NARRATIVE REPORT

SDG: 4, 9, 10, and 16

Title of Activity: Project proposal for CHED GIA program

Date/Time: AY 2024

Venue: CHED Region 2

Organizers: CHED-GIA

Objectives: To develop a unified STEM platform that can be accessed both online and offline. This platform will provide comprehensive educational resources, interactive tools, and collaborative features to enhance STEM education across the Philippines.

Beneficiaries (if any): Students, educators, and educational institutions

Participants: Selected HEIs in the Country

Highlight of the Activity

Dr. Melanie G. Gurat, the Coordinator of the DOST-CBPSME at Saint Mary's University, has submitted a project proposal for the CHED Grant-In-Aid (GIA) Program titled "Development of a Unified STEM Platform for Online and Offline Use in the Philippines." This proposal falls under the DOST's Research, Extension, and Innovation (GIA-RIE) initiative, which aims to foster research and development projects that advance knowledge, promote innovation, and extend the benefits of research to various sectors of society.

The primary aim of this proposal is to develop a unified STEM (Science, Technology, Engineering, and Mathematics) platform that can be accessed both online and offline. This platform will provide comprehensive educational resources, interactive tools, and collaborative features to enhance STEM education across the Philippines. By addressing the digital divide and ensuring accessibility in areas with limited internet connectivity, the platform seeks to improve the quality of STEM education and foster a culture of innovation among Filipino students.

The proposal is currently in its second phase of evaluation for shortlisting. It is composed of other faculty researchers in other HEIs. If successfully shortlisted, Dr. Gurat will present the proposal to the CHED en banc for final consideration. The nature of the CHED Grant-In-Aid Program is to support projects that contribute to the advancement of higher education and research, promoting innovative solutions that address national and global challenges.

The proposal aligns with several United Nations Sustainable Development Goals (SDGs): **SDG 4: Quality Education** - By providing access to high-quality STEM education resources, the platform aims to ensure inclusive and equitable quality education for all and promote lifelong learning opportunities; **SDG 9: Industry, Innovation, and Infrastructure** - The development of an innovative educational platform contributes to building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation; **SDG 10: Reduced Inequalities** - By

addressing the digital divide and providing educational resources to underserved communities, the platform aims to reduce inequalities in access to quality education.

The beneficiaries of this proposal include students, educators, and educational institutions across the Philippines. Students will gain access to enhanced learning resources and tools, enabling them to develop critical skills in STEM fields. Educators will benefit from innovative teaching resources and professional development opportunities. Educational institutions will have the opportunity to integrate the platform into their curricula, improving the overall quality of STEM education.

Through this proposal, Dr. Gurat and Saint Mary's University aim to make significant contributions to the advancement of STEM education in the Philippines, fostering a generation of learners equipped with the knowledge and skills necessary to address the challenges of the future.

Appendices:

Transmittal letter from CHED en banc

Republic of the Philippines
OFFICE OF THE PRESIDENT
COMMISSION ON HIGHER EDUCATION

BAGONG PILIPINAS

22 October 2024

MELANIE G. GURAT, PH.D.
Project Leader
Saint Mary's University
Bayombong, Nueva Vizcaya

Dear Dr. Gurat:

Greetings from the Commission on Higher Education (CHED)!

This has reference to your project proposal titled **"Development of a Unified STEM Platform for Online and Offline Use in the Philippines"** which you applied for possible funding under the Grants-in-Aid Research, Extension and Innovation (GIA-RIE).

Please be informed that your project proposal is currently undergoing a second round of evaluation for short-listing. If your proposal is short-listed, you might be required to provide a brief presentation to the CHED *Commission en Banc (CEB)* for final consideration.

We shall inform you the soonest time possible of the result of the short-listing phase.

For any questions or clarifications, please feel free to contact the Research Management Division of the OPRKM at (02) 8441-1169 or via email at rdeproposals@ched.gov.ph.

Thank you very much.

