

# Philippine STI Programs and Policy Interventions towards SDGs

**ROWENA CRISTINA L. GUEVARA, Ph.D.**

Undersecretary for Research Development



DEPARTMENT OF SCIENCE AND TECHNOLOGY  
PHILIPPINES

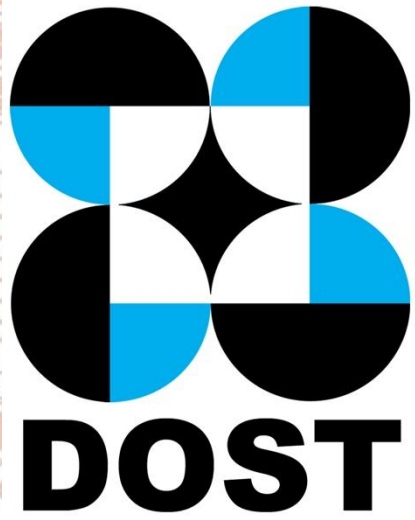


Philippine  
Development Plan  
2017-2022

**AMBISYON** NATIN  
**2040**

*The Life We Want*

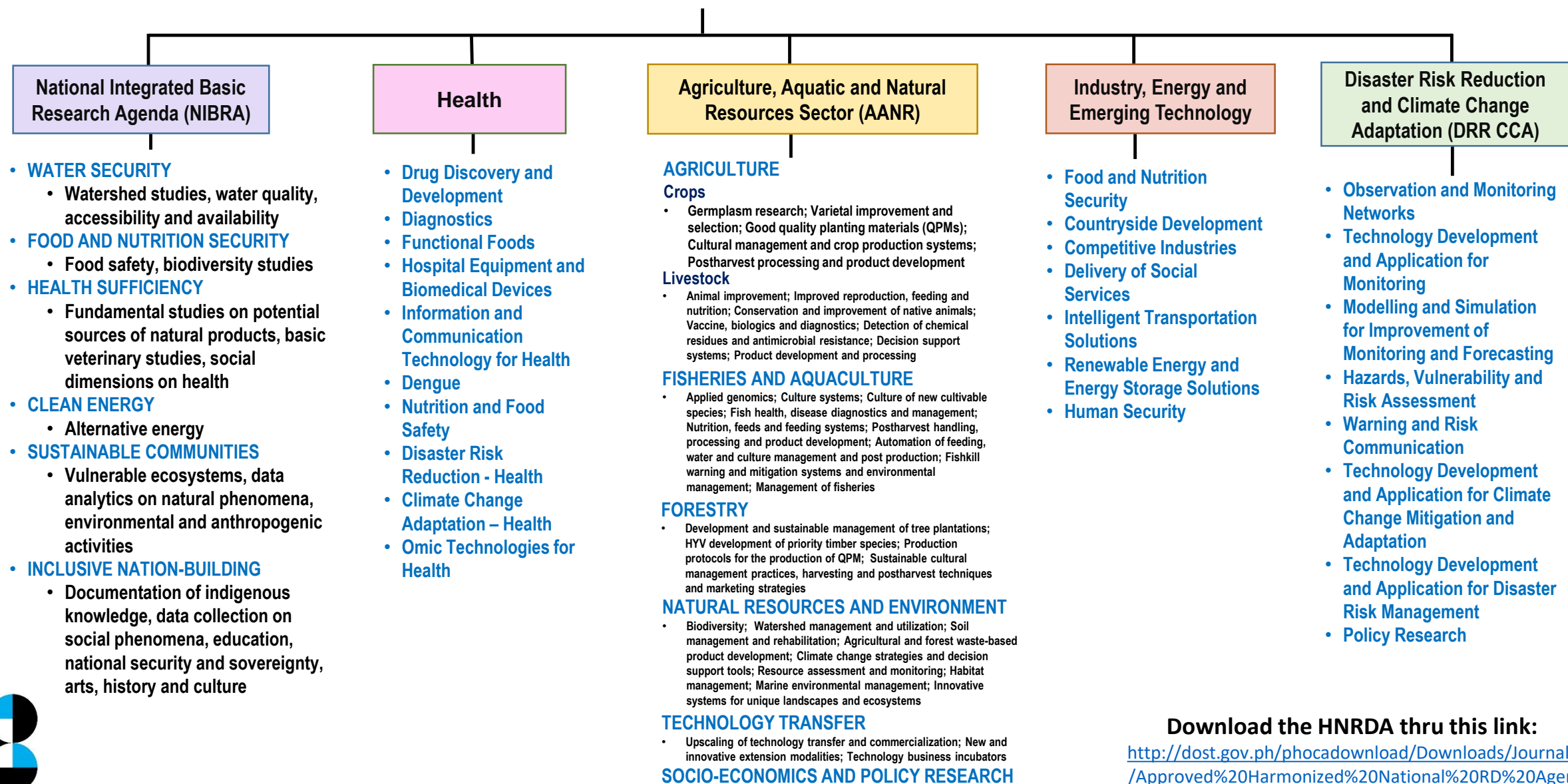




# SCIENCE FOR THE PEOPLE:

*“To ensure that science, technology and innovation work for the people towards more inclusive socio-economic development for the country”*

# Harmonized National R&D Agenda (2017–2022)

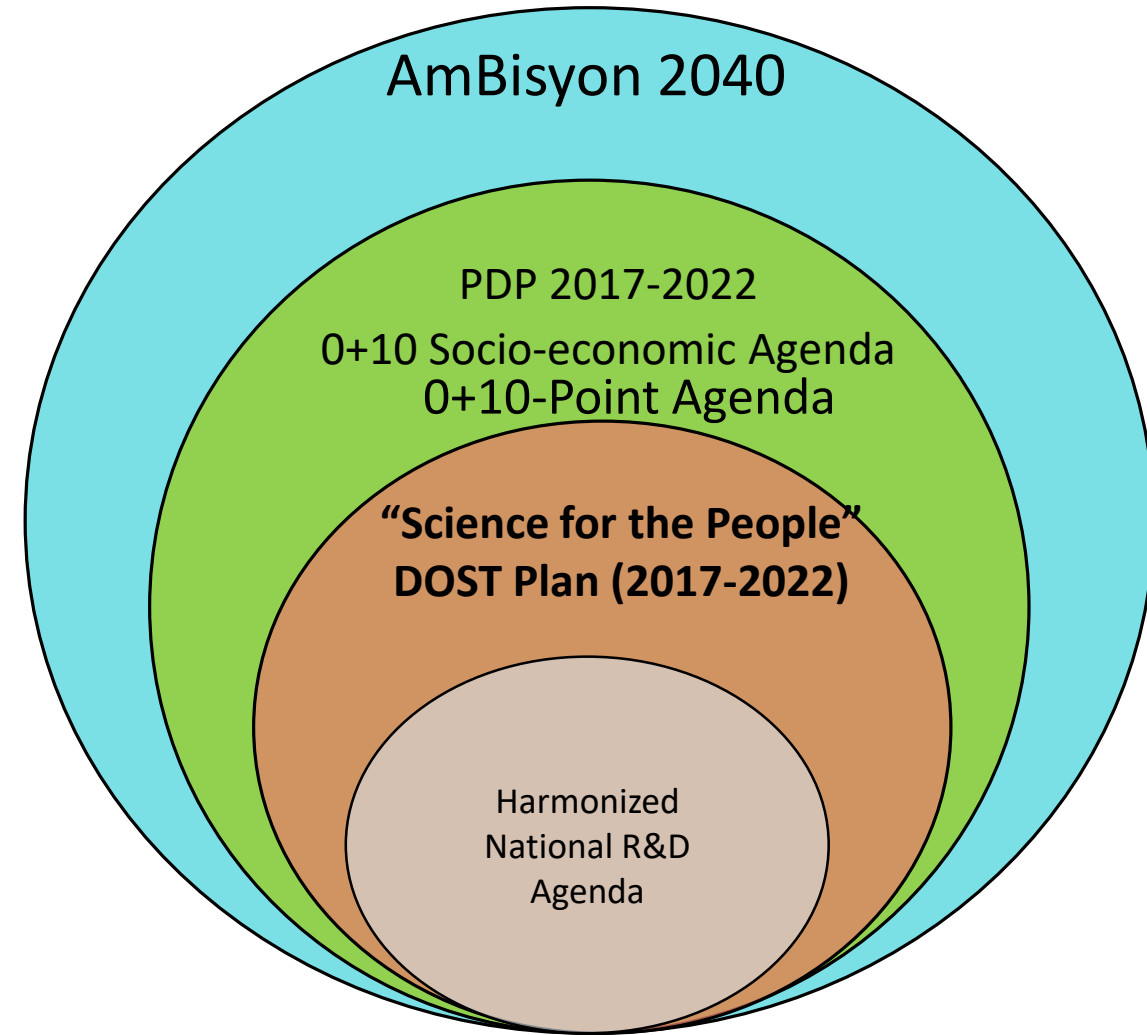


Download the HNRDA thru this link:

<http://dost.gov.ph/phocadownload/Downloads/Journals/Approved%20Harmonized%20National%20RD%20Agenda%20202017-2022.pdf>



# Alignment of the DOST Harmonized National R&D Agenda (HNRDA) to the National Plans and Priorities



# Innovation Drivers in the Investment Priority Plan 2017-2019

- Research and development activities
- Clinical trials (including drug trials)
- Centers of Excellence (e.g., academic and medical facilities)
- Innovation centers
- Business incubation hubs
- Fablabs/co-working spaces
- Shared Service Facility for MSMEs
- **Commercialization of new and emerging technologies and products of DOST or government-funded R&D**

# National Priority Plan (NPP)

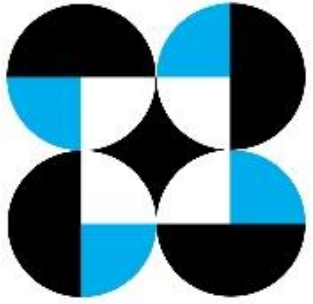


REPUBLIC OF THE PHILIPPINES

NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY

An annual list of the government's priority programs, projects and activities in the areas of education, health, youth and sports development, human settlements, science and culture, and economic development. Any project/program/activity included in the **NPP** entitles its individual or corporate donors to full **deduction** of said donation from **the donor's taxable income** for the year when the donations were made.

- **Science and Technology Innovation Center for Green Composites**
- **Supply, Delivery, Installation, testing, Supervision, Training and Commissioning of S-Band Dual Polarization, Doppler Weather Radar at Barangay Basacdacu, Alburqueque, Bohol**
- **PSHS System Donation Plan**
- **DOSTv: The Filipino Weather Channel**
- **Science and Technology Research Based Openly Operated Kiosk Stations (STARBOOKS)**
- **Malnutrition Reduction Program: 1) Technology Transfer and Commercialization of Complementary Blends and Snack Foods; 2) Monitoring and Process Evaluation of the DOST Package for the Improvement of Nutrition of Young Children (PINOY)**



