PACIFIC CENTRE FOR ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

A Report on the Assessment of the five shortlisted potential Project Communities

An Assessment carried out in support of the EU-funded USP Climate Change project in the Solomon Islands: "Supporting the Global Climate Change Alliance (GCCA) through Capacity Building, Community Engagement and Applied Research"

The Assessment carried out between 18th December, 2011 and 21st February, 2012

A Report for USP PACE-SD and the SI NPAC

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Cover page

The top two pictures (L–R) show (i) a recent king tide Ngawawa village; and (ii) one of the wells used for washing and cooking in Nagotano village.

The bottom three pictures (L-R) show (i) Nariekeara village and river; (ii) one of the water tanks used for drinking water in Aorigi village; and (iii) the importance of water on a small island is made clear by the graffiti on this old cement water tank in Nagotano village.

The picture of the king tide at Ngawawa was taken by Jasper Bonie and the other pictures were taken by Peter Ramohia (project in-country coordinator).

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Executive Summary

The USP EU-GCCA Project has three Components. These are: (i) Capacity building, (ii) Community engagement in adaptation to climate change and (iii) Applied research. The overall objective of the project is to develop and strengthen pacific ACP (African, Caribbean and Pacific) countries' capacity to adapt to the impacts of climate change.

The component (ii) Community Engagement in adaptation to climate change is currently being implemented in the Solomon Islands through the USP Solomon Islands Campus by an In-country Coordinator and with the help of an established National Project Advisory Committee (NPAC). During the second meeting of the NPAC held on the 18th November 2011, the NPAC shortlisted five villages or communities as potential project sites for the USP EU-GCCA project in the country. Note, in this report, the words village and community have been used interchangeably to mean the same thing. These villages were Tamboko (Guadalacanal), Nagotano (Buena Vista, Ngella), Nariekeara (Are'are Lagoon, Malaita), Aorigi (Santa Catalina, Makira) and Ngawawa (Reef Islands, Temotu). The NPAC also recommended that scoping visits be undertaken to each of the five villages to assess their potential as project partner. This selection process was adopted by the NPAC to ensure transparency and fairness in the project site selection process and furthermore, the selection of the final three project communities will also be further supported by the University of the South Pacific (USP) Pacific Centre for Environment and Sustainable Development (PACE-SD) developed site selection criteria.

The main aim of the assessment was: (i) to further assess the potential of each of the shortlisted villages as a project partner and (ii) to allow for a simple cost benefit analysis of each of the five villages to be undertaken.

Different teams comprising the project In-country Coordinator and selected members of the NPAC visited these villages between 18th December, 2011 and 21st February, 2012.

When visiting the different short listed villages, the main activities conducted were as follows:

- Had a meeting with the chiefs and other leaders of the village to introduce the visiting team;
- During the meeting with the village chiefs and other leaders, a verbal introduction of the USP EU-GCCA project and the main purpose of the visit and program was made;
- With the help of village leaders, arrange another meeting for the whole village;

- During the village meeting, the group was asked about their perception of the impacts of climate change;
- A presentation on the facts about climate change and why it is important to adapt was made to those attending the village meeting. This also included screening climate change awareness videos;
- A presentation about the USP EU-GCCA project and the main objectives and purpose was also made at the village meeting;
- When in the community, the rapid assessment of the village was conducted. The assessment was based on factors such as vulnerability, governance, stability, existing projects, past success stories, availability of technical expertise, access to school, any developments that could negatively impact adaptation, accessibility and interest of the community as partner
- Photos were taken of village participation and other projects, impacts of climate change, the main village water sources and any adaptation measures the village was already undertaking; and
- Copies of the USP developed Climate Change Fact Sheets was distributed to the villagers (including schools).

Three of the five short listed communities are located on small low lying islands and the other two on higher larger islands. Although some villages were closer to Honiara than others, there was no difficulty in accessing all the different short listed communities. Between two to four days were spent in each of the communities visited. The communities cooperated well with the visiting teams and no problems have been encountered during the visits.

The population of the five communities visited ranged from a few hundred in Ngawawa to more than a thousand in Tamboko. Three of the communities Nagotano, Aorigi and Ngawawa are predominantly Anglican Church of Melanesia whereas two Tamboko and Nariekeara Roman Catholic. In contrast, two communities Aorigi and Nagotano have been subjected to government climate change related assessment in the past when developing the NAPA whereas three Tamboko, Nariekeara and Ngawawa have never been subjected to any past government or NGO climate change related assessments. All five communities are vulnerable to climate change but the impacts on the communities vary. The most commonly noted impacts were those relating to water resources scarcity, coastal erosion and agriculture and food in-security.

Of the five communities, some are already undertaking some adaptation measures. For example, in Nagotano, villagers have planted coastal trees to protect the coastline against erosion; in Nariekeara drains have been dug to divert flood and rising sea water from the village; and in Ngawawa, the community is learning and applying alley cropping method to ensure food security. Although the governance structure of the communities are highly variable, it is observed that traditional and church leadership play an important role in ensuring the stability of the communities. The governance structure of some of the communities are highly developed and are also responsible for providing the require leadership for communities undertaking own initiatives to address community development (e.g. Santa Catalina Development Association), management and conservation of resources (Green lagoon marine conservation area in Ngawawa) and income generation initiatives (coffee farming in Nariekeara and seaweed farming in Nagotano).

There is a lot of variation in the level of community involvement with the government (both National and Provincial), NGOs and other Institutions. Some of the NGOs and organizations that have supported activities and funded projects in some of the five short listed communities in the past include The Nature Conservancy (TNC), World Vision, Live and Learn Environmental Education (LLEE), Kastom Gaden Association (KGA), Solomon Islands Development Trust (SIDT), Foundation of the peoples of South Pacific International (FSPI), Japan International Cooperation Agency (JICA), Solomon Islands Government (SIG) through Ministry of Agriculture and Lands (MAL) and SIG donor funded projects Rural Development Project (RDP) and Rural Advancement Micro Project (RAMP), AUSAID and NZAID. While logging activities represent a major threat to high island communities (Tamboko and Nariekeara), almost all five communities reported overexploitation of resources and increasing population as major threats as well.

No attempt has been made to recommend any of the five short listed communities as the best project sites. The responsibility of selecting the final project sites lies with the NPAC. The NPAC is expected to deliberate on each of the five communities and using the information provided in this report and the USP developed selection criteria will make the final project site selection. In making the selection, it is recommended that NPAC take into account the following considerations.

(1) Effective community leadership: – the community needs to show that they have understood the problem at hand and are willing to commit to the activities to be undertaken and most importantly, will show some indication that they are willing to have ownership of the activities and take on the responsibility of implementing and maintaining the activities even up to the point of the project coming to an end.
(2) Level of community interest/commitment: - the community must have a high level of interest and commitment to the project because this will contribute to the long term sustainability and success of project.
(3) Level of need by the community: - the community must need the project in order to adopt its results as part of their culture and life.
(4) Community commitment to the sustainability of the project activities: - the community taking ownership also includes ability to passing on the lessons learnt from project to other communities.
(5) Resource needed for the proposed adaptation activities are within the project funding capacity: - the community showing innovation, being smart and cost effective.
(6) Possibility of integrating the activity into some existing activities that has been going on in the community so it is not seen as a stand-alone or an opportunity for a hand out – either from other NGOs or churches.

