

# South Erromango Area Council, Tafea Province



## VULNERABILITY ASSESSMENT RESULTS - AREA COUNCIL PROFILE

*Community-based vulnerability assessments conducted by Corey Huber and Jimmy Mase between 12.11.15 & 19.11.15. Report produced by Corey Huber.*



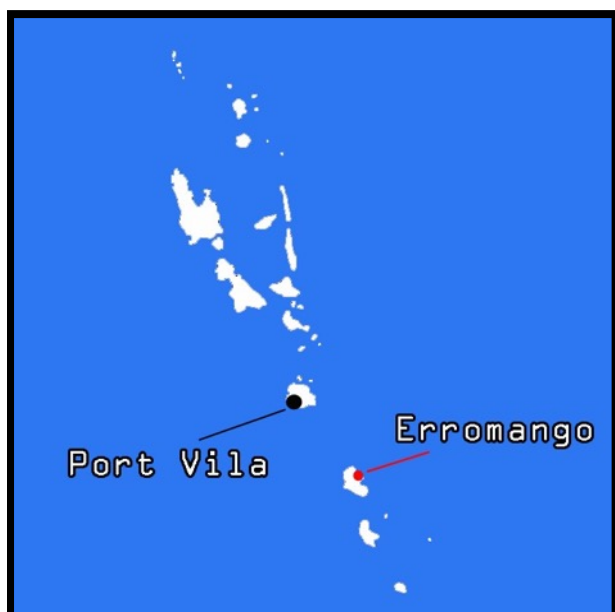
PHOTO: HAPPYLAND VILLAGE, ERROMANGO

### SOUTH ERROMANGO AREA COUNCIL, TAFEA PROVINCE REPUBLIC OF VANUATU

Results elicited from communities during vulnerability assessments conducted in Williams Bay Village, South River Village, Antioch Village, and Happyland Village in November of 2015.

This report developed with the support of the United Nations Development Program and “Adaptation to Climate Change in the Coastal Zone of Vanuatu” or “VCAP”, which is implemented by the Vanuatu national government through the Ministry of Climate Change.

v 1.0



# TABLE OF CONTENTS

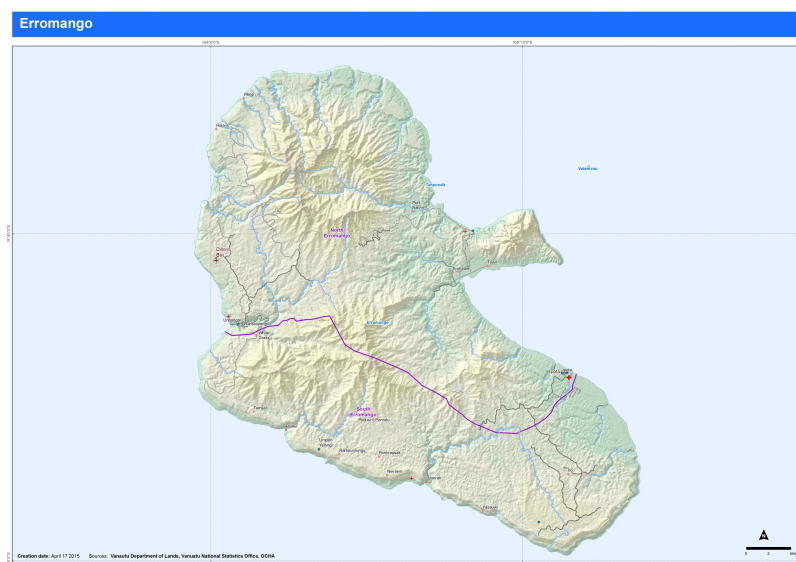
1. Methodology .....	Pages 1 - 2
2. Summary of Key Vulnerabilities .....	Page 3
3. General Information	
3.1 Population .....	Page 4
3.2 Organizational Structures	
3.2.1 Provincial Government / Area Council .....	Page 4
3.2.2 Other Government Officers .....	Page 5
3.2.3 Traditional Chiefly Structures .....	Page 5
3.2.4 NGO's .....	Page 6
3.2.5 FBO's .....	Page 6
3.2.6 CBO's & Committees .....	Page 7
3.2.7 VDC's .....	Page 7
3.3. Livelihoods .....	Pages 8 - 9
3.4 Services	
3.4.1 Health .....	Page 10
3.4.2 Education .....	Page 10
3.4.3 Other (Security, Airport, Banking, Communications, etc) .....	Page 11
4. Conveyance Infrastructure .....	Page 12
5. Upland Resources	
5.1 WASH .....	Pages 13 - 14
5.2 Agriculture ( <i>food security, invasive species</i> ).....	Page 15
5.3 Forestry (Commercial, Erosion Control).....	Page 16
5.4 Livestock.....	Page 16
5.5 Environment.....	Page 17
6. Coastal Resources	
6.1 Fisheries.....	Page 18
6.2 Environment.....	Page 19
7. Natural Disaster and Climate Change	
7.1 Natural Disaster.....	Page 20
7.2 Disaster Warning.....	Page 20
7.3 Disaster Shelter.....	Page 21
7.4 Climate Change.....	Page 21
8. Community Priorities for Development	
Williams Bay.....	Page 22
South River.....	Page 22
Antioch.....	Page 22
Happyland.....	Page 23
9. Annex Documents	
Vulnerability Assessment - Williams Bay	
Vulnerability Assessment - South River	
Vulnerability Assessment - Antioch	
Vulnerability Assessment - Happyland	
Area Council Meeting Sign-In Sheet	

# 1. METHODOLOGY FOR VULNERABILITY ASSESSMENT

The term “Vulnerability Assessment” is sometimes used interchangeably with the term “Community Profile” within Vanuatu. Both terms refer to a participatory social engagement tool that elicits information in a group setting about communities in a comprehensive, multi-sector approach. Vulnerability assessments (or community profiles) allow for community members to identify for themselves any relevant vulnerabilities using their contextual knowledge (including those posed by climate change and natural disasters), contribute valuable baseline data about the community as well as define community priorities for development in a fairly short span of time.

There have been multiple methodologies and templates utilized by various stakeholders to conduct vulnerability assessments and community profiles within Vanuatu, however, the Department of Local Authorities (DLA) is attempting to standardize this process. The DLA approved the use of the draft assessment tool and methodology used to collect the data contained within this report (version 2.3 of the “Komuniti Profael Form”). The vulnerability assessment tool utilized was designed using the pidgin language, Bislama, and is intended for use by non-technical Ni-Vanuatu facilitators (a generalist with a secondary level of education should be able to facilitate the assessment process with minimal training). The template for the assessment tool is currently in draft format and will be further refined by the DLA with the support of UNDP and other stakeholders throughout 2016.

The information contained within this report summarizes the results collected from vulnerability assessments conducted on **Erromango Island in November of 2015**. These vulnerability assessments were conducted in a community meeting format that was open to the general public. Data was collected from community members through the assistance of facilitators, who led several public meetings and encouraged active participation throughout the meetings by asking a series of questions and putting forth discussion points, as detailed in the “Komuniti Profael Form” version 2.3. The facilitators attempted to elicit data without influencing the results provided by the community. At times, the facilitator attempted to help community members arrive at a consensus or agree upon an approximate answer if there happened to be any disagreement or varying answers provided by the group.



