UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD), twentieth session
Geneva, 8-12 May 2017

High-level roundtable on "Eradicating poverty in all its forms and dimensions through promoting sustainable development, expanding opportunities and addressing related challenges"

Statement submitted by

Philippines

Monday, 8 May 2017

Ministerial Roundtable

Philippine Statement
High-level Roundtable on Eradicating Poverty in all its Forms and Dimensions through Promoting Sustainable Development, Expanding Opportunities and Addressing Related Challenges
8 May 2017, 11:00am

(1) Esteemed delegates, ladies, and gentlemen, good morning.

(2) One of the world's largest archipelagic nations with over 7,100 islands, rich natural resources including diverse flora and fauna, the Philippines is undoubtedly a must-visit country. Sadly, despite all these, the Philippines is confronted with high poverty incidence.

(3) In 2015, one in every five Filipino was considered poor. The poverty threshold was at US$200 for basic and non-food needs for a family of five.

(4) But this does not mean that there is no more hope for us. We are driven. We are exerting, and will continue in exerting efforts to eradicate poverty.

(5) Under the newly approved Philippine Development Plan (PDP 2017-2022), the government has laid down the necessary reforms to build the foundation towards a prosperous, predominantly middle class society and a comfortable life for the Filipinos. In the next six years, our government will focus on putting in place social protection mechanisms to build up the socio-economic resilience of individuals and families.

(6) A major issue which is directly related to poverty that is of great priority to our nation and to most nations is **food security**. Although the Philippines has vast agricultural land, it is not yet able to maximize the benefits from the same due to deficiencies in natural resources management, production and post-production technologies, technical capacities among farmers and fisher folks, and in the capacity of firms to do large-scale operations. In addition, significant losses brought about by natural disasters is a big problem.

(7) In response to this, the challenge to harness Science and Technology for the development of the food sector is taken seriously by the Department of Science and Technology (DOST). One of the planning councils of DOST, the Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD) spearheads the formulation of industry strategic S&T plans for major agricultural, forestry, and aquatic commodities, which are the primary sources of livelihood of most Filipinos.

(8) A net importing country, the Philippines is pursuing food security strategies. Government invests in irrigation, farm to market roads, production and post-harvest facilities, farm price support, and research and development.

(9) Technology plays a key role in the development of nations. Technology can be a force multiplier. Armed with the right kind of technology, countries will be able to produce more food, transport goods more easily, develop better infrastructure,

monitor and assess the data so that the right kind of government policies are implemented. More importantly, technology used the right way promotes sustainable development.

(10) It was in this light that the DOST formulated its Harmonized National R&D Agenda (HNRDA) 2017-2022. The HNRDA is organized into five sectors:

1. National Integrated Basic Research Agenda
2. Agriculture, Aquatic, and Natural Resources
3. Health
4. Industry, Energy, and Emerging Technology
5. Disaster Risk Reduction and Climate Change Adaptation

(11) The **National Integrated Basic Research Agenda** prioritizes on fundamental researches focused on the following issue-based programs:

- **Water security** – watershed studies; water quality, accessibility, and availability;
- **Food and nutrition security** – food safety and biodiversity studies;
- **Health sufficiency** – fundamental studies on potential sources of natural products, basic veterinary studies, and social dimensions on health;
- **Clean energy** – alternative energy; and
- **Sustainable communities** – vulnerable ecosystems, data analytics on natural phenomena, environmental and anthropogenic activities.

(12) Research priorities for **agriculture, aquatic, and natural resources** include:

12.A
- **For crops** – germplasm evaluation, conservation, utilization, and management; varietal improvement and selection production of good quality seeds and planting materials;

12-B
- **For livestock** – breed development and genetic improvement; reproductive biotechniques; vaccines, biologics, and diagnostics development;

12-C
- **Fisheries and aquaculture** – applied genomics; culture systems; new cultivable species for culture;

12-D
- **Forestry** – development and sustainable management practices; development of high-yielding varieties or priority timber; production protocols for the propagation of quality timber and non-timber forest planting materials;

12-E
- **Natural resources and environment** – biodiversity; watershed management and utilization; soil management and rehabilitation.

