of its workforce on machine operation and maintenance last July 18, 2022.

The DOST Region 1 thru the Provincial Science & Technology Center - Ilocos Sur (PSTC-IS) facilitated the training on the operation and maintenance of the Color Sorter machine in partnership with Ricemac Philtrade Corporation equipping four workers including Mr. Arden S. Torres, owner of Torres Rice Mill. They were introduced with the general aspects of operation and maintenance of the newly acquired color sorter machine ensuring high percentage recovery.

Mr. Richard T. Pal-laya, Electro-Mechanic Technician from Ricemac Philtrade Corporation served as the resource person during the training.

According to Mr. Torres, most of their clients demand quality milled rice free from foreign and discolored grains.

Since high quality rice grains commands a higher price, the firm received a total of Php2,400,000.00 last June 2, 2022, from the DOST for the acquisition of the 5G Color Sorter Machine with full color CCD camera, RGB led lamp, and fully automatic control system.

Before the intervention, the firm has an existing second-hand color sorter machine acquired in 2018. However, the machine is beginning to show signs of inefficiency due to the presence of discolored grains producing lower quality of output.



With the intervention, the elimination of the firm's existing constraints in producing quality milled rice free from typical defects and discolored grains could be attained. The color sorter machine will help the firm increase its productivity by 10% and will significantly increase the income in rice milling services and rice retailing business.

Torres Rice Mill is one of the assisted firms of the center for this year under the DOST-SETUP – a flagship program of the agency that aims to assist existing Micro, Small and Medium Enterprises (MSMEs) to address their technological problems and improve productivity and efficiency thru technology acquisition, human resource training, functional packages and label designing, and product testing.

DOST-1's iSTART program introduces Good Agricultural Practices in Sual, Pangasinan

By: Eliza Mae E. Fernandez



The Department of Science and Technology Regional Office 1 (DOST 1), through the Provincial Science and Technology Center in Pangasinan (PSTC-Pangasinan), in collaboration with the Smarter Approaches to Reinvigorate Agriculture as an Industry in the Philippines (SARAI) of the University of the Philippines Los Baños (UPLB), conducted an on-site inspection and demonstration of Automatic Weather Stations (AWS) on July 22, 2022 in the Municipality of Sual, Pangasinan to support local government unit (LGU) in incorporating advanced agricultural farming methods and practices required for agricultural sustainability.

The Automatic Weather Station Early Warning System (EWS) for Agriculture was one of the priority projects identified during the Focused Group Discussion of innovation, Science and Technology for Accelerating Regional Technology-based Development (iSTART) program conducted in the Municipality. The AWS was developed by the SARAI Team from the UPLB

and funded by DOST-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) is applicable for use on agriculture and disaster preparedness.

In addition, the SARAI-AWS technology is a system of integrated components that automatically measure, record, and transmit weather data to include temperature, wind speed, precipitation, humidity and among others and is also capable of weather forecasting and can be used as an EWS.

Present during the activity were Engr. Arnold C. Santos, Provincial Director of PSTC-Pangasinan who acknowledged and welcomed the participants and Mr. Decth-1180 P. Libunao, DOST 1 OIC-ARD for Field Operations.

Participants during the orientation were representatives from LGU Sual Municipal Planning and Development Office, Municipal Disaster Risk Reduction Management, and

Reduction Management, and Municipal Agriculture Office.

The presentation of Project SARAI was discussed by Ms. Rosemarie Laila D. Areglado, and the Lectures and Demonstration of Automatic Weather Station was spearheaded by Prof. Nelio C. Altoveros and Mr. Rendendo Mata, all from UPLB. According to them, the weather forecast, and information obtained from an AWS can help farmers in making appropriate decisions related to crop planting dates, and adjustments in farm operations. The AWS network also serves as a data point collection source for Project SARAI to help build its long-term weather and climate databases.

With the aid of the DOST iSTART program, S&T intervention continues in the Municipality of Sual towards innovation, progress, and development (SDG 9 & 11).



DOST 1 PROGRAMS & SERVICES

TECHNOLOGY TRANSFER AND COMMERCIALIZATION PROGRAM

SETUP

SMALL ENTERPRISE TECHNOLOGY UPGRADING PROGRAM

iFWD PH

INNOVATION FOR FILIPINOS WORKING DISTANTLY FROM THE PHILIPPINES

CEST

COMMUNITY EMPOWERMENT THROUGH SCIENCE AND TECHNOLOGY

COMMUNITY-BASED

COMMUNITY-BASED PROJECTS

SCIENCE AND TECHNOLOGY SERVICES

RSTL

REGIONAL STANDARD AND TESTING LABORATORIES

TACS

TECHNICAL ASSISTANCE AND CONSULTANCY SERVICES

P&L

PACKAGING AND LABELING ASSISTANCE

TECH TRAININGS

TECHNOLOGY TRAININGS

SCHOLARSHIP PROGRAMS

JLSS

JUNIOR LEVEL SCIENCE SCHOLARSHIPS

UNDERGRADUATE

UNDERGRADUATE S&T SCHOLARSHIPS

GRADUATE

GRADUATE S&T SCHOLARSHIPS

SPECIAL PROJECTS

iSTART

INNOVATION, SCIENCE AND TECHNOLOGY FOR ACCELERATING REGIONAL TECHNOLOGY-BASED DEVELOPMENT

STARBOOKS

SCIENCE AND TECHNOLOGY ACADEMIC AND RESEARCH-BASED OPENLY-OPERATED KIOSK STATIONS

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