*Vulnerability assessments conducted in Williams Bay, South River, Antioch, & Happyland*

The results from these community vulnerability assessments often consist of estimations, provided by community members to the best of their knowledge. While the results within this report should provide relatively accurate information about a community's vulnerabilities and resources, there may contain within this report inaccuracies as reported by the communities themselves. Data within this report should be considered as approximations made by community members (example - population figures).

The facilitators also utilized focus groups as part of the approach in completing the vulnerability assessments, allowing for further in-depth discussions regarding vulnerabilities and more inclusivity for local youth and women who sometimes face cultural limitations or inhibitions when expressing themselves publicly during community meetings. Focus groups utilized during this initiative included women's groups, youth groups (under the age of 25) and men's groups.

Key respondent interviews were also utilized to engage community leaders, including teachers, health workers, chiefly authorities, NGO representatives and woman's group leaders.

Relevant chiefs and members of chiefly councils were informed of this community vulnerability assessment process and its potential benefits before any data was collected and permission was granted to carry out the assessments in accordance with local governance practices. Chiefly representatives participated in the community profiling initiative at all communities consulted within **South Erromango: Williams Bay, South River, Antioch, and Happyland**. The provincial Area Secretary for the **South Erromango Area Council, Mr. Tomasi Sembet**, as well as **VCAP South Erromango Site Coordinator, Mr. Jimmy Mase**, were engaged throughout the entire community vulnerability assessment process and actively facilitated sessions at community meetings.

Notice was given to communities prior to each meeting where vulnerability assessments were conducted (public announcements were made and notices were hung on community notice boards) and the entire community was encouraged to attend, including women, youth and disabled persons, etc. Meeting attendance was encouraged regardless of land ownership claims, ethnicity, education, religion or gender. **Meetings took place in Williams Bay (13.11.15), South River (14.11.15), Antioch (15.11.15), and (15.11.15)**. Although the entire community was encouraged to attend and participate in the vulnerability assessments, attendance was voluntary and some chose not to participate due to work or personal commitments.

Transect walks through the communities were also conducted by the facilitators before and after vulnerability assessments were completed. Photos were taken by the facilitator at these times.

This report will be shared with **Tafea Provincial Government Council and the South Erromango Area Council**, as well as the nationally implementing stakeholders and partners of "VCAP".

LOCATION & DESCRIPTION OF ASSESSMENTS	MALE PARTICIPANT	FEMALE PARTICIPANTS
<u>Williams Bay</u> - Meeting conducted in public courtyard on 13.11.15 with representation from a geographic area including outlying "stations." Attendance was relatively low due to many community members preparing for the end of the academic school year, helping prepare students for examinations and end-of-year festivities.	30	20
<u>South River</u> - Meeting conducted in a temporary shelter near the Rural Training Center (RTC) on 14.11.15 with representation from a geographic area including outlying "stations." End-of-year festivities required several community members to take part in community work during consultations.	20	15
<u>Antioch</u> - Meeting conducted in Antioch on 15.11.15 and included representatives from several smaller "stations" nearby. Antioch is a collection of small clusters of households spread over several kilometers, often considered on the edge between South and North Erromango Area Councils.	18	15
<u>Happyland</u> - Meeting conducted in Happyland on 06.11.15 with representation from a geographic area including outlying "stations" spanning from Ponkil to Port Lucy. Due to the area's extreme remoteness, very few development projects have taken place here. A notable exception is an FAO supported forestry project, responsible for supporting a large kauri tree	60	75



## 2. SUMMARY OF KEY VULNERABILITIES ON SOUTH ERROMANGO

*Summary of key vulnerabilities identified by communities during vulnerability assessments. Please note that further information regarding these key vulnerabilities may require input from technical experts.*

<b>Food Security</b>	<p>Food security concerns within South Erromango are currently reported by community members as a matter of great concern. The ongoing recovery from Tropical Cyclone Pam in March of 2015 has been greatly hindered by the current El Nino event, leading to low crop yields. Due to TC Pam destroying a substantial amount of local gardens, several months of government-supported food aid were required before agricultural output should have returned to safe levels. However, due to a lack of adequate rainfall as well as abnormally high temperatures and intense sunshine, food security concerns within South Erromango have been exacerbated.</p> <p>With a large amount of wild game available such as wild cattle, pigs and chickens, diets are often supplemented by local hunters. However, often these wild animals cause high levels of damage to local gardens as reported by communities.</p> <p>Williams Bay, South River, Antioch and Happyland all identified some upland gardens areas as landslide prone. Landslides often destroy small garden areas.</p> <p>The sale of agricultural produce is very limited, although the demand for fresh produce is high. The profits from agricultural activity are perceived by locals as minimal when compared with potential profits to be gained from seasonal sandalwood &amp; kava sales.</p>
<b>Footpath Maintenance and River Crossings</b>	<p>The highest priority need identified in South Erromango was for improved public conveyance infrastructure, specifically the “climate proofing” of footpaths (upland and coastal) as well as construction of several bridges over water crossings. Communities expressed ample support possible assistance that would improve infrastructure and allow for increased access to services such as health care and education. Focus was placed on two main river crossings (Williams Bay and South River) and the main footpath between Antioch and Happyland.</p>
<b>Water Security</b>	<p>Water security issues have been exacerbated by the current El Nino drought, strongly impacting those communities surrounding Happyland as they rely entirely on rain tanks for potable drinking water. The communities of Williams Bay, South River, and Antioch are able to utilize gravity-fed water systems, although increased usage and demand on these systems has caused their holding tanks to require improvements.</p>
<b>Cyclone / Tsunami Shelters</b>	<p>There are currently no proper disaster shelters on South Erromango, however, during emergencies communities will utilize any cement buildings available. Due to the widespread destruction recently experienced during TC Pam, community members expressed an urgent need for safe and secure disaster shelters.</p>
<b>Access to Banking Services - Economic Security</b>	<p>The National Bank of Vanuatu and Western Union have no satellite branches based in South Erromango. There is a high demand for these services due to the influx of money arriving to Erromango because of workers who should receive salaries and seasonal income generating activities. The closest access to a bank for the village of William’s Bay involves a 10 hour walk (one-way) to Ipota Villa in North Erromango.</p>
<b>Dangerous boat landing - Ponkil</b>	<p>There is a dangerous boat landing area along the stony coastline of Ponkil that is used by community members of Happyland. Often this boat landing is considered unusable due to the strong tide and coastal conditions. Boat passengers, including vulnerable people, are often required to leap from the boat onto the stones or they are tossed ashore and received by a team of men attempting to catch the passenger and prevent their potential fall into the water.</p>

### 3. GENERAL INFORMATION FOR SOUTH ERROMANGO AREA COUNCIL

#### 3.1 POPULATION

These figures have been provided by community members in consultation with Community Disaster Committees and the Provincial Area Council Secretary. Youth has been defined as under the age of 25 years, household defined by VNSO as per kitchen rather than by individual housing units. Only those currently present on **South Erromango** during time of assessment included in figures.