(13) The **health** sector will prioritize research on drug discovery and development, functional foods, and diagnostics, among others.

(14) For the **industry, energy, and emerging technology** sector, the research agenda includes countryside development, competitive industry, renewable energy, and energy storage solutions.

15 In the area of **disaster risk reduction and climate change adaptation**, research will focus on the development of state-of-the-art observation and monitoring

systems for weather, climate, geologic, and oceanographic processes; hazards, vulnerability and risk assessment; and development and application of instruments, tools, systems, and protocols to mitigate climate change.

16 Scientific and technological advances in biotechnology, materials science, genomics, information and communications technology including artificial intelligence and big data, electronics, nanotechnology, nuclear science, and the like will be employed in generating needed knowledge, technologies and innovative applications to address the pressing national problems such as food security. In this regard, capacity building programs are being implemented to gain competence in these areas.

17 Moreover, outputs from research and development activities are shared to the public through different media. DOST conducts technology transfer days whereby mature technologies ready for commercialization and adoption are showcased to the public. Trainings and consultancy services are also provided.

18 Science and technology interventions are special initiatives that can effectively respond to certain community challenges. While they cannot be applicable to the entire broad spectrum of community development challenges, there are, in the DOST's assessment, five entry points or development challenges where S&T interventions can make a difference in the lives of people in the poorest of the poor communities, to wit: (1) basic education and literacy; (2) livelihood/economic enterprise development; (3) health and nutrition; (4) water and sanitation; and (5) disaster risk reduction and climate change adaptation. This is our Community Empowerment through Science and Technology (CEST) program. CEST has contributed to the decrease in the number of malnourished children in identified poorest of the poor communities.

19 Majority of the poor Filipinos are found in rural areas where the business sector is dominated by Micro, Small, and Medium Enterprises (MSMES), which contribute to around **65%** of the **total jobs** generated in the country. For this reason, DOST sustained the implementation of its Small Enterprise Technology Upgrading Program (**SETUP**), which provides assistance to MSMEs engaged in food processing; agriculture, marine, aquaculture, forestry, and livestock, metals and engineering, health and wellness, information and communication technology, and other priority sectors. Through **SETUP**, firms are provided with S&T interventions in the form of provision of innovative and cost-effective facility/equipment, human resource development, and technical consultancy services, among others, to address the gaps that most of them are challenged with. They are able to apply innovations to their firms thus, enabling them to move up the technology scale and become more competitive. As a result, improvement in firms' productivity as well as product quality are observed. It turn, employment opportunities are generated thereby contributing to the increase in the country's overall manufacturing growth.

20 An assessment of the S&T human resource situation of the Philippines revealed that there are only 270 researchers for every million Filipinos, which falls short of the UNESCO norm of 380 per million population and the 1,020 per million population average across developing economies of East Asia and the Pacific. To address this, we have strengthened our S&T scholarship programs. Currently 19,000

scholars in Science Technology Engineering and Mathematics (STEM) are being supported by DOST per year. Specialized trainings and incentives are also provided to accelerate the development of S&T human resources who will be tapped to contribute to nation-building. Both local and overseas Filipino scientists are tapped to share their expertise to the public, especially those in the countryside.

These and all other programs of the Department are aligned with the Philippine Development Plan (PDP) for 2017-2022, specifically Chapter 14 thereof which calls for "vigorously advancing science, technology, and innovation". Said chapter details the country's strategies aimed at increasing the country's potential growth through innovation, which can build the foundation for a globally competitive knowledge economy.

We have laid down our vision, goals, targets, and strategies. We are putting on programs in place. The challenge for us now is to make sure that our people will get the maximum benefit from them – we have to make sure that government support is given, where they are needed.

