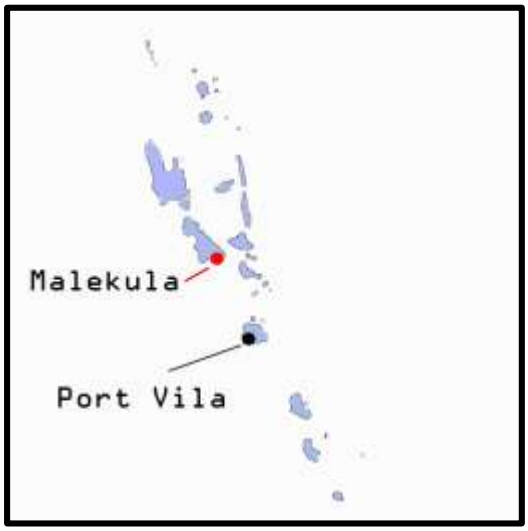
South Malekula Area Council; Malampa Province

1 V-CAP site context and background

Malampa is one of the six provinces of Vanuatu, located in the centre of the country and consisting of three main islands namely Malekula, Ambrym and Paama. It also includes a number of smaller offshore islands – the small islands of Uripiv, Norsup, Rano, Wala, Atchin and Vao off the coast of Malekula and the volcanic island of Lopevi near Paama (currently uninhabited). Also included are the Maskelynne Islands and other small islands suck as Akam and Avock along the south coast of Malekula. The total population of Malampa Province is 36,722 (2009 census) people and it contains an area of 2,779 km².



Malekula is the most populated and developed island in the province and houses the provincial capital named Lakatoro. Malekula receives an abundance of precipitation. The temperature on the island varies during the hot and cold seasons, but averages approximately 24.9°C at the coast and is a few degrees cooler in the centre of the island. Weather in Malekula is seasonal, and warmer from November until April and cooler and dryer period typically from May to October. Like the rest of Vanuatu, the island's weather is strongly influenced by the El Nino Southern Oscillation cycles. During the El Nino (warm phase) the country is subject to long dry spells. During the La Nina (cool phase) Vanuatu has prolonged wet conditions.

Malekula is located on active geological faults. The southeastern side of the island experienced major earthquakes as recently as the 1990s and the land, e.g. Akam Island, was reported to have subsided by up to a depth of 1 meter. There are three active volcanoes located within Malampa Province: twin peaks on Ambrym Island and one located on Lopevi Island. The entire province is at a severe risk of tsunamis and earthquakes.

Primary roadways on the island run from north to south along the eastern coast of the island. The condition of these roadways is quite poor in many areas due to the effects of climate-induced erosion and the numerous river and creek crossings where there are no vehicular bridges. After heavy rains the roads often become inundated and locals are forced to travel by boat or walk, as vehicles cannot access the primary roadways in poor conditions.

The second phase of the Australian funded VTSSP project is currently improving the primary roadway along the northern end of the island, The first phase of VTSSP focused on improving access between Lakatoro and Norsup, creating a bridge and drainage system to allow for improved passage over a swampy inlet adjacent to the coast.

The central, western and southern portions of Malekula have extremely limited infrastructure and locals rely mainly on boats and footpaths for transport.

There are 2 airports on the island serviced by Air Vanuatu. The largest is at Norsup near the provincial capital in the north and the other airport is located in South Malekula at the former French Condominium headquarters in Lamap.

Cargo ships regularly service the island as well as passenger ships such as the MV Big Sista, which regularly facilitate the exports of kava, copra and fish to Port Vila and Luganville. The major wharfs are located in Norsup and Lamap.

There are communities in Malekula still practicing very traditional lifestyles where Western clothing and commodities are not commonly used and where Bislama, the national language, is not spoken often. There are two classifications of the traditional tribal groupings on Malekula: the “Big Nambas” and the “Small Nambas” and these names are derived from the size of the gourds and leaves used to create the customary penis sheathes traditionally worn by the tribes.

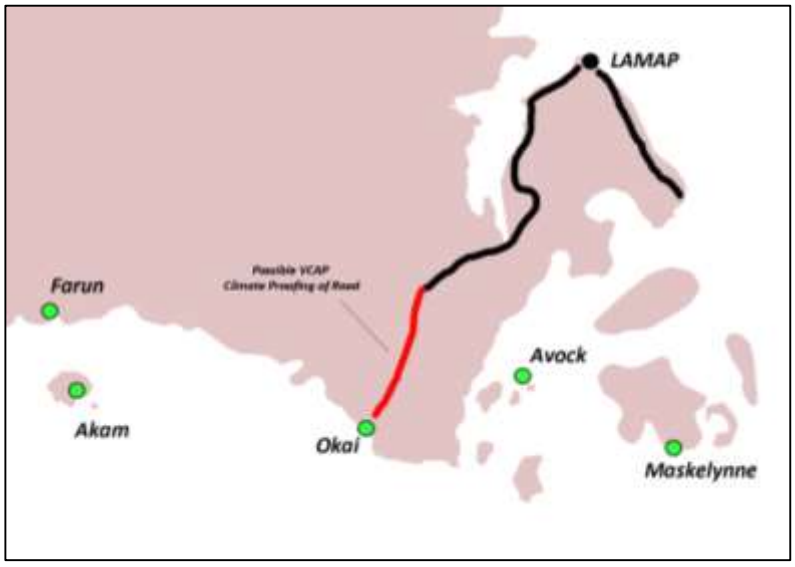
2 Proposed project site and resources

2.1 Proposed site

The project site consists of a coastal area located in South Malekula Area Council, including 3 offshore islands The western border starts at Farun Village on the mainland and nearby Akam Island and then proceeds east to the Maskelynnes Islands.

It is important to note that these areas are very isolated in their nature and difficult to access. This creates one of the biggest challenges in addressing the climate change related issues.

In addition, Lamap will be included in the South Malekula Area Council planning process to be established by V-CAP. All villages within this target site are all located within the South Malekula Area Council. There are additional benefits that will flow to the Area Council to the West in South-west Malekula.



As of the 2009 Census, the total population of Malekula was 22,934 people with an annual growth rate of 1.9%. In 2009, the outer island of Akam had a total population of 646 people with an annual growth rate of 1.3%. However, locals from Akam have indicated there has been a recent outward migration to the mainland meaning that there may be a significant change in this annual growth rate recorded in 2009. Maskelynnes had a population of 1,022 in the 2009 Census with an annual growth rate of 0.8%.

The following table indicates the target communities and islands within this site:

Province	Island	Village	Area Council	Immediate Beneficiaries	Additional Beneficiaries	M	W	Total
Malampa	Maskelynne		South Malekula	1,200	0	558	642	1,200
Malampa	Avock		South Malekula	241	0	110	131	241
Malampa	Malekula	Okai	South Malekula	248	0	130	118	248
Malampa	Malekula	Farun	South Malekula	400	0	210	190	400
Malampa	Akam		South Malekula	400	0	200	200	400
Malampa	Malekula	Lamap	South Malekula	0	267	147	120	267
Malampa	Malekula		South West Malekula	0	2,885	1483	1402	2,885
			TOTAL	**2,489**	**3,152**	**2838**	**2803**	**5,641**

Explanation of population statistics

- Male to Female % for Malekula Island according to 2009 Census is: 1.0257927.
- Data derived from 2009 Census figures provided by VSO along with revised data collected during community consultations with Provincial Area Secretaries.

Additional Beneficiaries Explanation- Malekula:

- The population from the South-west Area Council of Malekula, west of the immediate V-CAP sites will benefit from proposed V-CAP initiatives to provide climate proofing to the road that has been established from Okai to Lamap, allowing them greater access to health, educational, inter-island transport, market and shopping services;
- The village of Lamap will also benefit from V-CAP component 1.1.1, which will establish an Area Council development plan incorporating their community inside;
- Lamap communities will be engaged in the trade and market routes opened up by the improved infrastructure to reach South Malekula;
- Resources will be allocated to provincial workers and government department field officers, to facilitate the expansion of the lessons learnt from V-CAP to additional sites in the island and province.

A more detailed description of the villages located within the V-CAP site are outlined below:

Area Council	Villages	Total Population
South Malekula	Akam Island (Lemlan, Robianas, Turak)	400+
	Farun Village (+ Falou, Aromai, Lohorfar, Barbismor, Renaour, Lasovsae, Lamolghai, Lebus stations)	400+
	Okai Village (+Lemang, Marbagho, Hojef)	248
	Maskelynne Island (Peskarus, Pelong, Lutas)	1,200
	Avock Island	241

The total beneficiaries of the V-CAP in this location are 5,641 persons.

2.2 Planning and local governance

2.2.1 Traditional System

The traditional chiefly system is the main governance structure that is active at this V-CAP site. The village chiefly councils oversee a majority of the village level planning, community work, disciplinary meetings and dispute resolution, which occurs regularly in the villages.

Throughout the project site, the communities indicated that every Thursday was reserved for performing community work under the direction and supervision of the respective village's council of chiefs. Normally a village chiefly council is comprised of various tribes, each of which have a chiefly leader, forming a council where one Chairman or Paramount Chief is chosen.

There are no disputes over chiefly titles within the villages on the mainland, Okai and Farun. The traditional chiefly system appears to operate quite effectively at these sites.

However, on Maskelynne, there is significant division within some communities as a dispute over chiefly titles has been raised to the Lands Tribunal, the national government body overseeing such cases. Akam island communities also indicated that there is a minor dispute regarding their chiefly title. The presence of disputes with chiefly titles poses a potential threat for implementation of any projects, as each disputing party must be consulted with the expectation of not excluding any particular groups.

There is an island wide council of chiefs on Malekula called the *Maltenvanu Council*. This island wide council is comprised of the Chairman from each chiefly council on Malekula and its offshore islands. It sets broader policy, rules and regulations for the villages as well as hearing the more serious and demanding disciplinary cases between villagers in addition to performing dispute resolution services.

2.2.2 The South Malekula Area Council

The South Malekula Area Council has been established, although there is little evidence regarding its fuctionality, such as a budget or Area Council work plan. The Council's meetings are reported to be irregular and there is reported to be confusion regarding their responsibilities and funding allocation to the Area Council by the provincial government at the time of the V-CAP consultation.

There is currently no office building for the South Malekula Area Council. The Area Secretary is based out of Lamap currently, where there is a surplus of former condominium government buildings, some of which are in poor condition. Several Area Council members and the Area

Secretary indicated that the province intends to construct an office in Farun village eventually, although the funding and schedule for this construction is ambiguous.

In addition, the V-CAP project will support beneficiaries from an additional Area Council called the South West Malekula Area Council. It is anticipated that the full range of efforts undertaken in South Malekula will be able to be scaled up and duplicated in South West Malekula.

The Malampa Provincial Government Council maintains its presence in the Area Council through its Area Secretary. Area Secretaries are field officers employed by the provincial governments and they live and work within their respective Area Councils. Their basic duties include the following services: tax collection, voter registration, government awareness duties, Statistics enumeration duties and assisting development projects within their respective Area Councils. The Area Secretary will play an integral role in facilitating future V-CAP work and meetings. The V-CAP intervention will support and strengthen the efforts of the Area Secretary.

2.3 Brief profile

The target communities in South Malekula indicated during V-CAP PPG consultations that they generate a majority of their household income through the sale of kava and copra along with fishing activity.

2.3.1 Marine and coastal areas:

Fishing is important at a subsistence level for all households within the project site. A number of customary or “tabu” marine managed areas have been established by communities along the coast. These are managed through traditional management systems with decisions on the management of these sites made by chiefly council representatives. There is a range of management systems in place for these sites, often allowing a fishery to recover its harvestable populations.

(Man from Maskelynne returning to island on small boat)

This area is home to the largest coral reef system in Vanuatu and was the place the V-CAP PPG visited that provided the best example of marine conservation which had four registered MPA sites and proposed their further development. There are a number of benefits in the list of the sites CCA which include longer periods of closure, government assistance in monitoring and evaluation, e.g. Reef Check and obvious biodiversity conservation benefits. Currently, the four CCAs in the area have formed an informal network that they hope to further develop—similar to the networks established at Pele Island, North Tanna and Crab Bay in Malekula.

The fishing and the sale of marine resources generates substantial income for certain villages located in South Malekula, The islands of Maskelynne and Avock receive multiple weekly shipping services that cater to fishermen with ice facilities for the transport of fish and lobster to Port Vila. In Okai Village, Akam Island and Farun Village the fisherman sell bottom-fish such as “pule”, smaller fish from the reef and lobster. Within the target area (excluding Avock island for which data is unavailable) there are 6 motorized boats which regularly take part in trolling fishing and bottom-fishing activities. A vast majority of the target population utilizes locally constructed canoes for fishing purposes or take part in spear-fishing.

In relation to challenges in the marine and coastal environment:

- All villagers reported declines in offshore fisheries catches;
- Communities with MPAs indicated that these MPAs had a positive impact on coral reef fisheries around the MPA;
- There were reports of communities from remote villages fishing in the fishing grounds of local fishermen (to be confirmed);
- All villages expressed concern with an increasing number of Crown-of-thorn sea-stars and expressed an interest in being part of a control program;
- All villagers expressed concern at coastal erosion.

2.3.2 Terrestrial

The terrestrial area of the Malekula of South Malekula Area Council is interesting for a number of reasons. There are relatively large tracts of forests and related habitats that are relatively intact. In some of these areas communities have created “kustom forest tabu” areas, which are protected from hunting and the felling of trees. The low population and inaccessability may possibly explain the limited exploitation of resources to date. However, with an increasing population and increased access to markets through enhanced public conveyance infrastructure, there will be increasing pressure on these upland areas. V-CAP will seek to address related issues as outlined below.

Upland agriculture

Many of the communities in South Malekula live on small offshore islands, thus the space available for agriculture is limited. A number of the offsore island communities have farmland on the mainland of Malekula and travel on a regular basis to the mainland to conduct farming. In recent years, an increasing number of households from the islands are moving to live on the mainland with closer access to agricultural land. This is resulting in the cutting of forest and increasing pressure on the resources.

The planting, production and sale of fresh kava to supply the production of “ready-made” kava bars in Port Vila, Luganville and elsewhere is increasingly becoming the primary source of income generation in the area. There is little to no value-added processing involved with kava production in South Malekula. The kava is occasionally dried in the sun for preservation purposes until shipping services can transport the kava to commercial areas where relatives of the farmers sell the kava and send money or supplies back to the village. There are 21 “ready-made” nakamals (excluding Avock Island for which data is unavailable) which sell local kava daily for personal consumption within the target area.

Copra harvesting and sales, although on overall decline in Vanuatu, are still regular and active in this area. Normally copra prices fluctuate highly and farmers sell copra following market

trends and government subsidies offered. Copra is sold to agents who then sell domestically or export abroad.

A range of issues were identified in relation to agriculture. These are summarized in the table of issues in the section below.

Water supply and security:
Each village has a variety of means of water supply. These range from:

- ***Gravity feeds*** from ”water sources” typically small springs where the water has been contained and then is piped – often over a number of kilometres to the village where there are typically shared taps to provide water to a number of households
- ***Tank supply from metal roofs*** – very limited as there are very few metal rooves in the area, except at schools- which should be equipped with tanks
- ***Groundwater*** – pumps and wells – very common in the surveyed villages.

The provision of secure water supply through all seasons was a priority of the community. Communities highlighted a number of issues in relation to water supply. Village specific issues are highlighted below:

- ***Farun village:*** Water security is considered to be the second highest community priority as indicated by Farun Village during V-CAP consultations. A number of people (over 50) from Akam Island have recently settled in Farun due to limited space, erosion and resources on the small island of Akam. This has placed further strain on Farun’s water supply. Also, the relocation of the secondary school from Akam with its boarding students has impacted water security in Farun. There is a gravity feed water supply system with 15 taps, which frequently does not work. In rainy conditions, the water is reported to be visibly contaminated and considered unsafe to drink. There are at least 2 coastal springs which locals access for drinking purposes when necessary in Farun. There are 12 poly and fiberglass rain tanks, 2 cement rain tanks and 4 cement wells which provide drinking water to the community here. In addition, there are 3 ground wells that provide water for washing and cooking only.
- ***Maskelynne island:*** Water is a very serious issue in this island, with the main supply groundwater that is becoming increasingly contaminated by salt water intrusion and pollution from toilets without septic tanks. The communities on Maskelynne noted that water security was a critical issue and that normally during dry periods villagers must walk a substantial distance to access a ground well located near the centre of the island from which to collect drinking water. However, there are a great quantity of wells and rains tanks on Maskelynne which provide drinking water normally, however there were increasing concern as to the quality of this water. One small-scale solar desalination plant has been provided to this island. Overall, the villagers were most concerned about the potential of their pit toilets to pollute the island’s water table.
- ***Akam Island:*** Villagers indicated their water supply had improved with the relocation of the High School and a large portion of the population to the mainland. During the V-CAP consultation they reported that the island had 12 poly or fiber-glass rain tanks and 9 cement rain tanks (5 of which were large +5,000 litre tanks) that functioned and provided drinking water to the population. There are 6 cement wells, 12 ground wells and 1 hand pump that provides semi-fresh water for washing and cooking purposes only.

- ***Okai Village***: Communities from Okai Village that their drinking water access was greatly improved by the French Embassy in 2013 with the expansion of its gravity feed water supply system. They report that their water supply system functions well in both drought and rainy conditions. There are currently 11 taps connected to the gravity feed system that are functioning well in Okai. There are 5 poly or fiber-glass rain tanks and 1 cement rain tank that provides drinking water as well. The village has dug 10 ground wells to access fresh water for cooking and washing, but not for drinking purposes.

2.3.3 Conveyance Infrastructure

There is a developing road network around Malekula Island. Construction and improvements are being supported by the Australian Government through the VTSSP and the Public Works Department with possible supplemental funding be offered by the Chinese government.

In the proposed sites there are tremendous transport challenges. For example, from Akam island, the options for travel to the mainland to access health services and markets are either a boat though rough seas for 2-3 hours, followed by a walk for minutes, or a shorter boat ride followed by a 12 km walk. There are major issues in current transport arrangements, in particular in medical emergencies.

In the proposed site there are no roads. In response to local needs, communities did cut a road from the bridge on the main road to Okai in the late 1990s to early 2000s. This was a massive undertaking by local communities and demonstrates the importance of the road. However, the road fell in disrepair due to a swamp in the mid-section of the road, which disrupted access. The local communities indicate that the rehabilitation of this road is a very high priority and that this task will become more challenging in the face of climate change. The Public Works Department performed a survey of this road as recently as 2012.

Regular commercial and passenger shipping services access the communities in South-east Malekula. Commercial ships specializing in the transport of kava, copra and local produce regularly target Malekula on an irregular basis when there is sufficient cargo to transport. Passenger ships such as the Big Sista maintain a regular schedule, servicing passengers headed to Port Vila or Luganville as well as transporting fresh seafood as well. A small sailing vessel owned by the communities on Maskelynne Island makes routine trips between Lamap and Port Vila, transporting locals and fresh seafood.

(V-CAP consultation team following the hand-cut road to Okai village)

The closest airport is located at Lamap, a 3 hour boat ride and 30 minute walk from Akam Island in good conditions and a 30 minute boat ride and 30 minute walk from Maskelynne Island. It has a grass landing strip and is regularly serviced by Air Vanuatu.

2.4 Other socio-economic information

2.4.1 Health services

Health services are a major concern to the people of South Malekula, who complain that qualified health care workers often do not wish to live and work within the target area due to its relative inaccessibility. There is a clinic located on Maskelynne Island staffed by a Nurse Aid and a trainee working to provide basic medical care to the population. On Akam Island, currently there is an unstaffed Health Dispensary building – however a Village Health Worker with limited skills provides basic treatment for minor medical ailments when there are supplies available. The Area Secretary and Area Council representatives have stated their wish to construct a Health Dispensary on the mainland at Farun Village to serve the population in place of the abandoned Dispensary on Akam. Currently, Farun Village has an Aid Post building but there is no Village Health Worker so the building is vacant. In Okai Village, there is also a vacant Aid Post building, as their former Village Aid Post Worker left to go work in New Zealand following seasonal labour schemes.

Villagers consulted within the target area complained that those suffering from serious medical ailments often had difficulty with transportation to Lamap, due to rough seas which are prevalent around the south east corner of Malekula. While Maskelynne and Vao are not particularly affected, the communities on Akam Island, Farun Village and Okai Village experience considerable hardships in accessing health care facilities. Villagers indicated several cases where sick patients were unable to travel for treatment because of the rough seas so they eventually died and of pregnant mothers who delivered their children on boats on the way to Lamap. These villagers suggested a repair of a previously used road which leads from Lamap to Okai Village would greatly increase their accessibility to essential health services.

2.4.2 Education:

There are 5 schools located within the target area as shown in the chart below. In 2010, a Council of Ministers meeting endorsed the relocation of Akam Island's Secondary School to the mainland due to concerns about coastal erosion and space availability on Akam Island. As of 2013, South Malekula Secondary School in Farun Village is operating out of temporary buildings, awaiting funding from the national government to construct permanent classrooms in a safer location further inland.

School Name (Location)	Primary, / Secondary School?	Language	Classes	Government Teachers (Community Teachers)	Total Students
Luwoi (Akam)	Primary	English	1 - 6	2 (4)	95

Sangalae (Maskelynne)	Centre	English	1 - 8	7 (3)	200+
Vanraru (Okai)	Primary	English	1 - 6	2 (3)	100+
South Malekula (Farun)	Secondary	English	7 - 10	5 (1)	143
Kalwai (Farun)	Primary	English	1 - 6	3 (2)	100

Pre-school-

Pre-schools in South Malekula reported an extremely high number of enrolled students compared with other V-CAP sites. There were 64 pre-school students in Farun, 60+ students on Akam Island, 20+ students in Okai and reports of a high number of pre-schoolers on Maskelynne and Vao islands.

(Okai village- community indicated very high number of pre-school age students)

2.4.3 Other services

Financial:

Maskelynne Island has both a National Bank of Vanuatu branch and an agent from Western Union, which are accessed frequently by the community. Akam island, Okai and Farun receive monthly visits from a "mobile" banking officer from the National Bank of Vanuatu, however many villagers do not use this service.

Security:

The closest police sub-post in located in Lamap. The police officer in Lamap travels to the target area when there are serious cases reported, sometimes with support from the officer stationed in Lakatoro, Malekula. In October of 2013, there was a serious dispute that occurred on Vao Island resulting in many homes being burnt down after a man from this island was accused of murdering a man from Lamap by using witchcraft. There were also several rape / incest cases in 2013 which required the police to travel to this area.

Government Extension Workers:
There are no government extension workers currently based within the target area. Occasional visits from government officers do occur within the target area but it is not commonplace.

2.5 Other development activities / sector

2.5.1 Mining

International mining companies have performed exploratory excavations in South Malekula in the past. Additional surveys were carried out in 2013. However, to-date there are only unconfirmed reports of gold deposits. These developments must be tracked and potential implications identified.

2.5.2 Tourism

Tourism activity in South Malekula is limited to Maskelynne Island. There are 8 bungalows / guest houses on Maskelynne with eco-tours which allows visitors to snorkel on the rich coral reefs as well as view endangered species such as the dugong and giant clam. Tourists typically arrive via Air Vanuatu by landing at the airport in Lamap and are transported the short distance to Maskelynne. Occasional tourists arrive via a tourist “cruise” ship catering for small and specialised groups, and also on yachts and sailboats. The other villages within the V-CAP target area in South Malekula do not receive any tourism and related revenue due to their relative inaccessibility, lack of information on these sites and lack of facilities.

2.5.3 Small business

Small businesses and income-generating activity contributes to South Malekula’s local economy as well. Within the target area (excluding Avock island, for which data is unavailable) the villagers consulted indicate that there are approximately 46 small stores, 33 local bakers, 24 boat transports generating small revenue. The sale of livestock also generates a moderate level of income for target communities, not nearly as substantial as the sale and harvest of marine resources.