	Men	Women	Youth	Disability	Total Pop	Households
<b>South Erromango (Total)</b>	456	524	369	26	1295	224
<b>Williams Bay</b>	300	325	200	20	625	156
<b>South River</b>	70	80	60	3	150	32
<b>Antioch</b>	86	119	109	3	205	36
<b>Happyland</b>	145	170	140	5	315	103

**Remarks** - Williams Bay's total population is the largest within South Erromango as well as the economic center of the area and attracts additional residents originating from other villages due to a convenient location that allows access to a service center with an airport and health dispensary. Locals defined Happyland as covering a large area starting at "Ponkil" at its western border and extending eastward to include the village of "Port Lucy" at its eastern border. Antioch population figures are derived from sparsely populated settlements along the southern coast of the island that are separated by several mile distances. South river has a population contained within a relatively smaller area but includes small outlying settlements as well.

#### 3.2 ORGANIZATIONAL STRUCTURES

##### 3.2.1

##### PROVINCIAL GOVERNMENT / AREA COUNCIL (AC)

<b>Area Secretary</b>	The Provincial Area Secretary for South Erromango is Tomasi Sembet and he was hired by Tafea Provincial Government Council as of 2012.
<b>Area Council</b> (Governance body)	Both the North and South Area Councils adhere to the island's five-year development plan, <i>Erromango Strategic Development Plan : 2014-2018</i> . AC members identified their priorities within the context of climate change and possible VCAP interventions, requesting technical training led by the DLA on AC roles and responsibilities, local governance, and financial management. AC members met two times in 2015, largely focusing on the adverse effects of TC Pam and the distribution of relief items such as food and WASH supplies. The Area Council's Chairman, Jason Mete, reported chronic budget shortages as inhibiting the AC's ability to properly meet their mandate.
<b>Area Council Office / Resources</b>	Functional AC office constructed with permanent materials in Williams Bay. Suggested improvements to the facilities by AC members included providing a VIP or water seal toilet, rain catchment tank, strengthening the metal roof that may have been damaged by strong winds in TC Pam and constructing a sea wall immediately in front of the office. Area Council members unsure whether the AC Office is appropriate for use by community as a cyclone shelter, as its location is adjacent to the coastline and is considered highly exposed to winds and storm surge. No boats or other means of transport provided to Area Secretary or AC.

## 3.2.2

**OTHER GOVERNMENT OFFICERS**

<b>Forestry</b>	A Forestry officer was previously stationed on Erromango in Williams Bay but villagers reported that his post was vacated several years ago. This Forestry officer was responsible for supporting the Kauri reserve in conjunction with the United Nations Food and Agriculture Organization (FAO).
<b>Education</b>	Government teachers are located in Williams Bay where there is one primary school (Years 1 - 6); and in Antioch where there is also one primary school (Years 1 - 6). There are several pre-schools on the island.
<b>Health</b>	Government supported nurse stationed at Williams Bay Dispensary.
<b>Water Resources</b>	Two Water Resource officers were temporary placed in South Erromango in 2012 to help facilitate the installation of JICA funded gravity-fed water supply systems. These were installed in Williams Bay, Antioch, and South River.

## 3.2.3

**TRADITIONAL CHIEFLY STRUCTURES**

<b>Status and Role of Chiefly System</b>	<p>Chiefly council on the island of Erromango is responsible for enforcing customary rules and regulations within communities, maintaining traditional cultural practices and providing general leadership and oversight for the population. Chiefly authorities most often provide discipline and resolution for smaller criminal cases or disputes rather than the police / judicial system. Chiefly status is hereditary, with stronger links associated with the male bloodline, although leadership may be relinquished to a “steward” outside of the appropriate bloodline if approved by the proper chiefly authorities. Chiefly council consists of both males and females.</p> <p>Chiefly consent is required for any development work or activity on this island initiated by any person, regardless of birthplace.</p> <p>Chiefly bodies are also present on a tribal level, community level and island-wide level on Erromango. The island-wide chiefly council is often the final authority, responsible for settling larger disputes, customary arrangements and preserving important traditional knowledge. Voluntary village development work was previously conducted by entire communities on Erromango once a week or as instructed by the chiefs, but this practice has been severely constrained by several factors including the increasing participation and commitment of community members in private IGAs. Chiefs call for community meetings as required now. Recovery efforts relating to TC Pam and the current El Nino have also adjusted community work schedules.</p> <p>While there have been minor disputes over chiefly authority on Erromango, mainly occurring in Ipota Village, all disputes over chiefly authority are currently considered resolved and have always been settled peacefully with rulings from the island-wide Council of Chiefs and Erromango Paramount Chief being accepted by all parties. Most disputes are focused on land ownership claims. Rarely, these claims regarding land ownership have gone through the judicial system and sometimes serious criminal cases are handled by the police.</p>
--	--

**3.2.4****NGO's & INTERNATIONAL ORGANIZATIONS**

<b>CARE International</b>	CARE International distributed agricultural tools & seeds in a food security in mid-2015. Tools were distributed via "tool banks", where they are available for communal use and accessible to local women on Erromango. CARE International has employed a local woman from Williams Bay to help with agriculture and food security projects. CARE International plans to strengthen its community based committees that will address gender, food security and disaster risk resilience issues.
<b>World Vision</b>	World Vision has been implementing their "Bush Kitchen" project, focusing on the construction of toilets and kitchens with local materials. WV also distributed kitchen supplies to households following TC Pam.
<b>JICA</b>	The Japanese government through its JICA program financially supported the construction of gravity-fed water supply systems in Williams Bay, Antioch and South River in 2012.
<b>Save the Children</b>	Supports Village Health Workers and Aid Post establishment in South River and Happyland with training and equipment.
<b>FAO</b>	FAO had previously stationed a officer in Happyland to help coordinate education and conservation efforts related to the local kauri reserve.
<b>UNICEF</b>	UNICEF distributed large tents for use as community classrooms in all three population centers following TC Pam in early 2015.
<b>UNDP</b>	UNDP and the Ministry of Climate Change have been implementing the Vanuatu Coastal Adaptation Project (VCAP) in all four major population centers.

**3.2.5****FAITH BASED ORGANIZATIONS (FBO's)**

<b>Williams Bay</b>	The largest denomination in the Williams Bay area is the Presbyterian Church with approximately 100 members and 1 permanent church building made from permanent materials. This is followed closely by the Seventh Day Adventist Church (SDA) that has around 80 members and 1 permanent church house. Smaller FBO's here include the Neil Thomas Ministries (NTM), Apostolic Church, Praise & Worship, Jehovah Witness, Bahai, Jesus Only, and Assembly of God with less than around 40 members each and a temporary shelter. These church networks have organized associations for women & youth members.
<b>South River</b>	A majority of this community attends the Seventh Day Adventist (SDA) Church with approximately 25 members. There are also Presbyterian, Apostolic and Catholic churches present, although each with memberships limited to approximately 15 members each. None of these churches have permanent buildings but do have organized women's and youth groups.
<b>Antioch</b>	The largest faith-based organization is the Seventh Day Adventist (SDA) Church with approximately 160 members and a temporary structure. Also present are the Presbyterian Church with approximately 14 members.
<b>Happyland</b>	The Presbyterian Church is the largest faith-based organization with approximately 50 members, followed by the Seventh Day Adventist Church (SDA), Assemblies of God (AOG), Catholic, and Neil Thomas Ministries (NTM), each with less than 40 members and no permanent shelters.



