



### VSU R&D SEMI-ANNUAL REPORT

Center/College/Department: **Institute of Tropical Ecology and Environmental Management (ITEEM)**

#### A. Research papers/posters disseminated/presented

TITLE OF PAPER/POSTER	DATE, VENUE	RESEARCHERS/PRESENTERS
a. Institutional		
b. Regional		
Insects Associated with <i>Aquilaria</i> spp. in the wild- their importance in sustainable agarwood production	<ul style="list-style-type: none"> <li>February 24, 2022 Session Hall, Legislative Building, Capitol Grounds, Tacloban City</li> <li>March 7, 2022 Municipality of Abuyog, Leyte Conference Room</li> </ul>	KJGLongatang, JDErmio, MJCCeniza, MCAMeriales, KDGundemaro, LPLongatang
A Glimpse of Hope: Distribution and Conservation Threats Assessment of Endangered Philippine <i>Aquilaria</i> in One of the Last remaining Lowland Dipterocarp Rainforest in Leyte Island	<ul style="list-style-type: none"> <li>February 24, 2022 Session Hall, Legislative Building, Capitol Grounds, Tacloban City</li> <li>March 7, 2022 Municipality of Abuyog, Leyte Conference Room</li> </ul>	JOPogosa, SJCompendio, ABORias, OBBaldos, RMFOquias, KNFlorentino, FAlmeroda, VAEscasinas, GCFernandez Jr., MMBande, EPMaratas Jr.
Race Against Time: Saving the Endangered <i>Aquilaria</i> Tree Species from Extinction in one of Leyte's Remaining Dipterocarp Rainforest	<ul style="list-style-type: none"> <li>February 24, 2022 Session Hall, Legislative Building, Capitol Grounds, Tacloban City</li> <li>March 7, 2022 Municipality of Abuyog, Leyte Conference Room</li> </ul>	GCFernandez Jr., MMBande, EPMaratas Jr.
Soil Nutrient Status of Agarwood ( <i>Aquilaria</i> ) Growing Area in Abuyog, Leyte	<ul style="list-style-type: none"> <li>February 24, 2022 Session Hall, Legislative Building, Capitol Grounds, Tacloban City</li> <li>March 7, 2022 Municipality of Abuyog, Leyte Conference Room</li> </ul>	SBLina, ABORias, KJGLongatang
c. National		
d. International		

B. Attendance of researchers at scientific *fora*/ training/workshops/seminars

TITLE	DATE, VENUE	RESEARCHERS ATTENDED
a. Institutional		
b. Regional		
c. National		
d. International		
RESTOR: Monitoring Ecosystem Services and Biodiversity Using Advance Technology	June 20-24, 2022 ITEEM Terrestrial Ecosystems Division Annex Building	JOPogosa, KJGLongatang, SJMCompendio, LPLongatang, VAEscasinas, FMAImeroda, RMOquias, KGundemaro, ABORias, MMBande, KFlorentino, ICSeno

C. Technologies/Information patented and commercialized

- Technology patented (**Please give a brief description of the technology, generator and the status of patenting**)
- Technology commercialized (**Please give a brief description of the product, impact and the researcher/generator**)

D. Research papers published

	TITLE	AUTHOR (S)	DATE/YEAR/PUBLICATION/PUBLISHER	
a. Refereed Journal				
Institutional				
National				
International				
b. Semi-popular publ'n (newsletter, etc.)				
c. Popularized pub'ln (technoguides, etc.)				
d. Book Chapter/s				
e. Books				

E. R and D awards and recognitions received

NAME OF AWARDS	TITLE OF PAPER/ POSTER GAINED AWARD	RECIPIENT/S	PLACE AWARDED	DATE AWARDED	AWARD OBTAINED (Plaque; if cash, indicate amount)	SPONSORING AGENCY
a. Institutional						
b. Regional						
c. National						
d. International						