2.6 Other development projects

There is a range of development projects in the South Malekula. These are outlined below:

- The island of Maskelynne appears to receive much assistance and support by funding partners, compared to other communities located within the target site. This may be due to its relative easy access and high population. On Maskelynne, there is a water de-salinization project sponsored by NZ Aid. The de-salinization project is located near the school and some villagers report that it is helpful in providing additional fresh water to meet their needs.

- The New Zealand government has also supported Maskelynne by creating a small local "soap" manufacturing center, which produces specialty hand soaps made from local materials which are then sold to the public domestically and internationally.
- A fiber-glass boat manufacturing centre on Maskelynne was operational for several years with support from the Australian government, however this centre is not functional at the moment.
- Australian Youth Ambassadors have also established working relationship with the communities on Maskelynne, contributing with small community development projects.
- There are a number of small-scale fisheries projects within the target area in South Malekula. There is an ice machine here provided by the Department of Fisheries.
- There are "turtle monitors" who are community representatives trained and supported by an NGO called ***Wan Smol Bag*** to assist with marine based conservation efforts and they are located throughout the target area.
- Akam Island received a solar system through the small grants GEF project scheme, which powered a community icebox used for fisheries activities. However, at the time of the V-CAP consultation, the icebox was not functioning and only the solar lighting system was functional.
- The European Union has recently funded the construction of new classrooms on Okai village as well providing 2 rain tanks to Farun Village.
- The French Embassy in 2013 funded an extension to the gravity feed water supply system in Okai village, providing much better access to safe drinking water for the community. AusAid has contributed several rain tanks to communities within the target site as well.
- The Malampa Province TVET (Technical Vocational Educational Training) Centre which is funded by the Australian government has provided several valuable training opportunities recently in the target area. A workshop involving the management of marine resources was held in Okai Village while on Akam there were training sessions conducted on livestock, agriculture, solar energy and catering. The communities on Maskelynne also noted several trainings funded by TVET.

3 Overview of key climate change vulnerabilities, threats and priorities for action.

At the community level there were detailed discussions were held at 13 community meetings, through village inspection and upland and coastal inspections. These are outlined in Annex 1.

A wide-range of development and climate related development issues were highlighted at each of the consultations. The analysis of outcomes of the stakeholder consultation and site inspection process in the area of South Malekula Area Council, combined with information gathered from government sources (including national, provincial and area council initiatives and plans), NGO and development partner projects (current and upcoming) has resulted in identification of a number of integrated development and climate change related challenges to address immediate priority development issues to build long-term resilience to climate change. These are outlined in the table below (please see next page).

3.1 Vulnerable Groups

During the discussions with women, youth, elderly and disabled persons at community level, and with provincial sub-district staff and committees, the primary development concerns expressed included:

(Elderly woman washing cookware in Farun Village)

Farun village:

The women interviewed stated their biggest concern is that current food shortages will get given the rapidly increasing population. Food shortages are the result of increased demand for food, the destructive impact of invasive species on subsistence groups and increasingly depleted fish stocks. They also reported that lack of access to the road is having a devastating impact on education and health services and on community wellness. The women said that government health workers often refuse to travel to Farun due to the dangerous sea crossing which results in unattended births, incidents of maternal and infant mortality, lack of family planning services and children not being vaccinated on time, or at all. The highest priorities for men, women and youth are: (i) road access, (ii) clean, accessible water, (iii) a fully staffed and functional health centre and, (iv) that the secondary school to be upgraded (as endorsed by the Council of Ministers in 2010).

Akam island:

Consists of about 100 households and 500 people. A significant number of people from Akam are now living on Malekula Island and in Port Vila (estimated at well over 200). This out-migration is due to two primary factors: i) Church and government encouragement that Akam communities relocate to the mainland due to rising sea levels, and b) for employment and education purposes. Women indicated that while the community is not opposed to moving to the mainland, they want to make this move in an organized manner, which involves ensuring

the health and education services are available on Malekula Island before they relocate – they think this will take 10-15 years. Both women and youth have representation on the 'negotiation committee' and feel that their views are heard and respected by community leaders.

During community consultations, female respondents mentioned many of the same concerns as women living in Farun. For instance, health care workers do not regularly visit the island due to dangerous travel conditions and the local health centre is now staffed by an aid post worker rather than a nurse. As a result, women are not able to deliver their babies at this centre, nor can they receive family planning supplies or have their children vaccinated. They reported that the aid post is very short of medical supplies and consequently children and older people are often sick for long periods of time. Mothers reported that their children frequently suffer from eye infections, diarrhoea, asthma, colds and skins infections. In addition, the women reported recent outbreaks of malaria and the measles (the last outbreak was in 1994), which affected most of the children and many adults, including pregnant women. The women also expressed concern about the lack of qualified teachers at the primary school as government teachers refuse to live in South Malekula. As a result, schools in the area are generally staffed by local teachers and volunteers. In addition, the rapidly increasing population (60 plus children in the village "kindy" and over 100 children in the primary school) means that classrooms are overcrowded and inadequately supplied. There is only one toilet for 100 students and one working water tank. Given the shortage of water at the school, and in the community, school is often closed on Wednesdays so that teachers can accompany children to the mainland on dug-out canoes to collect water, hence the name "Water Wednesdays".

The other major concern expressed by the women is the increasing shortage of food given the rapidly growing population and the declining quantity and quality of subsistence crops due to invasive species, change in weather patterns and over-farming. For instance, white fungus and black beetles are now deeply infesting the cabbage, taro, manioc and watermelons; citrus fruits are now smaller and drier and flying foxes and rats are eating most crops before they ripen. Women are no longer able to sell produce at the district market due to the high cost of boat transport (vatu 10,000 return) and food shortages. While men continue to sell fish and kava, transport costs greatly diminishes profit and the amount of money available for basic family needs.

For women, the highest priorities for intervention are: i) improving the water supply; ii) improving health care services (though qualified medical practitioners and equipped dispensary); and access to an improved road to Lamap to enable access to services and markets.

Okai village:

Similarly to the other communities in South Malakula, the lack of road access affects all aspects of community well-being. There were stories of women and children dying on boats in rough seas en route to the hospital in Lamap and the lack of a health care worker at the Okai aid post this year. Mothers are concerned about the growing number of children with malaria, measles and diarrhoea. Young people talked about the lack of training opportunities, excessive use of kava and teenage pregnancy. With respect to agriculture and fisheries, the same concerns exist throughout South Malakula in terms of food source depletion and degradation; women indicated that 10-15% of taro and yams are now inedible due to black

beetles. The priorities of the men, women and youth consulted in Okai included: improved water catchments; a properly equipped and staffed medical facility; improved toilets and hygiene.

Maskelynne Island:

Communities are extremely concerned about water shortages and water quality in the dry season, which is creating significant tensions between family groups regarding who has access rights, as well as serious health issues including chronic diarrhoea. There are also an inadequate number of toilets on the island; hence women said people are now using the land and ocean for toileting purposes. The rapidly increasing population is creating food shortages especially given other environmental and human induced factors (i.e. the soil erosion of mainland gardens, over-farming and increasing invasive species). A number of social problems related to over-crowding and lack of opportunities were also reported including teenage pregnancy, substance abuse, increased property crime and violence against women.

The priorities identified by community representatives consulted included: improved water supply, toilets and hygiene; improved lighting; FADs to help reduce the impact on reef fisheries; training programs on climate resistant crops and improved access to medical services, including family planning.

BASELINE: Current potential threats and vulnerabilities – South-east Malekula from community assessment

	Observation / threat	Causes	Risks – without intervention	Potential climate induced impacts	Level of threat	Potential adaption activities
Community governance and planning related issues	Climate related disasters impacting on communities	- Weather related, i.e. cyclones, storms and unseasonal rain - Lack of disaster management plan at community and area council level	- Communities will continue to be heavily impacted by natural disasters made worse by climate change	- Severe impacts on livelihoods at household, community and Area Council level	**HIGH**	- Development of Community Climate Change Adaptation Plan - Establishment of Community Disaster Committee - Development and implementation of Community DRR - Link into National Early Warning System - Link to Decentralisation Act Amendment 2014
	Lack of integrated community level planning process to integrate and mainstream climate change into village development planning and associated systems	- Processes not yet established	- Lack of cohesive planning processes impacting on ability to respond to internal and external challenges and build resilience to climate change, e.g. enhancing resilience to climate change	- Severe impacts on livelihoods at household, village, community and Area Council level	**HIGH**	- Development of Community Climate Change Adaptation Strategy - Establishment of Community Disaster Committee - Development and implementation of Community DRR - Link into National Early Warning System - Link to Decentralisation Act Amendment 2014
	Voluntary migration issues impacting on livelihoods and natural resource usage	- Coastal erosion - Increasing population - Decreasing water quality	- Continuing village level conflicts and challenges at the village and community level	- Decreased social cohesion - Increasing health impacts - Decreased livelihood opportunities	**VERY HIGH**	- Development of Community Climate Change Adaptation Strategy - Establishment of Community Disaster Committee - Development and implementation of Community DRR -
Issue: Marine ecosystem/ resource degradation	Coral Reef degradation due to Crown of Thorns Seastars (COTs)	- Degraded ecosystems - Removal of COTS predators - Increasing nutrients (?)	- Increasing threat from COTs due to increased larval dispersion	- Continued degradation of coastal ecosystems -	**HIGH – VERY HIGH**	- Implementation of regime to enhance ecosystem health - Monitoring COTS status to understand populations - Active removal of COTs

	Observation / threat	Causes	Risks – without intervention	Potential climate induced impacts	Level of threat	Potential adaption activities
	Mangrove cutting and removal is increasing coastal erosion – particularly in small islands	- Mangroves used as source of fuel and timber - Lack of appropriate coastal management regimes	- Reduction in ability to provide ecosystem services (i.e. coastal protection, nursery grounds) - Increased coastal erosion	- Seasonal high tides related events will inundate villages / coastal communities -	**HIGH**	- Substantial areas of mangroves need management regimes - Mangrove management planning - Mangrove plating - Develop sustainable use programs
	Sediment and nutrient being deposited on nearshore coral reefs	- Poor upland agricultural activities - Logging - Erosion - Cutting of mangroves	- Continued deposition on reefs, seagrass and mangroves systems - Smothering of coral reefs near creeks and river mouths - Ecosystem health will continue to decrease	- Diminishing quality of coral reef, seagrass and mangroves to provide ecosystem services - Reduction in ecosystem services including fish and other livelihood support	**MEDIUM (with potential to increase)**	- Development of Upland management plan - Upland erosion control measures - Education and awareness activities
	Coastal fisheries catches decreasing	- Overfishing - Tabu areas not effective management systems - Lack of planning of marine resource management - Lack of enforcement of laws -	- Continued overfishing and loss of breeding stock and biodiversity - Ecosystem health will continue to decrease - Some locations are reported as improving fishery resources due to MPAs and protected areas	- Reduced ability of coast to meet food security needs of local communities with increasing population	**MEDIUM-HIGH – VERY HIGH**	- Development and implementation of Integrated - Coastal Zone Management Plan - Develop integrated system of MPAs and fisheries management approaches - Installation of FADs
Coastal issues	Coastal inundation from King Tides and related events	- Increased construction in coastal margins combined with erosion and	- Very high – currently and increasingly will endanger infrastructure and coastal assets	- Water table will become increasingly salinized - Coastal infrastructure will be flooded and degraded	**VERY HIGH**	- Ensuring vegetation of shoreline - Securing alternative water supplies - CC Adaption Planning ensuring re-location of infrastructure assets away from coast

