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# Confab pitches for health policy integration

By Sheila Marie Anne J. de Luna, DOST-STII



Speakers and guests, including DOST Secretary Fortunato T. de la Peña, pose with the participants of the 2nd National Summit on Social Determinants of Health. (Photo by Henry A. de Leon, DOST-STII)

**G**oal number three of the United Nations (UN) Sustainable Development Goals (SDGs) for 2015-2030 is to “Ensure healthy lives and promote wellbeing for all at all ages.”

To help achieve this, member states of the UN adopted the Rio Political Declaration on Social Determinants of Health on 21 October 2011 to express their commitment to implement social determinants of health approach to reduce health inequalities. This entails efforts to work closely with other organizations on advocacy, research, and capacity building and to continue to advocate the importance of integrating social determinants of health in national and local government policies.

In support of this goal, the 2nd National Summit on Social Determinants of Health, with the theme “Attaining the Sustainable Development Goals by Integrating Health in All Policies,” was held to discuss what can be done to achieve the SDGs and how health can be successfully integrated in national and local government policies.

International and local experts across various disciplines and sectors, as well as

successful implementers of social determinants of health integration in their policies, converged to discuss, understand, and analyze issues, and share best practices on how social determinants can be successfully integrated in government policies, local government programs, and private sector initiatives.

Social determinants of health are the economic and social conditions and other determining factors that affect individual and group disparities—unfair and avoidable differences—in health status. They are shaped by the distribution of wealth, power, and resources at global, national, and local levels.

Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña, looks forward to the creation of new avenues that could lead to the integration of current health regulations during the conference.

The two-day conference also served as an opportunity for healthy discussions and sharing of ideas on how to promote, strengthen, and revise the healthcare system in the Philippines to contribute to the attainment of the SDGs.

Four enriching panel discussions dealt with the status of SDGs and human development,

the role of social determinants of health in all policies, and the efforts of the national government, local government units (LGUs), and the private sector in addressing social determinants of health by integrating health in all policies to attain SDGs.

A workshop wherein participants identified problems and solutions to integrating health in all policies addressed the question, “How can the Philippines improve research, education, policy, and social mobilization and advocacy in addressing the various social determinants of health?” The group discussions resulted to interesting recommendations on how to improve education, policy, and social mobilization, and advocacy efforts to address the social determinants of health and how to better integrate health in all policies, as well as suggestions on collaborative approaches for public health policies and interventions.

Dialogs from the panel discussions established the notions that while the problem involves health, solutions are not exclusive within the health sector, and that goals may be better achieved through cooperation across sectors, and between national and local institutions.

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# International experts discuss food fortification

By Reuben Andrew R. Razal, DOST-PCHRD

**Experts in the health and food industries gathered for a two-day conference to share their insights and research on food fortification, particularly focusing on how fortification of food positively impacts a population's health and nutrition.**

Dr. Visith Chavasit, professor at Mahidol University-Thailand, Dr. Drajat Matianto, vice rector of Bogor Agricultural University-Indonesia, and Dr. Enrique Ostrea Jr., professor at Wayne State University Michigan, presented their research and insights on food fortification science at the 2nd International Symposium and 9th Annual Scientific Conference of the Metro Manila Health Research and Development Council (MMHRDC) on 24-25 May at the Pan Pacific Manila.

Highlighting the theme "Food Fortification in Universal Healthcare," the experts discussed how fortification of food can improve health situations, like reducing malnutrition. "Food fortification has been an effective bridge in bringing together several elements to effectively combat malnutrition," according to Dr. Jaime C. Montoya, executive director of the Department of Science and Technology-Philippine Council for Health Research and Development (DOST-PCHRD), through a message read by Carina Rebulanan, chief of Institutional Development Division, DOST-PCHRD.

"It is cost-effective, has a wide scale and impact, and targets staple foods that are available and are part of the daily diet of individuals," Rebulanan said while explaining the importance of food fortification as part of malnutrition reduction programs to improve overall global health.

Dr. Chavasit, in his presentation, further discussed how to achieve optimal population health and nutrition through food fortification. He explained the best practices involved in creating better fortified foods, shedding light on the importance of developing programs that could be received better by the consumers.

Universal salt iodization has been identified as a strategy in eliminating iodine deficiency through iodization of all edible salts whether for use in household and processed food, as well as animal salt, said Dr. Chavasit. He emphasized how the program can drastically reduce the risks of mental retardation in children.

Dr. Matianto, meanwhile, discussed the food fortification initiatives in the ASEAN region. He explained that there are three strategies in addressing micronutrient deficiencies in the region, namely supplementation, food diversification, and food fortification.

He further explained how food fortification is believed to be the best and most efficient



Carina Rebulanan of DOST-PCHRD welcomed the international experts during the MMHRDC Annual Conference. (Photo courtesy of DOST-PCHRD)

choice since its cost efficiency also contributes to poverty alleviation and improvement of household food security. Dr. Matianto also highlighted the mandatory program scheme of food fortification in Indonesia which fortifies salt with iodine; wheat flour with iron, zinc, and vitamin B; and palm oil with vitamin A.

Similar with the food fortification efforts in Indonesia, several studies on food fortification and its impact on health among Filipinos were also conducted. One of these is a study on the effects of food fortification with *Moringa oleifera* (malunggay) in the IQ of children, by Dr. Enrique M. Ostrea Jr. Results of the said study were presented by Dr. Ma. Esterlita V. Uy of the University of the Philippines-Manila, National Institutes of Health. The research delved on how the enrichment of snacks with iodine and protein led to the significant increase in the IQ, weight, and hematocrit of daycare students in Malolos City, Bulacan. The study noted the increase in the IQ of the children ranging from five to eight points through the 10 continuous months of feeding with snacks fortified with malunggay.

The conference also included poster and photo exhibits by students and researchers centered on food fortification research.

The MMHRDC is part of the regional consortia under the Philippine National Health Research System (PNHRS). The DOST-PCHRD serves as the PNHRS secretariat, providing technical and administrative support to the consortia network.

Confab pitches...

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The Department of Health presented its strategic framework of the Philippine Health Agenda, which focuses on the strengthening of leadership and stewardship roles in the health sector and fostering of participatory governance. Successful government integrations of health in policies, like that of the Department of Social Welfare and Development's Pantawid Pamilyang Pilipino Program (4Ps) and Department of Environment and Natural Resources' efforts in incorporating health in its policies, provided other national agencies with a model on how they can integrate health in their own policies.

On the part of the LGUs, mayors Ramon C. Oñate of Palompon, Leyte; Carolyn S. Fariñas of San Felipe, Zambales; and Pryde Henry Teves of Bayawan City, Negros Oriental shared inspiring stories of how resilience, innovation, and resourcefulness help identify, prioritize, address, and integrate the social determinants of health into the health concerns of their communities.

Private sector representatives Antonio Meloto of Gawad Kalinga and Paolo Maximo Borromeo of Ayala Land Corporation and AC Healthcare Holdings, Inc, shared their journeys in contributing to better health and sustainable development through their own programs, thereby establishing the need for a closer coordination and cooperation between the public and private sectors.

At the end of the conference, it was recommended that there should be a common platform that stakeholders should agree on by which to address social determinants of health to attain the SDGs—with the DSWD's 4Ps as a possible main platform that national agencies can converge their efforts on. Further, it was suggested that roles and responsibilities of national and local governments should be clarified and that accountabilities should be assigned.

It was also pointed out that the national government should have a mechanism in engaging LGUs, taking into account their unique geography, capacity, and constraints. Finally, it was recommended that public-private partnerships should be upheld by creating conducive environment for business and social reform initiatives.

The forum, held on 21-22 May 2018 at Dusit Thani Manila, was co-hosted by the InterAcademy Partnership for Health, a network consisting of medical academies and medical sections of academies of science and engineering, DOST-National Academy of Science and Technology, Philippines, and DOST-Philippine Council for Health Research and Development.

