

DOST TNA Form 01**APPLICATION FOR TECHNOLOGY NEEDS ASSESSMENT**

Name of Enterprise: Genaro ARB Multi-Purpose Cooperative (GENARO ARB MPC)		
Contact Person: LEODEGARIO P. QUILIT, JR.	Position in the Enterprise: CHAIRPERSON	
Office Address : Sitio Fernandez, Poblacion, Magsaysay, Occidental Mindoro	Tel. No.: 09205-665-2937	Fax No.:
	E-mail Address: genarompc_mgy@yahoo.com	
Factory Address: Sitio Fernandez, Poblacion, Magsaysay, Occidental Mindoro	Tel. No.	Fax No.
	E-mail Address: N/A	
Website:		

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.


LEODEGARIO P. QUILIT, JR.
Chairperson

February 06, 2023
Date

Attachment A.

Enterprise Profile

Name of Enterprise:	Genaro ARB Multi-Purpose Cooperative (Genaro ARB MPC)	
Production Site/Location:	Sitio Fernandez, Poblacion, Magsaysay, Occidental Mindoro	
Business Permit No.:	2022-0106-0057	Year Registered: 2022

Brief Enterprise Background:

Genaro ARB Multi-Purpose Cooperative was formerly Genaro Samahang Nayon Inc. organized on January 12, 1982 with DA registration No. 04-05-06-000 III with thirty five members.

In 1988 it was converted into a marketing cooperative as Genaro Marketing Cooperative Inc. with DA Registration No. R-IV-FF-560 dated May 25, 1988 on June 20, 1988 it was amended into a Multi-Purpose Cooperative with the Bureau of Agricultural Cooperative Development (BACOOD) under Registration Certificate No.R-IV-CA-0347 as Genaro Multi-Purpose Cooperative was confirmed by the Cooperative Development Authority (CDA) on January 21, 1991 with confirmation No. 171.

Mr. Claudio B. Garcia was the founding Chairperson. At the time of its registration, its authorized Capital Stock was five hundred thousand pesos (P500,000.00) with Paid Up Capital of twenty thousand (par value of one hundred pesos per share) with 49 members.

The organization is now Genaro ARB Multi-Purpose Cooperative (Genaro MPC) with its CDA Registration No.9520-04001662 issued November 4,2009, with principal office located at Sitio Fernandez, Poblacion, Magsaysay, Occidental Mindoro ,the authorized capital of the cooperative is Thirteen Million Six Hundred Eighty Thousand Ninety Four Pesos and .40/100, (13,680,094.40) with the total membership of two hundred ninety two (292), having a paid up capital of Eight Million Nine Hundred Thirty Nine Thousand Six Hundred Twenty Six 8,939,626.00, members are coming from the different Sitio's and Barangays of the Municipality of Magsaysay.

The cooperative is having a total assets of 83,276,695.63 as of December 31, 2022, and having a net surplus of 3,021,801.90 which distributed as follows to the General Reserve Fund ,Education and Training Fund, Union and Federation ,Comm. Dev. Fund ,Interest on Capital Share and Patronage Refund.

Year enterprise was established: 1982

Initial capitalization: 500,000.00

Type of Organization:

- Single Proprietorship
- Cooperative
- Partnership
- Corporation
 - Profit
 - Non-Profit
- LGU

Enterprise Registration No.: CDA 9520-04001662 Year Registered: 2009
Classification according to capital Present Capitalization: 22,046,501.03

- 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:	M	F
Direct Workers		
Production	5	
Non-production	6	11
Indirect/Contract Workers		
TOTAL	11	11

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) _____
 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:

- a. Palay Trading, Consumer Stores, Agri-inputs Dealer
b. Re-lending, Bank-like Savings Deposit
c. Rice Milling, Drying, Harvesting/Threshing, Tractor, Trucking