Very truly yours,

MARY SYLVETTE T. GUNIGUNDO, Ph.D.
Director IV
Office of Planning, Research and Knowledge Management

NARRATIVE REPORT

SDG: 13, 15, 17

Title of Activity: 2025 Annual PLGU Investment

Date/Time: October 2024

Venue: PLGU, Capitol Site, Bayombong, Nueva Vizcaya

Organizers: PLGU NV

Objectives:

1. To promote forest conservation and biodiversity
2. To preserve indigenous knowledge, systems, and practices (iksps)
3. To support community empowerment
4. To enhance environmental education and awareness
5. To promote innovation in environmental governance
6. To align the project with the ecological priorities of Nueva Vizcaya, particularly in its role as part of the Cagayan north watershed region.

Participants: Dr. Elsa L. Cajucom

Mrs. Alicia Z. Jubay

A. Highlights of the Activity:

On August 28, 2024, Saint Mary's University (SMU), through Dr. Elsa L. Cajucom, Director of the Center for Natural Sciences, formally re-submitted a proposal to Forester Tito A. Tanguilig, Provincial Environment and Natural Resources Officer (PENRO) and co-chairperson of the Provincial Environment and Natural Resources Office (PENARO) in Nueva Vizcaya. The proposal, titled Establishment of a 2-Hectare Vernacular Ecological Station, was submitted in response to the Call for Applications for the 2024–2025 Annual Investment Program of the Provincial Local Government Unit of Nueva Vizcaya.

The project aims to support the Provincial LGU's agenda of environmental protection, with a special focus on the role of indigenous communities. Specifically, it seeks to enhance the use of their Indigenous Knowledge, Systems, and Practices (IKSPs) in forest conservation

and natural resource management. The proposal involves the conversion of a 2-hectare reforestation area at the Jamboree site, granted to SMU through a Memorandum of Agreement with the Provincial LGU, into a vernacular ecological station. This station will simulate the natural environments of selected indigenous communities in Nueva Vizcaya, serving as a resource for education, research, and community engagement.

The project envisions several outcomes, including:

- An increase in forest cover and biodiversity to support income generation and ecological balance.
- Enhanced community participation in conservation efforts, particularly through the integration of IKSPs.
- A platform for environmental education and showcasing innovative approaches to sustainable resource management.

The vernacular ecological station will also serve as a learning venue, promoting the ingenuity of indigenous communities and their contributions to environmental sustainability. As Nueva Vizcaya is part of the Cagayan North watershed region, comprising a significant portion of forest lands, the initiative is strategically aligned with the region's conservation priorities.

Dr. Elsa L. Cajucom, Director of the Center for Natural Sciences and SMU's representative to the Provincial Education and Environmental Awareness Team (PEAET), expressed optimism about the project's impact and provided contact details to facilitate further discussions. On October 2024, during the Regular Meeting of the PEAET thru PENARO announced the acceptance of the proposal. The MOEE Fund transfer amounting to PhP 500,000.00 is currently being processed by the PENARO this January 2025 and a MOA signing is set by March 2025.

Through this initiative, SMU reaffirms its commitment to collaborative environmental stewardship, emphasizing the value of local knowledge and sustainable practices in addressing ecological challenges.

Establishment of a 2-Hectare Vernacular Ecological Station

Project Description

The proposed establishment of a vernacular ecological station intends to advance the Provincial Local Government Unit's agenda on protecting the environment highlighting the relevant role of indigenous communities thru their knowledge, systems, and practices.

The 2-hectare reforestation area at the jamboree site granted to SMU through a Memorandum of Agreement with the PLGU will be improved and converted into a vernacular ecological station. The vernacular station will be designed to simulate the natural environments of selected indigenous communities in Nueva Vizcaya with consideration of their IKSPS on forest conservation and natural resources management.

