

APPLICATION FOR TECHNOLOGY NEEDS ASSESSMENT

Name of Community: LGU-Magdiwang		
Contact Person: Mr. Redentor M. Altobano	Position in the Enterprise: Municipal Agriculturist	
Office Address: Poblacion, Magdiwang, Romblon	Tel. No. 09987216271	Fax No.
	E-mail Address:	
Factory Address: Poblacion, Magdiwang, Romblon	Tel. No. 09987216271	Fax No.
	E-mail Address:	
Website:		

GENERAL AGREEMENTS:

1. The applicant shall, at the earliest opportunity, make available to the DOST Regional Office No. 4B (DOST-MIMAROPA) all information (manuals, procedures, etc.) required to establish the technology status of the selected core business functions and management systems;
2. If DOST-MIMAROPA is not satisfied that all the requirements for business registration are complied with, it shall inform the applicant of the observed deficiencies before starting the assessment;
3. When the required inputs to the assessment are already supplied by the applicant, including Attachment A, the DOST-MIMAROPA will assess the firm through the core business functions and management systems, whichever is applicable, to identify technology needs and verify compliance to standards vis-à-vis existing practices;
4. When the DOST-MIMAROPA has completed the technology assessment, a report will be prepared on the results of the assessment with accompanying recommendations and opportunities for improvement. The report prepared will define the scope of activities, functions, management practices and locations assessed. The applicant shall not claim or otherwise imply that the report applies to other locations, product or activities not covered by the report;
5. The applicant agrees that the report will not be used until permission has been granted by the DOST-MIMAROPA;
6. The applicant agrees that the receipt or acknowledgment of the report ends the assessment stage; any technical assistance ensuing from the recommendations of the report will be viewed as a separate project.

UNDERTAKING

I agree to undertake and observe the above General Agreements as stipulated by the Department of Science and Technology Regional Office No. 4B.


MR. REDENTOR M. ALTOBANO

Signature over Printed Name

Municipal Agriculturist

Position in the Enterprise

January 24, 2023

Date

Enterprise Profile

Name of Enterprise LGU-Magdiwang
 Production Site/Location Poblacion, Magdiwang, Romblon
 Business Permit No. N/A Year Registered N/A
 Brief Enterprise Background _____

In rice production, drying is the most critical operation after harvesting a crop. Up to 25% of moisture may be present in the rice grain when it is harvested. High moisture levels during storage can cause grain discoloration, promote the growth of molds, and raise the risk of pest attack. The rate at which rice seeds germinate may also be affected that's why it is important to dry rice paddy as soon as possible into a moisture content of 14% or less to prevent quality deterioration (*Rice Knowledge Bank, IRRI*). Sun drying is a traditional drying method for reducing the moisture content of paddy by spreading the grains under the sun. It is the most common drying method because it is low cost compared to mechanical drying. In Romblon, it is also the common method of drying paddy. The grains were laid on pavements or along the shoulder of the road which is both hazardous to both rice dryers and motorists. Problems of contamination and intermittent drying are generally encountered with sun drying especially during rainy season. It was also estimated that there is a total of 10% loss during pavement or sun drying. To solve the common problem incurred with pavement or sun drying, Portasol technology is proposed to be deployed to rice farmers associations of the municipality of Magdiwang in Sibuyan Island. Portasol is a portable and lightweight solar dryer composed of aluminum thermal trays that can be laid down on an open field or assembled into racks with a plastic sheet cover as protection from pests and fungus. Developed by Mr. Francisco Pagayon, the technology aims to eradicate this perennial problem of harvest losses and will provide fast, safe, and clean solar dryers on any ground, away from roads and highways. The technology can hold up to 150 kg of produce and its drying rate as per a study conducted on a different set of grains provide that it is 2-3 time faster than the usual method. Magdiwang, Romblon, on the other hand, is a 5th class municipality with 3,186.60 hectares, or 37.49 percent of the total land area, set aside for agricultural use. Following the area for coconut, the municipality's rice land is 561 hectares in total. There are nine (9) registered rice farmer's associations (RFAs) in the municipality with a total land area of 243.39 hectares and an annual yield of 939.26 metric tons of rice paddy. This technology intervention for farmers in Magdiwang would increase their rice percentage recovery and head rice yield compared to traditional drying method. During rainy season, the Portasol could utilize induced heat from charcoal or rice hull cinders. It also has a canopy to cover to avoid dampness of grains thus, prevents harvest losses, promotes higher grain quality and food hygiene.