F. R and D inter-agency linkages forged/maintained

NAME OF AGENCY	NATURE OF LINKAGE	Brief Description of Linkage	Remarks (specify amt generated, etc.)
a. Local (with LGUs, NGOs, POs)			
TERRESTRIAL ECOSYSTEMS DIVISION			
Department of Agriculture-Regional Field Office No. 8 (DA-RFO8)	This agreement was made for the implementation of the project "Enhancing the Restoration of Farming Livelihoods in Yolanda-affected Areas in Region 8" and "On-farm Research on Crop-Livestock Integration to Back-Up Implementation of Yolanda Rehabilitation and Reconstruction Program".	Under the program, the ITEEM was implementing the project "Training on Climate Change and Community-Based Ecosystem and Disaster Risk Management", which covers LGUs affected by Typhoon Yolanda such as Barugo, Alangalang, Sta Fe, San Miguel, San Isidro, Calubian, Villaba, Tabango, Leyte, Abuyog, Biliran, Cabucgayan, Caibiran, Culaba, Naval, Kawayan, Almeria, Javier, and Mahaplag.	
Local Government Unit of Cabucgayan, Biliran	The MOA was signed to collaborate with LGU Cabucgayan on native-species forest restoration (Rainforestation Technology) and marine resources conservation and protection.	The agreement considers the best practices and current initiatives of VSU on conservation agriculture and the protection and management of natural resources, which have been adopted and instituted by the LGU of Cabucgayan by establishing a demonstration farm in Barangay Baso.	
Department of Social Work and Development's (DSWD) Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDDS); Local Government Unit of Cabucgayan, Biliran; and Department of Environment and Natural Resources (DENR)	This agreement was made to implement a project to empower local communities through increased participation in local governance and the preparation and implementation of poverty reduction interventions on upland resource conservation through	The MOA was signed to mainstream Rainforestation and conservation agricultural projects in seven barangays within the municipality through the DSWD KALAHI-CIDSS Program by utilizing the existing demonstration farm in Barangay Baso as a	

NAME OF AGENCY	NATURE OF LINKAGE	Brief Description of Linkage	Remarks (specify amt generated, etc.)
	watershed rehabilitation and sustainable agricultural crop production.	learning site.	
Restoration Initiative for Sustainable Ecosystems (RISE), Inc.	This MOU is intended to establish a harmonious partnership between RISE and VSU through joint cooperation in teaching, research, and extension concerning Rainforestation and other related technologies.		
AQUATIC ECOSYSTEMS DIVISION			
Philippine Associated Smelting and Refining Corporation (PASAR), Corp.		Assist in monitoring the marine ecosystem along the coastal area of PASAR.	
Department of Agriculture-Bureau-Bureau of Fisheries and Aquatic Resources (DA-BFAR)		Extension and research collaboration on assessments of aquatic ecosystems and fisheries.	
Department of Environment and Natural Resources (DENR)		Extension and research collaboration of CILPS in Cuatro Islas, Leyte.	
LGUs of the 5 <sup>th</sup> District of Leyte		Collaboration in extension and research activity.	
Palompon Institute of Technology (PIT)		Research collaboration on marine assessments.	
b. Regional			
c. National			
d. International			

G. List of Ongoing/Completed R&D Projects

Program/Project/ Study Title	Proponent/s	Collaborator/cooperator	Lead Agency	Collaborating Agency
Development of Rainforestation Research and Training Site to Scale-up Forest Restoration Initiatives in Climate Change	MMBande, MAShton, DNeidel, HTConsunji, JOPogosa, ABORias, GCFernandez, LKQChu, LKQ; KJGLongatang,	-	Terrestrial Ecosystems Division, Institute of Tropical Ecology and	Environmental Leadership and Training Initiatives (ELTI), Yale University and Local