Acronyms

ACP	African, Caribbean and Pacific
AUSAID	Australian Aid
CC	Climate change
CCA	Climate Change Adaptation
EU	European Union
FSPI	Foundation of the peoples of South Pacific International
GCCA	Global Climate Change Alliance
ICC	Isabel Council of Chiefs
ITTA	Improve Temotu Traditional Agriculture
JICA	Japan International Cooperation Agency
KGA	Kastom Gaden Association
LDC	Least Developed Country
LLEE	Live and Learn Environmental Education
MAL	Ministry of Agriculture and Lands
MCA	Marine Conservation Area
MDPAC	Ministry of Development Planning and Aid Coordination
MECDM	Ministry of Environment, Climate Change, Disaster Management & Meteorology
MFMR	Ministry of Fisheries and Marine Resources
NAPA	National Adaptation Programme of Action
NGO	Non-government organization
NPAC	National Project Advisory Committee
NZAID	New Zealand Aid
PACE-SD	Pacific Centre for Environment and Sustainable Development
PMT	Project Management Team
RAMP	Rural Advancement Micro Project
RDP	Rural Development Project
ROA	Resource Owners Association
SCCC	Santa Catalina Coordinating Committee
SCDA	Santa Catalina Development Association
SIDS	Small Island Developing State
SIDT	Solomon Islands Development Trust
SIG	Solomon Islands Government
SIIPHRAA	Solomon Islands Indigenous People Human Rights Advocacy Association
TNC	The Nature Conservancy
USAID	United States Agency for International Development
USP	University of the South Pacific

1.0 INTRODUCTION

The Global Climate Change Alliance (GCCA) is an European Commission initiative launched in 2007. This initiative aims to deepen dialogue and cooperation on Climate Change between European Union (EU) and Least Developed Countries (LDCs) and Small Island Developing States (SIDS). The initiative is built on the two pillars: (i) improved political dialogue on Climate Change and (ii) financial support for adaption to the negative impacts of Climate Change.

The USP signed and took up the USP EU-GCCA project in December 2010 through the Pacific Centre for Environment and Sustainable Development (PACE-SD) and is currently implementing the project during the period 2011 - 2014. Fifteen LDCs and SIDS countries are involved in the project. These countries are Cook Islands, Federate States Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and East Timor.

The USP EU-GCCA Project has three Components. These are: (i) Capacity building, (ii) Community engagement in adaptation to climate change and (iii) Applied research. The overall objective of the project is to develop and strengthen pacific ACP (African, Caribbean and Pacific) countries' capacity to adapt to the impacts of climate change. Specifically, the purposes of the project are: (i) to develop and implement sustainable strategies for community adaptation to climate change, based on improved understanding of impacts of climate change and variability in the Pacific region and (ii) to establish a network of local, national and regional specialists on climate change who will support communities, governments within the pacific countries involved in the project, non-government organizations (NGOs) and regional organizations in their efforts to address the effects of climate change through a long-term, sustainable approach.

Eight villages or communities have been recommended by the National Project Committee (NPAC). Note, in this report, the words village and community have been used interchangeably to mean the same thing. However, during the second meeting of the NPAC held on the 18th November 2011, the NPAC shortlisted five of the eight communities as potential project sites for the USP EU-GCCA project. The shortlisted villages were Tamboko (Guadalcanal), Nagotano (Buena Vista, Ngella), Nariekeara (Are'are Lagoon, Malaita), Aorigi (Santa Catalina, Makira) and Ngawawa (Reef Islands, Temotu). Figure 1 shows the approximate location of all the villages with the shortlisted ones indicated by the white circles. The NPAC based its selection on the desire to give the opportunity to communities in the central and eastern regions (provinces) of the country to be involved in the project since the bulk of other government and NGO funded projects are already being implemented in the western region of the country. In addition to short listing the potential project villages, the NPAC also recommended that scoping visits be undertaken to each of the five communities to further assess their potential as project partner based on an assessment criteria established by the NPAC (**Appendix 1**).

This selection process was adopted by the NPAC to ensure transparency and fairness in the project site selection process and furthermore, the selection of the final 3 project communities will also be further supported by the University of the South Pacific (USP) Pacific Centre for Environment and Sustainable Development (PACE-SD) developed site selection criteria (**Appendix 2**).

The primary aim of the assessment was: (i) to further assess the potential of each of the shortlisted villages as a project partner and (ii) to allow for a simple cost benefit analysis of each of the five villages to be undertaken. This report presents the key findings of the assessment as well as the cost benefit analysis for each of the five shortlisted communities.

2.0 METHODOLOGY

2.1 Villages visited by the Assessment teams

As stated above and shown in Figure 1, the villages or communities visited were Tamboko in west Guadalacanal; Nagotano in Buena Vista, Ngella; Nariekeara in Are'are Lagoon, Malaita; Aorigi in Santa Catalina,

Makira; and Ngawawa in Reef Islands, Temotu. Different teams comprising the project In-country Coordinator and selected members of the NPAC visited these villages between 18th December 2011 and February 21st 2012. A brief description of each of the five villages visited and key findings of the assessment are given below under the Result Section.

The visits and all activities carried out during the assessment were successful. When undertaking the assessment in the different villages, the visiting teams were mindful and always careful not to raise the expectations of the communities unnecessarily. Members of the teams also made sure their engagement with the villagers were transparent and honest.

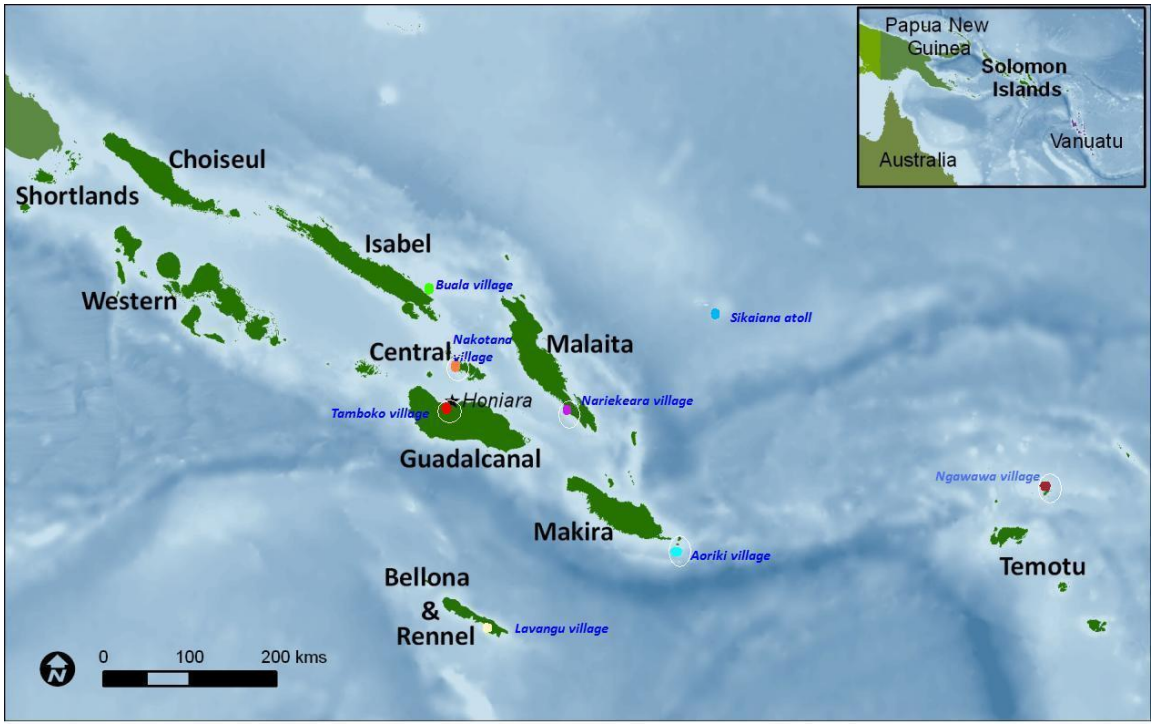

Figure 1: A map of Solomon Islands showing the approximate location of short listed villages marked in white circles.

