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

JAN - MAR 2021



HIGHLIGHT

DOST 1 CELEBRATES 2021 NATIONAL WOMEN'S MONTH, SUPPORTS GENDER EQUALITY AND WOMEN EMPOWERMENT









EDITORIAL



Welcome to the first issue of the S&T Trends for this year!

For over a year now, we have been experiencing extreme challenges that hinder inclusive growth and development in all facets of life – COVID-19 for one.

Despite this, DOST 1 has never stopped leading Science, Technology and Innovation for the benefit of our people in Region 1. We continue to invest in what we consider as potentials in the field of Science and Technology as our contribution in addressing problems brought by the pandemic and more so, to achieve inclusive development.

This issue highlights the various activities conducted by the agency during the National Women's Month Celebration in March as our support to Gender and Development. It features the different programs, projects and activities of DOST 1 for the first quarter of CY 2021 amidst the pandemic that made us realize we can find solutions for challenges confronting S&T development in the region.

Furthermore, DOST is persistent in expanding its networks and linkages for the realization of its programs and projects. With the help of our stakeholders from both public and private sectors, we were able to deliver science and technology-based services to the people.

Most importantly, we acknowledge all the men and women behind all the undertakings of DOST I and this issue testifies some of our successes.

We are DOST. We define one's life through Science and Technology.

Let us continue to work as one and #WeHealAsOne.

ANGEL LYN O. LEANDADO



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DOST 1 celebrates 2021 National Women's Month, supports Gender Equality and **Women Empowerment**

by DOST 1 - Gender and Development, Maureen Heidi L. Perez, Project Assistant II



The Department of Science and Technology Region 1 (DOST 1), through its Gender and Development (GAD) Program, actively participated in the annual celebration of the 2021 National Women's Month this March. With the sub-theme, "Juana Laban sa Pandemya: Kaya!", the celebration posed both challenges and opportunities for women.

This year's celebration serves as a tribute to the extraordinary roles of all Juanas as trailblazers and harbingers of change; and also a call for concrete, sustainable, and inclusive actions towards gender equality.

DOST I's GAD Focal Point System (GFPS), led by DOST I Regional Director Armando Q. Ganal, organized various activities for both internal and external clients of the agency. GFPS is a mechanism established to advocate and lead in mainstreaming gender perspective in agency policies, plans and programs, as well as in spearheading the preparation of agency's annual GAD plans in response to gender issues.



In photos were: (from left to right) ARD Racquel M. Espiritu of DOST 1, Ms. Antoniet L. Lingsit of DZAG Radyo Pilipinas Agoo, Regional Director Armando Q. Ganal of DOST 1, Ms. Maricel M. Foronda of DZAG Radyo Pilipinas Agoo, and Atty. Jasmin C. Banez of DOST 1.

DOST I's Kick-Off program on air

Through DOST I's radio program entitled, "Tekno PreSensya: Syensya ken Teknolohiya para kadagiti Umili", the Kick-Off program was conducted on the 1st day of March 2021 via FB live of the official FB Page of DOST 1, in partnership with DZAG Radyo Pilipinas Agoo.

The Program highlighted the activities prepared by the agency in celebration of the 2021 National Women's Month and encouraged every Juan and Juana to partake in all the activities set.





DOST 1 receives PRIME-HRM Bronze Award during the International Women's Day



DOST 1 Chief Administrative Officer and Acting HRMO, Atty. Jasmin C. Banez in delivering her opening message



CSC 1 Chief Human Resource Specialist of the PSED, Ms. Liwayway R. Navalta in sharing the Overview of the PRIME-HRM Bronze Award



DOST Region 1 Director, Dr. Armando Q. Ganal (left) received the Bronze Award handed over by CSC Region 1 Director, Hedy Jose B. Lardizabal (right)



DOST I Personnel behind the Bronze Award. Standing from the left: Mr. Zosimo C. Galvez, Ms. Arlene F. Galvez, ARD Racquel M. Espiritu, RD Armando Q. Ganal, Atty. Jasmin C. Banez, Ms. Arceli R. Pimentel. Seated from left: Mr. Decth-1180 P. Libunao, Mr. Enrique G. Fernandez, Ms. Angel Lyn O. Leandado, Ms. Adelisa C. Florendo, and Ms. Maureen Heidi L. Perez.

Department of Science and Technology Region 1 (DOST 1) received the Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) Bronze Award on March 8, 2021 during the agency's celebration of the 2021 National Women's Month.

The conferment of the PRIME-HRM Bronze Award to DOST 1 is based on the Civil Service Commission (CSC) Resolution Number 2001017, dated 03 December 2020. The award was presented by the CSC 1 Officials headed by Regional Director Hedy Jose B. Lardizabal; accompanied by Assistant Regional Director Josephine R. Altura; Chief Human Resource Specialist of the Policies and Systems Evaluation Division (PSED) Liwayway R. Navalta; Supervising Human Resource Specialist of PSED Walfredo C. Laudencia, Jr.; and Human Resource Specialist I Bernice Raya Dumaoang.

Atty. Jasmin C. Bañez, Chief Administrative Officer and Acting HRMO of DOST 1, said during her opening message that "I remember the time when our PRIME-HRM journey has begun. We are full of doubts and hesitations because the evidence requirements in the four systems are overwhelming. However today, the time has come to reap the fruits of our labors."

Atty. Bañez added that "This pandemic has proven that we, as public servants, are resilient regardless of sex. The scarcity of resources is not a hindrance to what we have accomplished now. This is all because of our dedication, unity and faith."

Meanwhile, Ms. Liwayway R. Navalta, CSC 1 Chief Human Resource Specialist of the Policies and Systems Evaluation Division, said that "In the history of PRIME-HRM, DOST 1 ang pinakamabilis nabigyan ng PRIME-HRM resolution. Hence, Bronze Award entitles DOST 1 with various incentives and privileges."

Ms. Navalta mentioned the incentives and privileges of being a Bronze Awardee; grant of accreditation status or the authority to take final actions on appointments, installation of available computerized HR systems developed/owned by the Commission shall be installed free of charge with free orientation in the operation, 20% discount to one (1) agency representative for CSC trainings/conferences, HRMO shall be nominated/ recommended for scholarship grant to CSC's Certification Program, among others.

DOST 1 Regional Director, Dr. Armando Q. Ganal applauded the assessors from CSC 1, especially Ms. Josephine R. Altura, Director III of CSC 1, who served as the agency's Assistor, and CSC 1 Regional Director, Dir. Hedy Jose B. Lardizabal. Director Ganal also mentioned that "Equal Opportunity Principle is being observed in the agency, regardless of sexual orientation, gender identity and expression, and sex characteristics, thanks to PRIME-HRM. Let us savor the bronze award first, and I encourage everyone to take on the next challenge when we are ready."

Women In Science Leadership

by DOST 1 - Research and Development Management and International Linkages Unit, Maura Andrea A. Ortega, Project Assistant II



DOST-1, through its Research and Development Management and International Linkages Unit (RDMILU), organized a webinar on Women in Science Leadership on March 8, 2021 as a way of celebrating the International Women's Day, where science and technology leaders and experts from government agencies and academe were brought together.

The free webinar was hosted via Microsoft Teams and Facebook Live through DOST-1's page. Around 100 participants from various government and non-government agencies, institutions, and LGUs showed their support.

DOST Undersecretary for Research and Development, Dr. Rowena Cristina L. Guevara, discussed about Gender and Development in Philippine Science, Technology and Innovation Ecosystem. It was revealed that 70% of our healthcare workers are women. She showcased the contributions of our female leaders and researchers in our fight against COVID-19. Some of these were the RxBox by Dr. Portia Fernandez-Marcel, FASSSTER by Dr. Ma. Regina Justina Estuar, and REwear face mask by Dir. Celia Elumba. She encouraged women researchers, scientists, and engineers to show their skills and talents for young girls to see role models in them. Meanwhile, Dr. Aimee Lynn Dupo, Scientist I and Professor 10 of the University of the Philippines Los Baños (UPLB), focused on fostering leadership through scientific citizenship. Research, documentation, education, and extension are avenues where women can exhibit leadership. Although, entomology is a field dominated by men. Dr. Dupo, an entomologist, is an example that women can pursue Science, Technology, Engineering, and Mathematics (STEM) related careers. She posted the subjects of her studies with catchy and informative captions on social media platforms. She believes that in this way, scientists would appear more approachable. She also actively participated in webinars and events where the youth was involved. She said,

"Whatever your interest is, regardless if you are a boy or a girl, if you are passionate about it, you have to be able to study for it. Ask a scientist about it.".

Also, Dr. Milflor Gonzales, Chief Science Research Specialist of DOST-Food and Nutrition Research Institute (DOST-FNRI), took a closer look on women's health and nutrition. Food insecurity was highest in households with children and pregnant family members. To reduce malnutrition, the first 1000 days of a child must be monitored. The health of a child is already affected from the first day of conception. The mother shall observe a healthy and proper diet to improve the cycle of nutrition. Food technologies for women were also developed to ensure that they are not only mentally empowered, but also physically healthy.

The discussion was followed by exchange of questions and answers among the participants and the speakers. It was an inspiring discourse that empowers young women to pursue careers in Science, Technology, Engineering, and Mathematics (STEM). Role modeling is important in inspiring the youth. Women leaders must go beyond the science, show the beauty of it and relate it to everyday life. What men can do, women can do.

All about COVID-19 Vaccines for every Juan and Juana

It is very timely that the GFPS of DOST I has organized a webinar on COVID-19 vaccines as one of the most essential topics that must be disseminated to every Juan and Juana.

Dr. Veronica G. De Guzman from the Department of Health Region 1 (DOH 1) served as the Resource Person during the webinar conducted last March 11, 2021 via Microsoft Teams and FB Live of DOST 1's Official FB Page.



Vaccination aims to save lives and mitigate the impact of the virus. It is one of the most effective ways to protect one's defense in this time of COVID-19 pandemic. COVID-19 vaccine prevents transmission and further infection of symptomatic and asymptomatic cases. Also, the vaccine strengthens the immune system by aiding in the identification and formation of antibodies to be able to fight the virus.

Before Dr. De Guzman ended her presentation, she encouraged every Juan and Juana to partake and support the BIDA BAKUNATION Program of DOH against covid-19. She added that, "The vaccine is free and effective, high quality, and however, the priority are those most-at-risk and most vulnerable."

Training on Ube Processing for All

A livelihood training webinar on Ube Processing was conducted on March 18, 2021 via FB Live close group.

The training webinar was organized by the GFPS to provide alternative source of income to all participants. Ms. Princess P. Abuan, Project Assistant II of Provincial Science and Technology Center (PSTC) – La Union, served as the trainor and a total of 143 participants joined the training webinar.







Learning about the 7S of Good Housekeeping

The webinar entitled "7S of Good housekeeping: Setting the Pathway to a Safe and Healthy Workplace in the Period of Pandemic", was conducted on March 15, 2021 via MS Teams platform and FB Live, which informed the participants in the identification of the costs of unsafe workplace to enterprise profitability and workers' productivity.

From the original 5S, it was upgraded into 7S: Sort, Systematize, Sweep, Standardize, Self-Discipline, Sustain, and Safety. It starts from identifying down to eliminating unnecessary items from the workplace down to the maintenance of safe and healthy workplace. The 7S helps us to optimize limited resources, comply with workplace new normal protocols and to boost productivity despite the reduction in business capacity.

