Pacific-German Regional Program on Coping with Climate Change in the Pacific Island Region













CCCPIR Vanuatu 2014 Annual Report to the Government of Vanuatu

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CCCPIR Project Background and Objectives:

Quick Facts:

Project Duration: 01/2009 -12/2015

Total Program Funding (Regional including Vanuatu): 19.2 million Euros

Implementation Partner: Secretariat of the Pacific Community (SPC) & Secretariat of the Pacific

Regional Environment Program (SPREP)

Project Countries: Vanuatu + 11 other PICs

Funded by: German Federal Ministry for Economic Cooperation and Development (BMZ)

The overall objective of the program is as follows:

The capacities of regional organizations in the Pacific Islands region and its member states to adapt to climate change and mitigate its causes are strengthened.

The regional SPC/GIZ programme Coping with Climate Change in the Pacific Island region (from here onwards referred to as CCCPIR) generates outputs for 12 Pacific Island member states of the Secretariat of the Pacific Community (SPC) including the Federated States of Micronesia, the Republic of the Fiji, Kiribati, the Republic of Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu.

Rationale for SPC-GIZ CCCPIR Program

Pacific Islands are highly vulnerable and have limited ability to adapt to climate change due to their particular geographical susceptibility to the impacts of climate change, a lack of human and financial resources and insufficient coordination when dealing with climate change. The limited capacity of agriculture and forestry, coastal and inland fishing, and the tourism and energy sectors to adapt to climate change and reduce greenhouse gas (GHG) emissions is likely to jeopardise future sustainable development outcomes (the core problem). This situation is increasingly compromising the achievement of key development indicators.

To achieve the overall objective of the Program, inputs are made within six components: strengthening regional advisory and management capacity (component 1), mainstreaming climate considerations and adaptation strategies (component 2), implementing adaptation and mitigation measures (component 3), sustainable tourism and climate change (component 4), sustainable energy management (component 5) and Education and climate change (component 6). The results in each of these six components are geared, within a multi-level approach, towards strengthening the expertise and capacity of key actors at different levels and in different sectors in relation to climate change. The successful implementation of pilot measures to combat climate change, the development of national frameworks, the strengthening of advisory skills and cooperation between regional organisations are all interlinked. In view of the inadequate human and financial capacity in these countries, it is only possible via a regional approach to effectively exchange information, improve adaptation to climate change and reduce GHG emissions.

The CCCPIR programme aims to fit into and enhance the existing matrix of donors and adaptation initiatives in Vanuatu, rather than duplicate and/or compete with them. CCCPIR has been able to immediately and flexibly enable members of the National Advisory Board on Climate Change and Disaster Risk Reduction (NAB) to trial and make an initial start on urgent climate adaptation activities while awaiting major climate funding from the Green Climate Fund recently established.

The programme is directly aligned with the policy priorities of the Government of Vanuatu, specifically towards implementing the Priorities & Action Agenda's Strategic Priority #4 on Climate Change. The program has helped shape much sectoral policy and continues to aid in implementation, specifically the Overarching Productive Sector Policy's Area #5 on Resilience, the National Forest Policy's Directive #4 on Climate Change, the National Land Use Planning Policy's area #13 on Risk and Vulnerability and a host of others at the national, provincial and local level.

The CCCPIR activities are intended to be flexible, fill gaps in other, larger projects, be hands on and ground based, and expand NAB's toolbox from which "tried and tested" community adaptation activities can be pulled to respond to questions and requests from villagers throughout Vanuatu. This approach has been tested successfully within the existing stakeholder networks including the Vanuatu Climate Action Network (VCAN), the Vanuatu Humanitarian Team (VHT), and the Food Security and Agriculture Cluster (FSAC). All CCCPIR lessons learned have been and will continue to be documented and shared freely among stakeholders for the widest possible impact.

Methodological approach and components of support

CCCPIR pursues a multi-level approach (regional, national, and sub-national/local), and works jointly with multiple government sectors and actors in member countries. In view of the limited human and financial capacities of Pacific Island countries, a regional approach is vital to achieve planned results. Exchanging experiences and effectively improving the way countries adapt to climate change and reduce GHG emissions as well as broad knowledge transfer about local, gender specific impacts of climate change and adaptation options is only possible as part of a regional approach. Experience gained at local level and by private actors will percolate up to provincial, national and regional levels and is used to develop conditions and services for adapting to climate change and reducing greenhouse gases.

The German input primarily involves the following components of support: expert, organizational, process, strategy and policy advice by international, regional and national short- and long-term experts, basic and more advanced training, and the supply of materials and equipment.

CCCPIR Components and Outcomes in Vanuatu:

To achieve the overall objective, the six project components have been collaboratively developed with leaders in Vanuatu and other countries, under which national program activities have been aligned. The first component is cross-sectoral and regional in nature, focusing on organizational, strategic and technical advice. The aim here is to improve the capability and coordination of the regional organizations in the interaction between, in the donor community and in cooperation with the countries. Component 2 predominantly supports national policies relating to the management of natural resources. Component 3 is closely linked with component 2 and aims to support the implementation of specific adaptation and mitigation measures and technologies, particularly at local and national level. Components 4 and 5 relate to tourism and energy management in a sectoral, multi-level manner. Component 6 supports mainly education institutions (teacher training, schools, providers of non-formal training) and works closely with relevant regional organizations (USP, SPBEA).

