



Republic of the Philippines  
**OFFICE OF THE SECRETARY**  
Elliptical Road, Diliman  
1100 Quezon City

**ADMINISTRATIVE ORDER**

**NO. 26**

Series of 2021

**SUBJECT : REORIENTATION AND STRENGTHENING OF THE DEPARTMENT OF AGRICULTURE BIOTECHNOLOGY CENTERS FOR THE ADVANCEMENT OF BIOTECHNOLOGY RESEARCH FOR DEVELOPMENT AND INNOVATION, AMENDING DA ADMINISTRATIVE ORDER NO. 06 SERIES OF 2015**

*WHEREAS*, Department of Agriculture (DA) Administrative Order (AO) No. 06, series of 2015 established and aimed the strengthening of three DA Biotechnology Centers, i.e., Livestock Biotechnology Center housed at the Philippine Carabao Center, Crop Biotechnology Center housed at Philippine Rice Research Institute, and Fisheries Biotechnology Center housed at the National Fisheries Research and Development Institute to rationalize research, development, and commercialization in agricultural biotechnology;

*WHEREAS*, the Agriculture and Fisheries Modernization Act (AFMA) of 1997 recognizes biotechnology as a tool in modernizing agriculture by helping enhance productivity, profitability, and climate change resiliency, eventually helping improve the well-being of Filipinos;

*WHEREAS*, the DA Biotech Program provides support to help move the agriculture and fisheries sector from a resource-based to a technology-based sector pursuant to AFMA of 1997;

*RECOGNIZING THAT*, Ambisyon Natin 2040: Matatag, Maginhawa at Panatag na Buhay, a long-term vision formulated under the leadership of the National Economic and Development Authority (NEDA), identifies agricultural biotechnology as one of the priorities for investments, which include appropriate human capital development, science, technology, and innovation, to help improve the competitiveness of enterprises;

*PURSUANT TO*, the Eight Paradigms of "New Thinking" for Philippine Agriculture, which is the policy approach of the DA towards making the agriculture sector a major contributor to economic growth and include modernization and industrialization, as well as strategies under the One DA Reform Agenda, which include technology and innovation, climate change adaptation, food safety and regulations, export development and promotion, among others, to steer the transformation of Philippine agriculture;

*DESIRING THAT*, DA interventions on the application of modern biotechnology are reinforced to support building a food-secure and resilient Philippines with prosperous and empowered farmers and fishers;

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*WHEREAS*, Executive Order No. 162 issued on October 16, 1999 provides that the Secretary of the Department of Agriculture may group, integrate and merge agencies/units to ensure coordination of actions, particularly in the implementation of action programs of the Department, and authorizes him to determine the agencies or attached agencies and corporations necessary to carry out the Department's mandate;

*WHEREAS*, the consolidation of biotechnology into R&D framework in the DA would facilitate and promote efficient use of government resources, allow scientific exchange between scientists engaged in biotech research and unrestrained access to available technologies;

*WHEREAS*, the three DA Biotechnology Centers will help the Department to ensure the maximum utilization of technologies generated and developed through supported research for development (R4D) projects while protecting the intellectual properties of partner research institutions in accordance with the Philippine Technology Transfer Act of 2009;

*WHEREAS*, there is a need to reorient the role and functions, and re-cast the administrative arrangement of DA Biotechnology Centers to be conducive to the advancement of research for development and innovation agenda under the DA Biotech Program and provision of relevant technical assistance;

**NOW, THEREFORE, I, WILLIAM D. DAR**, Secretary of the Department of Agriculture, by the powers vested in me by law, do hereby issue this Administrative Order to promulgate the legal and institutional framework for the reorientation and strengthening of DA Biotechnology Centers, amending for the purpose of DA AO 06, series of 2015.

