Gathering Samoan coastal information - an insider perspective

Anita Latai

Abstract

This paper considers the practicalities of conducting field-based research aimed at understanding Samoans' perceptions of the relevance and acceptability of the country's 'Coastal Infrastructural Management Strategy (CIMS) and Plans'. Government officers, consultants and other key informants were interviewed, and field research was undertaken among five village communities in Samoa during 2008 and 2009. The paper discusses the methodologies used in the study, which were designed to meet the ethical requirements of both Samoan society and the University of Otago Human Ethics Committee. A largely qualitative and interpretive research design was used. The predominantly oral nature of communication in Samoan society necessitated the use of semi-structured interviewing as the main method of data collection. The use of the Samoan language, as well as attention to cultural protocols were significant in the process of collecting data, whilst information analysis and interpretation in part adopted methods used elsewhere. The analysis of data including comments and stories told by research participants together with photographs of selected sites enabled the construction of a culturally situated analysis of coastal governance in Samoa.

Introduction

Research ethics and how they are defined are an important part of the research process. For the qualitative researcher who is aiming to construct realities from culturally defined and historically situated interpretations and personal experiences, informed consent and protection of research participants is an ethical responsibility. This paper discusses how the qualitative approach was adapted in the conducting of a field- based research on five village communities in Samoa. Moreover, it discusses how the methodology and procedures used were designed to meet the ethical requirements of the Human Ethics Committee at Otago University and the Samoan culture. While the former is a metropolitan university and the latter an indigenous society, both demanded informed consent and protection of participants before, during, and after data collection and analysis.

The devastating effects of climate change on the fragile coastal ecosystems of Samoa led to the development of its national coastal policy called the Coastal Infrastructural Management Strategy (CIMS) between 2003-2007. CIMS reflected a regional trend in the 1990s towards infrastructural management as a means of achieving coastal resilience and economic efficiency. Cyclones Ofa (1990) and Val (1991) caused widespread damage to infrastructure, dwellings, businesses and social facilities throughout the island group. This resulted in two major rehabilitation programmes that aimed to develop and protect infrastructure such as roads, seawalls, electricity and telephone poles to ensure coastal resilience and economic efficiency (Government of Samoa 2003). The first part of CIMS involved the notion of integration in the coastal management framework. Its aims included building government capability for coastal management and planning, developing partnerships between the public and private sectors, adopting a 'work with nature' philosophy, and observing the precautionary

principle in all funded programmes. The second part of CIMS aimed to create partnerships for management between the Samoan government and village councils, primarily through consultation and development of district CIM plans, to ensure efficient management of infrastructure. Given the lack of government funding for enforcement, the success of this strategy and the effectiveness of CIM Plans depended on the involvement and `buy-in' of each village and key service provider (Mitchell 2006).

This research was conducted to gather Samoans' perceptions of the relevance and acceptability of the country's 'Coastal Infrastructural Management Strategy (CIMS) and Plans'. The study used the qualitative approach as it sought to gather attitudes and understandings of Samoans (government officers, consultants and members of the village communities) with regard to the relevance and acceptability of the CIMS and Plans. The combination of comments and stories told by research participants, field observations of selected sites and policy analysis enabled the construction of a reality based on culturally defined and historically situated interpretations and personal experiences.

The oral nature and flexibility of semi-structured interviews made it the ideal method of collecting information for this research. An interview schedule was prepared in Samoan then used as a guide during the interviews. Oral methods are a common way of transferring knowledge in Samoa and their flexibility ensured there was scope for participants to discuss each issue or theme in their own way. This not only ensured that all areas covered were discussed, but also that participants were given the chance to contribute ideas they thought significant and relevant to the issue.

Other means of gathering information that supplemented interviews were field observations and policy analysis. Field observations consisting of short walks with participants and the taking of photographs and field notes were carried out after all interviews were done in a site and consent given. This was done to check out specific sites that were referred to during the interviews as well as to gain more understanding of the issues experienced in each coastal environment. The relevant legislation that were analysed included environment-related Acts such as Samoa's Land, Survey and Environment Act (LSEA) 1989; Village Fono Bill 1990; Fisheries (village by-laws 1999) Act 1988; Ministry of Works Act 2002; Planning and Urban Management Act (PUMA) 2004; and New Zealand's Conservation Act 1987; Territorial Sea and Exclusive Economic Zone Act 1977, and Resource Management Act 1991 (RMA). Policy documents included the CIM Strategy inception report, CIM Strategy document, assessment reports and implementation guidelines or district CIM Plans of the five districts selected.