Component 1: Strengthening regional advisory and management capacity

Component 2: Mainstreaming climate considerations and adaptations strategies

Component 3: Implementing adaptation and mitigation measures

Component 4: Sustainable tourism and climate change

Component 5: Sustainable energy management

Component 6: Climate change and education

The Vanuatu CCCPIR programme is besides the one in Fiji the only programme that actively engages in ALL components of the regional CCCPIR program.

COMPONENT 1: Strengthening regional advisory and management capacity

Vanuatu works closely with the Secretariat of the Pacific Community (SPC) to implement its revised **Joint Implementation Strategy (JCS)**¹. Multiple sectors are covered, and through the CCCPIR program, climate change has become a major area of collaboration with Vanuatu. In 2014, CCCPIR and SPC were able to provide advisory support to Vanuatu on climate change adaptation in the sectors of Livestock, Energy, Fisheries, Environment and Biodiversity, Disaster Risk, Education, Forestry, Gender/Women's Affairs, and Agriculture. The results of these climate change advisory service are captured in the component sections below, and can be viewed on the SPC website www.spc.int².

In addition the CCCPIR programme, has been instrumental in establishing and facilitating the multi-agency regional Pacific CROP Agencies' **Working Arm on Climate Change** including SPC, SPREP, USP and Forum Secretariat, and participates in its sessions. The WACC provides inputs to the Crop Executives' Subcommittee on Climate Change. Since early 2014 it has been renamed in "Working Arm on Climate Change and Disaster Resilient development (WARD)" and is coordinating also climate advice and support across countries and steering planning towards a **Pacific Islands Integrated Strategy for**

 $^{^1\,}http://www.spc.int/en/our-work/strategic-engagement-policy-and-planning-facility/country-strategies/305-joint-country-strategies.html$

² http://www.spc.int/images/climate-change/SPC%20climate%20change%20support%20activities%20in%20Pacific%20Island%20countries%20and%20te rritories.pdf

Disaster Risk Management (DRM) and Climate Change (CC) by 2015. The new integrated strategy will succeed the existing Pacific Disaster Risk Reduction and Disaster Management Framework for Action 2005 – 2015 (RFA) and the Pacific Islands Framework for Action on Climate Change 2006 – 2015 (PIFACC).

The CCCPIR has supported regional advisory services on climate change through technical support to the rollout of the **Pacific Climate Change Portal**⁴, which links directly to and is built with the same program language as Vanuatu's NAB Portal on climate change and disaster risk reduction.

COMPONENT 2: Mainstreaming Climate Adaptation Considerations

In 2014, Ministries and national stakeholders responsible for climate have been supported by CCCPIR in analyses, knowledge management, process and strategy advice, the provision of tools and training to develop and implement national adaptation strategies and by the integration of climate issues into sector plans and strategies. Component 2 focuses on supporting Vanuatu's national priorities in the area of mainstreaming climate change into national, local government and sectoral policies and strategies and where appropriate their integration with disaster risk reduction and biodiversity activities.

A key area of CCCPIR program support to the Vanuatu government has been the restructuring and institutional reform of national climate change governance. In 2014, CCCPIR continued to support Government partners to implement and strengthen the **National Advisory Board on Climate Change and Disaster Risk Reduction**, the supreme policy making and coordination body on these issues. Specifically CCCPIR has worked alongside and built the capacity of staff, volunteers and technical advisors to plan for and reform the **NAB Secretariat**. The technical advisor of CCCPIR Vanuatu was invited in 2014 to sit on the executive **NAB Taskforce**.

In addition to supporting Government, the CCCPIR actively works with civil society stakeholders, and is a founding member of the Vanuatu Climate Action Network (VCAN) an association of climate non-government organizations, and the Vanuatu Humanitarian Team (VHT). CCCPIR participates actively in the working arm of these bodies known as the Climate Change Disaster Risk Reduction Working Group. In addition, CCCPIR provided technical support to the Department of Local Authorities (DLA) Working Group on provincial assessments, and the National Environment Technical Working Group in policy development.

In Vanuatu, CCCPIR has enabled mainstreaming at the national level including preparation towards Vanuatu's new **National Sustainable Development Plan 2015-2025** in direct technical support to the Prime Minister's Office, the Department of Environment, the Melanesian Spearhead Group and IUCN (with direct financial support from CCCPIR to IUCN of 20,000Euro). This plan has begun incorporate sustainability principle of climate change and disaster risk reduction, building on the government's current **Priorities & Action Agenda** in which CCCPIR helped to mainstream climate change.

The new Ministry of Climate Change was supported strongly by CCCPIR in 2014 to undertake national and provincial consultations and redraft the National Climate Change and Disaster Risk Reduction

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³ http://reliefweb.int/report/world/roadmap-towards-integrated-regional-strategy-disaster-risk-management-and-climate

⁴ http://www.pacificclimatechange.net

Policy, which will expand on and succeed other CCCPIR supported documents including the draft **National Climate Change Adaptation Strategy**.

With CCCPIR support, 2014 saw additional work on the **National Environment and Green Growth Policy** elaborated which further directs implementation of national **the Environmental Management & Conservation Act** which CCCPIR helped to amend.

