

INSTITUTE OF TROPICAL ECOLOGY AND ENVIRONMENTAL MANAGEMENT

Visca, Baybay City, Leyte, 6521-A Telephone: +63 53 563-7497 / 525-0140 (local 1052) Email: <u>iteem@vsu.edu.ph</u> | Website: <u>www.vsu.edu.ph</u>

EXTENSION PROPOSAL

I. BASIC INFORMATION

Program/Project Title: Development of a Province-Wide Learning Site on Sustainable Agriculture and Natural Resource Management and Assessment of Community People's Perception towards the Rainforestation KALAHI-CIDSS Program in Cabucgayan, Biliran - Phase 2: Progression of the Province-Wide Learning Site on Sustainable Agriculture and NRM through Rainforestation in Cabucgayan, Biliran

Proponents:

Project Leader

- ✓ Name: Angelita B. Orias
- ✓ Designation: Instructor
- ✓ Unit/Office: Institute of Tropical Ecology and Environmental Management
- ✓ Contact Number: 09515007159
- ✓ Email Address: angelita.orias@vsu.edu.ph

Component Leader(s)

- ✓ Name: Dr. Marlito M. Bande
- ✓ Designation: Director
- ✓ Unit/Office: Zonal Center for Biodiversity Conservation and Habitat Restoration
- ✓ Contact Number: 09462247500
- ✓ Email Address: marlitojose.bande@vsu.edu.ph
- ✓ Name: Ms. Kleer Jeann G. Longatang
- ✓ Designation: Instructor
- ✓ Unit/Office: Institute of Tropical Ecology and Environmental Management
- ✓ Contact Number: 09126944306 and 09166247666
- ✓ Email Address: kleerjeann.longatang@vsu.edu.ph
- ✓ Name: Ms. Serica Joy C. Compendio
- ✓ Designation: Instructor
- ✓ Unit/Office: Institute of Tropical Ecology and Environmental Management
- ✓ Contact Number: 09368781674
- ✓ Email Address: joy.dadios@vsu.edu.ph

Project Staff:

- ✓ Name: Juan Tanguihan
- ✓ Nature of Involvement: Laborer
- ✓ Unit/Office: Institute of Tropical Ecology and Environmental Management
- ✓ Contact Number: Not applicable
- ✓ Email Address: Not applicable

Implementing Unit: Institute of Tropical Ecology and Environmental Management

Collaborating Units/Agencies:

- ✓ Name of Agency: Local Government Unit (LGU) of Cabucgayan, Biliran
- ✓ Nature of Involvement: Technical, Administrative and Policy Recommendation
- ✓ Address: Cabucgayan, Biliran
- ✓ Contact Number:
- ✓ Email Address:
- ✓ Name of Agency: Mr. Efren B. Saz, RF adopter
- ✓ Nature of Involvement: Administrative and Managerial
- ✓ Address: Cabucgayan, Biliran
- ✓ Contact Number: 09159522381 / 09465999890
- ✓ Email Address: efren.saz@vsu.edu.ph / efrensaz@gmail.com

Development Thematic Area:

- X Agricultural Science and Technology-based Livelihood/Entrepreneurship
- Basic Education and Cultural Development
- Health and Nutrition
- X Environment and Natural Resources
- __ Local Governance
- Rural Infrastructure and Energy
- Certified Skills Development
- X DRRM & Climate Change

Project Site(s): Rainforestation demonstration farm in Brgy. Baso, Cabucgayan, Biliran

Duration: January 2024 to December 2026 (continuing)

Proposed Budget: 450,000.00

II. **TECHNICAL INFORMATION**

Rationale

The Local Government Unit of Cabucgayan, Biliran has adopted and implemented the best practice and current initiative of Visayas State University in conservation agriculture, as well as the protection and management of natural resource through the Rainforestation approach. Thus, development of the Rainforestation demonstration farm in Brgy. Baso, Cabucgayan Biliran was realized on 2018.

The developed RF demonstration farm served as a catalyst for the municipality to undertake a larger-scale program that benefited a greater number of people. The project was the KALAHI-CIDSS program, also known as the Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services, which is a poverty alleviation initiative implemented by the Department of Social Welfare and Development (DSWD). It focuses on improving the living conditions in impoverished rural areas through a community-driven development (CDD) strategy. The project was fully implemented in 2019. The DSWD provided PhP 2,227,645.00 for the development of 59.2 hectares of farm planted with 55,310 native trees, 20,470 fruit trees and 8,000 abaca; and for the salary of 348 men and 170 women during the establishment. The counterpart of Visayas State University (VSU), Environmental Leadership Training Initiative (ELTI), and LGU Cabucgayan encompasses the provision of technical expertise, financial and administrative assistance, as well as the execution of the project, respectively. After the termination of the project, the VSU, LGU Cabucgayan and the RF adopters continued the implementation of the approach to the developed farms.

In addition to the KALAHI-CIDSS project which utilized the Rainforestation approach, the developed RF demonstration farm in Brgy. Baso managed by Mr. Efren B. Saz will serve as a suitable location for environmental science and forestry students to carry out skills development, exposure to gain valuable experience and learning. It will also provide opportunities for interested individuals and groups within Biliran to enhance their skills and knowledge in this field.

B. Objectives

The phase 2 of the extension project aims to strengthen the innovations and practices of the RF demonstration site to cater more beneficiaries within the Biliran Province, as well as to the partners of ITEEM who wanted to be exposed and learned in the demonstration site. Specifically, the extension projects, aims to:

- Transform the RF demonstration farm as an officially recognized learning site for sustainable agriculture and natural resource management by obtaining accreditation from ATI, TESDA and DENR.
- 2. Carry out a site visit, provide hands-on experience at the RF demonstration farm, and support the enhancement of skills for the beneficiaries.
- 3. Monitoring and updating the status of the five RF typologies implemented in the demonstration farm, together with the progress and activities of the RF adopters.

C. Major Components

- Component 1: Uma ni Papo as Accredited Learning Site for Sustainable Agriculture and Natural Resource Management through Rainforestation Approach (Ms. Angelita B. Orias)
- Component 2: Learning and Skills Development: Hands-on Experience and Exposure in the demonstration farm of Sustainable Agriculture and NRM through Rainforestation Approach (Dr. Marlito M. Bande)

Component 3: Monitoring and Updating of the Status of the RF Typologies in the RF Demo Farm; and RF Adopters in Cabucgayan, Biliran (Component 3.1: Ms. Kleer Jeann G. Longatang – Growth Performance and Insect Assessment) (Component 3.2: Ms. Angelita B. Orias – Carbon Sequestration and Stock in the RF Demonstration Site) (Component 3.3: Ms. Serica Joy C. Dadios – Innovations and Testimonies of RF Adopters)

D. Beneficiaries

Primarily, the identified project beneficiary is the Rainforestation Demonstration Farm located in Brgy. Baso, Cabucgayan, Biliran managed by Mr. Efren B. Saz, active and very committed RF adopter. Moreover, the support provided in the demonstration farm will be efficiently used in the enhancement of the demo farm and become accredited learning site in Biliran province. With that, it will create a good venue for more beneficiary to be capacitate and learn the techniques and approaches that the adopter did prior to sustainable agriculture and natural resource management using Rainforestation technology. The potential beneficiaries encompass students, LGU personnel, NGO members, DENR representatives, farmers, and other interested parties.

E. Expected Outcome

Component 1: Uma ni Papo as Accredited Learning Site for Sustainable Agriculture and Natural Resource Management through Rainforestation Approach

- Updated development plan of the Sustainable Agriculture and Natural Resource Management Learning Site
- DTI, LGU, DENR, DA-ATI, TESDA, and DepEd accreditation certificate
- Tree registration certificate from DENR

Component 2: Learning and Skills Development: Hands-on Experience and Exposure in the demonstration farm of Sustainable Agriculture and NRM through Rainforestation Approach

- Lists and documentation of beneficiaries participated in the field exposure and skills development.
- Very satisfactory Outstanding Performance Evaluation
- Action plan (for technical persons); or sketch of development plan (for farmers)

Component 3: Monitoring and Updating of the Status of the RF Typologies in the RF Demo Farm; and RF Adopters in Cabucgayan, Biliran

Component 3.1: Growth Performance and Insect Assessment

- Morphological performance of the planted trees and perennial crops
- Insect assessment

Component 3.2: Carbon Sequestration and Stock in the RF Demonstration Site

 Carbon sequestered and in stock both from above-ground and belowground.

