

QUARTERLY RESEARCH PROGRESS REPORT QUARTER: 4th

October - December 2022

Research Title: Assessment of Climate Smart Agriculture in Hilly Upland Areas

Program/Project/Study Objectives

Objectives:

- 1. To asses and evaluate the influence of the different double hedgerow's combinations on the soil erodibility.
- To assess the physico-chemical properties of the soil on the influence of IMO6, EM, and Vermicast application in the contour hedgerows on the degraded upland.
- II. Relevance to VSU & College's Thrust and Priorities:
- III. Highlights of accomplishments within the quarter
- A. Targets for the quarter
 - Regular observation and checking on the experimental site.
 - 2. Double hedgerow plant maintenance.
 - 3. Hedgerow harvesting and sample biomass collection of hedgerow plants.
 - 4. Procured Varmicast and Purchased rice bran as primary raw material for the production of Bio-fertilizer's (BOF's) such as IMO6 and EM. Also, obtained raw milk from VSU PCC for making Lactic Acid Bacterial Serum (LABS) used in making EM fertilizer likewise preparing organic concoctions from Eco-FARMI such as IMO2, FAA, and FPJ for making IMO6.
 - 5. Production and processing of Bio-Organic Fertilizers such as Indigenous Microorganism (IMO6) and Effective microorganism (EM).
 - 6. Regular weeding on ginger plants and harvesting of sweet potato in the upland flatland area for income generating (IGP) purposes.
- B. Highlights of accomplishments

- Perform area maintenance and cleaning through weeding to the treatment plots, under brushing on fruits planted (i.e. mango and abyo), grass cutting the trail to project site and any other surroundings near the area.
- Planting and replanting/replacement of dead hedgerows (i.e., Vetiver grass, Madre de Agua and Madre de Kakaw) was also done.
- 3. Continue hedgerow plant harvesting through cutting, weighing the leaves and stalks (branches) and also sample biomass collection.
- Purchased six (6) sacks of rice bran also three (3) litters of raw milk. Likewise, FAA, FPJ and IMO2 were already prepared at Eco-FARMI concoctions laboratory.
- 5. Sacking and harvesting processed Bio-Fertilizers IMO6 and EM, and was stored in Eco-FARMI storage room.
- 6. Maintenance through weeding, under brushing and fertilizer application on ginger plants, also harvesting and selling sweet potato.

IV. Physical Report of Operation A. Research Program

	Particulars/Name and Brief Description of Utilized/ Commercialized Technologies	Number
Outcome Indicator		
Number of research outputs utilized by the industry or by other beneficiaries	N/A	
Output Indicator		
Number of research outputs completed within the year	N/A	
Percentage of research outputs published in internationally-referred or CHED recognized journal within the year	N/A	

B. Technologies/Information patented and commercialized

Technology Invention(s) New Information	Invention Patent Number	Date of Issue	Utilization of Invention		Name of Commercial	
			Development	Service	Product	
A. Technology Invention(s)	NONE					
B. New Information	NONE				<u>!</u>	

Vision: A globally competitive university for science, technology, and environmental conservation.

Mission: Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment.

C. Research papers published (Identify if articles were for Research, Extension, Innovation or MSc/PhD Studies)

	Title	Author (s)	Date/Year/Publication/ Publisher	Remarks (if Research, Extension, Innovation, Thesis, MSc/PhD
a. Refereed Journal	NONE			
Institutional				
National				
International				
b. Semi-popular publ'n (newsletter, etc.)	NONE			
c. Popularized pub'ln (technoguides, etc.)	NONE			
d. Book Chapter/s	NONE			
e. Books	NONE			

D. Citation

Title of Research Output/ Published Journal Articles/ Book	Title of Journal & Vol. Issue/ Year	vol. Keywords	Researcher (s)	Citation Details					
				Author(s) Who Cited the Research Output	Title of Article Where the Research Output Was Cited	Title of Journal	Vol. / Issue / Page No.	City/ Year Published	Publisher
NONE									
NONE									

V. Issues, Problems, and Recommendations

1.	Delayed harvesting of hed	gerows and	biomass s	ampling o	collection of	of hedgerow	s
dι	e to subsequent rainfall co	nditions.					

Submitted by: DHENBER C. LUSANTA
Project Study Leader

Endorsed by: DHENBER C. LUSANTA

OIC - FARMI

Date Submitted: December 23, 2022

Received by OVPREI-RPO:

Date Received: