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### TECHNOLOGY NEEDS ASSESSMENT (TNA) REPORT

COMPANY:	LGU-SAN JOSE/BLGU-PINAMIHAGAN
ADDRESS:	BRGY. PINAMIHAGAN, SAN JOSE, ROMBLON



### SCOPE OF ASSESSMENT

- A. Strategic Directions
  - a. Vision and Mission
  - b. Goals and Objectives
  - c. Strategic Alliances
- B. Management Aspects
- C. Technical Aspects
- D. Marketing Aspects
- E. Financial Aspects

### SUMMARY OF ASSESSMENT

#### BACKGROUND:

San Jose is an island municipality in Romblon. Despite the surge in its tourism sector, a significant portion of its population made up of Ati natives and migrants from Panay remain marginalized. The IP community in this barangay is composed of 15 households. Each household has 8-15 members totaling an average of 225 IPs. These tribal communities are disconnected from the mainland with mountainous terrain making it more difficult for them to access necessary resources like food stocks, water, power, and even education. Among its old customs that enable them to survive the grips of hunger is small-scale agriculture. In 2022, a common processing facility for cassava and corn was established to increase the community's productivity and to provide them with entrepreneurial activity as an additional source of income. Water poverty on the other hand remains to be a major source of burden to the IP community. These indigenous people (IP) travel by foot to gather domestic water from the nearest source which is more than 1 kilometer away from their community. However, travel to the source is not a burden to the IPs. The difficult part is when they travel back to their community while carrying the added weight of water containers. Some households with extra money resort to hiring motorcycles to convey their water. These motorcycles charge them PhP20.00 per gallon. After the motorcycles, on the other hand, the IPs still need to travel a few meters by foot to their houses which are in the mountainous part of the community.

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### METHODOLOGY

Once the project has been approved and funding has been allocated, the Regional Office, with the help of the PSTC, would facilitate the purchase of the proposed facility. The baseline data would then be established through a meeting with the IP community, the bLGU of Pinamihagan, and the LGU-San Jose. The solar-powered water pumping system and the primary pipes of the distribution system will be DOST-MIMAROPA's counterpart. Meanwhile, the LGU-San Jose will be tapped to provide counterparts for the housing of the facility and for the secondary pipes going to each household in the IP community. When the facility is complete, training on its operation and maintenance would be provided to the operators. The operators will be assigned by the bLGU-Pinamihagan. Also, a microbial and chemical analysis of deep well water will also be conducted before distributing the water to the IP community. This is to guide project stakeholders in decision-making and future planning about the project. Since the facility is solar-powered, there is no need to allocate energy expenses to operate the facility. However, the bLGU-Pinamihagan would be encouraged to allocate funds for the replacement of batteries and inverters when they reach their maximum service life. This will be a minimum amount though because batteries and inverters have at least 5 years' of service life. Moreover, since the beneficiaries will have time freedom from having a direct domestic water supply, conduct of relevant training activities will be targeted to improve the productivity of the IP-beneficiaries to maximize their available time. Monitoring of the interventions including the corn and cassava facility will be charged against the budget of this project. A staff from the Romblon Provincial Science and Technology Office would also be hired to focus on this project and to manage the overall aspects of the project.

### SUMMARY OF FINDINGS



#### 1. Strategic Direction

##### a. Vision and mission

Industrialization is the major goal of the LGU. It aims to improve the lives of its people through developing more livelihood, business opportunities and employment.

##### b. Plans and Objectives

The local government is determined to have a stable source of electricity and water as well as a progressive economy in which its constituents especially those who are most vulnerable such as IPs will benefit from. Also, the mayor dreams to have additional establishments like airports, and tourism stations and hubs more employment opportunities for its constituents. The mayor also

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envisions its island to become one of the renowned tourist attractions of the province, capitalizing on its economic potential and island beauty. Having this in mind, the mayor also envisions more developed establishments and more active economic activities.

**c. Strategic alliances and current agreements**

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

**2. Management Aspect**

**a. Human resources**

The bLGU will be the one responsible to assign a person who will operate the facility and oversee the project. The assigned operator will be given various training activities such as training on the operation and maintenance of the equipment, 5S, basic financial management, and basic bookkeeping.

**b. Purchasing**

Raw water that will be generated and distributed through the facility will be sourced by an electric motor pump powered by solar energy to reduce overhead expenses. The water pump is located near the barangay hall of the bLGU-Pinamihagan where groundwater is ensured.

**c. Work environment**



The target work environment will be prepared ahead of time. This will be ensured through lay outing the facility according to 5S and OS and through preparing health and safety kits in case of emergencies.

**d. Business ethics and social responsibility**

The bLGU is committed to organizing and facilitating several of civic activities to develop and improve the welfare of its people.

**e. Occupational health and safety management**

The bLGU observes occupational health and safety during its operation and processes. It has safety kits, and first-aid kits on standby, as well as emergency gear to minimize risks during untoward incidents.