Key participants

The three stakeholder groups that were investigated were government officials, consultants and members of non-governmental groups and community members. These groups were expected to represent particular views on the development, implementation, current monitoring and evaluation of the CIM Strategy and CIM plans. Their statements were expected to permit triangulation for validation (Cope 2003).
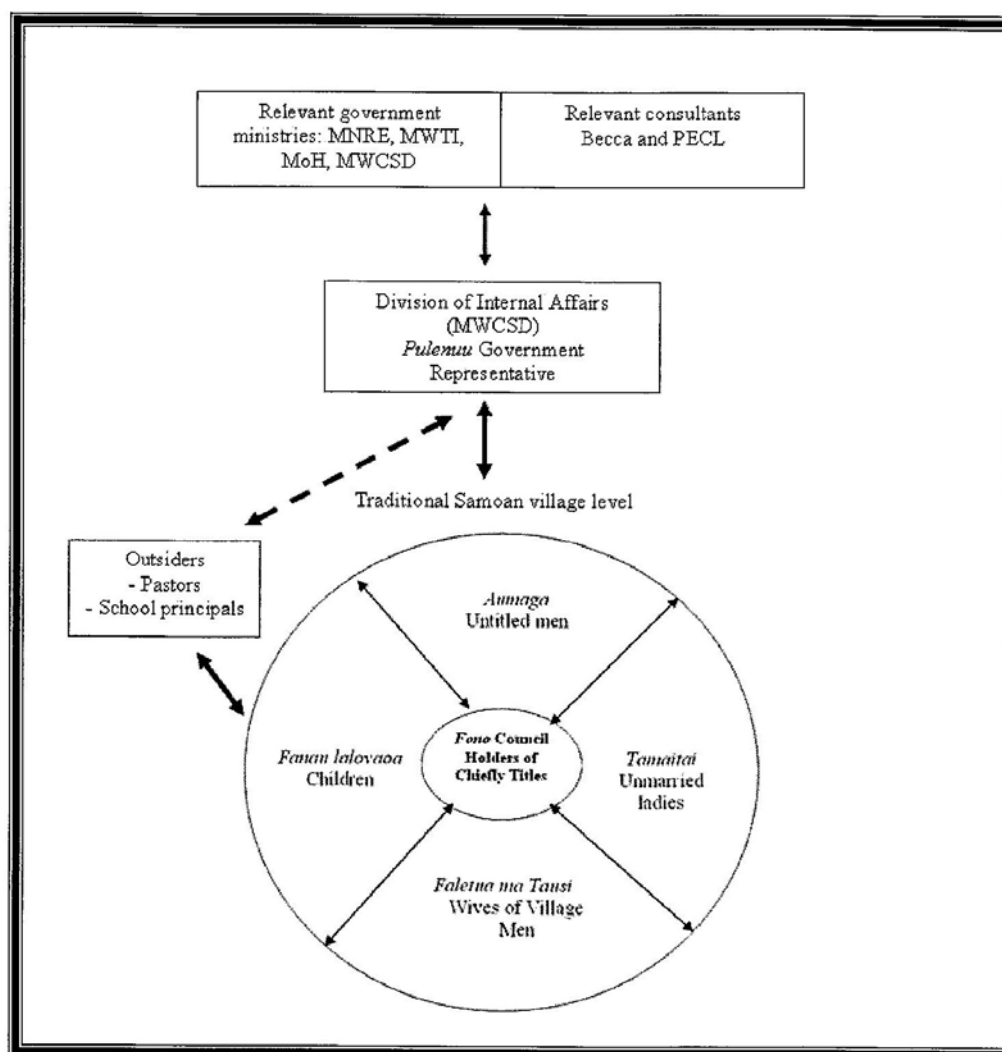
Figure 1: Groups involved in the development of CIMS (Source: Latai 2009)

Selection of participants took into account those groups originally involved in the development of CIMS at the national level (Figure 1). Four government officers were interviewed. Two were involved in the development of CIMS while the other two offered a general view of working as part of related government ministries. Also interviewed were two local consultants who were involved in the writing and implementation of CIMS.

The selection of community participants at the local level took into account well-known groupings in the socio-political organisation of a Samoan village and any knowledgeable outsiders who were present (Figure 1). There were six key informants for each site: an elder, a government representative, a chief, a pastor, a school principal and a young adult. Each community informant played a role in the village (Table 1).

Table 1: Key community participants and their roles

Informants	Roles
Government Representative	A chief selected by government and the village to act as a conduit
Chief	Holder of a chiefly title who is a representative of the family in the village council
Elder	A person usually over 60 years old, held with high regard in Samoan society due to age and experience
Pastor	Minister of the Christian faith in the village
Young Adult	A person aged between 20-40 years who does not hold a chiefly title

Holders of chiefly titles were selected because they are decision makers in the village. Their responses were expected to provide insight into the processes involved.

The elderly participants had to be 60 years of age or older. In Samoan society, these are people who have experienced changes to the traditional way of living, fa'asamoa, from colonial rule to independence and now. An elder in Samoan society may belong to any of the social groupings identified above, but selection of elders for this research drew mainly on unmarried village women, widows, wives of village men and untitled men. This was to ensure efficiency in terms of widening the sample to include groups that are not represented in other categories.

Selection of young adult participants was made in a similar way. The aim was to interview those who have lived in and experienced Samoa as an independent nation. These people are not formal decision makers, but they belong to the social groupings of unmarried women, young chiefs, young wives of village men and untitled men (20-40 years).

Government representatives are conduits for information flow between the national government and a village council (Figure 1). They are chiefs whose employment has enabled them to comment knowledgeably on relationships between government and village councils.

The pastor is an outsider in the village (Figure 1), but because religion is such a significant part of Samoan society a religious leader plays an important role in village affairs. It is a common occurrence that pastors are brought into council discussions when a conflict arises. The respect that villagers hold for them usually sees the issues resolved. There are usually several different religious groups in a village, so the selection of pastors was based on the dominant religious group in each place. It was expected that these participants could offer an informed, outsider's view of the decision making processes of the village.

School principals are also outsiders in a village. There is a school in most villages, and it may be government owned, but it will come under the management of the

village council. Principals were expected to provide external insight into the decision making processes of the village they served as well as of their home villages. Recognition of the multiplicity of roles that Samoans can play at the one time proved important in gaining the views of groups that may be under-represented in the study. It also enables the researcher to gain deeper insight into issues raised during interviews. Asking questions about the participant's background enables the researcher to explore these roles and seek more than one perspective. In many instances, a chief is not only a chief but also a businessman, a former government officer, or a parent living on the coast. Some elders are chiefs, or were educators, were pastors, or are pastor's wives. Some pastors had previously been government officers, principals or chiefs. Government representatives can be chiefs in their own right or simply members of the community. Some principals are chiefs in their home villages. Because most participants held multiple roles, they were able to see and discuss issues from more than one perspective.

Being a researcher automatically makes one an outsider in the community, but the fact that I was Samoan assisted me to ensure that proper avenues were followed when approaching participants in a local village. A combination of methods known as purposive and snowball sampling (Saratakos 2005) was used to select key participants. This process began with pastors, government representatives and school principals, in that order. The (outsider) roles that these people hold in villages made it easy to identify who they are and where they resided. For instance, a pastor's house is usually one of the biggest in the village and is located next to a church. Snowball sampling was then used to select chiefs, elders and young adults of a village. The government representative and reference to copies of CIM plans identified people involved in CIMS consultation.

Visiting the homes of these people, talking to them about the project, and ascertaining whether or not they were able to participate proved useful in gauging who will be best suited for the research. After an initial round of site visits, six people were selected from each site, depending on their availability, roles and knowledge of CIMS. The aim was to verify whether the CIM consultations included all groupings (insiders and outsiders) of a Samoan village. However, findings revealed there were some people in these groupings that were not consulted such as pastors, teachers and suspended chiefs and their families. These people were also interviewed.

Selection and justification of sites

Coastal Infrastructural Management Strategy (CIMS) currently covers the whole of Samoa, and all districts have a CIM Plan. The five districts chosen are coastal communities with distinctive physical characteristics, such as a wide lagoon, a coastal land strip and a reef (Figure 2) as well as features relating to the impacts of human activity and natural processes. These sites are representative of coastal areas in Samoa where the combination of human activity and natural processes has brought about coastal erosion, lagoon and reef degradation, and where loss of important inter-tidal habitat, particularly mangrove, has contributed to a decline in the lagoon fishery.
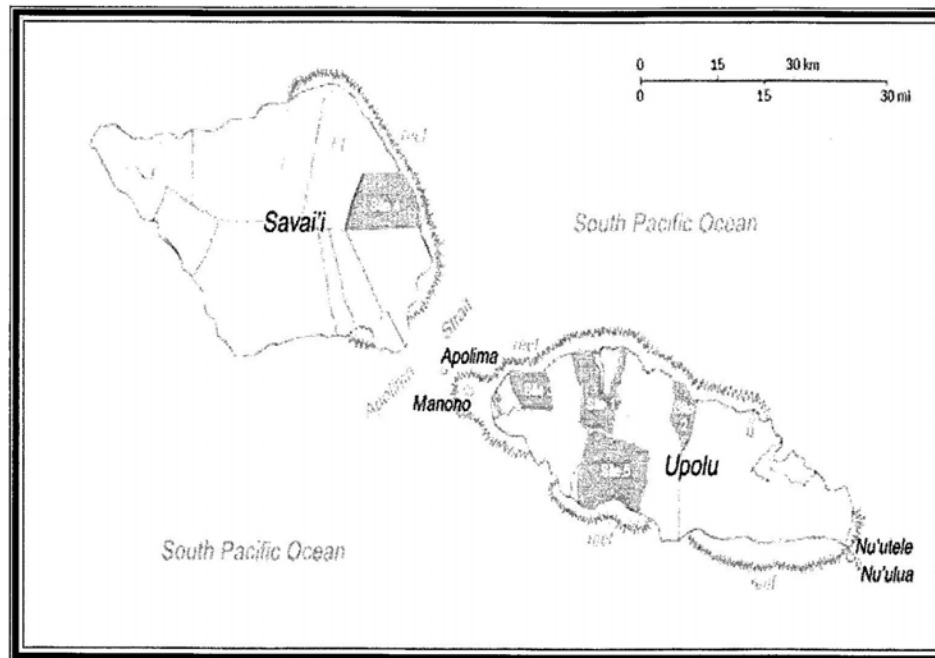
Figure 2: Map showing the five sites selected for the investigation
(**Source:** The World Fact Book 2009)

Studies of maps, as well as site visits, enabled selection of sites for detailed study according to the features previously discussed. The process started along the northwestern corridor of Upolu Island, the most urbanised area in the country and displaying those geographic characteristics. Two sites were selected from this area: one in the Apia urban area on the northeastern end, and one on the northwestern end of the corridor. The other two sites, though located on the western and southern sides of Upolu, share these features. The fifth site was found in Savai'i along its northeastern coast. This site is similar to the others in geography and is close to the Salelologa urban area, where economic development is concentrated.

