



PAPUA NEW GUINEA

PILOT TRAINING OF REMOTE COMMUNITY

**Capacity Building to Strengthen Sustainable
Implementation of Renewable Energy
Technologies for Rural Energy Access**

TRAINING REPORT



01st - 15th Oct 2020

Keapara Village, Rigo District, Central Province, Papua New Guinea

Acronyms and Abbreviations

ACSE	Adapting to Climate Change and Sustainable Energy
ADB	Asian Development Bank
CCDA	Climate Change and Development Authority (PNG)
CPA	Central Provincial Administration
EE	Energy Efficiency
EU	European Union
FREAGER	Facilitating Renewable Energy and Energy Efficiency Applications for Greenhouse Gas Emissions Reduction
GE	Green Economy
GGGI	Global Green Growth Institute
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
KOICA	Korean International Cooperation Agency
LLG	Local Level Government
MP	Member of Parliament
RE	Renewable Energy

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1.0 INTRODUCTION

The project “Capacity Building to Strengthen Sustainable Implementation of Renewable Energy Technologies for Rural Energy Access” is a 3-year regional pilot project being implemented in the Melanesian countries: Fiji, Vanuatu, Solomon Islands and Papua New Guinea and funded by the Republic of Korea through the Korea International Corporation Agency (KOICA) and implemented by the Global Green Growth Institute (GGGI) in partnership with the Pacific Islands Development Forum (PIDF). In PNG the Global Green Growth Institute is working in close collaboration with the Climate Change Development Authority (CCDA) and the Central Provincial Administration (CPA) as Partners and important stakeholders to successfully implement this Project.

In PNG the Pilot Project will be implemented in five selected villages of the Central Province of which three of the villages are in the Rigo district while two are in the Kairuku-Hiri District. These sites were selected based on certain set criterion that include existing or planned RE projects in those sites so as accessibility to RE systems mainly solar and grid systems. The proximity of these sites to the nearest government station or city and mode of access to those sites and resources on ground were also considered before these five sites were selected during the National Consultation workshop which was later confirmed during the Pre-implementation survey.

The project’s main objective is to strengthen informed and inclusive decision-making by resource owners and local government officials for integration of Green Economy (GE) and Renewable Energy (RE) into Local Level Planning and to Strengthen Implementation of Renewable Energy (RE) infrastructure for Rural Electrification. GGGI is working closely with local partners to develop various training modules within the project context to achieve this goal. In addition, in-country based local trainers will be engaged to deliver these capacity building trainings throughout the identified communities.

In order to carry out the capacity building training to the beneficiaries, the project has drafted training materials on Green Economy (GE) and Renewable Energy (RE), considering gender and inclusive development. This consists of 10 training modules, complete with trainers guide as per below:

1. RENEWABLE ENERGY MODULES

- 1.1. Renewable Energy General Principles
- 1.2. Solar in the Community
- 1.3. Solar Operation & Maintenance Basics
- 1.4. Pico-Hydro In the Community
- 1.5. Pico-Hydro Operation & Maintenance Basics
- 1.6. Renewable Financial Management

2. GREEN ECONOMY MODULES

- 2.1. Green Economy General Principles
- 2.2. Energy Efficiency
- 2.3. Green Business Basics
- 2.4. Gender Inclusivity & Development

The Project aims to target five groups of people in the selected project communities to train them on the RE and GE. These target groups include; traditional and community leaders, women, youths, vulnerable groups, government officials, small businesses, and local technicians.

The recently completed phase of the Project was pilot community training. The selected village out of the five selected rural villages of which the pilot community training was held from **01st - 14th Oct 2020**, a **duration of two weeks** was **Keapara Village** in the **Rigo District** of **Central Province**.

1.1 Pilot Community Training Objectives

The Pilot Community Training Objectives are highlighted below;

- To visit the selected Pilot Community (Keapara) and conduct Pilot Community Trainings to trail out the ten (10) draft training modules on Renewable Energy and Green Economy. Training is aimed at training 100-150 people from the different target groups in the selected rural community.
- Identify gaps in the training modules and tailor to suit the locals' needs & literacy level before finalizing the training modules.
- Identify best approach to train the locals to implement in the actual community trainings of all five selected rural villages in Central Province

1.2 Training Team

The Pilot Community Training was led by GGGI-PNG KOICA Project Coordinator and supported by CPA in partnership with CCDA and the Rigo District Staff. The following people were the members of the team;

1. **BENJAMIN KENI** – Team Leader and GGGI-PNG KOICA RE Project Coordinator
2. **NICHOLAS PATRICK TOKMUN** – Hired Consultant Trainer – KOICA RE Project
3. **MURRAY KONIDO** – CPA Disaster Emergency and Climate Change Advisor
4. **OVE ILE** – Rigo District Support Staff

1.3 The Pilot Community

The selected Pilot Community is **Keapara Village in Rigo District, Central Province**.

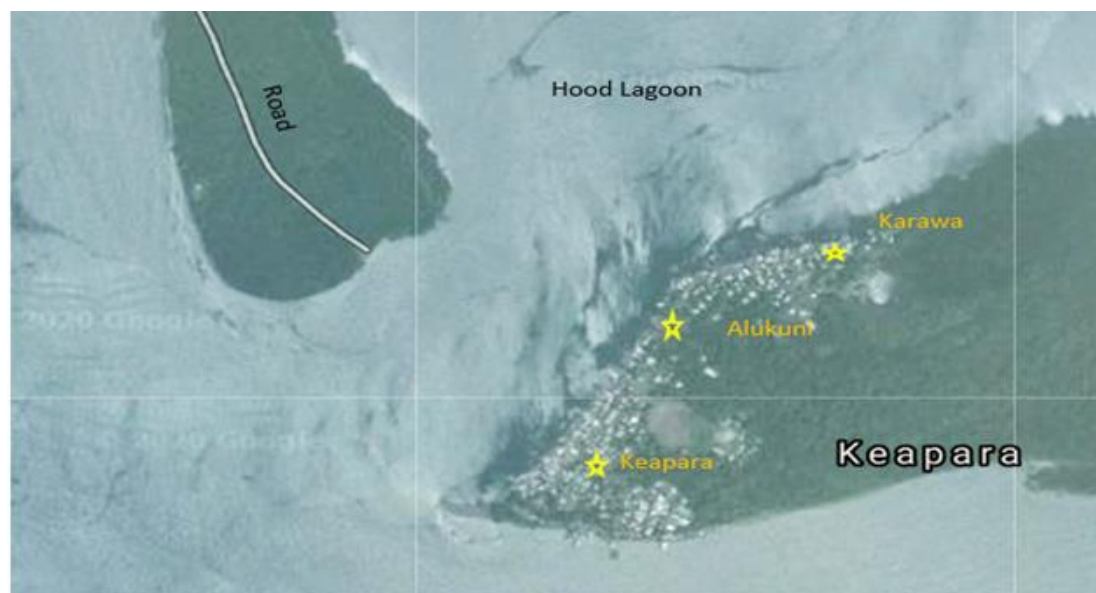


Figure 1.0: Google Earth Image of Keapara Village and its two neighboring Villages Alukuni & Karawa.

Table 1.0: Basic Geographical Information of Keapara, Alukuni and Karawa Villages

KEAPARA VILLAGE		ALUKUNI VILLAGE		KARAWA VILLAGE	
GPS Location	10.0999° S, 147.8634° E	GPS Location	10.0977° S, 147.8586° E	GPS Location	10.0961° S, 147.8608° E
Population	653	Population	397	Population	660
Male	348	Male	199	Male	330
Female	305	Female	198	Female	330
Households	90	Households	56	Households	94
Point of Contact	Hon. Iruna Ila, LLG Councilor, Ph: 7358 0043	Point of Contact		Point of Contact	

KEAPARA in itself is a big village located in **Hood lagoon Bay of Ward 23, Rigo coast LLG of the Rigo District, Central Province**. The name covers **three big villages Keapara, Alukuni and Karawa**. Though the villages do not have distinct geographical boundaries and are in the same LLG, they are separated by different ward numbers and have different ward councilors due to the high population in each village. Alukuni is in ward 21 while Karawa is in ward 22. The district headquarters and the nearest government station is Kwikila located approximately 34 km but most locals prefer to travel to POM due to the cost of items and for economic and other business or work activities.

The village is accessible by road which covers an approximate distance of 102 km from Port Moresby to the point of the lagoon where vehicles are left on the mainland and a 5 minute ferry by boat leads to the village. The lagoon is one of the richest in the country in terms of marine resources as it is surrounded by reef at the sea front and thick mangrove forests on the mainland meeting the sea.

These three villages are famous for producing some of PNG's most learned individuals and though they have different ward councils, they share the same culture and traditions and also speak the same languages '**Motu, English and Tok Pidgin**'. They also share most of the basic government services like health, education and church in the area.

They have a well-organized structure of traditional and religious leadership that plays an important role in providing the guidance and support to the development of the community which makes the village peaceful and unique in itself. The dominant religion/ church in all three villages is the United Church.

Nearly all local homes use mini solar kit systems supplied by the former local MP for lighting and powering devices such as phones. Few individuals who can afford or are small business owners had much bigger solar home systems and even small generators making up a small hybrid system. They also have a big 4000 Watts generator and several street solar lighting systems in the villages installed as a project funded by the local former MP. Most of the streetlights are now not working due to lack maintenance and vandalism.

The local culture and tradition in the village and of the local people has a special place that encourages the involvement of women and girls in decision making. Many of the locals are literate and understand the importance of gender equity and involvement. The local culture also gives great respect to the old, but it is just the disabled that are at times overlooked and are not considered, especially in decision making due to the fact that there are not many, most probably less than five individuals in the village.

The locals greatly depend on fishing and farming on the main land as their main source to earn an income from what they harvest and from the catch they sell. Unfortunately most of the fish caught are not stored for more than three to five days due to the fact that many do not have refrigerators that can hold fresh catch and at most times they make a loss. It was also noted that there were several local business like trade stores operating but many did open markets on certain days as part of social or community gathering and the marketing was done mainly by the women and girls.

One important observation made was that nearly all in the three villages actively participated in church or religious activities and that the church elders played an important part in mobilizing locals to attend the trainings and even the church yard was used to train locals during the pilot community trainings.



Figure 2.0: View of Keapara Village from Mainland Jetty



Figure 3.0: Local Village Market



Figure 4.0: Keapara government Run School



Figure 5.0: Village houses overlooking the United Church

2.0 PILOT TRAINING SCHEDULE

The pilot community trainings were completed successfully over the course of fifteen days as a result of a good collaborative team work with stakeholder and community support. Prior to the project team conducting the pilot community trainings in Keapara Village verbal and written approvals were taken from first the Global Green Growth Institute PNG office based in Port Moresby and the Central Provincial Administration (CPA) so as CCDA while contact was made with the local ward councilor of Keapara Village advising him in advance of the team's visit. Advise was sought also from the National Covid-19 Control center in Port Moresby due to the cases of Covid-19 in the country.

After all approvals were sought the team left Port Moresby on the 01st of October via road on a government vehicle provided by CPA. The first day was used to settle in at the lodge at Kwikila station. On the second day (02nd October 2020) the team travelled to Keapara Village to do community consultation with the local village leaders (ward councilor, Church elders, youth leaders, women leaders and the local chief).