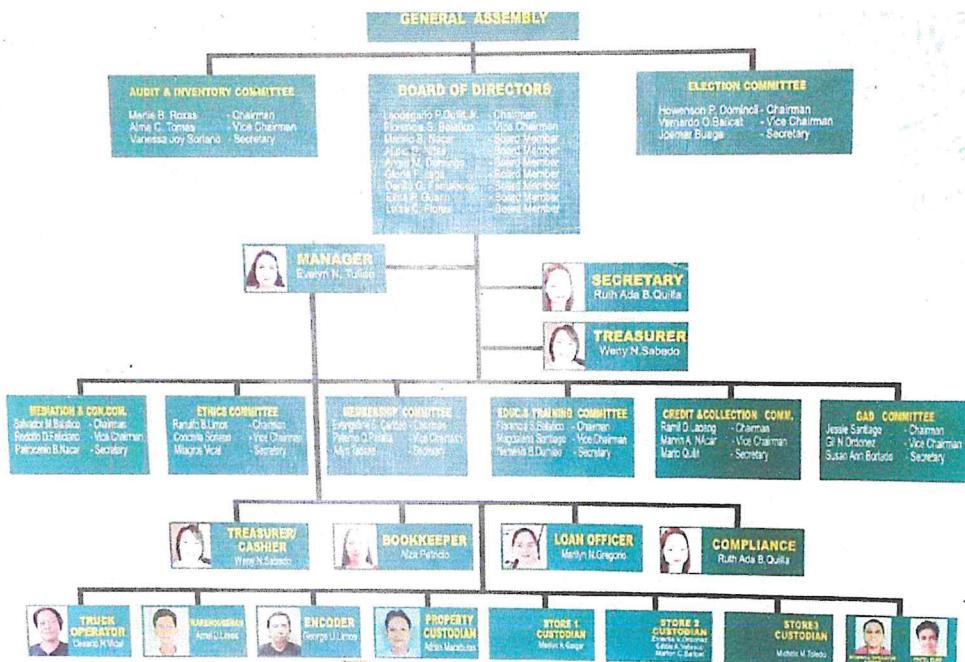
2. Reason why assistance is being sought:

- a. Frequent Power Interruptions
b. Frequent Fuel Price Increase

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

Genaro ARB MPC did not consult other agencies for the requested intervention since other agencies do not provide the necessary technology interventions that will address problems the cooperative is currently facing.

Organizational Structure



4. Enterprise's plan for the next 5 years

In the next 5 years, Genaro ARB MPC plans to improve its facilities through internal and external outsourcing.

Next 10 years?

In the next 10 years, Genaro ARB MPC plans to implement other income-generating projects and effectively provide members with access to quality pos-harvest facilities and other social services.

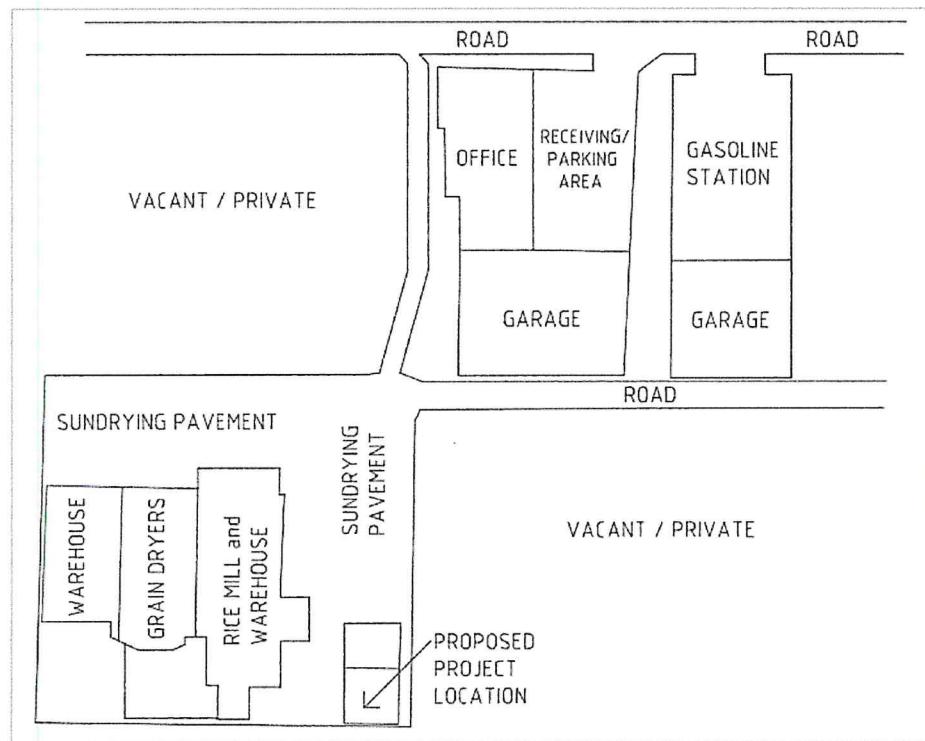
5. Current agreements and alliances undertaken