Component 3.3: Innovations and Testimonies of RF Adopters

Documentation on the innovations and testimonies of RF adopters

F. Potential Impact

- 1. Enhanced community awareness and engagement in the preservation of Philippine indigenous tree species and the rehabilitation of their original ecosystems.
- 2. An increase in the number of adopters of rainforestation and the rehabilitation of degraded areas into productive ones.
- 3. Enhancement of the conservation status of the endemic and native tree species found in the Philippines.

G. Methodologies/Strategies

Component 1: Uma ni Papo as Accredited Learning Site for Sustainable Agriculture and Natural Resource Management through Rainforestation Approach

- Continue the maintenance, and management of the 5.2 hectares demonstration farm.
- Updating of the development plan of the Sustainable Agriculture and Natural Resource Management Learning Site in Brgy. Baso, Cabucgayan, Biliran.
- Application for DTI, LGU, DENR, DA-ATI, TESDA, and DepEd accreditation
- Process the tree registration for all planted trees in DENR.

Component 2: Learning and Skills Development: Hands-on Experience and Exposure in the demonstration farm of Sustainable Agriculture and NRM through Rainforestation Approach

- Conduct of cross-visitation and field exposure using the rainforestation training modules.
- Learnings evaluation (pre and post evaluation)

Component 3: Monitoring and Updating of the Status of the RF Typologies in the RF Demo Farm; and RF Adopters in Cabucgayan, Biliran

Component 3.1: Growth Performance and Insect Assessment

- Measurement on the morphological parameters of the planted trees in the demonstration site.
- Assessment on the insect in the demonstration site
- Use of advance technologies (i.e., drone and TreeAPP) from RESTOR to monitor the site

Component 3.2: Carbon Sequestration and Stock in the RF Demonstration Site

- Data gathering and calculations of the above-ground biomass to determine the carbon sequestration and carbon stock in the five rainforestation typologies.
- Soil sampling prior to computation and analysis of carbon stock in soil.

Component 3.3: Innovations and Testimonies of RF Adopters

• Qualitative Social Science Method (personal interviews and focus group discussion) to document the innovations and testimonies of RF adopters.

H. Detailed Work Plan Schedule (2025)

Objectives		Major Activities	Duration (Months)											
	Objectives	Major Activities	1	2	3	4	5	6	7	8	9	10	11	12
1.	Transform the RF demonstration farm as an officially	Continue the maintenance, and management of the 5.2 hectares demonstration farm.												
	recognized learning site for	Application for DTI, LGU, DENR, DA-ATI, TESDA, and DepEd accreditation.												
	sustainable agriculture and natural resource management by obtaining accreditation	Updating of the development plan of the Sustainable Agriculture and Natural Resource Management Learning Site in Brgy. Baso, Cabucgayan, Biliran.												
	from ATI, TESDA and DENR.	Process the tree registration for all planted trees in DENR.												
si pr ha ex th de fa su er of	Carry out a site visit, provide hands-on experience at	Conduct of cross- visitation and field exposure using the rainforestation training modules.												
	the RF demonstration farm, and support the enhancement of skills for the beneficiaries. Learnings evaluation (pre and post evaluation)	evaluation)												
3.	Monitoring and updating the status of the five RF	Measurement on the morphological parameters of the planted trees in the demonstration site.												

typologies implemented in the demonstration farm, together with the progress and activities of the RF adopters.

Assessment on the						
insect in the						
demonstration site. Use of advance						
technologies (i.e., drone						
and TreeAPP) from						
RESTOR to monitor the						
site.						
Data gathering and						
calculations of the						
above-ground biomass						
to determine the carbon						
sequestration and						
carbon stock in the five						
rainforestation						
typologies.						
Soil sampling prior to						
computation and						
analysis of carbon stock						
in soil.						
Qualitative Social						
Science Method						
(personal interviews						
and focus group						
discussion) to document						
the innovations and						
testimonies of RF						
adopters.						

