

11 years of bringing
S&T good news

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DOST Secretary Fortunato T. de la Peña (middle) and DTI Secretary Ramon M. Lopez (3rd from left) seal their agreement with a handshake after the turnover ceremony of DOST's S&T nook and kiosk to DTI. Both departments agreed to partner in sharing information materials and resources. With DOST and DTI secretaries are DOST Undersecretary Brenda Nazareth-Manzano (2nd from left), DTI Assistant Secretary (Regional Operations Group) Demphna Du-Naga (extreme left), DTI Undersecretary Zenaida Maglaya (3rd from right), DOST-Region II Director Sancho A. Mabborang (2nd from right), and 3M Philippines President and managing director Ariel Lacsamana (extreme right).

DOST and DTI partner in promoting S&T products

By Mark Francis S. España, DOST-STII

In a strategic move to synchronize efforts in promoting and marketing S&T products in the market, the Department of Science and Technology (DOST) and the Department of Trade and Industry (DTI) have partnered to share materials and resources.

In the event called "Innovation Partners: DTI and DOST," both Departments formalized the details of their partnership to promote information on science, technology and innovation, and DOST-assisted products on a nationwide scale. The partnership will also provide an opportunity to promote the respective projects of DOST and DTI.

The ceremony that formalized DOST and DTI's partnership was held on 5 April 2018 at

3M Philippines, Inc., Bonifacio Global City, Taguig City with both DOST Secretary Fortunato T. de la Peña and DTI Secretary Ramon M. Lopez present in the event.

The partnership aims to espouse genuine collaborative partnership among government agencies leading to provision of better services for the public. Moreover, the joint efforts of both agencies will help drive awareness and appreciation in harnessing innovation among key sectors in the country.

The event highlighted equally significant activities such as the ceremonial turnover of DOST's S&T nook to DTI's Negosyo Center. The nook, which will be open to the public, is a stand-alone kiosk that contains promotional

materials on DOST knowledge products and services.

There was also a signing of memorandum of understanding for oneStore.ph, DOST's electronic commerce platform and a web application that caters to micro, small, and medium enterprises (MSMEs). Through oneStore.ph, local and international customers will have a convenient platform to buy unique products of Philippine MSMEs assisted by DOST.

During the event, the DTI-DOST Synergy Meeting, first conducted in June last year, resumed.

Both Departments are expecting to have a stronger partnership for more joint ventures in the future.

Cost effective TB detection possible with new diagnostic model

By Catherine Joy C. Dimailig, DOST-PCHRD

Researchers of a study that developed a computer model to assess the impacts of different diagnostic algorithms for tuberculosis (TB) believe that the new model that they developed will greatly improve detection of TB and multidrug-resistant TB in the Philippines.

In a forum organized by the Philippine Council for Health Research and Development (PCHRD), Dr. Charles Yu of De La Salle Health Sciences Institute (DLSHSI) and Ewan Tomeny from the Liverpool School of Tropical Medicine (LSTM) in UK, presented the initial results and future implications of the project on the cost effectiveness of TB detection in the country.

The study called "TB Filipino Impact Testing (FIT): Impact Assessment of Diagnostic Algorithms and Tools for Multi-Drug Resistant (MDR-TB) and Drug Sensitive Tuberculosis (TB) in the Philippines" was designed to represent patient pathways at specific sites that will be used to compare the impacts and cost effectiveness of different diagnostic algorithms.

Dr. Yu explained that the study is being conducted to support the cost effective roll out of new tools and algorithms for the diagnosis of multidrug resistant tuberculosis and drug sensitive tuberculosis in the Philippines. It was designed to represent patient pathways at specific sites that will be used to compare the impacts and cost effectiveness of different diagnostic algorithms.

Initial results from modelling in Cavite sites show that rolling out GeneXpert as a replacement to microscopy is cost effective where drug sensitive and MDR-TB cases are correctly treated. Moreover, it has been shown that most of the alternative diagnostic algorithms modelled would reduce patient costs significantly.

Tomeny discussed that, in the future, the virtual implementation modelling can provide a better understanding of current and potential future patient pathways through visualization, comparison of options by projecting the patient and health systems evidence over extended timeframes, estimation of patient and health system costs, and assessment of incremental cost effectiveness of scale up.

The next stage of the research will look at data from additional provinces in the Philippines. Data will be available soon for Davao and Bulacan. The LSTM will support the DLSHSI and National TB Program in using the models to evaluate alternative diagnostic algorithms in these provinces and across the Philippines.