2.2 Important Considerations for short listing and selection of Communities

A number of important considerations have been made when short listing sites or communities. These include the following:

- The critical sites will be those that suffer from at least two or all of the vulnerabilities under current climate (see USP selection criteria – **Appendix 2**),
- Water resources scarcity should be the highest priority followed by food in-security and then inundation and or erosion of coastal sites,
- Be inclusive and ensure that other sites (that may not be included in assessments undertaken already) are considered fairly and equally,
- Other factors that may include those related to overcoming social and economic barriers.

The final selected sites will be the ones with:

- Effective community leadership;
- High level of community interest and commitment;
- High level of need by the community;
- Community must demonstrate commitment to the sustainability of the project activities; and

- The resources needed for the proposed adaptation activities are within the project funding capacity.

2.3 Activities conducted in the villages during the visits

When visiting the different short listed villages, the main activities conducted were as follows:

- A meeting was held with the chiefs and other leaders of the village to introduce the visiting team;
- During the meeting with the village chiefs and other leaders, a verbal introduction of the USP EU-GCCA project and the main purpose of the visit and program was made;
- With the help of village leaders, another meeting for the whole village was organized (normally on day 2);
- During the village meeting, the group was asked about their perception of the impacts of climate change;
- A presentation on the facts about climate change and why it is important to adapt was made to those attending the village meeting. This also included screening climate change awareness videos;
- A presentation about the USP EU-GCCA project and the main objectives and purpose was also made at the village meeting;
- When in the community, the rapid assessment of the village was conducted. The assessment was based on factors such as vulnerability, governance, stability, existing projects, past success stories, availability of technical expertise, access to school, developments that could negatively impact adaptation, accessibility and interest of the community as partner. Observation was also made on the socio-economic engagements of the communities (see also **Appendix 1**);
- Photos were taken of village participation and other projects, impacts of climate change, the main village water sources and any adaptation measures the village was already undertaking; and
- Copies of the USP developed Climate Change Fact Sheets was distributed to the villagers (including schools).

2.4 Assessment criteria

A number of criterions have been developed by the NPAC in consultation with the project management team (PMT) to do the pre-selection of potential project communities. These included (a) country driven criteria set out in the National Adaptation Programmes of Actions (NAPA) (and including if the community is within a region or area visited in the past by the NAPA team when developing the NAPA document); (b) the personal experience and knowledge about the communities by NPAC members regarding factors such as the vulnerability or the effect of climate change on the community, governance and leadership in the community, past success stories of the community, stability of community, interest of community and physical accessibility (whether community remote or closer to the capital Honiara); (c) whether the community is already involved in or supported by the government, non government organizations (NGOs) or other organizations with similar or other types of community based projects; and (d) fairness – include communities that have never being involved in or supported by the government, NGOs or other organizations through a past community based project.

The criteria for assessing shortlisted potential project communities are specific to (b) above and were developed by the NPAC in consultation with the project management team (PMT). As mentioned above, these are presented in **Appendix 1**.

3.0 RESULTS

3.1 General

As stated in the Methodology Section above, three of the five short listed communities are located on small low lying islands and the other two on higher larger islands. Although some villages were closer to Honiara than others, there was no difficulty in accessing all the different short listed communities. Between two to four days were spent in each of the communities visited. The communities cooperated well with the visiting teams and no problems have been encountered during the visits (note: the weather was favourable at the time

especially in the Reef Islands but it may be different next time). This is not to undermine the need and the community readiness.

The population of the five communities visited ranged from a few hundred in Ngawawa to more than a thousand in Tamboko. Three of the communities Nagotano, Aorigi and Ngawawa are predominantly Anglican Church of Melanesia whereas two Tamboko and Nariekeara Roman Catholic. In contrast, two communities Aorigi and Nagotano have been subjected to government climate change related assessment in the past when developing the NAPA whereas three Tamboko, Nariekeara and Ngawawa have never been subjected to any past government or NGO climate change related assessments. All five communities are vulnerable to climate change but the impacts on the communities vary. The most commonly noted impacts were those relating to water resources scarcity, coastal erosion and agriculture and food in-security.

Of the five communities, some are already undertaking some adaptation measures. For example, in Nagotano, villagers have planted coastal trees to protect the coastline against erosion; in Nariekeara drains have been dug to divert flood and rising sea water from the village; and in Ngawawa, the community is learning and applying alley cropping method to ensure food security (mangrove planting and ITTA project ease food insecurity). Although the governance structure of the communities are highly variable, it is observed that traditional and church leadership play an important role in ensuring the stability of the communities. The governance structure of some of the communities are highly developed and are also responsible for providing the require leadership for communities undertaking own initiatives to address community development (e.g. Santa Catalina Development Association), management and conservation of resources (Green lagoon marine conservation area in Ngawawa) and income generation initiatives (coffee growing in Nariekeara and seaweed farming in Nagotano).

There is a lot of variation in the level of community involvement with the government (both National and Provincial), NGOs and other Institutions. Some of the NGOs and organizations that have supported activities and funded projects in some of the five short listed communities in the past include The Nature Conservancy (TNC), World Vision, Live and Learn Environmental Education (LLEE), Kastom Gaden Association (KGA), Solomon Islands Development Trust (SIDT), Foundation of the peoples of South Pacific International (FSPI), Japan International Cooperation Agency (JICA), Solomon Islands Government (SIG) through Ministry of Agriculture and Lands (MAL), Rural Development Programme (RDP) and Rural Advancement Micro Project (RAMP), AUSAID and NZAID. While logging activities represent a major threat to high island communities (Tamboko and Nariekeara), nearly all five communities reported overexploitation of resources and increasing population as major threats as well.

Using the community assessment criteria developed by the NPAC (see **Appendix 1**) more information on each of the five communities assessed is presented below.

3.2 Tamboko Community

General Information

Tamboko village was visited on the 18th and 19th December 2011. The assessment team comprised Mr. Douglas Yee (Director of Environment and the Chairman of the NPAC), Climate Change officer Mr. Thaddeus Siota (Climate Change Division, MECDM), Mr. Willie Atu (NPAC member and Solomon Islands Program Director of TNC) and the Solomon Islands project In-country Coordinator Mr. Peter Ramohia.

The village is situated on the eastern bank of the Umasani River west of the capital, Honiara, and therefore the most easily accessible by road. The village has five tribes with a population of more than a thousand people with a majority of them young people. The community is predominantly Roman Catholic. While there is existing leadership, both traditional and church, community participation is weak without supervision. However, the community youth group (St. Joseph Tamboko Youth) is quite active.

