



Project Proposal

Implementation of the Internationalization Program of the Visayas State University

Delivering Department Unit	Department of Agronomy, CAFS, VSU, Baybay City, Leyte IRRI
Project Title	VSU-IRRI Collaborative Project on Genetic Evaluation of Pre-Variety Breeding Rice Lines Through the ASEAN RiceNet
Project Proponents: Project and Study Leader (Component 2 – Advanced yield trials)	Dr. Ulysses A. Cagasan Associate Professor V and Head, Department of Agronomy, VSU, Visca, Baybay City, Leyte
Project and Study Leader (Component 1 – Preliminary yield trials)	Prof. Ed Allan L. Alcober Associate Professor II, Department of Agronomy, VSU, Visca, Baybay City, Leyte
Project Staff and Laborer	To be hired
Project International Partners	Dr. Shoba Venkatanagappa IRRI Senior Scientist II and Global Head and Coordinator for germplasm sharing and exchange networks of the International Network for Genetic Evaluation of Rice (INGER) operating in Asia, Africa, ASEAN, South American countries.

Rationale	<p>Rice breeding is one of the long term programs of the International Rice Research Institute (IRRI) in support to the sustainable development goals such as Zero Hunger and Improved Livelihood by providing rice varieties with higher performance and climate resilience. In Asia alone, over 430 varieties have already been released for farmers use. Some of the best performers are IR 64, IR 72 and IR 36, which have been considered as mega varieties (IRRI Annual Report, 2014). Other varieties like IRRI 154 and IRRI 156 have performed very well in various countries including the Philippines, contributing to food self-sufficiency and security.</p> <p>To continue providing farmers with good performing varieties, IRRI is currently spearheading the ASEAN Rice Network. It is a network for Rice Germplasm Exchange and Testing under field trials. It is also a network for sharing and evaluation of rice advanced lines to all ASEAN member countries. The outputs of this undertaking will be used as entries in the National Cooperative Testing (NCT) Program for Rice, and the selected good performing varieties will be recommended to the National Seed Industry Council (NSIC) for release as new rice variety. The idea is to provide farmers with a choice of new varieties, and enable the university and research centers to participate in the evaluation and selection of advanced breeding lines which can be also be used for student research.</p> <p>The Visayas State University (VSU), being known as a research university, is one of the few institutions selected by IRRI as one of the ASEAN Partners in conducting the field evaluation trials of advanced lines generated from their breeding resources. Being one of the partners, VSU can avail of IRRI's evaluation protocols, seeds of the different promising rice lines, and financial support for the cost of chemicals, fertilizer, and labor for field maintenance, but it has to provide the area for the trials, and some funds for the personnel services of the project staff. Thus, this project proposal is developed to request VSU for funds for the research staff and honoraria of the project and study leaders.</p>
Project Duration	3 years

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

Total Budget for one (1) year project operation	
• VSU	PhP438,180.00
• Collaborating partner (IRRI)	PhP218,000.00

I. Proposal Details. *Please state your objectives following the principle of SMART (Specific, Measurable, Attainable, Relevant and Time-bound)*

A. Objectives

1. Evaluate and select promising rice lines that are high yielding and adaptable to local conditions
2. Submit promising rice lines as entries to the National Cooperative Testing for Rice
3. Recommend high yielding, climate resilient and with acceptable eating quality rice varieties to the National Seed Industry Council

B. Methodologies/Strategies

1. The project will have two component studies which includes the following: (1) Preliminary trials of different promising rice lines from IRRI and the ASEAN Rice Network, and (2) Advanced trials of the good performing rice genotypes/lines selected from the trials conducted by the ASEAN Rice Net member countries. IRRI will provide all the promising rice lines for testing, the evaluation protocols to follow, and the budget to shoulder the cost for field establishment and maintenance.
2. The trials will be established in the rice experimental area of VSU. The size of the experimental area will be 5,000 to 7000 m². The promising rice lines will be planted in a 2m x 5 m plot size replicated 2 times.
3. Two (2) evaluation trials will be established, the preliminary trial with 100 entries of promising lines, and the advanced field trial with 50 entries. The trials of the different rice lines will be conducted for two (2) croppings per year. For provinces under type IV climate, dry season starts from January to June while the wet season is from July to December.
4. Monitoring and evaluation of the agronomic and yield parameters, and the pest and disease resistance of the rice lines included in the trials will be done every cropping
5. Processing and submission of data and other project reports to VSU and IRRI will be done every after cropping.
6. Presentation of the project accomplishments will be done annually during the

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VSU RDE in-house review.