The forum, held on 25 April 2018 at the National Institutes of Health, University of the



Ewan Tomeny from the Liverpool School of Tropical Medicine shares his presentation during the forum. (Photo from DOST-PCHRD).

Philippines Manila, served as an opportunity for researchers and medical practitioners to discuss and assess the current TB situation in the Philippines. Most of the participants were interested in using the model and applying it in the detection of other diseases such as dengue or HIV.

TB FIT is one of the six projects of the first cycle of the Newton Agham program, which is part of the collaboration between the Medical Research Council-UK and PCHRD. The program extends assistance to projects that help improve health outcomes through research based solutions and innovations.



ABOUT US

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DOST-NCR helps clean up creek, empower Taguig community

By Geraldine Bulaon-Ducusin, DOST-STII

The Department of Science and Technology-National Capital Region (DOST-NCR) recently collaborated with the local government of Taguig City and other government agencies to help clean up the Conga Creek to achieve a cleaner, safer and healthier metropolitan environment.

The Conga Creek in Taguig spans around 300 meters with 28 billion most probable number (MPN)/100ml reading of coliform and 0 oxygen water analysis. Under the international standards, the acceptable MPN should be less than one up to less than 10 MPN. This means that the pollution in the said creek is way beyond the acceptable limit and all the oxygen has been used up. Under such condition, no fish would ever survive because it has to compete with billions of bacteria.

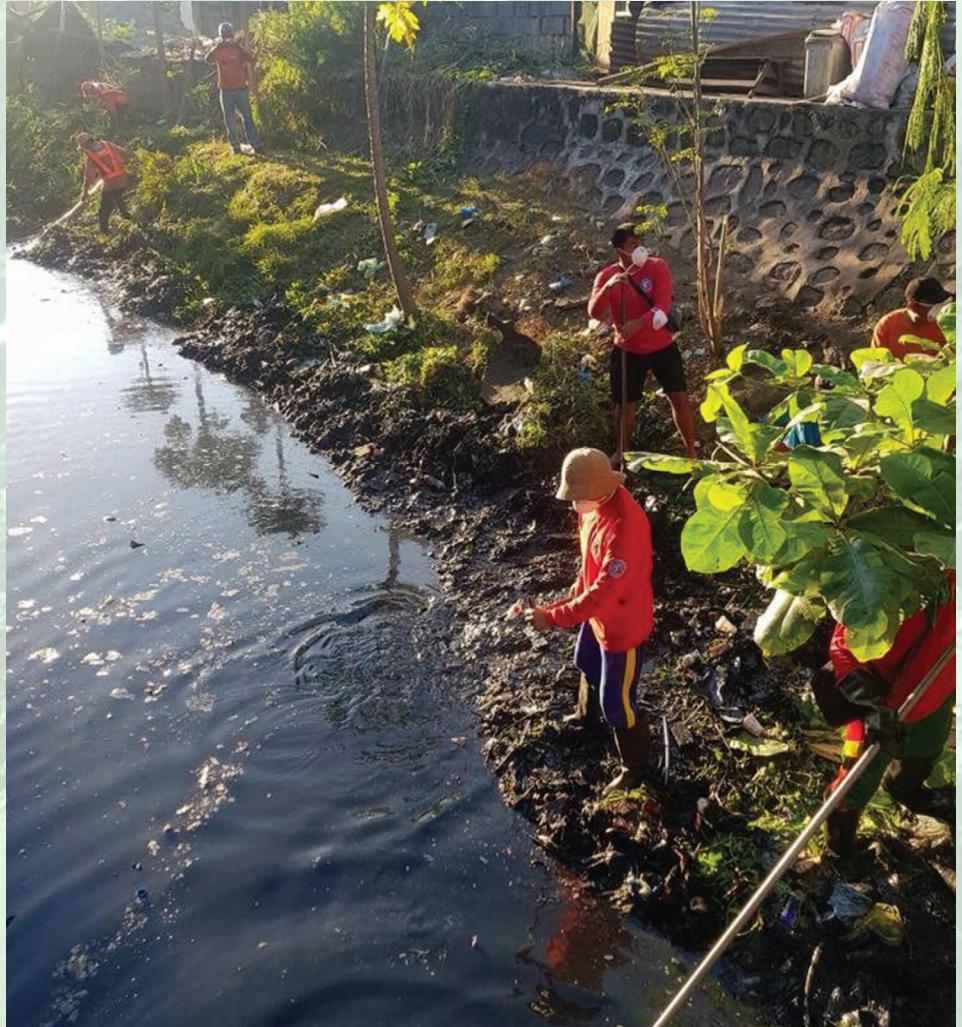
Conga Creek is among the 48 creeks under the Adopt an Estero Program of the Department of Environment and Natural Resources (DENR) and other agencies (private and government).

