

How the Department of Science and Technology is Building a Smarter Philippines

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“Smarter Philippines” is the Department of Science and Technology’s over-arching developmental program to leverage “smart technologies” and innovation for an enhanced quality of life and inclusive socio-economic development for all Filipinos. It has two major components—Smarter Cities, for urban development, and Smarter Countryside, for rural development. Science Secretary Mario G. Montejo has publicly announced the program, and the DOST is planning to launch it sometime in the First Quarter of 2013. Meanwhile, a number of the key programs have already been launched and are operational, while others are in various stages of development.

Smarter Cities builds upon a preexisting program, known as Next Wave Cities, which aims to accelerate development in multiple cities throughout the archipelago of the Philippines by connecting these cities to the domestic and and global economy. The program develops 21st century skills to enable Filipinos to participate in the Global Knowledge Economy; advocates for the building of both conventional and ICT infrastructure; and disseminates best practices on improving the business climate and keeping costs competitive. A Report Card with detailed metrics on talent, infrastructure, business environment and costs has been developed for each of the 45 or so participating cities.

As the Smarter Cities enhancement gets underway, the DOST plan to expand the present Report Cards to measure factors affecting the quality of life such as cultural attractions and environment, and dive deeper into measuring and tracking inclusive socio-economic development. We also plan for extensive capacity building for the ICT Councils of these cities, to enable them to bring to bear the full power of Smart Computing and smart technologies to accelerate the development of their cities.

Smarter Countryside harnesses modern technologies to accelerate rural economic development through sub-programs such as Smart Farming, Precision Agriculture, and Emerging and Indigenous Technologies for a Smarter Countryside.

Aside from the two major components, Smarter Philippines has six sub-components. First is Smarter Government. The flagship Smarter Government program, called iGov Philippines, aims to leverage information and communications technologies to deliver on President Benigno Aquino’s promise of a transparent, efficient, effective and inclusive government service for all Filipinos. Among its features are a government-wide secure e-mail and collaboration system, an electronic payments gateway system for government services, and a National Records Management System.

The second of the six sub-components is Smarter People. Through this program, academe, industry and government are working closely to develop 21st century skills and a modern curriculum, upgrade professional faculty development, especially in science, technology, math, engineering and ICT, and harness modern technologies to transform the learning experience. DOST has a well-developed scholarship system to increase the number of scientists, technologists and engineers with masteral and doctoral degrees.

The third of the six sub-components is Smarter Economy. Through this sub-program, the DOST aims to leverage science and technology for inclusive economic development. The Information and Communications Technology Industry Development Program is well underway, and aims to develop a \$50 Billion ICT Industry by 2016. I-CreativePhil aims to position the Philippines as a Top Three destination for creative process outsourcing, and brand the Philippines as a producer of high quality creative content. Smarter SMEs aims to assist local technopreneurs achieve successful and sustainable businesses of their own. The DOST is putting up Technology Business Incubators throughout the country, to accelerate technopreneurship.

The fourth sub-component of Smarter Philippines is Smart Mobility. This refers to both traditional infrastructure such as roads and bridges, airports and seaports, as well as the infrastructure to participate in the Global Knowledge Economy—Internet, broadband connections, and ICT business parks. Just last December, the DOST inaugurated the maiden voyage of the first wholly-Filipino designed and constructed monorail system at the University of the Philippines, Diliman campus. Being locally made, the price came at one fifth of prevailing costs. The DOST has launched the TV Whitespaces Program, to productively utilize unused frequencies on the TV spectrum to enable broadband penetration of unserved areas, especially poor communities in remote areas. With the help of DOST's advocacy, world-class IT parks are going up all over the Philippines.

The fifth sub-component is Smarter Environment. The DOST is harnessing the power of S&T to save lives through Project Noah, an IT-enabled disaster risk reduction innovation which aims to provide 6 hours warning time to vulnerable communities of impending floods. Our Smarter Grids program and renewable energy initiatives aim to lower the cost of electricity and make electrical power more reliable throughout the country.

The sixth and final sub-component of Smarter Philippines is Smarter Living. This component aims to enhance the quality of life for all Filipinos. Our Smarter Healthcare Program aims to implement a nationwide tele-health and telemedicine program. Teams of doctors linked together through the Internet will be able to diagnose and prescribe treatments for patients in remote areas at a fraction of present costs. The DOST now has a Philippine Health Research Registry, which enables medical practitioners to access health research for free over the Web. We have also made available a Natural Product Research Database for free over the Internet.

A systematic study of recorded history definitively shows that it is technology innovation, more than any other factor, which accounts for great leaps and bounds of progress and well-being. The DOST through its new over-arching program Smarter Philippines is attempting to leverage the awesome powers of smart technologies, combined with the innovative genius of Filipino scientists, researchers, technologists and engineers, to bring prosperity and inclusive development throughout our land.

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