**OFFICE OF THE DIRECTOR FOR RESEARCH, EXTENSION, INNOVATION AND COMMERCIALIZATION**
VSU-Villaba, Villaba, Leyte, 6537, PHILIPPINES
Telefax: +63 908-547-2371
Email: dscapon@vsu.edu.ph
Website: www.vsu.edu.ph

# VSU EXTENSION PROJECT
# ANNUAL ACCOMPLISHMENT REPORT

## CY 2022

## I. Basic Information

1. **Program/Project Title:** Biodiversity Enhancement and Maintenance of Rainforestation Techno-Demo and Learning Site

   **Program/Project Leader:** Dr. Daisy S. Capon

2. **Project Component (s):** Dr. Luz G. Asio
   Mr. Ted Dominique S. Belonias

   **Project Staff/Member(s):**

3. **Implementing Unit:** Office of REIC, Dept. of Crop Science

4. **Cooperating Agencies:** Office of the Director of Extension

5. **Program/Project Sites:** VSU-Villaba, Villaba, Leyte

6. **Duration**

   a. Date Started: December 2018
   b. Expected date of completion: December 2043 (25 years)

7. **Financial report for the year under review**
   a) Total approved budget: 38, 700.00
   b) Actual released budget: 38, 700.00
   c) External support or counterpart funds from cooperating agencies: none
   d) Actual expenditures: 38, 700.00

## II. Technical Report (not more than 25 pages including the tables and charts)

A. Executive Summary (1 to 2 pages only)

B. **Rationale**

- ✓ According to globalforestwatch.org, it was reported that from 2001 to 2019, Leyte lost 1.16 hectares of tree cover, which is equivalent to a 7.3 percent reduction in tree cover since 2000.

- ✓ With these challenges, VSU-Villaba as part of its extension activity will be establishing a Rainforestation project as this is timely, relevant, and responsive to the changing needs of its clientele and to combat the risk brought about by climate change.

- ✓ Thus, the establishment and maintenance of the Visayas State University-Villaba Rainforestation Techno-Demo and Learning Farm are advocated and promoted to help address the current environmental challenge.

## C. Logical Framework

| Narrative Summary | Objectively Verifiable Indicator | Means of Verification | Important Assumptions |
|---|---|---|---|
| **Goal**<br><br>Enhanced biodiversity and maintain a functional rainforestation technology demonstration and learning site | • 5% increase of different flora and fauna species in rainforestation area<br><br>• 5% increase in the number of technology adopters | • VSU system budget<br>• Assessment and monitoring evaluation report | • The municipal LGU and other stakeholders commit to supporting the rainforestation project |
| **Objective/ Purpose/ Outcome**<br><br>Increase to 3 hectares of land devoted for rainforestation program after 5 years in VSU-Villaba | • Rainforestation area increase by 2% after a year of implementation | • Terminal monitoring and evaluation project report<br>• Number of farmers who adopted the technology | • Project fund is released on time |
| **Outputs:**<br><br>1. Increase adoption of rainforestation | • 25% of local adopted organically grown vegetables (leafy and fruit vegetables) after 1 year<br>• Conducted 1 training/aid/or seminars/year<br>• Conducted 1 cross-site | • Number of individuals who adopted the technology<br>• Terminal reports<br>• Documentation reports<br>• Quarterly reports | • Sustained the adoption of rainfrestation technology |

| | | | |
|---|---|---|---|
| | visit/year<br>• Conducted 1 field day visit to successful rainforestation technology per year<br>• Established MOA/MOU/Contract between adopters and implementers. | | |
| 2. Enhanced technical skills on the rainforestation technology | • Conducted orientation and hands-on training on rainforestation.<br>• Farm visit to successful rainforestation technology. | • Documentation reports<br>• Quarterly reports | • Implementing is willing to support rainforestation technology |
| 3. Improved skills in rainforestation | • Technical specialist in the project area trained on rainforestation technology | • Quarterly reports<br>• Documentation on reports | • LGU, DENR, MDRRMO, and locality are willing to support rainforestation |
| 4. Support the maintenance of a functional rainforestation | • Networks of stakeholders established | • Minutes of meeting<br>• Budget allocation | • LGU, DENR, MDRRMO, and locality are willing to support rainforestation |
| 5. Strengthened ability to integrate rainforestation values into local policy, planning, and regulatory framework. | • Sectoral policies and plans revised to favor rainforestation | • Revised policies and plans | |

D. **Methodologies Employed**

- ✓ One-hectare Rainforestation demonstration farm will be established in the VSU-Villaba forest area, which has already been identified as a strategic location for a techno-demo farm.

- ✓ All the necessary field supplies and labor needed in the establishment and the first 7-10 years of maintenance of the demo farm will be provided by the university, although a possible fund/cost-sharing with other interested parties will also be explored.