	Observation / threat	Causes	Risks – without intervention	Potential climate induced impacts	Level of threat	Potential adaption activities
	Areas of coastline eroding endangering coastal infrastructure	- Loss of coastal vegetation - Sand mining from beaches - Inappropriate planning of infrastructure - Lack of maintenance of infrastructure	- Increasing danger – particularly in extreme weather events - Sea wall construction will not be cost effective – so problem will continue	- Currently houses, churches, schools continue to be threatened - Sea wall construction will not be cost effective – so problem will continue	**VERY HIGH**	- Ensuring vegetation of shoreline - Securing alternative water supplies - CC Adaption Planning ensuring re-location of infrastructure assets away from coast - Consider options for communities in case of community decision to relocate
	Changes in seasonal weather eroding the coast related to el-nino and la-nina	- Coastal erosion is occurring in unpredictable manner due to season (long-term weather patterns)	- Increasing danger – particularly in extreme weather events - Sea wall construction will not be cost effective – so problem will continue -	- Change in wave regimes may potentially impact on the coastal process enhancing erosion in some areas	**VERY HIGH**	- Ensuring vegetation of shoreline - CC Adaption Planning ensuring re-location of infrastructure assets away from coast - Consider options for communities in case of community decision to relocate
Land-based issues		-	-			
- **Water quality and supply**	Water sources for communities polluted	- Groundwater is increasingly salinized from saline water intrusion - Polluted from septics and pit toilets - Sediment entering water sources from poor upland management	- Saline water instruction becoming an extreme issue; - Continue and become worse under cc scenarios;	- Community health impacts, particularly on women, elderly and children	**HIGH**	- Development and implementation of community agreed plan on upland areas – including water catchments and source - Provision of WASH Training
	Lack of potable water (seasonal)	- Not enough capacity to harvest rainwater - Increasing salinization of groundwater - Increasing variability in rainfall - Increasing populations	- Continued water shortages – seasonal - Households consuming less than optimal water - Schools are running out of potable water	- Impacts on human health - Battles between communities over access to water - Continued provision of emergency water supplies	**High- very high**	- Installation of additional water storage at schools and in selected villages - Assistance in planning for water sources on the main islands in preparation for migration from small islands - WASH program to ensure water quality

	Observation / threat	Causes	Risks – without intervention	Potential climate induced impacts	Level of threat	Potential adaption activities
	Damage to the water distribution system post natural disaster	- Physical damage to system - No emergency back-up system	- Continued in ability to manage post-disaster - Risk to human health	- Not enough water resulting in increase in health problems following a natural disaster	**HIGH**	- Development of DRR Plan and Area Council and Village Level - Climate proof current water systems
- **Upland management - Erosion and soil management**	Deforestation	- Need for timber and related income - Lack of alternative to timber for construction	- Cutting continues without replanting - Increased access into site will result in increase in level of logging - Erosion issues become worse	- Forests are currently experiencing deforestation in the area. - Intense rains will further damage forests, resulting in soil instability and increased erosion	**MEDIUM**	- Development and implementation of Integrated Upland and Catchment Management Plans - Nursery to support production of tree saplings for reforestation programs - Identification of opportunities for terrestrial protected areas / CCAs
	Increasing upland erosion issues	- Poor upland management - Agricultural activities - Logging - Erosion of riverbank - Landslides	- Continued erosion - Loss of top-soil - Impacts on marine and coastal ecosystems	- Loss of top soil - Continued impacts on coastal and marine environment	**MEDIUM**	- Development and implementation of Integrated Upland and Catchment Management Plans - Nursery to support production of tree saplings for reforestation programs - Agricultural extension
	Farming Practice caused erosion	- Lack of understanding of alternative practices - Lack of access to different crop varieties	- Continued erosion - Loss of top-soil - Impacts on marine and coastal ecosystems	- Several farming practices, such as slash and burn farming, causes less soil stability and an increase in sediment generation and top soil loss	**MEDIUM**	- Education outreach and distribution of erosion preventing species for erosion control
Agriculture and Horticulture	Changes/difficulties in growing seasons and crop management	- Change in season timing / fruiting - Possible link to climate change reported	- Impact on crop yield - Impact on seasonality	- Potential impact on food security through timing of food production at household level	**MEDIUM**	- Education outreach Extension on agricultural species - Identification of climate change resilient crops
	Diseases and pests in agricultural produce	Uncertain, but maybe related to: - Changes in agricultural practices	- The problem will continue to get worse with a reported loss of crops of up to 40%	- High impact on food security through food wastage	**MEDIUM**	- Education outreach and distribution of climate change resilient crops

	Observation / threat	Causes	Risks – without intervention	Potential climate induced impacts	Level of threat	Potential adaption activities
		- Introduced diseases - Lack of alternative agricultural crop seedlings				
	Droughts	- Part of a natural cycle - Increasingly will be linked to climate change	- Occasional crop failure - Food shortages - Starvation	- Not enough water, an increase in health problems	**MEDIUM**	- Increase system capacity
	Horticulture erosion and sanitation issues	- Existing issues that will enhance the impacts of climate change	-	- Pigs, cows, goats and chickens are left to graze in various locations. Often their grazing locations cause problems of soil erosion and sanitary conditions.	**MEDIUM**	- Education outreach and distribution of materials for animal management (fencing)
Public conveyance infrastructure	Transport – vehicle and walking tracks become useable and dangerous during wet season	- Road constructed by local communities has become impassable in wet season - Absence of maintenance	- Roads will remain unusual and local communities will be reliant on dangerous ocean crossings - infrastructure continue to be unusable	- Lack of safe access to markets, education,, health and other government facilities - Human injury and deaths	**HIGH**	- Invest rehabilitation of roads constructed by local communities - Regular maintenance program - Involvement of island based contractors/ communities in maintenance
	River crossings present risk to pedestrian traffic (Secondary paths)	- Increased rainfall and extreme events made river crossing hazardous to pedestrian traffic	- Disruption to lives of rural communities - Lack of access to education, etc. - Death of children	- Lack of access to markets, education,, health and other government facilities - Human injury and deaths	**Low**	- Build / rehabilitate public walking tracks /
	Ensure road are constructed to specifications in line with climate projections	- Increased rainfall and extreme events damage public conveyance infrastructure	- Roads and infrastructure will continue to deteriorate without intervention - Road and relatred infrastructure will be unusable	-	**HIGH**	- Ensure appropriate design to ensure “climate proofing”

4 Proposed interventions

Situations change, project supporter's move on, projects get delayed in starting. Based on experience, it is recommended that the design of this project is reviewed by the NAB prior to any implementation at the proposed site(s). The project needs to be presented and discussed with local stakeholders during the establishment of the Pilot Project Committee in the Inception Phase of V-CAP. Expectations, confusions, further information and explanation can then be provided at project start – and the design of the project adjusted to fit new realities at the site in order to ensure project interventions are clear and understood by all – and stakeholder support is provided throughout implementation.

The above table provides an insight into the various adaptation options identified in the process of community consultations in the various sites as outlined in Annex 1 below.

The following sections provide a framework for the V-CAP response to the community profiling, baseline survey and rapid vulnerability assessment and field visits.

The V-CAP response to these issues will be delivered through:

- Component 1: Integrated community approaches to climate change adaptation
    - 1.1. Integrated CC-Adaptation plans mainstreamed in the coastal zone
    - 1.2 Improved climate resilience of coastal areas through integrated approaches
        - 1.2.1: Increased resilience of coastal ecosystem to climate change, South Malekula Area Council
        - 1.2.2: Enhanced resilience of terrestrial areas
        - 1.2.3: Climate proofing of infrastructure.

The proposed activities, baselines, interventions are targets are outlined in the tables below.

The proposed activities outlined below are based on an intensive field visit during the PPG mission and follow-up dialogue at the Area Council, Provincial and National Levels. However, a comprehensive Inception phase followed by a targeted information gathering and planning period will ensure the development of a comprehensive program that meets the needs of all stakeholders.

Component 1.1.1: South Malekula Area Council - Climate Change Adaptation Planning – Strengthening Village and Community Approaches

No.	Category	Details
1.	**Thematic area**	*Integrated CC-A plans mainstreamed in the coastal zone* *Cross-cutting* • *Gender / special needs groups*
2.	**Target communities**	All communities within South Malekula Area Council as outlined above.
3.	**Description**	Local governance institutions and structures strengthened to allow for Climate Change Adaptation plans to be created and effectively delivered on village, Area Council and District levels.
4.	**Rationale – addressing what climate change issue**	**Problem Identification** • There are no CC vulnerability assessments / CC Adaption Plans at the village and Area Council levels • Lack of awareness and capacity to integrate CC Adaptation into Area Council level and Community Disaster Committee level planning • Lack of formal institutional structure to address CC adaption planning processes and implement adaptation measures • Monitoring and evaluation capacity of local governance structures is limited. Report writing capacity is limited.
5.	**Impact of proposed activity**	• 5 coastal communities more resilient to CC through capacity building, participatory vulnerability assessments and implementation of integrated CC-A plans in the coastal zone
6.	**Base line**	• 1 of 1 Area Councils established • 0 of 1 Area Council 5 Year Development Plans created • 0 of 5 Community CC Adaptation Strategies developed with target communities by CDC's with DRR and ICZM components • 0 of 5 CDC's created in target communities • 0 of 1 Area Councils in target areas have CC / DRR Centers which also serve as the Area Council Office building
7.	**Activity Output**	• 5 Community CC Adaptation and Coastal Zone Management Strategy developed including preparedness and response plans and development priorities, formulated in the context of ICZM. • 1 Area Council has created a 5 year Development Plans incorporating CC Adaptation & integrated coastal zone management
8.	**Proposed Specific Activities**	**Planning Phase** Local governance institutions and structures are strengthened to allow for Climate Change Adaptation plans to be created and effectively delivered at community and Area Council levels.

		Village level ***Community Disaster Committees*** to be created in 5 target communities and will be comprised of at least a chiefly representative, woman's representative(s) so that gender components are considered, village water committee representative, village health committee representative along with representation from other development groups / committees in the village so that the CDC may be multi-purpose and can effectively steer the implementation of the various technical components of V-CAP on the village level as well as those of other future projects. • Undertake vulnerability assessments at the community level and develop coastal CC Adaptation Strategies;, • Involve representatives from VMGD and NDMO in undertaking these assessments of disaster and CCA risks, providing any necessary technical input to these CDC's while they create their plans • 5 CDC's from target communities create development plans considering CCA, DRR and ICZM. ***Area Council and Provincial level*** *South Malekula V-CAP Project Implementation Committee* comprised of a representative, most likely the Chairman, from each of the 5 target communities' CDC's, the Area Secretary from South Malekula AC along with relevant locally based government officers such as Fisheries officers. To meet regularly on a quarterly basis. • Identify capacity needs of South Malekula Area Council and Community Disaster Committees within and develop an institutional development action plan (planning, writing and evaluation) considering inputs from the individual CCA plans created by CDC's • By end of planning phase develop comprehensive project workplan with agreed targets for remainder of project. • Development of an Area Council Development Plan incorporating building resilience to climate change for South Malekula Area Council **Implementation phase** • Regular meeting of *Malekula V-CAP Project Implementation Committee* to evaluate the progress of the project implementation against agreed targets • Regular meetings of South Malekula Area Council (quarterly) to evaluate progress of Area Council Development Plans during implementation phase • Implementation of the institutional development plan for project area • Implementation of the CDC Plans at the village level • Village small grant scheme providing support to villages to implement the CC Adaptation and CDC Plans • Maintain an oversight of implementation of CC Adaption Plans and DRM Plans in conjunction with other project components (link to 1.2.1, 1.2.2, 1.2.3) • Monitoring and evaluation of implementation of plans against an agreed schedule
9.	**Implementation**	**Coordination and Dissemination** • This component to be coordinated by the Ministry of Internal Affairs through the Department of Local Authorities with delegated responsibilities given to the Malampa Provincial Government Council & the Natural Disaster Management Office. Affiliating partners will include

		the Ministry of Climate Change through the Vanuatu Meteorology & Geo-Hazards Departments
10.	**Indicators**	• 1 Area Council Development Plans created for South Malekula AC containing CCA and DRR components (DLA, VMGD & Malampa Province) • 5 Village Climate Change Adaptation Strategy created for 5 target communities by CDC's (VMGD, NDMO & Malampa Province) • 5 Community Disaster Committees for the target communities which are responsible for the implementation, monitoring & evaluation of Village Climate Change Adaptation Strategy • 1 CCA / DRR centers refurbished which will also serve as the Area Council office for South Malekula AC
11.	**Benefits**	Supporting the local institutions to adapt to climate change through building resilience to climate change at the Area Council and village levels, which will considerably mitigate the possible adverse effects sustained through the effects of climate change. These processes will allow the target communities and local government to take ownership of the V-CAP project, increasing their capacity to manage and implement future development projects as well as to effectively monitor and evaluate the project to ensure maximum efficiency.
12.	**Gender**	Mandate from the National Government concerning the formation of Area Councils to include representative members for Women, Youth and People with Disabilities. These Area Council representatives will be part of the CCA planning process at local level and will be actively involved in monitoring and evaluation of CDC plans to ensure that they effectively cater to the needs of women, youth and the disabled.
13.	**Environment**	*Is there a need for IEE, EIA? Actions proposed / screening needed?* • No
14.	**Risks and Assumptions**	Any Risks related to this activity/project. Any Assumptions made in relation to this activity/project **Risks** • Risks involve the possibility that internal community disputes involving chiefly titles or land ownership may pose challenges or have adverse effects on the formation or functioning of the Project Implementation Committee or the village level CDC's. **Assumptions** • Community representatives will be willing to participate in the Project Implementation Committee, CDC's & Area Councils.
15.	**Prepared by**	Matthew Hardwick