"Let us all remember that a safer place creates a healthy ambiance which in turn improves the productivity of the workers and in this time of pandemic it is also an effective preventive measure to control or minimize the spread of various illnesses caused by bacteria and viruses." Mr. Ben A. Donglayan, Productivity Trainor of Regional Tripartite Wages and Productivity Board Region 1, shared during his discussion. A total of 445 individuals participated in the said webinar.



TechTalk Webinar Series

by DOST 1 - Research and Development Management and International Linkages Unit, Maura Andrea A. Ortega, Project Assistant II



DOST-1, through its RDMILU, launched the first episode of TechTalk on March 17, 2021.

The TechTalk is a webinar series that promotes matured DOST generated and funded technologies. Female researchers and their technologies were featured in celebration of the International Women's Month. It was hosted via Microsoft Teams and Facebook Live through DOST-1's page.

Before the COVID-19 pandemic, products and technologies generated through research and development were showcased during the Regional Science and Technology Week and Municipal Science and Technology Caravan. These events aimed to attract business investors and MSMEs for possible technology adoption. As a way of adapting to the new normal, TechTalk is created to connect with the public virtually.

Professor Anabella G. Valdez of Don Mariano Marcos Memorial State University – South La Union Campus, talked about the Chevon-based Products she developed. Chevon or goat meat were processed into Bulgogi, entrails into Pinapaitan, lean trimmings into Sinampalukan and skin into Sisig. Mixes and bouillon cubes were also derived from lean trimmings, bones, and collagen of chevon carcass. Due to high water activity and low pH value, these chevon dishes were pressurized in a water retort to prolong the shelf-life. Thus, retortable stand up pouches were used for packaging. Pinapaitan, Sinampalukan, and Sisig can be stored for 5 to 6 months at room temperature. At the same conditions, Bulgogi can last up to 13.8 months.

As a result of the research project, Prof. Valdez was able to apply for patents and copyrights. Her industrial design for bouillon cubes molder/presser, dehydrator, and multipurpose cutter were registered. The dehydrator addressed the problem for drying in areas with insufficient sunlight. This can also be used for other food products such as fish.

On the other hand, Ms. Meryl A. Bernardino, Project Staff of PSU-DOST 1 Food Innovation Center (FIC), showcased various FIC-developed food products. She highlighted DOST's vacuum fryer in their food innovations for okra, squash, mushroom and native onions. It deep-fries food at a lower temperature to retain the natural color and flavor of the food. Vacuum fried products have lower fat content compared to traditionally fried products. For bottled products such as the chunky tomato salsa and bangus binagoongan, water retort was used.

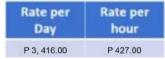
Another technology utilized was the cabinet dryer. It vaporizes water to inhibit the growth of microorganisms in dried mangoes and mango rolls. Lastly, processing of native delicacies were also modified. Instead of charcoal grill, gas baking oven was used to make tupig and bibingka. To extend the shelf-life of these delicacies from 5 days to 28 days, vacuum packaging machine was utilized.

These innovations are solutions for the oversupply of agricultural food products. The food products were not only preserved, but also made healthier and of greater quality. With prolonged shelf-life, local food products are available throughout the year and easier to export. Thus, increasing income and business opportunities for MSMEs.



Lease of Equipment







Rate per	Rate per	
Day	hour	
P 2,443.00	P 305.00	





Rate per	Rate per	
Day	hour	
P 3, 535.00	NA	





Serbisyo para kay Juan at Juana ng

Through the initiative of the GFPS and the Human Resource Management Unit, an activity entitled "Serbisyo para kay Juan at Juana ng DOST 1" was organized on March 22, 2021 via MS Teams platform participated by all DOST 1 staff.

The activity was steered by inviting selected Government agencies to showcase their programs which in turn, benefit DOST 1 staff. This serves as a special treat to all staff since they do not have the time to go visit and/or process their needs to these offices due to travel restrictions brought about by the pandemic.

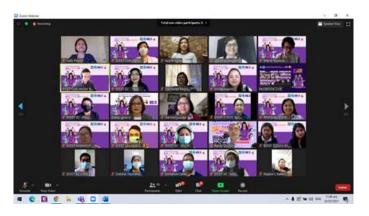
Five (5) National Government Agencies were invited, to wit: Department of Information and Communications Technology Luzon Cluster 1; Government Service Insurance System La Union Branch; Social Security System La Union Branch; PAG-IBIG Fund La Union Branch; and PhilHealth Regional Office 1.

WEE Care, WE Share Forum organized by DOST GAD Luzon Cluster

The WEE Care, WE Share forum was conducted on March 23, 2021 to unlock the doors of success and avenues of unblocking MSME's opportunity so that women can become actors in building community resilience and in alleviating the lives of those living in the communities.

WEE stands for Women Economic Empowerment while WE stands for Women Empowerment.

The Philippine Commission on Women (PCW) Executive Director Atty. Kristine Rosary E. Yuzon-Chaves gave her message emphasizing the extraordinary roles of Juan and Juanas in the society as trailblazers and harbingers of change especially during this time of pandemic.





On the other hand, DOST Secretary, Hon.
Fortunato T. De La Peña also gave his message and shared an anecdote about the life of Maria llagan Orosa, a well-known Filipina Chemist.
Secretary De La Peña also commented "All women can make an impact, can make change no matter what you are called in life. Be encouraged to think ahead of technologies, products and innovations that will not only impact today but also for the next generations to come. May the work of your hands help the people and serve the nation."

Region 1's representative, Mr. Racky D. Doctor shared his company's covid-19 initiatives that benefitted the community. Nutridense Food Manufacturing Corporation based in Sta. Barbara, Pangasinan is a leading manufacturer of research-based nutritious food products and is committed to support programs on healthy snacking and reduction of malnutrition in the country. Mr. Doctor is also the President of **Pangasinan Entrepreneurs Development** Association, Inc. or PEDAI, an association that opens access to financial, technological, and marketing opportunities to its member-MSMEs. Mr. Doctor, also, leads in assisting and guiding fellow entrepreneurs, who are mostly women, in the province of Pangasinan.

The WEE Care, WE Share forum taught every Juan and Juana that working together creates workforce that can do wonders in achieving common goal. The half-day activity was conducted simultaneously with the Training-Workshop on News and Feature Writing for DOST 1 staff.



News and Feature Writing Training-Workshop for DOST 1 staff

In order to capacitate the Media Core members of DOST 1 in doing their S&T works, specifically in writing S&T news, a Training-Workshop on News and Feature Writing was conducted on March 23, 2021 via MS Teams platform.

The activity covered basic methods of writing effective news and feature articles led by five (5) skilled staff of the agency: Mr. Kent Jerico Ramil of PSTC-llocos Norte, Engr. Maura Andrea Ortega of the RDMILU, Ms. Mae Grace Copleting and Ms. Thea Mitzi So of the S&T Promotion and Advocacy, and Ms. Marinique Guerrero of the RSTL.



Participation to the First Ilocos GAD Convention

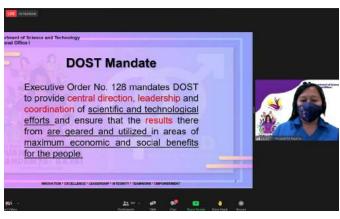
DOST 1 participated in the First Ilocos GAD Convention conducted last March 25-26, 2021 via Zoom and FB Live hosted by University of Northern Philippines. The activity was organized by the Regional Gender and Development Committee (RGADC).

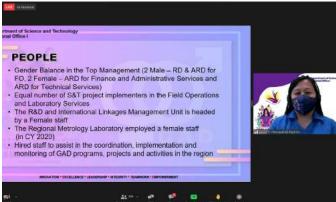
RGADC is one of the support committees of the Regional Development Council (RDC) in consonance with Joint Memorandum Circular No. 2016-01 by the National Economic and Development Authority (NEDA) and the Philippine Commission on Women (PCW) that prescribes the acceleration and gender mainstreaming at the regional and local levels.



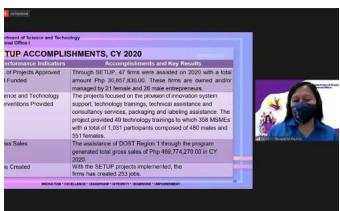
Ms. Racquel M. Espiritu, GFPS-Technical Working Group Head, presented and shared Innovative Programs of DOST 1 that address the Gender Needs During Covid-19 pandemic.

The convention with the theme: "Strengthening and Sustaining Gender Mainstreaming at the Regional and Local Level," will further enhance the knowledge of the participants about gender concepts, analysis and agenda setting.









DOST 1 Recognizes Juan and Juanas' Contribution in the 2021 National Women's Month Celebration



Department of Science and Technology Region 1 (DOST 1), through its Gender and Development (GAD) Focal Point System (GFPS), recognizes various employees for their invaluable assistance during the 2021 National Women's Month Celebration.

Dubbed as "Pagkilala kay Juan at Juana ng DOST 1", 16 DOST 1 employees, 6 Females and 10 Males, were awarded with Certificate of Appreciation during the flag raising activity of the agency held on March 29, 2021.

DOST 1 Regional Director, Dr. Armando Q. Ganal said that "Today culminates our celebration of the 2021 National Women's Month. Our activities for this month highlighted and focused on we, us and women in harnessing the services in fighting the pandemic, harnessing the services of institutions, and we also have given techniques on how to adopt available technologies - easy, low investment requirements, doable and livelihood generating. We have done a good job and I would like to commend all those personnel behind these successful activities as well as to all organizers of our women's month celebration headed by Ms. Racquel M. Espiritu, GFPS-Technical Working Group Head, and to all **GFPS Members.**"

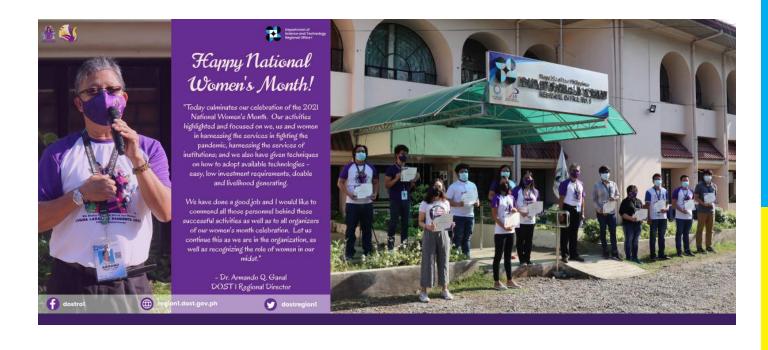
Director Ganal also added that "This will not be the last but we will continue this as we are in the organization as well as recognizing the role of women in our midst." Moreover, Ms. Princess P. Abuan, Project Assistant II of the Provincial S&T Center – La Union, was also awarded for being the Trainor during the Training on Ube Processing held on March 18, 2021 via FB Live.

As the agency continues to give recognition to its employees, this annual celebration also poses a challenge to all: Making Change Work for Women, especially in grappling with the effects of COVID-19 pandemic.



