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**Local manufacturers back DOST die and mold center**



A surface metal grinding machine was shown to the members of the media at the DOST-MIRDC Die and Mold Solution Center (DMSC) during a recent Agham Na Ramdam, a media briefing on DOST programs updates. The grinding machine is one of the many precision cutting, grinding and stamping tools inside DMSC which aims to help strengthen the tool and die manufacturing and eventually revitalize local manufacturing. **(Photo by Gerardo Palad, S&T Media Service, DOST-STII)**

By Joy L. Lazcano  
S&T Media Service, DOST-STII

**L**ocal manufacturers have expressed support to the Department of Science and Technology's (DOST) Die and Mold Solution Center (DMSC) during a recent media briefing at DOST's Metals Industry Research and Development Center (MIRDC) in Bicutan, Taguig City.

With the establishment of the DMSC, local manufacturing industries are expected to catch up with neighboring ASEAN countries in terms of capability. The Center offers modern infrastructure support services and capabilities that will connect firms involved in processing of raw materials with firms that convert these into the final product.

According to Chito Madroño, general manager of 13PM Enterprise, the industry needs to have such an infrastructure similar to boost the manufacturing industry.

13PM Enterprise has been partnering with the government especially with DOST-MIRDC since 1978. Madroño reveals that his game "Brain Twister" was a product of public-private partnership, with the game chip pieces having been developed by DOST-MIRDC a couple of decades ago. Brain Twister is a tile-based board game which requires a player to form given shapes using four oddly-shaped tiles.

"I went to MIRDC and asked them to fabricate the molds that will be used for the tiles," explains Madroño. "And I am happy because it is cheaper and produced the expected results."

Madroño, who sought MIRDC's assistance for his other board game "Word Factory" reveals that majority of local manufacturers subcontract their manufacturing processes to China because of its cheap overhead costs and faster turnaround.

He adds that the country currently cannot catch up with China in terms of production output but with 100 million Filipinos, local manufacturers can rely on the domestic market to boost local production.

Philip Ang, president of the Philippine Die and Mold Association shares Madroño's sentiment. The local market should support local manufacturers as this would equate to more economic gains, Ang said, and encouraged the media to come up with more positive news to attract more investors into the country.

In previous years, the Philippines only had 170 tool and die shops serving the local manufacturers compared to Thailand's 1,110. In 2011, the country imported about \$50 million of tool and die compared to less than \$9 million of exports for the industry.

# DOST-Supported harvester cleans up river, gives livelihood to folks

By Maria Luisa S. Lumioan  
S&T Media Service, *DOST-STII*



For presentation purposes only, photo shows a similar water hyacinth harvester technology developed by DOST's Metals Industry Research and Development Center being tested in

**A**s the water hyacinth population burgeoned in Buhi, Camarines Sur, Engr. Joel P. Sadol of the Central Bicol State University of Agriculture pondered on how he could turn this threat into an opportunity. Water hyacinths often clog waterways and degrade water quality. These pretty-looking pests actually block sunlight and prevent photosynthesis, thereby lowering the level of oxygen in the water.

First in his agenda was to get rid of the hyacinths, and then perhaps turn them into something useful. So he made a machine that can collect the hyacinths, and then recently improved its features to make the machine more efficient using less fuel.

The improved water hyacinth harvester is set to benefit farmers, fisherfolks, and handicraft makers in his hometown, through the assistance of Department of Science and Technology-Technology Application and Promotion Institute (DOST-TAPI).

Under DOST-TAPI's Technology Based Enterprise Development (TBED) Program, Engr. Sadol received a grant amounting to P247,000.

Aside from managing water hyacinths which are a perennial threat in Lake Buhi, the harvester provides opportunities for livelihood as well. Harvested water hyacinth can be made into baskets, matting, fertilizers, handicraft, and other products, said Engr. Sadol whose earlier model was funded by DOST through the Philippine Council for Industry Energy and Emerging Technology Research and Development.

DOST-TAPI's TBED program encourages the development of new or improved technologies that may have potential for commercialization. Research and development institutes, state universities and colleges, and government offices are qualified to avail of this assistance.

For more information about TBED, you may contact the Provincial Science and Technology Center or DOST Regional Office in your area.