Component 1.2.1: South Malekula Area Council - Increased resilience of coastal ecosystem to climate change

No.	Category	Details
1	**Thematic area**	• NAPA Adaptation Strategies 6 and 9 • Project component 1.2.1 Cross-cutting • Gender / special needs groups and youth
2.	**Site description**	The South-east of Malekula Island contains the largest coral reef system in Vanuatu, rich mangrove systems and large expanses of seagrass. The V-CAP site will comprise all nearshore waters of Southeast Malekula including coral reefs, seagrass beds and mangroves in the South Malekula Area Council.
3.	**Description**	South Malekula has very rich marine and coastal resources and could serve as a model in “best practices” in the building of capacity for the delivery of approaches to build resilience for adaption to climate change. The focus of these activities will be to build village, community and area level Integrated Coastal Zone Management Adaptation Plans (ICZMA Plans) to enhance resilience of coastal ecosystems to climate change. A particular focus at this site will be to build upon the existing 4 MPAs tol develop a resilient system through a planned process. This was the only site visited by the PPG where villagers in one community reported an increase in fish catch due to an MPA and undertaking specific activities undertaken to reduce pressure on marine ecosystems (e.g. Crown of Thorn Sea-star (COTs) removal and review of current fishing practices).. This project will be achieved through a comprehensive baseline assessment of the marine and coastal environment, dialogues and consultations with key stakeholders including traditional owners, resource users, and representatives from government agencies. Specific focus on this site will be on the management of mangroves and their roles in coastal protection. A comprehensive International Coastal Zone Management Adaption Plan (ICZMAP) will be developed with clear goals towards monitoring, implementation, and evaluation. The ICZMAP will then be implemented. It is anticipated that elements of this plan will include: • Education and outreach to fishers and coastal users, with particular focus on ensuring that women are activity engaged in training programs; • Development of South Malekula as a training focus for other sites; • Encouraging the participation of youth in the removal of COTs; • Development of alternative income activities; • Development of mangrove management plans. • Installation of Fish Aggregating Devices (FADs) to enhance nearshore and coastal

4.	**Rationale – addressing what climate change issue**	**Problem Identification** The greatest threat to the coral reef system from climate change in South Malekula is an increase in sea temperature and seawater acidification. These are major threats and the key adaptation approach will be to build ecosystem resilience; Additional threats include • Increases in precipitation during the wet season due to climate change, resulting in an increase in the generation of sediment in areas close to the larger island; . • Ecosystem health has been degraded (this is due to factors such as overfishing, crown of thrones thus reducing the resilience to climate change – which will exasperated with additional stressors from climate change.
5.	**Impact of proposed activity**	Increased resilience to climate change through healthier marine ecosystems supported by an increase in the area of Tabu Areas, CCAs and MPAs proposed by local communities to enhance ecosystem resilience, and link into a national Integrated Coastal Zone Management Plan.
6.	**Base line**	Identify baseline – but also identify additional baseline information needs if required • There are a number of "kustom Tabu" areas around the islands and several CCAs. • There are 4 MPAs that have been approved. The MPA near the village of Okai is reported local communities to be having positive impact on coastal fisheries; • Coastal water is degraded by increased water turbidity from small rivers and streams; • There are some crown of throne starfish degrading the reefs; • Areas of coral reef dieback does not appear to be regenerating in some locations; • There is a community of dugongs- communities are concerned about the high numbers, and there is a risk of dugong being hunted (and eaten); • The mangroves are extensive and generally very healthy; • Some issues related to mangrove cutting in selected areas; • The quantity and quality of the marine resources has decreased due to over fishing
7.	**Proposed specific activities**	**Break down of specific activities** ***Planning Phase:*** **Issue identification, intervention identification and planning** • Field staff will be appointed to support and facilitate community dialogues, baseline development and outreach training session held to engage the community in the marine monitoring project • Baseline surveys will be completed by Department of Fisheries and Technical Specialists • Development of Integrated Coastal Zone Management Adaption Plans (ICZMAP),and • Identification of suitable locations for expansion of the Tabu system and the creation of additional LMMAs and CCAs. ***Implementation Phase:*** **Implementation of specific interventions** • ICZMAP will be implemented

		• LMMAs, Tabu areas and CCAs will be refined and management plans will be developed and implemented • Field staff will establish a program of marine ecosystem education for the fishers, including women • Specific programs and activities will engage the youth in activities such as removal of Crown of Thorns Seastars; • Training will also focus on the value and importance of protecting the dugongs; • The Youth Club will seek to create innovative programs to engage and educate the youth, and • Field staff will work with current turtle monitors to support community initiatives to manage marine resources. ***On-going*: Monitoring and Evaluation** • Develop, implement and evaluate annual work plans together with local communities • Undertake community monitoring of Tabu areas and CCAs • Turtle Monitors, include female monitors will partake in the Monitoring Network activities, including One Small Bag's annual conference, and the sub regional Monitoring activities • Trainings/educational programs for the fishers including women and youth will be held at least twice a year as per the annual plan, and • A specific focus should be monitoring marine ecosystems following natural disasters to assess the resilience;
8.	**Activity output**	**Proposed specific outputs of activities** • Trainings for the communities, targeting the fishers, on the value and importance of establishing marine protected areas. Training topics will include: the value of marine conservation, establishing conservation areas, endangered/protected species, and invasive species removal. • Assistance to the area in the selection of another Network Monitor to work with the current Network Monitor • Youth club and women's group trainings on marine ecosystems, healthy marine management practices and endangered species. Training topics will include: the value of marine conservation, endangered/protected species, e.g. Dugong; Specific outputs will include: • The establishment of at least two more marine MPAs. • The establishment of at least five more marine Tabu areas. • Increase in number and size of fish populations. • Assistance linking MPAs/CCAs into a local network.
9.	**Indicators**	**Baseline and performance indicators to be used to monitor that activity and/or output** • Baseline biodiversity, habitat and fisheries surveys based on adapted Reefcheck and other suitable methodologies; • Development of 5 Integrated Coastal Zone Adaptation Plans approved by the national, provincial and local governments • Increase the size of CCAs by 100% • Enhanced Tabu Area Management Plans for existing tabu areas • Decrease in coastal water turbidity;

		• An increase in fish catch and fish size; • Increase in fish catch and fish size as evidenced by repeated detailed base-line surveys, and • A reduction in the number of Crown of Thorn Seastars.
10.	**Other Projects**	**Links with other activities/projects/donors (current/potential**) • Link to/ and draw lessons from the mangrove management initiatives (MECAL) in Crab Bay in coastal Malekula • Links to Turtle Monitoring Network • Link to MACBIO – GIZ/ IUCN
11.	**Implementation**	**Coordination and Dissemination** This component of the project will be implemented by a Field Officer appointed by the Project Implementation Unit (PIU) together with the Secretary to the Area Council of South Malekula. International and national specialists on marine ecosystems management will be appointed to lead and assist in the development of the planned interventions. A period of two weeks in the project site will be required to undertake these surveys and develop plans in consultation with local communities, Fisheries Department, EPCD and provincial agencies. • In addition, support will be provided to the District Officers of the Department of Fisheries to coordinate delivery of these activities with their agency work plans. • In addition, links will be established with relevant nongovernmental organizations, such as Wan Smol Bag, to engage them in the education process. • . In addition, the role of the Field Officer will include: • Initial planning and consultation with local communities • Facilitating initial assessments with expert consultant and communities and development of plan • Supporting community training for fishers and appropriate community representatives; • Working with District /Provincial Fisheries Office for planning and deliver training; • Using GESI strategies to ensure full engagement of women and youth and develop and implement specific activities for these beneficiaries.
12.	**Outline Terms of Reference**	**TOR to be developed for International and national specialists on marine science.** One Field Officer will be employed at a full-time basis for at least 3 years. The duties of this person will include: • Identify, plan, coordinate community training; • Facilitation the linkages and coordination between the 4 Turtle Network Monitors based in the site; • Support development, capacity building and activities for a climate change Youth Club;

		• Support a Climate Change Youth Club and organize trainings and programs on marine ecosystems • Organize marine education and training for area women • Link the LMMAs and the Tabu areas into the LMMA network, • Link the LMMAs to the national conservation system through the Department of Fisheries and One Small Bag.

13.	**Benefits**	**Expected benefits**
		
		Enhanced marine ecosystem resilience to CC on South Malekula to the impacts of climate change, with benefits including:
		• Developing the local system of marine conservation areas and Tabu areas, as well as larger marine conservation areas to:
		  ○ Increase biodiversity and ecosystems resilience
		  ○ Increase fish populations through protecting breeding nursery, and feeding grounds
		  ○ Promoting spill over into the non-protected areas, improving the abundance of fish available for harvest
		• Providing opportunities for marine monitoring to assess and identify issues, educational outreach and invasive species mitigation, and
		• Increase the focus for the turtle and dugong conservation and management.

14.	**Gender**	**Links to Gender Action Plan** This project links to the GESI Strategy by engaging women and youth in customized training sessions. Through hands-on educational programs women will learn about marine resources and sustainable fisheries. • This project links to the GESI Strategy by engaging women and youth through specific training programs.
15.	**Environment**	*Is there a need for IEE, EIA? Actions proposed / screening needed?* • Not required
16.	**Risks and Assumptions**	**Risks** • Community members do not engage in training programs and do not adhere to the governance of the LMMAs and Tabu areas • Effects of climate change could kill the reef or severely impede the reef unless action is taken • Lack of desire from communities for LMMA or Tabu area expansion, and • Communities choose not to apply material learned from the training program. **Assumptions** • The success of previous LMMAs and Tabu areas supports the idea that the communities will adhere to the rules and management procedures of additional LMMAs and Tabu areas. • Based on consultations conducted in this project area the design team assumes that the communities being targeted by this project will engage in training and apply the new knowledge offered and will support the development of additional LMMAs and Tabu areas. • Success of previous training projects around Vanuatu and community interests suggests that the trainings will be influential and beneficial in marine ecosystem sustainability.
17.	**Prepared by**	Virginia Smith

Component 1.2.2: South Malekula Area Council - Enhanced resilience of terrestrial areas managed to minimize erosion, provide clean water resources to both communities and ecosystems enhancing livelihoods

1.	**Thematic area**	1.2.2: Enhanced resilience of terrestrial areas managed to minimize erosion, provide clean water resources to both communities and ecosystems enhancing livelihoods: Cross-cutting - Gender / special needs groups and youth
2.	**Site description**	Southern Malekula from south of Lamap to Farun – and includes all coastal ecosystems including the substantial area of coral reef to the south of the area.
3.	**Description**	**Technical description of the activity/investment** The focus of the these activities will be to build village level, community level and Area Council level approaches to enhancing resilience of terrestrial areas managed to minimize erosion, provide clean water resources to both communities and ecosystems, support sustainable agriculture through a planning integrated planning process. These activities will operate at a number of different levels. These include: • Village level • Community level (communities may contain a number of villages) • Area Council Level – South Malekula Area Council; This component will address the key challenges identified during PPG field consultations, in particular those issues considered as sensitive and high risk based on the likely impacts of climate change and the urgent priority to build resilience in this area. In particular, this project will focus on the following: Minimizing and upland soil erosion and maximizing coastal protection through • Active planting / revegetation of catchments and coasts • Establishing and operating nurseries for breeding suitable species • Development of coastal and upland vegetation programs • Focus planting in sensitive areas(i.e, steep slopes, roads, rivers, coasts and water catchments), and • Establishing erosion management measures around and upland of villages. Supporting provision of secure clean water through: • Enhancing dry season water storage through tank provision • Identification of suitable mechanisms for groundwater management and protection • Soft measures including planning for catchment management, human migration and erosion control • Hard measures to reduce pollution of water sources • Securing the water source through appropriate infrastructure, and • Providing emergency and disaster water supply backup. Enhancing catchment management through: • Enhancing a planned approach to upland and coastal management

