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IMPLEMENTATION OF THE INTERNATIONAL COVENANT ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Periodic reports submitted by States parties under articles 16 and 17 of the Covenant

Combined second, third and fourth periodic reports of THE PHILIPPINES* ** ***

[14 December 2006]

* The initial report concerning rights covered by articles 6 to 9 of the Covenant (E/1978/8/Add.4), concerning rights covered by articles 10 to 12 of the Covenant (E/1986/3/Add.17), concerning rights covered by articles 13 to 15 of the Covenant (E/1988/5/Add.2) submitted by the Philippines were considered by the Committee on Economic, Social and Cultural Rights on 18 April 1980, on 8 May 1995 and 15 January 1990 respectively. The second periodic report was due on 30 June 1995, the third on 30 June 2000 and the fourth on 30 June 2005 respectively and submitted as the combined initial, second, third and fourth periodic reports on 14 December 2006.

** The information submitted by the Philippines in accordance with the guidelines concerning the initial part of reports of States parties is contained in the core document (HRI/CORE/1/Add.37).

*** In accordance with the information transmitted to States parties regarding the processing of their reports, the present document was not edited before being sent to the United Nations translation services.

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Question No. 2. Measures adopted to realize the right of everyone to enjoy the benefits of scientific progress and its applications

1002. In 1987, in response to increasing demands for science and technology (S&T) intervention in national development, the Government elevated the former science and technology body to a cabinet level. The cabinet body was named Department of Science and Technology (DOST) and accorded broad policy-making and program implementing functions.

Priority programs of the DOST

1003. The DOST is currently implementing six priority programs to develop competence, enhance competitiveness, and address the needs of the different sectors of society.

1004. ***Comprehensive Program to Enhance Technology Enterprises (COMPETE)***. OMPETE aims to spur private R&D initiatives, particularly among small and medium-scale enterprises (SMEs); to enhance public and private sector participation in S&T activities; and to upgrade the facilities and technical competence of government, academic and private sector institutions involved in S&T activities. Accomplishment of this is being done primarily through the establishment of Virtual Centers for Technology Innovation in the areas of microelectronics and information technology.

1005. ***Integrated Program on Cleaner Production Technologies***. The program aims to promote sustainable development and strengthen the competitiveness of the Philippine industries, particularly small and medium enterprises, by providing technical information and assistance in adopting cleaner production technologies that include waste minimization and pollution prevention techniques. Through the adoption of these industrial practices, Philippine industries will become highly competitive in the global market. The Program has four components, *viz*., a) policy study on the promotion of cleaner production technology transfer; b) establishment of a center for cleaner production technology development; c) setting up of a regional network for cleaner production technology transfer; and d) the identification of marketbased and command-and-control instruments for the adoption of cleaner production technologies.

1006. ***Establishment of a Packaging Research and Development (R&D) Center***. The DOST aims to establish a national packaging R&D center that will provide, among others, a common service facility for the use of industry. Through the Center, the Department will offer testing and related services for industry; conduct training programs and information dissemination campaigns; facilitate technology transfer to industry; and develop and maintain regional industry networks on packaging technology and services, particularly for SMEs. The Center is DOST's response to the concern over the low quality and added-value, and lack of competitiveness, of Philippine export products. Through the development of attractive, inexpensive, appropriate and environment-friendly packaging materials, as well as of designs that conform to international standards, the Center aims to make Philippine export products more competitive.

1007. ***Expansion of Regional Metrology Centers***. The DOST is currently developing a pyramidal metrology infrastructure of the country and upgrade the capabilities of public and private calibration laboratories in the regions to match the requirements of the various users. The program aims to provide the framework for promoting metrology awareness and application among all sectors and regions of the country. The Program has four components: a) identification of gaps in the present metrology system; b) the development, through the upgrading and expansion of regional/local calibration laboratories, of a national measurement system; c) the establishment of a metrology

training center; and d) the development and adoption of a laboratory proficiency evaluation program.

1008. ***S&T Intervention Program for the Poor, Vulnerable and Disabled***. The program aims to the provide the poor and the disadvantaged sectors of the civil society access to DOST generated/sourced technologies and science-based approaches to resource management to meet the minimum basic needs and to facilitate technology based-livelihood opportunities through the efficient and effective delivery of S&T services. Through the Program, the marginalized coastal and upland communities, indigenous communities, displaced communities, persons with disabilities and other vulnerable groups will be provided techno-transfer training, technical assistance, higher skill/knowledge acquisition, equipment grant and/or prototyping, and linkages for resource generation, including marketing and financing, integrated with value orientation to provide a wholistic approach to development.