At the sectoral level, in 2014 CCCPIR and FAO disseminated thousands of copies of the National Forest Policy to stakeholders in provinces. The Ministry of Agriculture sought CCCPIR support to both financially and technically support climate change mainstreaming in the draft National Agriculture Sector Policy, based on extensive consultation. Similarly, in 2014, CCCPIR supported the Department of Livestock to undertake a series of consultations and produce a draft National Livestock Policy. This mainstreaming work builds on that already completed by CCCPIR including policy support on the Vanuatu Energy Roadmap, Foreshore Development Act, Physical Planning Act, National Land Use Planning Policy, and Overarching Productive Sector Policy, National Tourism Action Plan, National Gender Policy, and the Vanuatu REDD+ Policy. In 2015, CCCPIR looks forward to mainstreaming climate change into the National Sustainable Development Plan.

In 2014, CCCPIR trained Government and Provincial Officers of SHEFA Province on climate change mainstreaming, launching its **TRACES Climate Mainstreaming Approach** for Vanuatu, as well as directly working with Provincial climate and disaster officers in TAFEA, SHEFA, MALAMPA, and SANMA provinces. The Secretary of SHEFA province asked CCCPIR to sit on a selection panel for its new **Climate Change Officer** as well as support the development of TORs and work plans for that position. In 2014, CCCPIR supported MALAMPA Province to develop the **MALAMPA Climate Change & Disaster Risk Directive**, and TAFEA Province to refine the **TAFEA Provincial Climate & Disaster Plan**.

In addition in 2014, the CCCPIR program provided a full-time intern to the Vanuatu Meteorology and Geohazards Department, and the Vanuatu Cultural Center to formally commence the **collection and use of Traditional Knowledge related to climate change and disaster risk reduction**. The guidelines have been employed on 10 islands during collections of traditional indicators of climate.

Climate change is now becoming more and more mainstreamed into sector activities, as evidenced by the new climate Guidebooks and Manuals developed in 2014 including a Glyricidia Manual, Fuel Efficient Rocket Stove Manual, Rapid Area Council Vulnerability Tool and Crown of Thorns Composting Guidelines. These new manuals are in addition to those which were developed previously including a Citrus Grafting Manual, Yam Vine Cutting Manual, Taro Seed Collection Manuel, Yam Miniset Manual, Alley Cropping Manual, Honey Bee Husbandry Manual, French/Samoan Banana Multiplication Guidebook, Vetiver Grass Manual, Marae Traditional Banana Preservation Manual, Coastal Erosion Factsheet, Gender and Climate Toolbox and Tilapia ManualForest Nursery Adaptation Guidebook, Livestock Husbandry and Climate Change Manual, Solar Fruit Drying Manual. All CCCPIR Manuals and Factsheets are freely available and downloadable⁵ on the NAB Portal www.nab.vu.

Informed members and skilled trainers of the different sectors of the society are the basis for a sustainable change. Specific capacity building activities undertaken by CCCPIR in Vanuatu have included training with ACTIV Women's Association, Musicians of Wan Smolbag, the Catholic Church, Cost-Benefit Analysis training, US Peace Corps Volunteers and the Counterparts, the Food Security and Agriculture Cluster, Members of Parliament, participants of the National Climate and Youth

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⁵ http://www.nab.vu/projects/coping-climate-change-pacific-island-region-spc-giz

Symposium as well as the capacity development of departmental directors and DGs, training of journalists, training for agriculture extension officers, training of lecturers and teachers at VITE and USP, and practical training on CC adaptation with communities, field school with provincial area secretaries, and mainstreaming training with government sector officers.

The CCCPIR program has developed Vanuatu's first Bislama-language DVD series on Climate Change in Vanuatu including Climate Change Overview, Climate Change & Agriculture, Climate Change & Food Security, Climate Change and Marine Resource Management, and Climate Change and MPAs, Climate Change and Traditional Knowledge, Climate Change Adaptation on Pele, Climate Change & Gender, Climate Change & Coastal Erosion, COT online DVD, Coral Mariculture, Climate Tourism and Waste, Cloud Nasara Animation, Climate Solar Dryer and Climate Change & Vetiver which have been disseminated to over 30 islands and over 800 communities in Vanuatu.

In 2014, the CCCPIR program expanded the rollout of and training activities on Vanuatu's first dedicated **Climate Change and Disaster Risk Reduction WebPortal, <u>www.nab.vu</u>, which serves a national coordinating function with a project database, resource database, contact list, calendar of events, and adaptation strategy matrix.**

Equally important for ensuring climate mainstreaming in Vanuatu is the sustained presence of CCCPIR on the **Vanuatu Climate Change Facebook Page⁶**. As of 31 December 2014, CCCPIR's facebook page had 3750 friends, and was being followed regularly by 96 people.

In 2014, the CCCPIR program continued its support to Vanuatu's participation in the **Melanesian Spearhead Group (MSG)** and the MSG Environment and Climate Change Technical Advisory Committee. CCCPIR also provided financial resources to hire a **Climate Change Technical Expert** now based at the MSG in Port Vila.

