



Memorandum Order

No. 32

Series of 2023

**SUBJECT : IMPLEMENTING GUIDELINES ON THE DISTRIBUTION AND
USE OF BIOFERTILIZERS**

I. RATIONALE

Rice production in the Philippines is currently facing numerous challenges such as unpredictable weather conditions, increasing resistance of rice pests and diseases to pesticides and the skyrocketing prices of farm inputs.

High prices of inputs, especially fertilizers pose a great threat to our rice production. To conquer this threat, the use of alternative inputs such as biofertilizers can be done to mitigate the impacts.

Biofertilizers are substances that contain living microorganisms that when applied to seeds, plant surfaces, or soil, colonize the rhizosphere or the interior of the plant and promote growth by increasing the supply or availability of nutrients to the host plant. This also involves new innovations that incorporate nanotechnology and growth enhancers with microorganisms that promote growth efficiency and effectively with fertilizer absorption.

Biofertilizers improve soil fertility by fixing atmospheric nitrogen, solubilizing soil nutrients, and production of plant growth-promoting substances in the soil. They are known for their cost-effectiveness, and environmentally-friendly nature which does not have ill effects on the environment and humans.

The key benefit of biofertilizers is their ability to aid soil health. They enhance the water-holding capacity of the soil and add essential nutrients such as nitrogen, vitamins, and proteins. Unlike traditional bulk fertilizers which, although containing naturally found minerals such as phosphorus and nitrogen, may overload the soil's ecosystem leading to a chemical imbalance and toxicity which degrades the soil and affects crop yields.

The use of biological fertilizers can replace a part of the inorganic fertilizers used as inputs by our rice farmers. This technology can be a significant contributor towards achieving a rice-resilient Philippines in the face of high prices of inputs.

II. OBJECTIVES

The project aims to improve the productivity of farmers in rice production in spite of the high prices of fertilizers by distributing biofertilizers which will complement the use of inorganic fertilizers and support the balance fertilization program. Specifically, the project intends to achieve the following:

1. Improve the productivity of farmers in rice production in spite of the high prices of fertilizers by distributing biofertilizers which will complement the use of other forms of fertilizer;
2. Upscale the use of biofertilizers for rice in support to balance fertilization strategy; and
3. Sustain if not increase rice production even with reducing the usage of inorganic nitrogen fertilizer through the utilization of biofertilizers.

III. SCOPE

The program covers the use of biofertilizers for implementation this CY 2023. The funds for this Project shall be sourced out from the fertilizer support program of the National Rice Program. Budget allocation and target area for biofertilizers by the Department of Agriculture - Regional Field Offices (DA-RFOs) will be issued through a separate memorandum signed by the Undersecretary for Rice Industry Development.

The target area will be based on the regional budget allocation equated with the price of biofertilizer selected by the DA-RFOs as per result of the selection process as reflected in Annex A.

This is also based on the premise that the selected biofertilizer can substitute at least 2 bags of inorganic urea fertilizers without sacrificing the yield. Theoretically, a savings of more than P2,000.00 per hectare can be realized if the cost of biofertilizer is less than P2,000.00 per hectare. This is illustrated as follows:

Biofertilizer to replace 2 bags urea/ha:

Cost of urea at P2,000/bag :	P 4,000.00
Cost of Biofertilizer/ha :	P 2,000.00
Savings/ha :	P 2,000.00

If the biofertilizer chosen by the DA-RFOs is less expensive, the fertilizer savings is increased.



IV. PROCUREMENT OF BIOFERTILIZERS

Procurement of selected biofertilizers will be done through competitive bidding following the provisions of RA 9184.

Biofertilizers to be procured must be registered under the Fertilizer and Pesticide Authority (FPA) or Bureau of Agriculture and Fisheries Standards (BAFS). Selection of specific biofertilizers will be based on the process conducted by the DA-RFOs considering efficacy/effectivity, price, savings from the reduction of inorganic fertilizer, local production, and availability of technical staff from the supplier to extend assistance in areas where the product is still new.

The Protocol on the proper use of the biofertilizer will be provided by the supplier.

V. SELECTION OF FARMER-BENEFICIARIES

Target beneficiaries of the program are farmers in rice cluster areas who are members of Irrigators' Associations (IAs), Farmers Cooperatives and Associations (FCAs), and Agrarian Reform Beneficiaries (ARBs) registered under the Registry System for Basic Sectors in Agriculture (RSBSA).

The priority are clustered areas where farmer-beneficiaries are recipients of hybrid seeds and certified seeds under the National Rice Program (NRP) or Rice Competitive Enhancement Fund (RCEF) Program including those from the LGUs and other government seed assistance programs.

The Local Government Unit - Extension Worker (LGU-EW) shall identify prospective farmer beneficiaries within their area of coverage. Also, in coordination with LGUs, the National Irrigation Administration (NIA) will identify farmer members from IAs who will be recipients of the biofertilizer. In the same manner, the Department of Agrarian Reform (DAR)-ARBs and FCAs shall identify farmer beneficiaries in their group.

VI. DISTRIBUTION OF BIOFERTILIZER

1. Biofertilizers will be distributed to identified qualified farmers in cluster areas registered under RSBSA as identified by the NIA, DAR and FCAs, in coordination with LGUs.
2. In coordination with LGUs, the distribution of biofertilizers will be through NIA-IAs, DAR-ARBs, and FCAs. For farmers who are not covered by the above, distribution will be through LGU-city/municipality.