### 3.2.6

## COMMUNITY BASED ORGANIZATIONS (CBO's) & COMMITTEES

<b>Williams Bay</b>	Active committees and organized groups in Williams Bay include a chiefly committee, women's groups affiliated with individual churches as well as one island-wide group, youth groups affiliated with individual churches, a health committee, Community Disaster Committee (CDC), school committee, business committee, and a recently formed Village Development Committee (VDC).
<b>South River</b>	Due to the smaller population and scattered communities there are very small committees such as a chiefly committee, island-wide women's group, youth groups affiliated with churches, water committee, school committee, health committee, Community Disaster Committee (CDC), and a recently formed Village Development Committee (VDC).
<b>Antioch</b>	Due to the smaller population and scattered communities there are very small committees such as a chiefly committee, island-wide women's group, youth groups affiliated with churches, primary school committee, Community Disaster Committee (CDC), and a recently formed Village Development Committee (VDC).
<b>Happyland</b>	Active committees and organized groups in Happyland include a chiefly committee, women's groups affiliated with individual churches as well as one island-wide group, youth groups affiliated with individual churches, a health committee, Community Disaster Committee (CDC), school committee, and a recently formed Village Development Committee.

*\*Only CBO's & committees considered functional and active by community members are listed in this report (example, if a village committee was formed for water security purposes but it does not hold regular meetings or perform any recent tasks, it is not cited).*

### 3.2.7

## VILLAGE DEVELOPMENT COMMITTEES (VDC's)

<b>VDC's</b>	Four functional VDC's as recognized by DLA are present within South Erromango. The communities of Williams Bay, South River, Antioch, and Happyland all established working VDCs as of November, 2015.
--------------	--

*\*VDC's are voluntary technical working groups comprised entirely of locally-based membership that address community oriented, multi-sector development issues and attempts to utilize representation from all existing organizational structures present within a community- such as chiefly systems / NGO's / FBO's / CBO's / Committees, such as those listed in previous tables above. VDC's are often used for planning or monitoring and evaluation purposes.*

*VDC's are flexible, voluntary working groups whose membership comes from EXISTING organizational structures. VDC's should not be viewed as an additional organization within a community but rather as a collection of representatives from a community's existing structures, providing a wide-range of skill sets and the knowledge base necessary to create an informed technical working group familiar with local context and conditions.*

### 3.3 LIVELIHOODS

#### 3.3.1

#### INCOME GENERATION

<b>Main Sources of Income</b>	<p>By far, the largest source of income generation for communities within South Erromango is derived from the export of marine resources (lobster, crab, fish, etc) and sandalwood to Port Vila, Efate. The sale of sandalwood on Erromango is seasonal and regulated by the Department of Forestry.</p>
<b>Alternative Sources of Income</b>	<p>A limited number of guesthouses are maintained within South Erromango, but they are typically occupied by visiting government officers and development partners. There is no tourism activity taking place within South Erromango.</p> <p>The sale of agricultural produce is very limited, although the demand for fresh produce is high. The profits from agricultural activity are perceived by locals as minimal when compared with potential profits to be gained from seasonal sandalwood and daily kava sales. Kava is sold in Williams Bay but due to extremely limited quantity the sale of kava is irregular. Kava from the island of Tanna is imported to Erromango twice a week via Air Vanuatu.</p> <p>There is no active fishing project selling or exporting fish on Erromango although there is a plentiful supply. Seafood is exported on a regular basis to hotels and restaurants in the capital city, Port Vila.</p> <p>There is normally a large supply of livestock on Erromango, in part due to the multitude of wild cow and pig on the island. Sale from timber takes place mainly in Ipota, where there is one sawmill operating.</p> <p>Regular salaries are paid to government &amp; NGO officers, temporary employees of local schools, and staff of Air Vanuatu.</p>

## LIVELIHOODS INVENTORY

### 3.3.2

	Williams Bay	South River	Antioch	Happyland	TOTAL
<b>Stores</b> (selling basic commodities)	8	2	1	7	10
<b>Cooperatives</b>	1	0	0	0	0
<b>Guest Houses / Bungalows</b>	4	0	0	3	3
<b>Fuel Sales</b>	7	1	0	2	3
<b>Boat Transport</b>	5	2	0	0	2
<b>Ready-Made Kava Bars</b>	0	0	0	0	0
<b>Markets</b> (fresh produce, fish, etc)	0	0	0	0	0
<b>Seamstress / Tailor</b>	5	3	0	10	13
<b>Baker</b> (either local bread or "gato")	20	5	2	10	17

### 3.3.3

## MISCELLANEOUS - LIVELIHOODS

<b>Outside Investors</b>	There have been several attempts over the past few years from outside investors to purchase land within South Erromango, but as of yet no land owners or Chiefs have allowed such a transaction. A private company based out of Australia has attempted to establish a sandalwood oil distillery in Happyland, however is currently not operational.
<b>Employment Abroad</b>	There are reportedly twenty South Erromango community members that are currently working abroad in either New Zealand or Australia as part of seasonal employment schemes. There are no locals currently working abroad on fishing boats or cruise ships.
<b>Cooperatives</b>	There is a cooperative in the community of Williams Bay, officially launched in 2010. This cooperative regularly is out of stock as reported by community members.
<b>Markets</b>	There are no locally based markets within South Erromango with the exception of sporadic produce and fish markets during special occasions. Occasionally, fruits and other food goods are sold between locals as well at this time.
<b>Value Added / Exports</b>	There is currently no income derived from value-added processing of resources within South Erromango.

### 3.4 SERVICES

#### 3.4.1

#### HEALTH

<b>Health Facilities</b>	<p>The Williams Bay Dispensary is comprised of one building and employs a Nurse. Dispensaries are able to assist mothers with child birth, remove teeth, provide medicines including antibiotics, share family planning methods and provide general treatment for mild to moderate medical conditions. The Williams Bay Dispensary has a boat to transport sick patients and to perform health related work on the island. Serious medical cases are referred from the dispensary to the hospital in Lenekel, Tanna or even directly to the hospital in Port Vila, Efate.</p> <p>South River and Happyland both have Aid Posts serviced by voluntary Nurse Aids. The Aid Posts are very small buildings and can provide basic assistance such as cleaning and dressing wounds or sores, sharing basic non-prescription medicines, distributing condoms and leading health awareness initiatives. Serious cases are referred from the Aid Posts to the Williams Bay Dispensary.</p> <p>Antioch currently has no health facilities.</p>
<b>Health Concerns / Common Illnesses</b>	<p>NCD's such as heart disease, hypertension and diabetes are reportedly growing in incidence among community members and are a common cause of death on Erromango. Health workers believe this is related to a shift away from traditional diets, lifestyles and heavy tobacco use especially by males on Erromango.</p> <p>TAFEA Provincial Health regularly coordinates with the WHO to initiative malaria-eradication spray programs throughout South Erromango Erromango, helping contribute to the very small number of malaria or dengue fever cases in recent years.</p>