7. Publications – the output of the project will be published in refereed international journals upon completion.

C. Logical Framework

Objectives	Activities	Outputs	Verifiable Indicators	Means of Verification	Assumptions
1. Evaluate and select promising rice lines that are high yielding and adaptable to local conditions	Conduct 2 trials for wet season (Jul-Dec 2020) Conduct 4 trials every year (wet and dry season cropping)	Preliminary and advanced trial conducted in wet season of 2021 Conducted 2 field trials for two cropping season in 2022 and 2023	Agronomic and yield parameters of the different rice lines evaluated	Data gathering and analysis	Data gathered and analyzed are within the acceptable CV
2. Submit promising rice lines as entries to the National Cooperative Testing for Rice	Analyze and compare the agronomic and yield parameters of the different rice lines tested and identify and submit promising rice lines for NCT	Promising lines are identified and selected for NCT	Number of promising lines recommended as entries for the NCT	Field trial report	More than 50% of the promising rice lines are recommend for advance trials More than 15% of the rice lines under the advanced trial qualify for NCT

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3. Recommend high yielding and climate resilient varieties to the National Seed Industry Council	Identify promising lines based on their growth and yield performance Write and submit research paper for publication	Promising lines are recommended to the NSIC Research article submitted for publication to refereed journals	Number of promising lines recommended to the NSIC Research article accepted by refereed journals	Field trial report Published article	More than 15% of the rice lines recommended for NSIC Paper accepted and published
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II. Project Details

Target Beneficiaries	<ul style="list-style-type: none"> • ASEAN Partners • Research Centers • University/Institution • Farmers • Researchers • Students (graduate and undergraduate students conducting their thesis)
Discipline (<i>check all that apply</i>)	
<input type="checkbox"/> Education Science, Teacher Training <input type="checkbox"/> Fine, Applied Arts <input type="checkbox"/> Humanities <input type="checkbox"/> Religion, Theology <input type="checkbox"/> Social, Behavioral Sciences <input type="checkbox"/> Business Administration Related <input type="checkbox"/> Law, Jurisprudence <input type="checkbox"/> / Natural Science <input type="checkbox"/> Mathematics <input type="checkbox"/> IT-Related	<input type="checkbox"/> Mass Communication, Documentation <input type="checkbox"/> Medical, Applied Professions <input type="checkbox"/> Trade, Craft, and Industrial Engineering <input type="checkbox"/> Engineering <input type="checkbox"/> Architectural, Town Planning <input type="checkbox"/> Agricultural, Forestry, Fisheries <input type="checkbox"/> Home Economics <input type="checkbox"/> Service Trades <input type="checkbox"/> Maritime <input type="checkbox"/> Others (specify) _____
Priority Area (<i>Check all that apply</i>).	
<input type="checkbox"/> Health, Life Sciences <input type="checkbox"/> Improving environmental resilience <input type="checkbox"/> Improving energy security	<input type="checkbox"/> Future cities <input type="checkbox"/> / Agri-tech <input type="checkbox"/> Digital, innovation, and creativity
Responsiveness to UN Sustainable Development Goals (<i>Depending on the research type and platform, you may check more than one (1) SDG</i>)	

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<input type="checkbox"/> SDG 1. End poverty in all its forms everywhere. <input type="checkbox"/> SDG 2. End hunger, achieve food security, and improved nutrition and promote sustainable agriculture. <input type="checkbox"/> SDG 3. Ensure healthy lives and promote well-being for all at all ages. <input type="checkbox"/> SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities at all. <input type="checkbox"/> SDG 5. Achieve gender equality and empower all women and girls. <input type="checkbox"/> SDG 6. Ensure availability and sustainable management of water and sanitation for all. <input type="checkbox"/> SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all. <input type="checkbox"/> SDG 8. Promote sustained, inclusive and sustainable economic growth, full productive employment, and descent work for all. <input type="checkbox"/> SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	<input type="checkbox"/> SDG 10. Reduce inequality within and among other countries <input type="checkbox"/> SDG 11. Make cities and human settlements inclusive, safe, resilient, and sustainable <input type="checkbox"/> SDG 12. Ensure sustainable consumption and production patterns <input type="checkbox"/> SDG 13. Take urgent action to combat climate change and its impacts <input type="checkbox"/> SDG 14. Conserve and sustainably use the oceans, seas, and marine resources for sustainable development <input type="checkbox"/> SDG 15. Protect, restore and promote sustainable use of terrestrial systems, sustainable manage forests, combat desertification and reverse land degradation and halt biodiversity loss. <input type="checkbox"/> SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels. / SDG 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.
Explain how the project responds to SDG selected above.	This project aims to end hunger, achieve food security, and improved nutrition and promote sustainable agriculture not only the Philippines but also to other ASEAN countries.
Explain how the project responds to the Ambisyon 2040.	This project responds to the priority thrust of the Philippine Government on the Ambisyon 2040 Program in reducing poverty and improving the livelihood of all Filipinos.