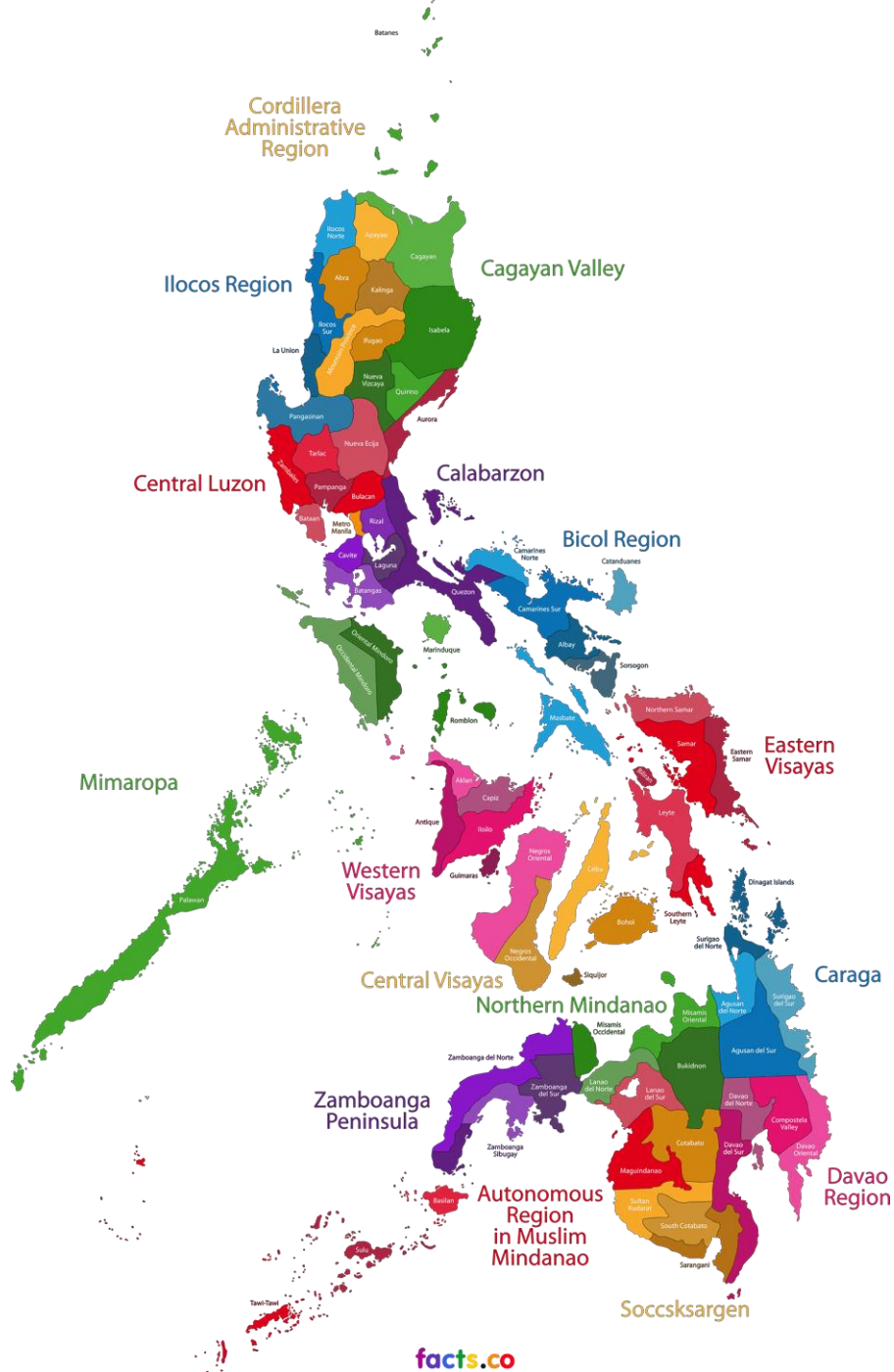
# Community Empowerment through S&T (CEST) Program

**CEST deploys a package of S&T interventions which aims to build progressive and empowered communities.**

For the “disadvantaged sectors” in the country, it will provide capacity building, livelihood and enterprise options and science learning. These sectors or CEST communities will have all the 5 components of CEST, with at least 2 components in each community covered.







**CEST** started in CY 2012  
with **72 communities**  
targeted to be transformed  
by CY 2016.

As of Dec 2017,  
**553 communities**  
have already been assisted.

# CEST Nationwide Accomplishments Summary (CY 2012 – 2017)

<b>WATER AND SANITATION</b>	No. of CWF units provided	5,963
<b>BASIC EDUCATION LITERACY</b>	No. of training/review classes conducted	92
	No. of STARBOOKS units deployed	294
	No. of scholarships granted	319
	No. of Technology based projects implemented	247
<b>LIVELIHOOD/ ECONOMIC ENTERPRISE</b>	No. of technology training conducted	488
	No. of packaging/ labelling materials	108
	No. of people trained	10,678
	No. of OL traps deployed	39,24
<b>HEALTH AND NUTRITION</b>	No. of beneficiary household/schools	1254
	No. of malnourished children served under feeding program	8,967
	No. of WLMS devices installed	53
<b>DISASTER RISK REDUCTION</b>	No. of ARG devices installed	112
	No. of Tandem (WLMS+ARG) installed	11



Image source: savethechildren.org

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



# Malnutrition Reduction Program (MRP)



0-4

YEARS OLD

33.6%

HEIGHT STUNTED

20.2%

UNDERWEIGHT

7.2%

ACUTE MALNUTRITION



5-10

YEARS OLD

33.6%

HEIGHT STUNTED

32%

UNDERWEIGHT

8.5%

ACUTE MALNUTRITION



Image source: Rappler

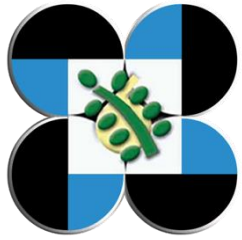


Php 328 Billion  
(2.84% of GDP)

330,418 students  
15% (due to stunting)