For the third year in a row, CCCPIR has technically supported the Vanuatu Government to prepare for and execute climate change negotiations under the UN Framework Convention on Climate Change (UNFCCC). 2014 saw a strong preparatory program leading towards **COP20 in Lima,Peru**. Of note were CCCPIR's support to drafting one **Submissions to UNFCCC on Adaptation**, as well as major revisions to a **draft Second National Communication**. The delegation opened up national priority development to the public through a two month long awareness campaign, included civil society and students at all levels,

In detail, CCCPIR technically supported and facilitated the following climate change mainstreaming and capacity building activities in 2014:

Activity	Date	Description	Beneficiaries
Radio Tok Bak Shows	20 January, 18 March, 21 March, 23 May, 03 July, 16, 18 July, 19 August, 04 September, 1 October, 16 October, 20 October, 26 October, 30 October	Radio call in shows regarding sectoral topics and climate change	Listenership of over 180,000 people
SHEFA Provincial Area Secretary Training on CC	20-24 January	Comprehensive training of provincial area secretaries on the TRACES method	15 males, 4 females
350 Vanuatu event	28 January, 15 March	Youth activities for climate action	120 males, 138

⁶ https://www.facebook.com/climatechange.vanuatu

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			females	
Climate & Disaster Standardization Workshop			10 males, 4 females	
UNFCCC Climate Negotiation Roundtables	egotiation April, 2 June, 10 July, 14 leaders related to Vanuatu's			
Launching on MOU on Traditional Knowledge and Climate Change	15 February	Launch of MOU among VMGD, VKS, Red Cross and SPC-GIZ on collaboration for 2014	18 males, 13 females	
Food Security and Agriculture Cluster Trainings	Tuesday 18 February 2014, Thursday 13 March 2014, Monday 24 March 2014, Friday 29 August 2014, Tuesday 25 November 2014 & Thursday 4 December 2014	Officers from the Department of Agriculture and other Partners from NGO's and government sectors.	22 male, 7 female	
Training of Provincial Climate Officers	19 February, 6 March, 11 April	One on one training with provincial climate officers from SHEFA, MALAMPA AND SANMA	1 male, 2 females	
Training		Community-wide training session on climate adaptation solutions for the people of Ifira	80 males, 73 females	
Tourism Climate & Waste Training	28 February, 10 April, 3 July	Training of community participants on the links among waste tourism and climate change including solutions and adaptation actions.	110 males, 73 females	
SloFood Workshop	12-14 March	Slow Food movement workshop including support on climate adaptation information	39 males, 35 females	
LiDAR training support	14 March	Adaptation and website related support to LiDar GIS training (led by PCCSP) on climate variables and projections	28 males, 15 females	
NAB Portal Training	14 March	Training with local civil society agencies on how to use the NAB portal	10 females	
National Sustainable Development Plan	18 March	Support and technical advice to prime minister's officer regarding drafting of new NSDP.	10 males, 6 females	
World Meteorology Day	24-25 March	National celebrations with lectures and screenings hosted by CCCPIR	200 males, 190 females	
Traditional Climate Knowledge Database Training	8 April	Training on the entry and analysis of traditional knowledge by sector officers	15 males, 11 females	
Journalism and	11 April	Lecture and hands-on activity with the journalism students at the Vanuatu	22 males, 12	

climate training		Institute of Technology (VIT)	females
Climate Adaptation Training for Musicians	28 April-2 March	Technical climate adaptation workshop with the lead singers and songwriters of all bands performing in the Fes Nalenga at Fes Napuan	30 males, 4 females
Environmental Planning Workshop	29 April	Support on the integration of the climate priorities from the National Environment Policy into the National Environmental Management Strategy (NEMS)	18 males, 8 females
Kawenu Science Week Presentations	30 April	Technical presentations to students and teachers on climate change adaptation	150 males, 200 females
Climate Adaptation Technical Training	5-9 May	Training for all 80 Wan Smolbag Vanua Tai Resource community monitors	63 males, 17 females
Technical Adaptation Training	21 May	Technical training on climate change adaptation for new volunteers at Youth Challenge Vanuatu	32 males, 19 females
World Environment Day	28 May	Public celebration with seminars and posters developed by CCCPIR	150 males, 114 females
Vanuatu Climate Dialogue	9-13 June	Training event linking NOAA, Australian Government, VMGD and sector agencies on using climate services	30 males, 17 females
Forum for National Sustainable Development	16-20 June	National consultation with all elements of society to draft the priorities of the National Sustainable Development Plan	400 males, 350 females
Cost Benefit Analysis Training	16-18 June	Cost Benefit Analysis Training in partnership with the PACSAP program	20 males, 18 females
Climate capacity Building	18 June	Workshop training with staff of the National Disaster Management Office on climate adaptation programs and objectives	8 males, 2 females
Planning Retreat with the National Advisory Board	24-25 June	Supported discussions on programmatic approaches, strategic directions and future activities	10 males, 5 females
Reef Check Training	27 June	Reef check and survey methodology training with the members of the Malapoa College Reef Check Club	8 males, 22 females
Technical Training on Climate Change for VARTDCA	29 January, 3 July	Development of 7 new modules on Climate change for rural training centers	9 males, 2 females
Social Network Analysis	June 2014	Comprehensive network survey of over 200 stakeholders involved in climate change & disaster risk reduction in Vanuatu	110 males, 90 females
Urban vulnerability Assessment	10-11 July	Technical support to multisectoral team conducting urban Port Vila vulnerability assessments (Blacksands Area)	28 males, 22 females

