

# *Agham at Teknolohiya para sa Demokrasya* (Science and Technology for Democracy)

## 45<sup>th</sup> Annual Scientific Meeting

12-13 July 2023

### RESOLUTIONS

WHEREAS, the Philippines, as enshrined in the 1987 Constitution, is a democratic and republican state;

WHEREAS, the State recognizes the importance of promoting general welfare in the enjoyment by all people of the blessings of democracy; protecting life, liberty, and property; and maintaining peace and order;

WHEREAS, not all developmental programs and projects are democratic, therefore the science community should endeavor to identify and separate exploitative from developmental empowerment;

WHEREAS, it is the policy of the state:

to prioritize science and technology together with education, arts, culture, and sports in fostering patriotism and nationalism, accelerating social progress, and promoting total human liberation and development, including those marginalized and underserved sectors;

to promote the adoption of technology for the national benefit while encouraging the widest participation in the generation and utilization of science and technology;

to promote and protect the rights of the people, civil society organizations, and platforms for effective and reasonable participation at all levels of social, political, and economic decision-making;

WHEREAS, the Agrarian Reform Program of the Philippines has almost largely achieved its target social justice objective; it is time to shift emphasis to economic objectives targeting land productivity and farm income;

WHEREAS, there is a continuous need to promote access and improve the quality of basic and higher education to ensure its relevance and fulfill society's multiple expectations;

---

**Correspondence:**

NAST PHL  
secretariat@nast.dost.gov.ph

**Citation:**

NAST PHL. 2023. Resolutions: 45th NAST PHL Annual Scientific Meeting July 2023. Transactions NAST PHL: [doi.org/10.57043/transnastphl.2023.3317](https://doi.org/10.57043/transnastphl.2023.3317)

**Copyright**

© 2023 NAST PHL

WHEREAS, water and energy are closely linked resources; the exponentially growing population, existing climate realities, and intensive water use put pressure on the existing water and energy supply needed to live comfortably and sustain growth;

WHEREAS, Universal Health Care (UHC), as provided by Republic Act 11223, aims to provide all Filipinos access to a comprehensive set of quality, accessible, and cost-effective health services without causing financial hardship;

WHEREAS, there is a need to enhance local government capacity and address the systemic gaps in the pillars of the healthcare system, specifically health information system, human resource development, private sector and community participation, and health financing, in order to ensure UHC implementation;

WHEREAS, science, technology, and innovation (STI) play a critical role in strengthening democratic institutions and processes and advancing developmental empowerment in a democracy;

NOW, THEREFORE, it is hereby resolved to recommend that the concerned sectors take the following actions:

**I. MOVE FORWARD THE AGRARIAN REFORM**

1. For the Senate and Congress to consider the following recommendations:
  - a. stop further issuances of new Notices of Coverage of Comprehensive Agrarian Reform Program (CARP)'s land acquisition and distribution (LAD) and the immediate lifting of the restriction on resale of awarded lands;
  - b. convert the lands consistent with the National Physical Framework Plan guided by the Regional Development Plan (RDP) and Comprehensive Land Use Plan (CLUP) of the local government units (LGUs); tax the conversion and earmark the tax utilization for poor farmers;
  - c. revise land rent/share and decriminalize share tenancy;
  - d. lift land ownership ceilings for investors in commercial scale agribusiness; and
  - e. phase out the Department of Agrarian Reform (DAR) in five (5) years and merge with the Department of Agriculture (DA) into a Department of Agriculture and Rural Development (DARD);
2. For the National Economic Development Authority (NEDA), DA, DAR, Senate, and Congress to call for a complete review of the CARP on the basis of balancing social justice and economic productivity features of the land reform program;
3. For the new DARD to ensure convergence of support services by government agencies to farmers;
4. For the DA and LGUs to promote farm clustering and consolidation;
5. For the banking system to codify acceptance of agricultural lands as collateral, and assert the Land Bank of the Philippines' primary mandate on small farm finance; and
6. For the DA, LGUs, DAR, Department of Science and Technology (DOST), and the private sector-led agri-fishery enterprises to fully implement the current Philippine Development Plan (PDP) 2023-2028;