Site 1: Sagaga le Falefa district

This district lies on the northwestern coast of Upolu, and its reef lies 900-3,500 metres offshore. The coastal strip is a wide band of low-lying land now largely occupied by houses, churches, schools, recent seawalls and reclamation (Figure 3). The main road is on the coastal strip, although not immediately adjacent to the coast in most places. There are pockets of wetlands along the coast in Utuali'i, Nono'a and Lotosoa, and there is a river mouth at Fale'ula. The poor drainage in these areas affects water quality and the stability of roads.
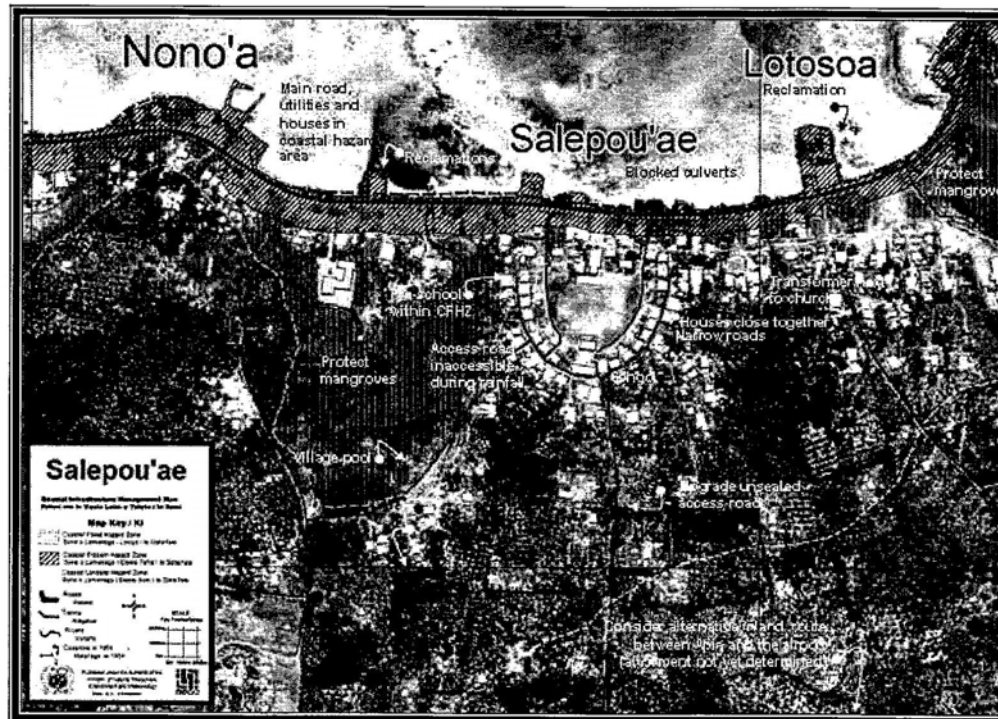
Figure 3: One village scene in Site 1 showing the extent of human activity on the physical geography of the area
(**Source:** Government of Sāmoa and CIM Plan Committeefor Sāgaga le Falefā District 2007)

Coastal villages are susceptible to flooding by coastal surges and storm water runoff. The vulnerability of buildings, in particular, to storm damage has encouraged villagers to move inland. The main road is an important feature of district infrastructure as it provides direct access between the Airport and Apia. Although not often located directly on the coast, for most of its length it lies within the Coastal Flood Hazard Zone (CFHZ) and the Coastal Erosion Hazard Zone (CEHZ).

The population of this district is 9,463 (2001 census), with most people engaging in traditional employment. Fishing and plantations provide the main source of income for village residents, although there is some employment in local schools, shops and at the Nono'a quarry. Some village residents are also employed in Apia or in nearby resorts and industry. In addition, the district supports several schools and a number of churches (Government of Samoa and CIM Plan Committee for Sagaga le Falefa district 2007).

Site 2: Vaimauga i Sisifo district

This district covers the central part of Apia, on the northern side of the island of Upolu, and extends from the coast to the highlands. The coastline varies substantially from one side of the district to the other. The eastern part contains sections of reef which range from 100 m to about one kilometre out from the shore. There are mangrove covered shores to the west, a dominant seawall through most of the city and port area, and a

developed coastal strip with reefs to the east. The district has a number of breaks in the reef, the most important being the channel which gives access to Apia Port. The high seawall which protects all of Apia harbour was built in the late 1980s. To the east of Apia Port, a smaller seawall is approximately one metre high.
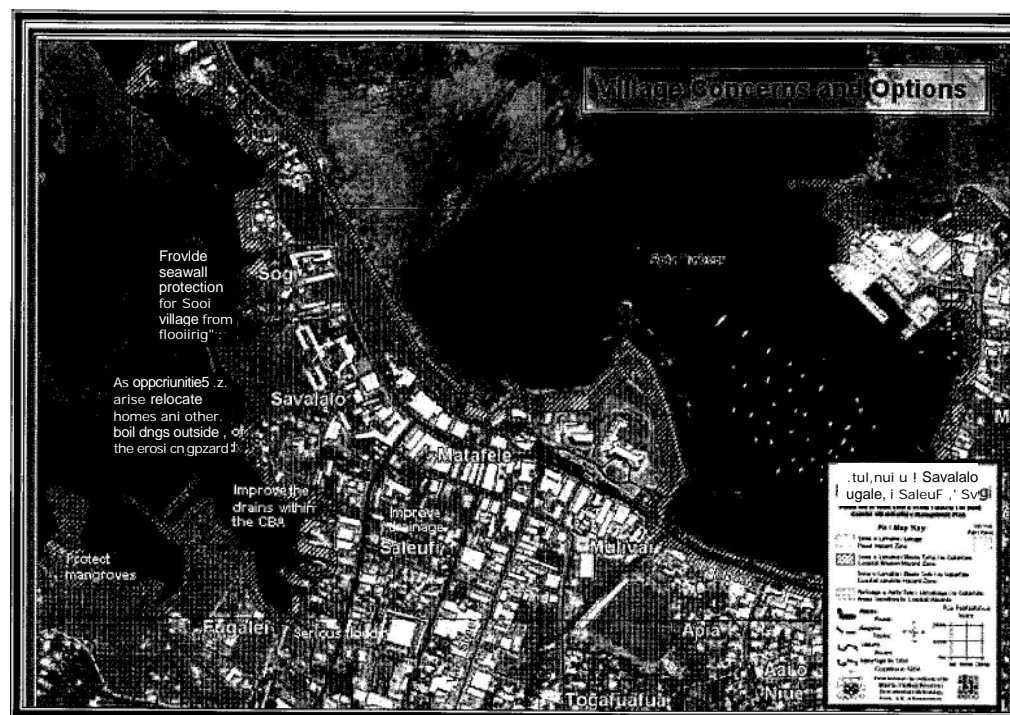