## Section 1. **DA BIOTECHNOLOGY CENTERS**

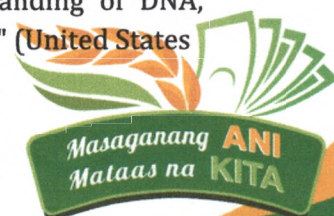
To facilitate a more integrated, focused, and inclusive implementation of the R&D agenda on agricultural biotechnology, three DA Biotechnology Centers, namely the Crop Biotechnology Center, Livestock Biotechnology Center, and Fisheries Biotechnology Center, will serve as focal centers of the Department in the development and utilization of modern biotechnologies for agriculture and fisheries and biotechnology capacity-building service to R4D network of institutions towards the development of policy, technology, and product. Their networks shall consist of DA research agencies and offices, bureaus, and other public research institutions conducting basic and applied research and technology and product development.

## Section 2. **DEFINITION OF TERMS**

2.1. **Agriculture** includes farming both animals, i.e., animal husbandry, and plants, i.e., agronomy, horticulture and forestry in part (Food and Agriculture Organization).

2.2. **Agricultural biotechnology** refers to "A collection of scientific techniques used to improve plants, animals and microorganisms. Based on an understanding of DNA, scientists have developed solutions to increase agricultural productivity" (United States

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Agency for International Development, Agricultural Biotechnology Support Project II, and Program for Biosafety Systems, 2004).

2.3. **Biotechnology** refers to "any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products for specific use" (Convention on Biological Diversity). It encompasses traditional applications, such as fermentation and brewing, conventional techniques, such as tissue culture, plant regeneration, and modern technologies, such as artificial insemination, genetic engineering, genomics, and bioinformatics.

2.4. **Crops**, as referred to in this Order, covers all major, minor, non-food, industrial, permanent/perennial, priority, root, temporary, and vegetable crops (Philippine Statistics Authority).

2.5. **Fisheries** refers to all activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving, and managing aquatic resources and the fishery areas, including the privilege to fish or take aquatic resources (Republic Act No. 8550: "The Philippine Fisheries Code, 1998)

2.6. **Aquaculture** includes fishery operations involving all different forms of raising and culturing fish and other aquatic species in fresh, brackish, and marine waters (The Philippine Fisheries Code, 1998).

2.7. **Intellectual property** refers to creations of the mind, such as inventions, literary and artistic works; designs; and symbols, names, and images used in commerce (World Intellectual Property Organization).

2.8. **Livestock** refers to farm animals kept or raised for consumption, work, or leisure (Philippine Statistics Authority).

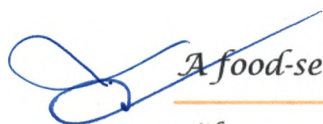
2.9. **Biotechnology Capacity-building Service** refers to technical assistance and training services provided to public research institutions to apply and use modern biotechnology tools.

### Section 3. OBJECTIVES OF THE CENTERS

The DA Biotechnology Centers shall support the thrust of the DA to improve the productivity and competitiveness of priority commodities by:

3.1. Undertaking innovative and cutting edge R4D programs, comprehensively covering fundamental research to innovation phases, using advanced tools of biotechnology; and,

3.2. Ensuring technology transfer or commercialization of outputs in scales that will impact the target agriculture value chain.



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#### Section 4. **ROLE AND FUNCTIONS OF THE CENTERS**

The DA Biotechnology Centers shall serve as catalysts of the Department in the development and utilization of modern biotechnologies for agriculture and fisheries. They shall rationalize and implement the Research for Development (R4D) Agenda of the Biotech Program of the Department. They shall also provide biotechnology capacity-building services to a network of R4D institutions in the utilization of modern biotechnologies

In performing their roles, the DA Biotechnology Centers shall have the following functions in support of the DA thrust to improve the productivity and competitiveness of priority commodities:

- 4.1. Conduct and host cutting-edge biotech R4D;
- 4.2. Create research teams and implement research programs for each research thematic area/priority within the Center;
- 4.3. Build an R4D network of institutions and strengthen connections among members of the network;
- 4.4. Undertake joint or collaborative R4D projects and activities with the Host Institutions and other local and foreign research institutions;
- 4.5. Provide institutional capability building for DA agencies and DA R4D network to use biotechnology applications, especially modern biotech tools;
- 4.6. Undertake activities to promote and communicate generated technologies and their respective work to encourage technology transfer or commercialization, expand the R4D network, innovative partnerships, and establish scientific and technology development collaborations;
- 4.7. Ensure alignment of projects and activities with DA Biotech R4D Agenda, complementation with other R4D efforts of other government institutions, and DA's thrusts and strategies; and,
- 4.8. Establish and operate a knowledge management system within the Center.