Explain how the project responds to Internationalization Plan of VSU	The partnership between VSU and IRRI is a testimony of a Collaboration in an international scope through this project on Genetic Evaluation of Pre-Variety Breeding of Rice Lines involving the ASEAN RiceNet.
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III. Schedule of Activities. *Provide a Gantt Chart presenting schedule of activities for the proposed project. Use a separate sheet for this portion.*

Starting Date: June 1, 2021		Completion Date: May 31, 2024	Duration: 3 years					
Activity Number	Major Activity	Anticipated Results	Schedule of Activities					
			Year 2021				Y2-2022	Y3-2023
			Q1	Q2	Q3	Q4		
1	Submission of budget proposal to DA-BAR by the IRRI partners	Approved budget		X				
2	Conduct of 2 trials for wet season only, for 2021	a. Conduct of 2 field trials (preliminary and advanced trials) with acceptable %CV results			X	X	X	X
	Conduct of 4 trials every year (wet and dry season cropping)	b. Gathered and analyzed the data			X	X	X	X
3	Prepare and consolidate data from the 4 trials	Consolidated data for submission to IRRI			X	X	X	X
4	In-house review presentation and make article for publication	Results presented during in-house review; Research article submitted for publication to CHED accredited journals			X	X	X	X

IV. Work and Financial Plan

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Work Plan for the Project <i>(Provide additional sheets if necessary)</i>		
Activity	Output	Date
1. Conduct of 2 trials for wet season 2021	1. Conducted 2 field trials (preliminary and advanced trials) with acceptable %CV results	November 2021 Jan-Dec 2022 Jan-Dec 2023
2. Conduct of 4 trials every year (wet and dry season cropping)	2. Gathered and analyzed the data	November 2021 Jan-Dec 2022 Jan-Dec 2023
3. Prepare and consolidate data from the 4 trials	3. Consolidated data for submission to IRRI	November 2021 Jan-Dec 2022 Jan-Dec 2023
4. In-house review presentation and make article for publication	Results presented during in-house review; Research article submitted for publication to refereed journals	December 2021 December 2002-2003

V. Sources and amount of funds needed by the project for one (1) year operation

II. Line Item Budget	Collaborators Support		
Items / Particulars	VSU	IRRI	Amount
1. Salary of 1 Research Staff @ 22,515.00/month	270,180.00		270,180.00
2. Salary of 1 Laborer (@ 9,000/month		108,000	108,000
3. Honoraria (1 Project Leader @8,000/month) and 1 Study Leader (6,000/month)	168,000		168,000
4. Land Preparation (Fuel, oil and others)		15,000	15,000

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5. Field Supplies (Sample bags, labeling bamboo, placards, fertilizer and pesticides)		20, 000	20, 000
6. Other services (emergency laborers) during planting and harvesting		65, 000	65, 000
7. Office supplies and communication		10,000	10,000
TOTAL	438,180.00	218,000.00	656,180.00

VI. Scholarships / Fellowships for Undergraduate and Graduate Studies and Faculty Mobility Inbound and Outbound and International Relations

List of Prospective Participants (Target only. When no names are available, kindly indicate the number of personnel / beneficiaries).

FULL NAME	INTITUTION	POSITION
<i>(Title) (First name) (M.I) (Last Name)</i>	<i>Do not abbreviate</i>	<i>Do not abbreviate</i>
<i>I. Inbound</i>		
<i>a. Undergraduate</i>		
<i>b. Graduate</i>		
<i>c. Faculty</i>		
<i>II. Outbound</i>		
<i>a. Undergraduate</i>		
<i>b. Graduate</i>		
<i>c. Faculty</i>		

VII. Summary of Expected Outputs

Category / Item/ Description	Quantity
1. Number of undergraduate scholars	3 Agronomy major students (undergrad and graduate students)
2. Faculty exchange	Send 1 faculty for training abroad
3. Publications	Published 2 research articles in accredited International referred journals

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4. Patents, etc.	Registered 5 NSIC rice varieties
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SUBMITTED BY:

ULYSSES A. CAGASAN

Signature over printed Name of Delivering
Project Lead / Point Person of VSU

SHOBA VENKATANAGAPPA

Signature over printed name of
Collaborating Institution Focal Person of *IRRI*

ED ALLAN L. ALCOBER

Signature over printed Name of Delivering
Project Lead / Point Person of VSU

REVIEWED AND ENDORSED BY:

BEATRIZ S. BELONIAS

Signature over printed name of
College / VP

APPROVED BY:

EDGARDO E. TULIN

Signature over printed name of
Agency Head