#### 3.4.2

#### EDUCATION

<b>Pre-Schools</b>	<p>There are a handful of pre-schools in Williams Bay, one in South River, and one located in Happyland. These schools are funded entirely by school fees paid by parents each term.</p>
<b>Primary Schools</b>	<p><b><u>Tabisi Primary School</u></b> in Antioch a is anglophone, has 58 students ranging from Year 1 - 6, and is staffed by one government teachers and one unregistered teachers from the community. The buildings on the compound are constructed of local materials and in poor condition. <b><u>Williams Bay Primary School</u></b> is anglophone, located in Williams Bay, has approximately 75 students ranging from Year 1 - 6, and is staffed by four government teacher and one unregistered teachers from the community.. The condition of the school buildings is moderate due to damage from TC Pam.</p>
<b>Secondary Schools</b>	<p>There are currently no secondary schools located within South Erromango.</p>
<b>Technical Schools</b>	<p>There is one rural training centers (RTC) or technical training schools located in South River. Occasionally community members travel to Port Vila, Efate or Luganville, Santo to enroll in technical programs as well.</p>
<b>Continued Education</b>	<p>Students wishing to further their education and who have passed their exams often leave Erromango to study at senior secondary schools on Tanna or Efate islands. Currently there is three locals attending university at USP in Fiji.</p>

<b>Flights</b>	The national airline, Air Vanuatu, operates flights to Ipota twice a week currently. This is the primary way of transporting light cargo and passengers to and from South Erromango due to the infrequent nature of ships servicing the island. Chartered flights from Air Taxi, Belair Airways, and Air Safari will occasionally service the island for private flights. Aviation Vanuatu Limited has partnered with the Public Works Department to select a local man responsible for providing regular maintenance to the airstrip to ensure safety of arriving planes.
<b>Shipping</b>	Large cargo ships service South Erromango very irregularly, often only once every two months. Ships are essential to transport heavy cargo such as building materials and store supplies. There are access points for ships to provide service and unload cargo near the communities of Williams Bay, South River, Antioch, and Ponkil (Happyland) although Williams Bay is typically the primary village that is serviced.
<b>Financial</b>	The National Bank of Vanuatu and Western Union have no satellite branches based in South Erromango. There is a high demand for these services due to the influx of money arriving to Erromango because of workers who should receive salaries and seasonal income generating activities.
<b>Communications</b>	<p>Digicel and TVL companies provide network coverage to most of the area. TVL network was provided in 2012 and Digicel was recently installed in late 2015. TVL network coverage was unreliable and often down due to technical problems throughout 2013 - 2015. Network access in Antioch and Happyland is not reliable and locals must walk a short distance in search of network reception. TC Pam badly damaged the TVL telecommunication towers in Williams Bay, effectively blacking out network on South Erromango until repairs were completed in mid-2015. In addition, a new Digicel tower was constructed in late-2015.</p> <p>There are no FM radio stations available, but medium wave radios can pick up Radio Australia. Radio Vanuatu is frequently not accessible on Erromango. Very few households own medium wave radios and tend to rely primarily on mobile phone communications to receive information.</p> <p>A basic internet connection is only available through the mobile phone carriers, with locals reporting improved performance by the TVL and Digicel networks. Reportedly, 3G internet speeds are reachable with the Digicel network only.</p> <p>Some small communities without access to communications networks on Erromango must walk up to one hour to access network coverage, thus they report great concern about their isolation and inability to receive important updates including early warnings for cyclones or tsunamis.</p>
<b>Security</b>	With no police or VMF presence on the island, local security is left to each community's respective Chief and Council of Chiefs. Should an incident occur that requires the presence of police, police have been contacted previously to intervene on the Chiefs' behalf.
<b>Community Halls or Meeting Venues</b>	There are no community halls or community buildings intentionally designed to house public meetings on Erromango. Otherwise, public meetings are held in classrooms, at community schools, church buildings or underneath the shade of banyan trees.



#### 4. CONVEYANCE INFRASTRUCTURE ON SOUTH ERROMANGO

<b>Roads / Vehicles</b>	<p>There are currently no operational vehicular roads within South Erromango, with the exception of a 10km road leading from Williams Bay to the nearby airport. However, roads were previously constructed from Williams Bay leading towards the interior of the island, connecting to Antioch and surrounding villages during the 1970s. These older roads were built and used by foreign logging companies operating heavy machinery. Abandoned after the 1980s, the roads have deteriorated in condition and are now obstructed by trees and dense vegetation. There is one vehicle based in Ipota that is utilized to transport timber and wharf cargo to the airport over very short distances within the immediate area only. This vehicle frequently experiences mechanical problems.</p>
<b>Footpaths</b>	<p>Walking along upland and coastal footpaths on Erromango is the primary means of transportation on the island. Every week, hundreds of villagers within South Erromango utilize the footpaths to travel between communities. As Williams Bay is a main service center on the island, locals from other villages routinely walk up to ten hours to access this location. Considering the rugged and difficult terrain in South Erromango, there are often times due to climatic activity when these footpaths become inaccessible. The most frequently used footpath within South Erromango are located along the coastline between South River and Happyland and includes steep cliffs and sharp volcanic rock. The terrain and accessibility of the footpath varies greatly from place to place. At times the footpath follows lengthy sand beaches at sea level but at other times it traverses rivers, scrambles over heaps of loose volcanic stones, narrowly clings to the edge of sheer cliffs or climbs steadily uphill several hundred meters in elevation before descending once again.</p> <p>These footpaths are natural walking trails and have not been maintained or developed with improved materials, drainage, etc. At times, portions of the footpath become inaccessible in wet or rainy conditions. Villagers report that there have been discussions with PWD about providing community based contracts for villagers to maintain footpaths, but they are unsure as to the status of this proposed initiative.</p>
<b>Bridges / Water Crossings</b>	<p>There are several locations along the primary footpath where pedestrians must wade across rivers or streams within South Erromango. There have been several near deaths in recent years where pedestrians (mainly children) have almost drowned attempting to wade across. The largest and most dangerous rivers are located in Williams Bay and South River, becoming difficult to cross at high tide or in rainy conditions because of flooding. There are also two large rivers on either side of the greater Antioch community.</p> <p>There are no bridges for any of the two major rivers within South Erromango along the primary footpath. There are a few makeshift bridges (fallen trees or timber nailed together) used to cross smaller streams in some locations.</p>
<b>Wharfs</b>	<p>There are no proper wharfs within South Erromango, with locals mostly utilizing sandy beaches that allow for ships to be pulled ashore or anchored nearby for small fiberglass boats to transport goods.</p> <p>There is a dangerous boat landing area along the stony coastline of Ponkil that is used by community members of Happyland. Often this boat landing is considered unusable due to the strong tide and coastal conditions. Boat passengers, including vulnerable people, are often required to leap from the boat onto the stones or they are tossed ashore and received by a team of men attempting to catch the passenger and prevent their potential fall into the water.</p>
<b>Boats</b>	<p>Travel by boat is often a preferred means of transportation between communities on Erromango, but it is entirely dependent upon having the financial ability to pay for a charter trip / fuel and also having accommodating weather. There are 7 boats currently providing transport services within South Erromango.</p>

## 5. UPLAND RESOURCES ON SOUTH ERROMANGO

### 5.1 WASH (WATER AND SANITATION, HYGIENE)

#### 5.1.1 Inventory of Drinking Water Sources by Community

(counting functional sources only, not those in need of repair)