## About us

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# DOST's STARBOOKS boosts Las Piñas HS students' science research

By Angelica A. de Leon  
S&T Media Service, DOST-STII

**S**tudents of University of Perpetual Help System Delta (UPHSD) in Las Piñas City now have a modern, up-to-date, and comprehensive reference tool for their science and technology (S&T) projects and reports with the unveiling of the Department of Science and Technology's (DOST) STARBOOKS unit last February 3, 2015 at the UPHSD high school library.

A flagship project of DOST's Science and Technology Information Institute (STII), STARBOOKS stands for Science and Technology Academic and Research-Based Openly Operated Kiosk, a user-friendly digital library of science and technology (S&T) information which does not require Internet connection. It is the first science digital library in the Philippines.

STARBOOKS contains S&T information in various formats – text, video, and audio – from local and international sources.

Among its contents is Britannica Ultimate Encyclopaedia which features Encyclopaedia Britannica, Britannica World Atlas, Merriam-Webster Dictionary and Thesaurus, e-magazines, fiction and non-fiction books, and royalty-free photos, drawings, and videos.

Also available in STARBOOKS are videos on livelihood for individuals seeking business opportunities, journals, and investigatory materials.

"STARBOOKS is STII's way of bringing (DOST-STII library's) science collection closer to the students," said STARBOOKS focal person Louise Ian de los Reyes of DOST-STII in her presentation during the launch.

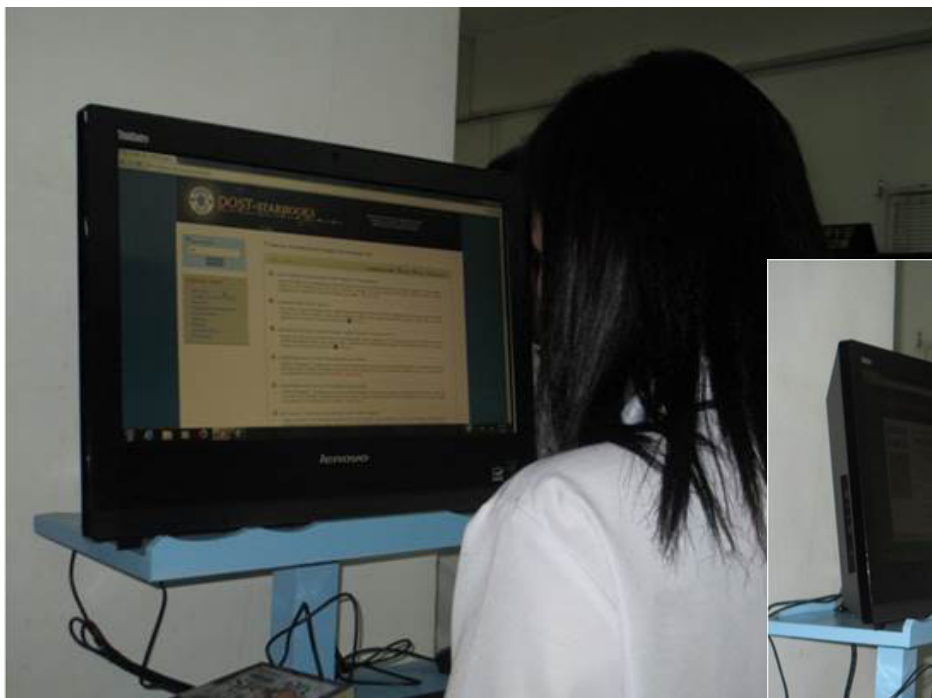
The DOST-STII library collection has around 80,000 titles in print and non-print formats covering a vast range of S&T fields – from chemistry, physics, and math to computer science and information technology.

University Librarian Aniline A. Vidal decided to have STARBOOKS installed after seeing one such unit at a university in Davao. "I found it interesting. I told myself I will avail STARBOOKS to have additional resources for the students and the faculty. The more collection you have, the more it will cater to the needs of the students," she said.

"It is also customizable," de los Reyes added. This means that the contents of UPHSD's own library may be digitized and added to the collection in their STARBOOKS unit.

STARBOOKS is also useful for scientists, technopreneurs, S&T professionals, and science buffs. Aside from academic institutions, also identified as STARBOOKS sites are government offices, NGOs, and LGUs. At present, STARBOOKS kiosks are already available in various sites across the country's 17 regions.