The awardees were:

Name	Sex	Unit	Role
Michael John C. Maquiling	м		For their technical assistance to al GAD Activities conducted: Video recording and editing, Webinars,
Raymond Ardee F. Soriano	М	-	
Justin N. Madrid M		ITSM	Techno Presensya and Setting up of venue.
Ryan Jan R. Borja	м		
Enrique L. Rimando	м		
Annalie L. Rosales	F		For initiating and facilitating the webinars on Women In Science Leadership and Technology Promotions
Maura Andrea A. Ortega	F	RDMILU	
Eulynn C. Eugenio	F]	
Enrique G. Fernandez Jr.	М	HRM	For hosting the Serbisyo Para Kay Juan at Juana ng DOST 1 webinar and during the Kick-off Program
Jara G. Acoon	F	HALAL	For assisting the GAD staff during the webinars - incharge in the preparation/sending of Registration and Evaluation Links; for initiating the HALAL Assurance Management E-Series
James D. Prepose	М	S&T LRC	For his assistance during the setting of the venue for the March 8 activity
Jayce M. Andres	М	Scholarship	For his assistance in serving as photographer during the March 8 activity and during other webinars
Thea Mitzi G. So	F		*Ms. Thea - for preparing the pub mat For hosting various webinars
Mae Grace N. Copleting	F	S&T Promo	
Hero D. Galamgam	м		For his assistance in purchasing tokens for RPs
Paul Stanley C. Ramos	М	RSTL	For his assistance in preparing pub mat of RDMILU webinars



DOST: Travel without Trouble, Pass through with S-Pass

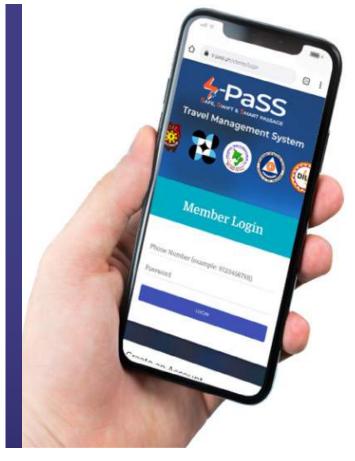
by DOST 1 - RxBox 1000 Project, Carla Joyce Cajala, Project Assistant II

The Department of Science and Technology consistently holds to its mission of leading and coordinating the country's scientific and technological efforts for the benefit of the whole community. This is evident in the previous and ongoing initiatives of the agency to align its innovations and activities in this time of pandemic. One of the latest developments of DOST is the Safe, Swift, and Smart Passage, or S-Pass. With the present conflicts in the borders among the towns and provinces and periodic changing of rules in the entry and exit points, DOST has developed this system to ease the burden of travelers and commuters. It was launched on March 26, 2021, thru the DOST-Philippines Facebook page.

S-pass is an online system primarily intended to efficiently manage travels of Filipino Local Workers, Returning Overseas Filipinos (ROFS), tourists, and others. It can be utilized in two (2) ways: as a Travel Management System which is a convenient online communication and coordination platform for travelers, LGUs, and other monitoring agencies, or as a Local Mobility Management System which replaces the use of pen-and-paper logbooks for visitors and personnel of offices, schools, and other public facilities.

For travelers, accessible information on the travel policies of all LGUs particularly when traveling by air and sea can be obtained. Usually, a health declaration form/medical certificate or a Travel Authority or both is needed for the traveler to pass through borders. Sometimes, it can be confusing to those who travel for work, vacation, or business as each LGU has its own list of guidelines. But with S-PaSS, the needed requirements can be identified easily. The travelers can be guided whether the area of destination is 'Restricted' or 'Unrestricted', which is duly updated by the LGUs responsible. If the LGU is on a 'Restricted' level, a 'Travel Coordination Permit (TCP)' should be applied, however, if the LGU was declared as 'Unrestricted', yet, you will be passing through 'Restricted' LGUs, a 'Travel Pass-Through Permit (TPP)' should be generated and presented. S-PaSS is to be used before and during actual travel unlike StaySafe and other contact tracing applications which are intended to be used all the time even if the traveler does not go into a trip.

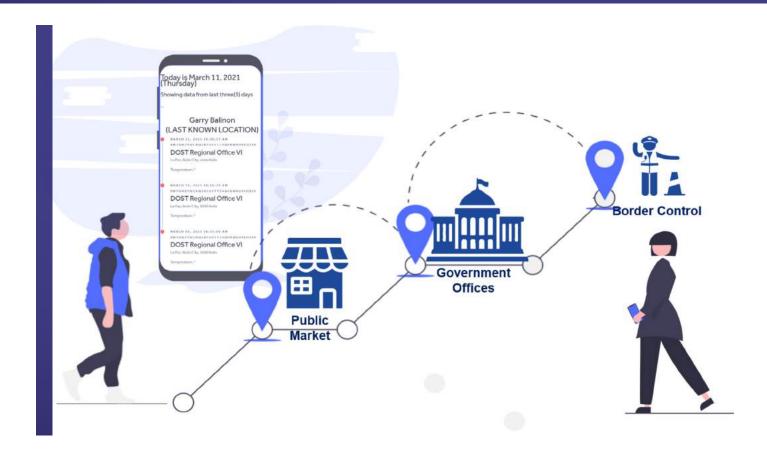
For LGUs, this is beneficial in organizing and ensuring a systematic way of posting information about their travel policies and requirements. They don't need a handful of documents and personal interactions as they can be processed online.



This ensures a smooth flow of updating the needed requirements per LGU at the moment it declares a "Restricted" travel policy. They can also verify the authenticity of documents, monitor and generate records of incoming travelers along with their travel histories, which could be useful in facilitating close coordination among Provincial, and City/Municipal LGUs.

To assist in the implementation of the system, the PNP can guide residents going to other LGUs in applying for travel documents when needed, help the LGUs in monitoring travelers in their territories, and verify the authenticity of travel documents presented.

Also, Monitoring Agencies can monitor the travelers and generate a report at the municipal, provincial, regional, and national levels for monitoring and planning purposes.



At the moment, the system is strongly recommended for its Travel Management System utilization.

For Region 1, all provinces (Ilocos Norte, Ilocos Sur, La Union and Pangasinan) have already activated their S-PaSS accounts and Travel Policies.

To fully maximize the features of the S-PaSS, DOST encourages travelers to register. Log in to https://s-pass.ph and register using personal mobile numbers. From there, the documents required by the LGU of destination and their restrictions on travel can be viewed. For TCPs, it can be submitted through the website. Most LGUs have contact numbers for easy coordination and verification of the status of TCP approval. It is advisable that travelers apply 1-2 days before their trip as the duration of approval depends on the LGU and not the system itself.

The success in the full and smooth implementation of the system relies on the responsible contribution and action of the traveler, LGUs, PNP, and monitoring agencies. There should be a mutual effort among these parties to achieve the continuous application of the system and its utmost goal. With this, more developments and innovations can be productively generated to gear the country in maximizing the advantage of science and technology for the people.



DOST I continues effort to maintain the CovidDETECT and FastPass System

by DOST 1 - IT Services and Management Unit, Enrique L. Rimando, Computer Programmer I



The Department of Science and Technology Regional Office 1 alongside its partner agencies, the Department of Health Center for Health and Development 1 (DOH), the Department of Interior and Local Government Regional Office 1 (DILG) and the Regional Task Force on COVID-19 in Region 1 (RTF) has been continuing its efforts to partake with the whole nation to combat the effects of the COVID-19 virus by managing and maintaining its CovidDETECT and FastPass systems.

The COVID-19 Detection and Reporting of Exposed Individuals Through Efficient Contact Tracing or CovidDETECT System is a tool used by the contact tracing teams in the conduct of contact tracing in Region 1. It is a system for managing information of COVID-19 Cases and its close contacts. It is developed by the ITSM Unit of DOST1 in partnership with the DOH-CHD1 and RTF Region 1.

The system was created to be a tool for the whole region to hold information of COVID-19 cases and its close contacts with their exposures and symptoms. The data on the system is being populated by DOH-CHD 1 and its counterparts in the LGUs.

The system analyzes the data and is presented into its dashboard which can be accessed by the public at https://coviddetect. dostl.ph. The dashboard presents a quick overview of the status of COVID-19 cases and its close contacts. Also, the information produced by the system can be used to help decision makers and planners as their reference to where to impose community quarantine and where it needs to be heightened or where are the areas that need mass testing.

As of March 23, 2021, a total of 8,259 Cases and 62,959 close contacts have been encoded into the system.

FastPass is a system designed to work with Covid-DETECT. It is one of the solutions developed and introduced by DOST 1 to enhance the contact tracing activities. It aids on tracking and identification of close contacts of COVID-19 cases. It utilizes QR Code technology to minimize the physical contact with pen, papers and logbooks. It is intended to be used by all individuals who are allowed and authorized to go out during community quarantine and the private and public establishments.

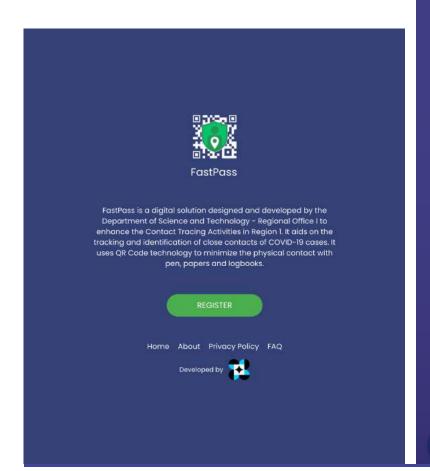
The said system can help contact tracers in identifying the close contacts of a certain COVID-19 Case. It records the mobility of an individual by scanning the QR Code. It also serves as a tool to prevent or mitigate the spread of the virus by providing warnings to the establishments on the individuals who attempt to enter their vicinity who were tagged as LSI, Close Contact or Case.

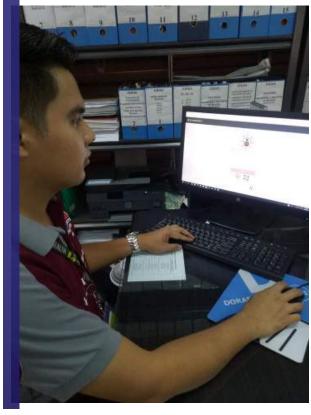
The system can record present body temperature and health declaration of an individual. The FastPass system also generate border pass QRs which can be used in border control management. Individuals and establishments (government, private or schools) may opt to register at https://fastpass.dost1.ph. Likewise, LGUs who are interested to adopt and implement the system may contact DOST 1 for their registration. The use of the system is free.

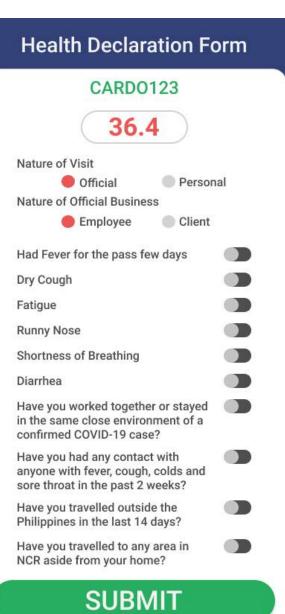
As of March 23, 2021, the total number of clients registered to the FastPass system is 163 and 51 establishments where 10 are private establishments, 25 NGAs, 5 provincial offices, 7 LGUs and 4 HEIs.

Both systems were recognized and adopted by the RIATF-IED Region 1 through its Resolution No. 33 entitled "Adoption and Deployment of CovidDETECT Application Tool for Decision Making and Contact Tracing" and Resolution No. 159 entitled "Adoption and Deployment of FastPass Application tool for Decision Making ang Contact Tracing".

