

Caring for the Country's Carrying Capacity

41st Annual Scientific Meeting, 11 July 2019

RESOLUTIONS

WHEREAS, sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”;

WHEREAS, the Brundtland Report on Sustainable Development (1987) emphasizes “the concept of needs, in particular the essential needs of the world’s poor;” and the “idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs;

WHEREAS, in 2015, following the completion of the Millennium Development Goals, the United Nations Member States adopted the 2030 Agenda for Sustainable Development that “provides a shared blueprint for peace and prosperity for people and the planet, now and into the future”;

WHEREAS, the 17 Sustainable Development Goals (SDGs) recognize that “ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests”;

WHEREAS, the Philippines, guided by the Philippine Development Plan (2017-2022) and the Ambisyon Natin 2040, through its various government agencies, endeavors to achieve the 17 SDGs;

WHEREAS, Republic Act 8425, also known as Social Reform and Poverty Alleviation Act defines minimum basic needs as “needs of a Filipino Family pertaining to survival (food and nutrition; health; water and sanitation; clothing), security (shelter; peace and order; public safety; income and livelihood) and enabling (basic education and literacy; participation in community development; family and psycho-social care)”;

WHEREAS, we recognize technology as the key to expanding carrying capacity to match population growth in combination with a vigorous implementation of the reproductive health law (Republic Act 10354), and with raising living standards;

WHEREAS, the National Academy of Science and Technology, Philippines (NAST PHL), recognizes the importance of transformation of science-based knowledge and research into goods and services for the Philippines’ path towards sustainability and resiliency as focused in the three SDGs: Goal 4 - Quality Education, Goal 12 -Responsible Consumption and Production, and Goal 14 - Life Below Water, among others;

WHEREAS, the theme of the NAST 41st Annual Scientific Meeting, “Caring for the Country’s Carrying Capacity” is implicit in achieving SDG numbers 4, 12, and 14, which includes (a) talent development and retention, (b) elimination of plastic waste, and (c) sustainable marine food security, among others;

WHEREAS, investing in talent development and retention will secure adequate numbers of highly trained and skilled citizens for the nation’s advancement;

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WHEREAS, imposing guidelines on the reduce, reuse, recycle, and redesign (4R’s) of plastics will help in reduction of plastic pollution;

WHEREAS, addressing the adverse effects of climate change will positively impact the security of marine food resources;

WHEREAS, addressing these concerns will significantly improve the country’s carrying capacity;

NOW, THEREFORE, it is hereby resolved that the following actions be recommended:

TALENT DEVELOPMENT AND RETENTION

1. Enhance activities that will increase awareness and appreciation of the value and impact of S&T in society in general and in the K to 12 STEM curriculum in particular;
2. Increase support for the development of STEM faculty and facilities in K-12;
3. Increase support for graduate education scholarships for study in the Philippines and abroad;
4. Participate in global initiatives on the environment; and
5. Promote acquisition of talents by providing incentives for high-level Filipino and foreign professionals to work in the Philippines.

REFORM THE R&D ECOSYSTEM

1. Eliminate dysfunctionalities in the research and development ecosystem such as the lack of regular items for high level R&D staff, restrictions to avail opportunities for training abroad, uncompetitive compensation packages;
2. Reform the procurement and fund disbursement system in STEM research, development and extension (RDE) activities; and
3. Increase public and private investments in the emerging technologies.

MANAGEMENT OF PLASTIC WASTE

1. Support zero waste initiatives at the national, regional, and local levels;
2. Consolidate, pass, faithfully implement, and adequately fund proposed legislation at the local and national levels on the phase-out of non-biodegradable single-use plastic materials;
3. Accelerate research and development on single-use biodegradable packaging materials;
4. Accelerate research and development to re-design plastics and chemical additives to make them more recyclable and safer;
5. Accelerate research and development to safely recycle plastic waste;
6. Craft more systematic collection, reuse and disposal of recyclable materials at the local and national levels;
7. Reduce the use of plastic materials in products and services (e.g. straw, utensils); and
8. Conduct comparative analyses of incineration, waste-to-energy, and other alternative approaches as a possible solution to plastic waste.

MARINE FOOD SECURITY

1. Increase investments on research and development in site specific science-based management of aquatic resources, such as scheduling closed and open fishing seasons and marine protected areas;
2. Increase investments on research and development of new integrated technologies in aquaculture;
3. Prioritize the creation of a Department of Fisheries and Oceans to assure sustainability of food from our marine and fresh water resources;
4. Train fisher folk to adopt sustainable mariculture practices specifically on feed quality, feeding practice, and water quality monitoring;
5. Pass and implement the National Land Use Act to rationalize the use of land and water resources for food security, industrial development, and human settlements; and
6. Revitalize the seaweed industry by providing support to (a) scientific and technical personnel and (b) social, economic, and seaweed biodiversity studies.

SUSTAINABLE HALAL ECOSYSTEM

1. Advocate for the passage of a law to define the standards of a robust Philippine Halal industry.

Done on this 11th day of July 2019 at the EDSA Shangri-La Manila, Mandaluyong City.