# Maya-1 to launch in space

By **Kritelle Nicole G. Chaves**, *DOST-PCIEERD*



The Philippine representatives on the BIRDS-2 Project (left) and Maya-1 (right). (Photos from DOST-PCIEERD)

**I**s it a bird or is it a plane? It's named after a bird and no, it's not a plane. It's a cube satellite.

Named after our former national bird, the maya bird, Maya-1, the first Filipino cube satellite (CubeSat), will be launched in space on 29 June 2018.

CubeSats are miniature satellites that were commonly used in low Earth orbit for remote sensing and communications but are now being utilized for interplanetary missions as well. This year, two CubeSats have already been deployed on a mission flying to Mars, with others being considered for a mission to Jupiter and the moon.

Implemented by the PHL-Microsat Program of the University of the Philippines Diliman, in collaboration with the Department of Science and Technology-Advanced Science and Technology Institute (DOST-ASTI) and the Kyushu Institute of Technology (Kyutech), Maya-1 was turned over to the Japan Aerospace Exploration Agency (JAXA) on 15 May to prepare for its launch.

In line with the functionalities identified by the BIRDS Project, Maya-1 is set to take images of the earth using onboard cameras, broadcast signals from various satellites and determine their locations, measure atmospheric density through orbital analysis, help operate a ground station network for CubeSat constellation—an application that will allow for easier telecommunication, and measure single event latch-ups in orbit.

Just like how Diwata-1 and Diwata-2 paved the way for space science to grow and flourish in the Philippines, Maya-1 will serve as a representation of how we strive to make our mark as a globally competitive country in the space technology scene.

The development of Maya-1 falls under BIRDS-2 or the Birds Satellite Project, a cross-border interdisciplinary satellite project that accommodates non-space faring countries. The project consists of 11 participating team members from four different countries—two of whom are from the Philippines.

Kyutech students Joven C. Javier and Adrian C. Salces represented the Philippines throughout the project. Master of Engineering student Javier is responsible for monitoring the development task progress of the project. Aside from taking on the role as team leader for the whole BIRDS-2 batch, he is also in charge of supervising the project cycle, ensuring that all stages—from the preliminary design to the satellite operation—are running smoothly and accordingly.

Meanwhile, PhD in Engineering student Salces takes over in managing the communication subsystem of the satellite. He also ensures the continuation of the establishment and operation of a ground station network, demonstration of the data collection system consisting of the CubeSat constellation, and the identification of all technical challenges of the system.

The projects under the PHL-Microsat program are funded by the DOST, assisted by the DOST-Philippine Council for Industry, Energy and Emerging Technology Research and Development.

## ABOUT US

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# DOST-NAST holds Luzon Regional Scientific Meeting

By Laurence M. San Pedro, DOST-STII

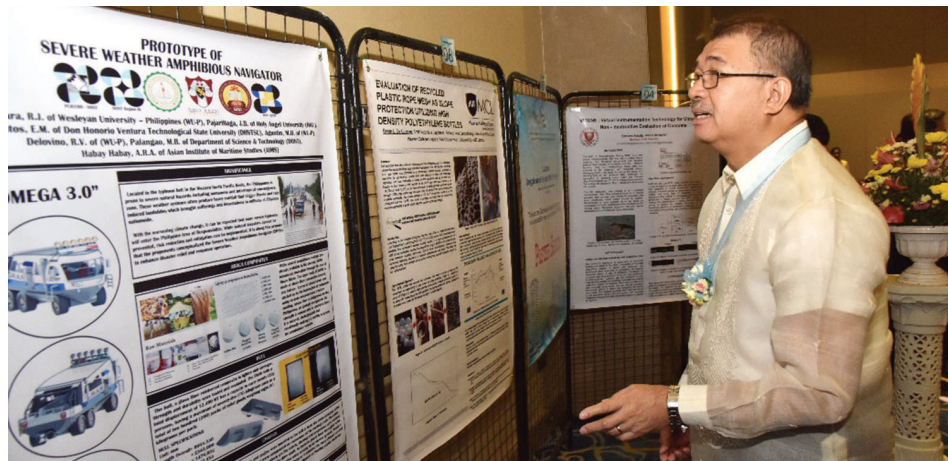
In continuation of its series of scientific meetings for 2018, the Department of Science and Technology-National Academy of Science and Technology (DOST-NAST) held the last leg of its regional scientific meetings (RSM) on 9-10 May 2018 at the Royce Hotel, Clark Freeport Zone, Mabalacat, Pampanga.