With the country's continuous battle against the COVID-19 virus, DOST 1 and its partner agencies will continue to oversee the smooth implementation and







DOST 1 joins the Inter-Agencies of Region 1 for the EPIC-DRRM Project

by DOST 1 - RxBox 1000 Project, Carla Joyce Cajala, Project Assistant II



"In unity, there is strength", this reflects what transpired during the Annual Project Review-Provincial Level, spearheaded by the Philippine Red Cross (PRC) for the EPIC DRRM Project III (Empowering the Philippine Institutions and Communities on Disaster Risk Reduction and Management), in partnership with the different government agencies of Region 1, on February 11, 2021 at Hotel Ariana, Paringao, Bauang La Union.

Department of Science and Technology Regional Office 1, represented by Ms. Gael Myca A. Abella and Ms. Carla Joyce B. Cajala, joined the representatives of the regional offices of the Department of Social Welfare and Development (DSWD), Department of Education (DEPED), Department of Interior and Local Government (DILG) and Office of the Civil Defense (OCD), as the PRC presented the 2020 Targets and Accomplishments of EPIC-DRRM. The 2021 activities were also cited along with the needed support from the different agencies present.

As a partner agency towards the realization of the EPIC-DRRM's objectives, the DOST 1 identified their various projects and programs which could be of potential help and collaboration with the planned activities for the year.

The following were pinpointed: Maintenance of the community based- flood warning system;
Community Empowerment through Science and Technology under DRR- CCA (Climate Change Adaptation); Coordination with PHIVOLCS and PAGASA for Risk Assessment and DRRM; Provision of Information, Education and Communication (IEC) materials; Promotion of disaster relief foods (ready to eat, complementary foods, energy food reserve); Livelihood Trainings; Business Continuity Workshop; COVIDdetect and Fastpass.

Other agencies have also enlisted their commitments to the different endeavors of the project. To further harness the working partnership of the inter-agencies, a Memorandum of Agreement is yet to be obtained.

The half-day event commenced with the dissemination of video materials with regard to the COVID 19 vaccination and Vaccine Clinical Trials from the office of Research and Development of the Department of Science and Technology (DOST), in support of its mandate to properly inform the public on the benefits of COVID19 vaccination.



DOST 1 conducts Halal Assurance and Management System e-Series Course for its Stakeholders in Region 1

by DOST 1 - HALAL Project, Jara G. Acoon, Science Research Specialist



Department of Science and Technology Region 1 (DOST 1), through its Training Needs Assessment and Development and Deployment of Training Modules on Halal Project, conducted a 3-day webinar series entitled: Halal Assurance and Management System e-Series Course on March 17-19, 2021 via MS Teams platform and through its Official Facebook page.

The webinar series highlighted the significance of the training and development of human capital in halal industry, not only to produce halal professionals for managing halal matters and policies, but also to produce halal competent persons who can be able to execute the daily operational tasks towards halal assurance and integrity in the halal logistics industry and for national halal economic growth.

On the first episode of the webinar series, Mr. Decth-1180 P. Libunao, the DOST1 Halal Lead Auditor, discussed the topic on Halal Concepts and Principles. This is to deepen the awareness and understanding of the halal industry stakeholders, not only to the compliance of the food with the requirements of religion, but also the cleanliness and hygiene quality and its suitability in terms of human values.

Likewise, Ms. Annalie L. Rosales and Mr. Hero D. Galamgam, members of the Food Safety Team, discussed the topics on Halal Assurance and Management System on the second and third episode of the webinar series, respectively. Ms. Rosales focused on the total quality health and sanitary system that involves adopting to the procedures for Halal slaughtering, processing,

and other related operations based on the Halal Assurance System (HAS) manual procedures.

Also, in determining the steps in setting up the HAS, especially in Halal food industry by identifying Halal critical or control point, process of verification, creation of Internal Halal Committee and Halal policies. She also emphasized that "Once the HAS is implemented by a food manufacturing, it also implies that food establishments shall ensure to follow the recommendatory standards and guidelines on Food Safety and Good Manufacturing Practices as well as other government initiatives in order to maintain the sustainability of Halal integrity."

To further understand the proper implementation of Halal practices for food processing industry, Mr. Galamgam, highlighted the importance of providing a safer food and the integration of Halal management system that involves good manufacturing practices. This includes developed, implemented, and maintained to manage materials, production processes, products, human resources, and procedures to uphold the sustainability of Halal production process.

After each session, an open forum was also conducted for participants' concerns and clarifications.

Moreover, a total of 655 attendees from various government and non-government agencies, institutions, Local Government Units and Micro, Small, and Medium Enterprises showed their interest in the webinar series.

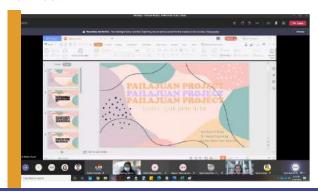
VISION 2021: Patriot Scholars' Initiatives in front of the Line

by DOST 1 - Scholarship Unit, Mark Daniel Devis, RA 7687 Scholar

This year surely changed the course of how normal is to everybody. From the set-up of workrooms to the setup of learning from school to transportation, everything suddenly shifted to what we call now, the new normal. This new normal presented even more challenges than that of the previous one but this didn't stop the DOST Scholars from extending help to those in need. Surges of volunteer acts were seen from across the country. From the simplest act of giving essential materials to the complexity of data gathering, scholars from Luzon to Mindanao showcased what scholars are made of and what they are made for.

With the impact that the volunteering acts have caused the country, DOST Patriot Scholars initiated a project where the different volunteering initiatives of scholars from around the country were highlighted. With this project, scholars from the different regions can adopt the successful initiatives from other regions which will benefit their own. This project sparked a fire and it is now illuminating every region in the country through the DOST Scholars.

Region 1 was chosen to lead the Public Service sector. With such responsibility given to the whole team of Region 1 scholars, they come up with three initiatives namely Project Yakap, Project PailaJuan, and Project Youth check. The implementation of the latter project was started by the scholars of La Union which was centered on the guidance regarding voter's registration for the 2022 elections. Representatives from the office of Commission on Elections – Region 1 were invited and shared their knowledge and expertise regarding voter's registration and elections. As per the first two projects, they are planned to be conducted this coming year. With regards to the implementation of the said activities, a meeting was held last December 28, 2020 which focused on the partnership of the different scholars' organizations to the different public sectors for assistance and guidance in the planning and implementation of the different initiatives.





The meeting was attended by the presidents of all the scholars' organizations of Region 1, the staff of the scholarship unit of DOST Region 1, the Regional representatives of Region 1 Electric Cooperative and DSWD Region 1.

The Project YACAP, which is focused on the welfare of senior citizen and PWDs, was discussed and Ms. Romelene Visconde from INEC suggested a possible assistance with the project in line with their own yearly projects as part of their founding celebration. Ms. Romelene ensured the coordination of the said project to the different electric cooperatives of Region 1 for a wider dissemination which will definitely result to a regionwide implementation of Project YACAP. DSWD also extended their help through providing assistance on securing documents needed in the implementation of the project and providing list of the possible groups and individuals that can be contacted for better coordination. As for the Project PailaJuan, Ms. Romelene also assured their assistance on the implementation of the project, especially on the specifics of electric distribution. Suggestions for the betterment of the mentioned projects were also raised.

With such recommendations and assistance from the regional offices of electric cooperative and DSWD, 2021 is surely a year to look out for when it comes to volunteering activities. It is truly a challenge for the scholars, and an opportunity for them to show how creative they can be and how they can make an impact which will contribute to the holistic development of our current situation.

Region 1, CAR DOST Scholars Participate in Values Formation Program Digitally

by DOST 1 - Scholarship Unit, John Joseph D. Zarate, RA 7687 Scholar





About 500 scholars from Region 1 and Cordillera Administrative Region (CAR) attended the Webinar on Scholar's Values Formation Program on Friday, February 19, 2021, through the video conferencing app ZOOM.

The Filipino Patriot Scholars Project of the Department of Science and Technology - Science Education Institute (DOST-SEI) is implemented yearly and no pandemic could stop the institution from accomplishing its missions and fulfilling its goals.

"They will have a deeper understanding of their real roles as future scholars for the nation and strengthen their inherent patriotism and nationalism," said Dr. Josette T. Biyo, Director of DOST-SEI. The objectives of the webinar were to orient the new scholars about the mandates of the Science Education Institute and the goals of scholarship programs, as well as to foster patriotism and nationalism among the science scholars, and instill them the core values of servant leadership, professional excellence, and social responsibility.

"Patriotism is not only a value formation but a form of strategy on how we can move as a nation and on how we can be a stronger nation, a more developed nation," said Dr. Geraldo S. Petilla, resource person on Patriot Project. Dr. Petilla highlighted the importance of patriotism during his talk and what is the real definition of a patriot and how to be one.

The role of the people is important in national development. "Patriotism is not only loving the country but it is more than that. It is doing something for the development of the country," Petilla added.

During the talk of Engr. Bernie Cangrejo, another resource person on the patriot project, it was emphasized the significance of forming the three core values and living with them. Having these core values; servant leadership, professional excellence, and social responsibility will remind the scholars of their importance and their purposes.

"Your values define who you really are,"
Cangrejo said. These core values are the guiding principles that dictate your behaviors and represent the things you really treasure.

"Who are you? You are the scholars of the nation, scholars for the nation, and the hope of the nation," Cangrejo said. As scholars of DOST, nurturing your minds is not enough, you must cultivate these values.

Don't be a DOST scholar only. Be a scholar for the nation. Be a patriot scholar.

DOST-SEI celebrates 1st Virtual In-Touch with Excellence 2021

by DOST 1 - Scholarship Unit, John Joseph D. Zarate, RA 7687 Scholar



Every year as part of the National Science and Technology Week, the Department of Science and Technology – Science Education Institute (DOST – SEI) celebrates the excellence of scholars as a way to showcase the truest impact of the government's science and technology scholarship program.

This year, 27 graduate-scholars, three (3) of which are Magna Cum Laude, 21 Cum Laude, two (2) with academic distinctions and one (1) Gawad Parangal Finalist were recognized during the very first virtual "In Touch with Excellence" on February 24, 2021 via MS Teams. Present in the said momentous event were the scholarship coordinators from 15 partner institutions, on-going scholars and concerned officials from DOST Region 1.

During the welcome remarks of Dr. Armando Q. Ganal, Regional Director of DOST 1, he urged all participants to learn from the testimonies and success-stories of their co-scholars. "Very timely indeed, as you will get inspiration from your fellow scholars who have made it and will unselfishly share their experiences from the time they started their journey and up to the present, "echoed Dr. Ganal.

There is no other best avenue to promote the fruits of science and technology and communicate all the good news brought about by innovation than during "In Touch with Excellence."

As the keynote speaker Dr. Josette T. Biyo, Director of DOST-SEI, emphasized that, "The achievement of scholar-graduates is an inspiration as much as it is an assurance that the best and the brightest of the nation are joining the science community soon."

The inspiring director of DOST-SEI then shared three (3) principles that are very timely and relevant for all scholar-graduates to ponder. "First, love your work and makie a difference in the lives of all the people and the community you serve. Second, continue to learn because you were created for a purpose. And lastly, believe that you can make a difference," said Dr. Biyo.

Among the scholar-graduates who received an award and delivered their testimonies was Mr. John Joseph D. Zarate, Magna Cum Laude, from PSU-Bayambang Campus. According to Mr. Zarate, "the DOST scholarship fueled our aspirations and helped us achieve our impossible dreams. As a graduate-scholar, we should continue to embody the vision of DOST and help build our nation. Dahil tayo ay iskolar ng bayan, para sa bayan."