A discussion was held with the village leaders in which the project team outlined the purpose of their visit, the project aims and objectives, the importance of the trainings and how the village (Keapara) was

selected for the pilot community training as part of awareness for the upcoming days of trainings. The leaders were amazed and thanked the team for their visit and the implementer (GGGI) and the donor (KOICA) for selecting the village for the pilot trainings.

As part of resource mobilization the following payments were made;

1. Catering for 10 days of 25 participants was paid to the women fellowship group,
2. Hire of Dinghy for 11 days was made to a local dinghy owner
3. Hire of generator was made to a local businessman to use his generator for 10 days of training
4. Hire of the training Venue for 10 days was made to a local church elder.
5. The prior mobilization led to a good turnout of participants for the training unfortunately many were still caught up in their daily activities and church related activities during the course of the ten days training.



Figure 5.0: Project Team doing Mobilisation & Awareness



Figure 6.0: Day one of Training Group Photo

Table 2.0: Pilot Community Training Schedule_01st Oct-15th Oct 2020.

Day	Activity	Location	Mode of Transportation	Personals	Time-Frame	Lead Trainer	Support Trainer	Responsible Person
01st October 2020	Travel from Port Moresby to Kwikila Station, Rigo District Central Province. Place of Accommodation	Maggi Highway	Road	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	4 hours			Benjamin Keni
02nd October 2020	Preplanning (Community consultation, mobilization, panning, Project Introduction, Awareness Training, Registration & Compilation of Training List etc)	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day			Benjamin Keni
03rd October 2020	Launch of the Pilot & Conduct First Day of Pilot community Trainings - Green Economy Module 1 GREEN ECONOMY GENERAL PRINCIPLES	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Nicholas	Benjamin & support accompanying staff from the Provincial & district Administrations.	Benjamin Keni
04th October 2020	Rest & Pre-plan for second week of trainings	Kwikila Station						
05th October 2020	Conduct second day of Pilot Community Trainings - Green Economy Module 2 - ENERGY EFFICIENCY BASICS	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni
06th October 2020	Conduct third day of Pilot Community Trainings - Green Economy Module 3 - GREEN BUSINESS BASICS	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Nicholas	Benjamin support accompanying staff from the Provincial & district Administrations	Benjamin Keni
07th October 2020	Conduct Fourth day of Pilot Community Trainings - Green Economy Module 4 - GENDER INCLUSIVITY & DEVELOPMENT	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni
08th October 2020	Conduct Fifth day of Pilot Community Trainings - Renewable Energy Module 1 - RENEWABLE ENERGY GENERAL PRINCIPLES	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Nicholas	Benjamin support accompanying staff from the Provincial & district Administrations	Benjamin Keni
09th October 2020	Conduct Sixth day of Pilot Community Trainings - Renewable Energy Module 2 - SOLAR IN THE COMMUNITY	Kwikila Station	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni
10th October 2020	Conduct Seventh day of Pilot Community Trainings - Renewable Energy Module 3 - SOLAR OPERATIONS & MAINTENANCE BASICS	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Nicholas	Benjamin support accompanying staff from the Provincial & district Administrations	Benjamin Keni
11th October 2020	Rest & Pre-plan for second week of trainings	Kwikila Station						

12th October 2020	Conduct Eight day of Pilot Community Trainings - Renewable Energy Module 4 - PICO - HYDRO IN THE COMMUNITY	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Nicholas	Benjamin support accompanying staff from the Provincial & district Administrations	Benjamin Keni
13th October 2020	Conduct Ninth day of Pilot Community Trainings - Renewable Energy Module 5 - PICO - HYDRO OPERATIONS & MAINTENANCE BASICS	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni
14th October 2020	Conduct Tenth day of Pilot Community Trainings - Renewable Energy Module 6 - Renewable Financial Management	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni
15th October 2020	Official closure & conclusion of the Pilot Community Trainings - Short Program & Return to POM	Keapara Village	Road & Boat	1 x GG staff + 1 x Hired Trainer+ 1 x CPA staff + 1x Rigo District Staff	whole day	Benjamin	Nicholas support accompanying staff from the Provincial & district Administrations	Benjamin Keni

3.0 FEEDBACK FROM THE PILOT COMMUNITY TRAININGS

3.1 General feedback from the training team

Below are the general observations from the trainers on areas that were good (feedbacks), areas that need improvement and so forth as each module under Green Economy (4 x modules) and Renewable Energy (6 x modules). This is critical as it serves the purpose trainers providing information on how they feel the modules should be improved or customized, based on their training experience from training the community.

The general feedbacks are given below.

3.1.1 Trainers feedback on GE General Principles

Table 3.0: Summary of Feedbacks from Trainers on Green Economy

3.1.1. GREEN ECONOMY GENERAL PRINCIPLES		
NO	Feedbacks	Improvements
1	The terms used to describe the different types of economy maybe too complicated and confusing to some given the low literacy level.	<ul style="list-style-type: none">➤ In the customization of the module it is very important the words used simple and localize;➤ And definitions provided are simple and can be easily related to by the locals.
2	The module though has stated/outlined some ways of moving away from Brown Economy to more Greener Economy they may be too broad and locals may not relate well those measures or benefits.	<ul style="list-style-type: none">➤ In the customization of the module it is important that a clear distinction is made where locals in a group activity identify the different brown activities they do and;➤ Also identify the sustainable measures they can take/ do to move away from those brown ways to greener ways. <i>Eg: Replanting mangroves and giving time for them to grow rather than cutting them only.</i>➤ For PNG it is important to stress on the importance of sustainable fishing and farming especially for the rural communities as these is part of their daily living.
3	The module also outlines the effects of climate change but not in detail especially ways to help locals mitigate and adapt to	<ul style="list-style-type: none">➤ It is important to provide alternatives/ options that will enable villages to think broad on ways they can help themselves successfully

	the effects of climate change as this village is a coastal village that is greatly affected by climate change impacts.	<p>mitigate or adapt to the drastic effects of climate change they currently face.</p> <ul style="list-style-type: none"> ➤ Include a table that clearly outlines the mitigation and adaptation measures that locals can take for example mangrove rehabilitation programs headed by the youths as a mitigation option for coastal/shoreline erosion. Another option would encourage the young to do Beach clean ups and proper disposal of waste to avoid sea pollution.
4	In this Module we have outlined that there are international agencies available that provide funding for Green initiative Project which have gotten the attention of locals. Unfortunately we have left them with no knowledge on how or the process they will follow to access those funds or seek assistance either from the government or NGOs.	<ul style="list-style-type: none"> ➤ In the final customization it is important to at least include methods or ways to follow in successfully acquiring funding from the different available agencies with specific examples for the different countries. ➤ Maybe it will be good to briefly outline the steps of Project Proposal Writing and maybe give an example. ➤ The same concept can be used by locals to apply for funds/ projects under the different agencies given their set/ defined proposal format/ template.

3.1.2 Trainers feedback on RE General Principles

Table 4.0: Summary of Feedbacks from Trainers on Renewable Energy General Principles

3.1. 2. RENEWABLE ENERGY GENERAL PRINCIPLES		
NO	Feedbacks	Improvements
1	The module in itself was good and quite detailed. Unfortunately to make locals understand better and move away from using Non-renewable sources of energy especially fossil fuels we must make them understand better the impacts it will have on the environment and more importantly on their health and those of their children. This will make them to take responsibility and think twice in using fossil fuels.	<ul style="list-style-type: none"> ➤ Include a section under 2.14: 'Impacts of Energy use 'globally' on how the burning of fossil fuels affects our and those of our children health/ respiratory systems. If possible, include some illness caused by inhaling fumes. ➤ Under section 2.16 'Climate Change' Stress how the burning of fossil fuels turns to act like a blanket trapping heat from escaping the Earth's surface triggering Global Warming and

		Climate Change. Relate the effects of Climate change again to how it affects agriculture putting stress on water and food security and how can that affect our lives/health and those of our children and the natural environment in the future.
2	Clear distinction so as advantages and disadvantages of using Renewable and Non-Renewable sources of Energy.	<ul style="list-style-type: none"> ➤ Though this is stated it is better to include a summary table that briefly outlines the different sources of Renewable Energy Sources available and the advantages and disadvantages of using Renewable sources. ➤ The same can be done for the Non-renewable sources of energy. ➤ This will enable the locals to pick up a good understanding of why it is important for us and the world to move away from using non-renewable sources of more sustainable and renewable sources or energy.

3.1.3 Trainers feedback on Green Business Basics

Table 5.0: Summary of Feedbacks from Trainers on Green Business Basics

3.1.3. GREEN BUSINESS BASICS		
NO	Feedbacks	Improvements
1	Give more examples and pictures of Green Business	In the final customization it is must that the module includes more pictures and examples into Green Business taking into the local geography. In this way the participants are able to follow pictures and example in local community and country.
2	Give scenarios and discuss more in detail the elements of green business	In the final customization it is must that the module includes more scenarios and more detail examples into Green Business taking into the local geography. In this way the participants are able to follow scenarios and more in detail in local community and country.
3	Give more practical examples of measures of greening the Community in the local area.	The modules need to discuss into context of the local area the actual measures of greening the Community in the local area. Thus, the participants are able to follow scenarios and more in detail in local community and country.

4	The Business Model should reflect to the local community	The modules need to reflect discuss into the local community. Thus, the participants are able to follow scenarios and more in detail in local community and country.
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3.1.4 Trainers feedback on Gender Inclusivity & Development

Table 6.0: Summary of Feedbacks from Trainers on Gender Inclusivity & Development

3.1.4. GENDER INCLUSIVITY DEVELOPMENT		
NO	Feedbacks	Improvements
1	This module was very interactive in which the locals enjoyed especially when it came to the activities and role plays. However there are some terms used that needs simplification to suit the literacy level of the locals.	<ul style="list-style-type: none"> ➤ It is important that the terms used in the module are further simplified and more examples are given to further clarify to the locals the meaning of the terms. ➤ It is also important to state also why it is important that locals get to know and understand these terms under section 3.0 before proceeding. ➤ This can be outlined in the workbook.

3.1.5 Trainers feedback on Energy Efficiency

Table 7.0: Summary of Feedbacks from Trainers on Energy Efficiency

3.1.5. ENERGY EFFICIENCY BASICS		
NO	Feedbacks	Improvements
1	Some terms used need to be simplified further to meet the literacy level of the locals	<ul style="list-style-type: none"> ➤ The module needs simplification especially of the terms used such terms especially Energy Efficiency and Energy Conservation. Use relevant Examples to explain their meanings ➤ Use more examples to bring out the meaning of the terms. Especially in the learner's workbooks.

