STEPAN UPDATE

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STEPAN Holds Training Workshop on Case Study Writing

The Philippines hosted the training workshop on 6-7 September 2006. The training workshop was the second step in the project to prepare and compile case studies in innovation-based entrepreneurship, as a contribution to STEPAN's archive of teaching and learning resources for science, technology and innovation policy development.

There were nineteen (19) participants in all, with 17 from the Philippines, 1 from Vietnam, and 1 from Nepal.

As there had been a previous workshop held in November 2005, also in Manila, that established the framework for the case writing project, many participants came prepared with case leads and preliminary data.

The workshop was designed so that the training would cover both content and style aspects of case writing. The first day was devoted to content aspects and the second day to style aspects.

Participants at the workshop engaged in small group discussions on actual case leads.

The workshop started with a very short opening session. Opening Remarks were made by UNESCO and the host institution, the Department of Science and Technology (DOST).

The programme then moved immediately to the main agenda with the first training lecture on the topics of (1) Case study project framework, (2) General concepts of

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Mission to Brunei

Prof. Tim Turpin of the University of Western Sydney and Australian National Focal Point for STEPAN, undertook a mission to Brunei Darussalam on 26-30 November 2006 to present the results and recommendations of the science and technology policy study done in 2005 by a team which he led. The presentation was made before the National Science and Technology Committee (NSTC) of Brunei. Prior to this meeting, the NSTC had not met for several years.

The meeting was chaired by the Minister for Development. There was a general level of support concerning the need for action as well as for specific recommendations.

Suggestions emerging from the discussion focused, in general, on three areas:

(a) establishing national research priorities as a process for guiding the allocation of research funds;

(b) resourcing the R&D Unit under the Ministry of Development; and

(c) the general concept of a centralised laboratory.

Follow-up action on launching a national R&D priority setting exercise is currently being pursued. Overseeing a research priority setting process would serve as an important first task to engage the reconvened NSTC. It would also be a useful training platform for the R&D Unit of the Ministry of Development. ###

Inside this issue:

Events of Interest

Delhi Sustainable Development Summit (DSDS)

22-24 January 2007, New Delhi
http://static.teriin.org/dsds/2007/index.htm

episteme-2: **International conference to review research in Science, Technology and Mathematics Education**

12-15 February 2007, Mumbai
http://www.hbcse.tifr.res.in/episteme

UNESCO Bioethics Forum

26-27 February 2007, Islamabad

Contact: d.macer@unescobkk.org

Eighth Asian Bioethics Conference (ABC8)

and the **Second UNESCO Bangkok Bioethics Roundtable (BBRT2),**

19-23 March 2007, Bangkok, http://www.stc.arts.chula.ac.th/ABC2007/index.html

Contact: Dr. Soraj Hongladarom [hsoraj@chula.ac.th]

The Atlas of Ideas: Mapping the New Geography of Science

17-18 January 2007, London, http://www.demos.co.uk//projects/atlasofideas/overview

Towards a Coherent Innovation Policy for the Philippines

The author, Mr. Bernie Justimbaste, is Director of Planning at the Department of Science and Technology, Philippines.

Promoting innovation in the Philippines, therefore, must be viewed as a long-term process of gradually building on existing strengths while correcting potential weaknesses in a coherent and comprehensive manner.

A Philippine innovation : The Coconut Milk Beverage is an inexpensive beverage that adds nutrition in the form of proteins, energy and minerals to the local diet.

Recent Innovation Policy Initiatives

The concept of National Innovation Systems (NIS) originated from developed countries, particularly the Organization for Economic Cooperation and Development. Its strong policy orientation intuitively appeals to many developing countries as a management strategy to cope with the economic challenges of globalization and rapid technological change. As one of these developing countries, the Philippines has recently applied the NIS concept to its national development plan.

The Medium-Term Philippine Development Plan, covering the period 2004 to 2010, outlines four broad strategies to promote national innovation. First, national policies shall be focused on enhancing the country's innovation system. Second, the competitiveness of the country's knowledge and S&T workers shall be enhanced by improving the educational system and its compatibility with industry requirements. Third, knowledge creation and transfer shall be accelerated by allocating more funds to field extension work, to R&D and to the upgrading of S&T facilities. Lastly, the promotion of technology-based entrepreneurship shall be furthered by providing technological and financial support to new entrepreneurs and small- and medium-scale enterprises (SMEs).

While many of these policy initiatives have been adopted from the experiences of other countries, the key challenge for the Philippines is to achieve coherence of innovation policy across different and complex development concerns. A Philippine innovation policy must balance inherent socio-cultural, political and institutional interests with global trends. Significant transformation will be needed within the institution, from the attitudes of the individual to the entire regulatory framework. Promoting innovation in the Philippines, therefore, must be viewed as a long-term process of gradually building on existing strengths while correcting potential weaknesses in a coherent and comprehensive manner.

Towards a Coherent Innovation Policy Framework

The coherence of the Philippine innovation policy framework will largely be influenced by the following policy choices:

Narrow vs. Broad Scope of Innovation

The notion of innovation emphasized by the developed countries focuses on the diffusion of new products and services into the economy. In the Philippine context, the outcomes of technological innovation are largely determined by a broader set of complementary actions such as organizational development, introduction of new management or marketing techniques, adoption of new supply or logistic arrangements, improved approaches to internal and external communications and the upgrade of technical skills of workers. Therefore, a broader definition of innovation is more relevant to the Philippines.