The highlight of the said virtual event was to laud the exemplary performance of the graduate-scholars with Latin Honors and Academic Distinctions according to school: Pangasinan State University – John Joseph D. Zarate (Magna Cum Laude), Fremel B. Macayana (Cum Laude), Kesha Mae A. Sagaoinit and Sahra A. Vicente (with Academic Distinctions) and Jade N. Mijares (Gawad Parangal Finalist); Mariano Marcos State University (MMSU) - Rocky R. Estoque (Magna Cum Laude), Aira S. Basilio, Queenie Rose P. Calaranan, Renz Nikko A. Collado, Novelyn S. Corpuz, Francis A. Gamboa, Stephenleigh A. Guittap, Mary Grace D. Matias, Jervin Louie L. Reyes, Mae Jeianett S. Reyes, Nelson Junior T. Rodillas, Shaina Louise S. Soto and Jake Casey A. Sugui (Cum Laude); University of Northern Philippines – Abdul Azis M. Acmad (Magna Cum Laude), Honey May C. Bulao, Oigel F. De Peralta, Filipina D. Gadut, Jemeima Lou F. Ribucan and Ivin P. Yadao (Cum Laude); and Don Mariano Marcos Memorial State University (DMMMSU) - Joy O. Dela Peña, Jennifer E. Heruela and Vanessa Roze V. Quezada (Cum Laude).

Aside from the awarding of medals, plaques and certificates to all graduate-scholars with Latin honors, notable citations were also given to those who have displayed commendable contributions to the organization and the community alike.

The following were special awards and their recipients during the "In Touch with Excellence": Scholarship Coordinators of the Year - Dr. Evelyn B. Lomboy (Over-All Scholarship Coordinator of PSU), Ms. Melody P. Tumanan (Scholarship Coordinator of DMMMSU) and Ms. Catherine A. Solomon (Scholarship Coordinator of CdD); Leadership Excellence Award - April Jeiren R. Muska (MMSU Batac), Mark Daniel D. Devis (UNP), Edmer O. Mueca (DMMMSU), Mark Glendale T. Valenzuela (UCU) and Francis Ryan G. Ramos (PSU Bayambang); The Ultimate Contributor Award – Regie A. Valite (MMSU Batac), Mark Jerico D. Mina (UNP) and John Dovi M. Gonzales (DMMMSU); Helping Hand Award – Ryan Jade I. Quibael (MMSU Batac), Lia Riobelle C. Mandac (MMSU Batac), Grenhanmae M. Cambi (UNP), Katrina Jade A. Pajo (UNP), Alfredo A. Padin (DMMMSU South La Union), John Rommel T. Retuya (DMMMSU South La Union) and Frenze Harvey R. Bascos (PSU Urdaneta); President of the Year Award - April Jeiren R. Muska (MINDS) and Outstanding Scholars Association Awards – Movement of

The "In Touch with excellence" reminded all graduate and on-going scholars of their vital role in nation building and that the choices they make have a great impact in the country.

Ilocos Norte DOST Scholars (MINDS).





DOST-1 Staff take oath as Associate **Members of the National Research Council of the Philippines**

by DOST 1 - Research and Development Management and International Linkages Unit, **Annalie L. Rosales, Science Research Specialist II**





The Department of Science and Technology Region 1 (DOST 1) staff were among the 133 Regular and 303 Associate Members who took their oath as members of the National Research Council of the Philippines (NRCP).

Dr. Armando Q. Ganal, Regional Director, and Ms. Annalie L. Rosales, Science Research Specialist II, were inducted as Associate Members of NRCP on March 10, 2021 during the Virtual Oath-taking held at the NRCP Annual Scientific Conference and 88th General Membership Assembly. Dr. Ganal took oath as Associate Member of Division VI -Agriculture and Forestry while Ms. Rosales took oath as Associate Member of Division V -**Biological Sciences.**

As members of the NRCP, they will receive the following privileges: 1) funding support for R&D projects; 2) publication of research in the NRCP journal;

3) Master's thesis and doctoral dissertation manuscript grants; and 4) opportunities for professional development.

The NRCP is a collegial body of highly trained and productive scientists and researchers addressing the demand for knowledge, skills and innovations in the sciences and humanities in order to effectively and efficiently contribute to nation-building and improvement of the quality of life of the Filipino people. It is mandated to promote and support fundamental or basic research for the continuing improvement of the research capability of individual or group of scientists as well as fostering local and international scientific linkages. It is also mandated to provide advice on problems and issues of national interests and to promote scientific and technological culture to all sectors of society.



DOST-1, advocates Food Safety in all Sectors in the Region

by DOST 1 - Community Empowerment through Science and Technology Project, Cyrille Ann B. Manalon, Science Research Specialist 1





In support to strengthening the Food Safety Regulatory System in the Philippines, the activity was conducted as familiarity and adequate understanding of the complexity in food manufacturing is important in the conduct of research and development in food process and engineering and in handling food in production areas of firms, members of Food Safety Team (FST) from the Department of Science and Technology Region 1 were invited as resource speakers during the Seminar-Trainings conducted by the Department of Agriculture Regional Field Office I and Institute of Agricultural and Biosystems Engineering (IABE) in coordination with the Research and Extension Unit of DMMMSU-NLUC.

Mr. Decth-1180 P. Libunao, Laboratory Head of DOST 1-Regional Standards and Testing Laboratory and Mr. Hero D. Galamgam, Technical Manager of Microbiology Laboratory of DOST 1, served as Resource speakers during the "Training on Proper Handling of Food and Food Safety Awareness and Introduction to Hazard Analysis and Critical Control Point (HACCP) of Proponent Groups under IREAP Regular Subproject" held on February 4-5 and February 10-11, 2021 at Hotel Ariana, Bauang, La Union and Pangasinan Regency Hotel, Calasiao, Pangasinan respectively, attended by selected food handlers from La Union and Pangasinan.

Ms. Cyrille Ann Manalon, Science Research Specialist I of DOST I, together with Mr. Galamgam served as the resource speakers during the "Seminar-Training on Food Safety Regulatory System, HACCP and Good Manufacturing Practices (GMP)" held on February 9-10, 2021 at the Audio Visual Room of DMMMSU-NLUC, Bacnotan, La Union, attended by the faculty and researchers of DMMMSU-NLUC implementing or intending to conduct R&D studies related to food, hygiene and sanitation.

Topics discussed in the trainings conducted include: Food Safety Awareness, Basic Food Hygiene, Good Manufacturing Practices (cGMP), Sanitation Standard Operating Procedures (SSOP) and HACCP Awareness. Participants from the said trainings were delighted and thankful for the information they acquired that are beneficial for their undertakings.

The DOST 1 through its FST aims to further disseminate information and awareness on Food Safety.



DOST-1 RSTL launches new testing and calibration services online

by DOST 1 - Regional Standards and Testing Laboratory, Marinique A. Guerrero, Science Research Specialist 1



The Department of Science and Technology Region 1 – Regional Standards and Testing Laboratory (DOST-1 RSTL), has launched its new services as a part of the 2021 National Women's Month Celebration entitled Ceremonial Awarding and Launching Event online on March 8, 2021.

"Regional Standards and Testing Laboratory operates an advanced and diversified government service laboratory" stated by Senior Science Research Specialist, Mr. Decth-1180 P. Libunao, who also introduced that the DOST-1 RSTL is an ISO/IEC 17025:2017 accredited Laboratory and mentioned all other Laboratory Accreditations and Recognitions of the establishment.

RSTL Technical Managers, Mr. Hero D. Galamgam for Microbiology Laboratory, Ms. Lena C. Rosario for Chemistry Laboratory and Engr. Bernadine P. Suñiga for Metrology Laboratory ellaborated the new deliverance of the testing and calibration services to its stakeholders.

Under Microbiology Laboratory the additional services are (1) Detection of Bacillus cereus, (2) Detection of Listeria spp. & Listeria Monocytogenes and (3) Detection and Enumeration of Coliforms an E. coli using Enzyme Substrate Coliform Test (MPN); on the Chemical Laboratory the additional services are (1) Permanganate Oxidation Number (PON), (2) Turbidity and (3) Color and lastly under the Regional Metrology Laboratory they offer (1) Length, (2) Pressure and (3) Thermometry & Hygrometry testing. Q&A portion is provided for the clarifications of the general public answered and clarified by the technical managers and ended the presentation with the OneLab video.

"DOST-1 RSTL will continue to be at the forefront in providing essential laboratory services to Micro, Small and Medium Enterprises, academic institutions, hospitals, researchers, students, Local Government Unit, and the general public."

For more information, please contact us at 0929-197-8906. To be updated on the latest happenings, please follow our Facebook page at DOST-1 RSTL.

DOST-1 RSTL continues to ensure strict compliance of ECC by the DENR, through EMB

by DOST 1 - Regional Standards and Testing Laboratory, Marinique A. Guerrero, Science Research Specialist 1



DOST 1 Regional Director Dr. Armando Q. Ganal spearheads the monitoring and compliance of the agency's Regional Standards and Testing Laboratory (RSTL) with the requirements of Presidential Decree No. 1586 and DENR Administrative Order (DA0) No. 2003-30.

The Environmental Certificate Compliance (ECC) has been acquired on June 18, 2020 issued at EMB-RO1, Government Center, Brgy. Sevilla, San Fernando City, La Union.

On February 8, 2021, the establishment received a letter from Engr. Maria Dorica Naz-Hipe, Regional Director of the Department of Environmental and Natural Resources Environmental Management Bureau (DENR-EMB) regarding the compliance with the requirements of the provisions of Republic Act 6969, otherwise known as "Toxic **Substances and Hazardous and Nuclear Wastes** Control Act of 1990", and its Implementing Rules and Regulations (IRR). On March 20, 2021 compliance under the same Law, the Hazardous waste generated by the establishment has been hauled and sent to a registered treater.

Other provisions of Environmental Management and General Conditions under ECC such as the submission of Self-Monitoring Report (SMR) quarterly and Compliance Monitoring Report (CMR) are observed. The full operation of DOST-1 RSTL ensures that all regulatory and statutory requirements needed are complied with.

For more information, please contact us at (072) 888- 3399 or 0929-197-8906. To be updated on the latest happenings, please follow our Facebook page at DOST 1 - Department of Science and Technology Regional Office No. 1.





June 18, 2026

RCC-OL-R61-2020-0123

DR. ARMANDO O. GANAL

Regizer I Director

Department of Science and Technology Regional Office 1

DEMANSU-Mid La Union Campica, Bage, Carbringer, San Ferrando Cry, La Jeson

ENVIRONMENTAL COMPLIANCE CERTIFICATE

Door RD Garral

This refers to the Environmental Compliance Certificate (ECC) application for the Segundal Standard and Texture Leboratory (DOST / SSTE) located at DMMM-SU - Mic La Union Compute Brgs. Cathonizer, San Fernando Chy, La Union.

After satisfying the requirements of the said application, this Bureau has decided to great at DOC for the above-mentioned project.

With the issumes of the ECC, you are expected to importent the measures presented in the finited Environmental Emmission: Checklar (EEC), intended to protect one minimize the project software impass on community bothly welfer and the environment. Environmental considerations shall be incorporated in all places and aspects of the project.

This Cetificate does not cereate any right on he used as an authorisation to implement the system, you may proceed with this implementation only after accuraing all necessary permits auditor detargones required by other perticute Government Agyretic Offices, that have administrative jura diction over such projects/operations (i.e. DENR, EMB, LGU, etc.). This little stall be authorized by the upper periodiculty in cases start complaints of the stipalatest does in the started DCC.

Please be guided, accordingly.