3. The quantity of biofertilizers to be distributed or received by the farmer-beneficiary will be based on the area to be planted that was provided with seeds under the seed assistance program (certified seeds and hybrid). Rate of application per hectare will follow the manufacturer's recommendation.
4. Farmer beneficiaries shall acknowledge receipt of the Biofertilizer using Form 1 (Annex B) to be certified correct by the Municipal/City Agriculturist.
5. The copy of the list of farmer beneficiaries (Form 1 – Annex B) will be submitted to DA-RFOs.

VII. APPLICATION OF BIOFERTILIZERS

Biofertilizers will be applied following the manufacturer's recommendation. It should be emphasized that the application of biofertilizer shall reduce or replace the application rate of inorganic urea equivalent to at least 2 bags per hectare.

Technical staff from the supplier must be available to assist farmers during the application or if there are technical issues raised by the farmers during the process of utilization.

VIII. MONITORING AND EVALUATION

DA-RFOs shall undertake the gathering of the necessary data in coordination with the Municipal/City Agriculturist, Provincial Agriculturist, and assigned Agricultural Technologist.

The reporting, monitoring, and evaluation system shall be led by the Field Programs Coordination and Monitoring Division (FPCMD). Reports shall be submitted to the Office of the Undersecretary for Rice Industry Development, complete with observations and/or recommendations.

IX. SUPPLEMENTAL GUIDELINES

The DA-RFOs are hereby authorized to formulate detailed supplementary guidelines to address peculiar situations in their locality. These supplemental guidelines shall be subject to the approval of the Undersecretary for RID prior to implementation.



X. AMENDMENT CLAUSE

This Memorandum Order may be reviewed, amended, or supplemented as the need arises and only through a written instrument duly signed by a competent authority.

XI. SEPARABILITY CLAUSE

If any clause, sentence, or provision of the Memorandum Order shall be declared invalid or unconstitutional, the other provisions not affected thereby shall remain valid and subsisting.

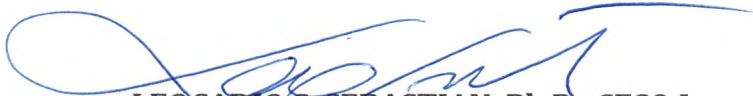
XII. REPEALING CLAUSE

All other previous orders, issuances, rules, and regulations inconsistent with or contrary to this Memorandum Order are hereby repealed and revoked.

XIII. EFFECTIVITY

This Memorandum Order shall be effective immediately upon signing and shall remain in force unless revoked by a competent authority.

Done this 27 day of April, 2023.


LEOCADIO S. SEBASTIAN, Ph D., CESO I
Undersecretary for Rice Industry Development



DA-CO-FOS-MO20230427-00004



Annex A

Guidance in the Selection of Biofertilizers

The DA-RFOs shall be guided with the following requirements in the selection of biofertilizers to be procured and used. While several biofertilizers are available in the area, prioritization will be done through a point system based on the following categories:

1. **Pricing - cost per hectare (30 points)**

The price of the biofertilizer should be reasonable considering the effectiveness and ease of application in terms of cost per hectare.

2. **On-site testing for Efficacy and Effectivity (30 points)**

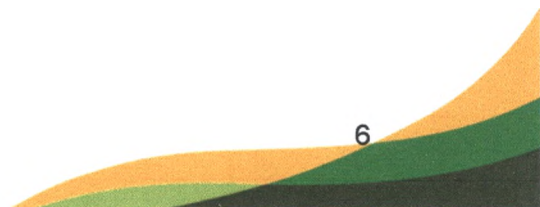
The Biofertilizer had been tested in the farmer's field in the target region or province by DA-RFO, PhilRice, or other FPA-accredited entities with significant results. Advantages of the use of the biofertilizer must be reflected in terms of yield, reduction of inorganic fertilizer usage, savings in fertilizer cost relative to recommended rate, and net profit compared to the recommended technology and prevailing farmer's practice adopted in the area.

3. **Capacity for Technical Support (20 points)**

The company manufacturer/supplier must have the capacity to provide technical support to farmers on the proper use of their product (biofertilizer) to ensure efficacy and effectiveness. This is considering that the product is new in the target area and the farmers may not be familiar with the proper protocol for effective use.

4. **Local Production (20 points)**

Preference for locally produced biofertilizer. The biofertilizer, if locally produced, ensures on-time availability and facilitates transport. It also generates local employment and contributes to the local economy.



A-RFOs may craft their own scorecard/s capturing the internal criteria for each category. A sample scorecard is shown below. The maximum number of points per item mentioned above must still be followed.

Criteria	Points
01.Pricing a. Cost per hectare b. Number of applications c. Technical innovation for efficacy and cost-saving	30 pts 10 10 10
02.On-site testing for Efficacy and Effectivity a. Effects on the increase in yield b. Reduced Use of Inorganic Fertilizer c. Savings in Fertilizer Cost d. Net profit generated	30 pts 10 pts 10pts 5pts 5pts
03.Capacity for Technical Support a. Enough manpower to conduct technical support b. With information dissemination activities for the use of the biofertilizer c. With protocol for technical support	20 pts 10pts 5pts 5pts
04.Local Production a. Locally produced b. On-time availability in the locality c. Generates local employment to the locality	20 pts 10pts 5pts 5pts
TOTAL	100

Annex B
List of Farmer-beneficiaries of Biofertilizers
Form 1

Region: _____
 Province: _____
 Municipality: _____
 Barangay: _____

No.	Name of Farmer			Address	Farm Location	Farm Area (hectare)	No. of Biofertilizers Received per hectare (ml,pack,kg, etc)	Signature
	Last Name + Suffix	First Name	MI					
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Prepared and Submitted by:

Certified Correct:

 Agricultural Extension Worker

 Municipal/City Agriculturist

