

DOST TNA Form 01

APPLICATION FOR TECHNOLOGY NEEDS ASSESSMENT

Name of Enterprise: Tuban Blessed Farmers Multi-Purpose Cooperative (TUBFARMCO)		
Contact Person: ARTHUR L. NOCELO	Position in the Enterprise: Manager	
Office Address: Barangay Tuban, Sablayan, Occidental Mindoro	Tel. No.:	Fax No.:
	E-mail Address:	
Factory Address: Barangay Tuban, Sablayan, Occidental Mindoro	Tel. No.	Fax No.
	E-mail Address:	
Website: None		

GENERAL AGREEMENTS:

1. The applicant shall, at the earliest opportunity, make available to the DOST Regional Office No. IVB-MIMAROPA all information (manuals, procedures, etc.) required to establish the technology status of the selected core business functions and management systems;
2. If DOST IVB-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 IVB-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 IVB-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 IVB-MIMAROPA;
6. The applicant agrees that the receipt and acceptance 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. IV-B-MIMAROPA.



ARTHUR L. NOCEO

Manager

15 November 2021

Date

Enterprise Profile

Name of Enterprise: Tuban Blessed Farmers Multi-Purpose Cooperative (TUBFARMCO)
 Production Site/Location: Barangay Tuban, Sablayan, Occidental Mindoro
 Business Permit No.: 9520-04001807 Year Registered: 2009

Brief Background:

Year enterprise was established: 2008

Initial capitalization: _____

Type of Organization:

- ☐ Single Proprietorship
☒ Cooperative
☐ Partnership
☐ Corporation
 ☐ Profit
 ☐ Non-Profit
☐ LGU - Barangay

Enterprise Registration No.: CIN-010040214 Year Registered: 2009

Classification according to capital _____ Present Capitalization: PhP. NA

- ☐ Micro (less than 1.5 M)
☒ Small (1.5 – 15 M)
☐ Medium (15- 100 M)

Classification according to employment (number of employees)

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

Number of Employees:	<u>M</u>	<u>F</u>
Direct Workers		
Production	<u>5</u>	
Non-production		
Indirect/Contract Workers		
TOTAL	<u>5</u>	

Business Activity:

- ☐ Food processing (please specify specific commodity) _____
- ☐ Furniture (please specify specific commodity) _____
- ☐ Gifts, decors, handicrafts (please specify specific commodity) _____
- ☐ Metal and engineering (please specify specific commodity) _____
- ☒ Agriculture/ Marine/ Aquaculture (please specify specific commodity) Rice Transplanter
- ☐ Health products & pharmaceuticals (please specify specific commodity) _____
- ☐ ICT products (please specify specific commodity) _____
- Others, please specify _____

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

Provision of transplanting services to farmers

2. Reason why assistance is being sought:

- a. To provide farmers with rice transplanter technology.

b. _____

c. _____

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

- ☐ Yes, from what company/agency? _____
- _____
- _____
- _____

(Please specify the type of assistance sought)

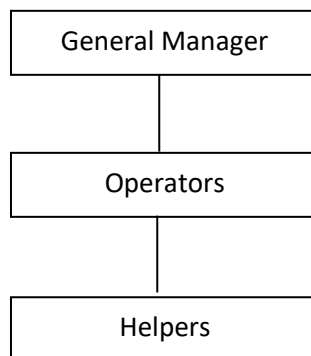
☒ No, why not?

- a. TUBFARMCO intends to avail the GIA Program of DOST-MIMAROPA

b. _____

c. _____

Organizational Structure



4. Enterprise's plan for the next 5 years

TUBFARMCO plans to provide the farmers cut its cost on planting of rice and have an additional income generating activity for the cooperative.

Next 10 years?

Acquire another paddy rice transplanter through the income generated from the farm implement. Expand services to other farmers outside Barangay Tuban.

5. Current agreements and alliances undertaken

None

BENCHMARK INFORMATION

All items below are not applicable

▪ Production and Supply Chain

➤ Raw Materials

Primary Raw Materials	Volume of Primary Raw Materials Used per Month		Unit Cost (PhP.)	Value of Primary Raw Materials Used per Month (PhP.)	Annual Cost of Raw Materials (PhP)
	Quantity	Unit			
TOTAL					

- Production Not applicable

Product	Annual Volume of Production	Unit Cost of Production (P)	Annual Cost of Production (P)	Production Capacity	Product Selling Price

- Existing Functional Production Equipment

Type of Equipment	Specifications	Capacity	No. Of Units	Year Acquired
TUBFARMCO only have threshers and hand tractors				

- Production Problems and Concerns

Labor intensive in planting paddy rice.
Labor and seed requirement is costly

- Production Waste Management System

Not applicable

- Production Plan

Not applicable

- Plant Lay-Out

Not applicable since the equipment will be operated in the ricefields.

