

PRESIDENT'S REPORT

2007: A Year of Commitment, Expectations, Challenges and Optimism

The year 2007 was packed with action on all fronts of scientific endeavor; all geared up on revitalizing the once anemic science and technology (S&T) program in this country. We advocated for increase in S&T budget from the lowly 0.14% of GDP in 2003 to 0.5% by 2010 and hopefully, achieve the norm among developing countries, of 1% of GDP in 2015. Whether this is indeed realistic is for PAASE to see. We have reason to be optimistic though as this year major investments have been earmarked on S&T human resources development, research and development (R&D) infrastructure as well as technology development and commercialization programs. Our advocacy is working! According to the DOST, a cursory assessment of the 2008 national budget would show that the government sector would allocate about PhP4.45 billion on R&D, of which PhP1.45 billion with the DOST budget. This is just the start of a long journey; we have at our hands also to see many, if not all, of these initiatives succeed. It comes, however, with loads of commitment, expectations, challenges, and optimism from the entire scientific community – and PAASE will always be there!

COMMITMENT

We took off in 2007 where PGMA left her words of commitment at the 14th August 2006 meeting at Malacañang – “to continuously increase the budget for science and technology and education” and implement the recommendations of the science community (led by PAASE), as follows: (i) to create the Presidential Coordinating Council on R&D (PCCRD), (ii) to develop a strong S&T human resource development program, (iii) to complete the National Science Complex and Technology Incubation Park, (iv) to implement commercialization and technology transfer programs, and (v) to propose new legislative measures.

PAASE continues to work with DOST and other scientific organizations to develop new programs to strengthen S&T in this country. We have active PAASE members who are in both the National Academy of Science and Technology (NAST) and the National Research Council of the Philippines (NRCP); two collegial bodies that provide advice on S&T matters to the President and the DOST.

APAMS 2007

On the occasion of the 27th Annual PAASE Meeting and Symposium (APAMS2007) and the 2007 International Conference on Science and Technology held last 15-17 February 2007, PGMA's commitment to S&T was confirmed. She announced her full support, including budget allocation to the abovementioned recommendations, and even issued right there and then Executive Order No. 604 creating the PCCRD. This engaged us all an equal commitment of our time and effort to help the country achieve its S&T goals and aspirations -- a shared commitment indeed between the government and the scientific

community. At the said APAMS, more than 400 participants coming from different academic institutions and the private sector in the country were in attendance. The DOST, the National Academy of Science and Technology (NAST), and the National Research Council of the Philippines (NRCP) supported the major scientific event. Proceedings of the APAMS and S&T Conference have been published and disseminated to individuals and institutions. For more information, please contact *DLSU-CESDR* at (+632) 5360260.

The next APAMS will be held on 22-24 May 2008 at Georgetown University, USA. For more information, please contact *Dr. Liza Virata-Theimer*, PAASE Secretary.

PAASE Board Meetings

In view of the distance, the PAASE Board this year has to conduct all its four (4) quarterly meetings through teleconferencing. Matters related to PAASE are presented, discussed and resolved during these meetings. We relied so much on internet, our emails and googlegroups to communicate and receive feedback from the members. In fact, many great ideas emanated from the on-line discussion which have been debated upon, discussed extensively, and resolved in time. This makes PAASE different indeed! We failed though this year to improve on our PAASE website. However, we would pursue this matter in the next APAMS. Board meetings were presided over by the Chairman of the Board, Dr. Manny Velasquez. Minutes of the meeting are available with Liza. Next year, the leadership shifts back to the US with incoming President Leah Tolosa at the helm.

We are proud to have welcomed this year new members of the Academy. The membership now has reached 226 covering USA, Europe, Australia and the Philippines.

PAASE Philippines

An organization called PAASE Philippines, Inc. was organized and incorporated this year primarily to manage possible funding donations to support PAASE activities in the Philippines. This will also help accelerate PAASE activities in the country. PAASE matters are also discussed locally during its regular quarterly meetings. This year four were held at the UP Marine Science Institute (MSI). The meetings will also be used in the future as venue for lectureships of any PAASE member in town or those Balik Scientists. We intend to open up the lectures to non-PAASE members. Meetings may be hosted also by other institutions. Other initiatives of local PAASE include the establishment of the *Philippine Science Letters* (PSL), contributions to the Philippine *Star Star Science* Thursday Column, and sustained S&T advocacy work of PAASE. The PSL, by the way, is a proposed innovative on-line journal intended to publish scientific articles produced locally. In fact, several commitments have already been received for yearly contributions to PSL. This is still under discussion. Dr. Ed Padlan had committed to act as its Editor. For *Star Science*, close to 60% of the articles are contributed by PAASE members, and has been there since June 2004. The PAASE Philippines is headed by Giselle Concepcion

and Alvin Culaba who were elected President and Vice President, respectively. For more information, please contact *Dr. Miren Santos* of Admissions Office, UP Diliman.

