



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

Memorandum Order

No. 42
Series of 2022

**SUBJECT : IMPLEMENTING GUIDELINES ON THE DISTRIBUTION OF
NITROGEN-FIXING BIOLOGICAL FERTILIZERS IN RICE AREAS**

I. RATIONALE

Rice production in the Philippines is now facing numerous challenges: 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 great threat in our rice production. To conquer this threat, the use of alternative inputs such as biological fertilizers can be done to mitigate the impact brought about by this threat.

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 productivity of our farmers in rice production despite the high prices of fertilizers by distributing nitrogen-fixing biological fertilizers which will complement with the use of inorganic fertilizers.

This project also aims to upscale the use of nitrogen-fixing biological fertilizers for rice through massive technology utilization.

III. SCOPE

The Project shall cover the CY 2022 wet cropping season and 2022-2023 dry cropping season in selected rice-producing municipalities and provinces distributed in all regions with respective targets reflected in Annex A. Target areas must be situated in any of the following ecosystems:

1. Irrigated areas with intermittent irrigation

These areas include all irrigated areas with good drainage and where water could be easily controlled making the field possible for alternate wetting and

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drying. Areas which are continuously flooded or with poor drainage should be avoided.

2. Favorable rainfed areas (with supplemental irrigation)

These include areas not fully dependent on rainfall but where supplemental irrigation from creeks/ponds accumulated during the rainy season or using pump is possible.

IV. SELECTION OF FARMER-BENEFICIARIES

Target beneficiaries are rice farmers registered under the Registry System for Basic Sectors in Agriculture (RSBSA).

Farmer-beneficiaries must be recipients of hybrid seeds and certified seeds under the National Rice Program (NRP) or Rice Competitive Enhancement Fund (RCEF) Program.

The Local Government Units Extension Worker (LGU-EW) shall identify prospective farmer beneficiaries within their area of coverage.

V. IMPLEMENTATION

A Memorandum of Agreement (MOA) has been signed by the DA and the BioTech-UPLB for the P58,669,200.00 worth of nitrogen-fixing biological fertilizers.

Ready to use nitrogen-fixing biological fertilizers will be procured directly from BioTech-UPLB via government to government transaction. The RFOs should be guided with the MOA signed between the Department of Agriculture and BioTech-UPLB regarding the supply of ready to use nitrogen-fixing biological fertilizers for rice (refer to Annex B).

A. Distribution of nitrogen-fixing biological fertilizers

1. Ready to use nitrogen-fixing biological fertilizers for rice will be distributed to identified qualified farmers listed under RSBSA.
2. LGU-EW shall spearhead the distribution to prospective farmer beneficiaries.
3. Farmer-beneficiaries shall acknowledge receipt using Form-1 (Refer to Annex C). The list of farmer-beneficiaries (Form 1) will be certified correct by Municipal/City Agriculturist which will be submitted to DA-RFO.


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B. Application of nitrogen-fixing biological fertilizers

Method of Application

1. As solid inoculant for direct-seeded rice or for sowing on seedbed.
 - a) The palay seeds will be pre-germinated in gunny sacks or suitable containers. When radicles come out, the seeds/germinants will be placed in a suitable container.
 - b) The required amount of nitrogen-fixing biological fertilizers will be poured into the container with seeds. The nitrogen-fixing biological fertilizers will be mixed with the seeds/germinants making it sure that all seeds are evenly coated. The inoculated seeds will be sown directly on the field or on prepared beds. Caution must be observed not to expose the inoculated seeds to direct sunlight.

2. As liquid inoculant for a seedbed
 - a) The nitrogen-fixing biological fertilizers will be mixed in a sufficient volume of clean water.
 - b) The mixture will be evenly drenched to the seed/seeding-lined seedbeds after sowing.

3. As slurry for transplant seedling
 - a) In a container, the nitrogen-fixing biological fertilizers will be mixed with water to form a slurry.
 - b) The roots of seedlings will be pruned and dipped in the slurry for at least 30 minutes.
 - c) The seedlings will be ready for transplanting.

Rate of Application of nitrogen-fixing biological fertilizers

1. Five (5) packs (200g/pack) is required to inoculate seeds good for one (1) hectare.
2. It is still necessary to apply fifty percent (50%) of the nitrogen requirement of the rice farm.

VI. TIMELINES

The Project shall be implemented until the validity of funds which is on December 31, 2022.



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VII. MONITORING AND EVALUATION

DA-RFO will undertake the gathering of the necessary data in coordination with the LGU extension workers (Municipal/City Agriculturist and Provincial Agriculturist).

The reporting, monitoring, and evaluation data shall be led by the Field Programs Coordination and Monitoring Division (FPCMD). Reports shall be submitted to the Office of the Secretary, complete with observations and/or recommendations.

