Department of Science and Technology
Programs and Services

TOMAS B. BRIÑAS, CESO III

Regional Director

DOST MANDATE

Executive Order No. 128 mandates the DOST to provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results therefrom are geared and utilized in areas of maximum economic and social benefits for the people.
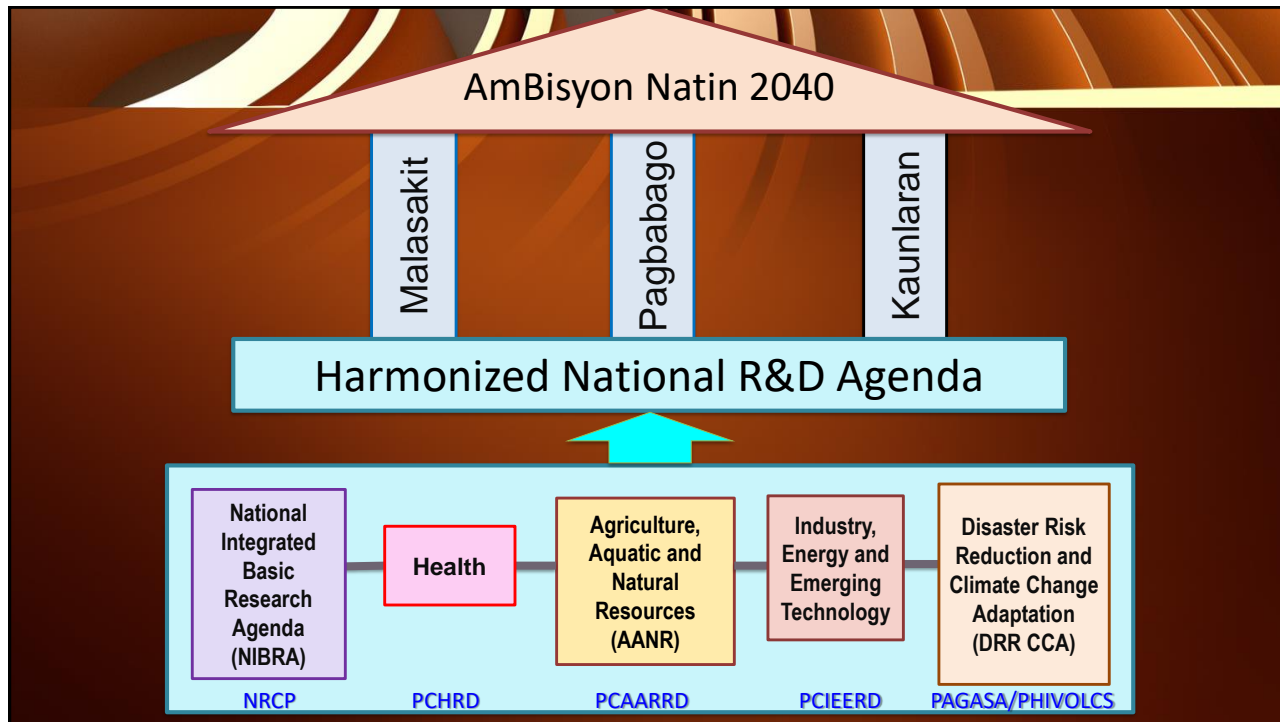
DOST SECRETARY FORTUNATO T. DE LA PEÑA

"My top priorities will be on R&D to address pressing concerns on health, agriculture and the process industries"

http://newsbytes.ph/2016/06/08/with-new-chief-dost-prepares-return-to-conservative-rd-roots/

Science For The People

1 R&D to Address Pressing Problems

2 R&D for Productivity

3 R&D to Tap, Manage and Store Renewable Energy Resources

4 R&D to Apply New Technologies Across Sectors

5 Disaster Risk Reduction and Climate Change Adaptation

6 Maximize Utilization of R&D Results Through Technology Transfer and/or Commercialization

7 Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness

8 Assistance to the Production Sector

9 Upgrading of Facilities and Improvement of S&T Services

10 Human Resource Development for Science & Technology

11 Capacitate and Utilize Institutions in the Regions
– SUCs who do R&D and Develop Human Resources in S&T

12 Collaboration with industry, academe and international institutions

DOST's response to the 10-Point Socio-Economic Agenda of PRRD

AmBisyon Natin 2040

Malasakit Pagbabago Kaunlaran

Harmonized National R&D Agenda

National Integrated Basic Research Agenda (NIBRA)	Health	Agriculture, Aquatic and Natural Resources (AANR)	Industry, Energy and Emerging Technology	Disaster Risk Reduction and Climate Change Adaptation (DRR CCA)
NRCP	PCHRD	PCAARRD	PCIEERD	PAGASA/PHIVOLCS