3.1.6 Trainers feedback on Solar in the Community

Table 8.0: Summary of Feedbacks from Trainers on Solar in the Community

3.1.6. SOLAR IN THE COMMUNITY		
NO	Feedbacks	Improvements
1	The module in all was good, one thing to note is that locals were interested or wanted to know a little bit more on how sunlight is converted into electricity and what makes up the solar panels that enables it to absorb sunlight and then converts that to electricity.	<ul style="list-style-type: none"> ➤ Include a section under 3.0 Basics of Electricity, to basically break down a solar panel to the components it is made up of and what gives it that ability to absorb sunlight and generate electricity in return that gets stored. This will help locals understand the basic science behind how a panel generates electricity.
2	Less information on the type and quality brands of solar panel, batteries, inverters and charge controllers that may influence the buying choice of the locals after the training.	<ul style="list-style-type: none"> ➤ Include a section in the module that outlines the quality solar panels and components from those that are not of quality may refer to researches conducted or from experiences. ➤ This information is vital and will help them make better choices the next time they out shopping for a solar system or its components. ➤ Can include that in a group activity so they can identify and state the Product brands they have and give comments on the functioning and whether or not the product has lasted that long.
3	Less to no information on environmentally friendly ways to dispose spoilt batteries & solar panels making sure it does not pose harm.	<ul style="list-style-type: none"> ➤ A section under safety must cover in detail proper ways/ solutions that will help locals dispose their damaged batteries and panels to avoid environmental damage that may cause harm to human health as well.

3.1.7 Trainers feedback on Solar O&M Basics

Table 9.0: Summary of Feedbacks from Trainers on Solar O & M

3.1.7. SOLAR OPERATIONS & MAINTENANCE BASICS		
NO	Feedbacks	Improvements
1	The module in itself was good but with trainers not been specialized in Electricity/ solar has made it quite difficult to simplify the information given especially when it came to practically doing connections (Parallel & Series), how to measure voltage and current and explaining the difference using local examples the difference and function of voltage and current.	<ul style="list-style-type: none"> ➤ Trainers must be trained separately or at least a day or two on the basics of solar O & M and how to do safe connections. ➤ This knowledge is important before all trainers go out to do the main community trainings. ➤ Villages will have the thought that all trainers are trained and know well the solar system and as such may ask one trainer to help fix a system and that's when the trainers need to show their technical knowledge which will go a long way in educating the locals.
2	During this Training the locals showed great interest in the practical part of the session unfortunately there was only one solar training kit which caused some especially the women to shy away from taking part in the practical sessions.	<ul style="list-style-type: none"> ➤ It is important that during the main community trainings it is important that we take two or three solar training kits and enough tools. ➤ In doing so all will have a fair chance of playing around with the components/tools and do connections themselves. ➤ This will also help us identify/show to the locals as explained in the module the difference or advantages & disadvantages or doing parallel and series connection at home and also the importance of having a Charge controller and inverter in your system.
3	The locals as per observations really do not know how to identify and place properly their solar panels to receive maximum sunlight of which part of this has been covered in this module.	<ul style="list-style-type: none"> ➤ More information must be included on how locals can identify the correct direction to face their solar panels properly and at what angle of incline to receive maximum sunlight.

		➤ It is important that we have all tools stated/ showed in pictures on hand and it is also important that the trainers be also taught on how to correctly use those tools especially the; Multi-meter, clap-meter, sundial and others.
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3.1.8 Trainers feedback on Pico-Hydro in the Community

Table 10.0: Summary of Feedbacks from Trainers on Pico-hydro in the Community

3.1.8. PICO – HYDRO IN THE COMMUNITY	
Feedbacks	Improvements
There is still a bit of confusion with regards to explaining the difference between voltage and current. The water example (Fig 32) is quite confusing as such is there a possibility of using much clearer examples.	➤ This will help the trainers to understand well the two concepts and use much local examples to explain the two terms and their roles or importance.
Locals were very interested & asked in PNG since there not any hydro/turbine dealers in PNG, how can we pave a way forward for them to Purchase turbines.	➤ Include a section in the training modules on ways or who they should go and liaise with to enable them to purchase Pico-hydro turbines overseas so they can install locally. For example; Rural Powers PNG Limited.
The general geography of the Village (Keapara) is not suitable for setting up Pico-hydro systems (that is what locals think). As for use it is important, we make the locals think broad and be innovative or give them creative ideas that can enable them to set up a Pico-hydro despite their geographical setting.	➤ One example used during the training was; "Use a Solar Pump" to pump up sea water from one or two small dams to a tank at a height. ➤ Then use pipes 'Penstock' to channel down to Pico-hydro turbine located at a lower height which then generates electricity".
The pilot village (Keapara) is a coastal village surrounded by sea and have flat geography. As such the hydro Module may not be very applicable in this community.	➤ Is there a possibility of us leaving out this topic given that the village do not a stream/river source as such may be unrealistic and even been innovative maybe very costly and may not last long. <i>In The main trainings selective trainings suiting to the geography and need of the respective communities will be conducted for the different Project communities.</i>

3.1.9 Trainers feedback on Pico-Hydro O&M Basics

Table 11.0: Summary of Feedbacks from Trainers on Pico-Hydro Operation & Maintenance

3.1.9. PICO – HYDRO OPERATIONS & MAINTENANCE BASICS	
Feedbacks	Improvements
The Module covered well the different types of hydro systems, turbines and the concept in setting up one including the Safety Measures, but I believe locals will still be confused of how electricity is generated from the turbine spinning.	<ul style="list-style-type: none"> ➤ In the customization we should include a section that identify and in detail explain how electricity is generated using a turbine/hydro especially in the trainers' guide so the trainer is on an upper hand to explain. Note that this will be done once hardware kits are available in the main trainings. ➤ Also it would be great to give estimated costs of certain small pico-hydro systems so the locals have think of ways of whether they can afford the system or; ➤ What will they do that will help them in acquiring such equipment and who they should go to whether a government agency or a business dealer/ company to acquire such equipment like the pico-hydro turbines.

3.1.10 Trainers feedback on RE Financial management

Table 12.0: Summary of Feedbacks from Trainers on Financial Management

3.1.10 RENEWABLE FINANCIAL MANAGEMENT		
NO	Feedbacks	Improvements
1	Very detail and simplified module that makes training easy. Note in <i>Section 3.3 'Donor Agencies'</i> It is good stating the different funding agencies for such community programs but unfortunately there is no contact information of the agencies.	<ul style="list-style-type: none"> ➤ It is important that under the different agencies listed as potential funders under <i>section 3.3</i> we must include their contacts or their webpage information for locals to have access/ or contact to those agencies or the local government. ➤ Stress also on the importance of good institutional linkages be established and

		followed before contact to funding agencies is made.
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- Also it is important to include in the activities what type of initiatives the locals plan to implement given that they have gained knowledge in the training. *Add activity for the community to brainstorm/discuss and to come up with ideas on how they intend to use the new knowledge to start new initiatives within the community.*

Based on that the trainer can generally go on to give them basic information on how they should go ahead in setting up and seeking funding if needed in the future.

3.2 Community feedback on the modules

3.2.1 Community feedback and recommendations on “RE General Principles”

DAY 1 SATURDAY

Module: RE GENERAL PRINCIPLES

Date: 03/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 30

Male: 22

Female: 8

Training Evaluation = 15

Target Groups/ Audiences	Feedbacks
Local Government Officials	<p>The Honorable ward councilor in acknowledging the different energy technologies available he further stated that it will be costly for the villagers themselves to construct such systems like the wave, tide and wind systems as such asked if the Project can also identify potential donors/ investor that are willing to help the village construct such systems.</p> <p>He also stated that the village is in need of fresh water as such parts of the training should cover constructive ways to extract and use water wisely as water is an important resource in their village.</p>

Traditional/ Community Leaders	A community leader stressed on the idea of biomass and stressed that his village members be taught on ways to construct such systems as most of the household was are dumped unwisely that directly creates an eye sore on the beach front.
Small Businesses	A local businessman been interested in the topic asked if we could further explain how the burning of fossil fuels contribute to Global Warming and Climate Change and how can that also affect the health of humans and animals. In response a simple explanation was given with regards to the science behind the burning of fossil fuels and how the release of Carbon dioxide contributes to trapping heat that contributes to global warming and how that leads to climate change effects. Further explanation was made outlining that the fumes from burning of fossil fuels affects our respiratory system affecting our health over time.
Local Technicians	A local technician with great interest in the biomass system further asked if they could be taught how to channel the gas to their homes for cooking. The local technicians and youths also showed great interest to learn more about the mechanics of how power/ electricity is generated from wave, tide and wind and whether or not it is possible for the locals to construct one as those are suitable technologies given the village geography.
Women/ Vulnerable Groups	Women who attended the training were very interested especially in the biomass system. One stated that over the years of continuous use of firewood has overtime affected their health and asked if the steps involved in constructing a biomass mini plant can be taught to them so instead of throwing away bio-degradable waste they use to produce biogas.



Figure 7.0: Group Photo for Day 1 of Training on GE General Principles



Figure 8.0: Local Ward Councillors Taking Part in the

3.2.2 Community feedback and recommendations on “GE General Principles”

DAY 2 MONDAY

Module: GE GENERAL PRINCIPLES

Date: 05/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 24

Male: 23

Female: 1

Training Evaluation = 12

Feedbacks of Locals on Green Economy General Principles

Green Economy General Principles	
Target Groups/ Audiences	Feedbacks
Local Government Officials	The local ward councilor stated that with the training they have understood what climate change is and the basic science of it. He further asked how they can organize themselves to access funding from Government and NGOs to combat the effects of Climate Change.

Traditional/ Community Leaders	<p>A local village elder was happy with the training and expressed his gratitude stating that now with the training he has come to realize the effects of Climate change that's affecting them and their natural marine and terrestrial ecosystems. He further outlined that with the training they can now work together as a community to adapt to and mitigate these effects. He suggested that he will work closely with the locals especially the youths to set up a committee that will concentrate on mangrove rehabilitation.</p>
Small Businesses	<p>A local businessman acknowledging the training further explained to his community members the importance of keeping their beaches and living environment clean. He also stated the importance of recycling non-biodegradable materials and used the example of him collecting can tins around the village and beaches every morning that he sells. He stated that if everyone takes ownership of their waste their village would be as beautiful as before.</p>
Women/ Vulnerable Groups	<p>A mother outlined her appreciation of the training stating that she once heard of the terms 'Brown Economy' and 'Green Economy' but never really understood the terms. After the training now she understood the terms and stated that Green Economy is the way forward for her family and the community as a whole.</p> <p>She further went on to state that they use a lot of wood to cook daily as such she asked if there are other sustainable ways of cooking or can solar be used for cooking.</p>

Photos of the Training Day



Figure 9.0: Participants & Trainers taking part in the role play



Figure 10.0: Group Discussions with trainers facilitating

3.2.3 Community feedback and recommendations on “Green Business Basics”

DAY 3 TUESDAY

Module: GREEN BUSINESS BASICS

Date: 06/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 16

Male: 13

Female: 3

Training Evaluation = 12

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ Very excited about the program and wish to learnt more the different economies with focus to shift to green and blue economy ➤ I wish to have more training as such for Capacity Building and development in the Community ➤ Would welcome back the Main Training to his community so a much large audience and population may attend it will be a game changer to his area in terms development and change of mindset.
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ The Leaders wish to learn about Green Business and appreciated the module as an eye opener and change of mindset ➤ Wish so much to involve a wider cross section of the community at large. ➤ They wish to have more awareness to the local community before rolling such a vital and important development program
Small Businesses	<ul style="list-style-type: none"> ➤ Open up new ways of making business ➤ Venture into new ways of making sure to sustain their business operations ➤ Wish to follow green way of making business
Local Technicians	<ul style="list-style-type: none"> ➤ Align them to areas of sustainability into maintain community projects ➤ Feel ease to work with the community for trouble shooting, repair and maintenance of solar systems.
Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ Very excited to be amongst the training group ➤ Appreciate that the male participants now understand the role of women in the society ➤ Confident to stand up and share with the other women and community the new knowledge, skills and values acquired from this development