67% of cost of grade  
repetition ➡ government





# DOST PINOY

(Package for the Improvement of Nutrition of Young Children)

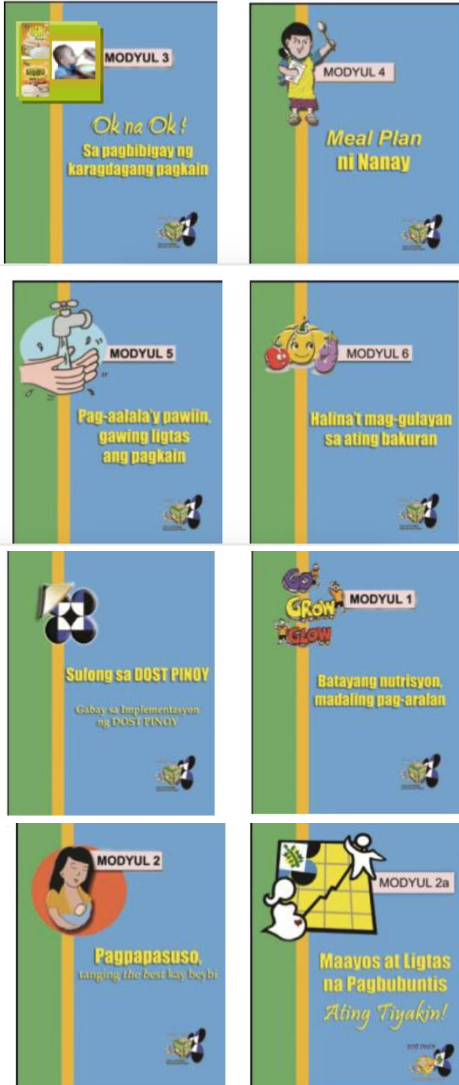
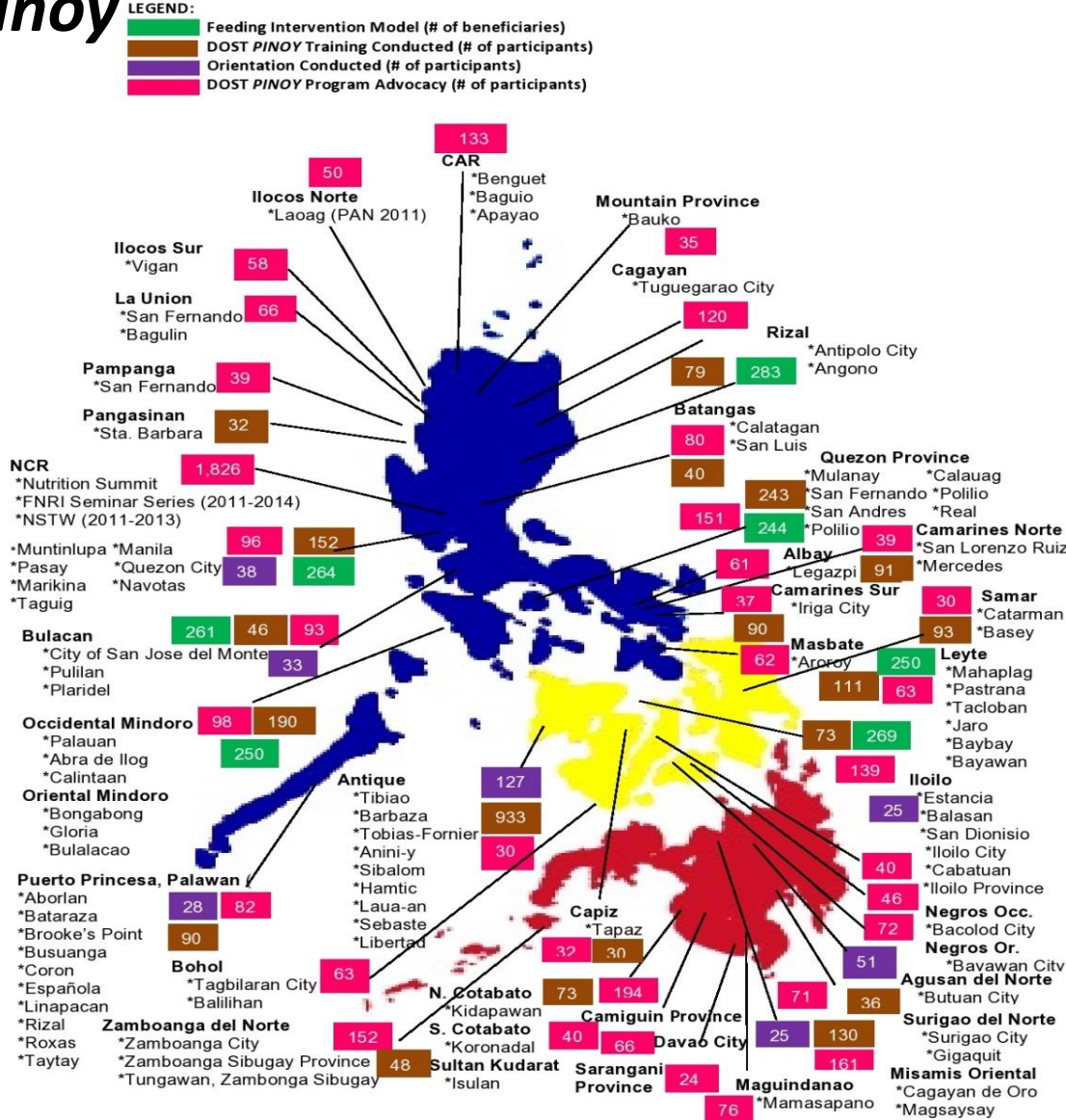
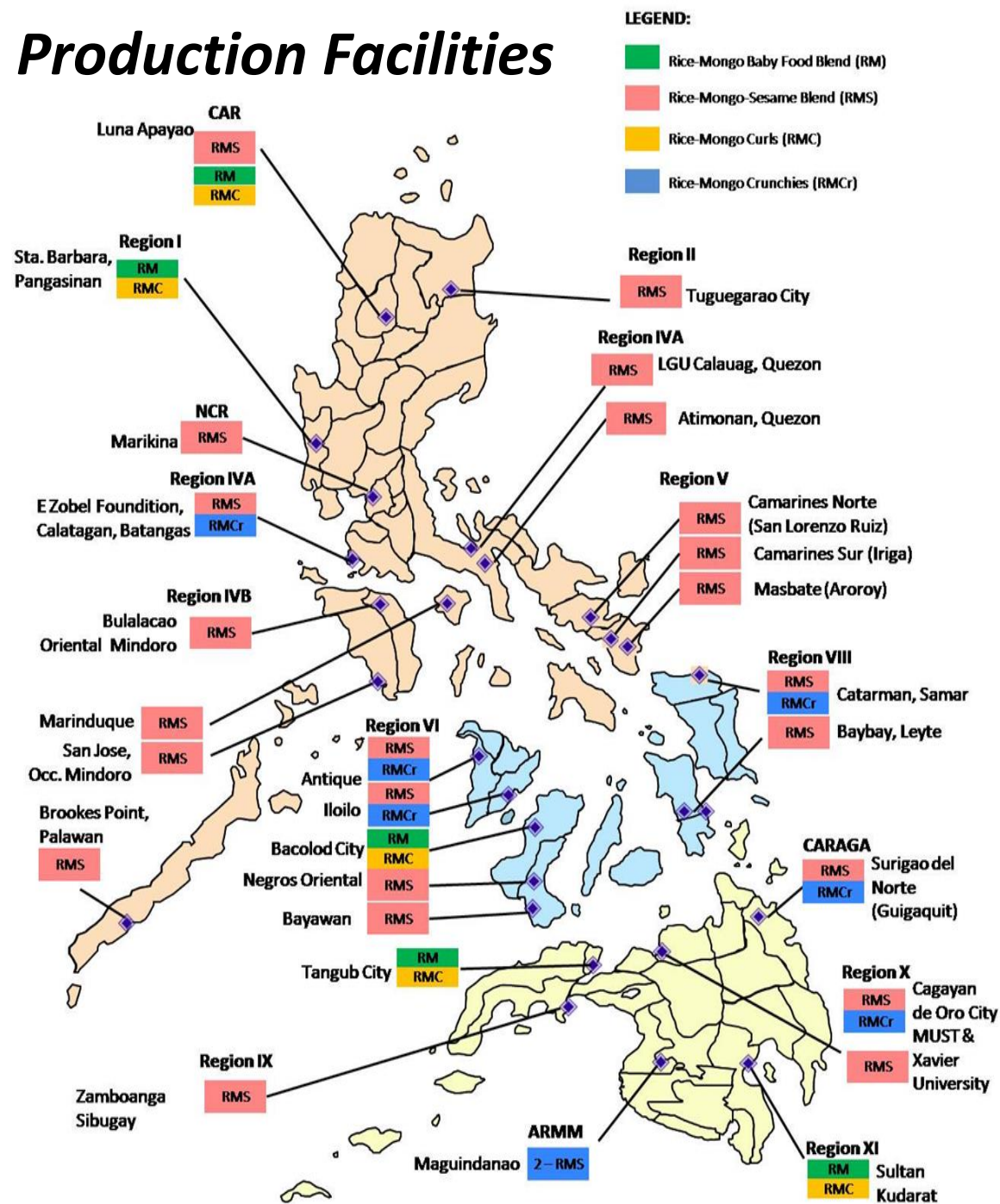