		• Providing support for plant species to reduce erosion • Providing alternative timber species and sources • Managing cattle and livestock grazing, and • Identifying opportunities for establishment of community conservation and protected areas. Enhancing climate resilient agriculture through: • Providing agricultural extensions services • Planting of climate resilient species that can withstand heat, drought and disease • Providing climate change resilient species, and • Improving access to markets. An integrated approach to addressing these issues will be achieved through the development of Integrated Upland and Catchment Management Plans (IUCMP). These plans will incorporate specific land management plans. A particular element of this component will support agricultural and forestry education outreach to farmers, including women and youth in consultation with provincial level agencies.
4.	**Rationale – addressing what climate change issue**	**Problem Identification:** **Changed rainfall patterns** • Will impact on the seasonality and availability of groundwater upon which many of the island communities rely; • Increases in precipitation due to climate change, particularly during the rainy seasons, will result in increased erosion on the hill slopes, resulting in the generation of more sediment; • Increases in the intensity of the wet and dry seasons as a result of climate change may increase the risk of major bedload transport events, such as landslides; • Current agricultural practices, such as slash and burn farming and allowing cattle grazing on steep slopes, create unstable soil conditions; • Increases in upland erosion results in a loss of valuable top soil; and • Sediment being transported to the coast where it increases coastal water turbidity and deposits sediment on the coral reefs. **Higher temperatures** • Wet and dry season dynamics due to climate change will require more climate resilient crops to insure food security, and • Crop diseases are predicted to become more pervasive.
5.	**Impact of proposed activity**	**Outcome:** The expected outcome of this component in South Malekula will be better planning and management to ensure enhanced resilience of terrestrial upland and coastal areas to minimize erosion, provide clean water resources, establish sustainable agriculture practises by communities and improved ecosystem health all of which is required for food security.
6.	**Base line**	Evidence has shown that a healthy upland and costal terrestrial ecosystem will be more resilient to climate change. On the mainland in South-east Malekula island, the relative inaccessibility and low population protect over-use of terrestrial

		resources. However, with the anticipated migration of communities from offshore islands and the rehabilitation of a road into the area, additional pressures will be placed on these ecosystems. Thus, efforts and planning processes need to be established to ensure: • Erosion in upland and coastal areas generating substantial amounts of sediment that is washed into coastal waters does not increase; • Ecosystem degradation and climate change does on severely impact on agricultural production; • Plans are developed for the provision of clean water to villages; • Logging, land encroachment, agricultural expansion is planned with consideration of ensuring resilience to climate change; and • Potential for sediment moving into marine and coastal systems in minimized.
7.	**Proposed specific activities**	**Break down of specific activities** • ***Baseline:*** Develop baselines of issues and threats of terrestrial upland and costal ecosystems with a particular focus on impacts of climate change on agriculture, water supply, forestry and protected area management and related resources at all six V-CAP sites; • Identification of highly erosive sites and factors associated with erosion causation • Field Coordinator appointed to coordinate baseline, facilitate community planning and support implementation • ***Planning***: In conjunction with project partners identify suitable approaches to enhance catchment and upland management • Develop Integrated Upland and Catchment Management Plans (IUCMP) through the use of participatory approaches that integrate forestry, agriculture, water resources and traditional management regimes at village, community and areas council level that identify time-bound actions for long-term management including tabu and community conservation areas. • Survey of area to identify focus areas for erosion conservation, and. • Develop plans for the demonstration garden and nurseries in selected villages. • ***Implementation*** of Integrated Upland and Catchment *Management* Plans including nurseries, agricultural training and extension, provision of climate-resilient crops, though development of time bound annual work plans. • As part of the implementation of IUCMP develop specific cooperative programs with forestry, agriculture and water resources agencies to deliver an agreed series of comprehensive work plans with time bound outputs to be delivered in conjunction with Field Officers, Area Council and appropriate provincial officials. • Establishment of the demonstration training gardens and nurseries to demonstrate and grow grasses for slope stabilization, saplings for re-forestation and climate change resistant crops to be disseminated to the communities for their individual farms. • Farmer, women, and youth (via the youth club) outreach training and education Trainings will include topics, such as: ▪ Sustainable land management in the uplands ▪ Sustainable land management in the lowlands ▪ Climate change resistant crops and farming practices • Develop and disseminate erosion control materials; such as, stabilizing grasses and tree saplings. • ***On-going*- Monitoring and evaluation:** • Monitoring, evaluation and work planning will be based on the IUCMP prepared in Year one, and annual participatory reviews will identify progress

		and lessons learnt to be incorporated into the workplans for the following year • Survey the forest villages to assess the amount of forested area (initial period and month 40) • Survey the villages to see if there are shifts in farming practices (annual review / scorecard) • Assessments of the size of the sediment deposits at the reef and coastal water turbidity (Marine Network Monitors) • Monitor implementation of the plan, and will seek to expand the areas, and. • Monitor the occurrences of landslides.
	Activity output	**Proposed specific outputs of activities :** • Trainings for community farmers, including women on better farming practices to reduce erosion and conserve top soil • Distribution of resources to community farmers to facilitate top soil conservation practices • Establishment of a Training Garden and Nursery to house saplings, stabilizing grasses and climate change resistant crops • Youth club trainings on better farming practices to conserve top soil • Women's trainings on better farming practices to conserve top soil • Reduction in the farming practices resulting in upland farming practices to reduce sediment transport. • Halting the building of sediment deposits at the reefs and the increase water turbidity.
12.	**Indicators**	**Baseline and performance indicators** • Baseline biodiversity, habitat and agriculture and forestry surveys based on adapted suitable methodologies • Development and implementation of *Integrated Upland and Catchment Management Plans (IUCMP)* • Annual IUCMP workplans developed, implemented and reviewed Establishment of one terrestrial CCA • Enhanced management plan for 1 terrestrial tabu areas • Reduction in erosion and runoff as indicated by decrease in coastal water turbidity • Number of farmers adopting measures to actively reducing sediment run-off • Number of erosion areas along road-sides with reduced erosive potential • Area of upland planted with slope stabilizing species to reduce soil runoff • Amount of forested land in the upland area, and • Number of landslides occurring in areas of highlands.
13.	**Other Projects**	**Links with other activities/projects/donors (current/potential**) • Related agriculture sector projects • Related forestry sector projects
14.	**Implement-ation**	This component of the project will be implemented by the Field Officer appointed by the Project Implementation Unit (PIU) together the Secretary to the Area Council. Technical experts will be drawn from the Department of Agriculture and Department of Forestry. V-CAP will support operational expenses in relation to the delivery of technical activities.

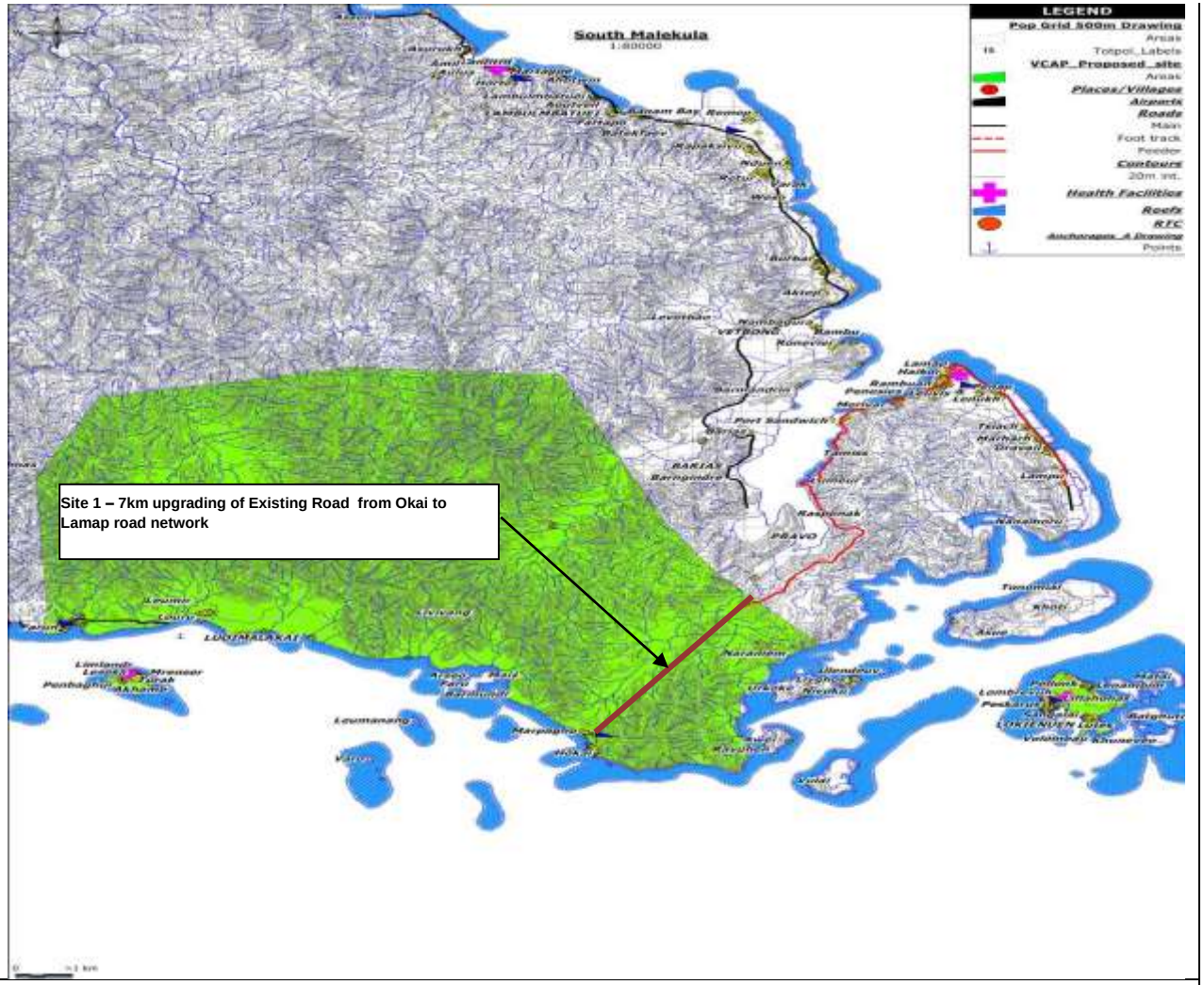
		International and national specialists on forestry and erosion control will be appointed to lead and assist in the development of the planned interventions. A period of two weeks in South Malekula will be required to undertake these surveys and develop plans in consultation with local communities. Additionally, they will develop plans for the nursery and training garden. • In addition, support will be provided to the Departments of Agriculture and Forestry to coordinate delivery of these activities with their agency work plans. • In addition, links will be established with relevant institutions including Santo Agricultural Research Centre and Farmers Support Association. The Field Officer (50% time) will coordinate the delivery of this component. Their role will include: • Undertaking initial planning and consultation with local communities • Facilitating initial assessments with expert consultant and communities and development of plans • Supporting community training for farmers and ensuring women are actively engaged • Working with District /Provincial Forestry and Agriculture Office to establish nursery and training gardens for climate resilient crops and erosion prevention plants; and • Developing and implementing specific activities under the auspices of the CC Youth Club to support erosion reduction initiatives.
15.	**Benefits**	**Expected benefits** • A structured approach will be developed to ensure the planning for the future land-use to build resilience towards the long-term management of land resources in South Malekula. • The project will identify mechanisms to minimize the amount of erosion from the upland slopes of the site resulting in the following benefits: o Increase topsoil conservation o A healthier coastal marine ecosystems ▪ Less sediment deposited at the reef ▪ Less turbid coastal waters. • The project education and outreach will provide male and female farmers with the technical and physical resources to improve their farming practices and promote climate change resilient farming; • The project will enhance food security through insuring improved farming practices and promoting climate resilient crops, and • The project will enhance household livelihoods through improved quality and quantity of market produce available for sale.
16.	**Gender**	**Links to Gender Equity and Social Inclusion Strategy** • This project links to the GESI Strategy by engaging women through training sessions. Through hands-on and locally relevant educational women will learn new farming techniques for sustainable farming. • This project links to the Gender GESI Strategy by engaging youth in training sessions and involvement in the training garden and nursery. Through a range of training activities, youth will learn new farming techniques necessary for a sustainable future.
17.	**Environment**	*Is there a need for IEE, EIA? Actions proposed / screening needed?* • Not required