Photos of the Day



Figure 11.0: Nicholas Opening the training Day



Figure 12.0: Women taking part in the training

3.2.4 Community feedback and recommendations on “Energy Efficiency”

DAY 4 WEDNESDAY

Module: ENERGY EFFICIENCY BASICS

Date: 07/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 14

Male: 12

Female: 2

Training Evaluation = 12

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ Understand how to help the community in using the environment wisely to generate small business. ➤ Will engage the community green project for mangrove planting at waterfront of the Church Ministry Compound ➤ He will stop the net dragging fishing method as it destroys the new mangrove seedlings
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ They have highlighted that through this training has taught them that purchasing of energy equipment, they need to ask about the quality and other information of the products and its effect. ➤ He further states that all they want is for use of the equipment like a bulb to light up their homes without taking into account the efficiency rating of the bulb, and how the training will enable them to have a thought process towards buying more energy efficient products. ➤ The youths see this as a way to preserve environment and take part ownership of this as leadership of tomorrow. ➤ They have made a commitment to work with current local leaders to carry development taking into account the new knowledge, skills and values acquired.
Small Businesses	<ul style="list-style-type: none"> ➤ Align the new knowledge to sustain their business moving away from brown economy and shift to blue and green economy. ➤ Will explore and implement some of the new business ideas under Energy Efficiency Basics.
Local Technicians	<ul style="list-style-type: none"> ➤ They see a bright future ahead and are willingly and committed to be development partners
Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ Excited to learn about the new business initiatives. They will be working with partners and communities to venture new business opportunities

Photos for the training day

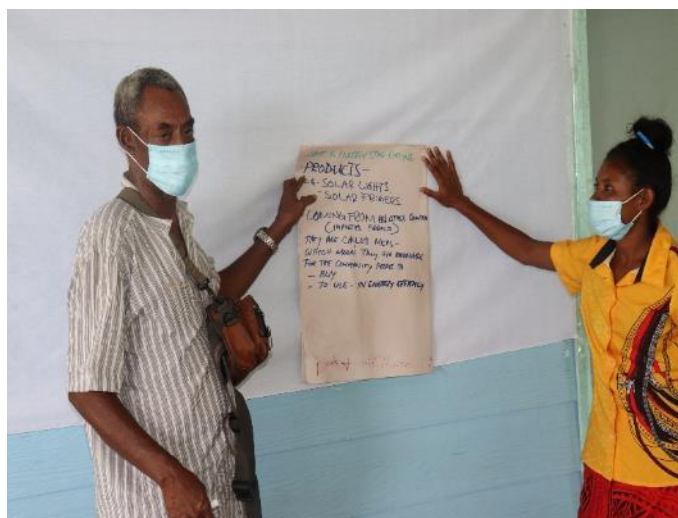


Figure 13.0: Father & Daughter doing group Presentation



Figure 14.0: Nicholas taking part in a group discussion

3.2.5 Community feedback and recommendations on “Inclusive Development”

DAY 5 THURSDAY

Module: GEINCLUSIVE DEVELOPMENT

Date: 08/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 19

Male: 12

Female: 7

6. Training Evaluation = 11

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ It gives a clear sense on how to run their community taking into the role women / vulnerable groups and youths ➤ Know the importance of equity and equality and how to reinforce that in the community ➤ Take on themselves to be a role models in implementing the new ideas, skills, values to their communities.
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ They have now an in-depth understanding of Gender Equality and Gender Equity. ➤ They now realize how the different groups have their rights and how they could be involved in decision making. ➤ The youths on the other hand expressed their potential, but are always overlooked. ➤ This usually makes them feel left out and end up resorting to anti-social activities ➤ Gender according to their prior knowledge is more about male and female however within the module they were able to understand that gender is a responsibility performed by both male and female and how they relate to each other.
Small Businesses	<ul style="list-style-type: none"> ➤ As important members of the community and being part of the training program they will now make an effort to align their small business operations to assist in this space ➤ They support their partners to be partners of change in terms inclusive development.
Local Technicians	<ul style="list-style-type: none"> ➤ They acquire a lot of new information to be agents of change. ➤ They will now support any development on Gender & Inclusivity Development.

<p>Women/ Vulnerable Groups</p>	<ul style="list-style-type: none"> ➤ An interesting observation from Women / Vulnerable groups emphasized that they are always left out in most of the decision making due to traditional barriers whereby males are usually dominant in decision making when it comes to development. ➤ Thus this is where it becomes an issue and usually lowers their status as well. ➤ With this training development they believe man would be able to understand the role of women and allow them to take their space in decision making ➤ They have expressed interest to take this training materials home.
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Photos for the Training Day



Figure 15.0: Group Discussions on-going



Figure 16.0: Women taking part in discussions

3.2.6. Community feedback and recommendations on “RE Financial Management”

Day 6: Friday

Module: RE FINANCIAL MANAGEMENT

Date: 09/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 18

Male: 17

Female: 1

Training Evaluation = 14

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none">➤ There should be a more detail bridge into Financial Management➤ Asked with identifying the different sources of energy present in the village (wave, tide, wind and sun/solar) how can they go about in writing up a project proposal and to which donor specifically to fund such a project.
Traditional/ Community Leaders	<ul style="list-style-type: none">➤ The donors in the training module didn't have contact details➤ The youths showed interest in establishing a committee that specializes in mangrove rehabilitation and asked how can they link their work to seek assistance from possible donors or the government to support their working moving into the future.
Small Businesses	<ul style="list-style-type: none">➤ There were no templates for donor funding applications➤ A small businessman who was very interested in the training asked if more training/ group activities be done so they understand well how to get a loan and the payback period so as how to calculate the interest.

Local Technicians	<ul style="list-style-type: none"> ➤ The module should have a section project planning & design development
Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ They wish to have a copy of the training material ➤ Having much interest in establishing committees and managing funds a woman participant asked if they could be trained on how they can register a legal committee that can manage their funds properly guided by law so no funds are misused for such community projects initiated.

Photos of the Training Day



Figure 17.0: Youths taking part in group presentations



Figure 18.0: Husband & wife and a youth taking part in group presentation.

3.2.7 Community feedback and recommendations on “Pico-Hydro in the Community”

Day:7 Saturday

Module: PICO - HYDRO IN THE COMMUNITY

Date: 10/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 16

Male: 14

Female: 2

Training Evaluation = 11

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none">➤ Good content but not very applicable to the village geographical setting.➤ One asked given the basic knowledge of hydro is it possible of establishing one given their local geography and if so he further asked the estimated cost of erecting such a system.
Traditional/ Community Leaders	<ul style="list-style-type: none">➤ Should explore other systems associated with the sea tides, waves and wind apart from solar given the geography of the village and that the village has those resources capable to generate electricity.
Small Businesses	<ul style="list-style-type: none">➤ A small business owner suggested that with such trainings it is important that we highlight to them the most suitable and affordable form of RE technology that they can adopt to benefit their business and their local community.
Local Technicians	<ul style="list-style-type: none">➤ Wish to explore alternatives that will make use of the ocean water to set up a Pico-hydro system.➤ Stated that the technology in itself was very interesting and quite new as most thought only of big turbines. Suggested that the mechanics of how electricity is produced should be explained.

Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ Learn new knowledge and needs training materials to take home. ➤ More hands on activity especially with connecting wires and other safety requirements/ tips.
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3.2.8 Community feedback and recommendations on “Pico-Hydro O&M Basics”

Day 8 Monday

Module: PICO - HYDRO OPERATIONS AND MAINTENANCE BASICS

Date: 12/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 16

Male: 14

Female: 2

Training Evaluation = 11

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ Not applicable to community ➤ One agreed that such trainings are good information sharing and stated that they should encourage more young of both genders to attend such trainings in the main trainings.
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ New things to improve and understand from natural resources. ➤ It is important especially for the young youths to learn and understand the safety aspects of connecting a system and also the safety measures involved.

Small Businesses	<ul style="list-style-type: none"> ➤ Though not applicable but vital information acquired. ➤ This was quite too technical and most women/ mothers did not attend.
Local Technicians	<ul style="list-style-type: none"> ➤ Vital information acquired thus principles is similar to solar systems ➤ Having a Pico-Hydro turbine will help a lot as it will help us identify the different components and get to actually see how it is installed. ➤ Suggested to explain how connections are done from the turbine to the system that powers a household. <i>Will be done once kit is available.</i>
Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ Need equipment for practical demonstration. ➤ The principles in terms of connecting wires is the similar as those of a solar system but with a Pico-hydro system, power can be produced at night as well.



Figure 19.0: Group photo with the participants



Figure 20.0: A local Electrician explaining to Participants.

3.2.9 Community feedback and recommendations on “Solar In the Community”

DAY 9 Tuesday

Module: SOLAR IN THE COMMUNITY

Date: 13/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials

- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths
- Local Women

Total Participants = 16

Male: 14

Female: 2

Training Evaluation = 12

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ It helped the community in the sustainability part of the Solar Systems in the village. ➤ Work with the Government to repair and maintain the current Solar Project that was given the previous MP which are no longer working.
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ Youths were really enthusiastic to learn about what solar and its components are and also the type of Solar Home systems that can be used. A local technician that was part of the training also highlighted that the module really enhanced his knowledge and was informative on how to help the community if there is a need. ➤ An interesting fact here is that participants were able to identify the different components of the solar system and were able to understand that to have a quality Solar system; it was essential for ➤ the community to be invested from the planning of what type of system they have to the purchase and then operating and maintaining the system. ➤ Improve safety in handling electrical appliances and taking care of products
Small Businesses	<ul style="list-style-type: none"> ➤ Venture into green source to sustain business operations
Local Technicians	<ul style="list-style-type: none"> ➤ Beneficial knowledge acquired and step up from what they already know. ➤ They now stand ready to assist the community for trouble shooting, repair and maintenance.

Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ The women also highlight that they are able to understand and differentiate that it is the sunlight and not the heat that provides energy to the panel where it charges the battery. They are also able to know and understand how to position and properly mount solar in a pole or roof.
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Photos of the Training Day



Figure 21.0: Ben helping local Technician to explain components of a solar system



Figure 22.0: Youths taking part in Group activities

3.2.10 Community feedback and recommendations on “Solar Operations & Maintenance”

DAY 10 Wednesday

Module: SOLAR OPERATIONS & MAINTENANCE BASICS

Date: 14/10/2020

Attended Groups:

- Provincial Government Officials
- Local Level Government Officials
- Community Leaders
- Church Leaders
- Local Technicians
- Local Entrepreneur
- Youths

Total Participants = 14

Male: 10

Female: 4

Training Evaluation = 10

Target Groups/ Audiences	Feedbacks
Local Government Officials	<ul style="list-style-type: none"> ➤ The Official were very keen to learn how to operate solar systems. ➤ Took part in the practical learning session ➤ Demonstrate how to trouble faults in the solar system ➤ Were given the opportunity to help out in the set-up of the kit.
Traditional/ Community Leaders	<ul style="list-style-type: none"> ➤ Beneficial to everyone in the community ➤ Change people's style and standard by venturing into green sources of energy
Small Businesses	<ul style="list-style-type: none"> ➤ Migrate energy sources to green energy to save cost. ➤ Be able to learn how to operate solar systems. ➤ Given the opportunity to help out in the set-up of the kit.
Local Technicians	<ul style="list-style-type: none"> ➤ Now able to trouble shoot better to help the community in sustainability of solar systems. ➤ Migrate energy source to green energy and be a development partner in this space. ➤ Local Technician, youth and women were very keen to learn how to operate solar systems. Local technicians were given the opportunity to help out in the set-up of the kit.
Women/ Vulnerable Groups	<ul style="list-style-type: none"> ➤ This group women were very keen to learn how to operate solar systems. ➤ Were given the opportunity to help out in the set-up of the kit. ➤ This session was quite technical and many women were shy to participate in the practical but when encouraged by the trainers they did great in helping to connect and troubleshoot.