Image source: [www.cbsua.edu.ph](http://www.cbsua.edu.ph)

# Coverage of Implementation: DOST Pinoy



# Production Facilities




**JOIN  
THE RANKS OF  
GOOD BUSINESSES  
MADE BETTER THROUGH**

# SETUP

**Small Enterprise Technology Upgrading Program**

**8 DECENT WORK AND ECONOMIC GROWTH**



**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**



**10 REDUCED INEQUALITIES**







# Transforming MSMEs through Science, Technology and Innovation

## S&T Solutions

- Technology Transfer and Commercialization  
Eg. MPEX, CAPE, food safety,  
energy audit and cleaner production
- Packaging Assistance
- Technology Trainings
- Laboratory and Testing Services
- Innovation Fund



FIC  
FOOD  
INNOVATION  
CENTER

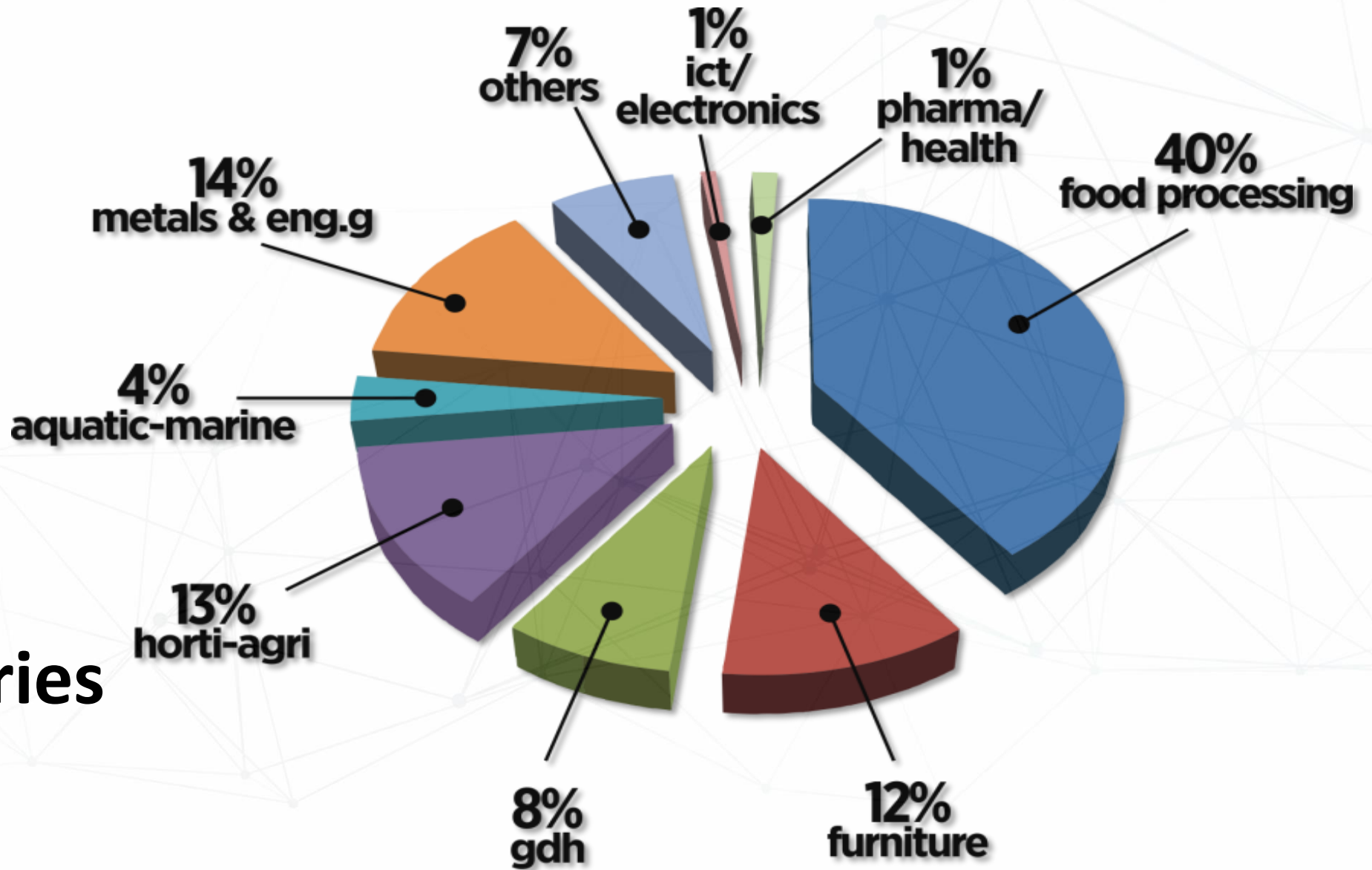
MPEX  
MANUFACTURING  
PRODUCTIVITY EXTENSION  
PROGRAM



Consultancy for  
Agricultural and  
Manufacturing  
Productivity  
Improvement (CAMPI)  
Level-Up Program



# Distribution Of Beneficiaries According to Industry





**SETUP**  
S & T innovations for SMEs

SMALL ENTERPRISE TECHNOLOGY UPGRADING PROGRAM

167,939  
jobs

Php  
3.336  
billion

4,363  
MSMEs

Php  
35.354 billion  
gross sales

**2002-2016**

**Accomplishments**

769  
projects

8,017  
New Partners

Php 774  
million  
assistance

44% Avg  
productivity  
improvement

59,912  
jobs

Php 7.2 billion  
gross sales

**2017  
Accomplishments**

Flora Martirez



**Fred Fredeluces**

Gen. Manager Green Tropics  
Coffee Enterprise  
General Santos, City



Thelma Pepito



Victor Villa





**Nena Limpiado**  
Plant Supervisor PWD Multi-Purpose  
Cooperative Gensan, City


**PWD GENSAN**  
**MULTI-PURPOSE COOPERATIVE**  
CDA - Registration number- RA. 9520-12007422  
11-B Brgy. Fatima Gen. Santos City.  
*FURNITURE: We accept Order Here Contact number: 09127196571*





Image source: <http://research.mmsu.edu.ph>

TUKLAS LUNAS DEVELOPMENT CENTER FOR LUZON

# Drug Discovery & Development Program: Tuklas Lunas

**3** GOOD HEALTH  
AND WELL-BEING





**RxBox**  
 Advancing Community Healthcare







YOUTH EXCELLENCE  
in Science Award  
July 12, 2018 8:30 A.M.  
UP NIS  
venue  
Dilliman





# DOST STARBOOKS

The First Philippine Science Digital Library

your access to a wealth of science and technology information at your fingertips



## STARBOOKS

The first Philippine

SCIENCE Digital Library



Your access to a wealth of S&T information right in your community...

Sleek, user-friendly pods filled with S&T information that cater to the curious researcher or the avid reader...

Stand-alone information kiosk, hence, information access is possible even without internet connection...