Very truly yours,

allorias -

The Environmental Certificate Compliance (ECC) has been acquired on June 18, 2020 issued at EMB-RO1, Government Center, Brgy. Sevilla, San Fernando City, La Union.

DOST-PSTC Ilocos Norte joins Tienda ni Gob through Calibration Caravan and S&T Information Drive

by PSTC - ILOCOS NORTE, Kent J. Ramil, Project Assistant II

Attuned to its mandate through RA 8180, otherwise known as the industry deregulation act of 1996 and the Executive Order No. 337, DOST should prescribe calibration and verification intervals of all measuring instruments. The Department of Science and **Technology-Provincial Science and** Technology Center Ilocos Norte (PSTC - IN) headed by its Provincial Science and Technology Director Engr. Benjamin S. Mercado, Jr., joined this year's Tienda Ni Gob in partnership with the Provincial Government of Ilocos Norte and offered free calibration of weighing scales for the Ilocano kailian in the province, a five-day activity initiated by Governor Matthew J. Marcos Manotoc.

As part of the agency's participation in this year's Bicentennial Celebration of the province, this caravan aims to calibrate weighing scales used by Barangay Nutrition Scholars, Municipal and Barangay Health Workers, SMEs assisted by the province and LGU market vendors.



A total of 348 weighing scales were calibrated with a total value of assistance amounting to Php. 97,440. The free calibration activity was led by Gerald Q. Gabriel, Science Research Specialist II and point-person for calibration services, and was supported by Mr. Jahmai O. Grande and JR I. Lanzarote. The agency also promoted its on-going projects and services such as SETUP, Community-Based Projects, iFWD PH, among others.

"Coupled with innovations from partner agencies, especially the Department of Science and Technology, we assure that the SME Department of PGIN and our participants will continue to demonstrate the distinctly pioneering Ilocano spirit, honest and reliable measurement of weight of our Ilocano based products," said Ms. Elma Gabriel, the Small Medium Enterprise Officer of the Provincial Government of Ilocos Norte.

Also, Governor Manotoc extended his appreciation to the partner agencies and firms for supporting the backbone of the economy of the province, the MSMEs.

As stated in Republic Act 9236 or the National Metrology Act of 2003 in ensuring the verification and accuracy of measuring equipment by providing standard quality calibrating service to every Filipino. The DOST PSTC - IN ensures the accuracy and verification of weighing scales to achieve reliable and precise data for every Ilocano.



LGU Dingras going-green Using DOST-ITDI'S Green Engineering Technology

by PSTC - ILOCOS NORTE, Kent J. Ramil, Project Assistant II







In a move to strengthen its solid waste management capabilities and composting efforts, the Municipality of Dingras, through the help of the Department of Science and Technology-Provincial Science and Technology Center-Ilocos Norte (DOST - PSTC IN) adopts Dual Drum Composter Equipment from the Department of Science and Technology-Industrial Technology Development Institute (DOST-ITDI).

The dual drum composter equipment is a smallscale motorized composter developed for the

management of 100 kg of biodegradable solid waste. It follows a standardized process with compost as the end product. Easy to operate, maintain, and with no leachate production, it can be an alternative for community-based management of solid biodegradable wastes generated by barangays, restaurants, canteens, schools, and food processing firms. DOST-PSTC IN headed by its Provincial Director Engr. Benjamin S. Mercado, Jr. led the turnover ceremony last March 4, 2021, at the DOST-PSTC IN. It was followed by a 4-hour informative lecture and briefing last March 5, 2021, discussed by Engr. Joanne Tan Tuazon, Senior Science Research Specialist and Mr. Benjamin Arcilla Santos, Science Research Assistant of ITDI, via webinar. The lecture was attended by the LGUs focal persons for

"As landfill space and openings decrease, there will undoubtedly be more pressure to compost food waste along with all organic wastes, and composting may be an attractive alternative for cities and municipalities as well as a value-added opportunity. This is only one of the many green engineering technologies of our agency to manage a wide variety of economic, social, and environmental problems more efficiently and effectively," says PD Mercado.

solid waste management and DOST-PSTC IN

staff.

Moreover, Mr. Noel E. Salvatierra, Municipal Environmental and Resources Office of LGU Dingras extended his gratitude to DOST for its unparalleled support in mitigating the hazardous effects of improper disposal of waste. The DOST-PSTC IN will continue to support and promote ITDI's developed green engineering technologies ready for adaptation for a cleaner, safer, and more sustainable llocos Norte.

llocos Norte Entrepreneurs going Online Marketing through DOST oneSTore.ph amidst Pandemic

by PSTC - ILOCOS NORTE, Kent J. Ramil, Project Assistant II

Intending to make the products and services offered by local micro, small, and medium enterprises (MSMEs) accessible to a larger number of consumers amidst pandemic, the Department of Science and Technology Region 1 (DOST 1) through its Provincial Science and Technology Center-Ilocos Norte (PSTC-IN) and the Provincial Government of Ilocos Norte (PGIN), have committed to work together through the oneSTore.ph.

The DOST I, DOST-PSTC IN together with DOST 2 initiated the first Training and Orientation of one-STore.ph project for the PGIN on March 18–19, 2021. The 2-day activity was attended by Gov. Matthew J. Marcos Manotoc together with the department heads and staff from the Micro Small Medium Enterprises Office, INVEST, Information, and Technology Office (ITO), and Sustainable Development Center (SDC) of PGIN. oneSTore.ph project developer and Science Research Specialist II of DOST 2, Mr. Christopher Musni discussed and enlightened the participants on how the platform works.

The DOST oneSTore.ph is an E-commerce that operates nationwide and caters primarily to Philippine consumers. It provides customers with an effortless shopping experience and retailers with simple and direct access to one of the largest customer bases in the Philippines and throughout the world. DOST 1 Regional Director Armando Q. Ganal encouraged local entrepreneurs to take advantage of the good news. He even mentioned that despite the pandemic, the nation is going through, the MSMEs have a fallback and alternative platform for them to still produce, promote and market their products.

Meanwhile, DOST 2 Regional Director and oneSTore. ph Project Manager Engr. Sancho Mabborang assured that the agency will help the MSMEs in llocos Norte and in nearby provinces to access a larger number of consumers through the continuous development and improvement of oneSTore.ph platform. "We are here to help you reach the maximum market potential of your products, the DOST is always here every step of the way, and we hope for your continued support and efforts in improving the lives of our entrepreneurs," stated Engr. Mabborang during his closing remarks.



Gov. Matthew J. Marcos Manotoc during his welcoming remarks.



Staff from the Micro Small Medium Enterprises Office, INVEST, Information, and Technology Office (ITO), and Sustainable Development Center (SDC) of PGIN



DOST I Regional Director delivering his message to the participants congratulating the province of llocos Norte for embracing the oneSTore.ph project.



DOST 2 Regional Director giving his closing remarks and reassuring the continued support of oneSTore.ph to the province of llocos Norte amidst pandemic.

The oneSTore.ph hub in Ilocos Norte is expected to be launched on the early months of the second quarter of this year and will be located at La Tabacalera Lifestyle Center in Laoag City.

DOST awards Water Filters to Dumalneg; 333 households assured safe drinking water

by DOST-1 CEST, Engr. Jordan L. Abad, Science Research Specialist II & CEST Project Leader





The Department of Science and Technology Regional Office 1 (DOST-1), through the Community Empowerment through Science and Technology (CEST) Program and the Provincial Science and Technology Center-Ilocos Norte (PSTC-IN) awarded 150 units of water filters to 323 beneficiaries in the municipality last March 12.

Engr. Benjamin M. Mercado Jr., turned-over the water filters to LGU- Dumalneg through Municipal Health Officer Dr. Reyzalde M. Acosta and Sanitary Inspector Amy M. Espartero together with the beneficiaries of the four (4) barangays. 140 clusters with 323 households, together with two (2) elementary schools, three (3) barangay health centers, one (1) RHU, one (1) high school, and three (3) other municipal establishments benefited from the project.

Mavie S. Cadiz, LGU staff, was delighted to see a lot of her kailians in Dumalneg given access to potable water, "Haan kami a gumatang pay iti danom mi iti ruwar gapu cadaytoy filter a inted iti DOST, agyaman kami!" (There won't be a need to buy water outside our municipality because of this water filter from DOST, thank you!) she added while extending the gratitude of her kailians.

The intervention is part of the project DANUM (Disinfecting Agua's Noxious and Unwanted Microorganisms) under the Health and Nutrition area of the program. DANUM is a package of intervention including water resource mapping and provision of related technology on safe drinking water. Water resource mapping was conducted last July 2020 with six spring sources and 17 random houses sampled and tested for potability through the Regional Standards and Testing and Laboratory – Microbiology Laboratory. Results revealed that 100% of these sources are contaminated with E. Coli bacteria and other contaminants unfit for drinking. With this findings, DOST-1 purchased 150 units of .1 micron absolute hollow fiber membrane filter that could remove contaminants providing safe drinking water to the residents while the LGU purchased buckets to be installed with the filter and water jugs as catchment of clean water as their counterpart.

The program has been implemented in the municipality since 2018 providing Science and Technology (S&T) interventions in the areas of health and nutrition, Livelihood, Education, DRRM and Climate change adaptation and in Environmental Protection and Conservation.

DOST-1 awards P3.8-M Technological Interventions to 6 MSMEs in Ilocos Sur

by PSTC - ILOCOS SUR, Laurine R. Sales, Project Assistant II



The Department of Science and Technology Region 1 (DOST 1), through its Provincial Science and Technology Center – Ilocos Sur (PSTC-IS) turned over the financial assistance under the Small Enterprise Technology Upgrading Program (SETUP) amounting to Php3,807,899.00 to six (6) Micro, Small and Medium Enterprises (MSMEs) on March 31, 2021 at the PSTC-Ilocos Sur, Vigan City.

Among these MSMEs are Costales Ricemill, Jezzie's Food Products, Manang Cora Sugarcane Products Manufacturing, Royal Maharlika Wellness and Livelihood Training Center, Inc., Nik's Printing Shop, and Melanie's Turones De Mani.

Before the awarding, Provincial S&T Director Ramon S. Sumabat lightly reminded the recipients on the content of the Memorandum of Agreement signed and notarized by them and the agency. He also expressed his high hopes towards their commitment for the successful implementation of the program.

The SETUP intends to support the MSMEs through provision of technology-based interventions to existing firms in order to upgrade their business.

It also aims to assist them through provisions of Technology Assistance and Consultancy Services (TACS); packaging and labeling; engineering, layout and plant design services; equipment design, specifications and acquisition; and product standards and testing to improve their productivity and competitiveness. Priority sectors include Food Processing; Health and Wellness; Metals and Engineering; Aquamarine, Agriculture, and Horticulture; Furniture and Fixtures; Gifts, Decors, and Handicraft (GDH); Energy and Environment as well as ICT: Software, Animations, Electronics/ Microelectronics.

For this year, the PSTC-llocos Sur aims to provide assistance to 10 firms in the province.



DOST-PCAARRD, DOST-1 to roll-out "Tilapia Para sa Pamayanan sa Amianan" Project in the First Congressional District of Ilocos Sur

by PSTC - ILOCOS SUR, Laurine R. Sales, Project Assistant II



The Department of Science and Technology Region 1 (DOST 1) in partnership with the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development of the Department of Science and Technology (DOST-PCAARRD) will launch the "Tilapia Para as Pamayanan sa Amianan" project to the selected three municipalities in the First District of Ilocos Sur in July 2021.

