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USP EU PROJECT:

Support the GCCA through Capacity Building, Community Engagement and Applied Research.

SITE ASSESSMENT TEAM RECOMMENDATION REPORT FOR SAMOA NPAC COMMITTEE ENDORSEMENT



NPAC Assessment Team at Falealupo Village:

Madam Chair for Samoa NPAC, High Chief Vaasilifiti Moelagi Jackson, starting off with a prayer before the start of the meeting with the Falealupo village Mayor, Woman Sui o le Malo, and Youth representative.

(Photo by Allan Alo Seiuli Vaai-USP Polynesian Outreach Program Coordinator for the Pacific)

EXECUTIVE SUMMARY

Great attention bordering unto a cautionary approach was executed for this great milestone for the USP EU GCCA project and its dealing with one of the pillars for this Project namely the Community Engagement Part. The NPAC Samoa and its members have been very thorough in executing this part of the activities in selecting the villages providing a self encompassing environment so the selection of sites was informed by a collection of data and information about the various Climate Change Work in Samoa, those that are involved and also villages that have already been included in the various Climate Change Project to date in the country. The provision of this information as directed by the NPAC before the ad hoc NPAC Meeting in May 2012, was done by selecting a Sub Committee to look into this and report back to NPAC before selection of sites, attested to the fact that there are still other villages that have no idea about Climate Change, information existing so far from other Climate Change activities therefore will act as a platform by which this selection of sites will be based. More importantly, it will of course make way for Conflict of Interest from members to evaporate!

Accordingly, the process of selecting the sites have been rigorous and participatory, a property that is highly needed if selection is politically, religiously, culturally and from Climate Change perspective, is balanced. The Team assessing the sites have learned a lot and gained experience from this exercise and so are the villages and villagers.

The Team has also realised how huge the issue of Governance is when it comes to all villages in dealing with the various development both domestic (in village) and on the national level. The fact is, if the Governance and "Pulega a Alii ma Faipule" (village Council Governance) is not that tangy, things will continue to fall apart despite huge assistance and help. Due to past shenanigans with the village Governance, the mismatch maybe due to very little knowledge on the governance part, has for the team discovered that managing resources for all villages leaves a lot to be desired. During the course of this project, the Team is adamant that this trend in villages can be changed. It affects all facets of village life and through this work, and that their experience, they believe they see the end of the tunnel for the better. In short, thousands of ways to skin a cat!

Accordingly, whilst some of the soft activities to be executed by the project for example awareness programs through some tangible activities including the young and youths and the various organizations inside the village, eg women's committee etc, it is imminent that the need for follow up is highly recommended. There's a definite need for awareness programs due to the lack of knowhow re. Climate Change in Samoa. There is also a pressing need for all sites to be visited as there is virtually no knowledge and awareness on Climate Change except for Manase Village which, under control of autocratic ruling (One Chief-One Family) this High Chief knows all the information about Climate Change and Ozone layer but have yet to inform his village about this knowledge utilising a participatory activity with village and family.

Village councils have also stressed the use of mouth to mouth passing of information from generation to generation that was affective and effective traditionally. Today the influence of technology such as mobile phones and TV is disengaging this medium of old. Indicative of the need to reconnect with the youth through this old methodology that will bring numerous benefits such as – reconnecting strong ties between youth and elders, expression of concern for the environment through the use of artistic mediums stemming from the depth of history and genealogy and the continued connection reemphasising the role of youth/children and elders as trustees of their heritage having heed the call to take back ownership into their own hands and educating their people on the changes brought in by Climate Change.

All in all, the sites selected have undergone the process of selection based on the GCCA Site Selection Criteria and Guidelines and also recommendations from the Assessment Team based on their merits with the various thematic areas where their experiences is highly needed. It is up to the whole NPAC committee to endorse the sites as recommended by the Assessment Team so that all other activities that follow will entertain the concept of "lock and key" hypothesis, as things will fall exactly where they should be!

On behalf of USP EU GCCA and Implementing Agency PACE SD, a vibrant thank you goes out to the Members of the NPAC committee for the diligence and support and quality advice in the management and execution of the Project activities. A huge cheer for Vaasilifiti Moelagi Jackson, our NPAC Chairwoman and Chairperson, who was determined like an African Tiger in the wild pursuing a cheetah, to attend with the Assessment Team, one of the milestones for the Project.

Last but not least:

To Afioga Peseta Frank Fong, ACEO MAF, Susuga Sami Lemalu, MNRE Forests, Afioga Tamasoalii Saivaise, MESC - interested on Climate Change on French Tourist girls and not the selected Villages, Afioga Seiuli Allan Alo Vaai, Coordinator for Polynesian Outreach Program for Pacific (USP) on Education and Arts, Afioga Tile Tofaeono, MNRE (Thank You for being a driver mate, highly appreciated), Afioga VaifaleTevita Simeti of MWCSD (Internal Affairs) the gate way to community network and endorsement.

Vinaka Vakalevu and Faafetai lava

APPRAISAL OF 12 SITES TO SELECT 6 FINAL SITES (Upolu Island and Savaii Islands)

INTRODUCTON

A special sub-committee was selected from within the NPAC tasked with looking into various Climate Change related projects within Samoa to give the committee members an idea with selecting the sites for the GCCA Project with emphasis to the Community Engagement part of the project. The result for this work is documented in the USPEUGCCA Project ad hoc meeting Minutes in May 2012 and this was sent out to all the members after the meeting.

The result from this meeting is the gist of this site visit and appraisal where 8 members of the committee were involved. Experts with the experience in their various fields formed the basis by which the selection of those to be involved was made. For instance, based on the 4 thematic areas from the Project document, this was used as a platform for selection by NPAC of those villages or sites to be involved in the site selection process and appraisal.

The thematic areas are:

Food In-security, Water Resources and Scarcity, Coastal sites, (Marine-Ecological) and Eco System Degradation. Those with experience and involvement with the stated thematic areas were selected on those merits. It eases the work to a greater extent.