Figure 4: Apia Urban Area
(Source: Government of Samoa and CIM Plan Committee for Vaimauga i Sisifo District 2007)

There are two main rivers in the district - the Vaisigano River in the central area, and the Vaivase River to the east. The MulivaiNailima Stream flows down the western side of the district. In addition, there are numerous smaller streams and springs that can occasionally flood the more densely populated coastal areas. The Central Business Area is poorly drained and experiences surface flooding during heavy rains.

The area is characterised by urban development, densely populated deltas, coastal flats and sparse settlements further inland (Figure 4). Until recently, the coastal eastern part of the district contained an extensive mangrove area, large sections of which have been reclaimed over the years. The coastline has changed significantly in the past 50 years with construction of the high seawall, creation of a man-made island to the northeast of the district, and a new discharge point for the Moata'a mangroves at Taumeasina. These changes have altered sediment/sand deposition patterns, causing disappearance of the `golden sand beach' once popular with residents and visitors alike (Government of Samoa and CIM Plan Committee for Vaimauga i Sisifo District 2007).

Site 3: A'ana Alofi III distict

The A'ana Alofi III district is on the northwestern side of the island of Upolu and is characterised by a coastal plain with a well established vegetation cover and coral sand beaches. A reef extends along its eastern side, with two breaks that influence tidal flows and sediment transport along the coast. There are two notable springs on this length of the coast, both adjoining the 800 metre mangrove system in Fasito'otai and Vailu'utai. The four coastal villages of Fasito'otai, Vailu'utai, Faleatiu, and Satapuala are located on the eastern corner of the district next to Faleolo Airport, which dominates the coastal area.

The mangrove system adds substantially to the biodiversity of the area and includes the historic site of Liua le vai o Sina. The area is flooded during heavy rains and high seas. The old A'ana Alofi III District Secondary School and sports field in Fasito'otai was built on reclaimed mangrove swamp and used to flood regularly. Eventually the school was relocated inland between the villages of Satapuala and Faleatiu.

The main road is an important element of the district's infrastructure. The old airport main road, which used to run along the Faleatiu, Satapuala and Magia coast, has been eroded by as much as 0.5m in parts. The road was diverted in the 1970s, when the airport terminal building was shifted to its current location. A four kilometre long revetment runs along the coastal flanks of Faleolo Airport.

Figure 5: Modified coastline- Mulifanua wharf and Aggies Hotel
(**Source:** Government of Sāmoa and CIM Plan Committee for Ā'ana Alofi III District 2007)

The A'ana Alofi III district had a population of 5,161 persons in 2001. The majority engaged in a mix of traditional and non-traditional work: plantation work, fishing, and agricultural/cultivation activities. Aside from the airport, the main commercial activity in the district is Aggie Grey's Lagoon Resort. The resort occupies land between the airport and the Mulifanua wharf, and the developers raised the land close to the beach and modified the beach to ensure a quality tourist experience. (Government of Samoa and CIM Plan Committee for A'ana Alofi III District 2007).

Site 4: Fa'asalele'aga Numera Fa district

This district is located on the northeastern side of Savai'i. The coastline is characterised by fine sandy beaches and rocky outcrops, with scattered wetland and mangrove areas immediately inland. The land to the west gently rises to more than 500 metres and contains several volcanic domes. The district is unusual in that in some areas there are two reefs: an inner reef within 50 metres of shore, and an outer reef up to a kilometre away. These reefs influence tidal flows and sediment transport along the coast.

There are no major rivers in the district, although flooding after rain is a common problem for it. As a result of poor drainage, swamps or ponds often form behind the main road and houses along the coast. Land clearance for inland settlements and agriculture has increased storm water runoff and siltation.
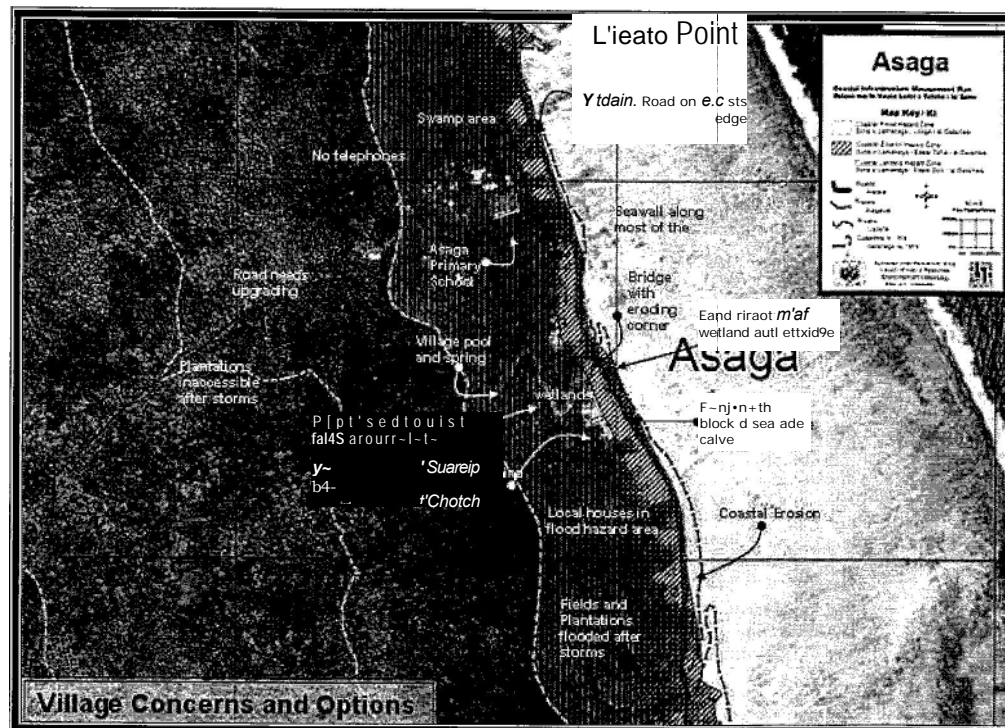