	Williams Bay	South River	Antioch	Happyland
1) Gravity Supply System	1	1	3	0
2) Poly / Fiber-Glass Rain Tanks	62	0	10	14
3) Above Ground, Cement Rain Tanks	0	0	0	0
4) Enclosed Ground Wells (Cement bottom)	0	0	0	0
5) Open Ground Wells (No cement)	0	0	1	1
6) Powered Pumps (Generator / Solar)	0	0	0	0
7) Hand Pumps	0	0	0	0
8) Coastal springs (water directly accessed from a spring located on the immediate coastline)	1	1	0	1
9) River / spring (water directly accessed and used at a river or spring, no use of pipes)	1	1	4	1

#### 5.1.2

#### WASH

<b>Brief Summary of Water Resources by Community</b>	The communities of William's Bay, South River and Antioch all have functioning gravity-fed water supply systems, funded through the Japanese government in late-2012. Antioch relies on three separate smaller gravity-fed systems, often being insufficient to adequately service the area. Happyland currently relies entirely on rain catchment tanks. There are several small "stations" surrounding each of the major population centers that do not have access to any source of potable water and must transport water containers long distances. The full area reported water security vulnerabilities related to substantial changes to normal rainfall patterns.
<b>Toilets</b>	The communities of Williams Bay, South River, Antioch and Happyland all primarily utilize bush toilets or open pit latrines, with the exception of a handful of VIP and water seal toilets. All four communities expressed a concern regarding sanitation and waste management practices, requesting technical training from government partners.

<b>Water Committees</b>	All four communities have functioning water committees, with Williams Bay and South River asking households to contribute towards a monthly maintenance fee.
<b>Hand-washing Access</b> (Access to Water + Soap)	Access to running water and soap at individual households is moderate in Williams Bay and South River, but poor in Antioch and Happyland. Almost no bush toilets or open pit latrines had regular access to running water and soap.
<b>Waste Disposal</b>	Most rubbish is disposed of by burning it in large open pits or burying it in the ground. Community members discussed rubbish occasionally being strewn throughout the bush and near the coastline.
<b>Access to Community Rain Catchment Tanks</b>	Williams Bay, Antioch, and Happyland communities have access to several water tanks, but only a handful are available for public use. South River has a few private rain catchment tanks. South River was given two 6,000L rain tanks by CARE International in late-2015, however no materials for catchments were provided, currently making both tanks nonoperational.

### 5.1.3 Improved Toilet Inventory

	<b>Williams Bay</b>	<b>South River</b>	<b>Antioch</b>	<b>Happyland</b>
<b>Flush Toilet</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Water-seal Toilet</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Compost Toilet</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Ventilated Improved Pit Toilet (VIP Toilet)</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>5</b>

*\*Majority of improved toilets located at community buildings such as schools, church housing or guest houses.*

## 5.2 AGRICULTURE

5.2.1	AGRICULTURE
<b>Primary Crops</b>	Primary food staples within South Erromango include manioc, taro, yam, kumala, island cabbage and banana. Other crops may include tomato, pumpkin, tomato, and watermelon.
<b>Garden Space</b>	Due to low population density, there is ample space for gardening. Erromango is the third-largest island in Vanuatu, but has a small population of approximately 2,000 people. However, the communities of Williams Bay, South River, Antioch, and Happyland have gardens that can be several hours walking distance from their households.
<b>Agricultural Sales</b>	Currently, the sale of agricultural goods is extremely low. Due to low crop yields and water security issues, the sale of local produce and root crops is irregular. Kava must typically be imported from Tanna before being sold for local consumption, with the exception of Happyland that has a small amount of local kava.
<b>Food Security</b>	<p>Food security concerns within South Erromango are currently reported by community members as a matter of great concern. The ongoing recovery from Tropical Cyclone Pam in March of 2015 has been greatly hindered by the current El Nino event, leading to low crop yields and water security issues. Due to TC Pam destroying a substantial amount of local gardens, several months of government-supported food aid were required before agricultural output should have returned to safe levels. However, due to a lack of adequate rainfall as well as abnormally high temperatures and intense sunshine, food security concerns within South Erromango have been exacerbated.</p> <p>With a large amount of wild game available, local diets are often supplemented with beef or pig. However, often these wild animals cause high levels of damage to local gardens as reported by communities. There are also many fishermen who spearfish the local reefs, providing a variety of fish and crustaceans as well.</p>
<b>Invasive Species</b>	The International NGO, Live and Learn, has been supporting an invasive species eradication program focusing primarily on American Rope. They have one field officer stationed in Ipota whom is responsible for supporting activities within South Erromango.
<b>Pests</b>	Communities have been reporting an increase in small insects and snails adversely impacting their gardens. Williams Bay, South River, Antioch, and Happyland reported pests and caterpillars consuming their manioc, island cabbage, taro, and kumala. Happyland expressed concern regarding sandalwood also being negatively impacted.
<b>Diet (Use of Store-Bought Foods)</b>	There are approximately 18 small stores throughout South Erromango that sell a variety of imported food goods. Popular items include rice, tin fish/tuna, flour, sugar, salt, and chips/crisps. However, store inventory may fluctuate regularly due to a lack of cargo ships regularly servicing the island.

### 5.2.2 Agriculture

Inventory	None Available	Some Available	Plentiful
Coconuts		X	
Kava		X	
Coffee		X	
Vanilla	X		
Pepper (black or white)		X	

	None Available	Some Available	Plentiful
Cacao	X		
Fruits		X	
Vegetables		X	

### 5.3

## FORESTRY

<b>Summary of Forestry Activities</b>	Seasonal sandalwood harvest and sales take place throughout South Erromango. There is a large kauri reserve located in Happyland which previously received the support of FAO and the Department of Forestry, in promoting the protected upland area as tourist destination.
<b>Primary Species</b>	Primary species of wood include White Wood, Mahogany, Pine and Sandalwood.
<b>Nurseries</b>	There are currently no functioning nurseries within South Erromango, with the exception of a CARE International supported nursery in Williams Bay. TC Pam has destroyed small nurseries stationed in Antioch.
<b>Timber Sales</b>	The seasonal sale of Sandalwood is a primary source of income for many households on Erromango.
<b>Erosion Control</b>	All of South Erromango reported serious issues of erosion along main footpaths, especially during inclement weather. Technical assistance by many communities has been requested to counter erosion by employing soft measures.

## 5.4 LIVESTOCK

### 5.4.1 Livestock Inventory

	Chickens	Ducks	Goats	Pigs	Cattle
<b>Williams Bay</b>	<b>1000</b>	<b>2</b>	<b>12</b>	<b>40</b>	<b>40</b>
<b>South River</b>	<b>100</b>	<b>0</b>	<b>30</b>	<b>20</b>	<b>50</b>
<b>Antioch</b>	<b>1000</b>	<b>4</b>	<b>25</b>	<b>3</b>	<b>30</b>
<b>Happyland</b>	<b>1500</b>	<b>0</b>	<b>40</b>	<b>50</b>	<b>200</b>
<b>TOTAL: SOUTH ERROMANGO</b>	<b>3600</b>	<b>6</b>	<b>107</b>	<b>113</b>	<b>320</b>

### 5.4.2 Livestock Summary

<b>Summary of Livestock Activities</b>	The main sources of livestock within South Erromango are chickens and cattle, followed by pigs and goats. It should be noted that there is also an abundance of wild livestock, particularly cattle and pigs, that are often consumed by locals. CARE International began implementing multiple food security projects within South Erromango in mid-2015 including community poultry projects in Williams Bay.
--	---