The work for this appraisal of sites started 11th June and ends 15th June with a briefing by the NPAC Members tasked with selecting sites before the visit started. The briefing ensured the selection of the final 6 sites from the 12 sites visited endorsed to the best of their knowledge for the final approval of sites by NPAC when meeting 22nd June 2012 before the Climate Change Coordinator leaves for Tonga if it happens. It is important to note also that based n the 6 sites selected, 2 or 3 sites will be selected also by NPAC as demonstrated sites for the Project. These sites will have to be endorsed from the PMT (Program Management Team) in Fiji!

(See Appendix: 1)

It is important to note that the NPAC was well aware of the selection process for the selected sites and the subsequent final selection of the 6 sites and has endeavoured to follow closely the recommendations as stated in the **Site Selection Guidelines for EUGCCA (Global Climate Change Alliance) Project.**

Survey questionnaire provided by Seuseu Fata Seuseu of MNRE formed the basis for the questions for the various themes as well. The questionnaire is based on the various work conducted under CIM Plans II Project by World Bank. (See Appendix: 2)

Google Earth Topo Maps for the selected sites are also included in the report for ease of reference. (See Appendix: 3)

The results of the appraisal are given below:

ECOSYSTEM DEGRADATION

Village: TAFUA

Sui O Le Nuu: Palusau Saivaaia (did not attend)

Sui o le Malo:

Sui o Tupulaga Talavou: Vaovale Leuelu

Peresitene Komiti Tumama Sapi Ulu Contact: 7203986

Coastal Problems:

• The star fish??? Alamea (crown of thorns) is gaining momentum as their numbers are increasing

- Lots of dead corals and rocks on the beach. Sand is no longer visible
- Waves are quite huge now not like before. It is bringing in more "limu enaena".......)
- We could hardly see the reef. It looks as if it does not exist anymore
- The rocks utilised for fishing is no longer useful as the waves are increasingly hitting the rocks and so it is dangerous.
- Old village therefore is moving up or inland. National Geographic Magazine did document this when village is on the beach
- The greatest change on the coast is from Tafua to Palauli and that is due to erosion of the coastline
- Still validating conservation covenant with Sweden.
- No logging is taking place now although it was logged about 20 years ago
- After logging, it was great to have farms then, it must have been reason for the sediments on the sea assisting covering the sand
- The pigs also did affect it to a greater extent as more families prefer the pigs to free range
- The youths did provide in one of their programs a huge sty for the village pigs, Now it is no longer there as they now free range
- Changes due to climate change: alamea, limu, sediments on the sea, dead coral and lots of
 rocks brought in by the waves. Food in terms of agriculture crops is hard. Most of the village
 land is rocky so it is a disincentive to farm for most families.
- Prefer to dam their own water source for the village. Water provided by government is OK but they do pay for it when they have their own water source. Need help in this respect.
 Other projects have made visits and have reported the hardship of pumping this source to the top to supply the village. They strongly suggest that this is their choice.
- The Sui O le Nuu did not attend. Members present did comment if that is what a Sui O le
 Malo does all the time it shows a no care attitude which is no good for the village. Some of
 the issues voiced, were never linked to the Sui O le Malo monthly meeting neither the
 respective Ministries.
- A fire did damage one side of the village neighbouring on to Palauli in 2011
- On asking whether the village council is looking into the algae limu part of the damage to sea
 whether they have any control in place to reduce this risk. Because of god was the answer.
 He also mentioned it is due to logging in the past 20 years.
- On asking what the village now needs to do to reduce these unwanted risks the Tuua answered. He said the village needs to plant more trees on the ridge and also near the dormant volcanic section of the mountain. They have requested the fisheries conservation for the village but haven't turned up. There's a need to follow up on the water resource of the village so they benefit out of this resource.

- Near their water resource area they had tilapia fish project. This might also contribute to the algae formation on the beach. When the flooding occurred all the tilapia fish project was ruined and everything ended up in the sea.
- Three village sections: Malae Souli, Gataeloa and Ove

ECOSYSTEM DEGRADATION

Village: PALAULI (VAILOA)
Sui O le Nuu: Mataafa Esau Poufa

Sui o le Malo:

Sui o Tupulaga Talavou: Peresitene Komiti Tumama

Contact:

- The Graig Company is mining sand from the Mangrove area
- Going on for more than 20 years
- Other companies are given mining sand license and permits, some are not.
- Mangrove commercial dealings have now divided the village
- Parliament Minister for Finance is the rep for Palauli Constituent
- Allowed sand mining in 2005 for Paplauli to develop water tanks to supply water from Paluli to Puapua village another village earmarked for tourism resort development.
- Changes so far: In 2005, the mining of the sand has deepened the area adjacent to Mangrove. This has allowed sharks and other bigger fish to come on shore. One person was beaten on the leg
- More than 1000 meters of mining from the mangrove areas into the sea has deepened the channel and has allowed the sea to inundate the surrounding areas on high tide or during th floods. It is dangerous now to fish in the mangrove itself and on the sea.
- The forest is untouched and it is OK
- Sea shells like pipi fole and ipo which were the main food source for most of the villages is now disrupted and believed to have been moved elsewhere
- Sea turtles are seen only during hide tide believed to be in search for sites to ly eggs when it
 is highly reduced
- Village are only taking the dried materials from the mangrove areas
- They use nets like upega and traditional bamboo fishing lines and casting for fishing in the mangrove areas. Also fish for crabs as well
- The Sui O le Nuu has just been selected by the village but have not yet been endorsed by MWCSD. When asked about problems he knew the village is facing-he said: Im new but I will look into that with an open heart!!
- In terms of sea level rising, he said that is happening in Vailoa Palauli no doubt about that.
 They have already been equipped with a sea wall from the ADB program. But they have
 witnessed how useless is this when in times of flooding and high waves when it hit the
 village. The poor village school nearby has always been affected sending the kids home in
 case

On what to do to avoid sand mining in the future: He mentioned it is best to tell council to increase the mining cost per truck from 450SAT\$ at present to 2000SAT\$ to avoid this.
 However he is unsure if this is taken by the whole council and some chiefs are corrupt. As a result presently, the village is divided now. Families who owned the land covering the mining area and nearly all of the mangroves are now blocking access for the mining area with stones when we visited.