Figure 6: Asaga Coast - infrastructural development evident
(Source: Government of Samoa and CIM Plan Committee for Fa'asalele'aga IV District 2007)

A seawall was established along the coast at Asaga and Pu'apu'a to protect the main road when it was upgraded in 1995 (Figure 6). The main road closely follows the coastline and provides access to schools, shops and tourist accommodation, as well as to facilities in adjacent districts, such as Tuasivi hospital. It is considered an important part of the district's infrastructure, although it is located almost entirely within the Coastal Erosion Hazard and Flood zones.

The district has a population of 1,579 persons (2001 census). Economic activity is dominated by subsistence fishing and farming, with some cattle raised inland. More reliance is placed on fishing as opposed to plantation work due to the limited amount of topsoil over the lava rock. Non-traditional work is associated with tourism including the operation of tourist *fale* such as Joelan Beach Fale and Laui'ula Beach Fale in Lano. Approximately 120 acres of land in Pu'apu'a have been leased to the Samoan government for a hotel development project (Government of Samoa and CIM Plan Committee for Fa'asalele'aga IV District 2007).

Site 5: Safata district

This site is located on the southern side of Upolu. The area is underlain by young volcanoes and lacks surface flowing streams and dissection. Soils are predominantly clay and loam with sands found along the coastal areas. These are considered organically rich and therefore, considered highly fertile and suitable for agricultural production (Taulealo 1993), which supports the semi-subsistence lifestyle of the residents. Few springs are found on which the villages depend for water. Two mangrove forests are found with the major one, the Sataoa-Sa'anapu Mangrove Area now under conservation. A fringing reef becomes a barrier reef in the Safata Bay. Fishing and agriculture are the main activities in the district though there are tourist related activities. For instance, the Sataoa-Sa'anapu Mangrove Conservation area as well as related accommodation businesses.

Ethics and process of collecting information

The university's requirements and what is appropriate in the Samoan culture were honoured in this research. Both demanded attention to informed consent and protection of participants (Bogdan and Biklen 1998) before, during and after data collection and analysis. For me, the process of researching my own culture required recognition of the Samoan view of knowledge, not just information to be gathered but also that revealing of information is done in strict confidence (Aiono Le Tagaloa 2003). The notion of the va*tapuia* (sacred relations) which dictates relationships of mutual trust and respect was strictly observed throughout this research. Every Samoan in any given situation knows how to stand, sit and talk. Observance of cultural protocol, behaviour and use of formal Samoan language was given priority throughout the research process.

Having fluency in the Samoan language, and an awareness of the protocols governing Samoan communication greatly assisted me in establishing rapport and ensured that the process of gathering information ran smoothly. As the subjects of research, participants are in a powerful position. They can withhold information, supply partial information, and possibly even dictate the way the research is conducted. Thus, while in the field, it was important to bear in mind cultural protocol as well as qualities of patience, persistence, tolerance, humility, honesty, trust, discernment, an open mind and an acceptance that some questions may never get answered.

All communications for this research, including interviews, were done in the gagana fa'aaloalo (formal Samoan) as opposed to gagana *ta'atele* (commonly spoken

form of Samoan) that is used among friends and peers. Gagana *fa'aaloalo* is appropriate for discourse with strangers, professionals and older persons. This way of speaking combines linguistic and non-linguistic elements into a more elaborate and careful way of addressing people. There was strict adherence to linguistic form, such as the use of a specialised vocabulary and a more formal grammatical structure (Simanu 2002). Nouns and verbs in ordinary Samoan were changed to the formal versions. For instance, the phrase 'how are you?' in ordinary Samoan is `o a *mai oe?'.* When addressing chiefs the noun oe changes to *afioga* for a high chief, *tofa* for a talking chief, and *susuga* for a pastor.

Letters of invitation and consent forms were drafted in formal Samoan then translated into English for ethical approval. Recognition of *va-tapuia* meant that it was culturally appropriate for these letters to be personally handed out during visits to the homes and offices of selected participants. Being there enabled the researcher to clearly explain important parts of the letter and answer any questions before the consent forms were given out for signing. The letter included the latter, a request for email correspondence in future, and permission to record information in written and audio form. Most importantly, with respect to information used in this thesis, participants had to be assured that confidentiality would be maintained, particularly in the discussion section of the thesis. All these aspects were covered in the application approved by the University of Otago Ethics Committee before field enquiries were authorised to begin in Samoa.