VIII. 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 DA Undersecretary for Operations prior to implementation.

IX. 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.

X. REPEALING CLAUSE

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

XI. EFFECTIVITY

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

Done this 10th day of June, 2022.


WILLIAM D. DAR, Ph.D.
Secretary



DA-CO-FOS-MO20220609-00006

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ANNEX "A"

BIO N TARGET AREAS AND BUDGETARY REQUIREMENTS

REGION	AREA COVERED (ha)	Packets of RTU* Bio N	TOTAL BUDGET (Php)
CAR	400.00	2,000	200,000.00
Region I	54,794.40	273,972	27,397,200.00
Region III	19,150.00	95,750	9,575,000.00
Region IV A	9,083.00	45,415	4,541,500.00
Region IV B	7,130.00	35,650	3,565,000.00
Region IX	2,400.00	12,000	1,200,000.00
Region V	7,206.00	36,030	3,603,000.00
Region VII	1,137.60	5,688	568,800.00
Region VIII	3,000.00	15,000	1,500,000.00
Region XI	4,976.60	24,883	2,488,300.00
Region XII	8,060.80	40,304	4,030,400.00
Grand Total	117,338.40	586,692	58,669,200.00

*RTU – Ready to Use Bio N





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Annex A

Regional Breakdown of Target for Nitrogen Fixing Bio-Fertilizer in Rice

BIO N TARGET AREAS AND BUDGETARY REQUIREMENTS

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Annex B

Copy of the Memorandum of Agreement between DA and UPLB-BioTech



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MEMORANDUM OF AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

MAY 30 2022

This Agreement is made and executed this _____ at Los Baños, Laguna, Philippines by and between:

The **DEPARTMENT OF AGRICULTURE, (DA)**, represented herein by its Secretary **HON. WILLIAM D. DAR**, and hereinafter referred to as "**DA**", a national government agency with office address at Elliptical Road, Diliman, Quezon City;

-and-

The **UNIVERSITY OF THE PHILIPPINES LOS BAÑOS, (UPLB)**, a constituent university of the **UNIVERSITY OF THE PHILIPPINES**, the National University of the Philippines, created by virtue of Act. No. 1870 as amended and re-organized and operating by virtue of PD 58 and RA 9500, with office address at College Los Baños, Laguna, represented herein by its Chancellor, **DR. JOSE V. CAMACHO, JR.**, and hereinafter referred to as the "**UPLB**"


JOSE V. CAMACHO, JR.
Chancellor

WITNESSETH:

WHEREAS, UPLB through **BIOTECH Bio N LABORATORY** has been established to provide assistance to **DA** to pursue its teaching, research, extension and other programs;

WHEREAS, by virtue of the Omnibus Agreement signed between DA and UPLB through the BIOTECH Bio N LABORATORY, the UPLB through the BIOTECH Bio N LABORATORY can tap the physical and human resources of the UPLB to carry out its mandate;

WHEREAS, DA is providing support to the rice farmers by distribution of Bio N inoculants;

WHEREAS, UPLB through the BIOTECH Bio N LABORATORY and DA have commonly recognized the need for joining efforts in the pursuit of their respective institutional objectives and concerns;

NOW THEREFORE, for and in consideration of the foregoing premises and their mutual covenants herein set forth, the parties have agreed on the following provisions:

TERMS AND CONDITIONS:

1. EFFECTIVITY AND DURATION OF THE CONTRACT

This agreement shall take effect for a period of six (6) months, upon signing of both Parties. It shall be binding for the entire duration of the test / evaluation set forth herein unless earlier terminated upon mutual consent of the parties, or by either party for causes provided under section five (5) hereof.

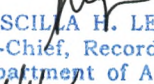
Upon the lapse of this agreement, the parties shall renew the contract for a period which shall depend upon the mutual objective of the parties. The intent to renew the same shall be made in writing and conveyed to the other party within thirty (30) days prior to its termination. Any modification or amendment to this Agreement shall be made in writing and subject to the mutual consent of the parties.


Ofita P. Manana


DR. MARILYN B. BROWN
Director



CERTIFIED TRUE COPY


SCILLA H. LEGASPI
OIC-Chief, Records Division
Department of Agriculture

2. DUTIES AND OBLIGATIONS OF UPLB-BIOTECH

- 2.1 UPLB through BIOTECH Bio N LABORATORY shall, under the supervision of **Ms. Julieta A. Anarna**, produce **Five Hundred Eighty-Six Thousand Six Hundred Ninety-Two (586,692)** packets (200g/pack) of Bio N ready to use inoculant for rice until the end of October 31, 2022 which shall be distributed by **DA**. Five hundred thousand (500,000) packets of which should be delivered before July 31, 2022 and the remaining balance will be delivered not later than October 31, 2022.
- 2.2 UPLB through the BIOTECH Bio N LABORATORY shall provide such number of technical personnel as the efficient and effective conduct of the project shall require.
- 2.3 UPLB through the BIOTECH Bio N LABORATORY shall provide capacity building such as provision of technical assistance, training to mixing plants personnel and staff, and quality control of the Bio N.