For more information about STARBOOKS, email [dost.starbooks@gmail.com](mailto:dost.starbooks@gmail.com) or [starbooks@stii.dost.gov.ph](mailto:starbooks@stii.dost.gov.ph).



**STARBOOKS MAKES ITS WAY TO UPHSD.** High school students at the University of Perpetual Help System Delta (UPHSD) in Pamplona, Las Piñas City excitedly try their library's newly installed STARBOOKS unit from the Department of Science and Technology - Science and Technology Information Institute (DOST-STII) during the launching last February 3, 2015. STARBOOKS (Science and Technology Academic and Research-Based Openly Operated Kiosk) is a user-friendly stand-alone digital library of science and technology (S&T) materials in text, video, and audio formats. These include Britannica Ultimate Encyclopedia which features, among others, reference materials, e-magazines, fiction and non-fiction books, and royalty-free photos, drawings, and videos. STARBOOKS does not require Internet connection and provides students, scientists, technopreneurs, S&T professionals, and science buffs with a complete and updated research tool. For more information about STARBOOKS, email [dost.starbooks@gmail.com](mailto:dost.starbooks@gmail.com) or [starbooks@stii.dost.gov.ph](mailto:starbooks@stii.dost.gov.ph). (S&T Media Service)

# Weather forecasts not absolute DOST exec says knowing uncertainty of Typhoons will help prepare for disaster better

**D**epartment of Science and Technology Assistant Secretary Raymund E. Liboro, acknowledging that weather forecasts are “not absolute”, advised disaster management agencies to focus more on “communicating uncertainty” in understanding and appreciating the science behind weather forecasts and typhoon warnings issued by DOST-PAGASA.

Speaking at a panel discussion in a seminar hosted by the Office of Civil Defense (OCD) and Japan International Cooperating Agency (JICA) at Discovery Suites Ortigas, Liboro underscored that laymanizing weather updates involved more than their translation into the vernacular.

“The key to communicating typhoon warnings is communicating uncertainty. And the most essential part there is the implicit understanding that forecasts are not absolute and cast in stone. This time, for Typhoon Ruby, DOST-PAGASA presented a variety of scenarios to impress upon the public the many possible ways a typhoon can move, like it has a mind of its own,” he explained.

Assistant Secretary Liboro also discussed the urgency to come up with ingenious and creative approaches in dealing with emergency situations such as rescue and recovery operations. He recounted the experience in Japan after the great earthquake of 2011, wherein road-clearing crews were accompanied by deputized audit personnel to hasten the process of issuing fuel vouchers for their trucks and heavy equipment.

“Nowhere is it more crucial to be able to think out-of-the-box than in disaster risk



DOST Assistant Secretary Raymund E. Liboro at the Final Seminar on DRRM Capacity Enhancement Project organized by the Office of Civil Defense and Japan International Cooperation Agency. Also in picture are (L-R) Director Edgar Allan Tabel of the Department of Interior and Local Government, Assistant Secretary Myrna Cabrera of the Department of Social Welfare and Development, and Director Remedios Edencia of the National Economic Development Authority. (S&T Media Service)

reduction and management. Buhay kasi ang nakataya dito, (Lives are at stake) and this ability quite literally spells the difference between life and death,” he said.

The Final Seminar on Disaster Risk Reduction and Management Capacity Enhancement Project was organized by OCD

and JICA to share to stakeholders the final outputs of the three-year project, designed to boost the conduct of DRRM planning and implementation activities along the four thematic areas of prevention and mitigation, preparedness, response, and recovery/reconstruction. (S&T Media Service)

## InFocus



### DOST ASSISTANCE FOR FILIPINO INVENTORS

Atty. Marion Ivy Decena (middle) of the Department of Science and Technology – Technology Application and Promotion Institute (DOST- TAPI) spearheads the Signing of Memorandum of Agreement and Orientation for the proponents of Invention-based Enterprise Development (IBED) Assistance Program under DOST-TAPI’s Invention Development Division. With Atty Decena are IBED grantees Mardinio P. Azores (left) of Kaibigan Mar Azores Incubator and Engr. Rodrigo P. Duque (right) of Ozone Dynamic Ventures. (S&T Media Service)