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## 3. Technical Aspect

### a. Operational and outsourcing practices

#### Production system

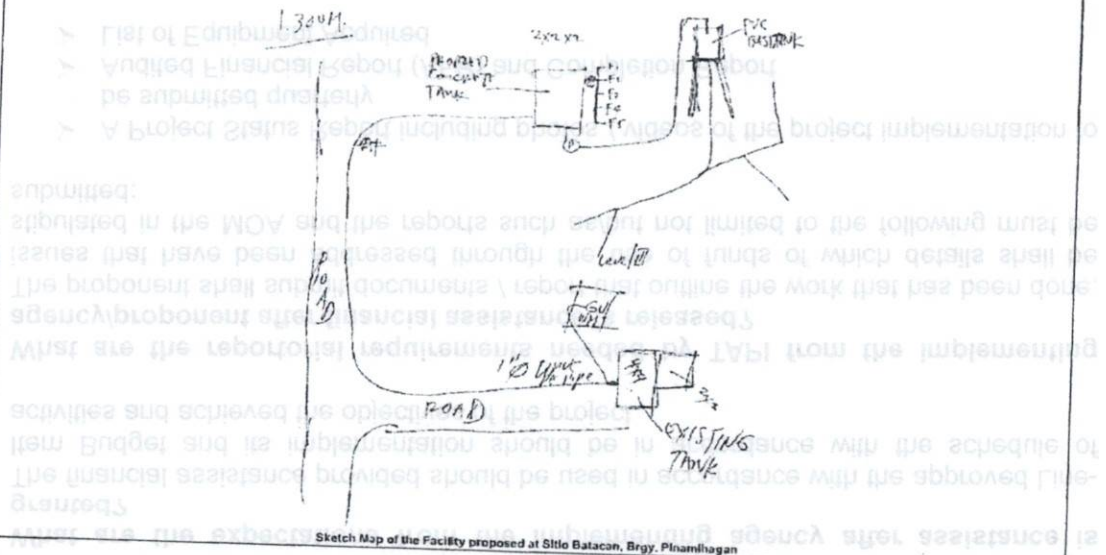
The project would focus on water generation for domestic use. Production will depend on the water requirement of the IP community. The LGU-San Jose will be tapped to assist the bLGU-Pinamihagan in overseeing the facility to maximize its use and ensure its prolonged service life.

#### Production planning and control

Planning and control of production will be directed by the bLGU-Pinamihagan with close supervision of LGU-San Jose and PSTO Romblon. Production control will be based on the water needs of the IP community, and the other community which shares the water source located in Sitio Sugod. Rationing and scheduling of water supply to these communities are being eyed to that the source will not run out of water.

#### Production layout

This sketch map developed by the LGU-San Jose Municipal Engineering Office with the help of PSTO Romblon is the proposed layout of the facility and the distribution system to ensure stable source of production.



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## Work Study/Improvement

Work study and improvement will focus on how to extend the water storage capacity of the concrete water tanks as source of the domestic water of the IP community in Brgy. Pinamihagan. Possible construction of additional water tanks or discovery of new water pump site will also be explored.

## Equipment management and maintenance

Training on the facility operation and maintenance will be provided to the bLGU. However, maintenance of the facility will be the counterpart of the bLGU management. Maintenance plan will also be developed to ensure systematic and regular maintenance schedule of the facility.

## Quality assurance system

N/A

## Outsourcing practices

N/A

## b. Product and process performance and improvement

### Re-engineering and research development

The bLGU will engage in research and development for operation improvement and water generation facility with distribution lines efficiency. This also will be done in partnership with the LGU-San Jose, DOST-MIMAROPA, and the academe.

### Performance measures and results – Process

N/A

### Performance measures and results – Product

N/A

### Procedures for continuous improvement

N/A

### Product quality standards

N/A

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**c. Environmental management system**

**Waste management**

N/A

**4. Marketing Aspect**

**a. Marketing plan**

Marketing will not be necessary as the product water is really needed by the community and it will be distributed directly to households of the IPs.

**b. Market outlets**

N/A

**c. Promotional activities**

N/A

**d. Market competitors**

N/A

**5. Finance**

**a. Cash flow and other related documents**

The bLGU has an accounting division to ensure all the cash-related transactions of the mayor and other officials in a specific project are tightly monitored and adjusted according to purpose. The accounting division also keep the municipal records of cash flow and financial capability per project.

**b. Source of capital/credit**

The local government send proposals to higher authority and other agencies to finance their employees' salary and other projects too.

**c. Accounting system**

The bLGU employed a treasurer to oversee the financial flow of their governance. The treasurer is the one who recommends for approval for a project's financial counterpart. He also ensure systematized cash-flow on every project to ensure proper implementation.

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## CONCLUSIONS:

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

1. The proponent has an organized management that is willing to implement projects under DOST-MIMAROPA'S CEST program. The proposed community could carry additional facility, workforce movement, and new processes.
2. The proponent has good management skills. However, its water management still needs further improvement. Training activities and other interventions are needed.
3. The needed intervention applied under CEST would be the establishment of a domestic water generation facility with distribution system for Indigenous People of Brgy. Pinamihagan, San Jose.

## RECOMMENDATIONS:

The following are recommended by the TNA team:

1. DOST MIMAROPA should extend relevant interventions such as adoption of SES technology for domestic water generation with distribution system for Indigenous People of Brgy. Pinamihagan, San Jose.
2. If needed the DOST MIMAROPA should assist the community in training and other necessary interventions.
3. The proponents should submit additional requirements to go with the proposal.

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