## 5.5

## ENVIRONMENT - UPLAND

<b>Geography / Description of Environment</b>	South Erromango from Williams Bay to Antioch is mainly rugged mountains, requiring climbs of several hundred meters before descending again. Erromango is the largest island in the province and is renowned for its forest resources, including an abundance of wild game, sandalwood trees and hardwood forests. It is the largest island in the province by far but it is sparsely populated considering its land area.
<b>Pollution</b>	Minimum pollution on Erromango in upland areas, aside from household waste that may be improperly disposed of.
<b>Persistent Organic Pollutants (POPs)</b>	There is no reported use or presence of POP's.
<b>Water Catchment Areas</b>	Concerns related to grazing livestock were raised throughout South Erromango community consultations as possibly having adverse affects on water catchment areas. Small-scale forestry activities have been discouraged near water sources but do occasionally take place throughout many water catchment areas.
<b>Conservation Areas</b>	There is an official upland conservation area in Happyland that has been recognized as a "kauri" reserve, and protected by a project facilitated by FAO and UNDP, which hoped to promote the area as an eco-tourism destination.
<b>Access to Traditional Building Materials</b>	TC Pam greatly decreased access to traditional building materials, especially bamboo, natangura and coconut leaves.
<b>Access to Firewood</b>	There is sufficient access to firewood throughout Erromango.
<b>Erosion Related to Logging, Buildings</b>	As there are currently no commercial logging activities within South Erromango, erosion related to small-scale logging by private individuals is considered to be very low as reported by communities. Individual community members utilize chain saws for private logging purposes.
<b>Invasive Species</b>	The International NGO, Live and Learn, has been supporting an invasive species eradication program focusing primarily on American Rope. They have one field officer stationed in Ipota whom is responsible for supporting activities in South Erromango.
<b>Protected Species</b>	Heavy logging of the kauri tree species, which began in the late 1800's and continued for a century has considerably decreased the number of kauri trees - however, the protected reserve near Happyland is attempting to protect this species for future generations. Often timber from kauri trees was exported to Australia or even England.
<b>Mining</b>	There are no reported mining activities in Erromango VCAP site.
<b>Management Plan</b>	No individual communities within South Erromango currently have management plans, but a strong interest was expressed to receive technical assistance in drafting one in all four population centers. The island's five-year strategic plan, <i>Erromango Strategic Development Plan : 2014-2018</i> , outlines priorities related to environmental management but does not specify any tactics or preferred interventions by community.

### 5.5.1 Environmental Resource Inventory

	None	Some	Many		None	Some	Many
Coconut Crabs		X		Fresh Water Prawns		X	
"Nawemba"		X		Fresh Water Fish			X
Flying Fox			X				

## 6. COASTAL RESOURCES ON SOUTH ERROMANGO

### 6.1

### FISHERIES

<b>Inshore Fisheries Summary</b>	Many community members take part in small-scale subsistence fishing along the coastline or go diving with spearguns. There is limited export of sea-food due to irregular access to preservation facilities and high expenses related to air freight.
<b>Offshore fishing</b> (Trolling or deep sea fishing)	Offshore fishing is not a common activity in South Erromango. Trolling occasionally takes place during transport trips by small passenger boats.
<b>Inshore Fishing Methods</b>	Most fishermen use spearguns, however some fishing poles and traditional spears are also utilized as part of inshore fisheries methods.
<b>Fisheries Exports / Sales</b>	A small amount of fish and shellfish are exported weekly to Port Vila for use by hotels and restaurants. Commonly sold resources include lobster, crab, prawns and fish.
<b>Preservation</b>	William's Bay has several private ice boxes available for food preservation, but are often too expensive for most families to use.
<b>Fish Aggregating Devices (F.A.D.'s)</b>	There are currently no Fish Aggregating Devices (F.A.D.'s) located within South Erromango.
<b>Resource Monitors</b>	The communities of Williams Bay and Happyland have turtle monitors associated with "Vanua Tai Risos Monitor," responsible for encouraging sustainable resource management and empowered to enforce fishing regulation by Fisheries Department.
<b>Coral Reef</b>	All four communities expressed concerns regarding the declining health of their coral reefs, highlighted by coral bleaching and an observed decline in fish quantities by locals.
<b>Crown of Thorns Starfish (COTs)</b>	Williams Bay reported an observed increase in the number of Crown of Thorns Starfish.
<b>Ciguatera</b>	Every community reported concerns regarding local fisheries and Ciguatera poisoning.
<b>Sea Cucumber</b>	Recently, community members in Williams Bay reported that recently individuals have exported large quantities of sea cucumber to Port Vila.
<b>Traditional Conservation Methods</b>	Chiefs will often "block" certain areas of a community's shoreline for conservation and food security purposes.
<b>Marine Protected Areas (MPA's)</b>	There are no officially recognized Marine Protected Areas (MPA's) located in South Erromango.

## 6.2

## ENVIRONMENT - COASTAL RESOURCES

<b>Marine Pollution</b>	Marine pollution is typically limited to small pieces of rubbish or benzine/fuel used for small fiberglass boats. There are no major industrial areas on the island that contribute to marine pollution.
<b>Coastal Erosion</b>	Williams Bay and South River experience low levels of coastal erosion due in large part to both communities being situated around large river inlets.
<b>Sedimentation</b>	Areas surrounding Williams Bay and South River have been reported as having large deposits of sediment in shallow waters, preventing locals from being able to collect shellfish or go spearfishing.
<b>Dugongs</b>	There are no dugong sightings reported by locals near South Erromango.
<b>Turtles</b>	The communities of William's Bay and Happyland have turtle monitors associated with "Vanua Tai Risos Monitor," responsible for encouraging sustainable resource management.
<b>Mangrove Ecosystems</b>	There are expansive mangrove ecosystems on the coastline between Williams Bay and Happyland, in particular around the areas of Ponkil and Port Lucy.
<b>Sand mining</b>	Community members reported regularly accessing local sand beaches to acquire sand for construction purposes, but it is not believed by local community members to be associated with any coastal erosion.

## 6.3 COASTAL RESOURCE INVENTORY

*\*While resources differ by community - results indicated below are inclusive of results from every community within South Erromango AC*

	None Available	Some Available	Plentiful
<b>Reef Fish</b>			<b>X</b>
<b>Bottom-Fish</b> (Pule, etc)			<b>X</b>
<b>Sea Cucumber</b>			<b>X</b>
<b>Trocha shellfish</b>		<b>X</b>	

