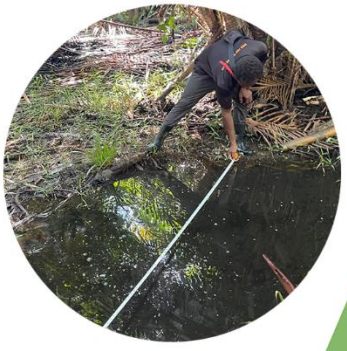
SPISARD

The South Pacific Institute for Sustainable Agriculture & Rural Development





2023 Annual Report

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Background of SPISARD

The South Pacific Institute for Sustainable Agriculture and Rural Development (SPISARD) was founded in 2003 at the Papua New Guinea University of Technology. It promotes sustainable agriculture and rural development through tailored extension methods, training, and technology transfer. The institute conducts research on food and cash crops, and livestock to improve farming practices, productivity and income while minimizing environmental impact.

Overtime, SPISARD expended its focus to include household food security, livelihood strategies, gender issues, resources management, health, education, water supply, sanitation and more. The institute uses a model village approach, for research training and extension, involving the target population, communities, students, and academic staff. This approach ensures real-time feedback and a participatory process, with activities conducted in model villages across various agro-ecological zones.

Vision

The Institute envisions itself as a dynamic leader in extension and sustainable agriculture development, providing lifelong learning and positively impacting rural communities in Papua New Guinea, Melanesia and the South Pacific Island Countries.

Mission

The Institutes mission is to advance ‘Smart Villages’ and enhance skills for rural development, foster collaborative action and learning through demonstration projects and centres, ad encourage direct farmers participation to improve farming systems, increase productivity, income, food security while sustainably managing the environment.

Function

The institutes’ function includes applied research, training, development of farm implements and post-harvest technology, extension services, market and agri-business information, technology transfer, policy evaluation, advisory services, promoting agriculture biodiversity, rice cultivation, aquaculture, agroforestry and traditional farming systems.

Introduction

SPISARD uses the Smart Village Model to implement its programs. There are five areas that the institute is focused on and they are;

i. Research and development
ii. Teaching and training
iii. Technology Transfer
iv. Capacity building
v. Monitoring and evaluation

Currently, SPISARD has active projects in two villages, that is cocoa development project in Masandanai village, East Sepik Province and inland fish farming project in Hamara, Oro Province. A bulb onion farming project is being planned for Itsir village in Markham Valley. The institute will continue to work with these villages to transform them into Smart Villages.

Funding

The Institute receives an annual budget of K100,000.00 from the university to support its outreach activities. In 2023, an additional funding of K100,000.00 was provided by the University for SPISARD team to conduct activities during the vacation period with this report detailing the outreach activities implemented in 2023.

2023 Outreach Activities

Outreach activities carried out in SPISARDs Smart Villages are discussed in the following order;

i. Hamara Village, Sohe District, Oro Province
ii. Masandanai Village, Angoram District, East Sepik Province
iii. Tabaga Village, Tambul-Nebilyer District, Western Highlands Province
iv. Itsir Village, Markham District, Morobe Oro Province
v. Kuli Gap, Mt. Hagen District, Western Highlands Province

A. Hamara Village, Sohe District, Oro Province

i. Opening of Integrated Community Transformation Centre

The SPISARD was invited to the Opening of the Resource Center dubbed the Integrated Community Transformation Center that was built by the villagers purposely for diffusion and transfer of technology from learned and experienced trainers from PNGUoT to the villagers.

ii. Training on Stockfeed Making and Building a Simple Solar Dryer

Hamara is a subsistence community with fertile soil and abundance of natural resources. Food crops make up 95 percent of the villager's diet. Hamara villagers have abundant supply of tradition staple food from the garden; native plantains, taro, sweet potato and lowland leafy vegetables however they lack consistent supply of protein. The villager's rear chickens, pigs and most recently ducks for consumption on special occasions and for selling, but aside from hunting activities the villagers do not a have steady daily protein intake in their diets.

When SPISARD was invited to the opening of the Integrated Community Training Centre, the team planned a training on stockfeed making and building a solar drier. The purpose of the training was to teach the villagers on how to make stockfeed using locally available resources which they can use to feed village chickens and domesticated pigs. The solar drier is essential for drying the pelleted feed so that it can be stored. A total of 167 villagers participated in the training. The training ran for five days and included classroom lessons and practical activities.