Children's Day climate celebration	24 July	Major awareness and education event with displays videos and games	550 males, 600 females
MSG Environment and Climate Change Meeting	11-15 August	Technical support on development of new MSG Environment & Climate Change Strategy	12 males, 6 females
Area Council Climate Training	19 August	Technical adaptation training with members of the Nguna-Pele Area Council	15 males, 1 female
Training at the Australia-Pacific Technical College	19 August	Institutionalize climate awareness with new community development student projects and disseminate adaptation measures	18 males, 12 females
Agriculture Policy Development Retreat	25-29 August	Technical retreat to develop the policy directives for the National Agriculture Policy	13 males, 3 females
Vanuatu National Herbarium	28 August	CCCPIR supported herbarium development to store and share climate resilient tree specimens	30 males, 28 females
Futuna Agriclimadapt Festival	2-6 September	Week long showcase and hands on training on CCCPIR adaptation activities	300 males, 320 females
German, French and British Day of Climate	9 September	Organized a debate competition among the students of Malapoa College	100 males, 190 females
Fes Nalenga Band Technical Training	11-12 September	Technical training on adaptation with directors and songwriters of local string bands preparing to participate in Fes Nambawan	28 males, 7 females
Fes Nalenga celebration	1 October	2014 Theme: Climate Change & Traditional Knowledge	500 males, 500 females
Crown of Thorns Starfish technical workshop	7 October	Skype workshop with the Australian Great Barrier Reef	5 males, 6 females
National SMS Climate Quiz	13-17 October	National campaign via Digicel sms to reach all remote communities with climate information	38,000 people
National Youth & Climate Symposium	13-17 October	Major youth event to share adaptation practices and encourage island-based action	250 males, 200 females
Vanuatu UNFCCC COP Prep Training	13-17 October	Series of trainings and hands on events with Parliamentarians, students and climate negotiators to prepare for the 20 th conference of the parties.	100 males, 120 females
UNFCCC Least Developed Countries Expert Group (LEG) Training	3-7 November	Technical support to training with pacific island and Vanuatu representatives on the National Adaptation Plan process	29 males, 16 females

Training in Eratap Community	14 November	4 November Technical information on Adaptation technology and site visit for demonstration plot			
National Climate Change Policy Consultations	17-29 November	With the people and leaders of TAFEA provinces, civil society and other agencies	80 males, 70 females		
Cost Benefit Analysis Training	25-27 November	For technical officers in multiple sectors	20 males, 17 females		
Coastal Erosion Training Program	1-7 December	For the students of Malapoa College in collaboration with the Department of Geology and Mines	15 males, 13 females		
Women's Climate Adaptation Training	8 December	Training for women entrepreneurs on how to adapt to climate change	35 females		
Training on Climate Change	9 December	Provide trainings and Awareness on Climate change impacts on the following areas Agriculture, Fisheries and also social and economical aspect in a community to the Peace Corps Volunteers based on different islands in Vanuatu.	18 males, 19 females		
Catholic Women's Adaptation Training	12 December	Training for women church leaders on how to adapt to climate change	165 females		
Training on rapid climate vulnerability assessment	16 December	Presented the results and methods for the survey to the DLA working group	12 males, 18 females		

COMPONENT 3: Implementing Adaptation and Mitigation Measures

In 2014, the CCCPIR program has supported government and civil society actors responsible for climate change and adaptation in designing and carrying out suitable adaptation and mitigation demonstration and pilot measures. Advisers have supported communities in the participatory planning, implementation and reviewing of adaptation efforts.

In Vanuatu, Component 3 focuses on the implementation of adaptation and mitigation measures, particularly at the community level.

Implementing model projects on climate change adaptation on pilot sites has been of crucial importance in order to gather experiences on the ground and feed them back into the national strategic and policy development processes and create success stories of concrete adaptation measures.

Pilot site activities have continued in the two sites selected in 2010 through an intensive consultation process:

Pele Island, susceptible to the climate change impacts of sea level rise, costal inundation, rainfall variability, soil nutrient loss, and coastal & hillside erosion.

Teouma Community, Efate Island, susceptible to climate change impacts of rainfall variability, soil nutrient loss, high wind exposure, and excessive temperatures.

Adaptation options for field trials were developed by government technical experts reflecting national priorities and building on the results of **detailed Vulnerability and Adaptation Assessments** carried out in the pilot sites. IN 2014, the CCCPIR program in collaboration with SHEFA province, developed a new **methodology for rapid climate vulnerability assessment**, and successfully trialed the approach with local area secretaries and councilors, developing a **Nguna-Pele Climate Vulnerability Hotspot Map**.

In Teouma, resilient varieties of Kumala and Island cabbage were planted and evaluated from the cultivars provided by the Vanuatu Agriculture Research and Training Center (VARTC). After trials, crops were harvested and distributed to key farmers for multiplication and further trials in their local areas within south of Efate. New techniques for improving soil fertility were trialed including soil sterilization methods locally called 'Black magic' well as liquid fertilizer production and composting.

On Pele, in 2014 a **piggery adaptation cost-benefit analysis** was undertaken and published which demonstrated the economic value of pig husbandry adaptation to local communities. This is the first CBA conducted for climate adaptation in Vanuatu.

Demonstration activities being trialed and evaluated in 2014 for up scaling in the Pilot Sites include Coastal & Hillside Erosion Control Measures through Forestry, Soil Enhancement & Composting, Crop Diversity Trials for Climate Resilience, Adapted Farming System designs for CC Resilience, Livestock Breeding Trials for CC Resilience, Integrated Agriculture & Livestock Systems, Crown of Thorns Starfish Composting, Marine Resource Management, Solar Fruit Drying and Food Preservation, Steam Cooking Systems, Silage Livestock Feed technologies, Citrus Grafting technologies, Banana and Yam multiplication technologies, Composting Toilet technology, Tilapia Backyard Urban Food Security, Honey Bee Husbandry enhancement, and Livestock Biogas technologies.