EXPECTATIONS

All eyes are on science and technology, at least, by the science community, primarily because of the major investments placed into human resource development and research & development. All institutions have been mobilized to create opportunities for our local researchers to develop their skills, provide advance education and training, transfer and disseminate knowledge, commercialize technologies as well as establish centers of excellence in science and engineering research. A lot of expectations are sought by stakeholders of science, as the only measure of success is no less than a technological breakthrough that would uplift the quality of life of the Filipino, and the society, in general.

Consultations with the industry and private sector allowed us to identify the top R&D priority areas. These are: (i) alternative energy, (ii) biotechnology, (iii) health products, (iv) Information and Communications Technology (ICT), and (v) environment. These are thematic research areas that every research institution shall be focusing on. Funding from DOST shall be given to research proposals that address any of these concerns. In fact, two major proposals by PAASE members have been approved in the area of health products and biotechnology. For further information on research funding, please contact the Office of *Undersecretary Graciano Yumul* of DOST.

As for the Presidential Coordinating Council on R&D, DOST is still awaiting the appointments of Council membership by PGMA. This body, to be headed by the President herself, is envisioned to determine R&D budgetary allocations for different government agencies, coordinate annual priorities on R&D by government and private sector, monitor R&D performance, and to establish a system of evaluation of R&D performance. PAASE is hopeful that it will get representation in this important body. For more information about the PCCRD, you may reach the Office of the *Undersecretary Fortunato de la Peña* of DOST.

Human Resource Development Program (HRDP)

Efforts towards achieving the critical mass of scientists and engineers in the country received so much attention from the government. The success and experience of the DOST Engineering and Science Education Project or ESEP, had been drawn to formulate another scheme of MS and PhD scholarship programs and benefits. The latter is designed to make the offer more attractive to study in the Philippines, but in some cases, with provision for an overseas research component. The DOST and the Commission on Higher Education (CHED), each received PhP100 million for the said programs. Additional PhP161 million was committed separately under the ERDT to finance graduate engineering scholarships. It is expected that all institutions cooperate and develop partnerships in order to provide the necessary expertise and laboratory facilities

available for graduate research. *Dean Toby Dayrit* of Ateneo School of Science and Engineering can provide more details about this Program.

By the way, the DOST also embarked on a massive accelerated Human Resource Development Program for their personnel. This is envisioned to strengthen the necessary scientific base and complementary requirements of academic institutions in the country. This Program is being managed by the Office of *Director Ester Ogena* of the Science Education Institute (SEI) of DOST.

Amendments to PAASE Constitution

Five (5) sections of Article 4 (Officers) of the PAASE Constitution and By Laws were amended and ratified last October 31, 2007 by the membership. No amendment was carried out on the “Qualifications of Members” as the recommendation of the MemCom to the Board was to maintain the old provision. The revised Constitution is now in effect, and should you need an e-copy, please contact Dr. Ma. Luisa Virata-Theimer, PAASE Secretary.

The Balik Scientist Program (BSP)

The application process of the BSP was simplified and streamlined to attract more Filipino scientists to come back to the Philippines and help in its S&T efforts. From the initial target of ten (10) this year, DOST has exceeded its target with over 25 commitments from PAASE members alone. As of November last month, 18 applications, including non-PAASE members, have been received for short- and long-term expert visits. In fact, early birds -- four (4) PAASE members -- have already arrived to start work! The local PAASE ensures that activities of the visiting scientists are fully disseminated to institutions to maximize the benefit of the Program. For future applicants, PAASE can assist in providing host institutions as well as to facilitate your application with the DOST. You may contact the Office of the *Assistant Secretary Malou Orijola* of DOST, or *Dr. Gisela Padilla-Concepcion* of Marine Science Institute, UP Diliman.

CHALLENGES

The National Science Complex

The completion of the National Science Complex which requires some PhP1.7 billion to complete received the priority funding by the government. It received initially PhP500 million to start the infrastructure development, including the acquisition of new laboratory equipment and facilities within the complex, and is currently underway. It is expected that additional PhP500 million will be released and the final PhP700 million to finish the complex. It is thus a very challenging task for UP to realize the ambitious project which shall serve as the country’s hub for science researchers throughout the country. For details of this Project, please contact *Dean Caesar Saloma* of the College of Science, UP Diliman.