The Luzon RSM, which carried the theme “Science and Technology-Enhanced Transformation for Sustainability and Industrialization (2018-2030),” was held in partnership with the DOST Regional Offices I, II, III, IV-A, IV-B, V, NCR, and CAR.

The theme for the Luzon RSM, as suggested by the Biological Sciences Division of DOST-NAST, reflects the country’s “AmBisyon Natin 2040” development plan and the United Nation’s Sustainable Development knowledge platform for 2018-2030, which prioritizes the nation’s sustainability and resiliency goals.

DOST Secretary Fortunato T. de la Peña said during the event that while the country is agriculture-oriented, there is a need to pursue the path to industrialization to maximize the country’s potentials for development.

“Industrialization has been the key in achieving socioeconomic developments in most developed countries. We have to pursue an industrialization plan to maximize development,” said Sec de la Peña.



DOST Secretary Fortunato T. de la Peña takes a look at the displayed scientific posters during the Luzon Regional Scientific Meeting with the theme “Science and Technology-Enhanced Transformation for Sustainability and Industrialization (2018-2030)” on 9-10 May 2018 at the Royce Hotel, Clark Freeport Zone, Mabalacat, Pampanga. (Photo by Gerardo G. Palad, DOST-STII)

The science chief further said that by creating new opportunities and expanding the growth potential, science and technology can significantly contribute to reducing inequality. “In fact, out of seven research institutes of the DOST, six are focused on industrial development,” he said.

The Luzon RSM also discussed the problems and issues that are currently being encountered on the path to attaining the United Nations 2030 Agenda for Sustainable Development.

Other topics discussed in the two-day event include the sustainability and resiliency of the science culture in attaining the country’s development goals; the importance of having an affordable and clean energy which involves the smart electricity grid and the quality of water and wastewater; and building sustainable cities and communities with the presence of information and communications technology ecosystems, smart city programs, and railway system developments. (Information from DOST-NAST)

## inFocus

**DOST regional offices partner with NPC.** In a bid for wider national media coverage of their programs and projects, various regional offices of the Department of Science and Technology (DOST) and the Filipino Inventors Society Producers Cooperative (FISPC) partnered with the National Press Club (NPC). Formalizing this collaboration was an MOU signing among the DOST-National Capital Region (DOST-NCR), DOST-Cordillera Autonomous Region (DOST-CAR), DOST-Regions I, II, and III, FISPC, and NPC held on 23 May 2018 in Quezon City. The partnership also entails the conduct of promotional activities on DOST’s flagship program SETUP (Small Enterprise Technology Upgrading Program) for NPC employees and to provide them with technical assistance for livelihood opportunities. The signatories to the MOU were DOST-NCR Director Jose B. Patalinjug III, DOST-CAR Director Dr. Nancy A. Bantog, DOST-Region I Director Engr. Armando Q. Ganal, DOST-Region II Director Engr. Sancho A. Maborang, DOST-Region III Director Dr. Julius Caesar V. Sicat, NPC President Mr. Rolando B. Gonzalo, and FISPC President Francisco O. Pagayon. DOST Secretary Fortunato T. de la Peña witnessed the signing of the MOU. (Text and Photo by Ivan O. Rosal, DOST-NCR).