18.	**Risks and Assumptions**	**Risks** • Communities are unable or unwilling to engage in planned trainings or outreach. • Communities engage in training programs but do not apply new knowledge and change current farming practices. **Assumptions** • Communities are interested in this type of training, as expressed during project design consultations. • That when individuals within targeted communities are trained to use erosion reducing materials and have access to them, they will utilize these approaches on their farms, and encourage others to do the same. • That the project will be able to demonstrate locally applicable models, and • That erosion reducing measures promoted by this project actually reduce current erosion problems.
19.	**Prepared by**	Virginia Smith

Proposed V-CAP activity
Component 1.2.3: Malekula Island

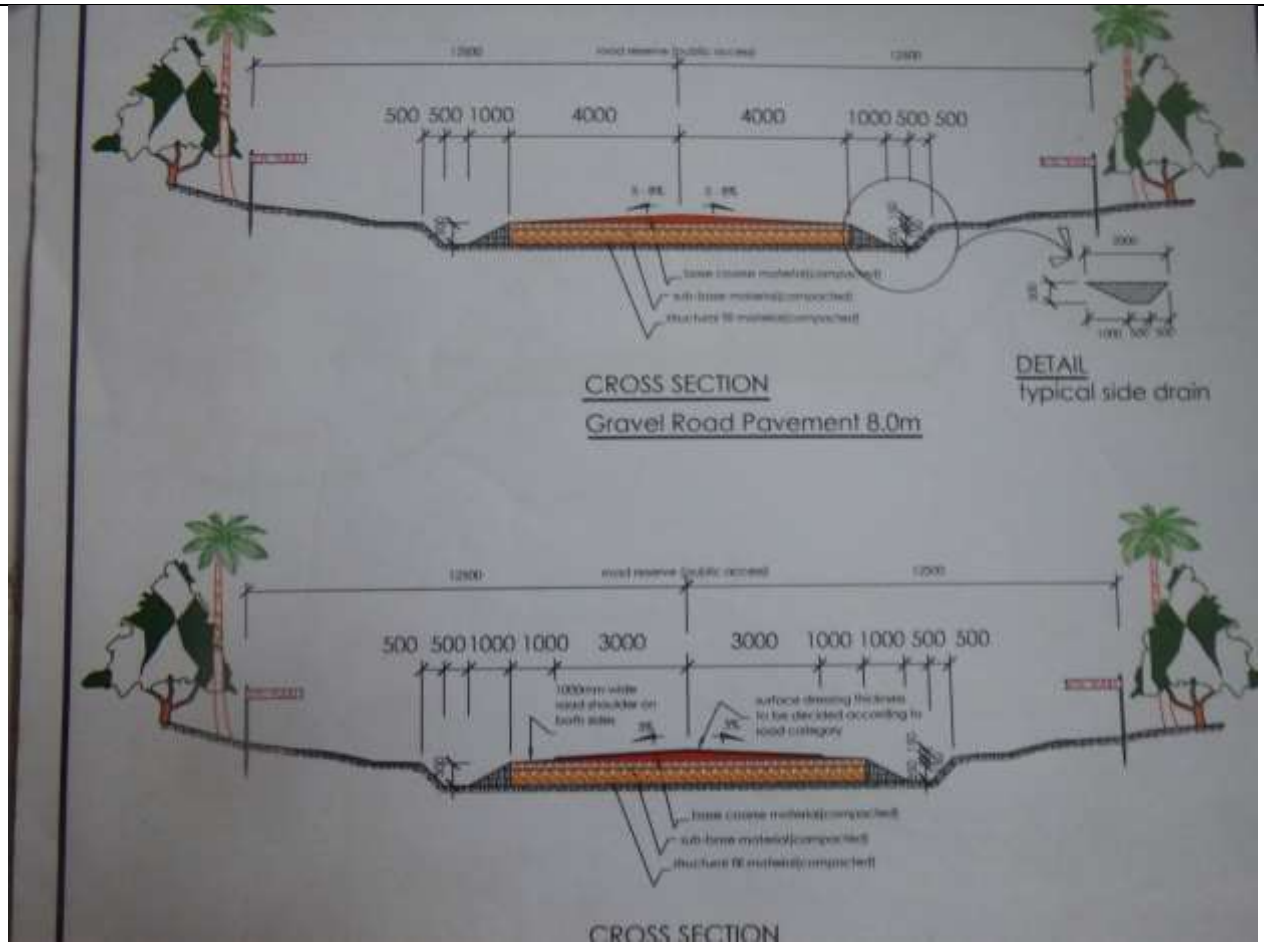
No.	Category	Details	Map of Malekula Island (South Malekula)

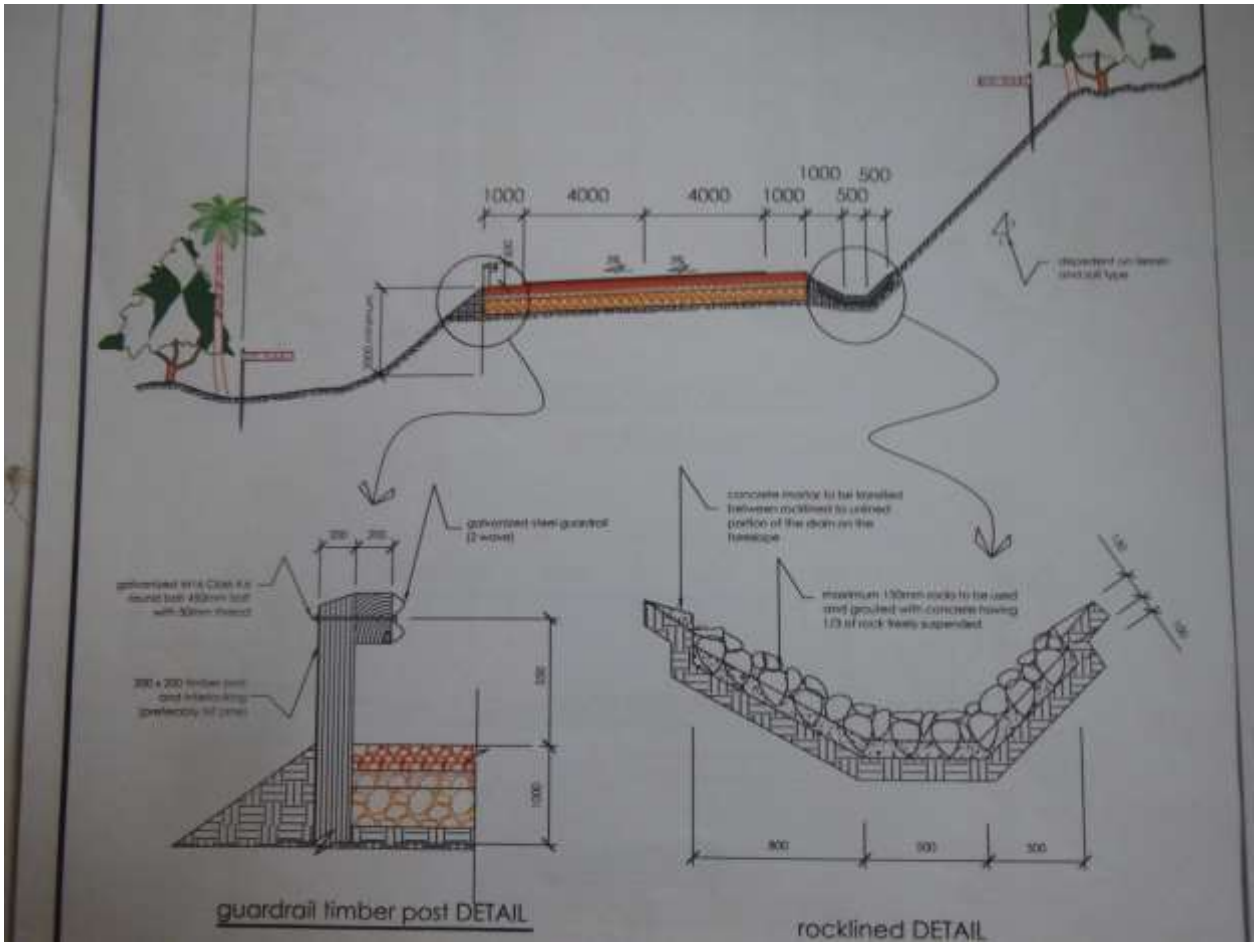
16.	Summary title name	Improved resilience through climate proofing of selected public conveyance infrastructure (i.e.: access way through road upgrading) in the coastal zone in at least 1 priority area along the Chinese planned road rehabilitation project.
17.	Thematic area	Climate proofing of public access road.
18.	Province	Malampa