Year enterprise was established: N/A Initial Capitalization: N/A

Type of Organization:

<input type="checkbox"/>	Single proprietorship
<input type="checkbox"/>	Association
<input type="checkbox"/>	Partnership
<input type="checkbox"/>	Corporation
<input type="checkbox"/>	Profit
<input type="checkbox"/>	Non-profit
<input checked="" type="checkbox"/>	LGU/bLGU

Enterprise Registration No. N/A Year Registered N/A
 Classification according to capital (Php) Present capitalization N/A

<input type="checkbox"/>	Micro (less than 1.5 M)
<input type="checkbox"/>	Small (1.5 – 15 M)
<input type="checkbox"/>	Medium (15 – 100 M)

Classification according to employment (number of employees)

- ☐ Micro (1 – 9)
☐ Small (10 – 99)
☐ Medium (100 – 199)

Number of Employees:

Direct Workers	M: ____	F: ____
Production	M: ____	F: ____
Non-production	M: ____	F: ____
Indirect/Contract Workers	M: ____	F: ____
Total	M: ____	F: ____

Business Activity:

- ☐ Food processing (please specify commodity) _____
- ☐ Furniture (please specify commodity) _____
- ☐ Gifts, decors, handicrafts (please specify commodity) _____
- ☐ Metals and engineering (please specify commodity) _____
- ☐ / Agriculture/Marine/Aquaculture (please specify commodity) _____ Post-harvest Technology
- ☐ Health products and pharmaceuticals (please specify commodity) _____
- ☐ Information and Communications Technology (ICT) products (please specify commodity) _____
- ☐ Others, please specify _____

1. Specific product or service the enterprise offers its customers:

The Local Government of Magdiwang is the primary implementer of laws, rules, programs, and projects in the municipality of Magdiwang.

2. Reasons why assistance is being sought:

The LGU signifies its interest in the GIA program to improve rice productivity through Portable Solar Dyer (PORTASOL) technology for drying of palay.

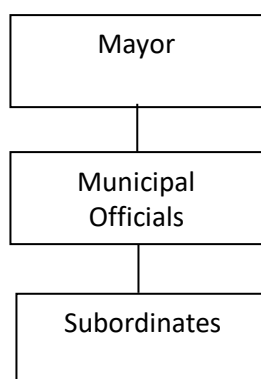
3. Have you consulted any other individual/organization for any assistance?

☐ / If Yes, which company/ agency? Please specify the type of assistance sought

Yes, together with the DOST, the LGU have consulted various experts from different government and non-government stakeholders to increase rice farming productivity, livelihood, environmental conservation, and more.

☐ If No, why not?

Organizational Structure



Managerial/Manpower

	Capability
Mayor	Acts as the head of the municipality. Assure that all the projects proposed are beneficial to the whole community. Commands designated personnel to specific assignments.
Municipal Officials	Helps the mayor implement ordinances and projects for the municipality. Suggest plans and ideas for the progress of the island municipality.
Subordinates	Ensure that the programs, projects, and activities are properly implemented and sustained. Also, becomes the end-users and beneficiaries themselves.

4. Enterprise's plan for the next 5 years?

The local government is determined to increase the rice productivity of rice farmers in which its constituents will benefit from efficient and sustainable farm operations.

Next 10 years?