The community has a history of involvement with the government, donors and other Organizations (both local and international. In the past, local farmers of the village have been assisted through a government funded agricultural project through the Ministry of Agriculture and Lands (MAL) and KGA. The primary school building in the community was built using funds donated by the Australian Government (Figure 2). JICA and SIDT have supported cleanup campaign against Malaria in the community in the past as well resulting in a decrease the number of incident cases. JICA and the Disaster Management Division of the MECDM are currently involved with the community in monitoring and collecting data on the water level (height) of the Umasani River. Other Organizations involved with the community in various other projects in the past included World Vision, LLEE and Save the Children. A concern viewed by the community was that most (if not all) projects implemented in the community in the past stop when the project period ends. There is no continuity and ownership of projects by the community. Perhaps, past projects should have given consideration to the social structure of the community as well.

The meeting held with the community was not well attended considering Tamboko is a large community. It is estimated that about 40 people attended the meeting and presentations. In addition to making presentations about the USP EU-GCCA project and Climate Change, at least ten copies of the PACE-SD developed Climate Change Factsheets were presented to the community and school. Mr. Ben Tovo, the village Catechist and elder was the contact person for the community.

Figure 2: The Tamboko primary school building funded by the Australian government (photo by P. Ramohia).

Main Sectors of concern

There are three main sectors of concern for the community. These are agriculture, water resources and health. Tamboko is a farming community with people relying on commercial crops like Cocoa and Coconut for income and subsistence crops for food. Situated near the bank of the large Umasani River, the village is prone to extensive flooding. Past flooding incidents have resulted in destruction of food gardens and other properties. In contrast, the community has also experienced droughts in the past as well. Farmers have observed change in the general weather pattern compared to in the past and this is affecting soil quality, fertility, crop yield and even the planting season. Farmers are experiencing problems with pests and diseases as well. In the past people plant and eat mostly local food. Nowadays, people depend on rice and other imported processed food. One of the recent worst flooding events was experienced in 2009. This disaster has claimed a number of lives in the affected region of west Guadalcanal. The general feeling of villagers was that the two logging companies operating upstream were to be blamed for this disaster. The logging activities of the two companies has contributed to landslides and debris that blocked part of the river upstream and created an artificial dam that when burst open resulted in destruction of food gardens and properties and even loss of live downstream.

There is no water supply in the community but the villagers rely on natural springs (Figure 3), water tanks and well for their water needs. The availability and quality of water is therefore a major concern. In addition to this concern, the village does not have proper toilets and sanitation as well.

The community has experienced outbreaks in diarrhoea in the past especially following flooding (wet) and dry spells. Malaria cases in the community fluctuate and people associate this with the presence of numerous swamps and creeks near the village. These are the breeding sites for malaria carrying mosquitoes. The increasing population of the community also pose additional pressure on resources and implication for associated health issues.

Additional information on the community based on the assessment is presented in **Appendix 1**.

Figure 3: A woman fetching drinking water from the main natural spring of the village (photo by P. Ramohia).

3.3 Nagotano Village

General Information

Nagotano village was visited on the 20th and 21st December 2011. The assessment team comprised Mr. Willie Atu (NPAC member and Solomon Islands Program Director of TNC), Climate Change officer Mr. Thaddeus Siota (Climate Change Division, MECDM) and the Solomon Islands project In-country Coordinator Mr. Peter Ramohia.

The village is located on Nagotano Island, a small low coralline island with poor soil for gardening and lacking freshwater. The island is situated near Buena Vista Island in Ngella, Central Islands province. Nagotano is about two kilometres long and half a kilometre at the widest part of the island. Located in Ngella, this island community is close to Honiara and easily accessible by sea. Nagotano community is predominantly Anglican Church of Melanesia with a population of more than 400 people.

There is strong and active traditional and church leadership in the village. Nagotano has a total of 15 chiefs. The two leading chiefs of the community are Mr. Peter Bera and Mr. James Meu. The community chiefs meet regularly to discuss community work plans and activities as well as to solve any disputes or other community problems. There is strong community participation as result of the strong leadership by the chiefs. This is demonstrated through strong community participation in projects such as building of a new community school building (Figure 4) and church house. Although some individuals may fail to take part in community work from time to time but respect for the chiefs of the community is still very strong. Anyone who does not participate in community work will appear before the chiefs and is asked to pay a fine based on the Chief's Constitution. To this community, working together is a tradition passed down from ancestors. Although part of Ngella, the community does not interact much with the Provincial government and the Ngella House of Chiefs. The

community is however, a member of the Sandfly Resource Owners Association (ROA) and the Isabel Council of Chiefs (ICC).

Community work and activities are organized and coordinated through various established committees such as School, Church and Clinic Committees. The chiefs and church leaders of the community are also actively involved in these Committees. All the families in the village are required to make community contribution to the different community activities on monthly basis.

Nagotano community does not have a history of engagement with the government, NGOs or Aid donors. Although Buena Vista Island (which includes Nagotano) was one of the sites visited by the NAPA team in the past, it was only in the last three years that the Ministry of Fisheries and Marine Resources (MFMR) has introduced seaweed farming as an alternative income earning activity to the community and this has been very successful. Recent government engagement with the community was also through the SIG donor funded RDP implemented by the Ministry of Development Planning and Aid Coordination (MDPAC).

The community does not have a health aid post or clinic and have to travel to nearby Tathi village to access medical help through the Australian funded Tathi Clinic. However, during bad weather, access to the clinic is difficult. A health aid post built in the village would improve the situation for the community and provide employment opportunity for trained nurses from the village.

Figure 4: Primary school building under construction, a community supported own initiative (photo by P. Ramohia).

The meeting held with the community was well attended with an estimate of more than 200 people attending the meeting and presentations. In addition to making presentations about the USP EU-GCCA project and Climate Change, education and awareness videos on food security and climate change were also shown. Ten copies of the PACE-SD developed Climate Change Factsheets were presented to the community and school.

Main Sectors of concern

The three main concern sectors for the community are water resources, agriculture and food in-security and coastal erosion but the most compelling need of the community is water. A number of cement water tanks have been built by the colonial government for the community in the 1970s. These are no longer been used. Nowadays, the community relies on tank water for drinking and wells for washing and cooking. There are a total of 15 wells in the community (Figure 5a). During long spells of dry seasons, villagers have to go to the mainland (Buena Vista) in search of water. The longest drought experienced in the recent past was six months. During that time, a landing craft has to bring water for community from all the way from Honiara. The community does not have enough water tanks so during rainy days, villagers harvest rain water from the Church roof (Figure 5b).

Agriculture and food in-security is a major concern for the community. There is limited good land for making gardens and repeated use of land is resulting in soil fertility loss. Widespread use of dynamite fishing is believed to be contributing to decline in fish stocks.

(a)

(b)

Figure 5(a) and (b): One of the 15 wells in the village (a) and harvesting rain water from the Church roof (b) (Photos by P. Ramohia).

Coastal erosion resulting from sea level rises and large waves is also affecting the village. Many parts of the village are being eroded away and losing coastal vegetation (Figure 6a). Some houses in the village are in danger of being washed away. The community recognized this threat and has been addressing this through planting trees to protect the community and coastline (Figure 6b). The community has considered building seawalls but these are not effective. They have also considered planting mangroves as well. In addition to the above, there is a need for the community to have proper toilets.