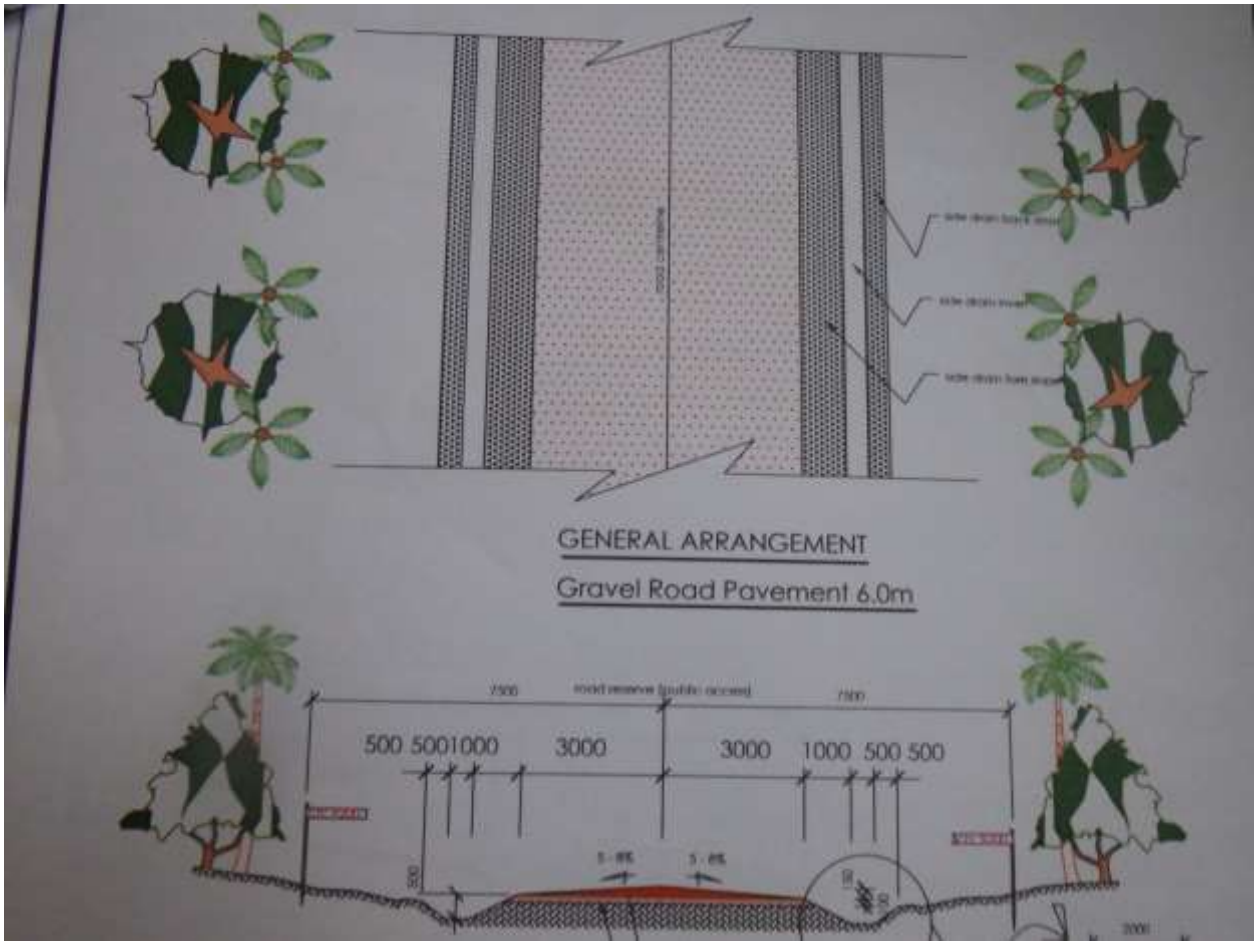


19.	Site description	Mountainous terrain covered by thick secondary forests and vegetation. Rain water accumulates within catchments and flows through limestone rocks tributary channels- discharging down steep slopes across public roads into the coastal zone below. The 7km existing road access was cleared and constructed by the communities of South Malekula. The access route passes through flat land with secondary forests and vegetation and farm lands. This road will provide transportation and communication links to the public facilities such as schools, health, employment services, etc. in Lamap and Lakatoro. The part of the existing road that makes it inaccessible is the 150m long swampy land through which the road passes. During period of heavy rain, rain water that run down steep slopes accumulates in the swampy land and makes the road difficult to use. 

		 The project aims to upgrade the 7km road by adding quarry materials to climate proof the carriageway to accessible standards.


500 500 1000
4000
4000
1000 500 500
CROSS SECTION
Gravel Road Pavement 8.0m
DETAIL
typical side drain
500 500 1000 1000
3000
3000
1000 1000 500 500
CROSS SECTION


1000
4000
4000
1000
500
1000
500
guardrail timber post DETAIL
rocklined DETAIL


GENERAL ARRANGEMENT
Gravel Road Pavement 6.0m
500 5001000
3000
3000
1000 500 500

20.	Target communities	South Malekula Communities including Akhem island(Lemlan, Robianas, Turak), Farun (including Falou, Aromai, Lohorfar, Barbismor, Renaour, Lasovsae, Lamolghai, Lebus stations), Okai village(including Lemang, Marbagho, Hojef), Maskelynes and Vao islands.
21.	Description	Improve the resilience of selected public conveyance infrastructure (i.e.: access way, upgrading of existing road), etc. in the coastal zone in at least 1 priority area along the Chinese planned road rehabilitation project. .
22.	Rationale – addressing what climate change issue	Public use the existing road to travel between villages and public facilities for their everyday needs. This includes traveling to and from health, education and employment facilities and their village farms. The access road is also used for transport for goods and services to local markets and ports but now the road is no longer in use. In South Malekula, the main means of transport system is by boat. Climate change predictions suggest that the coastal waters will increase in temperature, acidity and relative sea level. Additionally, CC predictions suggest increase in the intensity of cyclones which pose a threat to the livelihood of the people in South Malekula. In times of rough seas, the communication and transportation of goods and services are cut. The project aims to upgrade and climate proof the existing 7km road (constructed by the community) from Okai to Lamap to reduce threats on the lives of the people using the ocean as their transport route and increase productivity by encouraging farmers to transport their products to the main centres and ports at Lamap and Lakatoro.
23.	Impact of proposed activity	Climate impacts such as increased precipitation increase floods which destroy and increases risk to public conveyance systems and impedes the flow of both mobile and pedestrian traffic along formed roads. . Destroyed or impassable roads impacts the flow of goods and services between villages nodes. It impacts public livelihood activities
24.	Base line	• The existing constructed public conveyance system; • The road transports goods and services between villages; • Sections of roads has deteriorated due to lack of maintenance and increasingly inaccessible due to inclement weather and poor condition; • Road constructed by the communities in South Malekula; • Road crosses swamp creek tributaries; • Chinese planned road rehabilitation Project in 2015/2016
25.	Activity Output	Improved resilience through climate proofing of selected public conveyance infrastructure (i.e.: access way, upgrading of road,), etc. implemented by the Public Works Department) in the coastal zone in at least 1 priority area along the Chinese planned road rehabilitation project.
26.	Proposed specific activities	1. Site 1 – Upgrading of existing Road (from Okai to Lamap) – 7km x 6m wide of metal covered road carriageway by using quarry materials Cost = 28,800,000 Vatu (Labour Cost – 3,520,000 Vatu, Material, transport & equipment – 24,480,000 Vatu)

27.	Cost of the project activities on South Malekula	The cost of the Project Activities are as follow • 7km upgrading of existing road from Okai to Lamap = 28,800,000 Vatu
28.	Component Link	This component will link with the other outputs i.e. 1.1 and 1.2.1. and 1.2.2. It will work with local communities on the implementation of these activities. Communities will be involved in the maintenance of appropriate areas of the road.
29.	Other Projects	Chinese planned road rehabilitation project
30.	Implementation	Implemented by Public Works using Community base contracts.
31.	Outline Terms of Reference	Site 1 – 7km road upgrading • Conduct site survey/investigation; • Consultation to be done with PWD in regard to coordination and facilitating the construction of the project by using IBC or Public Works resources; • Design the appropriate type of road in accordance with best engineering practice, standards and codes to address the climate threat and its impacts; Implement the designed activity.
32.	Contract Packages	To be determined in consultation with Malampa Provincial Council and PWD
33.	Indicators	7km road upgrading to be constructed.
34.	Benefits	Travel along the public conveyance systems will be safer and easier and the public will be protected from climate related flooding. The project will provide a more efficient movement and flow of traffic along the road connecting other private and public facilities. The project will provide for an all-weather access between villages and other public and private facilities.
35.	Use of Models	• Vulnerability Assessment Tools appropriate to the given environment was used to determine the impacts and vulnerability of the public conveyance systems to climate change including determining adaptation options of those climate change threats • Best engineering practice are used to design and recommend appropriate adaptation options to climate change threats. • Case studies and lessons learned from similar island environment in the pacific were used to determine adaptation options;

36.	Beneficiaries	• South Malekula Communities including Akhem island(Lemlan, Robianas, Turak), Farun (including Falou, Aromai, Lohorfar, Barbismor, Renaour, Lasovsae, Lamolghai, Lebus stations), Okai village(including Lemang, Marbagho, Hojef), Maskelynes and Vao islands.
37.	Gender	• Women could set up local stores to sell food for the workers at each site during construction; Women can participate in public/community awareness of the risks associated with climate change threats and risk; • Increased access to markets will encourage more women to participate in community business development in their respective areas;
38.	Environmental screening	Project of this nature will be given environmental approval by the Physical planning of the Malampa Provincial Government.
39.	Risks and Assumptions	• Flooding of surrounding area; • Damage to road infrastructure; • Road transport impeded; • Public access between public nodes is compromised; • Environment destruction of surrounding properties; • It isolate and separate communities from services and help;
40.	Lessons learnt	• The lack of maintenance of the road has impeded the flow of traffic between villages and public nodes. • Emergency and safety of the communities has been compromised depends on these road infrastructure • The flow of goods and services have been affected and disrupted; • Destroyed roads limits trade between villages.
41.	Total Cost (VT)	28,800,000
42.	Prepared by	Nathaniel Bue and Isikuki Punivalu,

Annex 1: Summary of PPG activities related to South Malekula Area Council

4.1 Community Consultations

The field mission to Epi Island was from the 17th- 21st October 2013. All consultants joined the mission. In addition, an official from the Public Works Department. The Project Officer from Malampa Province and the Area Secretary for the South Malekula Area Council joined the mission.

Community meetings were held as outlined below. In addition as part of these meetings there focus groups on (i) gender, women and youth - to encourage women, young people and people with disabilities to express their views openly and (ii) a focus group on fisheries, coasts and the environment.

Other details relating to the mission include:

- When preparing to consult with villagers in South East Malekula, the V-CAP team contacted the Malampa Provincial Government Council via phone and email on many occasions. However, it was difficult to obtain relevant feedback from the province due to the fact that there was a transition of leadership occurring at the time. The current Secretary General of Malampa Province was yet to be appointed to his current position by the Public Service Commission and there was an Acting Secretary General who was preparing to be relieved of their duties during the V-CAP consultation.
- Therefore, the V-CAP team invited the Project Officer from the Malampa Provincial Government Council to accompany the team in travelling to the target area and in facilitating with the community consultations to ensure that the provincial government would be involved in the consultation process.
- The main facilitator who helped arrange and organize these meetings was the Area Secretary for the South Malekula named Lulu. The Area Secretary did an excellent job arranging with the chiefly councils for our meeting time and locations as well as guiding the V-CAP team throughout the project area.
- The community assessment meetings also had focus groups to allow technical V-CAP team members to further explore their respective fields. In respect to gender, a women's focus group was also held to allow women to express their views openly, which does not happen typically within the presence of men in public meetings in Melanesia.

Date	Consultation	Men	Women	Total
Oct 18	South Malekula – Farun Community Consultation	22	4	26
Oct 19	South Malekula – Akam Community Consultation	30	8	38
Oct 19	South Malekula – Akam Env /Infra Focus Group	16	0	16
Oct 19	South Malekula – Akam Women & Youth Focus	0	14	14
Oct 19	South Malekula – Okai Community Consultation	18	5	23
Oct 19	South Malekula – Okai- Env / Infrastructure	6	0	6

Oct 19	South Malekula – Okai- Women & Youth	0	12	12
Oct 20	South Malekula – Maskelynne Island Consultation (Peskarus, Pelong & Lutas villages)	99	52	151
Oct 20	South Malekula – Maskelynne Env / Infra	20	0	20
Oct 20	South Malekula – Maskelynne Women & Youth	2	22	24

In addition, the field mission undertook:

- Village surveys – guided walks through the village to identify and document key issues;
- Surveys of water sources where specialist joined local communities to review water supply and sanitation;
- Surveys of island to observe coastal erosion, development challenges in the villages;
- Observation of farming and livestock management practices;
- Observations of coast line noting beach erosion, beach aggradation, and species of interest and points of environmental concern;
- Underwater observation surveys – shallow water surveys – less than 10 metres
- Surveys for dugongs and mangroves by boat;
- Confirmation and explanation of issues of concern raised by villagers, e.g. plant diseases (i.e. Lap lap Leaf disease);
- Inspection of infrastructure, including roads river crossings, walking paths, bridges, etc.

1.1. Community Consultation Priorities

During the discussions in South Malekula with women, youth, elderly and disabled persons at community level and with provincial sub-district staff and committees, the primary development concerns and priorites expressed included:

Farun Village:
1.) Road access- repair locally built road to allow for climate resilience to flooding and swamp conditions
2.) Water Security
3.) Improved Health services, access to Lamap difficult with rough seas
4.) Secondary school – permanent buildings desired for school which relocated from Akam following directives of former government

Akam Island:
1.) Improved Health services- nurse requested for vacant dispensary building
2.) Road access- improve road access from Lamap to Okai
3.) Market house- women of Akam interested in organizing to sell produce and handicrafts at local market

Okai Village:
1.) Aid post- village wants community representative to receive training and provide Village Health Worker services
2.) Road- improvement to road to access Lamap
3.) Solar lighting for community buildings desired

Maskelynne Island:

1.) Fish Aggregating Devices (FAD's)- requested to alleviate impact of over-fishing on local reefs and for income generation
2.) Improved toilets- distance of toilets from households considerable and concerns over high water table on pit latrines
3.) Energy- energy project desired to provide renewable energy for household consumption