The mayor envisions the rice industry to be competitive to importation of rice, profitable for farmers, resilient to disasters and climate risks, and able to cater to the consumer demands for safe and healthy rice.

5. Current agreements and alliances undertaken

The local government is currently allied with all the national government agencies and non-government agencies for planning and implementing its programs, projects, and activities

BENCHMARK INFORMATION

■ Production and Supply Chain

➤ Raw Material

Raw Material	Source	Unit Cost (P)	Volume Used/Year
N/A			

➤ Production

Product	Volume of Production/Year	Unit Cost of Production (₱)	Annual Cost of Production (₱)
N/A			
TOTAL			

➤ Production Equipment

Type of Equipment	Specifications	Capacity
N/A		

➤ Problems and Concerns

Sun drying is a traditional drying method for reducing the moisture content of paddy by spreading the grains under the sun. It is the most common drying method because it is low cost compared to mechanical drying. In Romblon, it is also the common method of drying paddy. The grains were laid on pavements or along the shoulder of the road which is both hazardous to both rice dryers and motorists. Problems of contamination and intermittent drying are generally encountered with sun drying especially during rainy season. It was also estimated that there is a total of 10% loss during pavement or sun drying.

➤ Production Waste Management System

N/A

➤ Production Plan

The project will focus on the use of PORTASOL technology for rice farmers. Production of rice is expected to improve with the use of this technology as rice farmers still use the traditional and labor-intensive sun drying method. Project monitoring would also be done by DOST-Romblon with the assistance of the LGU-Magdiwang through data gathering. Monthly monitoring of output will be accomplished to ensure optimum utilization of the technology assistance.

➤ Inventory System

N/A

➤ Maintenance Program

Training on the operation and maintenance of PORTASOL technology will also be given. The LGU-Magdiwang through its Municipal Agriculture Office (MAO) will facilitate and coordinate with their rice farmer associations and ensure to have a facility dedicated for the storage of the PORTASOL technology. Members of the association will operate the equipment by schedule in order to give equal chances to every member who would use the solar dryer which would also serve as a common service facility for each association.

➤ cGMP/HACCP Activities

Capability enhancement trainings for cGMP and HACCP will be conducted to the rice farmers.

➤ Supplies/Purchasing System

The nine (9) rice farmer associations in Magdiwang, Romblon will receive 10 units of PORTASOL technology.

▪ **Marketing**

➤ Marketing Plan

N/A

➤ Market Outlets and Number

N/A

➤ Promotional Strategies

N/A

➤ Market Competitors

N/A

➤ Packaging

○ Nutrition Evaluation

N/A

○ Bar Code

N/A

○ Product Label

N/A

○ Expiry Date

N/A

▪ **Finance**

➤ Cash Flow or other related documents

N/A

➤ Source(s) of capital/credit

N/A

➤ Accounting System

N/A

▪ **Human Resources**

➤ Hiring and Criteria

N/A

➤ Incentives to Employees

N/A

➤ Training and Development

The DOST-MIMAROPA in partnership with the Department of Agriculture will provide relevant training and capability enhancement to the RFA beneficiaries. Project monitoring would also be done by the DOST with the assistance of the LGU-Magdiwang

through data gathering. Monthly monitoring of output will be accomplished to ensure optimum utilization of the technology assistance.

➤ Safety Measures Practiced

Safety measures will be practiced during the production. The unit will be housed to the designated facility of Magdiwang RFAs. Health and safety kits in case of emergency will be also prepared.

➤ Other Employee Welfare

N/A


▪ Other Concerns

The local government unit could utilize the GIA assistance to improve farmer's productivity in terms of drying crops. GIA assistance is highly recommended.

Prepared by:

Validated by:


MR. REDENTOR M. ALTOBANO
Printed Name and Signature of
Owner/Chair/Representative


MARCELINA V. SERVAÑEZ
Printed Name and Signature of
PSTD/Cluster Manager

January 24, 2023

Date

January 26, 2023

Date