3. DUTIES AND OBLIGATIONS OF DA

DA through the RFOs shall provide financial support to UPLB-BIOTECH amounting to **FIFTY-EIGHT MILLION SIX HUNDRED SIXTY-NINE THOUSAND TWO HUNDRED PESOS (PhP 58,669,200.00)** for the mass production of Bio N ready to use inoculant at BIOTECH. Payment shall be made in tranches, **fifteen percent (15%)** upon signing of this Agreement and succeeding payments shall be made upon delivery of the inoculant.

4. PROJECT IMPLEMENTATION

Delivery schedules will be in coordination with concerned DA-RFOs. Drop-off points will be in the provinces identified by the RFOs with the concurrence of BIOTECH.

Supplemental MOA between concerned RFOs and BIOTECH will be made regarding specific quantities, delivery schedules, drop-off points and payment of delivered inoculant. List of RFOs with Bio N allocation is found in Annex A.

5. TERMINATION

- 5.1 This agreement shall terminate upon the lapse of its effectivity period subject to renewal upon mutual consent of the parties.
- 5.2 In case of breach by one party of this Agreement, the other may terminate the same upon giving a written notice within thirty (30) days from the time of breach. Otherwise, the Agreement shall remain in force and effect between the parties.
- 5.3 If either party shall be temporarily unable to perform its obligations by reason of force majeure, with written notice of the event within ten (10) days from the time of the occurrence, such obligation of the party shall be suspended until the inability ceases. In this case, both parties shall make the most possible arrangement by mutual agreement according to the circumstances.

The term "force majeure" as used herein shall refer to strikes, lock outs and other industrial disturbances, acts of the public enemy, war, blockade, insurrection, riot, epidemic, landslide, earthquake, storm, lightning, flood, civil disturbances, large scale explosion and other similar events unforeseen and / or not within the control of either party.

6. GOVERNING LAW AND VENUE OF LITIGATION

This Agreement shall be governed by the laws of the Republic of the Philippines. The parties herein agree to undergo mediation / arbitration and exhaust all possible means to amicably settle any conflict or issue which shall arise from this Agreement. In event of failure, the case, action or litigation shall be instituted in the proper Court of Justice in the Province of Laguna only.


JOSE V. CAMACHO, JR.
Chancellor

Chancellor



Julieta A. Anarna


DR. MARILYN B. BROWN
Director

Director



CERTIFIED TRUE COPY


SCILLA H. LEGASPI
OIC-Chief, Records Division
Department of Agriculture
6/6/22

7. NOTICES


Required written notices and other correspondences shall be addressed to the following:

For **DA**: **HON. WILLIAM D. DAR**
Secretary
Department Of Agriculture, (DA),
Elliptical Road, Diliman, Quezon City

For **UPLB**: **DR. JOSE V. CAMACHO, JR.**
Chancellor
UP Los Baños, College, Laguna


IN WITNESS WHEREOF, the parties hereunto affixed their signature on the date and place above written.

Department of Agriculture, (DA):
By:


HON. WILLIAM D. DAR
Secretary



University of the Philippines (UPLB):
By:



DR. JOSE V. CAMACHO, JR.
Chancellor

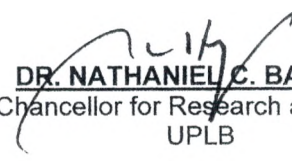
Conforme:


JULIETA A. ANARNA
Project Leader


DR. MARILYN B. BROWN
Director, BIOTECH

Signed in the presence of:

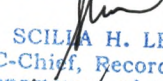

DR. LEOCADIO S. SEBASTIAN
Undersecretary and Chief of Staff
Department of Agriculture (DA)


DR. NATHANIEL C. BANTAYAN
Vice Chancellor for Research and Extension,
UPLB

Attachment:

- 1. Project proposal with budgetary requirements (Attachment A).

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SCILLA H. LEGASPI
OIC-Chief, Records Division
Department of Agriculture



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Annex C

Form 1. List of Farmer-Beneficiaries of Bio-fertilizer

Annex C
Form 1. List of Farmer-Beneficiaries of Bio-fertilizer/ Inoculant (Bio N)

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

No.	Name of Farmer			Address	Farm Location	Farm Area (ha)	No. of BioN Received (Packs)	Signature
	Last Name+Suffix	First Name	MI					
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
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Prepared & Submitted by: _____
Agricultural Technologist

Certified Correct: _____
City/Municipal Agriculturist

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