None

➤ Existing Functional Production Equipment

Type of Equipment	Specifications	No. Of Units	Cost (Php)	Year Acquired
Mechanical Grain Dyer		1	Granted by D.A.	2022
Rice Transplanter		1	Granted by D.A.	2022
Combine Rice Harvester	DC 70 PH OLUS	1	Granted by D.A.	2021
Wing Van	Isuzu	1	Granted by D.A.	2021
4-Wheel Tractor	Yanmar 351A	1	Granted by D.A.	2020
Mechanical Grain Dyer		1	Granted by D.A.	2017
Generator Set	R180	1	Granted by D.A.	2017
Warehouse (JICA)		1	Granted by D.A.R.	2013
Sundrying Pavement		1	Granted by D.A.	2013
Combine Rice Harvester	Ford	1	Granted by D.A.	2010
4-Wheel Tractor	Jander	1	Granted by D.A.	2010
Mechanical Grain Dyer		1	Granted by D.A.	

- Production Problems and Concerns
 - Frequent power interruptions and fuel price increase
- Production Waste Management System
 - N/A
- Plant Lay-Out



- Process Flow

Currently, Genaro ARB MPC utilized diesel engine in paddy drying and rice milling. Being the usual prime mover of most agricultural equipment, the diesel/gasoline engine produces power which is transferred to the agricultural equipment to perform the needed operation.



- Inventory System

Inventory is being conducted by the Audit and Inventory Committee
- Maintenance Program

All equipment and machineries are being scheduled for maintenance based on the manufacturers' maintenance manual.
- cGMP/HACCP Activities

None
- Supplies/Purchasing System

N/A

- **Marketing**

- Marketing Plan
N/A
- Market Outlets and Number
None
- Promotional Strategies
None
- 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

Please see attached.

- Source(s) of capital/credit
Revolving capital is being sourced out from generated income.
- Accounting System

Genaro ARB MPC has its own bookkeeper who ensures that all transactions are properly recorded. Services of a registered accountant are also sourced out yearly.

- **Human Resources**

- Hiring and Criteria
 - Active member or family of Genaro ARB MPC members
 - Good moral character
 - Willingness to work and communicate with different people
 - Physically and mentally fit
 - Willingness to obey all employees and rules and regulations
- Incentives to Employees
 - 13th month pay
 - Performance bonus
 - PhilHealth Benefits
 - SSS Benefits
 - Pag-IBIG Benefits

- Training and Development
 - Cooperative Management and Good Governance
 - Strategic Planning
 - Self-Risk Assessment & Management
 - Training Course on the Operation and Management of FLGC
 - Human Resource Management & Development
 - Policy and Rules Formulation
 - Effective Communication Skills
 - Records Management
 - Parliamentary Procedure
 - Basic Cooperative Course
 - Basic Accounting for Non-Accountants
 - Financial Management and Cooperative Standard
 - Entrepreneurial & Business Management
 - Orientation on Labor and Other Related Laws
- Safety Measures Practiced
 - Wearing of safety gears for machinery operators is strictly required.
 - Wearing of face masks for all employees is also strictly required.
- Other Employee Welfare
 - None
- Other Concerns
 - None

Prepared by:

Validated by:


LEODEGARIO P. QUILIT JR.