(a)

(b)

Figure 6(a) and (b): One part of the village that is being eroded away and losing vegetation (a) and the community planted trees to protect village and prevent coastal erosion (photos by P. Ramohia).

3.4 Nariekeara Village

General Information

Nariekeara village was visited on the 28th and 29th December 2011. The assessment team comprised Mr. Moses Ramo (NPAC member representing SIIPHRAA), Abraham Namokari (NPAC member representing the Prime Minister's Office) and the Solomon Islands project In-country Coordinator Mr. Peter Ramohia.

This community is located in West Are'are Lagoon in Malaita province. The village is relatively close to Honiara and has consistent reliable weekly shipping service linking Honiara. In addition to sea transport, the village is also accessible by air. The village has nine tribes (with the same number of tribal Chiefs) with a population of more than 700 people and is predominantly Roman Catholic. Logging is the biggest threat to the community at the moment. Overexploitation of resources also poses a potential threat to the community. There is existing strong governance structure in the community based on traditional leadership and culture and church. The nine tribal Chiefs and elders meet regularly in the community meeting hall (Figure 7) to discuss community work plans and activities as well as solve disputes and other community problems. The strong leadership in the community is further demonstrated through the nine tribes making up the village already working together to collectively address resources management issues and challenges and engaging in the education and awareness of their children.

Figure 7: The community meeting hall (photo by P. Ramohia).

Some of the resource management and income earning initiatives started by the different tribes of the village included: (i) establishment of a Marine Conservation Area (MCA) (ii) coffee farming and (iii) tree planting (native tropical hard wood). These community projects indicated that there is already a strong interest in community in working together for their common good.

The village was first established on an island in the Are'are lagoon in the 1950s (after the World War II). However, the village was relocated to its present site as a result of a cyclone in the early 1970s. Another cyclone that affected the community during the recent past was cyclone Namu in 1986.

The community does not have any existing government projects other than a classroom building project awarded to the community under the SIG donor funded RAMP implemented by the MDPAC . The community does not have any NGO funded projects as well.

The meeting held with the community was well attended with an estimate of more than 250 people attending the meeting and presentations. In addition to making presentations about the USP EU-GCCA project and Climate Change, education and awareness videos on food security and climate change were also shown. Ten copies of the PACE-SD developed Climate Change Factsheets were presented to the community and school.

Main Sectors of concern

Four sectors have been highlighted as the main concern sectors. These are ecosystem degradation (logging threat), saltwater intrusion due to sea level rise, agriculture and food in-security and flooding are some of the main concern for the community.

A logging operation is already taking place at the nearby village of Harumou and reliable sources within the community have revealed that the logging company is planning to meet with some of the tribal landowners of the community to establish a new operation in their land.

The village has experienced flooding in the past and river bank erosion is evident (Figure 8a). There is no water supply in the community but the villagers rely on natural springs (Figure 8b) for drinking and the river for cooking and washing. The availability and quality of water is therefore a major concern. Another major concern for the community is to have more proper toilets.

(a)

(b)

Figure 8(a) and (b): Flooding and river bank erosion is a concern for the village (a) and the main source of drinking water for the community (b) (photos by P. Ramohia).

Rising sea level is a major concern for the villagers. This is resulting in saltwater intrusion into coastal low lying areas including swamp taro patches. Although the village is situated inland, sea water is already reaching the village during high tide. The community has taken steps to divert flood and rising sea waters by digging drains in the village (Figure 9).

Figure 9: Drains (indicated by red lines) like these were dug in the village to not only divert but to accommodate flood and rising sea waters as well (photo by P. Ramohia).

3.5 Aorigi Village

General Information

Aorigi village was visited from 21st – 25th January 2012. The assessment team comprised Ms. Elirose Fagaqweka (NPAC member representing Solomon Islands Locally Managed Marine Areas) and the Solomon Islands project In-country Coordinator Mr. Peter Ramohia.

The village is situated on Santa Catalina Island in Makira and Ulawa province and the second farthest site from Honiara and therefore considered relatively remote. However, the village can be accessed by air through the airstrip on nearby Santa Ana Island and shipping services operating to the area from Honiara. The community is predominantly Anglican Church of Melanesia with a population of more than 700 people.

Santa Catalina is a bigger island compared to Nagotano and Reef Islands. It is estimated to be about six kilometres long and at the widest part three to four kilometres.

There is existing strong governance structure in the community based on traditional leadership and culture and the church. The Chief's council of the islands is made up of 21 chiefs. The combination of Church leaders and Traditional Tribal Representation are actively organizing the community on daily living basis. Different Chiefs are appointed to be in charge of different Sector Committees established in the village such as Health, Women, Church, Education and Sports. The connection to the Chief's Council is the Santa Catalina Development Association (SCDA). The SCDA is chaired by Mr. Moffat Wasuka. While the chiefs and the members of the provincial government holds leadership power in the community and province, the SCDA will provide support through funds solicited from donors and the government to boost and implement development plans. Connecting the various village Committees to the Chief's council, the members of the Provincial government and SCDA is the Santa Catalina Coordinating Committee (SCCC). The SCCC is tasked with mobilizing the different village Committees carry out assigned programmes and plans set by the SCDA. The SCDA has developed a 4 year Strategic Development Plan for the Island called Santa Catalina 2009 – 2012 Strategic Plan (Figure 10).

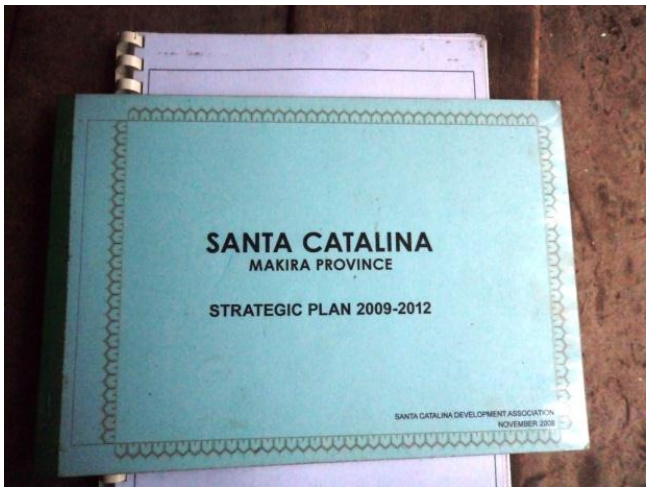

Figure 10: The Santa Catalina 2009 – 2012 Strategic Plan document (photo by P. Ramohia).

Although remote, Aorigi was one of the communities visited by the NAPA team in the past. The community is also one of the recipients of water tanks under the government RDP and the community clinic and school was built with funds from the Australian government.

The community was hit by two large cyclones during the last forty years. The first one was in the early 1970s and the second in 1986 (Namu). These two cyclones have a huge impact on the people and their properties and totally destroyed the vegetation of the island including fruit trees. In addition to the cyclones, an earthquake experienced in the 1950s has resulted in lowering of the western end of the island and uplifting of the eastern end.

Aorigi has many skilled fishermen. Some of them are still practicing traditional fishing methods such as the spider web fishing method. The community also has a custom house and organizes the spear fighting festival in May every year. These are major cultural attractions in the community.