1009. ***S&T for Mindanao***. The program aims to build up the Mindanao region's technological capability in order to boost its long-term attractiveness to investors. It has generated the support and collaboration of various line agencies, and the local governments including some cultural minorities from Mindanao. The Program has two major components: 1) Technology Program for Micro and Small Scale Enterprises; and b) Mindanao S&T Human Resources Development Program. To optimize the use of limited government resources, the Program will focus on four priority sectors, namely: 1) food industry; 2) marine; 3) horticulture; and 4) furniture.

Research and Development

1010. In undertaking and supporting R&D projects/activities, the Department gives priority to those that (a) address the most urgent problems of society; (b) are “use-inspired” or demanddriven; (c) enhance private sector participation; and (d) build the competence and long-term capability of the Philippine S&T community. In keeping with the new social contract, R&D activities that promote intergenerational equity (i.e. benefit future generations) will also be given high priority.

1011. The DOST works in tandem with the Department of Agriculture in implementing a comprehensive R&D program under the Agriculture and Fisheries Modernization Act (AFMA). More specifically, the DOST supports R&D aimed at increasing the productivity of the agricultural sector through the application of modern, efficient and appropriate technologies, thus enhancing their competitiveness in the world market and ensuring food security.

Technology transfer and commercialization

1012. The DOST’s technology transfer and commercialization program aims to hasten the delivery, adoption and commercialization of appropriate technologies to farmers and entrepreneurs. Through the program, support is provided for the accelerated development of technology business incubators and S&T parks in order to, respectively, assist in

spinning off technologies from the laboratories to industries and provide an environment conducive to industry-academe collaboration for R&D and innovation.

S&T services, testing and calibration

1013. In line with its commitment to improve the productivity and competitiveness of the local industry, the Department is upgrading its calibration, testing and S&T services. This is in line with the MTPDP's objectives of improving product standards and quality, encouraging innovation, and protecting the consumers. The program includes the following components: Manufacturing Productivity Extension Program for Export Promotion (MPEX), Consultancy for Agricultural Productivity Enhancement (CAPE), Municipal Science and Technology Advisory Program (MSTAP), and Science and Technology Experts Volunteer Pool Program (STEVPP), and Assistance to Inventors.

1014. MPEX aims to reduce production costs and improve the productivity and profitability of SMEs through the provision of technical assistance and consultancy services. Through the CAPE Program, the Department provides technical assistance to farmers with the end-view of improving farm incomes. Under the STEVPP, experts extend free assistance (e.g., training, seminars, workshops, hands-on-demonstration) to organizations, cooperatives and other interested parties in the countryside.

1015. The Department also provides calibration, analytical and testing services to Filipino firms to ensure the quality, safety and competitiveness of their products and to assist them in obtaining ISO Certification.

Disaster preparedness and hazard mitigation

1016. The Department provides timely information, monitoring and prediction services on weather, floods, earthquakes and related natural phenomena. It will also conduct studies such as hazard identification and mapping and vulnerability and risk assessment of potentially active volcanoes, faults and *lahars*.

1017. The DOST is currently supporting a project that utilizes satellite technology to forecast weather conditions. Efforts are geared toward accurate monitoring and prediction of the location, behavior and characteristics of a weather phenomenon for warning and public safety purposes. The project, which is being implemented by the Philippine Atmospheric, Geophysical and Astronomical Services Administration, aims to establish the use of satellite data in monitoring Philippine weather systems and conducting continuous weather observations over vast mountain and ocean surfaces and other remote areas. Part of the project’s goal is to use satellite technology to predict rainfall and tropical storm intensity that could help in the early warnings of flash floods, strong winds and destructive waves.

S&T human resources development

1018. Pursuant to RA 7687, the DOST provides scholarships to bright young Filipino students, especially those from underrepresented areas. The S&T Human Resources Development Program is the Department's response to the MTPDP's call on the government to “complement its competition (and other) policies by programs aimed at encouraging investment in education and S&T in order to raise Philippine productivity to international benchmarks”. It will also trains more science and mathematics teachers under the Project RISE (Rescue Initiatives in Science Education).

1019. The DOST also operates the Philippine Science High School System (PSHSS) which is a special public high school. The PSHHS offers scholarships to Filipino students who are exceptionally gifted in the sciences and mathematics, “helping the country reach a critical mass of professionals in science and technology.” Graduates of the PSHS are bound by law to major in the pure & applied sciences, mathematics, or engineering upon entering college.

1020. Reference may be made to TVET programs being offered by TESDA as discussed in pars. 148 to 156.

Question No. 3. Difficulties encountered in promoting the right of everyone to take part in scientific progress

1021. The key challenges in S&T and in the mobilization of knowledge for greater productivity and economic growth include the following.