- Process Flow

Not Applicable

- Inventory System

Not Applicable

- Maintenance Program

Not Applicable

- cGMP/HACCP Activities

- Not Applicable
- Supplies/Purchasing System

Supplies will be purchased from established suppliers in Sablayan. If there are no available supplies, TUBFARMCO usually place their orders from suppliers in Manila.

- **Marketing**

- Marketing Plan

Patronage of use of the rice transplanter has its captive users – the members and other farmers. Promotion will be taken care of by the TUBFARMCO themselves.

- Market Outlets and Number

TUBFARMCO shall be its market outlet. This will be promoted to the members and other farmers in the area.

- Promotional Strategies

Promotional activities will be through word-of-mouth.

- Market Competitors

TUBFARMCO has no competitors at the moment.

- Packaging NA

- Nutrition Evaluation _____
- Bar Code _____
- Product Label _____
- Expiry Date _____

- **Finance**

- Cash Flow or other related documents

Cash Flow shall be decided by the Coop's Finance staff. Books will be maintained.

- Source(s) of capital/credit

This proposed project shall be primarily funded by DOST-MIMAROPA

- Accounting System

TUBFARMCO shall abide by Cooperative Development Authority's accounting system. TUBFARMCO has established their accounting system following prescribed CDA guidelines.

➤ Human Resources

Three operators and 2 helpers will be required to operate the machine. They will be supervised directly by the Manager of the cooperative.

➤ Hiring and Criteria

Hiring of operators and helpers will be taken care of by Board of Directors through the recommendation of the General Manager.

➤ Incentives to Employees

The hired operators and helpers will receive compensation according to existing legal wages for agricultural workers

➤ Training and Development

Preventive maintenance will be provided to the operators and helpers as soon as project is implemented.

➤ Safety Measures Practiced

None at the moment

➤ Other Employee Welfare

None.

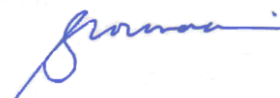
▪ Other Concerns

Prepared by:



ARTHUR L. NOCELO
Manager

Validated by:



MARIA ETHELWILDA G. CORONACION
Provincial S&T Director

Department of Science and Technology	Report No.	
	Page No.	
	Audit Date(s)	



TECHNOLOGY NEEDS ASSESSMENT (TNA) REPORT

COMPANY:	Tuban Blessed Farmers Multi-Purpose Cooperative (TUBFARMCO)
ADDRESS:	Barangay Tuban, Sablayan, Occidental Mindoro

SCOPE OF ASSESSMENT*

The TNA covered the following areas:

1. Strategic Direction
 - a. Vision and mission
 - b. Plans and Objectives
 - c. Strategic alliances and current agreement
2. Management Aspect
 - a. Human resource management
 - b. Purchasing
 - c. Work environment
 - d. Corporate social responsibility
 - e. Occupational health and safety management
3. Technical Aspect
 - a. Operational and outsourcing practices
 - production system
 - production planning and control
 - production lay-out
 - work improvement
 - equipment management and maintenance
 - quality assurance system
 - outsourcing practices
 - b. Product and Process Performance and Improvement
 - reengineering and Research and Development
 - Procedures for continuous improvement
 - Product Quality standards
 - c. Environmental Management System
 - Waste management
4. Marketing Aspect
 - a. Marketing plan
 - b. Market outlets and number
 - c. Promotional strategies
 - d. Market competitors
 - e. Packaging


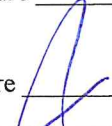
Reported by <u>ANTONIO T. DELOS SANTOS JR.</u> Name of TNA Team Leader	 Signature _____ Date 29 Nov 2021
Attested by <u>JERRY B. MERCADO</u> Name of ARD	 Signature _____ Date <u>6 Dec 21</u>

Department of Science and Technology	Report No	
	Page No.	
	Audit Date(s)	

5. Finance

- a. Cash flow and other related documents
- b. Sources of capital
- c. Accounting system

*** Scope of TNA is based on Technology Assessment Plan (TAP)**

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Name of TNA Team Leader			
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Name of ARD			

Department of Science and Technology	Report No.	
	Page No.	
	Audit Date(s)	

SUMMARY OF ASSESSMENT

BACKGROUND

Paddy rice is the primary crop being planted by the people of Brgy. Tuban. One of the primary concerns, particularly by the members of TUBFARMCO is the cost of manually planting rice which averages from PHP 6,000.00 (*waray waray*) to 7,000.00 (*straight planting*) per hectare. A hectare with 25 persons can finish the planting of rice in four (4) hours.