Several **short films** on pilot adaptation activities have been produced in 2014:

- 1. Pele Coral Planting https://www.youtube.com/watch?v=nx-1LW cXHO
- 2. Pele Climate Change Pilot Activities
- 3. Solar Food Dryer construction and use
- 4. Tourism Waste & Climate Change

In addition to those produced in the past:

- 1. Gender and Climate Change; http://apidae.com.au/A2C2/video/gender-health-and-climate-change-a2c2-vanuatu/
- 2. Coastal Erosion and Climate Change; http://apidae.com.au/A2C2/video/coastal-erosion-and-climate-change-a2c2-vanuatu/
- 3. Crown of Thorns; http://webdocs.dw.de/vanuatu/english
- 4. Teouma Pilot Site; http://tvdownload.dw.de/Events/mp4/globalideas_en/globalideas_en20120806_vanuatu_sd.m

The Vanuatu CCCPIR places a strong emphasis on partnerships and collaborations; specifically finding ways to value add on adaptation projects through multi-partner implementation. In this regard, CCCPIR has initiated several unique partnerships for climate change adaptation:

- 1. Joint initiative among the European Union, USAID, the University of the South Pacific, the Nguna-Pele Marine and Land Protected Area Network and CCCPIR on **ridge to reef community-based adaptation** implemented (16 communities on North Efate)
- 2. Joint CC Consortium multisectoral **community-based adaptation** program in implementation among CCCPIR, Oxfam, Care, Red Cross, VRDTCA (28 communities in Tanna and Torba Province)
- 3. Joint Initiative on CC and water resources adaptation among CCCPIR, SPC-SOPAC IWRM and Sanma Provincial Government (6 communities in Sarakata Watershed).
- 4. Joint Initiative on **Climate Variability education and animations** among CCCPIR BoM⁷ Australia, CSIRO, Red Cross and Vanuatu Government
- 5. Joint initiative with the Australian-funded Climate and Oceans Support Program in the Pacific (COSPPac) to collect and analyse traditional indicators of climate and climate variability.
- 6. Joint Initiative with James Cook University to undertake a comprehensive **Social Network Analysis of climate and disaster stakeholders**
- 7. Joint initiative with the University of Queensland to study the factors that both strengthen and weaken community based adaptation activities
- 8. Joint initiative between SPREP, CCCPIR and TAFEA province to undertake adaptation programs in communities.
- 9. Joint initiative among the Secretariat of the United Nations Framework Convention on Climate Change, CCCPIR, SPREP and UNDP towards developing a **NAP process for Vanuatu**.

Major Pilot Site Activities in 2014

Activity	Date	Description	Beneficiaries
Hands on Agriculture Training for climate adaptation	6-10 January	Training on setting up demonstration plot and hands on practices on farming systems at Teouma Futuna Pilot site	15 males, 5 females
Solar Dryer Training Development	9 January- 10 February	Technical training (international intern) with solar dryer experts to produce training guides and student workbooks for community trainings in Pele and Teouma	10 females
Hands on training on fertilizers	8 February	Testing Black Magic technique with local famers; in Teouma Bush using organic fertiliser for Nursery ("Black Magic" fertilizer)	7 male and 2 female famers
Agricultural Monitoring Training and Practice	15, 20, 28 February, 4, 7 March, 4,12,19,25 June, 6-8, 16, 28, 31 July, 13 August, 1 September	Establishment and regular monitoring of climate resilient crop trials at the Teouma Pilot Site	10 males, 5 females
Hands on Nursery	15 February	Demonstrating importance of nursery and hands on	8 males, 1

⁷ Bureau of Meteorology of Australia?????

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Training		practices (Building of Nursery) ay Teouma site	female
Development of a Conservation and Climate Poster	29 January	Training with Pele island experts on the benefits and challenges of conservation in a changing climate,	22 males, 29 females
Teouma Field School with APTC	11 February	Hands on field school at Teouma Site with Australia- Pacific Technical College students to learn adaptation techniques	45 males, 57 females
Pele Participatory Adaptation Research	17 February- 10 March	Participatory research aimed to support Pele to discover the factors that both strengthen and weaken community- based adaptation	103 males, 80 females
Training on Liquid Fertilizer	5 April	Practicing organic fertilizer for Chinese cabbage climate resistance	4 males, 2 females
Composting Training	3 May	Managing kitchen waste and weeds for composting in nursery and also direct application on crops like Yams and Kava at Teouma site	13 males, 11 females
Hands on Nursery Training	9 May	Demonstrated the importance of nursery and hands on practices (building a nursery) in Teouma	6 males, 4 females
Black Magic Soil Sterilization Training	16 May	Training on how to sterilize soils for increase productivity in Teouma	8 males, 3 females
Pentecost Traditional Knowledge Collection Trip	14-21 May	Site collection on Pentecost for traditional climate information and knowledge	106 males, 20 females
Nursery and Climate Training	21 May	Building Nursery with Iasoa Youths in Teouma and training youths on the important and technical aspects of agriculture for climate resilience	13 males, 3 females
Climate Change Governance Workshops	2 June	Technical Training with Chiefs from the Pele Island Council	31 makes, 8 females
Training on Glyricidia pruning	28 June	Pruning Glyricidia at Teouma and teaching famers on the importance of pruning. Also documenting and putting together manual on how to prune.	16 males, 14 females
Rocket Stove Training	4 July	Technical Training on the Development of fuel efficient Rocket Stoves at the Pele Pilot site	52 males, 21 females
Public Private Partnership	4 July – 22 December	Consultations in each community on Nguna-Pele in regards to conservation related partnership with Kakula private island	820 males, 753 females
Training on Crop Diseases	26 July	Sharing techniques on controlling pest and diseases with NGO partners on tomato, lettuce and Chinese cabbage	50 males, 26 females
FAD Survey	8 August	Surveys on Nguna and Pele with all area fishermen on	20 males