WATER RESOURCES SCARCITY:

Village: FALEALUPO

Sui O le Nuu: Auvaa Lesa
Taitaifono komiti Sui O le Nuu Taii Tulei Gisa
Sui o le Malo: Puti Talitonu

Sui o Tupulaga Talavou: Aumua Soifua Tagatanuu Peseta

Contact:

Sui O le Nuu: 7710500 Sui o Tina: 7783743 Failautusi: 7747424

- Villagers are now moving back to the coast since hurricane Ofa and Valerie 1990/1991 respectively when they moved inland
- New churches are now built back on the coast
- No government pipe in place to ensure that water will be supplied to Falealupo in the future
- Water tanks have been requested for along time for Falealupo
- Water tanks are around but it is highly not enough for all families
- Some donors eg EU, provide water tank and allocate 5 families per tank. A problem exist in
 the sense that the family where the tank is located will use it to the max and the other 4
 families are given less creating tensions and unhappiness. The Cardinal of the Catholic
 Church have provided other water tanks but still not enough.
- From October to January, when the rainy season is there for Falealupo, will need to fill in all tanks. The problem is that equipments to catch water is hard to get by and the corrugated roof iron to catch as much water is very small to have an effect in filling up the water tanks.
- At present, village pay SAT300\$ to Samoa Water Authority to fill in their tanks and the water is from Samata Village.
- Falealupo have natural springs and water holes sparsely located within the village. Hard to
 use pumps for these as they dry up very quickly. Most are now covered by vines and litterol
 forests as they do not hold water all the time. Water will disappear when Falealupo is in
 drought conditions.
- Falealupo do have bore holes for water. One hole was utilised by the village. Unforyunately the government took the pump back during the Previous Prime Minister Tofilau Eti Alesana, The Villagers found out later that the Prime Minister was using this pump in his farm!
- The other bore whole since beginning of 2012, the bore hole pump burned badly as the power supply was short to run the pump to maximum. So much for SWA engineers. The village has asked for a new contract from SWA to continue the work. Answer given by SWA sorry not enough power!
- A thought from the committee NPAC wether this is due to political affiliations. However it is believed that the SWA is at fault here.

- Falealupo from the beginning lacked this resource for their survival in fact it lack this
 resource period. It calls for Alii and Faipule to knock all the time and monitor their requests
 every now and then. Knock on any door is the name of the game don't sit on their laurels
 and wait. They believe it is government to provide water at a much reduced cost for
 everyone in Falealupo to benefit.
- During time of water shortage for village, water for drinking and tea is rationed. Shower and Laundry needs will not use water during this time. Toilets will use sea water and boiling root crops will utilise sea water.
- For the coast, there is a huge difference in the sense that waves are now very stronger not like before.
- The fish catch is still Ok but neighbouring villages are doing a great disservice by utilising ava niu kini on our fish stocks. We do have conservation for Faisua but other villages are taking advantage of this as we do not have boats to police this just a bit outside the reef.
- Falealupo has a Primary School
- Cocoa and coconuts are the only crops to depend on during droughts. It is also good for
 marketing purposes and selling these surplus in the market when the supply is great. Ufi or
 Yams (alata sp??) and cassava (manihot esculenta) are encouraged to be grown during
 drought.
- Talo (colocasea esculentum) and Taamu (alocasea esculentum) hardly survives the drought
- Bananas (Musa sp) hardly survives the drought to the effect that suckers or small banana plants will be hard to find from the corm.
- Falealupo did have a conservation convent with SEACOLOGY lead by Nafanua Paul Cox. The conservation agreement entailed a no logging at any one point in time. Many loggers were here with huge offers. The Alii and Faipule was adamant that logging is a big NO NO!!
- The agreement is about 50 years. The allotted area of the forests, called Vaomatua which lies on the Eastern Road to Falealupo. The rest of the Falealupo Forest is still under the Village Pule.
- The money from such is in the USA. It will be 20%/year for Falealupo. Nothing has been received since then. Despite this, Alii and Faipule are still holding on to not logging the forests

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- As a result, the village has its own logging business. The great thing about this is that, most
 of the trees felled during the hurricane Ofa and Valerie 1990 and 1991 respectively, are still
 durable after nearly 20 years. Eg is the Ifilele Tree (insta bijuca) used in some parts of Samoa
 for carving kava bowls but used by Falealupo for durable building materials for houses. After
 a ceratin sale, some reasonable amount is given to the Village as they do own the resource.
- They believe this way, the village is spared from fancy royalties espoused by government obtained by felling other trees from the main tree being cut where no one trusts. Besides logging companies havoc the forest by bulldozing roads within the forest for transporting the felled trees. Falealupo village doing this will sustain their forests forever. It allows for sustainable growth of the regrowth after all the sunshine is now fully exposed to the little trees below. This is why they never accepted requests from the loggers for felled tree after the Ofa and Valerie for fear of killing the young vegetation.
- This is why requests from the loggers for felled trees only is also rejected.
- Falealupo has also been briefed about various opportunities of obtaining aid assistance for village projects under the CSSP assistance. This assistance is facilitated together with the New Zealand Aid and Australian Aid has yet to join and the categories are 50,000, 150,000 and 300,000

COASTAL SITES: Marine and Ecological

Village: AUALA

Sui O le Nuu: Togialelei Gasologa

Sui o le Komiti: Aliitasi Lala

Sui o Tupulaga Talavou: Linda Liufau Siaosi

Contact:

Sui O le Nuu: 7233290 Sui o le komiti: 8405215 Sui Talavou: 7747424

- Have sent request for Sea wall
- 2 –3 meters of land affected by erosion around the coast and sea moving inland
- Huge changes we believe is due to climate change. Corals are dead and fish catch has been
 drastically reduced. Our neighbours are contributing to reduce fish catch due to use of
 chemicals. We do not have the means to police this.
- We believe there are commercial fisher men utilising our fishing area during the night most times they come with powerful engine boats and highly developed beams under water. We do not disturb them, as we are sure they are also equipped with guns.
- Have bi laws to protect our fishing resources
- Due to erosion of the coast line, we endeavour to plant coconuts to prevent erosion the best we could do.
- No awareness program has come to the village due to climate change.
- Cocoa is good food source but we have seen the changes during fruiting time as the flower blossoms are reduced or very sick and diseased. Shading them does not help so it needs to be fully exposed into the sun.
- During drought we forbid cigarette smoking in the farms and farmlands as protection from forest fire.
- The mangrove area has changed a lot we therefore promote growing the mangrove trees ie only one variety is there. A problem we realise is the need to build a wide bridge on road where the sea comes into the mangrove area. Presently, the road is utilising small round blocks to allow the sea in, This is bad for the mangrove area and our drinking and bathing pool therein. They strongly request assistance of government or donor, to change the construction of the bridge to save and sustain this valuable resource which had been a livelihood of the village in the past. As of old whenever there were unexpected visitors this resource will assist the village deal with sustainability and also their old practice in the past where during visiting from other villages or meetings we just go to the mangrove area block the old bridge entrance and collect "palani" fish to the feast. We need to recapture this goodness before it is lost again.
- Tilapia was introduced 3 times into the mangrove area it did not work. Maybe because of the imbalance between the water and sea water.
- Climate change has contributed to our understanding on different diseases and pests now
 evident in our farms. We also believe it contributed to some of our elders who we believe
 are quite sick and the government hospital doing nothing about it.
- Half of the village is staying around the coast
- Have requests for School building and a rugby and playing ground

FOOD IN-SECURITY

Village: ASAU

Sui O le Nuu: Tupai Fiamatai Sui o le Malo: Gamauga Utuloa

Sui o Tupulaga Talavou:

Contact:
Sui o le Nuu:
Sui o le komiti:
Sui Talavou:

- From June to October is drought period
- Rain will come around January
- Bi laws in place to forbid fires around drought periods around the village and in farms ner the forests
- Due to land issues with neighbouring Aopo village, boundries have been demarcated legally
 and has further added land for Asau village towards Aopo. Agreement already in place for
 such changes. Because of this, villagers have been very proactive in planting farms on this
 new land and therefore food is secured for the future although during drought seasons, the
 food growth has somewhat reduced due to heat of the sun. This is the effect of the drought
 on the land for farms.
- When this happens to Taro and Taamu, no more vegetables can survive during this period. Beans can grow during this time.
- Dust increases in the village during drought season
- Rain does not have any effect during such season as it is mostly rocky. However the village roadsides experienced a very quick flow into the sea making it muddy for a few days
- Population more than 3,000 not including those who frequent Apia township due to work and school
- Land for agriculture is enough
- Asau always prepare for fires in the forests and on land
- Historically, Asau forests was logged by Potlatch company in the past. Even though people
 were getting paid, they lived always in poverty. Nowadays, people are now living freely on
 their land and logging is highly forbidden. Reforestation programs have been instigated in
 Asau
- Great change so far due to climate change. Farm wise, food crops are hard to get not like before. "Punefu" is a process where people are now digging for crops like taro and taamu as they now produce very small corms and roots. Bananas are hard to grow and very few suckers to be produced per plant as the banana bunches are getting smaller and smaller. Whilst the villages do have farms, this time the crops suffer tremendously due to shortage of water through rain.
- Cocoa plantations suffered the most and as a result most cocoa plants die out as the flowering also is highly affected therefore affecting yields.
- Manihot esculenta (Cassava) and yams including the wild yams are very important drought resistant crops that Asau depended on are planted continuously around this period.
- Snakes are now ever abundant than before. Do not know why this trend is there. But believe they are responsible for adding water to the soil through crawling between rock crevices as a natural response to the limited water supply.
- "Peva" in the sea is also increasing. Crown of thorns are increasing in numbers as maybe the corals are affected as well.

- Village also has bi laws for harvesting common sea food like "kugage" (sea shells), asi, kio and others
- Siapo (tapa cloth) is not produced in great amount as the women responsible have died and no one of the women in Asau is following up on this product. Believe the woman are tired of doing this.
- According to sui o le malo, changes so far for the women in terms of climate change, is that
 the mulberry tree for tapa is not growing as before and has died out naturally. Pigs have
 been allowed to free range as the soil is no longer satisfying most of the pigs need for
 example, enjoying a bath in the waterlogged side of the sty. But this has now caused some
 problems as it does create tensions amongst the families due to playing havoc on other
 families farms and gardens.
- Usually farms have been planted and harvested and then another set of crops are planted on the same spot with no problem of regrowth. Presently after a farm is harvested, another crop is planted straight away. The second time will experience a bad crop, as the soil may not be supportive of the nutrients for growth and also exacerbated by the lack of water.
- Asau has water holes that the village depended on sometimes. Most of these water holes have dried up.
- Asau has a Primary School, a college and a kindy
- When dadap tree is red due to flowering (mu le aloalo) octobus is ready for the table, the weather at this time is bad for people and great for animals. Kapok tree when flower, is ideal time for nearly all yam varieties to be harvested.
- Pig hunting in Asau was done within the forests, nowadays, you can hunt well below the forests and get the pigs
- The great and important problem we experience in Asau is employment. After school or
 college and being a drop out, most students are jobless and tend to stay home. If not a taxi
 driver, they will stay at home and follow the same routine like other adults. Go the farm in
 the morning, come back in the evening.
- Tap water comes at 5am and close at 10am, then from 3pm to 10pm
- Asau has a mangrove area but a hotel development has cut down most of it.
- There is a great need for a consistent and abundant water supply. Water is the answer to our problem with our farms.