## 7. NATURAL DISASTER & CLIMATE CHANGE - SOUTH ERROMANGO

### 7.1

### NATURAL DISASTER

<b>Tsunami / Storm Surge / Cyclone</b>	<p>There is a high level of risk associated with tsunamis and storm surges, as demonstrated by TC Pam. Williams Bay, Ponkil and South River are situated along narrow coastlines and are only a few meters above sea level. During TC Pam, the large portion of both communities were flooded. A majority of Happyland communities are located further inland and face no immediate risks from tsunamis or storm surge.</p> <p>Cyclones pose a tremendous risk to South Erromango, with most buildings constructed out of local materials and villages having no formal disaster shelters. Cement houses or classrooms are used in emergency situations, but are often ill-equipped and lacking proper toilets, water tanks, or lights. TC Pam wreaked extensive damage to structures and gardens throughout the area and most communities have yet to fully recover.</p>
<b>Volcanic Activity</b>	There is currently no volcanic activity affecting South Erromango.
<b>Flooding</b>	Extensive flooding may occur during inclement weather or strong storms. Schools, churches, private homes, and footpaths are often impacted. A lack of adequate drainage often exacerbates the impact of heavy flooding.
<b>Erosion to Infrastructure</b>	Most upland and coastal footpaths experience erosion due to heavy rainfall, poor drainage, and large amounts of livestock utilizing the same throughways.
<b>Landslides</b>	Williams Bay, South River, Antioch and Happyland all identified areas adjacent to rivers and upland gardens as landslide prone. Landslides often destroy small garden areas.
<b>Drought</b>	Due to the current El Nino phenomenon, all of South Erromango is experiencing a severe drought. Happyland is more heavily impacted due to their reliance on rain tanks.
<b>Past Disasters of Note</b>	Tropical Cyclone Pam (2015), Tropical Cyclone Ivy (2004), and Tropical Cyclone Uma (1987) were all noted as climactic disaster of significance. Communities consider wild animals, mainly pigs and rats, destroying gardens as a disaster as well.
<b>Community Disaster Committees (CDC's)</b>	There are functional Community Disaster Committees (CDCs), supported by CARE International, in all four major population centers on South Erromango. Happyland's CDC is also responsible for the small stations of Ponkil and Port Lucy. Antioch's CDC encompasses all of the smaller villages in the area.
<b>Disaster Plan</b>	Community disaster plans are the responsibility of individual CDCs and Chiefs.

### 7.2

### DISASTER WARNING

<b>Radio</b>	All of South Erromango utilized radio communications for disaster warnings.
<b>CDC's</b>	CDCs are reportedly an integral mechanism for spreading information and warning regarding disaster.
<b>TVL / Digicel SMS Warnings</b>	Community members from larger villages reported that they received SMS alerts from TVL or Digicel prior to TC Pam, which assisted with disaster preparation.
<b>Family or friends from Port Vila</b>	Friends and family in Port Vila, Tanna, and Santo regularly reach out to community members regarding possible inclement weather.
<b>Traditional Knowledge</b>	Older members of the area were regarded as having traditional knowledge capable of providing advanced warning of upcoming weather event.
<b>No warning</b>	No communities reported having members unable to be warned of pending disasters.

### 7.3

### DISASTER SHELTER

<b>Status of Disaster Shelter by Community</b>	There are currently no proper disaster shelters on South Erromango, however, during emergencies communities will utilize any cement buildings available.
<b>Additional Community Buildings Used as Shelter</b>	Williams Bay and Happyland both use JICA-funded double classrooms as evacuation centers, as well as church buildings and their health dispensaries. The communities within Antioch and South riVER typically congregate in traditional nakamals as there are very few cement structures. Locals living in small “stations” either migrate to the larger population centers or often don’t have safe shelter during emergencies/disasters.
<b>Typical Building Materials Used / Condition - Housing</b>	Most buildings used as disaster shelters have cement floors and walls, typically glass/bamboo windows, and metal roofs. Conditions are moderate to poor as maintenance of most buildings is expensive and materials not easily accessible.

### 7.4

### CLIMATE CHANGE

<b>Sea Level Rise Observed?</b>	Yes, sea level rise has been observed in Williams Bay and South River as reported by local community members.
<b>Sea Level Rise Affecting any Valued Infrastructure?</b>	William’s Bay and South River experience storm surge affecting low lying areas of the community, in particular, the private homes residing along the coastline are affected. Several small stores and churches along the coastline in each community are experiencing similar challenges with the sea level rising above previous levels.
<b>Water Security - Impacted by Climatic Effects?</b>	Yes, all of South Erromango reported that significant changes in rainfall patterns has affected their water security. The current El Nino has increased water security concerns for the entire island.
<b>Food Security - Impacted by Climatic Effects?</b>	Yes, climatic events such as El Nino and tropical depressions/cyclones may greatly impact South Erromango’s food security. The current El Nino drought has hindered local gardens from fully recovering from TC Pam.

## 7.5 OBSERVED CLIMATIC CHANGES BY COMMUNITY (OVER LAST 20+ YEARS)

	Yes	No
Increased Rainfall (total amount per year)?		X
Increased Occurrence of Drought?	X	
Increased Temperature?	X	
Seasonal Changes? (timing of rainy / dry season)	X	
Bleaching of Coral Reef?	X	
Salt water intrusion of drinking water?	X	



## 8. COMMUNITY SELF-IDENTIFIED PRIORITIES FOR DEVELOPMENT - SOUTH ERROMANGO

*\*At the conclusion of each Vulnerability Assessment, communities were asked to divide into focus groups and identify two leading priorities for development for their entire community, not necessarily for the membership of their focus group alone. This activity allowed for group discussion of vulnerabilities and for the prioritization of needs. Communities were encouraged to identify actions that could be taken themselves instead of being wholly dependent on external donors.*

8.1	No of Participants	WILLIAMS BAY
Women's Focus Group	15	<u>Seamstress project</u> - support an Income Generating Activity (IGA) related to tailoring <u>Poultry project</u> - support an Income Generating Activity (IGA) related to poultry
Men's Focus Group	12	<u>Technical Fisheries training</u> - provide technical training from Department of Fisheries <u>Livestock fencing</u> - provide fencing and technical training from the Department of Livestock
Youth Focus Group	16	<u>Youth center</u> - construct proper youth center which could also function as a cyclone shelter <u>Sports venue</u> - construct proper sports venue which could also function as a cyclone shelter

8.2	No of Participants	South River
Women's Focus Group	15	<u>Market house</u> - support an Income Generating Activity (IGA) in the form of a market house that could also serve as a cyclone shelter <u>Improve food security</u> - provide ice boxes for food preservation
Men's Focus Group	10	<u>Technical Livestock training</u> - provide technical training from Department of Fisheries <u>Disaster shelter</u> - need for a safe location where community members can evacuate during a cyclone or tsunami warning
Youth Focus Group	10	<u>Youth center</u> - construct proper youth center with musical instruments <u>Sports venue</u> - construct proper sports venue which could also function as a cyclone shelter

8.3	No of Participants	ANTIOCH
Women's Focus Group	20	<u>Market house</u> - support an Income Generating Activity (IGA) in the form of a market house that could also serve as a cyclone shelter <u>Poultry project</u> - support an Income Generating Activity (IGA) related to poultry
Men's Focus Group	15	<u>Improved infrastructure</u> - "climate proofing" of upland footpaths <u>Disaster shelter</u> - Need for a safe location where community members can evacuate during a cyclone or tsunami warning. Can have a function as a comment hall building as well
Youth Focus Group	15	<u>Poultry project</u> - support an Income Generating Activity (IGA) related to poultry <u>Sports venue</u> - construct proper sports venue which could also function as a cyclone shelter

8.4	No of Participants	HAPPYLAND
Women's Focus Group	15	Improved water security - installation of gravity-fed water system Improved health services - support to improve existing Aid Post healthcare services and facilities
Men's Focus Group	50	Improved infrastructure - "climate proofing" of upland footpaths Improved water security - installation of gravity-fed water system
Youth Focus Group	15	Youth office - construction of proper meeting house for youth Sports venue - construct proper sports venue which could also function as a cyclone shelter