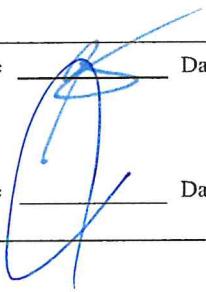
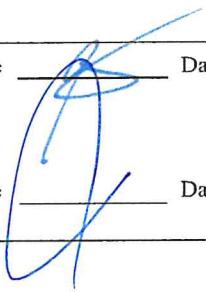
Chairperson


GLETSER C. MALIBIRAN

Science Research Specialist II

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TECHNOLOGY NEEDS ASSESSMENT (TNA) REPORT		
COMPANY:	Genaro ARB Multi-Purpose Cooperative (Genaro ARB MPC)	
ADDRESS:	Sitio Fernandez, Poblacion, Magsaysay, Occidental Mindoro	
SCOPE OF ASSESSMENT*		
<p>The TNA covered the following areas:</p> <ol style="list-style-type: none"> 1. Strategic Direction <ol style="list-style-type: none"> a. Vision and mission b. Plans and Objectives c. Strategic alliances and current agreement 2. Management Aspect <ol style="list-style-type: none"> a. Human resource management b. Purchasing c. Work environment d. Corporate social responsibility e. Occupational health and safety management 3. Technical Aspect <ol style="list-style-type: none"> a. Operational and outsourcing practices <ul style="list-style-type: none"> -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 <ul style="list-style-type: none"> -reengineering and Research and Development -procedures for continuous improvement -Product Quality standards c. Environmental Management System <ul style="list-style-type: none"> -waste management 4. Marketing Aspect <ol style="list-style-type: none"> a. Marketing plan b. Market outlets and number c. Promotional strategies d. Market competitors e. Packaging 5. Finance <ol style="list-style-type: none"> a. Cash flow and other related documents b. Sources of capital c. Accounting system 		
<p>* Scope of TNA is based on Technology Assessment Plan (TAP)</p>		

Reported by	GLETSER C. MALIBIRAN	Signature		Date	<u>02/13/2023</u>
Name of TNA Team Leader					
Attested by	JERRY B. MERCADO	Signature		Date	<u>02/20/2023</u>
Name of ARD					

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SUMMARY OF ASSESSMENT

BACKGROUND

Genaro ARB Multi-Purpose Cooperative was formerly Genaro Samahang Nayon Inc. organized on January 12, 1982 with DA registration No. 04-05-06-000 III with thirty five members. In 1988 it was converted into a marketing cooperative as Genaro Marketing Cooperative Inc. with DA Registration No. R-IV-FF-560 dated May 25, 1988 on June 20, 1988 it was amended into a Multi-Purpose Cooperative with the Bureau of Agricultural Cooperative Development (BACOOD) under Registration Certificate No.R-IV-CA-0347 as Genaro Multi-Purpose Cooperative was confirmed by the Cooperative Development Authority (CDA) on January 21, 1991 with confirmation No. 171.

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The cooperative is having a total assets of 83,276,695.63 as of December 31, 2022, and having a net surplus of 3,021,801.90 which distributed as follows to the General Reserve Fund ,Education and Training Fund, Union and Federation ,Comm. Dev. Fund ,Interest on Capital Share and Patronage Refund.

METHODOLOGY

The technology needs assessment (TNA) was conducted through an ocular inspection of the cooperative's facility and existing production equipment.

Summary of Findings

1. Strategic Direction

a. Vision and mission

The cooperative's vision, encapsulated in the statement "Matatag na pananalapi, suporta sa mga kasapi at pamayanan" (*Financial stability, support to members and community*)

Reported by	GLETSER C. MALIBIRAN Name of TNA Team Leader	Signature	Date
Attested by	JERRY B. MERCADO Name of ARD	Signature	Date

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support for members and communities), reflects to its goal of establishing a successful and prosperous cooperative and community.