The project sees as its outcome the increase in forest cover and enhanced biodiversity that will eventually provide opportunities for income generation. The project also sees a significant outcome in terms of providing opportunity for educating communities and enhance their capabilities and participation in the greening program and managing the natural resources on hand by adopting applicable and effective IKSPS.

The vernacular ecological station to be established can become a learning resource and a venue to showcase innovativeness in environmental governance as it recognizes and promotes the ingenuity of our indigenous communities in Nueva Vizcaya towards environmental sustainability.

Rationale

Nueva Vizcaya is a watershed haven of the Cagayan North region. Forest lands comprise three-fourths (349,880 hectares) of the province's total land area which is 390,410 hectares. From these forests spring the waters that provide irrigation to the whole region and to Nueva Ecija, Benguet, Isabela, as well as Quirino. The Nueva Vizcaya watersheds are

3. Photo documentation





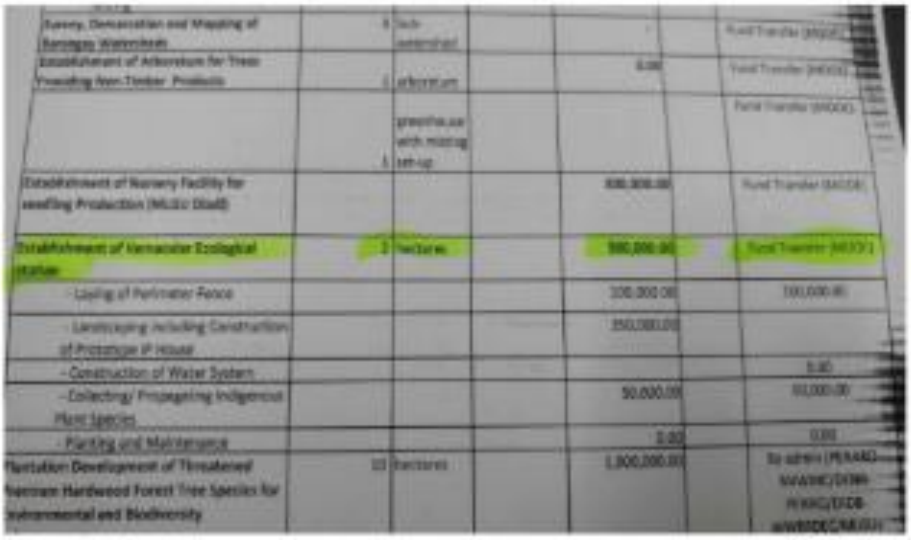
Prepared by:

Dr. Elsa L. Cajucom

CNS Director

B. Appendices

1. Approved Investment for 2025 PLGU Funding



Survey, Demarcation and Mapping of Barangay Watersheds	6	ha/s		-	Fund Transfer (MOOE)
Establishment of Arboretum for Trees Providing Non-Timber Products	1	arboretum		0.00	Fund Transfer (MOOE)
	1	greenhouse with misting set-up			Fund Transfer (MOOE)
Establishment of Nursery Facility for seedling Production (NLGU Dilasag)				800,000.00	Fund Transfer (MOOE)
Establishment of Vernacular Ecological station	2	hectares		500,000.00	Fund Transfer (MOOE)
- Lining of Perimeter Fence				100,000.00	100,000.00
- Landscaping including Construction of Prototype IP House				350,000.00	
- Construction of Water System					0.00
- Collecting/ Propagating Indigenous Plant Species				50,000.00	50,000.00
- Planting and Maintenance				0.00	0.00
Plantation Development of Threatened Narrow Hardwood Forest Tree Species for Environmental and Biodiversity	10	hectares		1,800,000.00	for admin (PENRO-MAWM/DENR-R1&C)/(FDB-MMDC/CMEO)