Collaborating with Taguig City under the said program, the DOST-NCR will not only help in cleaning up the creek but will also help empower the communities through the DOST Community Empowerment thru Science and Technology. The said DOST program helps communities improve their living conditions through science and technology interventions in health and nutrition, water and sanitation, basic education and literacy, livelihood/economic enterprise development, and disaster risk reduction and climate change adaptation.

Partners in the Adopt an Estero Program such as DOST-NCR and the other agencies also committed to support each other in the following areas: information and education campaigns, community mobilization and other activities that would foster harmonious relations. They will also work together in decongesting the pilot site of garbage and introduce interventions which are aligned with the DENR's recommended measures, such as planting of bamboo and other plant species along the river banks and other activities.

The other agency-partners in the Conga Creek cleanup are the Metropolitan Manila Development Authority (MMDA), Department of Public Works and Highways, Department of Interior and Local Government, and the Department of Health.

There are around 273 waterways (estero) in the metro alone, according to the MMDA. It is not uncommon to see polluted waterways in Metro Manila and the level of pollution has been a concern among environmentalists and other individuals and groups.



Representatives from partner agencies clean up Conga Creek. (Photo by DOST-NCR)



Helena Reitberger, Counsellor/Deputy Head of Mission of the Embassy of Sweden in Singapore, with her son Svante, interviews DOST-NCR Regional Director Jose B. Patalinjug III regarding the Adopt an Estero Program. (Photo by DOST-NCR)

K-12 ready STARBOOKS to be deployed in Northern Mindanao

By Julie Anne H. Baculio, DOST-X

The Department of Science and Technology (DOST)-X is all set to launch the K-12 ready STARBOOKS or the Science and Technology Academic and Research-Based Openly Operated Kiosks in the region very soon. DOST-X is set to bring updates with K-12 content to the 104 kiosks of STARBOOKS in Northern Mindanao. All of the STARBOOKS recipients will be receiving the update within the year.

DOST-X STARBOOKS personnel, headed by Dr. Roselyn V. Arellano, together with Arlene S. Inocando and Engr. Ephrem John O. Agorob, strengthened both the monitoring and updating of the digital S&T library. Majority of the kiosks installed in the region are located in the provinces of Bukidnon and Misamis Oriental, with 40 units and 30 units installed, respectively.

Schools in Bukidnon namely Casisang National High School in Malaybalay and Pilar High School in Sumilao; and in Misamis Oriental, namely Gusa Regional Science High School and Kibungsod National High School in Magsaysay, are among the schools in the list of the “library-in-a-box” beneficiaries.

Although DOST-X has reached a significant number of schools with STARBOOKS installed, Regional Director Alfonso P. Alamban, and the regional office’s STARBOOKS staff continue to encourage academic institutions to avail of the digitized library. Believing that science and technology in young minds will create



One of the STARBOOKS recipients navigates the different functions on screen. (Photo by DOST-X)

bigger steps to a more innovative country in the future, DOST-X takes the head-on challenge to bring in science and technology at the fingertips of every Filipino in the region.

STARBOOKS, a stand-alone information source, is being hailed as a helpful tool in bringing science and technology to students in rural and urban areas. Its offline feature enables learners to access digitized S&T materials and science-and-technology-enriched resources.

Another major event that will be conducted for STARBOOKS in 2018 is the upcoming Mindanao Cluster National STARBOOKS Stakeholders Convention. This will be held in November 2018 at General Santos City. The event will showcase the convergence of a network of STARBOOKS all over the country. DOST regional offices will soon be sending out invitation letters to selected participants for the event.

inFocus

R&D Updates. Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña delivered the Opening Remarks and led the launching of the Science for Change Program during the 3rd National Research and Development Conference held on 20 April 2018 at the Philippine International Convention Center, Pasay City. Citing collaboration with partners of the DOST, he underscored the importance of the Harmonized National R&D Agenda and likewise welcomed all the partners and stakeholders, especially the potential users of products and services of R&D. He also presented the recipients of the grants for the Niche Centers in the Regions for R&D Program and the Collaborative Research and Development to Leverage Philippine Economy Program. (Text by Judy Q. Aca-Saclamitao and photo by Henry A. De Leon, DOST-STII)