## II. DEMOCRATIZE ACCESS TO QUALITY AND CIVIC EDUCATION

1. For the National Government to increase funding for higher education to at least 4% of the GDP, as recommended by the World Bank, to support equitable access to quality education;
2. For the Senate and Congress to adopt the policy of socialized education in lieu of free tuition in public schools;
3. For the Department of Education (DepEd) to:
  - a. develop a long-term plan for Basic Education and public-private partnership (PPP) to strengthen capacity in sustainable development, climate change action, and development of blue economy;
  - b. review and strengthen democratic citizenship curriculum in basic education;
  - c. strengthen and expand the Educational Service Contracting and Senior High School (SHS) voucher programs through PPP;
  - d. sustain and invigorate its school feeding and related programs;
  - e. support the development of science culture in elementary and high schools through the conduct of science camps such as the DOST's National Youth Science, Technology, and Innovation Festival (NYSTIF), educational tours to science parks and science centers/museums, among others;
4. For the Commission on Higher Education (CHED) to:
  - a. provide stackable/ladderized programs with multiple entry and exit points in and out of the formal system;
  - b. retool graduates and professionals through microcredentials aside from degrees;
  - c. initiate and/or intensify faculty development programs, through a university consortium, explore flexible options for professional development, and create more graduate degree programs in the region;
  - d. provide equivalencies and credit transfer systems;
  - e. encourage public and private Higher Educational Institutions (HEIs) to prioritize STEM senior high school graduates for admission in STEM degrees;
  - f. strictly implement the phasing-out of substandard programs;
  - g. support policies, programs, and processes that encourage academy-industry linkages;
  - h. expand the system for accreditation and enhancement of distance learning modalities;
5. For the Technical Education and Skills Development Authority (TESDA) to strengthen its role and involvement in the accreditation and credit transfer system of the country;
6. On the development of education programs for marine and environmental issues:
  - a. For the CHED and HEIs to address the need for the development of curricula, faculty, infrastructure, and research support for marine and environmental concerns; and

- b. For the DepEd, CHED, TESDA, and HEIs to integrate environmental issues in classroom education and provide interventions to allow active participation of students and the youth on local marine and environmental concerns;
7. For the CHED, DepEd, TESDA, and HEIs to:
  - a. strengthen information literacy education in schools; and
  - b. develop and implement evidence-based community-based information literacy programs by supporting local research on interventions to counter misinformation;
8. For the Department of Information and Communications Technology (DICT) to:
  - a. review and strengthen regulatory and accountability systems for governance of social media and influencers (similar to traditional media and journalists); and
  - b. related to social media platforms, review the role of other information sciences and sociocultural factors in the dissemination and consumption of misinformation;

### **III. CONSIDER THE ENERGY-WATER-FOOD NEXUS**

1. For the Office of the President to establish the Department of Fisheries and Oceans;
2. For the National Economic Development Authority (NEDA) to lead an in-depth assessment of the synergies and tradeoffs in the use of freshwater resources for food, energy, and other uses, and to identify options and the policies and programs needed for optimal allocation of such resources.
3. For the Department of the Interior and Local Government (DILG) and the Regional Development Councils (RDCs) to require the LGUs to integrate energy-water-food programs into their development plans;
4. For the LGUs to optimize the utilization of the funds provided under the Mandanas-Garcia Ruling in the implementation of projects that will promote food, energy, and water security;
5. For the Department of Energy (DOE) to ensure commissioning of additional renewable energy projects for a good energy mix;
6. For the National Government and the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) to resolve potential issues in the power sector;
7. For the DOE to promote the development of alternative sources of renewable energy for desalination technology projects in small islands; and
8. For the Department of Environment and Natural Resources-Water Resources Management Office (DENR-WRMO) to incentivize rainwater harvesting;

#### IV. DEMOCRATIZE HEALTH AND HEALTH CARE THROUGH EQUITY

##### 1. Health Governance

- a. For the Department of Health (DOH) and the DILG to update the capacity of the LGUs by providing direction and technical knowledge in implementing Universal Health Care (UHC);
- b. For DOH and Philippine Health Insurance Corporation (PhilHealth) to strengthen primary healthcare implementation including necessary health systems components in all LGUs;
- c. For DOH and Philhealth to promote and incentivize PPP for the implementation of UHC;
- d. For DOH to form an advisory group to formulate specific targets for the monitoring and implementation of UHC;
- e. For the DOST to further strengthen the Health Technology Assessment Council (HTAC) in its periodic review of emerging scientific knowledge and recently developed medical technology that may be adopted in implementing UHC;
- f. For LGUs, HEIs, and health-related Research and Development Institutions (RDIs) to further strengthen programs that support equity in health;
- g. For LGUs to develop policies to support PPP and promote collaboration with private health endeavors and the academe to ensure continuous improvement of LGU health capacity; and
- h. For LGUs to promote proper nutrition, including feeding programs for the disadvantaged;