The meeting held with the community was attended by more than 80 people. In addition to making presentations about the USP EU-GCCA project and Climate Change issues, education and awareness videos on food security and climate change were also shown. Eight copies of the PACE-SD developed Climate Change Factsheets were presented to the community primary school.

Main Sectors of concern

Four main sectors have been identified for this community. These are water resources scarcity, agriculture and food In-security, coastal erosion and ecosystem degradation. The island has no source of fresh water so the community rely mostly on water tanks for drinking and wells for washing and cooking. Some attempts have been made in the past to pump underground water using windmill but this was not successful. The community also rely heavily on young coconut for drinking as well.

(a)

(b)

Figure 11(a) and (b): Water tanks are main source of drinking water (a) while wells provide water for washing and cooking (b) (photos by P. Ramohia).

Agriculture and food in-security is a major concern for the community as well. There is limited good land for making gardens and repeated use of land is resulting in soil fertility loss. Some crops like this species of bana (Figure 12) can grow well in sand. However, this is a seasonal crop grown purposely for the spear fighting festival.

Figure 12: This species of bana grows in sandy soil and is harvested mainly for the spear fighting festival (photo by P. Ramohia).

Coastal erosion is also affecting many parts of the island (Figure 13). However, the island is higher compared to Nagotano or Reef islands and therefore the effect of sea level rise will not have same impact on the community as it did on the other two communities.

Population increase poses a potential threat for the community because this can lead to overcrowding and lack of land for food gardens as well as increased pressure on marine resources. This in turn will lead to food in-security. Another major concern for the community too is to have proper toilets and sanitation.

Figure 13: Coastal erosion as result of rising sea level (photo by P. Ramohia).

3.6 Ngawawa Village

General Information

Ngawawa community was visited from 18th – 21st February 2012. The assessment team comprised Mr. Douglas Yee (Director of Climate Change and the Chairman of the NPAC) and the Solomon Islands project In-country Coordinator Mr. Peter Ramohia.

Ngawawa community consists of Ngawawa and Nola villages and are generally referred to as the Green Lagoon Community. The community is located in the main island of Reef Islands atoll. The Green lagoon community is mostly Anglican Church of Melanesia with a population of about 300 people. The island on which the Green lagoon community is located is about the same size as Nagotano. The island is uplifted on one side forming a cliff on the side facing open sea and a lagoon on the inside. There is evidence of strong governance in community based on traditional culture and church leadership. The community is united through the "Sao-opolau" which is a local language word for "meeting house" and "Nupana" or dancing ring (Figure 14).

Figure 14: The community "Sao-opolau" and "nupana" indicated by the arrows (photo by P. Ramohia).

The Community plans to establish the "Green lagoon Conservation Area" and to protect the turtle nesting beaches of Nykolo and Nymembula (species Hawksbill and Green). For the purpose of coordinating all community activities, the Green lagoon Community Committee was established. This committee has seven members. Each member of this committee chairs a different project activity that is currently being implemented in the community. For example, one member would chair the Climate Change project activities while others Church activities, World Vision project activities and so forth. The committee members are Mr. Bart Peluo, Mr. Nelson Nops, Mr. Bart Taali, Mr. Naphtahlai Palusi, John Naote, Arthur Palusi and Chris Lawra. The community has initiated own programme of activities as well. For example, in addition to the establishment of MCA, the community is involved in mangrove planting and development of agro-forestry or alley cropping system through the Improve Temotu Traditional Agriculture (ITTA).

Although this community is quite remote, a number of NGOs have engaged with the community in the past. These include TNC, World Vision and MDPAC through RDP. TNC has undertaken connectivity studies using the bumphead parrotfish (*Bolbometopon muricatum*) as the candidate species. The World Vision has been working on a project relating to children and water resources.

The meeting held with the community was well attended with an estimate of more than 100 people attending the meeting and presentations. In addition to making presentations about the USP EU-GCCA project and Climate Change, education and awareness videos on food security and climate change were also shown. Ten copies of the PACE-SD developed Climate Change Factsheets were presented to the community and school.

Main Sectors of concern

Water resources scarcity due to sea level rise and salt intrusion, agriculture and food in-security and coastal erosion are the main concerns for the community. Water is the most compelling need in the community. The community relies on rain water for drinking and cooking while wells are used mainly for washing. However, extreme high tide (Figure 15a) is not only affecting ground water through salt intrusion but has actually destroyed a number of community wells (Figure 15b). Water scarcity is also experienced during periods of dry weather.

(a)

(b)

Figure 15(a) and (b): Extreme high tide at Ngawawa village (a) and one of the wells destroyed by extreme high tide (b) (photos by J. Bonie).

Agriculture and food in-security is a major concern for the community as well. There is limited good land for making gardens and repeated use of land is resulting in soil fertility loss. The communities in the Reef Islands are trying to address their food in-security situation through projects such as ITTA, a project aimed at improving food security of small islands.

Coastal erosion is a major concern for the community as well. A number of houses in the community are threatened by rising sea water and coastal erosion (Figure 16a). The community has considered building seawalls but the success of such activities is not well understood by the community. One alternative that the villagers have been contemplating is relocating houses further away from the coastline. They have also started planting mangroves (Figure 16b) as well in the hope that when the mangroves grow bigger, they will protect the village from the rising water and coastal erosion.

(a)

(b)

Figure 16(a) and (b): A house already partly washed away due to coastal erosion (a) and community planting mangrove seedlings not only as protection against rising sea waters but as marine habitat (b) (photo (a) by P. Ramohia and photo (b) by J. Bonie).

The vulnerability of the people of the Reef Islands to scarcity of water and food in-security is very great especially in light of high population per unit area and exposure to climate variability such as longer drought periods, salt water intrusion due to sea level rise, soil infertility and water shortages. The fact that the community is quite isolated also made it even more vulnerable to the impacts of climate change. In addition to the above, a concern and need by the community is to have proper toilets and sanitation.

3.7 Simple Cost Benefit Analysis

In this section, a table has been used to do a simple cost benefit analysis which takes into account different factors such as cost of different forms of transport required to access the village; the cost of fuel; location of the village; the level of leadership in the community; and the vulnerability and impacts of climate change on the community. These factors are selected and based on the real experience and observation made during the visits to the five communities.

All five villages are vulnerable and are now already impacted by the effects of climate change. Therefore, the same rating of High is given to all of them. A strong determining factor in this analysis was the community demonstrating strong leadership. The presence of demonstrated strong leadership is given a High. Strong leadership would be required for the ultimate success of the project in the community. Communities closer to Honiara does not cost much to reach (truck, outboard motor, ship or plane) compared to the ones further away, The further away from Honiara the village is, the more expensive the fuel cost is. However, communities further away are equally affected by the impacts of climate change.

The Cost Benefit rating consider all the factors relating to the cost of access to village; the location of the village - close or far from main centre Honiara (and therefore the cost low or high); demonstrated strong leadership in the community; and vulnerability and impact of climate change on the community. A “Better” or “Best” rating represent the better and best chances of successful project at the reasonable cost. Factors such as accommodation and food costs (in the villages) are very similar across all five communities and therefore

have not been used in the analysis. At all five villages, the assessment teams have been well looked after but their hosts have not demanded huge payment for the service they provided.