1022. ***Need to make S&T policies coherent with national development goals***. New conditions call for new S&T policies. The key policy challenge is to boost productivity, economic growth and job creation through increased knowledge-intensive economic activities while maintaining social cohesion. Shaping up the *Philippine National Innovation System* will require S&T policies that are more focused, integrated to and coherent with other socioeconomic policies. To achieve this, a clear and better understanding of the flows of knowledge and technology among people, enterprises and institutions has to be attained. Mismatches within the system both among institutions and government policies that serve as barriers to innovation have to be identified.

1023. ***Weak knowledge base***. The sociocultural, political and economic environment sets the stage for the formulation of appropriate economic, education, S&T, labor, trade and industry policies that collectively affect the rate with which the country’s knowledge base is formed. This, however, is also conditioned by the interaction and collaboration between the academe and S&T community as producers of knowledge, and the industry as users of knowledge. The outcomes of their relationships influence the capacity of the economy to produce products and services for changing market needs.

1024. The following factors indicate the weakness of the country’s knowledge base:

- Lack of critical mass of R&D. The country lacks a critical mass of R&D workers as it has only 6,803 scientists and engineers engaged in R&D in 2002,

a significant decrease from 39.3 per cent form 1996 level. The decline occurred among government, public higher education and private non-profit institutions. Brain drain contributed to the country's declining number of S&T practitioners. Since knowledge and technologies are mostly embodied in human resources, this points to the urgency of the need to accelerate the development of R&D human resources in the country;

- Underinvestment in R&D. The country's expenditures in R&D amounted to PhP 4.5 million in 2002, only 0.11 per cent of the GDP and far too less than the standard 1 per cent of GDP recommended by the United Nations Educational, Scientific and Cultural Organization for developing counties. While the private sector (private business, private nonprofit and private higher education institutions) already contributes the bigger portion of the R&D investments (64 per cent of the PhP 4.5 billion total R&D expenditures in 2002), there is a need to promote greater R&D investments from both public and private sector;

- Low Number of Scientific Publications and Patents. The low number of R&D personnel in the country would naturally result in lower scientific outputs. To provide a glimpse of the poor state of S&T in the country vis-à-vis other countries, a comparison of scientific articles published by origin of author in 1999 placed the Philippines at 29th place among the 30 countries included in the Institute for Management Development survey. The Philippines had 146 published scientific articles.

1025. The average number of patents granted to residents of the Philippines from 1998 to 2000 stood at six, placing the country at 28th ranking out of 30 countries. The low number of patents granted is attributed to the lack of government's capital support for patenting as well as the lack of government and public support in the promotion of inventions.

1026. ***Need to improve the competitiveness of the country's knowledge and S&T workers***. The Philippines was ranked 3rd out of the 49 nations in producing knowledge jobs in 2001, up from 8th in 2000, according to the META Group's Global Technology Index (GTI). The GTI is the successor of the Global New E-Economy Index, a cyber atlas that represents an important measure of the economic dynamism and strength, as well as the technological capabilities and potential of each country. However, this is still lower than the country's 1st place ranking in the knowledge jobs category in 1999, which included ranking criteria on senior management, availability of IT skills, and qualified engineers.

1027. The decline of the Philippines from 35th to 39th in the transformation of the country's digital economy in 2001 was attributed mainly to the decline of the number of computers per capita, weak deployment of cellular access and small population of internet users. Meanwhile, the significant drop, from 38th to 45th in technological innovation capacity category was due to the decrease in the number of patents issued.

1028***. Poor mechanism for knowledge retrieval/exchange/dissemination.*** Access to knowledge and technology vital to the development of rural and remote areas in the country is still inadequate and non-existent in many regions of the country.

1029***. Need to leverage knowledge for greater productivity and global competitiveness***. Knowledge needs to be identified and appropriately packaged to target those who could make the most effective use of knowledge productivity-enhancing technologies. There is the need to intensify content and create knowledge by organizing knowledge networks to document and package best practices with the help of mass media, business, various church groups, academic institutions, professional organizations, LGUs, nd civil society for the use of farmers, fisherfolks, ordinary office ad factory workers.

1030. ***Lack of mechanism/programs to promote and encourage entrepreneurship***. To enable micro, small and medium enterprises to a formal, viable, growing businesses, there is a need to start-up incubation centers that would provide technology, in-house credit, legal and marketing assistance to locators; promotion of microfinance for entrepreneurs, streamlined processes for loan application; provision of one-stop shops for marketing support; and provision of training to develop/enhance entrepreneurial skills.