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TECHNOLOGY NEEDS ASSESSMENT (TNA) REPORT	
COMPANY:	Sangguniang Barangay of Maniwaya
ADDRESS:	Brgy. Maniwaya, Sta. Cruz, Marinduque
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 	

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- d. Market competitors
- e. Packaging

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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Summary of Assessment

Background

Maniwaya is a barangay in the municipality of Sta. Cruz with population of 1,573 and total land area of 325.9398 hectares. It was declared as one of the GIDA areas of the province by the National Economic Development Authority (NEDA) last 2019.

Barangay Maniwaya is situated in the southwestern part of the municipality of Sta. Cruz approximately 10 km from the Barangay Buyabod pier about 30 to 45 minutes ride by motorized banca and 14km from municipal hall of LGU Sta. Cruz.

Communities of Barangay Maniwaya relies on deep well with water pumps as their source of domestic water. Most of the constituents has rainwater collectors installed in their houses which is one of the sources of their drinking water. An estimated of 60-80 containers of potable water per day is shifted to Brgy. Maniwaya, Sta. Cruz, Marinduque thru banca which is sold in the community for Php.55.00 each.

Methodology

The technology needs assessment (TNA) was conducted through an interview with the punong barangay of Maniwaya, Hon. Analiza C. Romasanta.


Summary of Findings

1. Strategic Direction

a. Vision and mission

VISION:

Barangay na may pananalig sa Diyos, nagkakaisang mamayang, maayos, maunlad at makakalikasan tungo sa isang magandang hinaharap.

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Mission:

Maging isang barangay na mapayapa, produktibo na handa sa anumang sakuna at kalamidad.

b. Plans and Objectives

Sangguniang Barangay of Maniwaya's approach to providing public service to its constituents is to connect them with other government entities that can provide technical assistance for continued improvement.

c. Strategic alliances and current agreements

Sangguniang Barangay of Maniwaya, like other barangays, is now connected to many government entities that provide them various types of support.


2. Management Aspect

a. Human resources

The Sangguniang Barangay of Maniwaya plans to hire 1 to 2 workers in the production area. Residents of Barangay Maniwaya will be hired. The Barangay Maniwaya will also assign its barangay tanod will be assigned to patrol in the area to ensure the safety of the equipment and facility.

b. Purchasing

The LGU Sta. Cruz follows the **R.A. 9184**, entitled "An **Act** Providing for the Modernization, Standardization and Regulation of the **Procurement** Activities of the **Government** and for other Purposes," otherwise known as the **Government Procurement Reform Act**.

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c. Business Ethics and Social Responsibility

As the Local Government, they are responsible for supporting the community of Brgy. Maniwaya, Sta. Cruz, and ensuring public safety. By collaborating with DOST-MIMAROPA for technical assistance, the barangay intends to propose a water desalination project to ensure a sustainable supply of potable water for the community.

3. Technical Aspect

a. Operational and Outsourcing Practices

Production system

The proposed livelihood enterprise is set to be established in the Barangay of Maniwaya through the DOST technical assistance. A comprehensive package of technical assistance will be provided, including equipment, training, and other necessary programs to support the Sangguniang Barangay of Maniwaya in successfully implementing the project.

Production Planning and Control

The Sangguniang Barangay of Maniwaya will handle the overall operation of the project and ensure the safety of the production area and equipment.

Production Layout

Production area will be designed based on the requirements of the supplier also following the standards for water station.

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Work Study/Improvement

The workers will participate in training sessions facilitated by PSTO-Marinduque on food safety, as well as by the equipment supplier on technical operations and maintenance.

Equipment Management and Maintenance

The proposed technology (desalination) will be regularly maintained following the preventive maintenance and calibration program to be set by the supplier.

Quality Assurance System

Thru the government procurement system, the quality of the procured equipment will be assured.


*b. Product and Process Performance and Improvement*Performance Measures and Results – Process

Standard operating procedures based on the recommended process will be followed and monitored.

Performance Measures and Results – Product

Regular monitoring of final product (water quality) will be conducted with the assistance of the Provincial Health Office.

*c. Environmental Management System*Waste Management

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Wastewater will be directed to the septic tank. Moreover, a study will also be conducted where the wastewater is planned to be used as fertilizer for coconut trees in the area.

4. Marketing Aspect

a. Marketing Plan

Each household in the barangay will be informed about the project and its benefits to the community. The existing DOST-MIMAROPA-assisted project in the nearby island barangay of Mongpong will serve as a reference example to illustrate the advantages of the proposed project to the residents.

b. Market Outlets

The target market of the project will be the communities of Barangay Maniwaya and the tourist considering the gradual increase in tourism in the area.

c. Promotional Activities

The Sangguniang Barangay of Maniwaya will assist the hired workers in promotion of the target product (potable water).

d. Market Competitors

Most of the constituents (**95% or 1,494**) of Brgy. Maniwaya is dependent on purified water coming from the mainland which **costs ₱ 55.00 per container (20 liter cap.)**.

Other households without the capacity to buy purified water is relying on the shallow well (tabsing) as their source of drinking water. At present about 75 containers are being transported to the island per day, and this costs about **₱ 4,125.00**.

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The existing water station that supplies the potable drinking water to Brgy. Maniwaya are Aqua Don Water Refilling Station from Brgy. Aloba, Sta. Cruz and the Paredes Water Refilling Station from Brgy. Buyabod, Sta. Cruz both from the mainland.

5. Finance

a. Source of capital/credit

DOST-MIMAROPA will offer technical assistance through the provision of water desalination equipment, while the Provincial Government of Marinduque, LGU Sta. Cruz, and the Sangguniang Barangay of Maniwaya will contribute counterpart funding.


b. Accounting System

A separate account will be provided to record all the transactions of the project /enterprise and have revolving funds to ensure continuous operations of the project.

CONCLUSIONS:

Based on the interview and ocular inspection the TNA team concludes the following;

1. There is a problem on the source of potable water for the whole Barangay of Maniwaya.
2. There is a need to provide technical assistance through water desalination equipment to address Barangay Maniwaya's challenges in accessing a reliable source of potable water. There is also need for the

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conduct of seminar/training food safety, technical operations and maintenance of the equipment.

3. The needed technical assistance is timely and would enable the Sangguniang Barangay of Maniwaya to meet their vision and mission.

RECOMMENDATIONS:

The following are recommended by the TNA team:

1. DOST-MIMAROPA should extend assistance to the Sangguniang Barangay of Maniwaya to meet the community's need for a reliable source of potable drinking water.
2. DOST-MIMAROPA through the PSTO- Marinduque to provide necessary trainings.

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