Table 1: A simple Cost Benefit Analysis for each of the communities visited.

		Perceived cost associated with different means of transport and fuel for different locations					Governance and vulnerability observation for locations		Rating
Village	Location	Plane	Ship	Out board Motor	Truck	Fuel	Demonstrated Strong Leadership	Vulnerability to CC	Cost Benefit
Tamboko	close	n/a	n/a	n/a	low	low	medium	High	Good
Nagotano	close	n/a	low	medium	n/a	medium	high	High	Best
Nariekeara	close	medium	low	medium	n/a	medium	high	High	Best
Aorigi	remote	high	medium	medium	n/a	medium	high	High	Better
Ngawawa	remote	high	high	high	n/a	high	high	High	Better

4.0 DISCUSSION

The outcome of this community assessment shows that it does not matter whether the community is from a high and large island or low and small one, the main sectors of concern are similar i.e. water resources scarcity, food in-security, coastal erosion, environmental degradation and health. In other words, the target communities in this assessment are all vulnerable and experiencing the similar impacts of climate change, although not on the same scales. While higher island communities are more advantaged when it comes to availability to good quality water for drinking and cooking, it is a continuous struggle for lower/small island communities to get and maintain the quantity and quality of this precious commodity.

The same can be said about food in-security. Higher island communities have land available for not only planting subsistence crops for food but also for planting commercial crops like cocoa and coffee for income. Land is a limiting factor in lower/small island communities and the repeated use of whatever limited good gardening land is available is resulting in loss of soil fertility.

The impacts of coastal erosion are the greatest in the lower/small island communities. A vast portion of coastline is been washed away threatening the long term survival and existence of the communities. Like the need for obtaining and maintaining the quantity and quality of water for community use, it is a continuous struggle for the communities from the smaller and low islands to prevent their island been eroded away and to keep the rising water away from their village.

These communities are not alone in their effort to cope with the issues relating to the main sectors of concern stated above. The government, NGOs and aid donors have been assisting as well especially with regard to addressing water resources scarcity, undertaking education and awareness programmes and providing health facilities.

One of the important qualities that most of the five communities visited during this assessment have is strong community leadership, both in terms of traditional and church. It is because of this quality that the communities have continued to survive and grow over decades. The leadership in the communities may differ in structure, level of organization and style, but these are still influential and responsible for some of the community initiatives already being undertaken such as climate change adaptation, community based resource management, agriculture and food security, income earning activities and other community project implementation, dispute resolution and law and order. Strong and effective community leadership will play an important role in ensuring this USP EU-GCCA project is successfully implemented in the project communities.

The simple cost benefit analysis exercise, though not detailed, is useful. It is simple in the sense that it is based on the most basic factors such as cost of transport and fuel, strong community leadership, location of community and vulnerability and impacts of climate change on the community. This exercise will further help the NPAC to ensure communities selected produce best results at a reasonable cost.

5.0 CONCLUSION

This assessment was carried out purposely to gather more firsthand information on the five communities short listed by NPAC as the potential communities and to do a simple cost benefit analysis for each of the communities visited based on the real experience and observation made during the assessment. This report represented the achievement of these two aims. The NPAC now has more information about the short listed communities and is expected to make an informed project site selection. It is important that whatever communities are selected as the final project communities, these communities should represent the best chances for a successful community climate change adaptation project. Lastly, let us be reminded that, (i) the time spent in each community although sufficient to gather enough information to meet the aims of the assessment, it was not long enough to fully understand everything about the communities; (ii) all five communities are vulnerable and being impacted by the effects of climate change and although the cost of implementing a successful climate change adaptation project in a community is an important consideration, climate change is a matter of life and dead; and (iii) a strong and effective community leadership is important because it will ultimately decide the success of a project in a community.

6.0 RECOMMENDATION

No attempts has been made to recommend any of the five short listed communities as the best project sites since this was not one of the aims of this assessment. The specific aim of this assessment is to provide the necessary information to the NPAC to make the final project site selection. The NPAC must deliberate on each of the five communities and using the information provided in this report and the USP Developed Selection Criteria make their own project site selection.

In making the selection, it is recommended that NPAC to take into account the following considerations.

(1) Effective community leadership: – the community needs to show that they have understood the problem at hand and are willing to commit to the activities to be undertaken and most importantly, will show some indication that they are willing to have ownership of the activities and take on the responsibility of implementing and maintaining the activities even up to the point of the project coming to an end.
(2) Level of community interest/commitment: - the community must have a high level of interest and commitment to the project because this will contribute to the long term sustainability and success of project.
(3) Level of need by the community: - the community must need the project in order to adopt its results as part of their culture and life.
(4) Community commitment to the sustainability of the project activities: - the community taking ownership also includes ability to passing on the lessons learnt from project to other communities.
(5) Resource needed for the proposed adaptation activities are within the project funding capacity: - the community showing innovation, being smart and cost effective.
(6) Possibility of integrating the activity into some existing activities that has been going on in the community so it is not seen as a stand-alone or an opportunity for a hand out – either from other NGOs or churches.

7.0 REFERENCES

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APPENDICES

APPENDIX 1: Assessment of the short listed potential project villages using the assessment criteria set by the NPAC.

5; extremely high **4;** considerable **3;** low **2;** not really sure **1;** definitely not applicable, practical or feasible

Community	Vulnerability to climate change impacts	Governance structures and committees	Stability	Existing projects	Past success stories	Technical resource people available	Access to schools	Development that could negatively impact adaptation	Physical access	Partner interest	Overall Assessment
Tamboko village, west Guadalcanal	(a) Food security and erosion (b) Water /Flooding	(a) There is some evidence of existing governance structure (b) Farmers have setup committees in past through previous engagement with NGOs but committees not active now. (c) Set up of different committees Youth Committee Zone Committee	(a) No major disputes in the community	(a) There is an existing JICA/Disaster Division (MECDM) project that collects data and monitor the water level (height) of the river	(a) In 2009 farmers were involved in Improve, Plant and Protect in SI project under the Ministry of Agriculture (b) JICA/SIDT supported clean up campaign against Malaria has helped to decrease the number of cases in the past	(a) Situated close to Honiara, the community has easy access to relevant technical resource persons from Government ministries and NGOs	(a) There is a primary school in the village (built with Australian funding) (b) The Community has access to other nearby and even town schools as well	(a) Agriculture on flood land and pests (b) Logging activities upland (c) High dependence on imported goods (d) Diseases like malaria and diarrhea fluctuates during dry and flooding seasons (e) No proper toilets	Very close to Honiara and accessible by road.	(a) The main interest group is the local farmers. (b) Commercial cash crops (e.g. cocoa, coconut) main interest in community (c) Poor attendance reflect low interest in community	4
Nagotano village, Buena Vista, Ngella (NAPA Site)	(a) Water resources (b) Coastal erosion	(a) Existing strong and active traditional leadership	(a) The village has no major disputes	(a) Seaweed Farming under Ministry of Fisheries and	(a) Church Building – own initiative with no outside assistance	(a) Relevant provincial and national government	(a) Primary School in Community.	(a) Overexploitation of resources also poses a potential threat.	Close to Honiara and easily accessible by	High attendance reflect high interest in the	5

