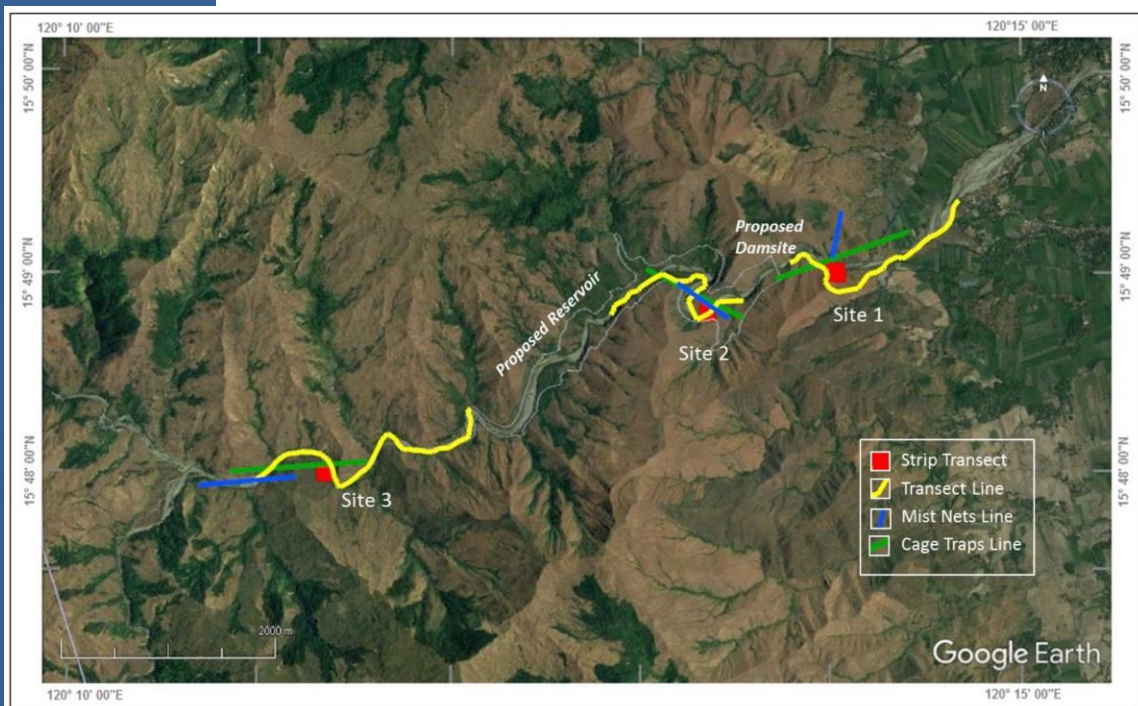


# Executive Summary



The Bayaoas Small Reservoir Irrigation Project (BSRIP) is a critical initiative led by the National Irrigation Administration (NIA) Region I - Pangasinan Irrigation Management Office. The project aims to enhance agricultural productivity by improving irrigation infrastructure in Aguilar, Pangasinan. By constructing a zoned embankment dam and a gravity-fed irrigation system, the project seeks to address seasonal water shortages and support sustainable farming practices.

## Objectives

- Evaluate the feasibility, sustainability, and impact of the BSRIP.
- Identify key challenges and opportunities in project implementation.
- Document best practices and lessons learned.
- Provide strategic recommendations to enhance governance, operations, and long-term project effectiveness.

## Methodology

The study utilized a mixed-methods approach, including document reviews, environmental impact assessments, stakeholder consultations, and field surveys. Data collection involved:

- **Key Informant Interviews (KIIs)** with local officials, farmers, and NIA representatives.
- **Focus Group Discussions (FGDs)** with affected communities and irrigation users.
- **Desk Review** of feasibility studies, environmental compliance reports, and hydrological assessments.
- **Site Inspections** to evaluate construction progress, water management systems, and environmental safeguards.

# Executive Summary



## Key Findings

### Project Implementation and Operations

- Pre-Implementation Phase:** Planning and coordination among NIA, local government units (LGUs), and other stakeholders ensured regulatory compliance and funding allocation.
- Implementation Phase:** Construction of the dam and irrigation canals proceeded with adjustments to accommodate environmental and logistical constraints.
- Post-Implementation Phase:** Monitoring mechanisms are in place, but challenges remain in data collection, water distribution equity, and infrastructure maintenance.

### Challenges Identified

- Governance and Coordination:** Bureaucratic delays and policy misalignments affect project execution.
- Infrastructure and Technology:** While the gravity-fed system is efficient, maintenance and climate resilience need improvement.
- Environmental Impact:** The project affects forest lands and river channels, requiring strong mitigation measures.
- Socio-Economic Impact:** Increased agricultural productivity is evident, but concerns over equitable water access persist.

# Executive Summary



(a) The Sampling Team

(b) On-site Measurement of Water Quality

(c) Water Flow Measurement Using Simple Float

## Recommendations

### Governance and Coordination

- Strengthen inter-agency collaboration to enhance decision-making and streamline policy execution.
- Develop a centralized project management and reporting system.

### Infrastructure and Maintenance

- Implement long-term maintenance plans for irrigation canals and dam structures.
- Incorporate climate adaptation measures to enhance project resilience.

### Environmental and Social Safeguards

- Develop a watershed rehabilitation program to offset ecological impacts.
- Engage local communities in water resource management to promote inclusivity and sustainability.

### Monitoring and Data Management

- Improve data collection systems through digital tools for real-time monitoring and reporting.
- Conduct periodic impact assessments to refine project strategies and address emerging challenges.

## Conclusion

The Bayaoas Small Reservoir Irrigation Project significantly benefits agricultural sustainability and water resource management in Pangasinan. Continued improvements in governance, infrastructure maintenance, environmental protection, and data-driven decision-making are essential to maximize its impact. Through proactive management and sustained collaboration, the project can serve as a model for future irrigation initiatives in the region.