Left to right: Theory session of stockfeed training. Women peeling and grating sweet potato and cassava. Men building the A-frame solar dryer.

iii. Inland Fish Farming Breeder Pond Development

Following the training in January, the SPISARD team travelled back to Hamara to develop the breeder pond for breeding Tilapia. The purpose of developing the breeder ponds is to ensure

continuous supply of fish fingerlings for distribution within the village as well as nearby villages The SPISARD considers the construction of this community breeder pond an effective way to engage villagers in fish farming, improve their diets, and their livelihood as well. Furthermore, not only will the villagers have a continuous supply of protein, fish can be processed into fish meal which is an ingredient for stockfeed. That way, the villagers don't have to look far for resources for making stockfeed.

Left to right: Construction of the breeder pond from start to finish.

B. Masandanai Village, Angoram District. East Sepik Province

The SPISARD/ATCDI Team composed of Mr. James Fanua, Mr. Robert Kipong and Dr Veronica Bue took a week's trip in February 2023 to Masandanai Village in the Karawari Local Level Government (LLG), in the Angoram District, East Sepik Province (ESP). Masandanai village is one of the project sites of SPISARD where work on cocoa production has already begun in 2022. The purposes of the trip were in threefold and they are:

i. Conduct training on cocoa production and management practices
ii. Conduct water feasibility studies
iii. Follow-up on the status of the cocoa budwood garden developed by SPISARD

i. Training on Cocoa Production and Management Practices

The training on cocoa production and management practices was facilitated by Mr. James Fanua (SPISARD) and Mr. Brian Misai (Cocoa Board). The two officers conducted participatory theory lessons in the morning followed by practical in the afternoons.

Left: Theory session of cocoa husbandry and management training. Left: Mr. Fanua demonstrating how to prune a cocoa tree while the training participants observe.

ii. Water Feasibility Study

Availability of clean drinking water is a problem in Masandanai village. Although the village is surrounded by creeks, the sources are from sago swamps, producing a brownish color to the creeks as well as a foul odor because of the decomposed debris in the bottom of the creek. A 9000Liter Tuffer tank, donated by the Karawari LLG is the only clean source of drinking water for the community with an approximate population of 300 people. Clean drinking water is scarce during the dry season when the tank is depleted. Hence, clean drinking water is a need in the village. Mr. Robert Kipong is the water Engineer with ATCDI who accompanied the SPISARD Team to Masandanai village to conduct a water feasibility study.

Left: Mr. Kipong conducting interview with a village leader. Centre: Mr. Kipong's assistant measuring the depth of a water well. Left: A village boy displaying water samples collected for testing.

C. Tabaga Village, Tambul-Nebilyer District, Western Highlands Province

i. Water Feasibility Study

ATCDI was engaged by SPISARD to conduct a water feasibility study in the Tabaga village community in Nebilyer. This community struggles to source clean water for drinking and sustaining their livelihood. A technical report of the feasibility study will be presented to the local MP for possible funding of the water project.

ii. Baseline Survey

A baseline household survey was conducted on the same trip and a comprehensive report is report is currently fiend finalized. The data from the baseline survey will serve as reference point for planning extension activities in Tabaga village and also as a benchmark for evaluating these extension activities.

D. Itsir Village, Markham District, Morobe Province

i. Awareness on Bulb Onion Production

A team comprising staff from the School of Agriculture and Fresh Produce Development Agency made the trip to Itsir Village in Umi/Atzera, Markham District. The purpose of the trip was to meet with the village people and discuss the prospect of trialing out bulb onion in the village. If the trial is successful, model farms will be replicated in other LLGs in the Markham District and farmers will be able to earn an income from farming bulb onion in addition to other cash crops.



Left to right: First contact with potential bulb onion farmers in Itsir Village, Markham.

E. Kuli Gap, Mt. Hagen District, Western Highlands Province

i. Evaluation on Soap Making and Stockfeed Training

In 2021, a training was delivered to people of Kuli Gap on soap making and stockfeed making. SPISARD was not able to conduct an evaluation in 2022 due to the National General Elections, therefore the evaluations took place in 2023. Monitoring and evaluation are important for improving SPISARD activities.

Conclusion

Over the past year, SPISARD continues to promote sustainable agriculture rural community development in its Smart Villages scattered throughout Papua New Guinea. With continued support from the University, the Institute is committed to working with villagers in rural communities to improve their farming practices and their livelihood.