	(c) Salt intrusion (d) Food security	(b) Strong and active Church leadership as well (c) Community member of the Sandfly Resource Owners Association (ROA)		Marine Resources (b) Also involved in the GERUSA (Gela/Russell/Savo) Association and ROA.	(b) Involvement in GURUSA/ROA (c) School building project is another own initiative	technical persons as well as NGOs	(b) Thadi Community High School on nearby Buena Vista island.	(b) Population Increase also poses a problem because of overcrowding and lack of land for food gardens.	sea.	community.	
Nariekeara village, west Are'are (Malaita)	(a) Food security (b) Salt water intrusion (c) Flooding (d) Ecosystem degradation and Natural Resource Management	(a) Existing strong and active governance structure in the village based on Traditional leadership and culture (b) Existing strong and active church leadership (c) Establishment of the Haurao/Mamarao Resources Management Committee.	(a) No major disputes in community now. (b) In the past, the community used to have some disputes over land ownership and resources but now all the conflicting tribes have joined forces to work together after their disputes have been settled through traditional means.	(a) School building project - under the EU/SIG Rural Advancement Micro Project (RAMP) (b) Church building project (c) Coffee farming (d) Forestry -tree planting project	(a) The school building project (b) Church building project (c) Resource Management Initiative	(a) Relevant provincial and national government technical persons as well as NGOs	(a) Primary School in village (b) Access to nearby Uhu Community High School as well	(a) Logging is the biggest threat to the community at the moment. (b) Overexploitation of resources also poses a potential threat.	Relatively close to Honiara and easily accessible by sea and air	The community is already demonstrating the ability to work together through their various initiatives – a reflection of high interest in working together in community. Also high attendance reflect high interest.	5
Aorigi village, Santa Catalina Islands	(a) Water resources	(a) Existing strong governance structure	(a) No major disputes in	(a) Water Tanks – supplied	(a) Annual spear fighting festival	(a) Relevant provincial and	(a) Primary School in the	(a) Population increase poses a problem because	Accessible by air and	High interest in the	4

(Makira Ulawa) (NAPA Site)	(b) Salt water intrusion (c) Coastal Erosion (d) Agriculture and Food Security	in the community based on Traditional leadership and culture. The Chief's council of the islands is made up of 21 chiefs. (b) Combination of Church leaders and Traditional Tribal Representation actively organizing the Community on daily living basis. Different Chiefs appointed to be in charge of different Committees established in the village e.g. Health, Law and Order etc. (c) The connection to the Chief's Council is the "Santa Catalina Development Association"	community. (b) Minor disputes do occur but are solved through customary dispute settlement means and church reconciliation	through RDP project. (b) All projects (government and NGOs) implemented in the village goes through the Association to the Chief's Council.	(b) Traditional fishing techniques still practiced (Kite fishing) (c) Development of Santa Catalina Strategic Plan 2009 - 2012	national government technical persons as well as NGOs E.g. Save the Children and World Vision - undertaken education and awareness programmes on health issues	village (b) Santa Ana Community High School on nearby Santa Ana Island	of overcrowding and lack of land for food gardens. (b) Resource scarcity especially water	sea.	community but attendance does not reflect this.	
Ngawawa Community (Lomlom District, Reef Islands)	(a) Water resources (b) Salt water intrusion	(a) Existing strong and Active traditional and church leadership	(a) No major disputes in community	(a) World Vision: Children and Water project	(a) ITTA – Improve Temotu Traditional Agriculture	(a) Community experts, province, national and NGOs	(a) Maena Memorial Community High School	(a) Overexploitation of resources poses a potential threat.	(a) Remote but accessible by air and sea	Very high interest due to community	5

	(c) Coastal erosion (d) Agriculture and food security	(b) Establishment of Green Lagoon Marine Protected Area			(b) Development of Agro-Forestry: Alley cropping system (c) Mangrove planting initiative (d) Establishment of Green Lagoon MPA		(b) Palipaa Community High School (c) Ngauwa Community High School	(b) Population increase	through Lata (b) An airstrip is under construction on Lomlom island	already involved in adaptation project in past. High interest also reflected by high attendance.	

Appendix 2: The USP Site Selection Criteria

THE UNIVERSITY OF THE SOUTH PACIFIC
PACIFIC CENTRE FOR ENVIRONMENT & SUSTAINABLE DEVELOPMENT

Project Title: Support to the Global Climate Change Alliance (GCCA) through Capacity Building, Community Empowerment and Applied Research

Task: Development of Project Site Selection Guidelines

Step 1: Aspects of Vulnerability

It is important to note that the selection of sites will focus on various aspects of vulnerabilities to climate variability and change.

(a) **Water Resources Scarcity**:
- (i) Portable water for drinking and other household uses
- (ii) Water quality and quantity
- (iii) Possible contamination sources
- (iv) Other issues/concerns

(b) **Food In-security**:
- (i) Drought prone lands
- (ii) Water logged flood prone lands
- (iii) Crop productivity and availability
- (iv) Coastal fisheries productivity & sustainability
- (v) Other issues/concerns

(c) **Coastal Sites**:
- (i) Coastal erosion
- (ii) Inundation
- (iii) Sedimentation in deltas
- (iv) Shoreline/river bank erosion
- (v) Health and sanitation (vector borne diseases etc.)
- (vi) Sea level rise and salt water intrusion
- (vii) Other issues/concerns

(d) **Ecosystem Degradation**:
- (i) Catchment degradation
- (ii) Soil degradation
- (iii) Soil erosion
- (iv) River siltation
- (v) River/estuarine system degradation
- (vi) Other issues/concerns

Step 2: Procedure for selection of sites

- Four approaches could be engaged in this procedure:

1. Systematically identify communities that have raised climate change concerns,
2. Stakeholders invited to suggest communities with environmental issues for the project,
3. The Department of Environment within your countries is asked to suggest sites of previous climate change project. In Fiji's case, the IC may also communicate with the Provincial Administrative Office for this purpose, and
4. Involve inviting suggestions from the Project Advisory Committee members.

Note: the following countries that have NAPAs to also use this as a guide in the process of selecting sites – bearing in mind the extensive assessments already carried out to identify these sites. What needs to be done though is gauge from your mapping exercise, if there are existing projects being undertaken within these sites/communities and whether our intended project activities will give added value to the existing work.

- When sites are short-listed, the following criteria could be used to screen the sites:

1. The critical sites will be those that suffer from at least two or all of the above vulnerabilities under current climate,
2. Water resources scarcity should be the highest priority followed by food in-security and then inundation and or erosion of coastal sites,
3. Be inclusive and ensure that other sites (that may not be included in assessments undertaken already) are considered fairly and equally,
4. Other factors that may include those related to overcoming social and economic barriers.

Step 3: Selection/Identification of sites

The selection/identification of sites will only/should be made after considerable consultations with relevant stakeholders and a follow-up site visits. With satisfaction on this procedure, the final site selection criteria should be as follows:

(i) Effective community leadership – the community needs to show that they have understood the problem at hand and are willing to commit to the activities to be undertaken and most importantly, will show some indication that they are willing to have ownership of the activities and take on the responsibility of implementing and maintaining the activities even up to the point of the project coming to an end.
(ii) Level of community interest/commitment
(iii) Level of NEED by the community
(iv) Community commitment to the SUSTAINABILITY of the project activities
(v) Resource needed for the proposed adaptation activities are within the project funding capacity
(vi) Other issues.