Increasing Corporate R&D to Boost Philippine Innovation, Growth, and Competitiveness

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CREATING RESEARCH INSTITUTIONS

Philippine companies need to increase research and development to boost theirs and the country's innovation, growth, and competitiveness. MBC held a roundtable discussion with Dr. Michael Purugganan, just-retired NYU dean of science to discuss how business and other stakeholders can accelerate this. Here is a summary of his discussion with CEOs, RTD heads, and science deans.[1] The RTD was co-sponsored by USAID-STRIDE.[2]

CHALLENGES

» Lack of basic research in universities or companies in large part because basic research is too expensive for Philippine schools and businesses.

COST TO DEVELOP A DRUG

- 12 years
- $2-B
- 10,000 tests

Alfonso Zulueta
Eli Lilly Int'l President
MBC keynote speaker, May 2019

» Lack of scientists due to low pay, lack of research work and labs. Scientists go abroad, some recruited even before they graduate.
» As a result, few scientists and companies apply for DOST and other research grants in part due to the lack of research scientists.
» Few companies partner with state universities because resulting research and patents have to be bidded out, subject to COA rules.
» Philippine universities are focused on teaching rather than a balance of teaching and generating knowledge. Philippine scientists aren't motivated to patent and commercialize their work.
» Lack of a research culture or ecosystem

"The value of a Basic Research is that it develops the expertise level in a particular area, and when the time comes you have a deep bench to help the country explore the topic further. Basic research need not be divorced from practical application."

Dr. Michael Purugganan

PROPOSED SOLUTIONS

1. **R&D champions in companies and business community.** "Lack of a culture is a non-starter. What's needed is leadership," according to one participant. Unilab Foundation has been reaching out to and meeting other companies in part for them to launch a STEM Leadership Alliance.
2. **Link Philippine universities with global research institutions.** This may help local universities develop expertise and strengthen research culture. The British Embassy's Newton Agham program supports collaborations between Philippine and British universities, as well as brings Philippine scientists to the UK for a two-week program.
3. **Work with provincial universities.** They have scientists but less opportunity and are therefore enthusiastic to collaborate with business. Also, private universities, to avoid the COA rules.
4. **Revise grant-giving rules and procedures.** One change that can be made is to award more grants based on "brilliance" of scientist rather than just areas preferred by the grant-giving agency.
5. **Build a community of young and returning scientists.** This gives them an opportunity to present their research, and gives industry an avenue to share their problems for possible research projects. ■

Summary by
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[1] We invited leaders from DOST, DTI, and NEDA but they were unavailable.
[2] USAID's Science, Technology, Research, and Innovation for Development (STRIDE) project