The project is an initiative of Congressman Deogracias Victor B. Savellano to adopt as an offshoot to the on-going project entitled "Backyard Tilapia Farming" implemented by the Laguna State Polytechnic University, Los Baños Campus which is a component of the GALING-PCAARRD Food and Livelihood Program for Covid-19 affected areas.

Initially, the DOST-PCAARRD headed by Engr. Eduardo Manalili, Director of Inland Aquatic Resources Research Division, Dr. Cynthia V. Almazan, Science Research Specialist II, and Wilfredo C. Ibarra, Science Research Specialist I scheduled a project coordination meeting with Dr. Armando Q. Ganal, DOST 1 Regional Director on March 8, 2021 and discussed the development of the project.

Also, they conducted a coordination meeting with Mr. Ramon S. Sumabat, Provincial Director of PSTC-llocos Sur together with Prof. Jose Cabatu, Professor at the llocos Sur Polytechnic State College (ISPSC) on March 9, 2021. After the meeting, proposed project site validation was conducted in coordination with the staff of Congressman Savellano.

Based on the validation, the one-year project will be implemented to the selected three (3) municipalities in the first congressional district of llocos Sur particularly in the Municipality of Cabugao, Caoayan, and Sta. Catalina, llocos Sur.

In Caoayan, farmer-fisherfolks already have existing cages with an area of 10 m x 8 m each thus, the DOST-PCAARRD suggested them to organize an association so that many residents in the barangay will be benefitted with the project. However, areas in Cabugao and Sta. Catalina, a small-scale backyard tilapia cages will be set-up.

The project will be a collaborative effort of the DOST 1, PSTC-llocos Sur, ISPSC - Narvacan Campus, First Congressional District of Ilocos Sur, Bureau of Fisheries and Aquatic Resources Region 1 (BFAR 1), and Local Government Units of Cabugao, Caoayan and Sta, Catalina.

DOST allots 10.5M for CEST in Ilocos Sur; Appraises 39 barangays for implementation

by DOST-1 CEST, Engr. Jordan L. Abad, Science Research Specialist II & CEST Project Leader





The Department of Science and Technology Regional Office 1 (DOST-1) through the Provincial Science and Technology Center Ilocos Sur (PSTC - IS) concluded the month-long Rapid Rural Appraisal (RRA) in Ilocos Sur last March 5 to complete the assessment of 39 barangays of the 12 municipalities for the implementation of the Community Empowerment through Science and Technology (CEST) program with 10.5 million budget allotment.

The CEST project entitled "Engaging Local Communities with Science, Technology and Innovation for Development" for the province focuses to 12 municipalities identified by the Regional Task Force to End Local Communist Armed Conflict (RTF-ELCAC) catering to 39 barangays within these municipalities. DOST, as member of the Poverty Reduction, Livelihood and Employment Cluster (PRLEC) will provide Science and Technology-based approaches using the CEST program strategy in community development.

To start the program's pre-implementation process, DOST-1 kicked-off community assessment or the RRA in Narvacan in February 4 followed by series of appraisals in the municipalities of Cervantes, Sta Lucia, Sta Cruz, Nagbukel, Candon City, Sta Maria, Salcedo, Galimuyod, Burgos and Quirino. The appraisal will serve as basis in the deployment of appropriate technological interventions in the identified communities utilizing matured DOST and other related technologies that would answer the needs and strengthen assets for poverty alleviation.

A team from DOST 1 conducted the data gathering with 1-4 barangays per day focusing to five (5) entry points of the program: Human Resource Development, Health and Nutrition, Economic Enterprise Development, Disaster Risk Reduction and Climate Change Adaptation, and the Environmental Protection and Conservation.

"This RRA will guide our team on what is the most suitable interventions addressing pressing needs in the five areas of the program. We will prioritize interventions and we will do it with your cooperation," said Director Ramon Sumabat, PSTC - IS, during the last leg of RRA in Quirino.

Identified interventions will be implemented within the year in partnership with the Ilocos Sur Polytechnic State College (ISPSC), North Luzon Philippines State College (NLPSC), the Ilocos Sur Provincial Police Office (ISPPO), and the 81st Infantry Batallion, 7th Infantry Division of the Philippine Army.



La Union firm produces first batch of locally-made surgical masks from start-up project with DOST-SETUP

by DOST-1 SETUP Regional Program Management Office, Katrina F. Ronquillo, Project Assistant II



Mr. Richard S. Chan of ModulHaus Incorporated hands the surgical face masks produced by the firm to DOST-1 Regional Director Dr. Armando Q. Ganal during the Ceremonial Awarding of the PRIME-HRM Bronze Award and ISO 9001:2015

Certification on March 8, 2021 at the Department of Science and Technology - Regional Office No. 1

The ModulHaus Incorporated of Agoo, La Union has recently produced its first batch of surgical masks through its innovative start-up project worth PhP5,000,000.00 funded by the Small Enterprise Technology Upgrading Program (SETUP) of the Department of Science and Technology Regional Office No. 1 (DOST-1).

A distinguished name as a manufacturer of modular products, ModulHaus Incorporated has been a beneficiary of SETUP since 2016. With 8 years' experience in the industry, Mr. Richard S. Chan, the general manager and owner of the firm, gained his expertise in the field through his previous work at the Modular Plus Home System Incorporated, a family-owned corporation and a corporate spin-off of the La Union Timber Corporation (LATIMCO). Its first assistance from the Program enabled him to acquire an automated panel saw machine for a precise and speedy cutting process of boards used in the production of modular products such as kitchen, wardrobe and pantry cabinets, restaurant and console tables, bathroom and vanity fixtures, and other architectural and interior office features. The firm uses top-of-the-line materials that made them competitive and establish a name in the industry that numerous private institutions, local government units, government offices, and schools and universities became their regular clients.

In 2020, the firm tapped the DOST through the La Union Science and Technology Center to avail its second phase of SETUP assistance focused on its proposed venture on surgical mask production. Due to the COVID-19 pandemic, wearing of face masks has now become a norm as it is already mandatory to wear one especially when staying outdoors. The limited supply and sudden upsurge in the demand for face masks have forced healthcare providers and frontliners to re-use their masks designed for one-time use only, which compromises their safety. Moreover, since there is only one manufacturer of surgical face masks in the country, stocks would easily run out in the market, and others would just resort to wearing cloth masks which does not guarantee protection from the dreaded disease due to its non-resistance to fluid.

With this predicament, ModulHaus Incorporated has then thought of establishing a production plant of surgical masks in the province. Albeit a start-up, the project was funded through SETUP as it is an innovative project and a considerable COVID-19 initiative.



The project fund of PhP5,000,000.00 was used in the purchase of 1 unit of Automatic Mask Making Machine and 2 units of Automatic Ear Tape Applier with a capacity that can produce 739,200 surgical face masks per month. ModulHaus Incorporated's new venture aims not only to mitigate the shortage of surgical masks in the region but also to aid in sustaining its availability in the market at a lower cost.

As of March, the firm has successfully produced its first batch of surgical face masks, branded as Safe Tech. Each 4-ply face mask is individually packed in a box, containing 25 pieces per box. To date, the firm has not yet commercialized its new product line as it is still waiting for its License to Operate from the Food and Drug Administration.

The DOST-SETUP is incessantly looking for ways not only to provide technical assistance and technological support to micro, small, and medium enterprises in the country but also to contribute in one way or another in the fight against COVID-19.



DOST-1 PSTC-LU and LGU Naguilian holds cGMP and Skills Training on Peanut Pastillas Processing

by PSTC - LA UNION, Eiryz Clyde Angelique D. Orpilla, Project Assistant I

The Department of Science and Technology Regional Office No. 1 (DOST 1), through the Provincial Science and Technology Center-La Union (PSTC-LU), in collaboration with the Local Government Unit of Naguilian, conducted a 2-day awareness seminar on current Good Manufacturing Practices (cGMP) and skills training on Peanut Pastillas Processing for the members of Daramuangan Peanut Producers Association (DPPA) held on March 25-26, 2021, in the Barangay Hall of Daramuangan, Naguilian, La Union.

Barangay Daramuangan is known in the municipality for the abundant supply of peanut. In support to the One-Barangay One-Product (OBOP) program of LGU Naguilian, the DPPA will venture in Peanut Pastillas Processing to provide livelihood to its members. DPPA is a recognized association of LGU Naguilian.

OBOP program harnesses the economic potential of every barangay and to encourage entrepreneurship. Also, it aims to provide greater impact in the proper utilization of resources thus maximizing peanut as a viable and highly productive agricultural crop.

Mr. Jonathan M. Viernes, Provincial S & T Director of La Union, granted the request of Mayor Nieri P. Tilos-Flores for the said training. The training aims to improve the socio-economic conditions of the members through proper access and to acquire necessary assets to engage in and maintain thriving livelihoods.

Ms. Princess P. Abuan, Project Assistant II and Food Safety Expert of PSTC-LU, served as the resource speaker and trainer of the 2-day seminar on cGMP and skills training. Ms. Abuan was assisted by Engr. Eiryz Clyde Angelique D. Orpilla. The said activity was joined by 15 participants who are members of the association.

With her expertise in food safety and food processing, Ms. Abuan discussed the importance and benefits of cGMP to assure a safe, wholesome and quality of product. She emphasized that food safety is in our hands.

Also, on the skills training, Ms. Abuan shared and demonstrated the technology on Peanut Pastillas Processing to capacitate the participants to make a better and profitable livelihood. On the second day, she let the participants to do and modify their product.

At the end of the activity, Punong Barangay Ramil D. Abun expressed his heartfelt gratitude and appreciation to DOST 1 and to LGU Naguilian for providing the training. He also encouraged the participants to continuously support the livelihood project.



Ms. Princess P. Abuan discussing the objectives of current Good Manufacturing Practices (cGMP)



Ms. Princess P. Abuan begins the skills training on peanut pastillas processing

DOST-1 conducts RRA (Rapid Rural Appraisal) in Santol, La Union

by PSTC - LA UNION, Catherine M. David, Project Assistant I





The Department of Science and Technology Regional Office I (DOST I), through its Provincial Science and Technology Center - La Union (PSTC-LU), conducted Rapid Rural Appraisal (RRA) in Santol, La Union on March 4-5, 2021.

The RRA focused on Barangays Lettac Sur, Sasaba and Sapdaan of the municipality. Local community officials and representatives actively participated in Focus Group Discussion (FGD) for the implementation of the Community Empowerment thru Science and Technology (CEST) program. This program aims to provide livelihood and alleviate poverty in remote communities.

The activity was spearheaded by PSTC-LU headed by Mr. Jonathan M. Viernes, the Provincial Director of DOST-PSTC-LU. The RRA was conducted by staffs from the DOST Regional Office and in collaboration with representatives from Don Mariano Marcos Memorial State University- North La Union Campus (DMMMSU-NLUC) and the Local Government Unit (LGU) of Santol.

The appraisal aims to determine needs, potentials, resources and assets of the community in the five (5) priority areas of the program as basis for the deployment of S&T intervention. Thus, the discussion focused on these priority areas and were conducted by the following: 1. Livelihood/Economic Enterpise Development by Ms. Arnelie G. Laquidan, Assoc. Prof. III, Mr. Heisaboy T. Tubaang, PA II and Ms. Catherine M. David, PA I. 2. Health and Nutrition by Ms. Karen Ballada, Instructor I, Ms. Annalie L. Rosales, SRS II and Ms. Cyrille Ann Manalon, SRS I

3. Basic Education and Literacy by Ms. Rowena D. Carreon, Assoc. Professor III and Ms. Adelisa C. Florendo, SRS II 4. Environmental Protection and Conservation by Ms. Desiree A. Vilar, Asst. Prof I, Mr. Jonathan M. Viernes, Provincial Director, DOST-PSTC-LU, and Ms. Eiryz Clyde Angelique D. Orpilla, PA II 5. Hazard Mitigation and Climate Change Adaptation by Mr. Jomar J. Lucena, Instructor II, Mr. Michael John C. Maquiling, SRS II and Mr. Raymond P. Espe, SRS I.