I. Line Item Budget 2025

Budget Items	Unit	Unit Cost	No. of Units	Unit Total	Total (Php)	
Budget items	· · · · ·	(Php)	(months) (Php)		(- · · · · · · · · · · · · · · · ·	
I. Personal Services						
A. Salaries and wages						
Laborer for the maintenance of 5.22						
	12 days	561.80	12		80,899.2	
hectares for 12 days						
II. MOOE						
A. Travel and Communication					50,000.00	
D 5: 110 "						
B. Field Supplies					19,100.80	
III. Total Cost					150,000.00	

J. Logical Framework

	J. Logical Framework							
Narrative Summary	Objectively Verifiable Indicator	Means of Verification	Important Assumptions					
Goal/Impact • A model farm for the provisioning, regulating, and the cultural function of ecosystems	Accreditation of the Sustainable Agriculture and Natural Resource Management as learning site	Number of RF farms adopted and established	Accredited and certified conservation agriculture demonstration farm					
Purpose/ Outcome The farm served as a model for other LGUs in the province of Biliran	Conducted cross— visits of from other LGUs in the province of Biliran	Visitors logbook (i.e., technicians, farmers, LGU officuals, ets)	Farm owners are organized and registered with the DOLE					
Increases the interest and support of the local stakeholders in mainstreaming and adoption of RF in Cabucgayan	Identified areas of proposed farms to be developed	Actual number of RF farms developed	Stakeholders are capacitated on Rainforestation and Conservation Agriculture					
List of farms' weak points on social, economic, and ecological performance weaknesses were discussed for future improvement	Key Informants Interview (KIIs) of RF adopters using RISE tool	RISE reports	Farm owners are aware of the economic, social and ecological performance (strengths and weaknesses) of their farms					
Both men and women adopters and non-adopters are aware of the native trees in preventing natural disasters	Conducted personal interviews and focus group discussion	List of farmers adopters and non- adopters interviewed	Gender conscious, women empowerment, sense of environmental education					
Benchmark data on the growth rate and insect herbivory will serve as guide and basis for the adoption and implementation of RF in other municipalities in Biliran island	Conducted measurement on the tree height, RCD/DBH and insect census	Data on growth rate and insect herbivory	Data on growth rate and insect herbivory will serve as reference for other farms					
Output Tree plantation registration		Inventory of trees planted	Security of the tree plantation					

 List of documents and facilities in the farm needed for the accreditation List of farmers adopted the RF farm 	Number of RF farms established and registered		
Activities • Maintenance and monitoring of the planted trees in the Rainforestation and conservation agriculture demonstration farm	 Inputs Conducted maintenance and monitoring of the planted trees 	Accomplishment reports	• Maintained farm
Accreditation of the Sustainable Agriculture and Natural Resource Management at the Agricultural Training Institute	Conducted inventory of the list of documents and facilities in the farm needed for the accreditation	List of documents and facilities in the farm needed for the accreditation	Accredited and certified conservation agriculture demonstration farm
Ocular inspection of the RF farm Registration of tree plantation in PENRO, Biliran	 Inventory and photo documentation of the developed RF farms 	List of farmers adopted the RF farm	Certificate of registration
Interview and sustainability analysis of RF farm using RISE tool	Conducted interview using RISE tool	• RISE reports	Farmers knowledge of the economic, social and ecological performance (strengths and weaknesses) of their farms
Qualitative Social Science Method	Conducted personal interviews and focus group discussion	List of farmers adopters and non- adopters to be interviewed	Gender conscious, women empowerment, sense of environmental education
 Monitoring on the growth performance and random sampling for insect herbivory 	 Conducted monitoring of the trees growth parameters and insect herbivory 	 Data on the planted trees growth rate, CO₂ sequestration and insect herbivory 	Data on growth rate and insect herbivory will serve as reference for other farms

Submitted by: ANGELITA B. ORIAS Project Leader (10Jan2025)	
Endorsed by:	
TEOFANES A. PATINDOL Director, ITEEM	
Received by:	
Extension Office Date Received:	