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**KISS and tell:  
DOST presents KISS  
on Valentine’s Day**

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

**W**ith the goal of bringing science closer to the people, the Department of Science and Technology (DOST) launched the Knowledge and Inspiration in Science Stories (KISS) on 14 February 2020 at the DOST-Science and Technology Information Institute (STII) Mini Theater, Bicutan, Taguig City.

DOST KISS is a series of promotional videos, which feature the DOST projects as well as funded and generated technologies by the DOST-attached research and development institutes, councils, academe, and small and medium entrepreneurs.

“To be honest, R&D is challenging to explain for the public to fully understand and appreciate. With the DOST KISS, we hope that people will love the Department’s efforts in R&D through likes, shares, and hearts on our social media accounts,” said DOST Undersecretary for Research and Development (R&D) Rowena Cristina L. Guevara.

Developed by DOST-STII and the DOST-Technology Application and Promotion Institute (TAPI), the 50 promotional videos are uploaded to the DOST official Facebook page

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**Knowledge and Inspiration  
in Science Stories**

**DOST rolls out 20 R&D  
outputs, services in 2020**

By **Allan Mauro V. Marfal**, *DOST-STII*



DOST Secretary Fortunato T. de la Peña introduces 20 programs, services, technologies, and innovations developed by agencies and regional offices of the DOST, together with various industry partners in a media conference on 20 February 2020 at the Hotel Jen in Pasay City. (Photo by Henry A. de Leon, *DOST-STII*)

**T**he Department of Science and Technology (DOST) unveiled 20 research and development (R&D) outputs and scientific services that would provide innovative solutions to address some of the country’s existing challenges and limitations in different sectors.

In a media conference held 20 February 2020 at the Hotel Jen in Pasay City, DOST Secretary Fortunato T. de la Peña introduced 20 programs, services, technologies, and innovations developed by DOST agencies and regional offices, together with various industry partners.

“The DOST would like to kick-off the year 2020 by featuring 20 of our programs and technologies that we believe can make a big impact in the lives of our countrymen and push

our country to attain socioeconomic growth and development,” said DOST Sec. de la Peña.

Called “Big 20 in 2020”, the DOST is set to spearhead a series of technology launches and events for the entire year. The said technology launches will highlight the practical benefits of various R&D outputs and scientific services, particularly in the areas of agriculture, enterprise technology, space science, genomics, mass transportation, development of smart cities, health and nutrition, disaster preparedness, and nuclear technology, among others.

The Secretary also emphasized that while technology remains the driving force of any developed economy, it is a must for the Philippines to develop more technologies that can help improve people’s lives.



(From left to right): DOST Undersecretary for Regional Operations Brenda L. Nazareth-Manzano, DOST-STII Director Richard P. Burgos, DOST Undersecretary for R&D Rowena Cristina L. Guevara, DOST Undersecretary for Disaster Risk Reduction and Climate Change Renato U. Solidum Jr., DOST-TAPI Director Edgar I. Garcia, and DOST Director for Internal Audit Service Maria Teresa B. de Guzman during the DOST KISS Launching on 14 February 2020 at the DOST-STII Mini Theater, Taguig City. (Photo from Henry A. de Leon, DOST-STII)

including the Facebook pages of DOST-STII and DOST-TAPI.

Half of the infomercials were produced by DOST-TAPI in support to the project Technology Transfer Day, which provides a venue to

fast-track the commercialization of DOST technologies through adoption or transfer.

Subsequently, the Technology Transfer Day offers opportunities to invest in business solution provided by local technologies to improve agriculture productivity, industry competitiveness, and quality healthcare.

The project is an effort to ramp up the innovative ecosystem referenced in Republic

Act 10055 or the Philippine Technology Transfer Act of 2009, making science and technology more significant and responsive to the needs of the local market.

Among the featured technologies and services are the Biotek-M Dengue Detection Kit, Fish-i: Smart Solutions for Sustainable Seas, and the Philippine Earth Data Resource and Observation (PEDRO) Center.

## ABOUT US

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.....  
*DOST rolls out...*

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Among the 20 R&D outputs unveiled by the DOST is the possible launch this year of two locally-built nanosatellites, an anti-dengue drug and biomedical devices, a 12-horsepower single cylinder diesel engine, and an automated guideway transit for the province of Bataan.

Also presented was a program called Understanding Lightning and Thunderstorms for Extreme Weather and Monitoring and Information Sharing or ULAT, a comprehensive program on nutrition, and a partnership between the DOST and the Department of National Defense.

There will also be a nationwide planting day of tissue-cultured coconut, the launching of maiden voyage of a hybrid trimaran, unveiling of a "Science for the People" book series, a concert using bamboo musical instruments, the launching of several DOST-enabled smart cities,

and an exposition on innovations in disaster risk reduction and management.

Several DOST facilities are lined up to start offering services this year including the country's first fully automated gamma irradiation facility, a Regional Yarn Production and Innovation Center in Miagao, Iloilo City, a tissue-cultured laboratory for ornamental plants in Bulacan, opening of various science discovery centers, the Philippine Genome Center in Visayas, and several laboratories including metrology laboratories in chemistry and biology, simulation packaging testing and green packaging laboratories, and a modular multi-industry innovation facility.

For more information on the DOST's 20 programs and technologies, visit [www.dost.gov.ph](http://www.dost.gov.ph) and download the «Big 20 in 2020» technology catalogue.

