



11 years of bringing S&T good news

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Balik Scientist Act approved in bicam final reading Pres. Duterte expected to sign it into law, Senator Aquino says

By Allan Mauro V. Marfal, DOST-ST//

The Balik Scientist Act that would give more incentives to returning Filipino scientists and engineers is expected to be enacted into law next month. The Act, also known as Senate Bill 1533, was approved in the third and final reading at the Senate and House of Representatives during the Bicameral Conference on 06 March 2018 at the Senate of the Philippines in Pasay City.

Senator Paulo Benigno "Bam" Aquino IV, principal author in the Senate, shared that both Houses are expecting that President Rodrigo Roa Duterte will sign the Act into law within the next two months. His Lower House counterpart is Bohol second district representative Erico Aristotle C. Aumentado.

"Upon transmittal of all the documents to Malacañang which will take a few weeks, then in 30 days if there is no veto message, we expect that he will sign this and it should be a law by April or May. I don't see any reason for the President (Duterte) not to approve this law. We all know that he would like to see all greatest Filipino minds to stay in the country to contribute to economic development," said Senator Aquino IV.

The Balik Scientist Act seeks to institutionalize the Balik Scientist Program of the Department of Science and Technology (DOST) which encouraged some of our scientists

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DOST Secretary Fortunato T. de la Peña (middle) poses with the principal authors of the Balik Scientist Act-- Senator Paulo Benigno "Bam" Aquino IV (left) for the Senate, and Bohol second district representative Erico Aristotle C. Aumentado (right) for the House of Representatives during the Bicameral Meeting. Also in the photo (standing, from left) are Salvador B. Belaro Jr. of 1-ANG EDUKASYON Party List, Senator Maria Lourdes Nancy S. Binay, Arlene B. Arcillas of the first district of Laguna, Edward Vera Perez Maceda of the fourth district of Manila, Divina Grace C. Yu of the first district of Zamboanga del Sur, and John Marvin "Yul Servo" C. Nieto of the third district of Manila. (Text by Allan Mauro V. Marfal and photo by Henry A. de Leon, DOST-STII)

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Gina eyes DOST's CEST program to help alleviate poverty

By Laurence M. San Pedro, DOST-STII

poverty and I need the help of the Department of Science and Technology (DOST)," said Regina Paz "Gina" L. Lopez, famous environmentalist and philanthropist during the National Science and Technology Week celebration in 2015.

She was looking at DOST's program called CEST, or the Community Empowerment through Science and Technology, as the "help" she needs to aid the country in getting out of poverty.

CEST is a program of the DOST which aims to alleviate poverty through S&T interventions in health and nutrition, water and sanitation, basic education and literacy, livelihood and enterprise development, and disaster risk reduction and management.

To date, the CEST program has already benefited many grassroot communities around the country. One example is Barangay Apang in Alilem, Ilocos Sur which was dubbed as the "poorest of the poor" in most surveys. Farmers and fisherfolks are now able to find alternative income by selling fruits and vegetables in nearby markets and stores to be able to buy other goods for their families.

Known for being a pioneer in corporate social responsibility, Lopez has taken her advocacy to the next level. Her foundation called "ILOVE" or Investments in Loving Organizations for Village Economies launched "Quest for LOVE," a nationwide search for loving organizations seeking to transform marginalized communities

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to return and contribute to research that will help address development gaps in the Philippines.

Under this bill, a returning scientist can enjoy various compensations that include: tax and duty exemptions to importation of professional equipment and materials, free medical and accident insurance covering the award period, reimbursement of expenses for baggage related to scientific projects, and even exemption from "renouncing their oath of allegiance to the

Secretary Fortunato T. de la Peña of the Department of Science and Technology (DOST) explains some of the provisions needed for the Balik Scientist Act with Senator Paulo Benigno "Bam" Aquino IV and Senator Maria Lourdes Nancy S. Binay during the Bicameral Meeting held on 06 March 2018 at the Senate of the Philippines in Pasay City. (Text by Allan Mauro V. Marfal and photo by Henry A. de Leon, DOST-STII)

country where they took the oath."

Aside from that, a Balik Scientist can also participate in DOST's Grants-in-Aid research and development projects with an initial lump sum research subsidy of P500,000 for a short-term program; P500,000 to P2 million for a mediumterm program; and P2 million for the long-term program, in accordance to relevant government rules and regulations and the need of the program involved.

The benefits also include special working and non-working visas, a round-trip class airfare from a foreign country to the Philippines, exemption from local travel tax, and DOST-subsidized visa application.

Sen. Aquino also shared that Sec. de la Peña has been supporting this bill for years, since he was an undersecretary of DOST.

"Malaking bagay na mapalakas natin itong Balik-Scientist program kasi may mga area coverages tayo na kulang na kulang ng experts. Kagaya na lang sa space technology and artificial intelligence na ngayon pa lang naguumpisa, mahalaga na mayroon tayong enough human resources upang tumulong sa research and development pagdating sa mga field na ito," said Sec. de la Peña.