FOOD IN-SECURITY

Village:	AOPO
Sui O le Nuu:	Pa'o Lilia
Sui o le Malo:	Agai
Sui o Tupulaga Talavou:	Mao Laki
Sui Komiti:	Metai
	Finautele Salafai
	Pili Faailo
	Meafua
	Tautinoga
Contact:	Fagaimanu
Sui O le Nuu:	7252715
Sui o le Malo:	7732161
Sui Talavou:	7207623
Sui komiti: (Metai)	7207331

(Finautele S)	7202504
(Pili Faailo)	7715588
(Meafua)	7715588
(Tautinoga)	7774884
(Fagaimanu)	7202504

- It has been quite long when we no longer log the forest
- Ah Liki logging company has been requesting the village to log the forest but have not been allowed anymore!
- It is due to logging in the past that the side effects have been felt by the village
- Water has always been a problem for Aopo
- A machine was there to drill the location in the village for water. The village has advised to
 bring the drill down a bit to the middle of the village but government workers believed this is
 where the water is. As a result so many pipes were needed to drill the place yet could not
 reach where the water is located.
- Some projects have provided for water tanks for the use of the village but not that all families have water tanks
- Now water is no longer a problem. Water through to Aopo is obtained from a neighbouring village called Letui it is a continuous supply for the village and hence there is no longer a water problem for Aopo
- Agricultural farms are highly affected. The process called "logola" or when all things are affected due to drought is felt in Aopo.
- Ufi vao or the wild yams is the last resort for the village during drought periods
- The village farms are now moving inland affecting the forest to an extent
- Hunting for pigs is still done but pigs are moving inland just where the farms are located
- "Afato" or larval stage for a certain Coleoptera Beetle of the Cerambicidea family of beetles is one of the food sources for the village is now no longer available. This is due to the unavailability of a certain indigenous forest tree that this beetle depends on for laying eggs. No one knows whether this particular beetle is utilizing another tree for laying eggs or is now moving deeper into the forest.
- The village has agreed to utilise about 6000 acres of land for conservation purposes and replanted with assistance from the Forest division of the MNRE Ministry.
- The village is far from the sea. Hard to do any conservation effort as no one to police this.
- Huge effect now on the fish catch. In the past, it takes one day for a fisherman to go fishing and bring home the catch in huge amounts. Nowadays, it takes a night or 2 nights for the fishermen to go fishing yet the catch is very low.
- Nearly the whole village is not involved with planting Nonu (citrus morinda). Few families are involved by harvesting the wild nonu to provide some income.
- Programs for youths need the advice from Alii and Faipolos or village councils
- There have been no awareness programs pertaining to climate change in Aopo
- On asking if there are any problems for the youths, the answer is there are no problems for youths at present
- Youths do involve in tourism by dancing and performing in neighbouring hotels
- Mothers are involved in handicrafts like Samoan fans and weaving finemats but not on a larger scale
- There are no mosquitoes now in Aopo but before they were plentiful
- Legend important from Aopo perspective: Tagloaalagi story is the Tagaloa from Aopo

ECOSYSTEM DEGRADATION

Village: MANASE (GAGASE)

Pulenuu: Taito Tanumafili Muese Sui o le Malo: Luse Tauanuu Muese

Sui o Tupulaga Talavou: Laumua

Contact: Sui O le Nuu: Sui o le Malo:

Sui Talavou: 7792003

- Manase village is owned by one person and family: Tanu Taito Muese
- As a boss, his running the process of "faiganuu" or village management as an autocratic practitioner
- Since the Tanu Beach Fale development is preferred by government cabinet ministers and
 even the Prime Minister as their hotel when in government business trips over at Savaii
 Island, his networking and understanding of the environment is huge. He needs to bring this
 knowledge down to his family members so they are all on par with these knowledge he
 possessed
- He is looking at a participatory way of running the village and do some delegation so he can concentrate on his core functions efficiently
- He set up tourism business when government after the aftermath of Hurricane Ofa and Valerie 1990 and 1991 respectively supported tourism development as the only resurector of hope for the economy of Samoa to sustain itself in the face of adversary.
- Beach fale development for tourism started in 1994
- Due to the existing 2 rivers behind the village and the perception that they will give the beach a dirty outlook, 2 rivers at the back of the village has been blocked and now causes a lot of trouble and problems for the village. Tourism has disrupts the natural process cusing erosion. Need to let the water back into the sea
- Since started, the beach was about 5 to 10 metres from the sea
- Now the sea is moving inland and now efforts to curb this is by planting lots of coconut trees to hold back the sand and allowed the medicinal plant "fuefuesina" (vigna marina) to cover the sand and prevent it from being washed back into the sea
- Did not perform an EIA for the tourism development product when started
- No wish to provide for sea wall done by government all over Samoa as this is not good for tourism for Manase.
- Conservation program for fish has been done since 1996
- Forest have not been logged. Poumuli, Ifilele (insta bijuga), dominated the forest. Ifileel is
 used for village development for building housed and making furniture which are highly
 valued.
- For agricultural produce, taro and other crops have been affected due to climate change.
 Taro and bananas are highly affected. Although the Misiluki banana (ladies fingers) is very adaptable and seem to have no effect at all
- Oranges, Breadfruit and Mangoes are other crops they depend on. They experience a
 change in Breadfruit production as it does not follow a trend like it used to. Even mangoes
 seemed to fruit quickly with many fruiting season not like before. It is an indirect benefit
 from Climate change

- In terms of youth, 52 youths are involved and family members of the same clan. No climate change seminar has ever been conducted in the village.
- For the woman member, she stated that no awareness program about climate change has ever been conducted in Manase
- She is not aware also of CSSP (EU Funded) program to apply for project to assist their village

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COASTAL EROSION

Village: SAPAPALII
Sui O le Nuu: (2 members) Seuili Meki

Seuili Meki Lio Faavaivai

Sui o le Malo: Tusi Tuilaepa

Sui o Tupulaga Talavou: N/A

Contact:
Sui O le Nuu: 2

Sui o le Malo: 7731235

Sui Talavou:

- Village has 2 Sui O le Nuu given the size: One Sui O le Nuu takes care of the other section of the village referred to as NOFOALII, the other represent the other half of the village called ALOALIIi
- There are 4 subvillages in Sapapalii. Aiga Samalietoa, Faiga, Nofo i ituaiga ia Sapapalii and Le itu Nofoalii.
- Women have 4 committes representing the 4 sections of the village but 1 overall committee for all women when together
- The village has a water shed area with 2 rivers running towards the sea
- Given the way bridges are built on the main road, this has affected the free flow of the river towards the sea, the engineering knowledge as engineers do not understand how the water flows. Sometimes flash floods happened affecting traffic and playing havoc to neighbouring households killing pigs and chickens.
- During heavy rains, the water and rivers seemed to go all over the village and great damage
 is done to houses and land. They believe the way bridges are built has regulated the water
 from flowing freely and thus the danger to household and domesticated pets as well. Most
 are still using land latrines and this also endanger health of the village
- This has lead to diseases for domesticated animals in the sense that chickens died on the trees and some who survived suddenly died on land progressively as weeks goes by
- This also affected agricultural produce as Breadfruit fruits fall off the trees before matured
- Flash flooding is becoming dominant now even on sunny days
- The village has great mangrove area but due to lots of flash floods, it seemed to endanger the mangrove area as most of the food we depend on for living is somewhat reduced for example "pipi or sea shell.
- No methods by village to reduce this risk for mangroves
- African Tulip Tree is a problem for farms as it is an invasive species
- Cocoa and yams are OK
- Village has a huge cattle farm why it affects the village due to flow of the river when flooded as they are now encroaching toward river banks.

ECO SYSTEM DEGRADATION

Village: TAELEFAGA FAGALOA

Sui O le Nuu: Fuiavailili Masani Leiataua

Peresitene a Tina: Lita Iefata Sui o Tupulaga Talavou: Metusela Tago

Meatuai Faaletatau

Sui O le Nuu: 7256062 Peresetene Komiti Tina 7513054 Tupulaga Talavou 7513054

- Water smells badly. Helath and MNRE have visited and nothing is done about it
- Drinking water has been reduced
- Quite a number of springs the village depends on, but eventually they all die out
- Very few sea food sources now not like before
- Pigs are free range
- Other water spring sources needs to be treated for ecoli, this is used only by village for bathing
- Water flowing from the lake is smelly and it is making the river brown in colour
- No one is farming the side to the pipe for electricity, they are now farming the other side
- The coast is now eroded and it has a bad colour due to sediments from the artificial lake for electricity
- Fish catch has drastically been reduced as well as other sea shells. Village has fished closer to coast but now they moved deeper into the lagoon as the coast is now soggy with sediments
- Corals have been damaged as well
- Sea level has risen and in some times, the sea comes into the peoples homes
- Changes have been noted with the fruiting of coconuts and breadfruit trees
- Taro crops are affected by drought as well as Taamu
- Mangoes are all right although they fruit about 3 times a year now which was not the trend
- Land is quite rocky for crops
- The river floods about 3 times ayear
- Need to replant the river banks
- Primary school at the village
- No awareness programs ever for climate change

COASTAL SITES

Village:	EVA
Sui O le Nuu	Matamea Faafetai
Sui Ole Malo	Lauano L
Sui o Talavou	Asola
Contact:	
Sui O le Nuu	7727801
Sui Ole Malo	7768902
Sui Autalavou	7768902

- Corals are dead
- Coastal erosion about 4 metres inland
- The coast is becoming soggy
- The forest is Ok farms are hard to do since it done on the slopes
- Most forests trees (indigenous) are no longer found in the forest
- Water resources are OK as they have own water resources
- Water is affected by drought
- No bilaws at present
- No awareness at all for climate change
- Evidence of rising sea level when high tide, is when the sea comes right into the homes
- Sand mining has been done a lot of time by the village
- Lots of birds are not in the forest anymore
- Breadfruits are fruiting continuously not like before so as mangoes
- Pandanus are still used by women for weaving mats but is beginning to die out due to heat

ECOSYSTEM DEGRADATION

Village: Tafuaupolu (4 village communities)

- Consist of Vailuutai, Faleaseela, Fasitootai Pata Falelatai Villages
- All connected by Rivers and mangroves
- Effect are common by all villages that the rivers needs to be protected as the flow is highly reduced
- Fasitootai has a reservoir to drink from
- Farm land for all the villages experience a lot of changes not like before
- Taro is hard to grow some crops like Breadfruits and Mangoes have indirect changes due to climate change as they now fruit continuously
- As the Tafuaupolu is the watershed area for these communities, some communities have cut
 forests right into the areas where water springs from while in others the water is protected
 as they do not cut down the trees nearby
- Faleseela experience the damage to mangroves due to increase frequency of high waves
- All villages experience a rise in the level of the sea
- All villages experience a reduction in the forest due to the heat from the sun
- Fasitootai experience a reduction in the mangrove area as the "limulimu" is more prevalent endangering the mangroves. Talie trees died out around the area
- Other

Eva village (to be inciorporated later when info comes in from assessment team)

DEBRIEFING BY ASSESSMENT TEAM: BOTH SAVAII AND UPOLU ISLANDS RECOMMENDATIONS.

After the last site in Savaii Island at Sapapalii Village, the Assessment Team was directed by the Chairperson to stay behind as this is very much opportune for the Team to select the sites that they feel should be the best out of 8 for Savaii visited.

On the Upolu Assessment, 4 sites were selected to select 2 for Upolu Island. After assessing 3 sites (Taelefaga, Eva and Tafuaupolu) the Team concurred that the visit for Leauvaa village should be nullified as their problem is more to do with village governance why they still allow their lands to be mined by the business community selling rocks for development. Given that this is not a vulnerability issue, It was then decided to add ONE more village to Savaii and one site for Upolu given the importance of the Tafuaupolu as a multiple-entity that the project can benefit from as a very virgin site! In this connection, Auala Village was added to the Savaii Assessment endorsed Sites making it 5 for Savaii and 1 for Upolu.

After careful consideration of the merits and the pros and cons why one should be over the other, the TEAM has agreed that the following villages be selected. It is summarised in the matrix below.