Information was gathered over a period of three months. The first round of interviews was held in March 2009 with the rest conducted in June and July. Follow up interviews and member-checking of transcripts lasted till the end of August. The length of time for the interviews ranged from two-three hours to nearly the whole day with each participant. One-on-one semi-structured interviews with village chiefs, pastors and elderly members of the community were held in their homes where they were comfortable. Individuals employed by government, local consultants and members of some NGOs were interviewed in their workplaces.

Va-tapuia that strictly governs behaviour in Samoan society was observed during communication with all the participants. A younger person is expected to respect one who is older. The range of participants in terms of seniority warrants attention to personal behaviour and style of approach during each interview. Observance of dress code was also vital during the interviews. Semi-casual wear of a long */avalava* (sarong or a long skirt) and a sleeved top was considered appropriate when visiting a Samoan family. There were instances when I had to sit cross-legged on the floor during the interviews thus, being comfortable as well as appropriately dressed for such an occasion was important.

Entering a Samoan house invites the notion of *talimalo* (offering hospitality) and I was prepared to accept that with respect and reciprocate the kindness offered. Any form of communication/meeting/consultation is marked by an exchange of some sort, as evident in the act of giving *lafo* (traditional monetary gift) during the `ava ceremony on a larger scale. The same concept was applied with a simple cup of coffee or the offering of lunch on individual visits. Therefore, monetary and non-monetary gifts were prepared to be given when and where appropriate.

Holding introductions in the formal Samoan language was an important, even paramount, way to establish rapport with the participants. Familiarity with cultural protocols and the Samoan language were essential in establishing common ground with the participants. It showed respect for the participant as well as the depth of the researcher's knowledge and recognition of the faʻasamoa. Gagana *faʻafailauga* (chiefly language/oratory) which is used by and among chiefs at ceremonial functions and during

village *fono* (chief council meetings) was used at the beginning of each session. This is similar to gagana *fa'aaloalo* except it interweaves into the language references to Samoa's history, *alagaupu ma muagagana* (proverbs), genealogies and biblical quotes (Simanu 2002). Samoan culture is rich in imagery, nuance and metaphor with formal language separating the common person from those superior in cultural knowledge. As words give, communicate and create meaning, we are poor spiritually and intellectually if we speak Samoan yet unaware of the meaning, nuance and metaphor (Tamasese 2005).

A significant part of introductions was the recitation of honorifics. This acknowledged personalities and the hierarchies of villages, districts and national *matai* entities the participant belongs to. While *matai* are generally the official custodians of family genealogies, heirs ought to know their genealogical connections, which can be acquired not only by knowledge and continued referrals to family genealogies but through active participation in traditional activities. Persons who are well versed are respected and admired for they are possessed of knowledge which allows them to participate effectively and efficiently in traditional exchanges and dialogue (Vaai 1999).

The Samoan phrase, *E le tauilo tama a* tausala, e *tamaali'i i lana tu, nofo, tautala. Aua o le* mea *a le tamaali'i le fetalai,* translates, as the nature or essence of aristocratic behaviour is the ability to speak (Aiono Le Tagaloa 2003).

Moreover, there was attention to changes in posture, distance and eye contact, as well as to the tone and volume of speech. *Va-tapuia* demands observance of space and behaviour when speaking to chiefs, pastors, the elderly and anyone older. As all participants were older than me, such protocols were observed. There was always sufficient space between the researcher and participant and care was taken not to sit at the same level or to directly face the participant. Rather, the option of sitting on the floor or beside the participant was taken. In addition, a low and respectful tone was used during all interviews.

During initial contact, it was found to best be honest and clear about the purpose of the interview, the objective of the study, and the processes involved in the interview. Better understanding of language and cultural protocols assisted me to gain the confidence of the participants and fostered relationships of trust necessary for exchange of information with them. Permission to tape record interviews enabled a full focus on the interaction instead of pressure to record the participants' words. This was important as interviews were not just about talking. They were about listening and paying attention (Clifford and Valentine 2003).

In the Samoan context, the process of interviewing is highly sensitive. One must always carefully select the appropriate words and situations when speaking, whether to declare, inform or interrogate. Interviewers are scrutinised by informants according to the situation, words used, tone and subject matter. Thus, one needs to be mindful of how questions should be framed, enactment of words, mannerisms and body language so as not to risk being offensive in any way. Lack of recognition and misunderstanding of these vital aspects will result in participants giving inaccurate information - a common occurrence that is inaccurately described by foreign researchers as the failure of Samoans to answer questions truthfully. This is captured in the Samoan phrase, *E agatonu Manu'a i le fesili.* An approximate translation of this phrase is 'the proper practice or attitude leads to correct or just behaviour (Aiono Le Tagaloa 2003).

Basically, the way a question is asked will determine the response. Therefore, during the process of asking questions it was crucial that I was only a guide while the participant talked. Being direct was avoided, and the preference was to introduce general pointers that the participant could talk about. The use of open-ended questions during discussion or as follow-ups encouraged participants to give more detailed

answers. Moreover, this approach showed the researcher's interest and involvement in the discussion. Skill and experience were needed to ensure the appropriate timing of these questions so that the participant was not interrupted.

Observation of body language while questions were posed and answered, and in moments of silence during an interview was important. These revealed much about a participant's emotions and the `unsaid'. These are cues to the researcher and tell whether or not the participant was comfortable with the questions. They also showed if the researcher needed to re-direct the line of questioning or avoid asking a question altogether. Furthermore, the ability to speak ordinary and formal Samoan and English fluently assisted in cases when local consultants and government officers switched between Samoan and English.