Photos of the training Day



Figure 23.0: Women taking part in Trouble shooting



Figure 24.0: Departure group Photo with

4.0 TRAINING SURVEY RESULTS

4.1 Pre-Evaluation Training Results

This section of the report contains the results of the Pre-Evaluation survey before the actual training. The forms/ questionnaires were administered in advance of the training to the participants to share their expectations of the workshop by filling the form before the start of each training day.

This section is broken up based on the different questions asked on the Pre-evaluation survey forms.

- Question 1: What are you hoping to learn from this training?**

The answers of locals for the ten different training modules for the ten days is summarized in the table below for this question. Note that due to the similarity in answers summary answers are given as such the feedbacks for each module/ training day is less than that of the participants who attended the training.

Day No.	Training Modules	General Feedbacks from local Participants
1	GE General Principles	<ul style="list-style-type: none"> I. Expressed great interest to learn more about different RE Technologies especially the solar, tide, wave and wind energy generating technologies due to their geographical situation. II. Understand what Green Economy is. III. Many responses from locals showed that they had very little to no knowledge on GE as such many stated to learn more about solar/ RE instead.

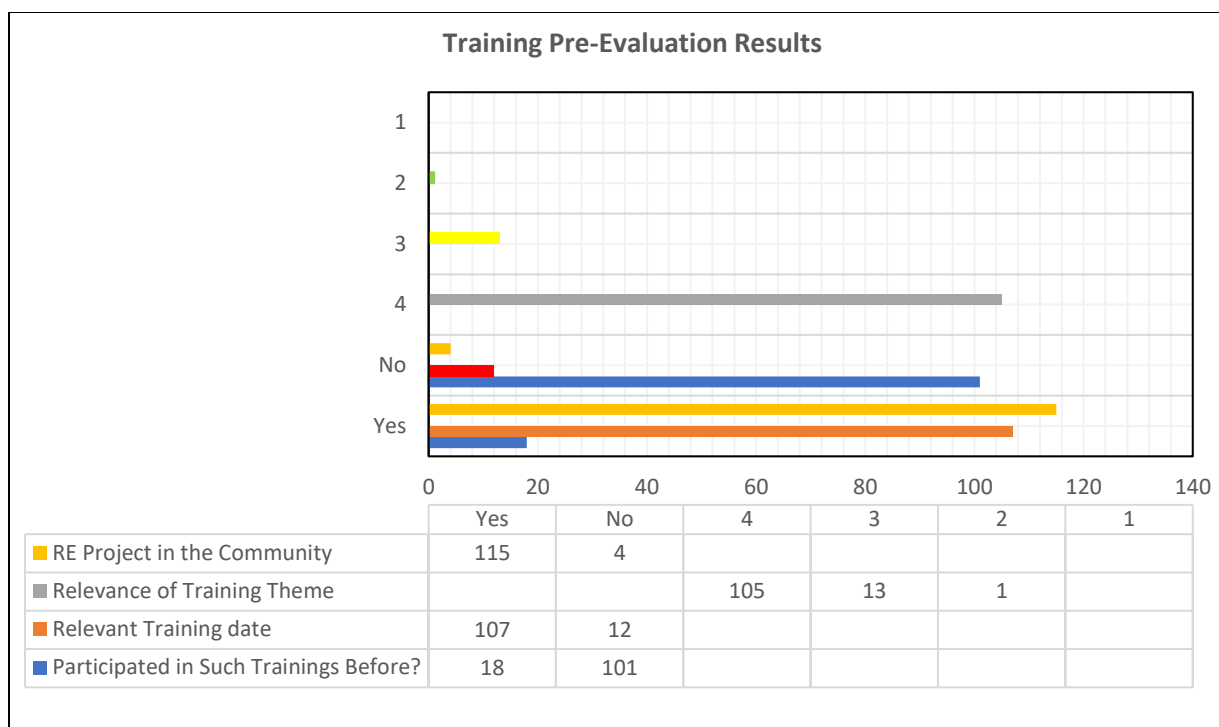
2	RE General Principles	<ul style="list-style-type: none"> i. Hoping to learn/ know what is meant by Renewable Energy. ii. How is energy generated from RE sources? iii. Different types of RE Sources & technologies available & those suitable for my community. iv. Understand why RE is good compared to non-renewable energy sources.
3	Green Business Basics	<ul style="list-style-type: none"> i. Understand what is meant by the term Green Business ii. Understand how to make a green Business iii. Learn the sustainable ways to reduce environmental pollution. iv. Learn to help in community initiatives or projects v. How to use our natural resources sustainably to make business.
4	Gender Inclusivity & Development	<ul style="list-style-type: none"> i. Understand the importance of Gender inclusivity. ii. Ways to change the way the community structure is and involve more women and vulnerable in decision making hoping that all regardless of gender take part in community activities to live happy.
5	Energy Efficiency Basics	<ul style="list-style-type: none"> i. Understand what is Energy & Energy Efficiency ii. Learn how/ ways to save energy iii. Understand the different types of energy sources
6	Renewable Financial Management	<ul style="list-style-type: none"> i. Learn more about Renewable Financial management. ii. Ways to live sustainably with the natural environment and help my community to adapt these best practices. iii. Anticipating to grasp new ideas to improve me and my community's way of living.
7	Pico-Hydro in the Community	<ul style="list-style-type: none"> i. Learn the different hydro types or systems ii. Hydro Energy generation and its safety iii. Basics involved that can help local purchase a small pico-hydro turbine. iv.
8	Pico-Hydro O & M Basics	<ul style="list-style-type: none"> i. Learn More on Pico-hydro systems ii. Learn how to get, install & operate Pico-hydro systems. iii. More on Series and parallel connections.

9	Solar in the Community	<ul style="list-style-type: none"> i. Learn more on Solar in terms of how to purchase good quality systems. ii. Learn the practical part of how to place solar panels to receive maximum sunlight. iii. Learn how to identify faulty batteries and also ways to look after batteries well. iv. Learn how to dispose spoilt batteries & panels safely. v. Learn more on AC & DC and their difference.
10	Solar O & M Basics	<ul style="list-style-type: none"> i. Learn how to connect a solar system properly ii. Learn how to use the different tools iii. Learn to fix a solar system, troubleshooting. iv. Learn how to protect and keep safe my panel and batteries. v. Learn how to connect more than one battery or panel in series and parallel.

• **Question 2: Have you participated in a training workshop before?**

A summary of the answers from all participants over the course of the ten days of training. As shown in graph 1.0 below indicated by the blue colored bar about 18 participants out of the total 109 participants stated that they have attended some sort of training before while the majority of 101 participants have not attended such trainings and showed great interest and willingness to learn through the ten days of training.

We heard from locals that there was a similar training conducted by Child Fund PNG in the community but it was for a day and based generally on water and sanitation best practices.



Graph 1.0: Summary results of questions 2, 3, 6 and 8.

- **Question 3: Is the theme of the training relevant to your community?**

As shown in Graph 1.0 according to the participants who attended the trainings over the course of ten days 105 participants in total gave an overall rating of 4 (Strongly Agree) indicated by the gray colored bar, while 13 participants gave an overall rating of 3 (Agree) indicated by the yellow bar and 1 gave a rating of 2 (Disagree) indicated by the green bar that the training theme was relevance to the community.

It was observed that the answers given by the participants was greatly influenced by the low literacy level in that some did not understand well the making/ ratings of the questions before selecting the appropriate one relating to the question.

In all as per the responses given it was clear that the local participants were happy with the theme of the training as it was relevant to their community.

- **Question 4: In what way will this training benefit you and your community?**

The following are some of the interesting benefits that the participants outlined that would benefit them and their community.

- Know the worth of the natural environment and live sustainably
- Successfully adapt the ways to move away from Brown Economic activities to Greener and Blue forms of Economy that will benefit us today and those of our future generations.
- Help me help my community in a good way
- Help me fix my solar system and those of my family or community members
- Help me to set up a small green business

- vi. Help save our natural resources
- vii. Involve more women & girls and vulnerable people in community decision promoting equality.

- **Question 5: How many family members are in your household?**

According to the responses from the participants gathered each day the results are presented in the table below with the total family members stated against each day of training.

Days	Total number of Participants	Total Number of family Members gathered from all participants responses for that training day.
Day 1	15	111
Day 2	12	111
Day 3	12	92
Day 4	12	83
Day 5	11	91
Day 6	11	110
Day 7	11	87
Day 8	14	116
Day 9	11	62
Day 10	10	72
Total	119	935

Based on the above table it is obvious that there is quite a big family living together in a household. As such we believe that if each of the participants who attended the training can transfer that knowledge to educate their family members on what they learnt, we would have gone past the target of the project to train 100-150 people as more than five hundred people will have gained knowledge of the trainings conducted.

- **Question 6: Is the date and time for the training suitable? If no, please indicate another date and time?**

As shown in Graph 1.0 for this question out of the total participants for the ten days, 107 stated that the date and time was suitable as indicated by the brown bar for them while 12 participants out of the total stated that the date and time was not suitable as indicated by the red bar mainly because there were several church related activities going on concurrently. It was also nearing the festive season and many of the locals were busy gardening/ harvesting their produce and were out fishing to sell to buy things in preparation for the festive celebrations.

These were the two main factors that contributed to less participants attending the different trainings for the different days of training.

It was also suggested that in the main training we should do it in the beginning of mid of next year as this is the time the locals are free from their daily activities and many will attend the trainings.

- **Question 7: What does Renewable Energy Mean to you?**

As noticed from the answers gathered at first the locals had very limited knowledge on Renewable Energy but after going through the first and second day of training they picked up and gained fair knowledge on what is meant by Renewable Energy. Below are some responses gathered from the locals as to how they define Renewable Energy.

- i. Energy that can be used over and over again.
- ii. Free Power or Energy
- iii. Solar & hydro Power
- iv. Energy that will help me and my environment & future generation
- v. The new way of living to meet our energy needs.
- vi. Energy/power that is produced from my natural environment that is clean.
- vii. Free Energy given by the Nature

- **Question 8: Are there any Renewable Energy Projects in your Community?**

As shown in graph 1.0 the answers gathered by the local participants over the ten days of training showed that 115 of the participants responded that they have a past Renewable Energy Project in their community which is true. The other four responded **No** this could be because of the fact that they may have not understood the term 'Renewable Energy' as such have given such answer. It was confirmed by the project team during the Pre-implementation and during the Pilot Community Training that there is indeed a renewable energy project initiated by the former local MP. The project supplied every individual home with solar kits. The project concentrated on supplying and installing mini solar home kits (4 lights and a switch Port for charging Mobile Phone/ radio) and solar streetlights. Unfortunately, the locals were not taught on ways to install and maintain the solar systems themselves which has resulted in many of the solar home kits and solar streetlights now failing and the locals have limited knowledge on fixing the systems. Some of the solar streetlights have been vandalized due to political influence. There is also another project funded by EUGIZ in the community that concentrates on supplying clean water to the community unfortunately the project is not yet implemented, and the project is already past its implementation phase as per the project timeline.