		their use and feedback on the fish aggregating device				
Distribution of climate resilient planting materials	20 August	Distributed 20 different Varieties of planting materials to local famers on Futuna island during the AGRIKLAEMAPTATION Adaptation Festival	6 communities; 200+ famers			
Climate change rapid vulnerability assessment survey	25-27 August	SHEFA province, SPC-GIZ and NAPE Area secretary carried out a survey on the island of Nguna and Pele with 4-5 community leaders per area council. Survey asked participants to rank vulnerability indicators under 4 main vulnerability key areas, averages were taken for each community and graphed to show the severity of the vulnerabilities per area council.	35 males, 48 females			
Teouma Futuna Community	3 September	Public Demonstration on Adaptation strategy	20 males, 11 females			
Nguna-Pele Climate Training	10-11 September	Technical training workshop with members of the Nguna-Pele executive committee	8 males, 1 female			
Harvest Kumala varieties	10 October	Harvested and weight all climate resilient kumala varieties	80 males, 35 females			
Pele Field School on Adaptation	23 October	Visit and hands on training with the Pacific Emerging Leaders Dialogue participants to the Pele pilot site	37 males, 32 females			
Coastal Erosion Assessment	29 October	Assessment and scoping of coastal erosion and sand mining problems at Paunangisu community	9 males, 8 females			
Pig Husbandry Training	21 November	Hands-on field based training for Pele pilot site farmers to learn resilient pig husbandry practices	35 males, 2 females			
Pele Council of Chiefs Training	15-18 December, 29 December	Governance training and workshop with the Pele Council of Chiefs and Development Board on adaptation	22 males, 18 females			

COMPONENT 4: Sustainable Community Tourism

CCCPIR launched its sustainable community tourism and climate change adaptation activities in 2013, with the technical support of an external consultancy firm (Pacific Asia Tourism PTY LTD) and on-ground experts in the SHEFA tourism office and the National Tourism Development Office.

2014 was largely dedicated to implementation of the community tourism adaptation programs. The two pilot sites chosen by the Vanuatu Tourism Board for the CCCPIR adaptation piloting were the Nguna-Pele area and the Havannah Harbour area, both on North Efate. These two sites were selected due to their proximate location and existence of current tourism activities. Both communities and the provincial area councils have endorsed the project objectives and been fully involved in program implementation.

In Havannah Harbour, the area council requested support to cope with the growing problem of waste, and identify both the consequences on tourism and the additional exacerbation climate change brings to the issue. The campaigned focused on realistic and locally appropriate solutions which in many cases are already being implemented. Working alongside the Vanuatu Meteorology and Geohazards Department, the Vanuatu Environment Department, the Tourism Department, SHEFA Province and the Department of Finance, a DVD was produced showcasing the local Waste Climate & Tourism case study in a "peer-to-peer" Bislama-language format. The film and educational campaign was launched by the Area Secretary of the North West Efate Area Council and shared with all communities and schools.

At Nguna and Pele, the focus has been on tourism activities that enable adaptation. On **Pele Island**, the community of Worasifiu elected to trial a **coral mariculture technique for tourists**. Planting varieties of corals that are resilient to increased sea temperature and other climate changes enables reefs to regrow. At the same time, tourists can participate in the planting activity and generate income for other community adaptation programs. Over 200 coral fragments were planted and 119 giant clams disseminated. On **Nguna Island**, the abundance of small operator bungalows has put excess pressure on already climate vulnerable coral reef fish. In response, the community of Taloa with support from the Vanuatu Fisheries Department and CCCPIR has established a **freshwater Tilapia aquaculture program**. The extremely resilient fish grown in the tanks are supplied to local bungalow operators.

Major Tourism Pilot Site Activities in 2014

Activity	Date	Description	Beneficiaries
Backyard Tilapia Training	31 January, 24-28 February, 2 July, 7, July, 8 October, 2 September	Training among Nguna site participants on basics of tilapia husbandry by Fisheries Department	135 males, 129 females
Coral Reef Mariculture Training	18 January, 22-23 June, 2 September	Site visits and hands on training for planting coral with local divers and tourism operators	22 males, 7 females
Deployment of Underwater Coral Garden	22 August	Placement of welded wire mesh for planting of coral and giant clams	100 males, 28 females
Havannah Tourism Training	30 January, 17 February, 28 February, 10 April, 3 July,	Specific training, site visits and documentation of case studies on waste tourism and climate change.	80 males, 67 females
Launch of Havannah Waste, Climate & Tourism campaign	23 October	Major launching od DVD with all local chiefs, area councillors and school students alongside government departments	306 males, 340 females

COMPONENT 5: Sustainable Energy Management

CCCPIR ended its sustainable energy management activities in Vanuatu in 2013, handing over major outputs to the Government of Vanuatu (Department of Energy, Mines and Mineral Resources and Vanuatu Meteorology and Geohazards Department). No new activities were undertaken in 2014.