SUMMARY OF ENDORSED SITES BY THE ASSESSMENT TEAM (5 Savaii Island, 1 for Upolu)

Village Name	Туре	Vulnerabilities
SAVAII ISLAND		
(1) Falealupo	Water Resources Scarcity	Lack water, bore holes haven't been tested for quality water and dry out quickly after rain, drought problems exist, agriculture affected tremendously No awareness program for Climate Change has been conducted
(2) Asau	Food In-security	Climate has affected agriculture production from vegetables to root crops. Even fish catch is affected and sea shells the village depend on for subsistence has been reduced Forestry is highly affected even though there are replanting schemes. Water is also a huge problem as the water seeps quickly during rainy season as it is rocky and less soil. No Climate Change awareness program ever been conducted in village
(3) Manase (Gagase)	Coastal Sites	The coast is highly affected

_	T	
		by erosion due to lack of EIA
		and need to look at the
		village backyard due to lack
		of planning in dealing with
		rivers flowing into the beach.
		The eroded beach is
		somewhat coming inland by
		3 to 4 metres. Food is also
		affected and forest trees do
		feel the impact from the
		heat. Root crops also are
		failing badly. No climate
		change awareness program
		ever conducted here in the
(5) 5		village
(4) Sapapalii	Ecosystem Degradation	Mangrove affected both due
		to climate change and
		development. Cattle farms
		and cutting the trees on the
		river banks have contributed
		to flash flooding affecting
		nearly three quarter of the
		village. Farms have been
		highly affected due to
		changing weather patterns.
		No climate change
		awareness program ever
		conducted in this village
(5) Auala	Coastal Site	The sea is coming into the
		village and coast eroded by 3
		to 4 metres not like before.
		The village is now planting
		coconuts but will have a
		problem when the sea wall
		by government will be
		constructed. Fish catch and
		agriculture affected greatly
		as it is rocky and most crops
		like cocoa and taro are
		affected due to the heat
		mangrove important for fish
		needs to be replanted to
		save the drinking water and
		protect the small fish they
		depend on subsistently.
UPOLU ISLAND		depend on subsistently.
(6) Tafuaupolu (Include 4	Ecosystem Degradation	Tafuaupolu involves 4
villages in a water	Leosystem Degradation	villages. Encroachments to
resource)		water sources from this huge
• Faleaseela		
 raieaseeia 		catchment area is affecting

 Fasito'otai 	the water bringing sediments
 Vailuutai 	into the sea affecting
 Pata (Falelatai) 	mangrove areas in Fasitootai
	and other villages. Weather
	patterns also add to the
	problem. Agriculture forests
	and sea life are all affected
	due to weather patterns. No
	climate change awareness
	program ever conducted for
	the 4 villages

APPENDIX: 1

PROGRAM FOR VISIT SAVAII ISLAND

Date	Activity	Remarks
SAVAII IS		
Mon 11/June	0800am ferry for Savaii	
	Village to assess: Tafua & Vailoa Palauli	Accommodation: Falealupo
		Beach Fales
Tues 12/June	Falealupo Matautu & Auala	
		Accommodation: Vaimoana
		Hotel at Asau
Wed 13/June	Asau & Aopo Village	Accommodation: Tanu Beach
		Fale Manase Area
Thurs 14/june	Manase & Sapapalii	Accommodation: Jet
		Over/Rosalote
Friday 15 th	Debriefing/COMPILE NOTES-select 6	Return Upolu by 2pm ferry
June	villages for NPAC info	
UPOLU Is		
Mon 18/June	Fagaloa (taelefaga) & Eva	Leave at 09.00am
Tues 19/June	Tafua Upolu & Leauvaaa	Leave at 09.00am

APPENDIX: 2

QUESTIONNAIRE GUIDE

Water Resource and Scarcity

- 1. What are ways to obtain water for your village?
- 2. What time of the year that you get water from rain?
- **3.** What time of the year that you do not get water?
- 4. What are some of the problems environment wise why the village could not get water?
- 5. What problems faced by village why water is hard to get?
- **6.** How many in the village that is affected by this problem?
- 7. Do you have any methods in place to overcome this problem?
- 8. What assistance do you want to overcome these problems?

Food In-Security

- 1. What time of the year village is affected by drought?
- 2. Do you have any indicators to let village know that these are approaching?
- 3. What effects to this have on the village environment?
- 4. Any effects during droughts and wet months?
- 5. What are some of the crops that grow well in the village?
- 6. Any problems that are usually faced by the village?
- 7. How many in the village is affected by this problem?
- 8. What are some of the ways (methods) that the village utilize to overcome these problems?
- 9. Do you need assistance to solve these?

Coastal Sites (Marine and Ecological)

- 1. Do you have any environment related problems on the coast?
- 2. Do you experience any notable changes now in the village due to weather?
- 3. Has the village any system in place to overcome these
- 4. How many in the village affected by these?
- 5. Can you estimate the damage to the village coast affected by these?
- 6. Do you experience flooding and flash floods in the village? How many/yr? any effect on domestic animals and plants in the village? How about the sea food etc?
- 7. How many in the village affected?
- 8. Any assistance needed by village to alleviate this?

Ecosystem Degradation

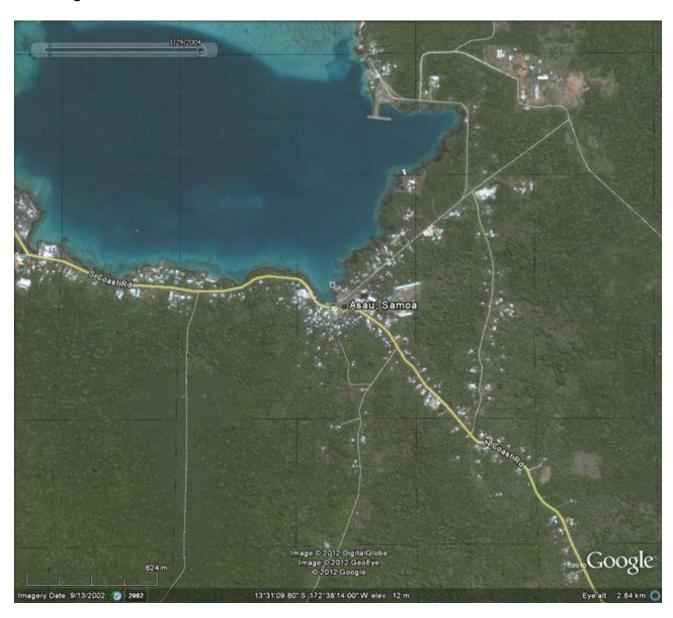
- 1. Can you estimate the size of your mangrove area?
- 2. Any changes in the coastal areas of village due to use of the mangrove resource?
- 3. Any bi laws by the village to protect sand mining and mangrove areas?
- 4. Any climate Change related changes that you experience in the village?
- 5. Any effects faced by village due to endangering the coast?
- 6. Can you estimate the mangrove area that is endangered?
- 7. Any environment related problem experienced by village (erosion of coast, reduction in sea food etc)
- 8. Any ways that you have done to mitigate these?
- 9. Any assistance needed by village to overcome these

