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S&T good news

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Science department celebrates Pinay scientists' contributions in the time of pandemic

By Allan Mauro V. Marfal, DOST-STII



(From right) Dr. Nathalie Lourdes Africa-Verceles, Dr. Gloria Luz M. Nelson, and National Scientist, Dr. Lourdes J. Cruz were among the resource speakers during the Women's Month Celebration of the Department of Science and Technology held on 30 March 2021 via Zoom.

Since the pandemic has started a year ago, many Filipina scientists have made major contributions through research and development (R&D) in combating the coronavirus disease 2019 finding ways to adapt to the present situation.

On 30 March 2021, via Facebook Live, the Department of Science and Technology (DOST) celebrated Women's Month as culminating activity with the theme "Sina Juana, Juan at ang Siyensya Laban sa Pandemya:" Kaya! This became an avenue for the DOST system to pay tribute to the many contributions of women scientists, researchers, engineers, teachers and those in other professions in different sectors of society more so during this time of the pandemic.

"The Women's Month Celebration is an opportune time to share with every Filipino that men and women can work together in providing timely and appropriate solutions to fight against the challenges brought about by the pandemic. We all know that women are resilient and creative enough to be part of bigger plans in attaining our goals as a nation," said DOST Secretary Fortunato T. de la Peña.

Sec. de la Peña encouraged everyone to fight gender inequality particularly during the pandemic and to always have the gender-lens to prevent leaving women behind as the whole world struggles to overcome the negative impacts of the pandemic that stunt progress in several areas.

Meanwhile, Dr. Diana L. Ignacio, Assistant Secretary for Human Resources Management, Management Services, and Special Concerns and the Officer-in-Charge of DOST's GAD Regional and Support Service, expressed her belief that women have excellent skills and abilities and when provided with the needed support, it will result in empowered women; able to meaningfully participate in the planning and decision-making processes at various levels.

"Yes, we can make change work for women as we provide them opportunities to articulate their needs and allow them to participate in creating concrete, sustainable, and inclusive actions towards gender equality," said Asec. Ignacio.

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Shining moments of women

The virtual celebration of Women's Month was filled with different lectures and presentations that mirrored the many valuable contributions of several Filipina scientists different fields. Dr. Nathalie Lourdes Africa-Verceles talked about the challenges confronting women with her presentation titled, "Gender and the COVID-19 Pandemic; Rising to the Challenges." National Scientist, Dr. Lourdes J. Cruz highlighted the important role of women scientist in the country's fight against the virus with her "Women Scientists at the Core of the Battle Against COVID-19". There was also Dr. Gloria Luz M. Nelson who talked about the stark reality of unplanned pregnancies in her presentation, "The Stories of Filipino Pregnant Teenage Mothers During the COVID-19 Pandemic Crisis". Lastly, two Pisay students, one already a graduate and the other a Grade 11 student, shared two different perspectives about distance learning brought about by COVID-19 under the presentation titled, "Teacher-Student Learning in the midst of the Pandemic: PSHS Experience".

These two young men are Michael A. Casas, now a Special Science Teacher IV at PSHS-Southern Mindanao campus and Mr. Janri M. Llamoso from the PSHS-SOCCSKSARGEN campus.

Also, part of the virtual celebration was a tribute given to the late DOST Undersecretary for Regional Operations Brenda L. Nazareth-Manzano who dedicated her life to serving the country with her knowledge, expertise, and wisdom. Most importantly, she was honored for her exemplary leadership and commitment to gender equality and women empowerment even before when she was the regional director of DOST Region IX.

Capturing outstanding women on film

Another highlight of the virtual celebration was the presentation of winners of the #MyWonderJuana and #MySuperJuan Video Making Contest that was spearheaded by the DOST-Industry and Technological Development Institute.

In the category of #MySuperJuan, the video entry of Bonifacio Tamarang from the DOST-

National Research Council of the Philippines garnered the top prize. It was followed by the entries of Wilcel James Bernardo and Gian Carlo Pait, from the DOST-Technology Application and Promotion Institute who got the second and third places, respectively. This category required the participants to create a video that will feature a man who does his share of doing unpaid domestic work, which is stereotypically labeled as a woman's job.