Harmonized National R&D Agenda (2017-2022)

National Integrated Basic Research Agenda (NIBRA)
- **WATER SECURITY**
  - Watershed studies, water quality, accessibility and availability
- **FOOD AND NUTRITION SECURITY**
  - Food safety, biodiversity studies
- **HEALTHFUL LIFESTYLE**
  - Fundamental studies on natural products development, animal health, social dimensions on health
- **CLEAN ENERGY**
  - Alternative energy
- **SUSTAINABLE COMMUNITIES**
  - Vulnerable ecosystems, data collection on natural phenomena, environmental and anthropogenic activities
- **RE-ENGINEERING THE PHILIPPINES TOWARDS INCLUSIVE NATION-BUILDING**
  - Documentation of indigenous knowledge, data collection on social phenomena, education, national security and sovereignty,, arts, history and culture

Health
- **Drug Discovery and Development**
- **Diagnostics**
- **Genomics/Molecular Technology**
- **Functional Foods**
- **Hospital Equipment and Biomedical Devices**
- **Information and Communication Technology for Health**
- **Nutrition and Food Safety**
- **Disaster Risk Reduction - Health**
- **Climate Change Adaptation - Health**

Agriculture, Aquatic and Natural Resources Sector (AANR)
AGRICULTURE
Crops
- Gemplasm research; Varietal improvement and selection; Good quality planting materials (QPMs); Cultural management and crop production systems; Postharvest processing and product development
Livestock
- Animal improvement; Improved reproduction, feeding and nutrition; Conservation and improvement of native animals; Vaccine, biologics and diagnostics; Detection of chemical residues and antimicrobial resistance; Decision support systems; Product development and processing

FISHERIES AND AQUACULTURE
- Applied genomics; Culture systems; Culture of new cultivable species; Fish health, disease diagnostics and management; Nutrition, feeds and feeding systems; Postharvest handling, processing and product development; Automation of feeding, water and culture management and post production; Fishkill warning and mitigation systems and environmental management; Management of fisheries

FORESTRY
- Development and sustainable management of tree plantations; HYV development of priority timber species; Production protocols for the production of QPM; Sustainable cultural management practices, harvesting and postharvest techniques and marketing strategies

NATURAL RESOURCES AND ENVIRONMENT
- Biodiversity; Watershed management and utilization; Soil management and rehabilitation; Agricultural and forest waste-based product development; Climate change strategies and decision support tools; Resource assessment and monitoring; Habitat management; Marine environmental management; Innovative systems for unique landscapes and ecosystems

TECHNOLOGY TRANSFER
- Upscaling of technology transfer and commercialization; New and innovative extension modalities; Technology business incubators
SOCIO-ECONOMICS AND POLICY RESEARCH
CAPACITY BUILDING

Industry, Energy and Emerging Technology
- **Food and Nutrition Security**
- **Countryside Development**
- **Competitive Industries**
- **Delivery of Social Services**
- **Intelligent Transportation Solutions**
- **Renewable Energy and Energy Storage Solutions**
- **Human Security**

Disaster Risk Reduction and Climate Change Adaptation (DRR CCA)
- **Observation and Monitoring Networks**
- **Technology Development and Application for Monitoring**
- **Modelling and Simulation for Improvement of Monitoring and Forecasting**
- **Hazards, Vulnerability and Risk Assessment**
- **Warning and Risk Communication**
- **Technology Development and Application for Climate Change Mitigation and Adaptation**
- **Technology Development and Application for Disaster Risk Management**

Science for Change Program

S4CP

endeavors to significantly accelerate Science, Technology and Innovation (STI) in the country through massive **increase in investment** on S&T Human Resource Development and R&D through the program

A. Program Expansion in 10 areas
B. New Programs in 5 areas
C. S&T Human Resource Development
D. Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness.

Science for Change Program (S4CP)

A. Program Expansion (10)

1. Health Self Sufficiency
2. Renewable Energy
3. Nuclear Science for Energy, Health and Agriculture
4. Climate and Environmental Sciences
5. Food and Nutrition
6. Agricultural and Aquatic Productivity
7. Biotechnology for Industry, Agriculture, Health and Environment
8. Technology Business Incubation
9. Foreign Scholarships for STI
10. Promotion of Culture of Science

B. New Programs (5)

1. Human Security R&D
2. Strengthening of R&D and S&T Services in the Regions through infrastructure (R&D Centers)
3. Space Technology and ICT Development
4. S&T for Creative Industries, Tourism Industry and Service Industry
5. Artificial Intelligence: From HRD to R&D Industry

C. S&T Human Development

SEI Grand Plan

D. Accelerated R&D Program for Capacity Building of R&D Institutions and Industrial Competitiveness (4)

1. Niche Centers in the Regions for R&D (**NICER**)
2. R&D Leadership Program (**RDLead**)
3. Collaborative R&D to Leverage Philippine Economy (**CRADLE**) for RDIs and Industry
4. Business Innovation through S&T (**BIST**) for Industry

DOST in the Region

The Regional Offices - DOST's prime-mover for countryside development

- Promote and accelerate technology adoption

- Stimulate innovation

- Reduce disaster risks and improve resiliency

STI Programs in the Region

SETUP

Small Enterprise Technology Upgrading Program

What is SETUP?

Strategy to
Enhance productivity and competitiveness of MSMEs through
Technological Innovations and
Upgrading of products and processes towards
Progress and growth in the countryside

HOW?   Infusion of appropriate technology
Training, technical assistance and consultancy services
Functional packages and label
Attainment of product standards and testing services
Assistance for technology acquisition

food processing	furniture, gifts, décor & handicrafts	marine and aquatic resources
horticulture	forestry and livestock	metals and engineering
health and wellness products	ICT	Other regional industry priorities

….SETUP Priority Sectors

SET**U**P
S&T Innovations for MSMEs

Program Framework

- **Add value to local products and processes through S&T interventions**

- **Enhance competitiveness of MSMEs through better products and processes**

- **Contribute to the creation of a robust local economy powered by highly competitive MSMEs**

- **Create employment, generate revenues (including dollar earnings), help alleviate poverty and social unrest**

Package of S&T Intervention

- Technology Needs Assessment
- Technology Upgrading and Acquisition
- Technical Consultancy Services
- MSMEs
- Testing and Calibrations Services
- Technology Training
- Packaging and Labeling

Standards and Testing Services
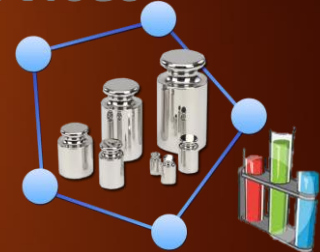
....The Regional Standards and Testing Laboratories (RSTL) provides clients with chemical, microbiological testing and analysis services.

....The Regional Metrology Laboratory (RML) provides clients with mass, volume and thermometry testing and calibration services.

S&T Scholarship

.... A nationwide program that provides scholarship to talented and deserving students to pursue priority courses in science, mathematics and engineering.

S&T Promotion

....a regional strategy to ensure promotion of various scientific and technological programs, projects and services in the dissemination of relevant information. It also covers information networking, sharing and showcasing of latest R&D breakthroughs and innovations.

National Program Initiatives For Sustained Economic Growth

- **Food Innovation and Commercialization Center**

- **Community Empowerment through Science and Technology (CEST)**

- **Complementary Food Production**

- **Sustainable Dengue Vector Management Program (SDVMP)**

- **Deployment of Early Warning Systems (DEWS) Project**

National Program Initiatives For Sustained Economic Growth

- **DOST-Science and Technology Academic Research-Based Openly Operated Kiosk Station (STARBOOKS)**

- **Integrated Gold-Copper Mineral Processing Pilot Plant**

- **Fabrication Laboratory (FabLab)**

- **Technology Business Incubator**

National Program Initiatives For Sustained Economic Growth

- **OneLab (One-Stop Laboratory Services for Global Competitiveness)**

- **OneExpert (network of experts in S&T)**

- **OneStore (e-business portal of SETUP products)**

- **RxBox (Telehealth device for RHUs)**

Thank you...