APPENDIX: 3

GOOGLE EARTH TOPO MAPS FOR SELECTED SITES Falealupo Village:



Asau Village:



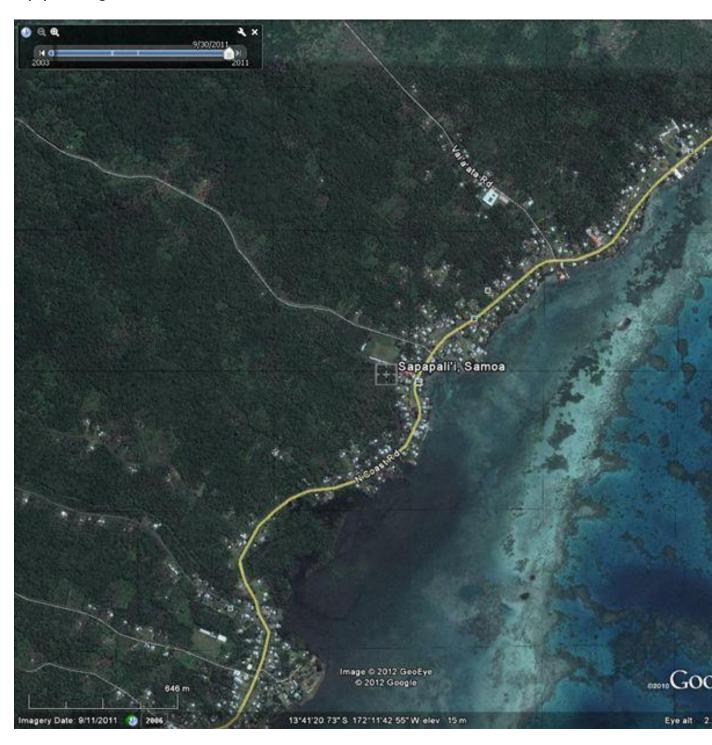
Auala Village:



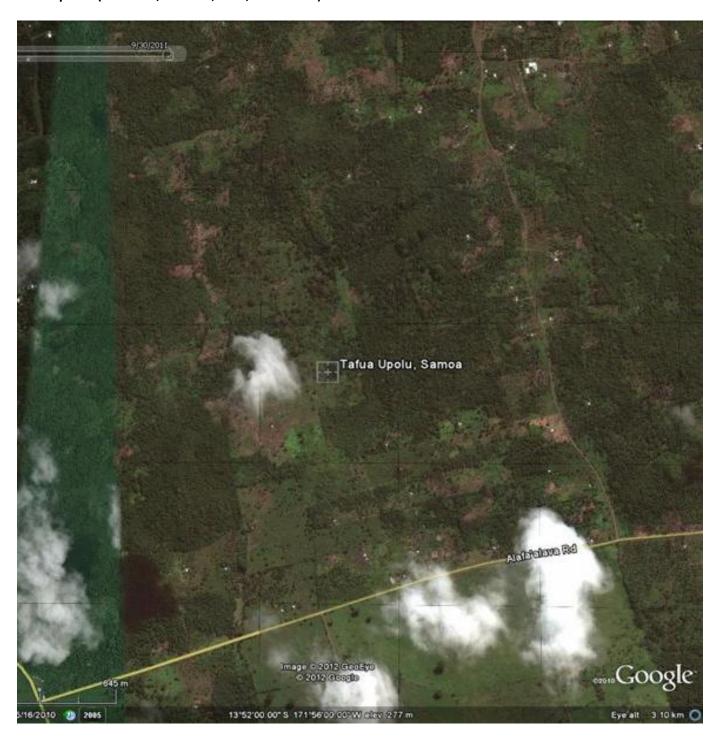
Manase Village:



Sapapalii Village:



Tafuaupolu : (Vailuutai, Nofoalii, Pata, Faleaseela)



APPENDIX: 4 NPAC Meeting Program







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USP EU PROJECT:

Support the GCCA through Capacity Building, Community Engagement and Applied Research.

NPAC MEETING PROGRAM 22nd JUNE MILLENIA HOTEL

TIME	ACTIVITY	REMARKS
3.00PM	Invocation	Chairperson or Select from NPAC Members
3.00pm – 4.10pm	Assessment Team to Report on the findings of the site visit assessment Discussion for any changes that the NPAC Needs and subsequent approval of Assessment Team Report and Recommendations for the information of all.	Chairman and NPAC Members
4.10pm – 5.10pm	Discussion and selection of "Demo Sites" 2 in Savaii and 1 in Upolu based on the results so far and also the Selection Guidelines espoused by PMT in Fiji. Inform NPAC for approval and endorsement of these demo sites and Pass through	ICC Tapu, and all NPAC Members attending. Tapu to make it clear about the need of the project and further explain the LMMA concept for the information of the NPAC

	DA 4T	
	PMT management Committee in PACE SD for further endorsement. Discussion also will reduce amount to 2 demo sites or 3 sites.	
	Introduce the communications about the difference between USP EU GCCA and GCCA SPC	ICC Tapu
5.10pm – 6.00pm	Summarize the whole process that is following for info of NPAC so they are clear and concise about activities following this milestone, ie selection of sites. Welcome the chance for NPAC to ask questions about the validity of the future activities that is following. Questions answered if any	ICC Tapu
6.05	Ending Prayer	Madam Chair
	3 - 7 -	
6.10pm	Refreshments	End of Meeting, THANK YOU and Say goodbye!

APPENDIX: 5

FOLDER COVER (Assessment Team minus Tevita Simeti (Camera Man)



NPAC Assessment Team in Asau village Savaii. Tevita Simeti of MWCSD is the camera man.