Barangay Tuban has a total of 676 hectares of agricultural land. The collective total of land being farmed by the members is around 535 hectares. This shows that the members of TUBFARMCO have a 74% control in the farming of rice

TUBFARMCO farmers make the most of palay farming for 3 cropping season which means harvesting can be done thrice in a year.

When planting rice manually, the seed distribution is not uniform in number. The spacing of rice from each seedling is also not consistent. The members of TUBFARMCO want and needs something that will make their planting of rice more efficient and effective.

METHODOLOGY

The Technology Needs Assessment was conducted through direct interview with the proponent. It also included actual assessment of their facilities.

Summary of Findings



1. Strategic Direction

a. Vision and Mission

TUBFARMCO aims to serve its current members and the community with an efficient and cost-effective rice transplanter.

b. Plans and Objectives

TUBFARMCO through this project intends to provide a farm implement that will help TUBFARMCO members and other farmers in Barangay Tuban reduced production cost particularly during the planting stage. Savings will be generated which will result to an additional income for the cooperative.

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Department of Science and Technology	Report No.	
	Page No.	
	Audit Date(s)	

c. Strategic alliances and current agreements

TUBFARMCO has no strategic alliances and current agreements with other organizations or agencies related to the proposed project.

2. Management Aspect

a. Human Resources

Three operators and 2 helpers will be required to operate the machine. They will be supervised directly by the Manager of the cooperative.

Purchasing

Purchasing of supplies and other required spare parts of the transplanter shall be attended to by the cooperative.

b. Work Environment

TUBFARMCO abides by Cooperative principles in the performance of their daily activities. An organizational structure is in place which is followed by the Board of Directors, the current officers, and the members. Staff are compensated according to their assigned tasks or position. Trainings are afforded to them to be more efficient in carrying out their duties and functions.

c. Business Ethics and Social Responsibility

TUBFARMCO shall abide with the mission and goals of the cooperative by providing services to its members and non-members with equal access and fairness.

d. Occupational Health and Safety Management

The operators and helpers will be given orientation on how to use properly the rice transplanter machine.

3. Technical Aspect NA

a. Operational and Outsourcing Practices

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Department of Science and Technology	Report No	
	Page No.	
	Audit Date(s)	

Production system

Production system for paddy rice will be improved through the introduction of the rice transplanter technology.

Production Planning and Control

Schedule of transplanting shall be established.

Production Layout

Not applicable since the equipment will be operated in the rice fields.

Work Study/Improvement

Not applicable

Equipment Management and Maintenance

Proper maintenance of the machine shall be scheduled. PSTC shall provide training on preventive maintenance.

Quality Assurance System

Not applicable

Outsourcing Practices



Supplies will be purchased from established suppliers in Sablayan. If there are no available supplies, TUBFARMCO usually place their orders from suppliers in Manila.

b. Product and Process Performance and Improvement NA**Re-engineering and Research and Development**

Not applicable

Performance Measures and Results – Process

Performance of the rice transplanter will be monitored as to its described features. Results of monitoring will be documented for future reference.

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Department of Science and Technology	Report No	
	Page No.	
	Audit Date(s)	

Performance Measures and Results – Product

Not applicable

Procedures for Continuous Improvement

Not applicable

Product Quality Standards

Not applicable

c. Environmental Management System**Waste Management**

No wastes will be generated from the rice transplanter.

4. Marketing Aspect NA**a. Marketing Plan**

Patronage of use of the rice transplanter has its captive users – the members and other farmers. Promotion will be taken care of by the TUBFARMCO themselves.

b. Market Outlets

TUBFARMCO shall be its market outlet. This will be promoted to the members and other farmers in the area.

c. Promotional Activities



Promotional activities will be through word-of-mouth.

d. Market Competitors

TUBFARMCO has no competitors at the moment.

5. Finance**a. Cash Flow and other related documents**

Cash Flow shall be decided by the Coop's Finance staff. Books will be maintained.

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	Page No.	
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b. Source of capital/credit

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c. Accounting System

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CONCLUSIONS


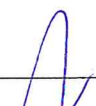
Based on the technology needs assessment (TNA) conducted through preliminary discussion with OMSC Researchers, the TNA team concludes the following:

1. The proposed project is a viable project and promises a great help to the farmers.

RECOMMENDATIONS

The following are recommended by the TNA team:

1. Facilitate Memorandum of Agreement with identified stakeholders for the successful implementation of the project.
2. Constantly monitor the implementation of the project in coordination with the stakeholders based on the set parameters and component indicators.
3. The DOST MIMAROPA should extend technology assistance to Tuban Blessed Farmers Multi-Purpose Cooperative to attain its objective of providing environment-friendly farm implement.

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