#### Section 5. **PRIORITIES, STRATEGIES, AND TARGETS**

The DA Biotechnology Centers shall implement programs, projects, and activities according to the prevailing R4D plan for agriculture and fisheries that support the DA thrust. This R4D agenda shall guide the work of the DA Biotechnology Centers in terms of priorities, strategies, targets, and related concerns.





## Section 6. MANAGEMENT AND COORDINATION

### 6.1. COORDINATING BODY

The projects and activities of the three DA Biotechnology Centers that implement the approved DA Biotech R4D agenda shall be supported by the DA Biotech Program Office (BPO). Likewise, the implementation of the Biotech R4D agenda shall be coordinated and monitored by the DA BPO, as illustrated in *Section 6.4*. Such coordination and monitoring shall be with due regard to the authority PhilRice, PCC, and NFRDI to supervise and manage as the Host Institutions and BAR being the national coordinating agency for R4D at DA.

### 6.2. HOST INSTITUTIONS

Given the foregoing premises and existing institutional arrangement and capacities, the three DA Biotechnology Centers shall be strengthened at the Philippine Rice Research Institute for crop biotechnology, Philippine Carabao Center for livestock biotechnology, and the National Fisheries Research and Development Institute for aquaculture and fisheries biotechnology.

### 6.3. MANAGEMENT OF THE CENTER


Each Biotechnology Center shall be managed and supervised by a Center Chief and assisted by biotechnology experts duly designated by its Host Institution's Head. The Center Chief shall be selected based on the following minimum qualifications:

- Must have managed a unit of the institution or other agencies or a research group for at least three years;
- Must have ten refereed research publications, at least five in ISI-journals;
- Must have a Ph.D. in related and/or relevant field of expertise (e.g., Plant Breeding, Molecular Biology, Biotechnology, Genetics, Physiology, Biochemistry, Fisheries, Aquaculture, Animal Science and Veterinary Science and Medicine); and,
- A holder of a position equivalent to Senior Science Research Specialist or higher.

The Host Institution's head shall designate the Center Chief with a term of three (3) years, renewable for another term of three (3) years (maximum of two terms).

The Center Chief shall form the following groups from the Host Institution's existing complimentary offices as well as from the Center's R&D network:

- a. **Technology Development and Innovation Group** – responsible for conducting and hosting cutting-edge biotech R4D activities, joint or collaborative research and

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technology innovation projects, and creating research teams and implementing research programs. For this group to undertake biotech R4D projects, the Center may be the proponent or co-proponent with the collaborating DA institutions and state universities and colleges. The Center may also offer its laboratory facilities and provide technical assistance in the use of equipment.

- b. **R4D Biotechnology Capacity-building Service Group** - responsible for providing R4D-related services and capacity-building measures on applying modern biotech tools for DA agencies and the network. These capability-building activities include short- or long-term local/international internships, symposia, caucuses, workshops, mentorships, and consultancy services.
- c. **Partnerships and Fund Generation Group** - responsible for building and strengthening connections with R4D network, sourcing out funding from local and international institutions/programs or public and private donor communities, forming meaningful and beneficial collaborations with local and international institutions or donor communities, and create research teams and programs together with the Technology Development and Innovation Group.
- d. **Technology Commercialization and Management Group** - responsible for undertaking activities to promote commercialization or transfer of generated technologies. The group shall also ensure integrated planning, design, optimization, operation, and control of technological products, processes, and services. The group shall also promote a culture of knowledge sharing and improve access of the networks and stakeholders to the wealth of information.

The DA Biotechnology Centers may engage additional experts and technical staff, as appropriate and necessary, to augment existing staff complement proportional to the R4D projects and activities.