# Filipinnovation leads the Philippines to improve ranking in the next GII

By Jund Rian A. Doringo, DOST-TAPI



(From left to right): His Excellency Ambassador Evan P. Garcia, permanent representative of the Philippines to the United Nations and Other International Organizations in Geneva; DOST Sec. Fortunato T. de la Peña; Andrew Michael S. Ong, director of the Regional Bureau for Asia and the Pacific of WIPO; and Dr. Sacha Wunsch-Vincent, section head of the Economics and Statistics Division of WIPO and co-editor of the GII during the GII Technical Meeting on 17 February 2020 at the PICC, Pasay City. (Photo from DOST-TAPI)

**The Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña cited “Filipinnovation,” the Philippine National Innovation Strategy as key to sustain and improve the innovation ranking of the Philippines in the Global Innovation Index (GII).**

This was revealed during the Technical Meeting and High Level Conference on GII in the Philippines on 17-18 February 2020 at the Philippine International Convention Center, Pasay City.

Co-organized by the Department through the Technology Application and Promotion Institute (DOST-TAPI) and the World Intellectual Property Organization (WIPO), the event brought together government heads and experts to deliberate on key policy issues, challenges, and opportunities in areas that are critical for the further improvement of the Philippine ranking in the next GIIs.

“It is with our utmost sincerity that this platform provides a broad exchange of expertise and experiences to create innovation frameworks and tools, national support systems for innovation, and government and industry collaborations to fulfill an innovative

ecosystem,” said DOST Sec. de la Peña.

The GII provides a summary of where an economy stands in innovation as a reference for the creation of innovation policies or amendments that promotes a synergistic relationship among the government, industry, as well as the academe—gearing towards long-term growth, sustainable productivity including employment opportunities.

It can be recalled that the Philippines made a very huge leap—indicating an improvement, from 73 in 2018 to 54 in 2019, breaking into the top 55 among 129 participating countries all over the world.

Moreover, the improvement is further signified in the GII’s sub-pillars, such as trade, competition, and market scale; creative goods and services; innovation linkages; knowledge absorption; and university/industry research collaboration.

“The Science for Change Program may have contributed to the improvement in innovation ranking as the program establishes research and development (R&D) centers in the regions, facilitate the acquisition of technologies to local companies, create synergistic academe-industry relationship, and engage experts in

strengthening research capabilities,” said DOST Undersecretary for R&D Rowena Cristina L. Guevara.

On the other hand, the Department committed to improve the ranking in the following years by choosing an area of focus in allocating financial resources, developing a yard stick measurement of innovation, and strengthening of information dissemination.

“We also need to include technology transfer in our intellectual property programs as well as promote open innovation system to start-ups and small and medium entrepreneurs, and absorb inbound innovation as a way to brand our innovation strategies as Filipinnovation,” added Sec. de la Peña.

Initially launched in 2007, Filipinnovation envisions a competitive and multidisciplinary workforce competent in producing value-added knowledge-based products and services of global standards.

“I hope that in the next two years, the Philippines will be in the thirty-third percentile in the GII with our efforts in pursuing the Filipinnovation brand in the global arena,” emphasized Sec. de la Peña.

# DOST, DAP tie up for Project SPARTA to produce data science graduates

By **Mary Anne D. Lorenzo**, DAP

**R**esearch shows a foreseen demand of data science and analytics workers in the Philippines both for local and global markets in the coming years. Asia Pacific Economic Cooperation (APEC) projects that 340,880 data science and analytics (DSA) workers will be needed in the Philippines alone by 2022. There is also a pressing need for data-driven modes of decision making in all sectors when it comes to creating and implementing policies and strategies.

In line with this, the Department of Science and Technology - Philippine Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD), in partnership with the Development Academy of the Philippines (DAP) launched the Smarter Philippines through Data Analytics R&D, Training and Adoption (SPARTA) on 24 February 2020 at the Green Sun Hotel in Makati City.

Project SPARTA aims to establish the necessary online education, research and development mechanisms and infrastructure to develop the industry of data science and analytics and to mainstream it in both private and public sectors.

DAP, together with its partners Analytics Association of the Philippines (AAP) and Coursebank will jointly develop and launch



DOST Secretary Fortunato T. de la Peña (left) and DAP President and CEO Engelbert Caronan Jr. lead the launching of Project SPARTA or Smarter Philippines through Data Analytics R&D, Training and Adoption to train and produce 30,000 graduates on data science and analytics. (Photo from Gerardo G. Palad, DOST-STII)

localized massive online courses on data science, analytics, and related fields.

The Academy is expected to train and produce 30,000 graduates on various learning pathways in the field of data science and analytics through the developed online courses within the three-year project period. These courses will be

aligned to the challenges of specific localities and to certain national issues.

This project will not only equip the students with knowledge and skills in data science and analytics, but will also train them and make them aware that this area of study exists and will be of great help in nation-building.

## inFocus

“It is a pleasure to welcome our distinguished guests from the European Union and the Copernicus Programme. Thank you for offering to work with us on different opportunities to develop earth observation applications for disaster risk reduction and management, environmental protection, and climate change adaptation,” thus emphasized by Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña during his keynote speech at the second Copernicus National Conference in Manila on 06 February 2020. The Philippines and the European Union delegations expressed their commitment to



further strengthen partnerships through the EU-DOST Copernicus Project spanning three years. DOST Sec. de la Peña said the European Union has provided a €10 million (euro) funding for the Philippines to implement the pilot projects. The project implementation will start next year. European Commission Directorate for Cooperation and Development Philippe Brune stated that the Philippines is already “mature” enough for the upcoming Copernicus pilot projects considering the availability of skilled professionals and manpower in the country. The Copernicus’ information services, as well as the data from which they are derived, are accessible on a full, free, and open basis by anyone. Originally intended exclusively for European citizens, it is currently helping service providers, public authorities and organizations around the world in improving their own monitoring and mitigation capacities. (Text and photo from Enrico A. Belga Jr., DOST-CO)