Surveys among Filipinos have shown that while the country's economy has been improving, the economic growth did not translate into poverty reduction – poverty reduction remained slow. Poor Filipinos complain about not feeling the effect of the reported improvement in the country's economy. Inequality has remained high and this inequality manifests even among the country's regions. Thus, it is very important that we must not employ a "one-size-fits-all" approach in addressing the poverty issue. Just like what we are doing in our Community Empowerment thru Science and Technology (CEST) Program, S&T interventions are provided based on the needs and extent of the problem in a given community.

The issue on poverty and food security is multidimensional. Hence, multidimensional solutions must be applied to address the same. Collaboration is a must among stakeholders, both in the private and public sectors, especially for those in the academe and local government units. International partnerships are also very important.

As public servants, we will continue our efforts towards the achievement of our development goals. We will double our efforts to eradicate poverty through sustainable development. And we will employ Science and Technology to facilitate this process.

"Eradicating Poverty in all its forms and dimensions through promoting sustainable development"

SECRETARY FORTUNATO T. DE LA PEÑA
Department of Science & Technology
08 May 2017

One of the world's largest archipelagic nations with over 7,100 islands.....

one of the mega biodiverse countries in the world and is very rich in natural resources

A MUST-VISIT COUNTRY!!!!!

The Philippines is still confronted with high poverty incidence

Poverty Incidence and Poverty Threshold of the Philippines in 2015

POVERTY INCIDENCE

The proportion of families/ individuals with per capita income less than the per capita ***Poverty Threshold*** to the total number of families/individuals.

Poverty Threshold

is the minimum income required for a family/ individual to meet the basic food and non-food requirements, also known as the ***POVERTY LINE***.

1 IN 5 Filipinos was poor in 2015.

Poverty Threshold

In 2015, a family of 5 needed at least **PhP 9,064** **on average monthly** to meet both basic food and non-food needs.

Source: Philippine Statistics Authority (PSA), https://psa.gov.ph/sites/default/files/2015_povstat_FINAL.pdf,

Vision 2040

"A PROSPEROUS, PREDOMINANTLY MIDDLE CLASS SOCIETY AND A COMFORTABLE LIFE FOR THE FILIPINOS."

FOOD SECURITY issues in the Philippines

Deficiencies in:

- natural resources management
- production and post-production technologies
- technical capacities among farmers and fisher folks
- capacity of firms to do large-scale operations

significant losses brought about by natural disasters

DOST's response to Food Security issues

Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD) spearheads the formulation of industry strategic S&T plans for major agricultural, forestry, and aquatic commodities, which are the primary sources of livelihood of most Filipinos.

Food Security Strategies

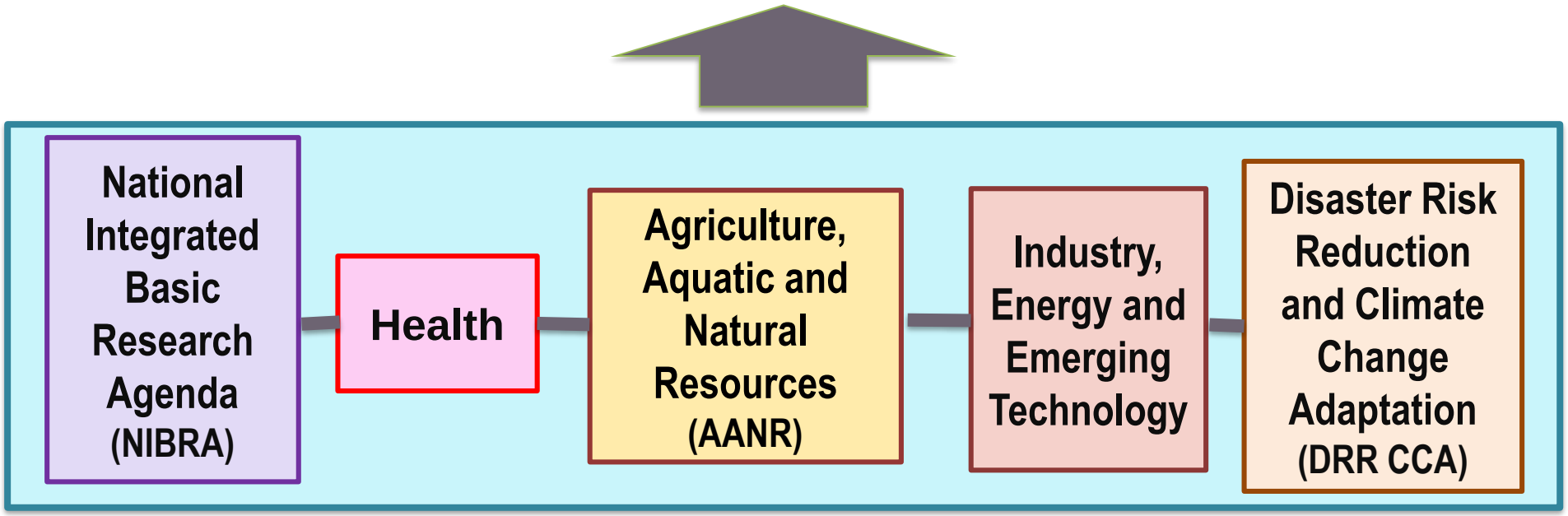
Government invests in:

- Irrigation
- Farm to market roads
- Production and post-harvest facilities
- Farm price support
- Research and Development

Technology plays a key role in the development of nations.

Technology used the right way promotes sustainable development.

Harmonized National R&D Agenda (HNRDA) 2017-2022



National Integrated Basic Research Agenda

1. Water Security
2. Food and Nutrition Security
3. Health Sufficiency
4. Clean Energy
5. Sustainable Communities

Agriculture, Aquatic and Natural Resources Research Agenda

1. Crops

- Germplasm evaluation, conservation, utilization and management
- Varietal improvement and selection
- Production of good quality seeds and planting materials

Agriculture, Aquatic and Natural Resources Research Agenda

2. Livestock and Poultry

- Breed development and genetic improvement
- Reproductive biotechniques
- Vaccines
- Biologics
- Diagnostics development

Agriculture, Aquatic and Natural Resources Research Agenda

3. Fisheries and Aquaculture

- Applied genomics
- Culture systems
- New cultivable species

Agriculture, Aquatic and Natural Resources Research Agenda

4. Forestry

- Development and sustainable management practices
- Development of high-yielding varieties
- Production of protocols for the propagation of quality timber and non-timber forest planting materials

Source: http://philippinenativeforesttrees.blogspot.com

Agriculture, Aquatic and Natural Resources Research Agenda

5. Natural Resources and Environment

- Biodiversity
- Watershed management and utilization
- Soil management and Rehabilitation

Health Research Agenda

1. Drug discovery and development
2. Functional foods
3. Diagnostics

Industry, Energy and Emerging Technology Research Agenda

1. Countryside development
2. Competitive industry
3. Renewable energy
4. Energy storage solutions

Disaster Risk Reduction and Climate Change Adaptation Research Agenda

1. Development of observation and monitoring systems
2. Hazards vulnerability and risk assessment
3. Development and application of instruments, tools, systems, and protocols to mitigate climate change

Our S&T Entry Points:

Community
Empowerment thru
Science and
Technology

SETUP

SETUP
S & T innovations for SMEs
SMALL ENTERPRISE TECHNOLOGY UPGRADING PROGRAM

Small Enterprise Technology Upgrading Program

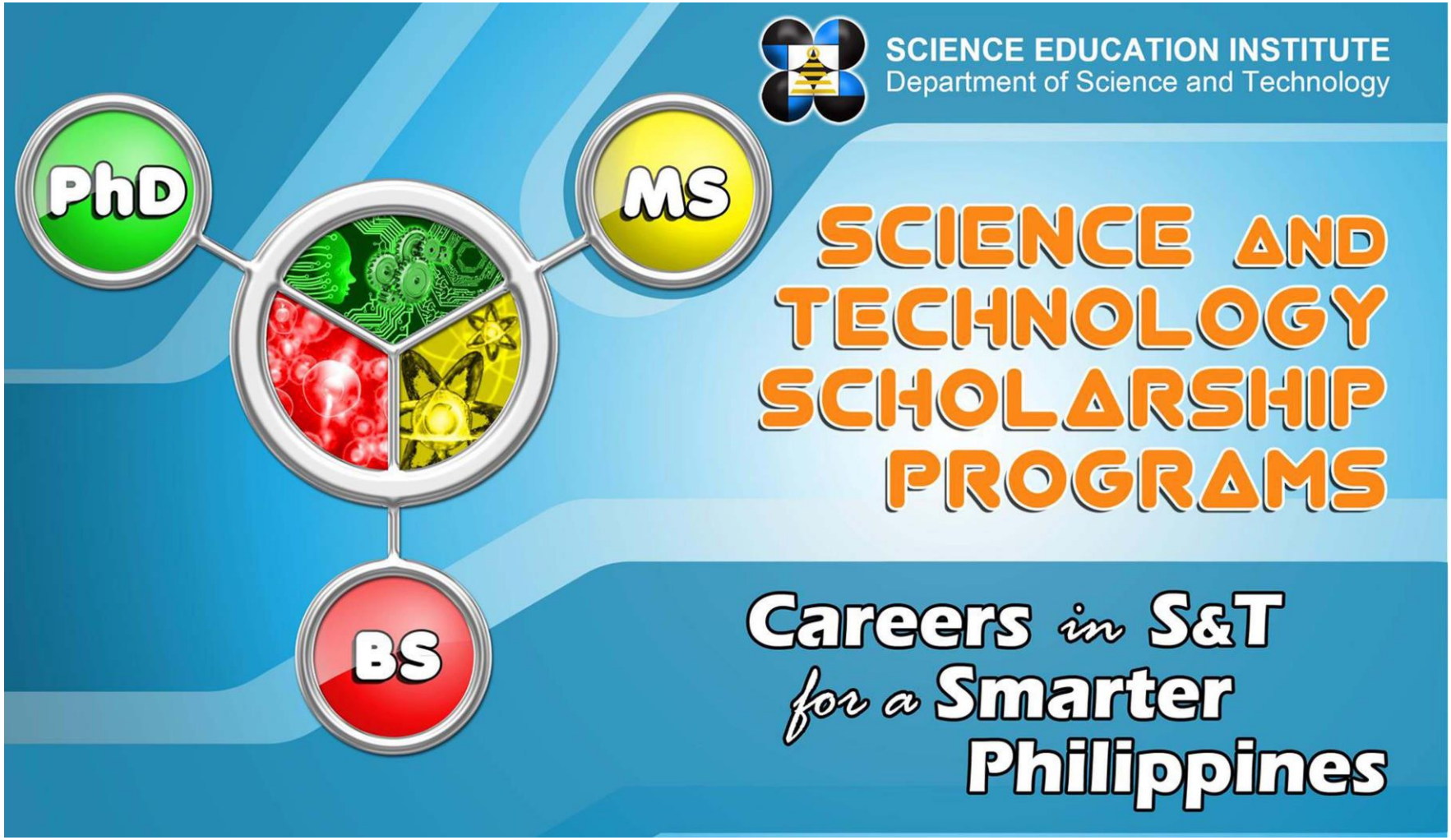
"Nationwide strategy to boost MSME productivity & competitiveness thru technological innovations"

one expert
oneexpert.gov.ph
Bringing you S&T solutions anywhere you are in the Philippines

ONE STORE
bringing quality products to your doorsteps.

OneLab
One Laboratory. Worldwide

Republic of the Philippines



Philippine Development Plan 2017-2022

Chapter 14

"VIGOROUSLY ADVANCING SCIENCE, TECHNOLOGY, AND INNOVATION."


Private Sectors
Public Sector
Academe
Collaborative approach to eradicating poverty
International Partners
Local Government

Thank YOU