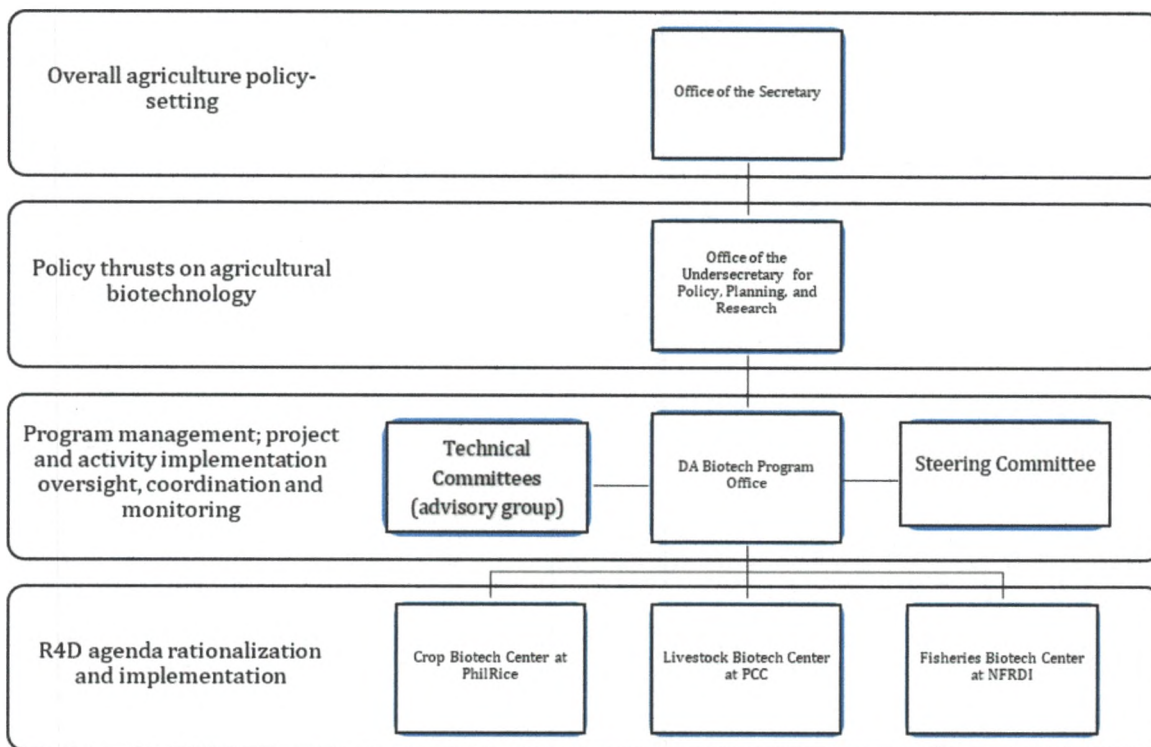
The DA BPO, in close coordination with DA Administration and Finance Services, shall initiate efforts to seek the creation of regular plantilla positions.

Upon the recommendation of the Biotech Center Chief, the Head of Agency/Host Institutions may engage the services of Job Order/Contract of Service personnel charged against the MOOE budget provided for the Biotech Center to ensure that desired outputs and targets of the DA Biotechnology Centers are attained. The said authority shall be subject to COA and DBM Joint Circular No. 2, s. 2020 and pertinent provisions of Republic Act No. 9184 or the "Government Procurement Reform Act" and its Implementing Rules and Regulations, as applicable, and the existing budgeting, accounting, and auditing rules and regulations. The Centers' minimum qualification requirements for each position shall be developed and laid out in pertinent special orders/issuances issued by the Department of Agriculture or the Host Institution.