The cooperative's commitment to its mission "Palakasin ang programang pangkabuhayan ng mga kasapi" (*Strengthen the livelihood programs of our members*) remains unwavering. GENARO ARB MPC believes that by strengthening the members' livelihood programs, they are contributing to their financial well-being and overall growth of the cooperative.

b. Plans and Objectives

Genaro ARB MPC plans to enhance its infrastructure by engaging in both internal and external outsourcing. The cooperative also envisions the implementation of additional income-generating projects. Additionally, the cooperative is committed to efficiently offering its members access to high-quality post-harvest facilities and a range of essential social services.

c. Strategic alliances and current agreements

None

2. Management Aspect

a. Human Resources

➤ Number of Employees:	M	F
Direct Workers		
Production	5	
Non-production	6	11
Indirect/Contract Workers		
TOTAL	11	11

➤ Hiring and Criteria

- Active member or family of Genaro ARB MPC members
- Good moral character
- Willingness to work and communicate with different people
- Physically and mentally fit
- Willingness to obey all employees and rules and regulations

➤ Incentives to Employees

- 13th month pay
- Performance bonus
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- Pag-IBIG Benefits

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		02/13/2023	
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		02/13/2023	

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➤ Training and Development

- Cooperative Management and Good Governance
- Strategic Planning
- Self-Risk Assessment & Management
- Training Course on the Operation and Management of FLGC
- Human Resource Management & Development
- Policy and Rules Formulation
- Effective Communication Skills
- Records Management
- Parliamentary Procedure
- Basic Cooperative Course
- Basic Accounting for Non-Accountants
- Financial Management and Cooperative Standard
- Entrepreneurial & Business Management
- Orientation on Labor and Other Related Laws

b. Purchasing

N/A

c. Work Environment

Genaro ARB MPC has adequate space for its operation, particularly rice drying and rice milling. Also, the cooperative has enough space for the safety of its equipment. In addition, the cooperative has also established good working relationships between workers and management.

d. Business Ethics and Social Responsibility

Genaro ARB MPC regularly pays for its business licenses and taxes fairly and ensures compliance with the CDA and LGU requirements. As part of social responsibility, the cooperative treats members and customers with respect and fair pricing for their services.

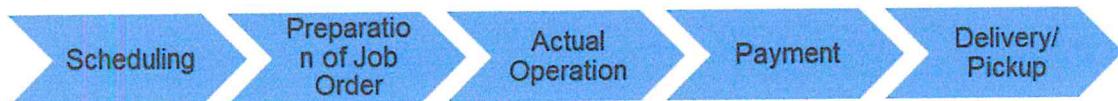
e. Occupational Health and Safety Management

Wearing of safety gears for machinery operators is strictly required.

3. Technical Aspect

a. Operational and Outsourcing Practices

Production system

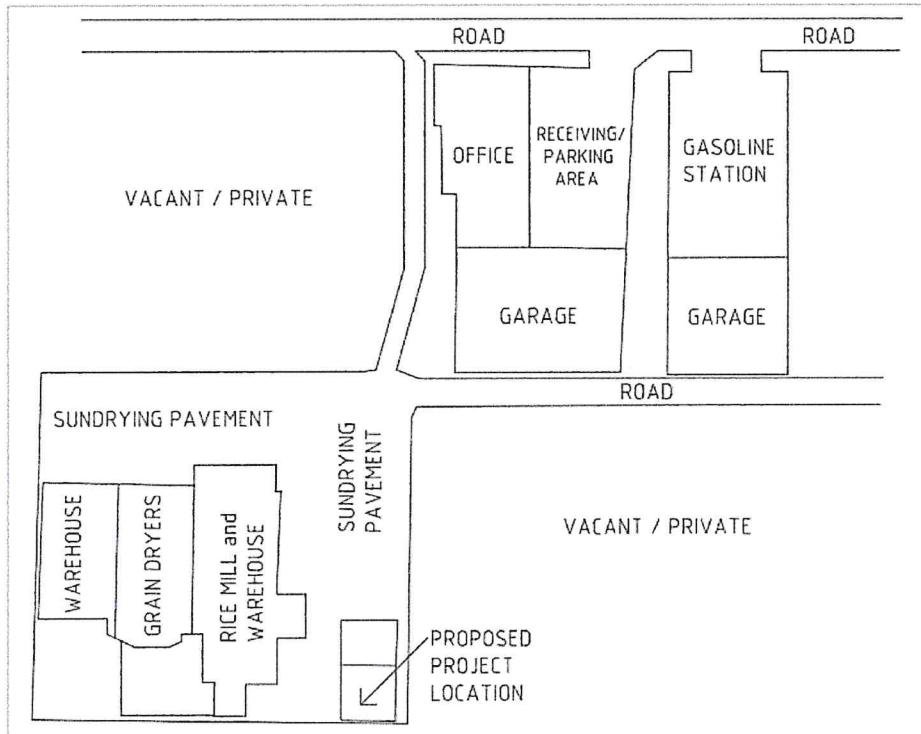


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Production Planning and Control