##### 2. Health Information System

- a. For the DOH, PhilHealth, DILG, and DICT to:
  - i. prioritize the development and implementation of an interoperable, secured, and demand-driven health information system and infrastructure at the national and local levels; and
  - ii. make the health information system accessible and usable by local health professionals and health workers;

##### 3. Human Resource Development

- a. For the DOH, the Department of Labor and Employment (DOLE), CHED, and the Professional Regulation Commission (PRC) to develop the policy toward the responsive production and equitable distribution of highly skilled, ethical, motivated, and practice-ready health workforce in both the public and private sector with competitive compensation, benefits, and incentives;
- b. For the DOH and the DICT to fast-track the operationalization of the National Health Workforce Registry as specified in the UHC Law to resolve the healthcare workforce crisis, especially at the primary health care level; and
- c. For the CHED, PRC, DOH, HEIs, and all health professional societies to reorient the education of all health professionals and health workers; and start faculty development programs, to develop their competencies in nutrition and related fields toward public health and primary health care, as mandated by the UHC Law;

4. Private Sector and Community Participation
  - a. For the Office of the President to issue an Executive Order enjoining national and local governments to engage the private sector and communities for the planning and implementation of public health programs; and
  - b. For the DOH to conduct training on social participation for policymakers and government planners based on the World Health Organization (WHO) handbook on social participation for UHC;
5. Health Financing
  - a. For PhilHealth to develop and deliver a comprehensive primary care package through capitation that addresses the triple burden of disease while engaging relevant agencies (e.g., DILG, Commission on Audit, and Bureau and Internal Revenue) in the process to facilitate its coordinated implementation and implement efficient payments systems; and
  - b. For the HTAC to determine the most cost-effective primary care services and submit their recommendations to the DOH for implementation;
6. Health Research
  - a. For the DOST, DOH, and CHED to continue supporting research on UHC; and
  - b. For HEIs and RDIs to develop and implement research programs on UHC;

#### **IV. STRENGTHEN THE 4Ps AND THE GOVERNMENT'S ANTI-POVERTY PROGRAMS**

For the Department of Social Welfare and Development (DSWD) to:

1. strengthen and improve program implementation, particularly the monitoring and enforcement of health conditions and the identification and measurement of outcome indicators related to the Family Development Sessions;
2. conduct further studies on factors affecting results (e.g., nutrition outcomes) and adjustments in policies and incentives; and
3. adopt an efficient and suitable payment infrastructure for emergency response, creation of grants-in-aid programs in education, and enhancement of other social programs or services.

#### **IV. PROMOTE THE APPROPRIATE UTILIZATION OF ARTIFICIAL INTELLIGENCE (AI)**

1. For the DICT to endeavor universal and affordable internet access and launch awareness campaigns, address inequality, and establish oversight for ethical AI development;
2. For the CHED, DepEd, and TESDA to integrate AI literacy programs into the curriculum, train teachers, and emphasize AI ethics ensuring students are prepared for the AI-driven future; and
3. For the Office of the President to encourage the government and business sector to incentivize AI adoption, foster collaboration, and establish regulations for responsible AI use.

DONE this 13th day of July 2023 in Manila, Philippines.

SIGNED,

**45<sup>th</sup> ANNUAL SCIENTIFIC MEETING  
RESOLUTIONS COMMITTEE**

**DR. NANCY A. BANTOG**  
Director, DOST CAR

**ENGR. ERNESTO M. GRANADA**  
Director, DOST Region VIII

**DR. ANTHONY C. SALES**  
Director, DOST Region XI

**DR. RICO C. ANCOG,**  
**OYS 2019**

**DR. ARNEL B. BELTRAN,**  
**OYS 2022**

**DR. MARLON T. CONATO,**  
**OYS 2020**

**DR. FRANCISCO A. MAGNO,**  
**OYS 2000**

**DR. JOHN MARK S. VELASCO,**  
**OYS 2014**

**DR. PIERANGELI G. VITAL,**  
**OYS 2021**

**ACD. WINDELL L. RIVERA**  
OYSI President

**CM ANNABELLE P. VILLALOBOS**

**ACD. RHODORA V. AZANZA**

**ACD. FABIAN M. DAYRIT**

**ACD. RODEL D. LASCO**

**ACD. EUFEMIO T. RASCO, JR.**

**ACD. AGNES C. ROLA**

**ACD. CARMENCITA D. PADILLA**

**ACD. WILLIAM G. PADOLINA**

**ACD. REYNALDO B. VEA**

**NATIONAL SCIENTIST EMIL Q. JAVIER**

**ACD. CRISTINA J. MONTIEL**  
Chair