Major results for this component included:

- 1. A **household energy survey** was completed in Port Vila and Luganville covering around 1200 households in total.
- The Government of Vanuatu (GoV), the Asian Development Bank (ADB) PEEP2 and CCCPIR have collaborated to produce several energy audit reports in Vanuatu which has led to a major funding proposal being developed by PEEP2 and approved by ADB to reduce energy consumption.
- 3. The Government of Vanuatu (GoV), the Asian Development Bank (ADB) PEEP2 and CCCPIR are collaborating to measure energy consumption before and after **energy efficiency installations at a number of Government buildings** to enable accurate impact assessment in terms of electricity savings and CO2 emissions reductions.
 - a. Metering of all lighting circuits to determine baseline lighting energy use at the Meteo building in collaboration with the ADB Promoting Energy Efficiency in the Pacific, phase 2 (PEEP2) project
- 4. The Government of Vanuatu and CCCPIR completed a preliminary survey of potential solar PV installation sites at various public buildings around Port Vila.
- 5. The Government of Vanuatu and CCCPIR completed a **solar energy feasibility study for the Meteo Building** including development of technical specifications for a solar PV project.
- 6. The Government of Vanuatu, with assistance from CCCPIR developed, submitted and successfully acquired **funding for a major renewable energy project** from the UAE Pacific Partnership Fund.
- 7. The Government of Vanuatu has with the assistance of CCCPIR signed an MoU with GIZ on the implementation of an energy project.

COMPONENT 6: Climate Change Education

Building on last year's support to mainstreaming of climate change elements into the K-13 new Vanuatu Curriculum, 2014 activities focused on developing the materials and teachers resources to appropriately impact this knowledge to students.

Specifically, the CCCPIR program worked alongside the Vanuatu Rural Training Development Centers Association (VRDTCA), SPC's Center for Education, Training and Communication, and local experts to develop a draft set of **7 modules on Climate Change & Disaster Risk Reduction** to be rolled out as a mandatory course among all Rural Training Centers on all islands.

Alongside the Government of Vanuatu and the PACSAP Australian Program, CCCPIR developed and launched a visual, picture-based outreach tool kit on climate change for education that is based on nationally prioritized key messages and learning outcomes on climate change. The toolkit has been shared with all schools and helps teachers to translate existing key messages and learning outcomes on climate change into personalized and culturally relevant visualizations like pictures, illustrations and cartoons that are often more approachable than scientific texts and graphs.

Again in 2014, the CCCPIR program alongside the Ministry of Education and over 30 partners organized and facilitated the third annual **Climate Zone Quiz Competition** designed to test the climate change knowledge and skills of Vanuatu's secondary schools. Schools from all 6 provinces participated, over 200

students, sat the written exam on 9 September, and the final matches were filmed for dissemination of Television blong Vanuatu and a DVD produced was shared with all communities throughout the country. Running from June to November, the climate zone program effectively reached over 200 students and 25 teachers and principals to improve their understanding of climate impacts and solutions. Winners of the competition, Malapoa College and Santo East School were awarded prizes to implement their own model adaptation programs. From 1-5 December, over 40 students from Malapoa undertook comprehensive and **detailed coastal erosion studies** (forestry, marine, geology, social) in order to implement a rehabilitation program in 2015.

As an add-on the in-person competition, the CCCPIR program, jointly with the Government of Vanuatu, Digicel Pacific and UNDP, spearheaded an innovative public private partnership in which **sms text climate questions** were sent to all mobile users with behavior-based questions related to climate change adaptation. In just 5 days of the sms program, over 38,000 users from around the country had participated in this innovative and dynamic program.

Governance of the CCCPIR in Vanuatu

CCCPIR Vanuatu has been heavily engaged in supporting Vanuatu to improve and strengthen the governance of climate change projects and program at a national level. At present, the CCCPIR program is broadly governed under oversight of NAB Chair and Director General of the Ministry of Climate Change, Jotham Napat. Operational decisions are taken in consultation with relevant Department Heads, departmental technical staff, and officers according to the nature of the project or activity.

SPC-GIZ Program Summary Budget Breakdowns for 2014 (Planned versus spent)

	Budget line	2014 Planned (Vatu)	2014 Realized (Vatu)
1	Technical expertise: long term and short term advisory services	15,000,000	16,266,500
2	Equipment	1,000,000	1,797,500
3	Training and Workshops	3,100,000	3,587,000
4	Pilot site activities	3,565,000	1,499,000
	Total	22,665,000	23,150,000

New Revised SPC-GIZ CCCPIR Program Budget 2009-2015 Donor Aid In Kind (vatu)

Items	1 st Year 2009	2 nd Year 2010	3 rd Year 2011	4 th Year 2012	5 th Year 2013	6 th Year 2014	7 th Year 2015	Total
Equipment		4,400,000	1,400,000	5,493,906	1,324,413	1,797,500	1,000,000	15,415,819
Trainings/Wo rkshops	1,400,000	2,750,000	4,290,000	9,496,739	8,304,410	3,587,000	1,000,000	30,828,149
Technical Expertise	3,900,000	31,000,000	28,900,000	29,988,500	37,748,000	16,266,500	14,700,000	162,503,000
Pilot Site Activities		2,850,000	4,500,000	7,213,119	9,287,874	1,499,000	1,000,000	26,349,993
Total	5,300,000	41,000,000	39,090,000	52,192,264	56,664,697	23,150,000	17,700,000	235,096,961

As outlined in the GIZ-Vanuatu MOU, the German Government through GIZ is providing Technical Assistance in different forms to the project (long term and short term expertise, equipment, training, financial support for pilot projects, communication etc.). The equivalent amount to provide these services can be estimated at up to 235,096,961Vatu. Note**: The amounts provided are approximations only, and can be reallocated between the different items according to the implementation needs.