Program/Project/ Study Title	Proponent/s	Collaborator/cooperator	Lead Agency	Collaborating Agency
Vulnerable Marginal Uplands in Inopacan, Leyte <b>(Completed)</b>	MMaarat, SGonzales, GMatinao, LPLongatang		Environmental Management	Government Unit of Inopacan
Mainstreaming Rainforestation Technology in the Philippines and Long-term Monitoring of RF Adopter's Farm <b>(Completed)</b>	MMBande, JOPogosa, ABORias, DJNeidel, SJM Compendio, VEscasinas, FAlmeroda, LPLongatang, KGundemaro, RMOquias	-	Terrestrial Ecosystems Division, Institute of Tropical Ecology and Environmental Management	Local Government Units of Abuyog, Javier, Mahaplag, Hindang, Leyte; Cabucgayan, Biliran; Pilar Camotes, Cebu; Bacong, Guinhulngan, Siaton, Negros Oriental; Foundation for These-Abled Persons Inc.; Life Giving Forest Foundation
Ecological Assessment and Conservation of <i>Aquilaria malaccensis</i> through Sustainable Agarwood Production in Leyte Island, Philippines (ECo-SAP) <b>(Ongoing)</b>	MMBande, JOPogosa, ABORias, KJLongatang, SJCompendio, GCFernandez Jr., EETulin, MJCCeniza, SLina, HLMondal, ANPolinar, GALbarico, EEFernando, MAShton, ADoolittle, LKokoska, FAlmeroda, LPLongatang, KGundemaro, RMOquias, VAEscasinas	Edwino E. Fernando, Mark Ashton, Amity Doolittle, Ladislav Kokoska	Terrestrial Ecosystems Division, Institute of Tropical Ecology and Environmental Management	-
Natural Resource Management-Based Extension Program (VSU Nature Park) Phase II: Empowerment of Local Stakeholders through Capacity Building, Relocation Survey of VSU's Agricultural Reservation and Development of Physical Land-Use and Natural Resource Map <b>(Ongoing)</b>	KJGLongatang, MMBande, JOPogosa, ABORias, GCFernandez Jr.	-	Terrestrial Ecosystems Division, Institute of Tropical Ecology and Environmental Management	Barangays Pangasugan, Guadalupe and Patag
Development of a Province-Wide Learning Site on Sustainable Agriculture and Natural Resource Management and Assessment of Community People's Perception towards the	JOPogosa, ABORias, GCFernandez Jr., MMBande	-	Terrestrial Ecosystems Division, Institute of Tropical Ecology and Environmental Management	Department of Social Welfare and Development Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social

<b>Program/Project/ Study Title</b>	<b>Proponent/s</b>	<b>Collaborator/ cooperators</b>	<b>Lead Agency</b>	<b>Collaborating Agency</b>
Rainforestation KALAH-CIDSS Program in Cabucgayan, Biliran <b>(Ongoing)</b>				Services (DSWD-KALAH-CIDSS); Environmental Leadership and Training Initiative (ELTI); and Local Government Unit of Cabucgayan, Biliran
Biodiversity of Marine Flora and Fauna in Artificial Reefs of Baybay City and Selected Municipalities of the 5 <sup>th</sup> District of Leyte	HRMontes, Jr. EDEspinosa, JCEvangelio, ARRFlandez, RMRModina, SACesar		Aquatic Ecosystem Division, ITEEM, and Dept. of Biological Sciences	Fifth District of Leyte and CRFMO, LGU-Baybay

#### H. List of Trainings/ Seminars/ Workshops Conducted

<b>Title of Training/Seminar/Workshop</b>	<b>Date conducted</b>	<b>Venue</b>	<b>No. of Participants</b>	<b>Sponsoring Agencies</b>
Rainforestation: A Strategy on Ecosystem-Based Disaster Risk Reduction	June 2-3, 2022	Brgy. Maganhan, Baybay City, Leyte	60	ELTI
Integrating the Rainforestation Farming Approach into the DepEd-ALS Curriculum in Negros Province, Philippines	Conducted every Friday of April 2022	ONLINE	18	ELTI and RISE

#### I. List of equipment/facilities purchased/enhanced

<b>Equipment Purchased/ Upgraded/ Facilities Enhanced</b>	<b>Location/ Agency</b>	<b>Expenditure/ Cost</b>	<b>Source of Funds</b>