### Agriculture

Agriculture, Fisheries, Forestry, Veterinary  
Medicine



### Auxiliary Sciences of History

Archaeology



### Geography & Anthropology

Anthropology, Environmental Science,  
Hydrology, Marine Science



### Library Science

Library and Information Science



### Science

Astronomy, Biology, Botany, Chemistry,  
Computer Science, Ecology, Genetics, Geology,  
Mathematics, Meteorology, Physics, Science  
and Technology, Zoology



### Social Sciences

Communications, Industry, Social Sciences,  
Statistics



### Education

Education



### Technology

Architecture, Engineering, Food Science &  
Technology, ICT, Livelihood, Nutrition



### Medicine

Medicine, Health and Wellness

4 QUALITY EDUCATION



# We Make Change Work for Women

*2017 National Women's Month Celebration*  
March 1 to 31

**#WomenMakeChange**



**5** GENDER  
EQUALITY



**Supporting Women's Economic  
Empowerment in the Philippines**



**6** CLEAN WATER AND SANITATION



armm-info.com



# Sustainable Mass Transport System

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Image source: [www.filamstar.com](http://www.filamstar.com) (lower right), [rappler.com](http://rappler.com) (upper right), [https://c1.staticflickr.com/1/363/19833962518\\_6b4924a9bd\\_b.jpg](https://c1.staticflickr.com/1/363/19833962518_6b4924a9bd_b.jpg) (left)



**SURFACE ANALYSIS**

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**Advanced Device and  
Materials Testing  
Laboratory (*ADMATEL*)**



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



**DIWATA: *Philippine Microsatellite (PHL-MICROSAT)***

**PEDRO: *Philippine Earth Data Resource Observation Center***

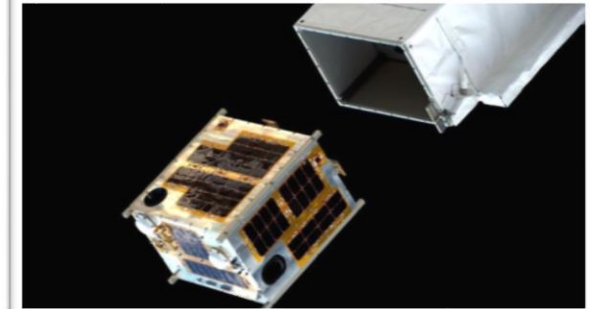
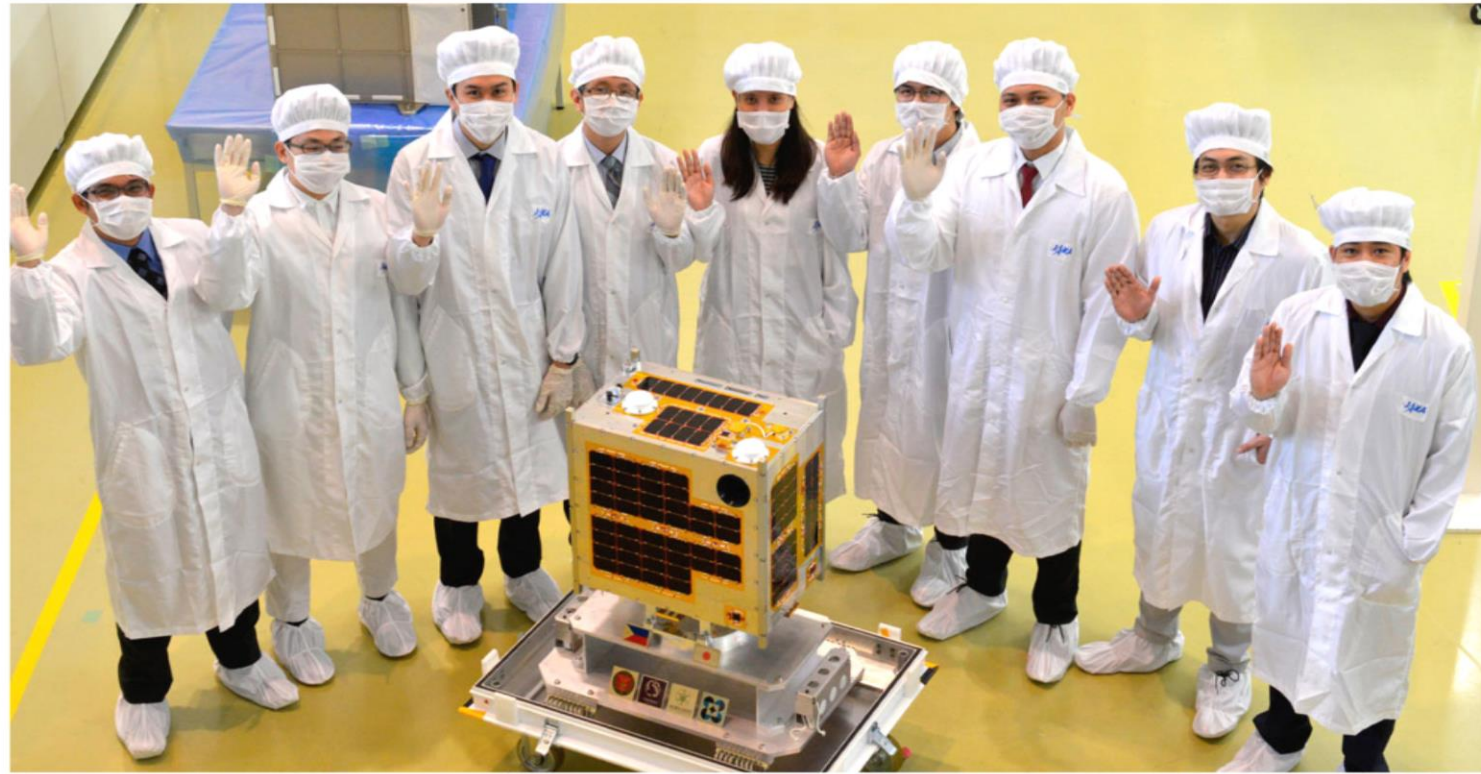
13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND

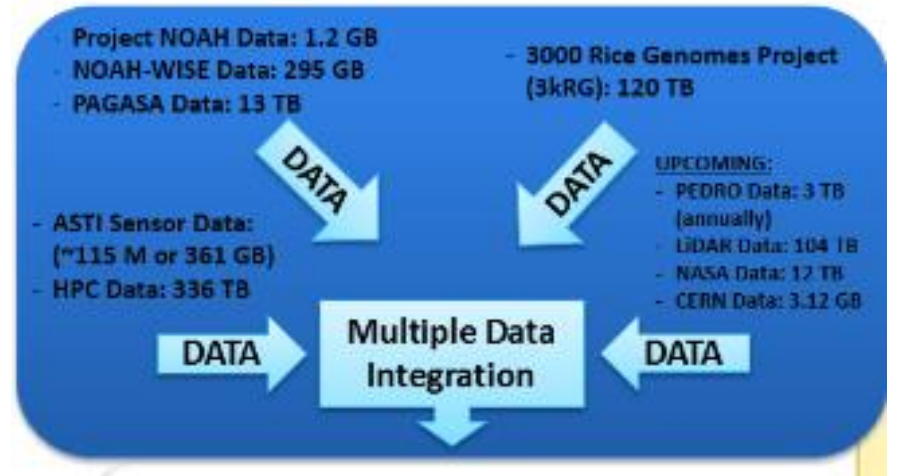






**COARE**  
COMPUTING AND ARCHIVING RESEARCH ENVIRONMENT

# DATOS: *Data Aggregation Technology and On-Demand System*



**HPC capacity: 3.040 cores**  
**Storage capacity: 1.5 petabytes**

Continuously offering high performance computing, storage and cloud computing services to various academic and research institutions



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



14 LIFE BELOW WATER

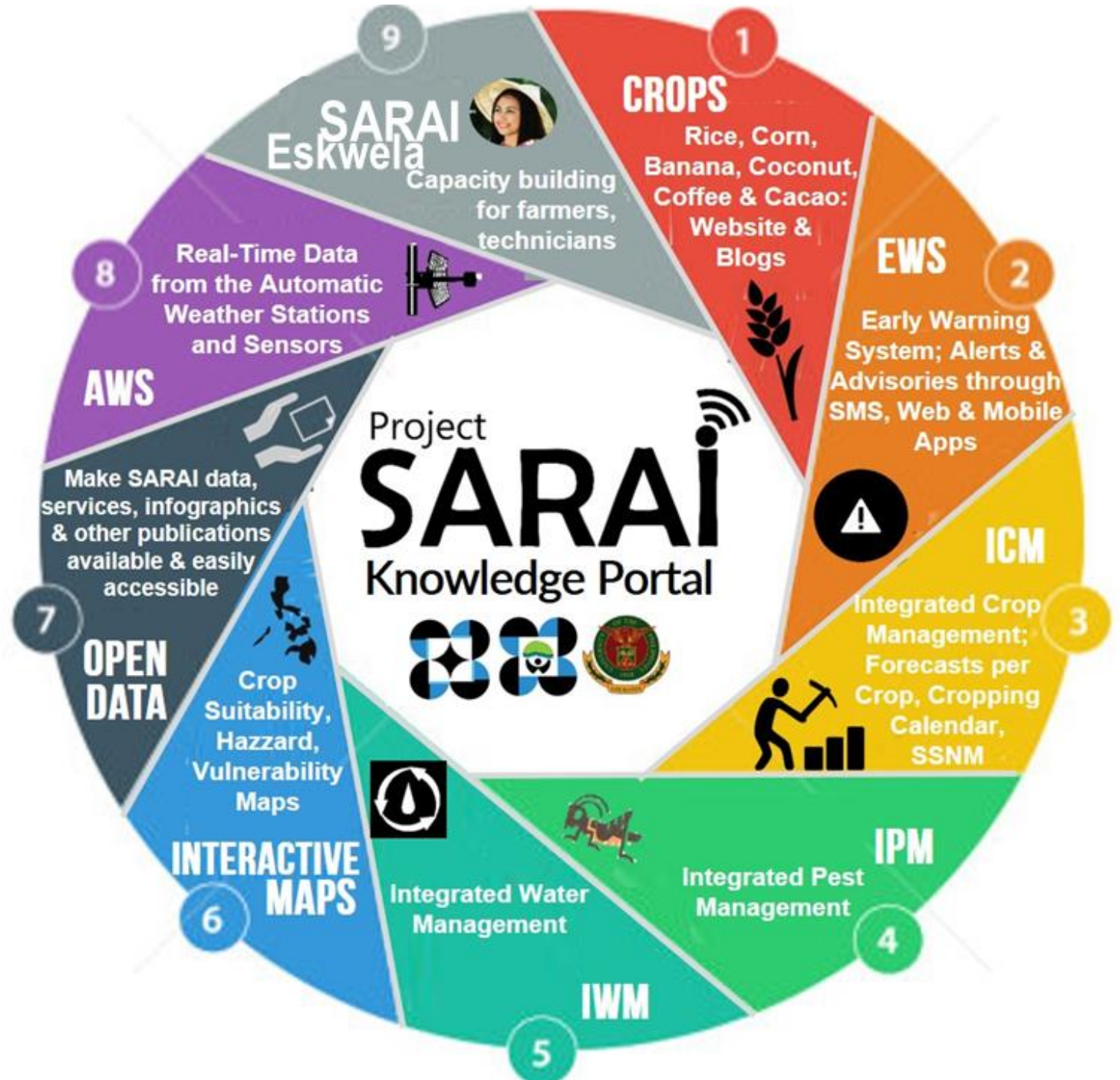


15 LIFE ON LAND



# Smarter Approaches to Reinvigorate Agriculture as an Industry (SARAI) in the Philippines

1 NO POVERTY



# Philippine Light Detection and Ranging (Phil-LiDaR) Program



# 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



# 17 PARTNERSHIPS FOR THE GOALS