R&D-based Innovations vs. Technology Diffusion-based Innovations

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Innovation Policy for the Philippines

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For developed nations, innovation policy is focused on effectively linking basic research to the transfer and commercialization of its results. Currently, the Philippines is adopting a similar stance as seen in a technology transfer bill being prepared by the Department of Science and Technology for enactment by Congress. Arguably however, technology diffusion-based innovations (the process of assimilating and making incremental improvements over imported technologies) offer more opportunities for increasing employment, productivity and economic growth than conventional R&D-based innovations. There are two reasons for this view. First, there is a wealth of economically-relevant knowledge and technologies that have already been developed and invented elsewhere that local firms have yet to capitalize on. Second, local firms, more often innovate by outsourcing capital equipment from abroad or R&D services from local institutions. The Philippine innovation policy therefore would have to increasingly focus on providing a conducive climate for helping local firms acquire innovative knowledge and technologies including managerial, organizational and technical know-how from all over the world and to adopt them for productivity and competitiveness.

Scientific vs. Technological Capacity-building

The key challenge for the Philippines is to optimally configure both its scientific and technological capacities to meet its national development priorities. To achieve this, the roles of public R&D institutions (fully funded by government) and higher education institutions (both publicly and privately funded) have to be clarified with appropriate funding policies put in place for effective role performance.

It is the mandate of public R&D institutions to build the capacity of local enterprises to acquire, adopt, adapt and diffuse knowledge and technologies from abroad. However, they are unable to use their income to effectively perform this because they are required by law to surrender these funds to the national government. Reforms are needed to allow public R&D institutions to use their income thereby making them more sustainable and less dependent on public funding.

On the other hand, both public and private higher education institutions perform three functions – R&D (knowledge creation), teaching (development of high level S&T workers) and extension (technology diffusion). Their R&D efforts must be focused on specific areas such as in health and agriculture and directed to meet local conditions. R&D investments, viewed as public goods investments) should be made stable and increasing over the long-term as a matter of government policy. Furthermore, public funding to these institutions must be based on their performance in producing MS and PhD graduates in priority R&D areas and in linking themselves with cutting-edge R&D institutions abroad. Finally, lifelong learning opportunities must be promoted to the workforce by these institutions, encouraged by government incentives.

Conclusion

While this paper does not exhaust the issues related to the establishment of a coherent Philippine innovation policy framework, it hopes to contribute in stimulating greater attention to innovation policies that will make the Philippine economy productive and competitive. ###

IN THE NEXT ISSUE :

Some results of the Australian study on scientist mobility

Outcomes of the Asia Pacific Science and Technology Forum in New Delhi, March 2007

An innovation for Philippine electronics industry: The digital multimeter has a large LCD screen that displays exact electrical measurements in digital or decimal readout and is used for testing and debugging faults on electrical devices.

It is the mandate of public R&D institutions to build the capacity of local enterprises to acquire, adopt, adapt and diffuse knowledge and technologies from abroad.

An innovation for better health : The Enriched Rice Premix an Iron Fortified Rice (IFR) Premix produced using extrusion technology.

United Nations
Educational, Scientific and
Cultural Organization

The Science and Technology Policy Asian Network (STEPAN) is a high-level official network of people and institutions in the Asia Pacific region involved in research and training for national science and technology and innovation policy development and management. The network develops support programmes to assist the development of S&T management information systems, foster the linking of research with social and economic application, and promote associated human resource development. STEPAN operates under the auspices of UNESCO, which continues to provide substantial support for the network..

Visit STEPAN at www.stepan.org

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Training Workshop on Case Study Writing

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Innovation-Based Entrepreneurship, (3) The Case Study Approach, (4) Key Activities in Case Writing (Case origin, Case leads, Case plan, Case research, Writing process, Release) and (3) Cae Template. The lecturer was Dr. Elvira Zamora, Professor of Technology Management and Business Administration at the University of the Philippines.

The first lecture was followed by group work. The participants were divided into six groups and asked to draw up an actual case outline, to be selected from the case study leads that were submitted by the participants. At the end of the first day, the six groups presented their selected case topic and case outline.

The following case studies were proposed:

Moondish Corporation – a successful family-owned company that ventured into the production of Filipino ethnic food for local and foreign markets;

La Herminia Company – a company in Southern Philippines engaged in handloom weaving of specialty textiles using intricate designs and indigenous fibers;

Pascual Laboratories – a Philippine company demonstrating a successful case of market expansion of herbal medicine products;

Solar Electric Manufacturers Association of Nepal – showcases an industry network with government backing for rural electrification;

VaBioTech – An example of a spin-off company from a government research institute;

Country Accents, Inc. – a Philippine wood and rattan furniture company with global market.

The second day of the workshop focused on style. The lecturer was Dr. Paz Diaz of the University of the Philippines College of Mass Communication. As the case studies are to be written in English, the lecture included discussion of concepts of readability, techniques of conveying information and emphasis in an interesting manner, avoiding gender discrimination, and drafting and revising a document in the English language.

The lecture was followed by a writing workshop, wherein the groups were asked to write the introductory chapters of the case studies that they proposed the previous day of the workshop. The drafts were then presented in a plenary session for sharing and mutual learning with the other groups, after which the groups were asked to rewrite and later present the revised drafts.

The participants are now expected to proceed with the preparation of their case studies. Review of the draft case studies will be done in two stages, the first by an expert review panel, followed by a final review by the STEPAN Board. These activities are expected within the next few months. ###

Participants at work on drafting their case outlines.