- N/A

Plant Layout**Work Study/Improvement**

- N/A

Equipment Management and Maintenance

- All equipment and machineries are being scheduled for maintenance based on the manufacturers' maintenance manual.

Quality Assurance System

- None

Outsourcing Practices

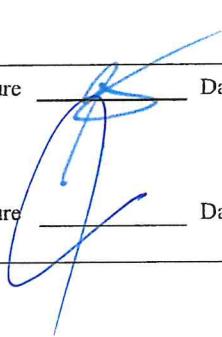
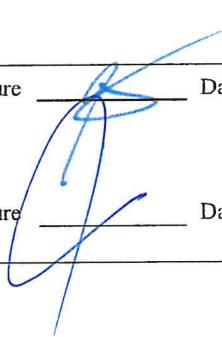
- Fuel & electricity are being sourced from local providers/suppliers.

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

- None

Performance Measures and Results – Process

- None

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Name of TNA Team Leader					
Attested by	<u>JERRY B. MERCADO</u>	Signature		Date	<u>02/20/2023</u>
Name of ARD					

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Performance Measures and Results – Product

- None

Procedures for Continuous Improvement

- None

Product Quality Standards

- None

c. Environmental Management System**Waste Management**

Rice hull produced from rice milling are being sold locally, which are then used to produce carbonized rice hull for soil conditioning.

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

N/A

b. Market Outlets

None

c. Promotional Activities

None

d. Market Competitors

N/A

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

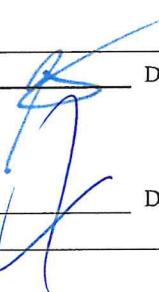
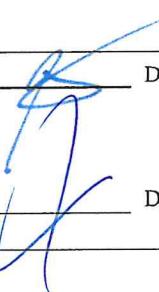
Please see attached financial statements.

b. Source of capital/credit

Revolving capital is being sourced-out from the generated income, dues, and membership fees.

c. Accounting System

Genaro ARB MPC has its own bookkeeper who ensures that all transactions are properly recorded. Services of a registered accountant are also sourced out yearly.

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Name of TNA Team Leader					
Attested by	JERRY B. MERCADO	Signature		Date	02/10/2023
Name of ARD					

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CONCLUSIONS

Based on the interview and ocular inspection, the TNA team concludes the following:

1. The cooperative has a well-organized management system, but the operational system needs further improvement, particularly to address problems in frequent power interruption and increasing fuel prices;
2. The needed improvement in firm's operational system will require a technology that utilizes agricultural wastes as fuel;
3. The cooperative is capable leading an R&D project for powering their postharvest equipment with 20-KVA rice husk gasifier-diesel engine-electric power generator; and
4. The cooperative can provide counterpart funds for the operation, maintenance, and safekeeping of the technology.

RECOMMENDATIONS

The following are recommended by the TNA team:

1. The DOST MIMAROPA should extend assistance to the firm by providing funds for the fabrication of 20-KVA rice husk gasifier-diesel engine-electric power generator;
2. The DOST MIMAROPA should assist the firm in:
 - a. Conduct of Training/Seminar to Technical Staff and Fabricator re: Rice Husk Gasification; and
 - b. Performance testing and evaluation of the gasifier and engine unit.
3. The firm should submit actual operation/production data for the complete preparation of project proposal. DOST MIMAROPA to assist in the revision of submitted proposal.
4. The firm should submit other documents as attachment to the proposal. DOST MIMAROPA to endorse complete document to NPMO after RTEC review of proposal.

Reported by	GLETSER C. MALIBIRAN Name of TNA Team Leader	Signature	Date
Attested by	JERRY B. MERCADO Name of ARD	Signature	Date