The activity was participated by 81 attendees from the barangay communities. The first day of the RRA started in Brgy. Lettac Sur, where the CEST group travelled about 35 minutes from Poblacion about 35 minutes or six kilometer (6km) uphill via jeepney.

On the same day, the Barangay of Sasaba was reached by the team for the afternoon session. It took about 1 hour & 30 minutes or 12.20 km travel from Poblacion uphill to the mountainous barangay.

After the activity in Brgy. Sasaba, the team proceeded from Brgy. Sasaba to Brgy. Sapdaan via almost 2 hours of hiking since it is not reachable by any vehicle for transportation.

The data gathered were consolidated and will be used in crafting the field study report which will be the basis of the government in implementing appropriate interventions aimed to alleviate poverty in the far-flung communities of Santol, La Union.

DOST-1 AMERIAL Team Visits MSMEs in La Union and Pangasinan to Introduce Smart Manufacturing Technologies

by PSTC - LA UNION, Bernadine P. Suniega, Science Research Specialist I & PSTC - PANGASINAN, Edward E. Ugale, Project Assistant II



The Department of Science and Technology Regional Office No. I (DOST-I), through the Provincial Science and Technology Centers (PSTCs) in La Union and Pangasinan, and in coordination with the Metals Industry Research and Development Center (DOST-MIRDC) visited various micro, small, and medium enterprises (MSMEs) in La Union and Pangasinan headed by Engr. Arnold C. Santos, together with Engr. Godfreyson Nardo, Senior Science Research Specialist and representatives of FS Automation, a private system integration company, visited Nutridense Food Manufacturing Corporation (NFMC) in Brgy. Malanay, Sta. Barbara, Pangasinan to conduct on-site ocular inspection of the production area and plot the existing equipment as an initial requirement for system automation integration in February 2021.

The collaborative activity aimed to evaluate, assess, and initiate the establishment of Advanced Mechatronics, Robotics, and Industrial Automation Laboratory (AMERIAL) Project in the province of La Union.

The on-site visit was part of the on-going consultancy assistance of DOSTI and DOST-MIRDC to NFMC through the innovative project "Establishment of the Advanced Mechatronics, Robotics and Industrial Automation Laboratory (AMERIAL)". The program aims to introduce modern and innovative automation technology to the potential firm adopters to further enhance and increase their production.

As an output of the visit, the FS Automation
Company and AMERIAL team will prepare
recommendations on automation process using
proper system integration and smart machines that
will remove all inefficiencies at all levels for much
smoother production processes. Technical details
on the automation process and costing of
technology will also be included in the report.

One of the project's objectives is to conduct R&D activities related to mechatronics, robotics, and automation for SETUP beneficiaries. MSMEs are encouraged to use smart manufacturing technologies to reduce cost and improve productivity and business agility.

Small Enterprise Technology Upgrading Program (SETUP), one of the enabling programs of the DOST, targets the MSMEs to increase their productivity and product competitiveness. Through SETUP, the department was able to assist and improve numerous MSMEs in the countryside that contributed to alleviate their socio-economic condition and become financially stable.

For the consultancy services, the AMERIAL team of experts headed by Engr. Godfreyson Nardo, Senior Science Research Specialist of DOST-MIRDC, visited SETUP beneficiaries in La Union and Pangasinan endorsed by the PSTCs. The team checked their production line for possible automation projects.







Overall, a total of 30 MSMEs in La Union and Pangasinan have been visited and assessed for the whole duration of the visit. Of which, 20 MSMEs has been identified with possible automation in their processes.

AMERIAL consultancy services also include troubleshooting and repair, facility upgrading and product development.

As an output of the visit, the AMERIAL team will prepare recommendations on the automation process among the visited firms using the proper equipment and interventions that can analyze and diagnose issues without human involvement and will remove all inefficiencies at all levels for much smoother operations. Technical details on the automation process and costing of technology will also be included in their report. Based from AMERIAL report, DOST-I will discuss with the firms on how to pursue the recommendations and determine the assistance that DOST can provide.

The AMERIAL project is in cooperation with the Mechatronics and Robotics Society of the Philippines (MRSP).

The DOST, along with other government agencies, will continue assisting MSMEs in adopting digitalization and electronic technology in their businesses.

The AMERIAL project is just one of numerous assistance the DOST provide MSMEs to continuously improve their productivity and business agility.





DOST 1 Team visits E-Nutribun Technology Adoptor's Facility in Pangasinan

by PSTC - PANGASINAN, Bernalyn P. Martinez, Project Assistant II



The Department of Science and Technology Regional Office 1 (DOST 1) team headed by Regional Director Armando Q. Ganal visited the Enhanced Nutribun (e-nutribun) facility of Nutridense Food Manufacturing Corporation (NFMC) on February 11, 2021.

e-Nutribun is a technology developed by the DOST-Food and Nutrition Research Institute (DOST-FNRI) in response to issuances of the Department of Social Welfare and Development (DSWD) issued Memo Circular No. 12 Series of 2020 – Guidelines in the Implementation of the Supplementary Feeding Program during community quarantine or other similar emergencies. The circular specifically stated the provision of nutribun to the supplementary feeding program of the DSWD.

DOST-FNRI reformulated the ingredients to come up with an 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.

Mr. Racky D. Doctor, president of NFMC toured the team to their facility. He said that their average daily production of e-Nutribun is 30,000 pcs with their current facility. They supply DSWD Regions 1, 2 and 3 for the supplemental Feeding Program and Department of Education's (DepEd) School-based Feeding Program.



The NFMC is one of the technology adoptors of e-Nutribun. It offers complementary food products for nutrition adopting the 11 technologies generated by the DOST-FNRI like Rimo Blend, Rimo Blend Choco, Rimo Blend Plus, Rimo Curls, Brown Rice Bar, Momsie, Stabilized Brown Rice, Iron Fortified Rice (IFR), IFR Kernel, Micronutrient Powder Mix and Enhanced Nutribun.

Focus Group Discussion of DOST-1's iSTART program proceeds in six pilot municipalities in Pangasinan

by PSTC - PANGASINAN SATELLITE OFFICE, Hannah N. Meim, Project Assistant I



Amidst the threat of the pandemic, notable happenings and hopes for brighter days are anticipated this year, as various stakeholders partake in the Focus Group Discussions (FGD) held from February 8-12, 2021 in six (6) municipalities of Pangasinan for the iSTART (Innovation, Science and Technology for Accelerating Regional Technology-Based Development) program.

Strategies and plans for the integration of science and technology for inclusive growth and development have been scrutinized during the sessions led by Dr. Lily Ann Lando, the knowledge provider/facilitator of strategic planning for the iSTART program.

The six (6) municipalities namely, Sual, Bugallon Malasiqui, San Fabian, Alcala and Balungao serve as pilot communities of the Province of Pangasinan that were identified as growth area for Region I based on the PLANADES Development Model from a study commissioned by DOST with the University of the Philippines-School of Urban and Regional Planning. The participation of concerned local government unit heads from each municipality and representatives from the academe provided valuable information that will be used to draft the corresponding S&T-based development plan for implementation in the respective municipality.

The iSTART program intends to use science, technology and innovation (STI) in its undertakings through multi-sectoral consultative process, engagement of researchers, scientists and engineers and inter-agency partnerships. The provinces of Camarines Sur (Region 5), Leyte (Region 8) and Agusan Del Sur (Caraga Region) along with Pangasinan in Region I are the pilot provinces to implement the program.

Pangasinan Governor Amado I. Espino III assured his commitment and full support to this DOST's initiative. Linkages with other government agencies are aspired to happen in hopes of more prolific results. Dr. Armando Q. Ganal, DOST-Region I director, conveyed the adherence of the DOST-I team for higher productivity and better quality of life through science and technology. Furthermore, the technical expertise of Lyceum Northwestern University and Pangasinan State University in the areas of Research, Development and Technology Transfer will be tapped to assist in the implementation of the program.

Successful outcome of the activity is due to the collaborations of the local government units, partner academe institutions, and the DOST team. Implementation of the identified projects and activities are anticipated to commence upon the approval of the governing authorities.

DOST-1 conducts virtual Technology Needs Assessment Validation to Firms in Pangasinan and Ilocos Norte

by DOST-1 SETUP 2.0 PROJECT 2, Sunshine C. Gaerlan, Project Assistant I



The Department of Science and Technology (DOST) through the Small Enterprise Technology Upgrading Program (SETUP) held a virtual Technology Needs Assessment (TNA) validation to micro, small, and medium enterprises (MSMEs) and community-based cooperative in the Province of Pangasinan and Ilocos Norte through Microsoft Teams last January 28 and 29, 2021 and February 2, 2021.

16 MSMEs from Pangasinan and Ilocos Norte were assessed by the Regional Validation Team of DOST-I composed of Regional Director Dr. Armando Q. Ganal, Assistant Regional Director for Field Operations Dr. Ismael D. Gurtiza, La Union S&T Center Provincial Director Jonathan Viernes, Ilocos Norte S&T Center Provincial Director Benjamin Mercado Jr. and the Regional Program Management Office headed by the SETUP Regional Coordinator Ms. Adelisa C. Florendo.

There were 11 MSMEs assessed in the Province of Pangasinan namely: KWJ Enterprise, Jojo Autoshop, Jerry's Art and Furniture, Doris Furntiure Shop, Emoh-Ruo Prints, Hi-Chi Farm, Jameel Mushroom Product and Trading, Pons Mushroom Farm, Louis Roy Bakeshop, JD Untalan Machine Works, and Gravity Steel Fabrication.

Moreover, four (4) MSMEs and one (1) community-based cooperative were assessed from the Province of Ilocos Norte which include Mr. Bing's Bakeshop, Mabini Square Den, GC Collection, JVA Furniture and Sirmata Multipurpose Cooperative for the community-based project.

The TNA validation served to confirm and evaluate the initial assessment undertaken by the Provincial Science and Technology Center (PSTC) staff on the technology needs of the firms and associations which may include but are not limited to Technical Assistance and Consultancy Services (TACS) and upgrading of equipment and facilities.

DOST-I through SETUP continues its endeavor to encourage and assist MSMEs in the adoption of technological innovations not only to improve their operations, products and services but also to increase their productivity and competitiveness in the sector. Likewise, Community-Based Project (CBP) remains to empower associations and cooperative to sustain and improve their productive undertakings that involve abundant commodities that have great potential for production or manufacturing intended to create livelihood and enhance the standard living of the community.

SERVICES:

TECHNOLOGY TRANSFER

- Small Enterprise Technology Upgrading Program (SETUP)
- Community-based Projects
- Community Empowerment through Science and Technology (CEST)

S&T SERVICES

- **▶** Testing and Calibration
- ▶ Packaging and Labeling
- Consultancy Services
- Techology TrainingsTechnology Fora

OTHER S&T SERVICES

- S&T Scholarship Program
- S&T Promotion and Information Services
- S&T Learning Resource Center



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