2. Communication



NARRATIVE REPORT

SDG:	**SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure, SDG 17: Partnerships for the Goals**
Title of Activity:	Project Developing Entrepreneurial Students Innovating Rural Economy (Project DESIRE): Innovate & Solve (Mentoring and Coaching)
Date/Time:	November 15-17, 2024
Venue:	Debusschere Function Hall, Saint Mary's University, Bayombong, Nueva Vizcaya
Organizers:	Nueva Vizcaya Provincial Cooperative and Enterprise Development Office in collaboration with Saint Mary's University, Nueva Vizcaya State University, and Aldersgate College
Objectives:	**To equip participants with techniques and tools to identify and address real-world challenges through innovative and creative thinking.** **To guide participants in defining clear goals, envisioning future outcomes, and mapping actionable strategies for achieving them.** **To train participants in presenting their ideas and solutions persuasively, ensuring they can effectively convey their concepts to various audiences.**
Beneficiaries (if any):	
Participants:	**Engr. Teofilo Sagabaen** **Engr. Gerene-Leigh Almazan** **Engr. Paulina Marzan** **Mr. IC Ruiz** **Mr. Rogie Taborda** **Ms. Rocel Audrey Batara** **Ms. Kriby Zyryll G. Perez**

A. Highlights of the Activity

The three-day seminar, held at Saint Mary's University, Bayombong, Nueva Vizcaya, proved to be an enriching and impactful experience for all participants. Designed to foster creativity, innovation, and problem-solving skills, the program effectively combined theoretical lectures, interactive workshops, and collaborative activities. The event was well-structured and provided a step-by-step journey from understanding challenges to presenting solutions.

On the first day, titled "**Spark Creativity and Uncover the Real Problem,**" participants were introduced to the fundamentals of creative problem-solving. Sessions like the "Root Cause Deep Dive" and "Interactive Design Thinking Challenge" emphasized identifying the root causes of challenges and generating ideas collaboratively. One of the highlights of the day was the "Lightning Decision Jam," where participants showcased their initial ideas and set the groundwork for their projects. This day established a strong foundation for participants, encouraging them to think critically and creatively.

The second day, themed "**Define, Dream, and Design,**" focused on goal setting and solution ideation. Participants engaged in the "Future Vision Workshop," where they outlined their aspirations and identified key challenges to address. Through tools like root cause analysis and rapid ideation, they transformed challenges into opportunities. A standout activity was the "Sketch Lab," where participants visualized and designed prototypes of their proposed solutions. This day fostered a sense of innovation and provided participants with the tools to translate abstract ideas into actionable plans.

The final day, "**Pitch, Reflect, and Wrap Up,**" was dedicated to refining and presenting solutions. Teams worked on perfecting their prototypes and participated in "Pitch Prep" sessions to enhance their presentation skills. The highlight of the day was the "Team Pitches and Peer Feedback" session, where participants presented their solutions and received constructive critiques from their peers. The seminar concluded with a reflection on lessons learned, next steps for project implementation, and an open forum for participant feedback.

B. Summary of the Activity Evaluation

The evaluation of the seminar highlighted its success and impact. Participants praised the relevance and practicality of the content, noting that the sessions were highly applicable to real-world challenges. The hands-on workshops and interactive activities were particularly appreciated for deepening understanding and fostering teamwork. Resource speakers, especially Mr. Niccolo Brian P. Ellis, were commended for their expertise, clarity, and engaging delivery. The balance between lectures and interactive sessions kept participants motivated and actively involved.

While the seminar received overwhelmingly positive feedback, some participants suggested extending the duration of hands-on activities to allow for deeper exploration. Others recommended creating follow-up opportunities to implement the solutions they had developed during the event.

Overall, the seminar was a resounding success. It left participants inspired, equipped with practical tools for innovation, and confident in their ability to tackle future challenges creatively. The three-day program not only enhanced their skills but also fostered a

collaborative and innovative mindset that they can carry forward in their personal and professional lives.

C. **Appendices (Documentation**









Prepared by:

Engr. Gerene-Leigh C. Almazan
Faculty Member

Noted by:

Engr. Joel T. Mendoza
Department Head, ECE