On the other hand, the #MyWonderJuana category required participants to focus on featuring inspiring women who can hurdle the challenges of the pandemic and who became role models in empowering others to remain hopeful. The video of Danica Faith Lagman from DOST-TAPI bagged the top spot, then rounding up the winners were the two videos submitted by Robby Salvador of DOST Region XI.

For both categories, the first prize is Php 5,000 while the second and third prizes are Php 3,000 and Php 2,000, respectively. A consolation prize of Php 500 were given to non-winners.

LIGTAS COVID helps MSMEs rise through venture financing

By **Jund Rian A. Doringo**, DOST-TAPI

In a bid to help the government stop the spread of COVID-19 while maintaining the growth of the micro, small, and medium enterprises (MSMEs) in the country, the Department of Science and Technology (DOST) through the Technology Application and Promotion Institute (TAPI) has operationalized the program Level-up Innovation Government Support for Technologies against the Spread of COVID-19 or LIGTAS COVID-19.

The program aims to assist MSMEs in providing the necessary financial assistance to enable them to acquire raw materials for the production of relevant essential products used against the spread of the deadly COVID-19. It is in line with the government's thrust in addressing the pandemic under the Bayanihan to Heal as One Act that stimulates grants for the manufacturing or importation of critical equipment and essential supplies related to activities that respond to mitigating the risks against COVID-19.

The assistance provides as much as Php1,000,000 per proponent on the condition that the proponent takes on at least 30 percent of the total project cost.

In 2020, six projects were given financial support with an approximate aggregate amount of Php 8,000,000.

And because of the urgency to address the negative impacts of COVID-19 both to public health and the economy as new variants of the virus have been detected, the program is now in full swing and is now accepting project proposals for 2021.

For more information on the LIGTAS COVID-19 Amended Guidelines, please visit <https://drive.google.com/file/d/1Vr9SM0tlgaofd9YzlgW6Jz2SAiwVWA/view> or contact 8837 2071 local 2157 and email info@tapi.dost.gov.ph.



Prime Innov8 Manufacturing Co., a disinfectant product manufacturer, is one of the beneficiaries of LIGTAS COVID-19 in 2020.



Zamboanga cacao-coffee farmers get DOST training

By Jan Melvin Vallejo, DOST-IX

Cacao and coffee farmers get science-based training to improve production capabilities in the province of Zamboanga del Sur.

Dubbed as “Package of Technology on Cacao and Coffee Production,” the training was spearheaded by the Department of Science and Technology Regional Office IX (DOST-IX) through its Provincial Science & Technology Center- Zamboanga del Sur (PSTC-ZDS) in partnership with the Provincial Local Government Unit of Zamboanga del Sur (PLGU-ZDS) held in Chandler Suites, Pagadian City last 17-18 March 2021.

Key technical personnel from DOST-IX and the PLGU-ZDS shared their expertise to the 30 identified cacao and coffee demo-farm beneficiaries and 10 coordinators.

The training aims to equip the participants on the latest trends in cacao and coffee production and introduce them to the DOST’s Smarter Approaches to Reinvigorate Agriculture as an Industry or SARAI technologies, a decision-making tool for farmers to manage their farms.

SARAI integrates local weather data, drought forecasts together with crop disease

and pest monitoring information and other farming data that are essential in enabling farmers to make informed decisions and efficiently manage farm activities. The technology focuses on top local crops such as rice, corn, banana, coconut, coffee, cacao, sugarcane, soybean, and tomato.

The activity is part of the DOST IX Grants-in-Aid project titled S&T Community-Based Farm to Enhance Cacao and Coffee Production in District II of Zamboanga del Sur.

Last January 2020, the PLGU-ZDS received from DOST-IX funding that amounts to PhP846,165.05 for the provision of farm inputs and implements to the identified farmers of the said GIA project.

The DOST-GIA program serves and promotes inclusivity to communities by developing and introducing technological innovations by collaborating with various government institutions to achieve a holistic and positive impact.

For more information, please call please call (062) 991-1024/ (062) 925 1838 or text 09177184284, or email us at dost9info@gmail.com or visit our Facebook page at www.facebook.com/DOSTRegion9.

ABOUT US

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DOST-funded, UP-developed mobile app to help in environment protection

By Jachin Jane O. Aberilla, DOST-STII



The graphic features a central smartphone displaying a polluted waterway with floating trash and boats. To the right, the MASDAN logo is shown with the text 'MASDAN CITIZEN SCIENCE APP'. Below the logo, the text reads 'Tayo na't maging mga tagapagmasid!' and 'Get started with MASDAN. Download it now!'. A 'GET IT ON Google Play' button is present. At the bottom, logos for DOST, DOST-PCIEERD, and IM4ManilaBay are displayed.

Citizens can now report environmental issues and concerns through a mobile application called 'MASDAN'. MASDAN is a platform for citizen science to map and monitor the water quality of Manila Bay and other similar areas in the country.

In 2020, the University of the Philippines-Training Center for Applied Geodesy and Photogrammetry and the Department of Science and Technology (DOST) launched a two-year program in response to the need for technological interventions concerning the rehabilitation and sustainability of the Manila Bay area dubbed, "IM4ManilaBay".

MASDAN mobile app is one of the outputs of the Development of an Integrated Mapping, Monitoring, and Analytical Network System for Manila Bay and Linked Environments project or MAPABLE, one of the four projects of the IM4ManilaBay Program.

What is Citizen Science

"Everything is mappable. We want to enable mapping and monitoring of the environment using geo-spatial technology such as remote sensing, surveying, graphic report systems, and other related technologies as well as citizen science." said the IM4ManilaBay Program Project Leader, Dr. Ariel C. Blanco.

According to National Geographic, citizen science is the practice of public participation and collaboration in scientific research to increase scientific knowledge. Through citizen

science, people share and contribute to data monitoring and collection programs. Usually, this participation is done by unpaid volunteers.

"Through citizen science, everyone has a role to play. We want to enable them to contribute towards generating actionable information," Blanco added.

How to use the app

Joner Medina, Senior Science Research Specialist of Project MapAble, demonstrated the framework of MASDAN. Users would have to register first and fill out the user profile form on the app. After which, users can now submit a narrative on an environmental issue or concern, its location, and accompanying photos as evidence. Users can also pin the exact location of the issue on a map. In the meantime, the app can only accept photos, not videos.

Concerned citizens can report the following environmental issues:

- algal bloom
- fish kill
- water pollution
- water hyacinth
- ongoing reclamation
- solid waste

Once a report is submitted, it goes through a server where it can be directly accessible to appropriate national government agencies, state universities, and colleges, higher education institutions, local government units,

civil service societies, and citizens. Through the app, concerned agencies can take action on the reports submitted by the users.

MASDAN app is not only meant for Manila Bay concerns, citizens can also report issues in the Laguna lake area and other areas in the Philippines.

What is it in for the users

"Ang pangangalaga sa kalikasan ay responsibilidad ng bawat isa. Dahil sa partisipasyon ng publiko sa pangangalap at pagbabahagi ng datos at impormasyon, nagiging matibay ang ugnayan sa pagitan ng publiko at eksperto. Nagiging mabilis na pagsasagawa ng pag-aaral at nagkakaroon ng konteksto dahil sa input ng mga mamamayan," Medina highlighted.

Dr. Enrico C. Paringit, Executive Director of the DOST-Philippine Council for Industry, Energy, and Emerging Technologies Research and Development (DOST-PCIEERD) expressed his appreciation to the project team for making this innovative mobile application.

"I encourage citizens to actively participate and become more informed on Manila Bay's conditions thus becoming more empowered and more aware. Let's partake in this opportunity to contribute, share knowledge, and exchange views," Dr. Paringit added.

Let's do our share and be a 'mapaBler' now and download the MASDAN app on Google Play.