Engineering Research and Development for Technology (ERDT)

PAASE fully supported the implementation of the National Graduate School of Engineering at UP, which has now evolved into what is called the “Engineering Research and Development for Technology” or ERDT. Led by UP Diliman, this is a consortia of the seven (7) universities in the country, including De La Salle University-Manila, Ateneo de Manila University, Mapua Institute of Technology, Central Luzon State University, University of San Carlos, and the Mindanao State University-Iligan Institute of Technology. ERDT will receive a budget of One Billion Pesos per year for three years starting in 2008; 200 Million is earmarked for engineering R&D and 161 Million for MS and PhD scholarships in engineering, and the rest for equipment and infrastructure. A total of Three Billion Pesos have been allocated for ERDT until 2010. PAASE members from UP, DLSU and Ateneo are actively involved in the formulation of the strategic programs and plans of ERDT. For more information, please contact *Dean Rowena Guevara* of the College of Engineering, UP Diliman.

OPTIMISM

We feel upbeat about the developments in the science and technology sector in the country. We have seen many changes (for the better, of course) in policy, programs and directions, particularly in funding for basic and applied research. The DOST Grant-In-Aid (GIA) money has almost doubled from PhP640 million this year to PhP1.45 billion in 2008! This excludes the R&D budget allocated to NRCP, which has also increased significantly. We hope to see more and more funds brought in for R&D spending so we can come close to our target of 1% of GDP by 2015. Based on official estimates, the country’s GDP is increasing at a rate of 6.0% per year reaching 7.5 trillion in 2008. This means that every 0.01% of GDP translates to some 750 million peso rise in national R&D expenditures. Assuming that the private, which includes the business and universities, spends on R&D at the rate the country’s GDP is growing, our R&D spending level could amount to 8.5 billion pesos in 2008. It is therefore forecasted that the level of national R&D expenditures could reach 0.17% of GDP by next year, which is a positive sign -- but still not at the rate at which China and India are racing upwards.

If we continue to pool our energy together, the light that we can now see at the end of the tunnel seems not too far distant ahead.

Executive and Legislative Agenda

PAASE believes that our advocacy could be more effective in the long term if aided by legislative measures. The two most urgent proposals we vigorously push for passage are the “*Technology Transfer Bill*” and the “*Technology Competitiveness Bill*”. Currently, the draft bills are being circulated among the different stakeholders for comments and suggestions. *Senator Edgardo Angara* is our champion on these initiatives.

Essays on Science and Technology

A collection of articles from Philippine Star's STAR SCIENCE Column dating back in June 2004 to July this year comprise the Volume 1 of the book on "Essays on Science and Technology for Securing a Better Philippines" (Mga Piniling Sulatin sa Agham at Teknolohiya Para sa Maunlad na Pilipinas). To be published by the UP Press, and expected to come out sometime in 2008, the book editors -- Gisela Padilla-Concepcion, Eduardo Padlan, and Caesar Saloma -- firmly believe that this book shall not only popularize science in the Philippines but more importantly, improve the science literacy of the general public and consequently, contribute to the development of science and technology culture in the country. Contact *Dr. Ed Padlan* of UPMSI for your comments and suggestions.

APPRECIATION AND THANKS

Let me now express my sincerest thanks and appreciation to the Board and the esteemed members of the Academy for giving me the opportunity to serve as your President for 2007. It was indeed a very challenging, and fruitful year at that!

I gratefully acknowledge the numerous people behind the APAMS 2007 and the various PAASE activities and projects throughout the year. Kudos to Jan-Michael Cayme, Giselle Concepcion, Toby Dayrit, Ernie Pernia, Miren Santos and Caesar Saloma who kept the level of energy at the local front sustained the entire year. Thank you, Liza Virata-Theimer for maintaining an effective communication and dissemination mechanism for all. Special mention to Congressman Luis Villafuerte who stood by us since the beginning -- a Champion indeed for PAASE! We owe to him the many successes of our advocacy programs. To the past Presidents and Members of the Board, your support and cooperation were highly appreciated, and to the local PAASE members, maraming salamat po sa inyong lahat!

We hope to see many more and new faces at Georgetown University.

We started this all, let us finish this mission with a BANG!!! Mabuhay ang PAASE! Mabuhay and Pinoy Scientists and Engineers!

Happy New Year to all and more power!

SGD. ALVIN B. CULABA
31 December 2007
Manila, Philippines