- **Question 9: Who does the budget or financial planning in your family?**

Answers or feedbacks collected from the participants over the ten days showed that in most of the families the fathers do the financial planning mostly but at times the mothers do the financial planning but in most instances/ the usual norm is that the father and mother together do the financial planning for their family.

- **Question 10: What does the term 'Gender Inclusive' mean to you?**

As witnessed during the beginning of the first day of training the response given by local participants showed that many had little to no knowledge on Gender Inclusion as such some left this blank. The following were some answers participants gave prior to the first day of training;

- i. To make gender equality strong
- ii. Include women to participate in Training
- iii. Includes disabled People

In comparison the following are some answers given by locals defining gender inclusion after days of training in which the term was used and explained.

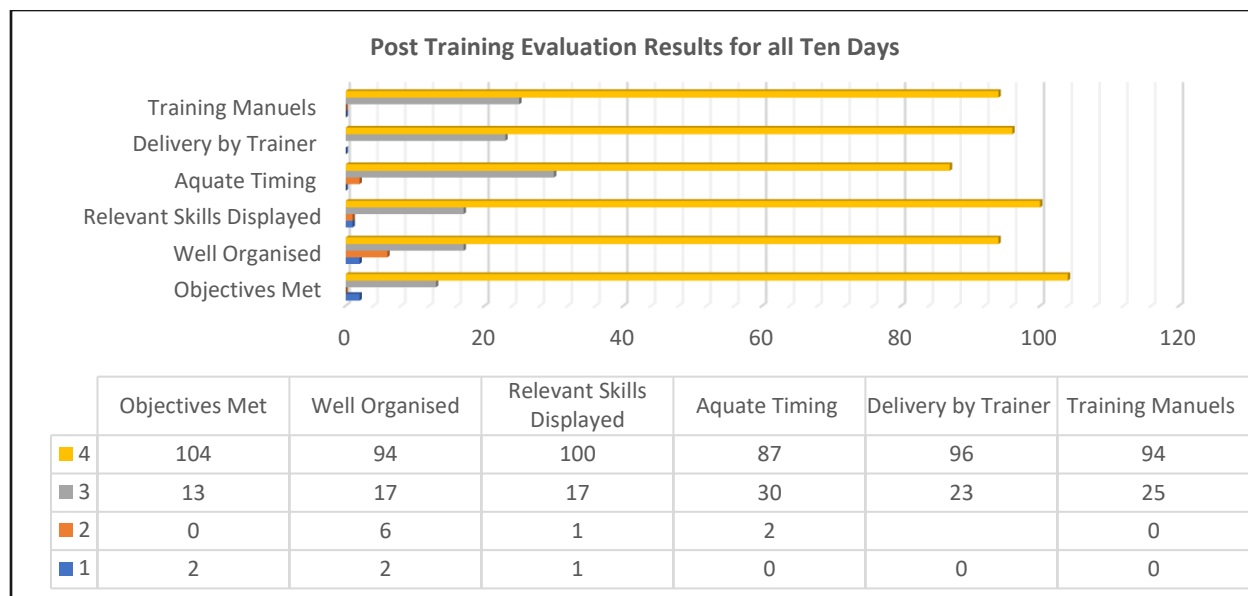
- i. Include Women in decision making
- ii. Equal participation of both men, women and vulnerable groups
- iii. Working together with our women and girls in everything we do, supporting each other.
- iv. To involve everyone and participate in any community activities together as one.

4.2 Post-Training Survey results

Below is a summary of the Post Evaluations of all the Training Modules for 10 days of the Community Pilot Training Program.

Graph 2.0 Summarizes answers given by participants over the ten days of training for questions 1-6 of the Post Evaluation form. Refer to Appendices for questions 1-6 of the Post evaluation form.

For the different questions are rating of 4 -1 is given where **4** is **very strong**, **3** is **strong**, **2** is **disagree** and **1** is **strongly disagree**.

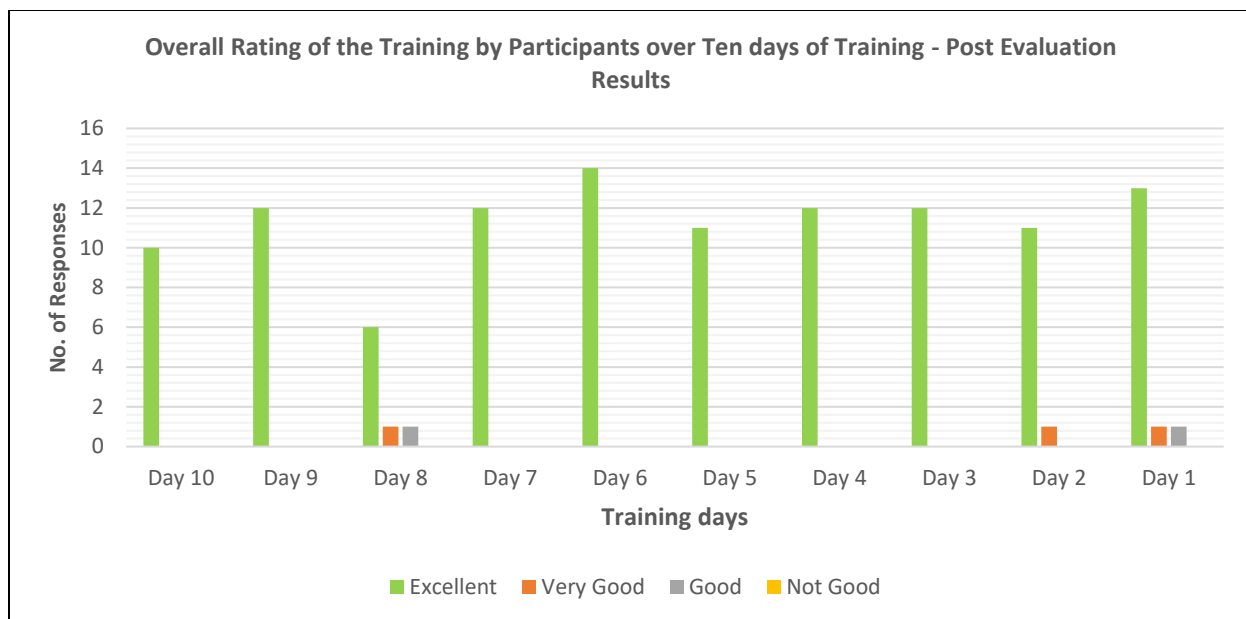


Graph 2.0: Summary of Post-Evaluation Results gathered from Participants over the ten days for different criteria.

Question 7: How would you rate this training.

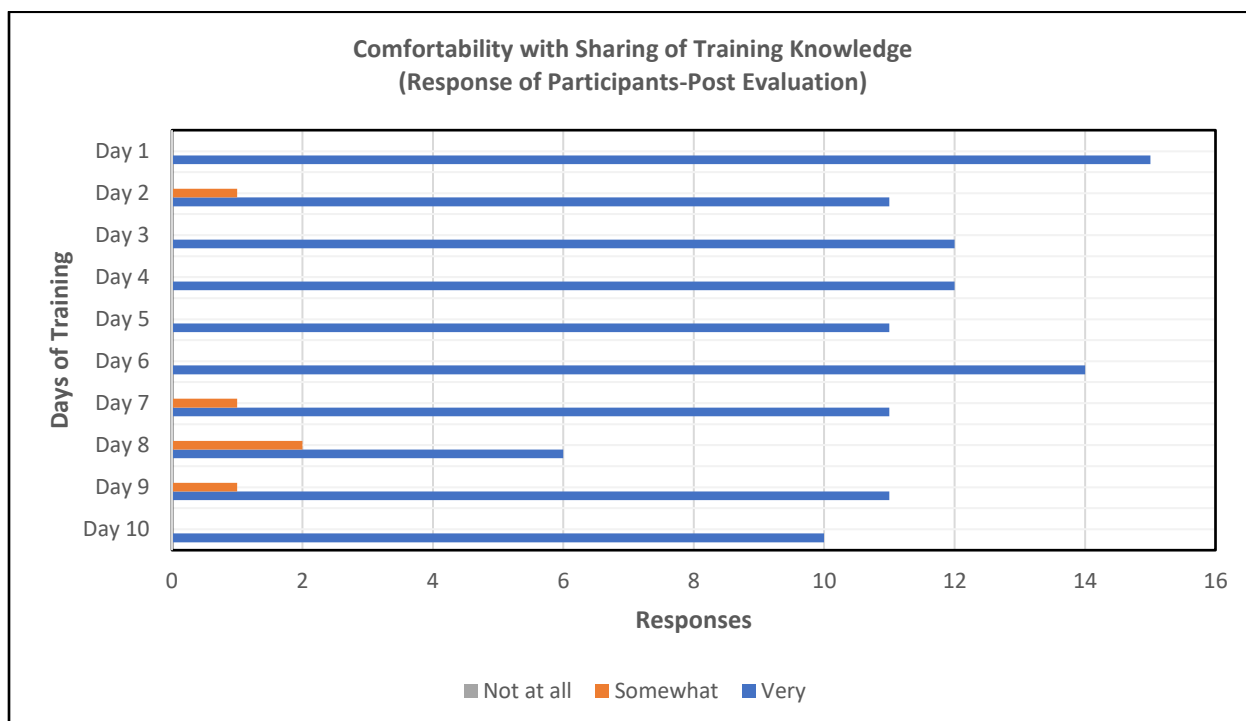
Shown in graph 3 is an overall rating given by the participants with regards to the ten training days on the ten different training modules.

As seen in graph 3.0 the locals in all ten days of training gave an Excellent rating of the overall workshop indicated by the green bars. While few participants in Day 8, day 2 and Day 1 of the trainings gave Very good ratings indicated by the Brown colored bars while one a female in day 1 gave a rating of Good as indicated by the grey colored bar. This could be because the topic covered in Day 1 of the training never really suited her or maybe because she was expecting to be trained on solar alone instead was trained on another topic on the first day as such gave such a rating on the first day of training but that gradually changed/ improved over the next training days.



Graph 3.0: Overall Rating of the Training by Participants over Ten days of Training - Post Evaluation Results

- **Question 8: How comfortable are you with sharing the information learnt at this workshop with others in your community for training?**



Graph 4.0: Comfortability with Sharing of Training Knowledge -Reponses from Participants over ten days of training.

As shown in graph 4.0 of the total 119 participants who attended the training over the ten days 114 gave a rating/ feedback that they are **'Very'** confident and comfortable with sharing of training knowledge they gained from the training as indicated by the blue coloured bars while 5 participants showed a bit of doubt and gave a rating/ feedback of **'Somewhat'** as indicated by the orange coloured bar. It was evident that no participant gave a rating of **'Not at all'**.