- ✓ A project schedule defining the schedule of activities and the resources required for a specific activity such as assessment of the soil health condition, and assessment of different flora and fauna in Rainforestation Area of VSU-Villaba, will be prepared before the implementation of the project.

- ✓ The entire area will be cleaned and properly arranged, indicating the location of the shed house. The entire area will be fenced using appropriate fencing material to protect the plants from stray animals and intruders.

- ✓ A small multipurpose shed house will be built as a demo farm facility. Part of the structure will serve as a briefing area, a small display area, and a storage area for tools, equipment, and field supplies.

- ✓ Monitoring and evaluation

## E. Results/Accomplishments

Growth performance in plant height, stem girth and number of branches of the different dipterocarp tree species planted in VSU Villaba Rainforestation site from Year 2019-2022

| Forest tree species | Annual growth rate in plant height (cm) | | | | Annual increase in width (mm) | | | | Annual increase in branches | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 | 2019 | 2020 | 2021 | 2022 | 2019 | 2020 | 2021 | 2022 |
| Almon | 56.37 | 88.89 | 175 | 280.26 | 0.67 | 0.75 | 16.71 | 26.62 | 3.75 | 5.49 | 8.75 | 19 |
| Apitong-Hagakhak | 71.86 | 113.33 | 131.25 | 207.65 | 0.71 | 0.77 | 15.73 | 23.02 | 1.71 | 0.89 | 2.5 | 4.77 |
| Bagtikan | 88.12 | 202.16 | 257.23 | 411.36 | 0.96 | 1.53 | 22.19 | 35.87 | 6.57 | 25.74 | 21.63 | 36.02 |
| Guisok-guisok | 76.60 | 98.13 | 139.07 | 230.4 | 0.63 | 0.78 | 14.79 | 22.81 | 3.05 | 4.06 | 16.2 | 24.5 |
| Hairy-Leaf Apitong | 64.79 | 81.6 | 79.25 | 220.1 | 1.01 | 0.62 | 6.91 | 15.71 | 0.25 | 0.73 | 0.75 | 8 |
| Mangachapoi | 54.78 | 115.71 | 175.32 | 269.72 | 0.67 | 0.73 | 16.58 | 21.09 | 0.83 | 3.50 | 13.32 | 20.51 |
| Manggasinoro | 52.62 | 73.43 | 77.24 | 81.26 | 0.61 | 0.74 | 12.44 | 13.58 | 3.23 | 1.15 | 3.15 | 3.3 |
| Narig | 76.19 | 112.49 | 131.37 | 183.91 | 0.61 | 0.70 | 11.39 | 12.15 | 0.41 | 1.02 | 2.5 | 6.57 |
| Palosapis | 91.32 | 131.86 | 202.26 | 246.6 | 0.79 | 0.92 | 16.83 | 22.70 | 0.82 | 2.29 | 11.8 | 15.18 |
| Yakal-Kaliot | 83.31 | 126.25 | 191.56 | 272.24 | 0.60 | 0.70 | 15.23 | 21.21 | 2.97 | 4.15 | 22 | 26.46 |
| Yakal-Malibato | 82.67 | 120.25 | 177.34 | 268.95 | 0.73 | 0.77 | 16.29 | 21.23 | 0.85 | 3.62 | 17.91 | 23.41 |
| Yakal-Saplungan | 79.05 | 141.83 | 196.24 | 282.9 | 2.16 | 0.92 | 17.01 | 20.62 | 2.80 | 6.14 | 17 | 22.27 |
| Yakal-Yamban | 77.33 | 99.71 | 122.36 | 169.50 | 0.74 | 0.78 | 11.92 | 11.44 | 0.45 | 1.05 | 3.72 | 4.63 |
| Tanguile | 69.23 | 128.15 | 176.25 | 295.62 | 0.99 | 1.44 | 20.38 | 32.12 | 1.14 | 7.21 | 18.68 | 25 |

## F. Problems Met and Recommendations

A. Issues and Problems

- Fungi occur in dipterocarp trees.
- Die back occurs in some of dipterocarp trees.
- Wilting occurs in forest trees due to drought season.
- Arrival of supplies and materials needed in the project implementation was delayed.
- Lack of manpower.

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B. Recommendations

- Applied botanical pesticides.
- Pruned and cutting the damage area of the stem
- Daily watering of forest trees to recover from wilting.
- Process of cash advance to purchase those supplies and materials.
- Hired an emergency labor to assist in the continuous data collection on forest and native trees.

G. **Plans and Target for the next year** (if continuing program/projects)

- Additional of 1 hectare of land for the extension of the rainforestation site.
- Construct and establish a nursery and propagation area for the production of native tree seedlings and other rainforest plan
- Conduct regular monitoring and evaluation of rainforestation site to assess the success of different rainforestation technologies and practices
- Conduct regular biodiversity surveys on flora and fauna
- Monitor growth and survival of trees
- Evaluate soil quality or soil health condition