#### 6.4. FRAMEWORK FOR COORDINATION AND MONITORING OF RESEARCH FOR DEVELOPMENT INITIATIVES ON AGRICULTURAL BIOTECHNOLOGY

The coordination and monitoring of projects and activities of the three DA Biotechnology Centers to rationalize and implement the approved DA Biotech R4D Agenda shall be performed mainly by the DA BPO, guided by its Program Steering Committee and technical committees. The framework for DA R4D agenda for agricultural biotechnology shall be as follows:



#### 6.5. Specific and Tangible Outputs of the Centers

Each group in the DA Biotechnology Centers is expected to produce intermediate and final outputs, such as:

##### a. **Technology Development and Innovation Group:**

- a.1. Tools, practices, and other innovative products in support of DA commodity thrust
- a.2. Improved crop varieties, animal or fish strains, among others
- a.3. Intellectual properties such as Plant Variety Protection, Utility Models, Patents, Protection for Animal/Fishery, Registration of Gene Sequences, among others
- a.4. Mentored researchers (during the research process)
- a.5. Others as deemed justifiable

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**b. R4D Biotechnology Capacity-building Service Group**

- b.1. Technical training programs implemented for DA agencies and networks
- b.2. Competency-based training tools
- b.3. Inventory of trained individuals and periodic post-training monitoring
- b.4. Consultancy and mentoring services provided to DA agencies and networks
- b.5. Others as deemed justifiable

**c. Partnerships and Fund Generation Group**

- c.1. MOUs and MOAs on research and capacity building collaborations with local/international institutions
- c.2. Donor scoping, proposal development and packaging, and donor negotiation
- c.3. Sourcing out funds from other government agencies, local and foreign donors (public or private grants), endowments, equities, investments, capital contributions, and any other source
- c.4. Others as deemed justifiable

**d. Technology Commercialization and Management Group**

- d.1. Technologies or products transferred or commercialized through technology transfer agreements or licensing agreements
- d.2. Technology incubation protocol and agreements established
- d.2. Systems for document management and database management
- d.3. Technology catalogs, policy briefs, scientific articles, and brochures, etc. in hard and digital formats
- d.4. Database of ongoing biotech R4D projects on crops, livestock, and fisheries, and aquatic resources within their networks, including funding sources
- d.5. Others as deemed justifiable

**Section 7. FUNDING**

The core funding for the Centers' operations shall come from the DA GAA allocation for DA Biotechnology Program and the concerned Banner Programs (Rice, Corn, HVC, Livestock, Fisheries). The DA BPO shall work with concerned Banner Programs to allocate needed funds to support priority biotech projects. Furthermore, the host institutions shall ensure maintenance of the Centers' facilities (buildings and equipment) and utilities (water and electricity) through cost-sharing and cost recovery schemes agreed with the DA BPO.

Furthermore, the Centers are authorized to source funds from other DA programs, other government agencies, local and foreign donors (public or private grants), endowments, equities, investments, capital contributions, and any other source to augment the DA's yearly funding support for Biotechnology Centers.



The Chiefs of the Centers are responsible for preparing their respective Annual Operating Budget, including their Work and Financial Plans. The individual Centers' Annual Operating Budget shall include all projects/activities and all funding sources. The DA Secretary shall approve each Center's Annual Operating Budget upon the endorsement of the Host Institution and the DA BPO.

#### Section 8. **FUND MANAGEMENT**

All funds released to the DA Biotechnology Centers shall be managed by the Center Chief, under the fiscal control and management procedures of the Department of Agriculture. Furthermore, the management and utilization of funds released to the DA Biotechnology Centers shall be done in accordance with applicable accounting and auditing rules and procedures.

#### Section 9. **TRANSITORY PROVISION**

The three DA Biotechnology Centers shall formulate respective manual of operations within ninety (90) days following the issuance of this Order.

#### Section 10. **AMENDMENT AND REPEALING CLAUSE**

This Administrative Order amends the definition of terms, objectives of the Centers as well as their roles and functions, management and coordination, and funding source of the DA Administrative Order No. 06, Series of 2015. A new section on specific and tangible outputs of the Centers is hereby added. All other issuances inconsistent with this Order are hereby modified, revoked or repealed accordingly.


#### Section 11. **SEPARABILITY CLAUSE**

The provisions of this Order are hereby declared to be separable. In the event that one or more of its provisions are held to be inconsistent, the validity of the other provisions shall not be affected thereby.

#### Section 12. **EFFECTIVITY CLAUSE**

This Order shall take effect immediately.

Signed on this 17th day of September 2021.

  
**WILLIAM D. DAR, Ph.D.**  
Secretary

DEPARTMENT OF AGRICULTURE  
  
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