- **Question 9: What topics would you like to receive further training on?**

The following are summary of feedbacks gathered from participants on the topics they would like to receive further trainings/ in depth training on;

- i. Solar in the community & Solar operation & maintenance – more practical exercises
- ii. The different types of RE Technologies Especially Solar, wind, wave and tide technologies of generating energy/ electricity.
- iii. The basics of Electricity; connecting Series & parallel and AC and DC and others.
- iv. Learn more about RE Financial Management & how to do Green Business.

- **Question 10: Do you have any suggestions for improving the workshop and training materials?**

As collected from response/ feedbacks given by the local participants. The following a summary of their suggestions to improving the workshop & training materials;

- i. Provide enough training manuals/ handouts to all participants.
- ii. For solar O & M have more practical exercises and less theory sessions.
- iii. Do more awareness at least for two days before the trainings for more participants to attend.
- iv. Provide enough tools and solar kit so everyone can participate actively.
- v. Encourage more women and girls so as the vulnerable groups to participate actively through talks with the local leaders to do more awareness.

- **Question 11: Can we add your contact details to our database and contact you for further trainings and engagements?**

From responses given by locals it was evident that all 119 participants who attended the ten days of training showed great interest in the trainings and stated that they were happy and willing to be a part of the project as such indicated a **"YES"** for their contact details to be included in our project database.

5.0 CONCLUSION

In Conclusion the Pilot community training was one of the first of its kind been implemented in the Central Province. It was completed successfully over a period of ten (10) days of physical training of locals in the pilot rural village of Keapara in the Rigo Coast LLG of Rigo district in Central Province.

The project team comprised of the Project Coordinator, consultant trainer, a Central Provincial staff/ representative and a Rigo district staff representing the district. The project team arrived at Keapara Village on the 02nd of October taking into and abiding by all Covid-19 Protocols and conducted mobilisation and awareness on the project and the trainings. On that day of mobilisation all arrangements and payments were made for services that the locals would provide during the ten days of training. The local ward councilor and pastor took lead in carrying out awareness on the upcoming trainings.

The actual trainings started on the 03rd of October with a good number of Participants and ended on the 15th of October 2020 taking into account and strictly practicing Covid-19 best practices throughout the trainings that includes daily temperature checks, hand sanitization, wearing of face masks and maintaining social distancing among others. A total of 119 participants were trained on ten (10) different training modules under Renewable Energy and Green Economy meeting the first aim of the pilot training to train about 100-150 people in this pilot phase of the Project.

Throughout the trainings the locals gave very valuable feedback on the different training modules taught each day. These feedback have been collected and will be used as the basis to tailor the training modules further. It was noted that the feedback given were based on the knowledge level of the different participants. It was also noted that nearly all participants including women who attended the trainings had attended school as such had a good understanding of the literature presented. This was evident in the questions they asked and the group activities they did and presented. The locals also spoke good English which happens to be the second common language spoken in the village apart from their local language.

As observed during the trainings, though the training material was detailed, the trainers further explained especially the different terms used further in their local language with the aid of a local translator. The villages paid more attention and interest especially when the training content was further simplified using simpler and local examples. For the two solar modules it was observed that locals were more interested in the practical sessions rather than the theory.

Feedback and comments gathered from the local government officials, community/ traditional leaders, local church leaders and the general participants showed that they treasured and greatly appreciated the training and the knowledge they have gained from the ten (10) days of trainings. Unfortunately, there were days during the trainings when less than twenty (20) participants attended. This was because of a church related activity that youths in the community had to attend. It was also witnessed that there were less participants from the other two villages (Karawa and Alukuni) due to the fact that awareness on the training was not carried out in those two villages by their local community leaders and ward councilors. There were also not many women/ girls that attended. This was because they were caught up in their daily household duties and with less awareness and encouragement for women involvement many did

not attend but fortunately 40% of the total participants were females but there could be more if proper awareness was conducted.

The local Ward Councilor for Keapara Village, Hon. Iruna Ila in his closing remarks on the last day of training spoke highly of the training and thanked KOICA for funding such a project, the Global Green Growth Institute for taking lead in implementing the project and selecting Keapara as the pilot village and CCDA and CPA as important implementing stakeholders of this important project.

5.1. Recommendations

As a way forward to successfully conducting the final trainings in all five (5) selected project villages and having maximum participation of locals it is suggested that at first it is very important to do proper awareness for the training weeks ahead of the training through the local ward members and the local church and community leaders. Engage women in the mobilisation discussions so they feel apart and obliged to get women/girls and Vulnerable groups to participate in the trainings and align the training schedule with the community activities such as church related activities. It is also very important that the feedback from the trainers and locals in the pilot community trainings be taken into consideration and the training materials be tailored further to suit the literacy level of locals in preparation for the main community trainings in 2021.

Finally it is very important that proper Covid-19 approvals are sought from the relevant authorities before going to the selected colleges to conduct the main trainings and when in the communities it is very important that the training team and the participants follow all Covid-19 best Practices to keep themselves safe from contracting the virus.

6.1 Participants list



KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (F)	C	kg
1	NICOLAS PARKER TOKMAN	3/10/2020	35.1 °C	91	
2	HELENE SILVANA	3/10/2020	35.7 °C	94	
3	SECURITY - RICHARD	3/10/2020	35.5 °C	94	
4	MURRAY KOND*	3/10/2020	36.2 °C	94	
5	ONE. EUGEN	3/10/2020	35.7 °C	94	
6	BENJAMIN. KEASI	03/10/2020	35.8 °C	94	
7	MIGA GIMA	03/10/2020	36.5 °C	94	
8	KHAMBUEB. IRUINA	03/10/2020	36.5 °C	94	
9	JEJEMAH. MEVALA	✓	29.7 °C	86	20
10	DOMA. MICHAEL	03/10/2020	29.3 °C	84	
11	WUNAN. LAX	03/10/2020	35.8 °C	94	
12	NOPIA. ALEXA	03/10/2020	29.5 °C	84	
13	NURAM. ITH	03/10/2020	35.9 °C	94	
14	INPI. MULA	03/10/2020	35.7 °C	94	
15	RAFI. KANO. VEROPPO	03/10/2020	29.8 °C	84	
16	GIMA. VALAGE	03/10/2020	35.7 °C	94	
17	RAY. GAGA NEW	03/10/2020	30.1 °C	84	
18	VENAI. HARAKI	03/10/2020	35.7 °C	94	
19	JORDAN OMU	03/10/2020	35.8 °C	94	
20	GIA. KULEL	11/10/2020	29.5 °C	84	
21	SULO. AMINI	03/10/2020	35.5 °C	94	
22	EMUY. ILARACI	✓	29.6 °C	84	
23	HAGE. ALENA	✓	29.0 °C	84	
24	ILA. TIARA	✓	35.8 °C	94	
25	ALU. ILA	✓	29.5 °C	84	

Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

Time End : 4:30pm
Date : 03/10/2020

DAY 2

Module: GE GENERAL PRINCIPLES

DATE: 05/10/2020



3rd Level, Dynasty Tower, Savanna Heights, Waiqat, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants & ATTENDANCE RECORD

No.	Name	Date	Body Temperature (°C)	AGE	GEN
1	Benjamin Keni (Coordinator)	05/10/20	30.5 °C		M
2	Nicholas P. Tokmun (Consultant)	05/10/20	35.8 °C		M
3	Murray Kimoda (CPA)	05/10/20	35.8 °C		M
4	ONE EUBO (support staff)	05/10/20	35.9 °C		M
5	HUMAN LIA	05/10/20	36.2 °C		M
6	Rev. George Nook	05/10/20	35.8 °C		M
7	SULO, ANITA	05/10/20	30.1 °C		M
8	JEREMIAH VALA	05/10/20	35.9 °C		M
9	EMMANUEL KARAKI	05/10/20	29.7 °C		M
10	NORTH ALA	05/10/20	30.7 °C		M
11	ALA NORTH	05/10/20	35.8 °C		M
12	MARISA SAMUEL	05/10/20	30.2 °C		F
13	MEGA GIMA	05/10/20	29.5 °C		M
14	LA, LEO	05/10/20	35.9 °C		M
15	KATO TONY	05/10/20	36.0 °C		M
16	HELENA LA	05/10/20	35.8 °C	60	M
17	GIMA Vantage	05/10/20	36.0 °C		M
18	TAMO PARK S	05/10/20	35.9 °C	19	M
19	Dona Michael	05/10/20	35.9 °C	19	M
20	PHILIP VALA	05/10/20	30.7 °C		M
21	VERA	05/10/20	30.6 °C	19	M
22	Gimana Karaki	05/10/20	30.0 °C		M
23	LINI, WATO	05/10/20	30.6 °C		M
24	NIMRA LA	05/10/20	30.9 °C	54	M
25					

Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

DAY #3

MODULE: GREEN BUSINESS PRACTICE

DATE: 06/10/20



Global Green Growth Institute

C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Sarawak Heights, Waigani, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants *ATTENDANCE: 22/20*

No.	Name	Date	Body Temperature (°C)	Sex	Age
1	BENJAMIN KENI	06/10/20	31.5 °C	M	39
2	NICHOLAS T	06/10/20	36.2 °C	M	
3	OVE ENOB	06/10/20	36.1 °C	M	
4	DENNIS VELE	06/10/20	36.2 °C	M	
5	GIMLA VORAGE	06/10/20		M	20
6	MREGA GIMA	06/10/20	20.5 °C	M	24
7	JORDAN OMU	06/10/20	36.4 °C	M	20
8	GIA KULU	6/10/20	29.8	M	45
9	PHILIP VALA	6/10/20	31.4	M	
10	MARETHA SAMUEL	6/10/20	29.0 °C	F	34
11	KANATIDVENI TRUMAT	6/10/20	30.9 °C	F	19
12	KESI THAPAKI	6/10/20	30.2 °C	F	20
13	HAN RUNA IIA	06/10/20	36.2	M	46
14	JAMU PAIAK	06/10/20			
15	JEREMIAH VALA	06/10/20			
16	SERGEA NOAH	06/10/20			
17					
18					
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20					
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24					
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Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

DAY #4

TRAINING MODULE: ENERGY EFFICIENCY PRACTICE

DATE: 08/10/20



Global Green Growth Institute

C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Sarawak Heights, Waigani, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)	Gender	Age
1	Benjamin Keni	08/10/20	31.1 °C	M	39
2	Michael P. Tokman	08/10/20	36.5 °C	M	4
3	Murray Kanido	08/10/20	36.5 °C	M	47
4	OVE ENOB	08/10/20	36.5 °C	M	1
5	Marfeta Vorage	08/10/20	30.00 °C	F	26
6	GIMLA	08/10/20	35.4 °C	M	42
7	KANATIDVENI TRUMAT	08/10/20	35.6 °C	F	19
8	GIMLA VORAGE	08/10/20	31.4 °C	M	20
9	JAMU TOKMAN	08/10/20	36.1 °C	M	21
10	LEVA SAMUEL	08/10/20	36.0 °C	M	24
11	Rev. Geneva	08/10/20	31.9 °C	M	1
12	MREGA GIMA	08/10/20	29.5 °C	M	24
13	HAN RUNA IIA	08/10/20	30.1 °C	M	46
14	FRANK IUMBA	08/10/20	33.1 °C	M F	17
15					
16					
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18					
19					
20					
21					
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23					
24					
25					

Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

DAY #5:

TRAINING MODULE: Gender Inclusivity & Development

Date: 09/10/20



Global Green Growth Institute

C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Sarawak Heights, Wangsa, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st-15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)	Gender	Age
1	Benjamin Keni	09/10/2020			
2	Nicholas Tolomun				
3	Murray Konido				
4	Ove Eovo				
5	Maretha Varage				
6	Gunna				
7	Kamatouva Iruva				
8	YEMANANNA IURUVA	09/10/20	31.2°C	FM	15
9	Gunna Varage				
10	Iamo Tokidu				
11	Lova Samuel				
12	REV. GONGGONG				
13	KEGA				
14	Tha Iruva Ika				
15	Kawa Iruva				
16	ANA ILARAKI	09-10-20	31.1°C	FM	41
17	INA ILARAKI	09-10-20	36.1°C	FM	39
18	LOI-N ILARAKI	10 APRIL 1967	36.0°C	FM	53
19	KARO ILARAKI	09 OCT 1971	35.1°C		49
20	EMILY ILARAKI	08-10-1981	31.0°C		39
21					
22					
23					
24					
25					

Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

DAY #6:

Training Module: RE FINANCIAL MANAGEMENT

Date: 09/10/20



Global Green Growth Institute

C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Sarawak Heights, Wangsa, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st-15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)	Gender	Age
1	Benjamin Keni	09/10/20	31.6°C	M	25
2	Nicholas P. Tolomun		31.8°C	M	
3	Murray Konido		32.6°C	M	
4	Richard	09/10/20	33.1°C	M	
5	REVEN VAI	11	31.4°C	M	42
6	NAU AMINI	✓	30.7°C	M	29
7	YARI IAMD	✓	30.4°C	M	30
8	Gunna Varage	✓	31.9°C	M	20
9	IAMO PAIK	✓	32.2°C	M	21
10	LUNAN LAA	" " "	29.8°C	M	42
11	LAVA-SKAVA	" " "	30.2°C	M	39
12	MEGA GINA	" " "	29.7°C	M	24
13	Tha Iruva Ika	09/10/2020	29.7°C	M	60
14	JEREMIAH VAI	09/10/2020	31.2°C	M	21
15	GARRY OLE	09/10/2020	36.5°C	M	19
16	REV. SONGGONG	09/10/2020	31.0°C	M	
17	DONA MICHAEL	09/10/20	31.5°C	M	
18	Maretha Samuel	09/10/20	31.7°C	F	36
19					
20					
21					
22					
23					
24					
25					

Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

Day # 7.

Module: Pico Hydro in the Community

Date: 12/10/20



Global Green Growth Institute

C/ Climate Change and Development Authority
3rd Level, Dynasty Tower, Savanna Heights, Wapasa, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)
1	Benjamin Keni	12/10/20	30.5°C
2	Nicholas P. Tokman	12/10/20	31.3°C
3	MIGA GIMA	12/10/20	29.5°C
4	STAFF ROBERT VALLI	12/10/20	31.9°C
5	Honi IANUA ICA	12/10/20	36.2°C
6	LEVA. SAMUEL	12/10/20	32.4°C
7	JEREMIAH VALLI	12/10/20	36.4°C
8	WILMAN LATA	12/10/20	36.3°C
9	GIMA VALLI	✓	31.0
10	IANUA PAKO	✓	31.7
11	NOTAU ALEWA	✓	32.4
12	INA. ILARAKI	✓	29.7
13	DOMA	✓	31.5
14	Marotta Samuel	✓	31.8
15	Iano LUKA	✓	30.7
16	EMMANUEL. ILARAKI	✓	31.7
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Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

Day # 8.

Module: Pico-Hydro in the Community

Date: 13/10/20



Global Green Growth Institute

C/ Climate Change and Development Authority
3rd Level, Dynasty Tower, Savanna Heights, Wapasa, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)
1	Benjamin Keni	13/10/2020	36.2°C
2	Nicholas P. Tokman	13/10/2020	
3	MIGA GIMA	13/10/2020	30.6°C
4	GIMA VALLI	✓	36.4°C
5	Iano PAKO	✓	36.3°C
6	Jeremiah VALLI	✓	36.1°C
7	Honi IANUA ICA	✓	31.6°C
8	LEVA. SAMUEL	✓	29.2°C
9	INA. ILARAKI	✓	29.0°C
10	EMMANUEL. ILARAKI	✓	30.2°C
11	STAFF ROBERT VALLI	✓	29.3°C
12	Iano LUKA	✓	29.7°C
13	WILMAN LATA	13/10/2020	34.9°C
14	NOTAU ALEWA	✓	31.0°C
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Confirmed by

Benjamin Keni
Project Coordinator _ KOICA RE Project

Day #9:

Community

Date: 14/10/20



C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Savanna Heights, Waigani, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Attendance List & Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)	Gender M/Fm	Age
1	Benjamin Keni	14/10/20	35.2	M	
2	Nicholas Tolomun		34.2	M	
3	Murray Knido		35.0	M	
4	Ore Eyo		30.0	M	
5	Ann. Irana Ila		31.0	M	
6	Emmanuel Haraki	17/10/20	35.2	M	
7	Rt. Pabasa Vata	17/10/20	31.2	M	
8	Wunan La'a	14/10/20	32.0	M	
9	Philip Vata		34.2	M	
10	Lama Samuel	14/10/20	35.2	M	
11	Lama Paak	17/10/20	29.0	Fm	
12	Jeremiah Vata	14/10/20	31.0	M	
13	Lama A. Lata	14/10/20	31.0	M	
14	Una Haraki	14/10	30.2	M	
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Confirmed by:

Benjamin Keni
Project Coordinator

End Time: 4.30 pm
Date: 14/10/20

Day #0:

Module: Solar ^{off} grid ^{mini} grid ^{community}

Date: 15/10/20



C/- Climate Change and Development Authority
3rd Level, Dynasty Tower, Savanna Heights, Waigani, NCD, Port Moresby, Papua New Guinea

KOICE Regional Capacity Building Project
Pilot Community Training, Keapara Village, Central Province
Papua New Guinea_01st -15th October 2020

Daily Temperature Readings of Trainers and Local Participants

No.	Name	Date	Body Temperature (°C)
1	PHILIP VATA	15/10/20	36.30C
2	Sgt BP Remon Vata	" " "	32.10C
3	EMMANUEL HARAKI	" " "	31.5
4	JEREMIAH VATA	14/10/20	36.10C
5	Ann. Irana Ila	" " "	31.9
6	Lama Paak	" " "	36.10C
7	How Remon MA	" " "	36.4
8	INA HARAKI	14/10/2020	36.12
9	Wunan La'a	15/10/2020	36.77
10	MIRA BINA	" " "	31.24
11	Ann. Vata	" " "	36.7C
12	Benjamin Keni	15/10/20	35.20C
13	Nicholas P. Tolomun	15/10/20	35.50C
14	Murray Knido	" " "	31.50C
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Confirmed by:

Benjamin Keni
Project Coordinator _ KOICA RE Project

6.2. Contacts of important people from the training Contacts of Important People from the Training

No.	Name	Gender	Contact
1	Mega Gima	M	+675 7924 3305
2	Wunam	FM	+675 7226 1234
3	Pastor Ruben Avli	M	+675 72153244/ 79102481
4	Leva Samuel	FM	+675 7553 9481
5	Iamo Laka	M	+675 7191 8941
6	Notau Alewa	M	+675 7973 7042
7	Hon. Iruna Ila	M	+675 7358 0043
8	Iamo Paak	M	+675 71359 700
9	Jeremiah Vala	M	+675 7126 8325
10	Emmanuel Ilaruki	M	+675 7391 0135
11	Gima Valage	M	+675 7951 8839
12	Rev Gereka	M	+675 7918 1682
13	Pastor Reuben Vali	M	+675 7215 3244
14	Murray Konido (CPA)	M	+675 7364 0061
15	Hon. Fred Silona	M	+675 7087 8156
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6.3: Pre-evaluation Form/ template

 <p>Global Green Growth Institute</p>	 <p>Pacific Islands Development Forum</p>	 <p>KOICA Korea International Cooperation Agency</p>
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Project: Capacity Building to Strengthen Sustainable Implementation of Renewable Energy Technologies for Rural Energy Access

.....Pre-Workshop Survey Form

Dear Participant,

Warm welcome to today's workshop.

This Pre-Workshop Survey Form will be administered in advance of the workshop to inform agenda and content decisions or at the onset of the training program.

You are now requested to share your expectations of this workshop by filling in this form.

Name: _____ Country: _____

Email: _____ Phone: _____




Please respond to the following statements by short answers or using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

4= Strongly Agree 3= Agree 2= Disagree 1= Strongly Disagree

1. What are you hoping to learn from this training?			
2. Have you participated in a training workshop before?			Yes No
3. Is the theme of the training relevant to your community			4 3 2 1
4. In what way would this training benefit you and your community?			
5. How many family members are in your household?			
6. Is the date and time for the training suitable? If no, please indicate another date and time.			
7. What does renewable energy mean to you?			
8. Are there any renewable energy projects in your community?			
9. Who makes the budget or does the financial planning in your family?			
10. What does the term "Gender Inclusive" mean to you?			

1

6.4: Post Evaluation Form/ template

 <p>Global Green Growth Institute</p>	 <p>Pacific Islands Development Forum</p>	 <p>KOICA Korea International Cooperation Agency</p>
Capacity Building to Strengthen Sustainable Implementation of Renewable Energy Technologies for Rural Energy Access		
Workshop Evaluation Form		
<p>Dear Participant,</p> <p>We appreciate your participation and valuable contributions made in this <i>Workshop</i>.</p> <p>As a concluding requirement of the workshop, you are now requested to share your experiences by filling in this Evaluation Form. This will allow us to assess whether we successfully attained the objectives of this workshop and assist in evaluating what further improvements are required.</p>		
<p>Name: _____ Country: _____</p> <p>Email: _____ Phone: _____</p>		
<p><i>Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.</i></p> <p style="text-align: center;"> 4= Strongly Agree 3= Agree 2= Disagree 1= Strongly Disagree </p>		
1. Workshop objectives were stated clearly and met.	4 3 2 1	
2. The workshop was well organized.	4 3 2 1	
3. The information and/or skills presented were relevant and useful for my community	4 3 2 1	
4. The Trainers provided adequate time for questions and answered them satisfactorily.	4 3 2 1	
5. Did the Trainer deliver the training well?	4 3 2 1	
6. The activities used in the training manuals assisted in the training	4 3 2 1	
7. How would you rate this workshop? (please check one) <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Not Good		
8. How comfortable are you with sharing the knowledge learnt at this workshop with others in your community for training? <input type="checkbox"/> Very <input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat		
9. What topics you would like to receive further training on?		
10. Do you have any suggestions for improving the workshop and training materials:		
11. Can we add your contact details to our database and contact you for further training and engagements.		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>.....</p> <p>Nicholas Patrick Tokmun Pilot Consultant Trainer -PNG</p> </div> <div style="width: 45%; text-align: right;"> <p>.....</p> <p>Benjamin Keni Project Coordinator -PNG</p> </div> </div> <p style="text-align: center; margin-top: 10px;">2</p>		