The process of thank you and farewell was also an important element of the interview. Anae et al (2001) refers to the importance and reciprocity of respect, aspects central to Pacific modes of communication and spirit of participation. In keeping with these values, saying thank-you was delivered in the formal Samoan language, followed by a gift to show appreciation. Sharing transcripts (member checking) through email and follow-up interviews on the telephone enabled participants to present feedback on how their responses were recorded, and ensured clarity.

Nature of information collected

Primary information came from interviews with more than 30 participants, as well as photographs taken during site visits. Secondary information included copies of government reports, policy documents, draft policy documents, district CIM plans, maps and photographs (Table 2).

Table 2: Types and sources of information

	Site visits	Government officers	Consultants	NGOs	Community
Primary information	Photos Field notes	Semi structured interviews	Semi structured interviews	Semi structured interviews	32 Semi structured interviews photos
Secondary information		Report copies Maps Drafts of policy discussion CIM Plans	Drafts of policies		

Of the 30 community members interviewed, 15 had participated in CIMS consultations and all were familiar with the strategy's aspects and outcomes. Those who were present at the consultation included five government representatives, four chiefs, four young adults (that is, untitled men and wives of village men) and two elders (Figure 7). None of the pastors and school principals that were interviewed participated in CIMS consultations as time was insufficient for them to be consulted in their host villages. Lack of time also prevented their participation in their home villages. Also excluded were two chiefs that were suspended, two young adults (one whose family does not have a

chief at the moment and the other whose chief is under suspension) and four elders who could not make it to the places where the consultations were held.
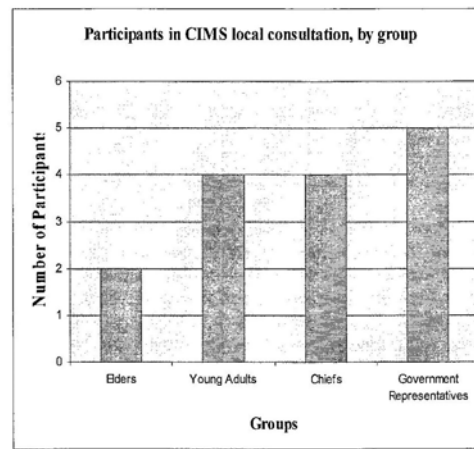

Figure 7: Participation by group in CIMS consultation

Analysis, interpretation and validity

Qualitative analysis, mainly descriptive was used in analysing primary and secondary information. The inductive nature of qualitative research required categorisation and theory building to proceed as interview information was thematically analysed, revisited and reduced as advocated by Mutch (2005). Cope's (2003) process of descriptive and analytic coding was used to identify codes as information was read and analysed within its own particular context. Coded information were then sorted and organised according to their relevance under the main research questions. The organisation of interview questions assisted this process.

Secondly, summary tables were then produced to organise research findings by codes and themes. A second table was then developed where the codes and themes identified in the first stage were compared against key ideas from bodies of literature identified in the literature review. These sources were from Western scholarship, indigenous knowledge or *fa'asamoa* and a hybridised form combining both (Table 3).

Table 3: Analysis of information

Step 1

Information	Description	Analytic Codes	Emerging themes

Step 2

Theme emerging out of Key themes from the Analysis policy literature

Multiple readings of transcripts and reflecting on action (by both the researcher and participant) taken during the interview characterised the last step of linking and tying these codes, to identify themes that relate to the research questions posed but also to new ones that emerge from my reading of the literature. Key questions adopted from Opie (1999:228) assisted in reflective analysis of themes, particularly linking them to the framing literature and using them as main topics for the final product. Questions included:

- What is interesting about my information?
- How does this enable me to think further about or conceptualise the issues being addressed here?
- Are these issues attended to in the literature and in what ways?
- Do my information support or extend my understanding of the literature?

Moreover, writing and rewriting of drafts assisted in the refining of themes and key ideas.

The method of triangulation was to check soundness and validity of information collected. This process allowed me as the researcher to view CIMS policy from the positions of various stakeholders, and the perspective of comparative analysis thus, enriching knowledge and providing a test of validity. Despite the range of backgrounds and roles of the research participants, this research has shown a broadly based faith in and acceptance of *fa'amatai* as the ideal governance framework.

All interviews were conducted in both ordinary and formal Samoan and then personally translated into English. Those interviewed also checked translations. The qualitative nature of this case study required presentation of participants' words to ensure that their views to the research themes, through long and frequent quotations are communicated directly to the reader.

Conclusion

The broader issue of this paper is of research ethics defined in two ways: by a metropolitan (University of Otago) and an indigenous (Samoan society) source. One dimension is how both were honoured and implemented. Another dimension is the extent to which these research ethics despite very different origins, consider the same principles. Both appreciate how different people reach differently to others (like researchers) they do not know, and the protection of these people should they wish to be part of the research process. The two complement and reinforce each other, as while the ethical requirements of the University of Otago suggest general ways to approach and gather information, the Samoan culture offers the researcher appropriate ways to

carry this out effectively in the local context. The predominantly oral nature of Samoan society saw the relevance of a qualitative, interpretative research design with semi-structured interviewing as the main method of information collection. The use of the Samoan language as well as attention to cultural protocols were significant to the process of collecting information, while information analysis and interpretation in part adopted methods used elsewhere. The discussion of information using comments and stories told by research participants and photographs of selected sites enabled me to construct a culturally situated analysis of coastal governance in Samoa.

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