Members and partners of the Investments in Loving Organizations for Village Economies (ILOVE) Foundation gamely did the "heart pose" together to embody the spirit of the "Quest for LOVE" which is to search for "loving organizations" working for the transformation of poor communities into social and economic enterprises. (From left to right) Ecosystem Technologies International, Inc. President Robert Y. So, Department of Trade and Industry Assistant Secretary Ameenah A. Fajardo, Department of National Defense Undersecretary Cesar B. Yano, Fidelina A. Corcuera of ILOVE Foundation, Department of Public Works and Highways Secretary Mark A. Villar, Senator Loren B. Legarda, ILOVE Foundation Head Gina L. Lopez, Department of Science and Technology Secretary Fortunato T. de la Peña, Department of Tourism Assistant Secretary Reynaldo L. Ching, Department of Social Welfare and Development Undersecretary Malou Turalde-Jarabe, and Technical Education and Skills Development Authority Director-in-Charge Sonia S. Lipio during the Quest for LOVE launch held on 8 March 2018 at the Palm Grove, The Rockwell Club, Makati City. (Text by Laurence M. San Pedro and photo by Gerardo G. Palad, DOST-STII)

Gina eyes...

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into agro-forestry, fisheries, or eco-tourism

Recently, ILOVE reached out to several government agencies to give a hand. Because of its CEST program, the DOST naturally became one of the ILOVE's partners.

Other partner government agencies include the Department of Trade and Industry, Department of Social Welfare and Development, Department of Tourism, Department of National Defense, Department of Public Works and Highways, Technical Education and Skills Development Authority, the Social Economy Action Research Foundation, Bayan Academy for Social Entrepreneurship and Human Resource Development, and the private sector. The ILOVEgovernment partnership was able to raise P5

Because of its noble intent, ILOVE caught the heart of DOST Secretary Fortunato T. de la Peña.

"I would like to express my admiration to the Quest for LOVE. This is very relevant, timely, and innovative. We have a program that matches ILOVE very well and we call it CEST," said the Secretary during the launch.

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DOST bats for first "smart farm" in PH

By Raissa Jean A. Ancheta, DOST-PCIEERD

Department of Science and Technology- Philippine Council for Industry, Energy, and Emerging Technology Research and Development (DOST-PCIEERD) put up its stakes to fund the country's first "smart farm."

The "smart farm" is a facility for the Smart Plant Production in Controlled Environments (SPICE), a P128M program that will promote urban farming and high-tech plant conservation. It will be housed at the DOST-Advanced Science and Technology Institute's Nursery of Indigenous and Endemic Plants in Quezon City.

Teaming up to develop the SPICE are the UP Diliman Institute of Biology and Electrical and Electronics Engineering Institute, and UP Los Baños Institute of Biology.

This program aims to lead the research and development for the design of a stand-alone urban farm system and establish protocols for micropropagation, cryopreservation, and nursery management of rare, endangered, and economically valuable native plant species.

"The core of this project is not only the development of new technology, but also, on a macro perspective, to ensure that we can protect our country's rich biodiversity," DOST Undersecretary for R&D Dr. Rowena Cristina Guevara said.

Modern farming methods like vertical

farming, micropropagation, cryopreservation, and hydroponics will be practiced to grow native plants in an environment wherein the climate, the lighting, and the irrigation system can be monitored, controlled, and changed real-time through the use of electronics, sensors, and automation.

"My idea of internationalization is exporting our own ideas, that foreign scientists will come to the country to study trees that are endemic here. SPICE is an innovation project," remarked UP Executive Vice President Dr. Teodoro J. Herbosa.

National Scientist and UP Professor Emeritus, Dr. Edgardo D. Gomez shared his experiences in biology and commended the team for initiating the project, saying that "This (SPICE) will be a world-class institute."

Aside from the technical features of the project, the facility is envisioned to include a "living laboratory" where visitors can see the various technologies employed and store where they can buy fresh vegetables grown on-site.







HYDROPONICS



CRYOPRESERVATION

Partners from UP Dilliman and Los Baños with representatives from DOST and DOST-PCIEERD during the groundbreaking ceremony of the Nursery of Indigenous and Endemic Plants at DOST-ASTI in Quezon City. (Photo by DOST-PCIEERD and graphics by Josemaria T. Zarraga, DOST-STII)

Gina eyes...

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Unlike the usual reality TV competitions that showcase talents such as singing and dancing, the Quest for LOVE wants to put the spotlight to loving organizations that are passionate and goal-driven.

"The stand of ILOVE is to bring genuine economic growth through area development. Why do we just give awards to those who sing well? Why don't we give awards to communities that have the guts and creativity to help themselves get out of poverty?" Lopez said.

The competition will feature the journey of the transforming poor communities into social and economic enterprises in a reality TV show that Lopez will produce.

The Quest is open to social enterprises, cooperatives, people's associations, foundations, NGOs, and other socially-oriented organizations. They must have an ongoing intervention program for a specific community and/or have completed at least two successful community development programs in the past.

