

Why the Philippine Government Should Increase Its Budget for the National University

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The University of the Philippines (UP) was established as the first and only national university of the country in 2008 (RA 9500) for a number of well-founded reasons. UP with its seven constituent universities, offers the most diverse and widest array of established graduate and undergraduate degree programs of any Philippine university today. It employs the highest concentration of full-time PhD faculty members in the basic and applied sciences, mathematics, engineering, social sciences, arts and the humanities. It is the primary generator of new scientific knowledge and the leading producer of newly trained Filipino scientists, researchers, scholars, and artists.

Scientific research generates new knowledge that allows us to understand more accurately the inner workings of Nature. It enables us to devise more effective ways of improving quality of life. New scientific knowledge is the fuel that drives the engine of technological innovation - the most critical driver of sustained growth in a knowledge-based economy. In 2004, David King reported in the journal *Nature* that national prosperity in terms of per capita income is strongly correlated with national scientific productivity as measured by average citation intensity of scientific publications.

The future prospect of the Philippine higher education system with its more than 1,700 universities and colleges is invariably hinged on the enduring capacity of UP (current enrollment: 51,473) to improve itself and succeed as a research, graduate, and public service university in a highly connected and constantly evolving global community. Less than 15% of faculty members in our higher education system have pertinent PhD degrees that qualify them to run graduate programs. An equally worrisome indicator is that a majority of PhD faculty in the basic and applied sciences and mathematics, is retiring in the next 15 years and not enough replacements are in sight. The UNESCO Science Report 2010 has revealed that the researcher population density of the Philippines (2010 population: 94 million) is two orders of magnitude lower than that of Singapore and one order of magnitude less than those of Indonesia, Malaysia and Thailand.

Investing in UP is a stamp of faith in the capability of our country to generate the human capital that is essential for building a better future. The Philippine government needs to demonstrate to the electorate and the world that it is ready and able to bet on the tremendous intellectual potential of Filipinos by providing UP with an ample budget that would enable it to function properly as a national university.

Every other country on our side of the Pacific-Rim from Japan to Australia prides itself with at least one adequately funded national university that nurtures and harnesses the artistic, creative and scientific talent of its people. In 2008, the higher education system of Japan (2010 population: 128 million) consisted of 756 universities (77% of them private) of which eighty-seven are national universities led by the University of Tokyo (chartered in 1877). Taiwan (2010 population: 23 million) supports sixteen national universities including the National Taiwan University (1928).

Between 2006 and 2009, the Philippine government had played catch-up with its neighboring countries by investing more seriously in science and technology. It allocated PhP1.7 Billion to complete the National Science Complex (NSC) and another PhP1.713B to address the infrastructure and equipment requirements of the Engineering Research and Development for Technology (ERDT) Program - a consortium of seven Philippine universities. The College of Science and the College of Engineering of UP Diliman operate the NSC and ERDT, respectively. Together they employ 35% of the faculty and accommodate 41% and 21% of the undergraduate and graduate students, respectively. In the first semester of SY 2011-2012, UP Diliman – the flagship campus of UP, has hired 1,539 full-time faculty members (44% of the UP total) to serve the academic needs of 17,305 undergraduate and 7,090 graduate students. On average, less than 6% of all high school students who take the UP College Admission Test in August of each year qualify for admission into UP Diliman.

Specifically, the Philippine government needs to increase (not decrease) its MOOE budget allocation for UP in 2012 by at least PhP200 Million, to enable UP Diliman to maintain and operate correctly the NSC and the ERDT. A well managed NSC and ERDT are vital to the success of other government agencies. The technical skills and experience of the scientists and researchers in the College of Science and the College of Engineering are indispensable in the successful implementation of high impact programs that are funded by the Department of Science and Technology and the Commission on Higher Education in the areas of scientific research and development as well as advanced manpower training.

The Philippines has only one national university and not several. Our government first and foremost, must demonstrate concretely that it truly recognizes the strategic value of UP to the future of the country and the Filipino nation. Neighboring countries have realized many decades ago that their own national universities are a national treasure. We need to learn from them and follow their lead.

Thank you.

About the author. Dr. Caesar Saloma is a professor of physics at the National Institute of Physics, UP Diliman. He received the *Galileo Galilei* Award from the International Commission for Optics in 2004 and the triennial *ASEAN Outstanding Scientist and Technologist* Award from the ASEAN Committee on Science and Technology in 2008. He is included in the *Ultimate List of 15 Asian Scientists To Watch* by Asian Scientist magazine (15 May 2011). He is a member of the National Academy of Science and Technology, Philippines and a Senior Member of the Optical Society of America.