Sixteen organizations will be pitched in the initial screening and will be trimmed down to the top eight deserving loving organizations that shall receive P100,000 plus direct access to government support.

The Quest for LOVE will run for eight months and will be aired as a segment in Gina Lopez's TV program "G-Diaries". At the end of the period, the top three loving organizations will be awarded based on tangible enterprise and the social and environmental outcomes they achieved. The winners shall receive additional direct assistance from ILOVE and its private and government partners.

For the complete mechanics and details of the competition, visit www.questforlove.ph.

ABOUT US

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> Framelia V. Anonas Editor-In-Chief Jasmin Joyce P. Sevilla Managing Editor James B. Intia Layout Artist Judy Q. Aca-Saclamitao Proofreader Allan Mauro V. Marfal Circulation

Department of Science and Technology-Science and Technology Information Institute Bicutan, Taguig City 1631 Metro Manila **Philippines**

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DOST, UN World Food Programme give S&T digital library to Maguindanao schools

By Allan Mauro V. Marfal, DOST-ST//

Department of Science Technology (DOST), in partnership with United Nations World Food Programme (UNWFP), deployed 15 STARBOOKS units in different public schools and local government units (LGUs) in Maguindanao. Short for Science & Technology Academic and Research-Based Openly Kiosks (STARBOOKS) is a digital science and technology (S&T) library developed by DOST-Science and Technology Information Institute (STII) to equip different public schools with valuable learning resources on

The digital library units were turned over after the signing of Memorandum of Agreement (MOA) between DOST-Autonomous Region for Muslim Mindanao (ARMM) and the 15 recipients on 01 March 2018 at Cotabato Government Center in Cotobato City.

"A digital learning resource material such as STARBOOKS could improve the way our public schools nurture our students in Maguindanao," said ARMM Governor Mujiv Hataman in a statement.

"With tons of information provided by this library in a box, particularly in the fields of Science, Mathematics, and Engineering, our students and teachers in the province will be equipped with additional knowledge on various scientific discoveries and innovative technological products," he added.

STARBOOKS deployment Maguindanao is part of the MOA signed between DOST-STII and UNWFP last August 2017 in which the latter committed to provide 112 STARBOOKSenabled computers to nine provinces in the



A teacher from Kabuntulan National High School in Maguindanao explores the features of STARBOOKS during the turnover ceremony held on 01 March 2018 at the Cotabato Government Center in Maguindano (Text and photo by Allan Mauro V. Marfal, DOST-STII)

country. These provinces include Benguet, Batangas, Laguna, Sorsogon, Misamis Oriental, Davao Oriental, Cagayan, Maguindanao, and

Recipient municipalities in Maquindanao were Kabuntulan Mother, Buldon, South Upi, and Northern Kabuntulan. Meanwhile, the 11 public schools with newly-installed STARBOOKS were Kabuntulan National High School, Gallego Edgcor National High School, Dinganen Buldon National High School, Karim National High School, South Upi National High School, Pilar Integrated Technical Vocational High School, Looy Integrated Technical Vocational High School, Pandan National High School, Lumao National High School, Gayonga National High School, and Datu Alamanza Dilangalen National High School.

Governor Hataman also said that a product like STARBOOKS could help different areas in Maguindanao to produce their own future engineers, scientists, and innovators who will play crucial roles in bringing inclusive development.

Alan C. Taule, chief of DOST-STII's Information Resources and Analysis Division, stressed that in deploying STARBOOKS, remote areas with no internet connection and limited learning materials have always been the top priority of DOST-STII.

"The support given by UNWFP has provided major boost to DOST-STII's goal of bringing more STARBOOKS units in the countryside," said Taule.

Meanwhile, Taule also recognized the contributions of different DOST regional offices such as ARMM to promote STARBOOKS and gain significant interests from LGUs, educational institutions, and partner organizations.

"With all the success received by STARBOOKS in recent years, our regional deployment officers helped us in many ways to increase the number of STARBOOKS beneficiaries nationwide," said Taule.

As of 02 March 2017, STARBOOKS has been deployed to 2,260 sites nationwide.





Department of Science and Technology-Science and Technology Information Institute (DOST-STII) Director Richard P. Burgos, together with the Institute's committee heads, join the recipients of the Most Outstanding and Loyalty awards as part of the 31st anniversary of DOST-STII on 27 March 2018. During the festive celebrations, DOST-STII launched its one-of-a-kind annual performance report that bears the theme "Defying Gravity" and features an augmented reality component. Alongside the performance report, the mobile applications for the Philippine Journal of Science, Science.ph, and DOSTv were also launched. In addition, Dir. Burgos proudly shared the Institute's accomplishments for the past year such as the Gold and Silver Anvil awards that the Science and Technology Academic and Research-Based Openly Operated Kiosks (STARBOOKS) has won, and also the grant of P70 M from the DOST Grants-in-Aid for the "Communicating Science for the People" program - the largest funding that DOST-STII has received so far. (Text by Rosemarie C. Señora and photo by Ceajay N. Valerio, DOST-STII)