

THE SEEMINGLY SIMPLE? COMMUNITY ENGAGEMENT AND CONSTRUCTION MANAGEMENT IN SAMOA, POST TSUNAMI 2009.

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ABSTRACT

Community Engagement and its associated community participation seem to be a key factor for “successful” post disaster reconstruction^{1,2}. Yet not much is understood on what happens in such an “engagement” and how it occurs³.

This paper presents one case study on the impact of constructing new fale for those affected by the Samoan tsunami in 2009. A return research visit is made 2 years after the original assistance was completed to reflective look back at the relatively short two week programme (which was part of a larger aid programme under Habitat for Humanity HFH) completed by volunteer carpenters from Unitec’s Building Technology Department.

The research suggests that there were strong cultural linkages established in what was built, it identifies by surveys and interviews areas where value was perhaps “added” but concludes that it was in doing the seemingly “simple” things that “engagement” was fostered. Such “simple” things maybe not so simple in reality but perhaps underline the need for construction managers to have a “situational awareness” in post disaster construction.

Keywords: Disaster relief; cultural values

INTRODUCTION

An earthquake of Richter Magnitude 8.1 to 8.3 struck Samoa at 6.48 am local time on 29 September 2009. According to witnesses it was between 3 to 15 minutes later that a 2-4 metre high tsunami came ashore principally along the eastern end of the south coast of Upolu Island in Samoa resulting in 143 deaths with a further 6 missing. Approximately 20 villages were destroyed

¹ IFRC, 2012. Understanding community resilience and program factors that strengthen them A comprehensive study of Red Cross Red Crescent Societies tsunami operation June 2012

² Council of Australian Governments, 2011. National Strategy For Disaster Resilience- Building the resilience of our nation to disasters February 2011

³ Deena Mistry, 2007. Community engagement: practical lessons from a pilot project. Home Office Development and Practice Report Development and Practice Report 48 pg1-7

This period of rebuilding was carried out from November 2009 until June 2010 with different teams arriving every two weeks to build a number of fale.

A team of Unitec volunteers from Building Technology were one of those teams in early 2010. The sense within the team was that their "acceptance" of the villagers' existing knowledge of both traditional and modern carpentry skills encouraged a higher level of local participation/engagement in the building process; and it was this impression that was later researched in 2011. It was hoped that such a study might explain in part why this team successfully constructed five fale, plus the carpentry for a further three, during their two weeks on the project, compared to an average of two fale by other teams? The sense within the team was that the "whole was somehow greater than the sum of the individuals" and it was this sense that the return visit sought to understand better.

Current New Zealand Ministry of Civil Defence and Emergency CDEM management procedures and advice on community participation/engagement seems to be as follows⁹:

"Recovery activities should:

- build upon the inherent strengths and capacities of the affected community
- be based on pre-event planning
- work through existing structures
- activate MOUs."

And¹⁰ "People of culturally and linguistically diverse communities are not a homogeneous group.... Working with communities with such diversity requires a flexible and local approach.... There are no fail-safe procedures for forming partnerships with culturally and linguistically diverse groups. A flexible and open-minded approach, together with careful planning, will result in vital information and much community goodwill and support. This will take time to develop, particularly if there has been no contact in the past." This seems to be at odds with the "sense" that the Unitec team experienced and that they may have stumbled onto something of a gap between the policy and the practical action?

Moreover, as observed by Coles and Buckle¹¹ who "start with the premise that effective recovery can be achieved only where the affected community participates fully in the recovery process and where it has the capacity, skills and knowledge to make its participation meaningful": resilience may address

⁹ CDEM, 2005. Recovery Management Director's Guidelines for CDEM Groups [DGL 4/05] May 2005 ISBN 0-478-25465-2 pg28

¹⁰CDEM, 2006. Working together Guidelines for Emergency Managers working with culturally and linguistically diverse communities. Information For The CDEM Sector [IS8/06] June 2006 ISBN 0-478-25472-5 pg 7

¹¹ Coles, E. & Buckle, P. (2004) The Australian Journal of Emergency Management, Vol. 19 No 4. November 2004 pg6

the 2nd of these qualities but "will be ineffectual without the means of engagement through participation with the wider social, economic and political communities" seems to further underline the sense the Unitec team experienced.

Finally, it is perhaps interesting to compare the 2009 Samoa Tsunami to the 2004 Boxing Day Asian Tsunami in Banda Aceh, Indonesia to get a sense of its impact. Based on a Samoan population of 187,000 people, the 149 lives lost would equate to a death toll of 156,000 in Banda Aceh, Indonesia. Their death toll was around 130,000 before counts were unofficially halted and hence it would seem to be comparable to what was considered as a major disaster. However, the loss in GDP was more significant being between 22-30%^{12,13} in Samoa and around 2.5% in Aceh. Hence, the impact of the 2009 Samoan tsunami was substantial and perhaps underlines the vulnerability of an "island" compared to a "land mass"^{14 15}.

METHODOLOGY

The study used a qualitative approach, involving interviews and observations that were subsequently analysed using two research frameworks – the Kestle Frame work (Kestle et al. 2008) and 'Talk to the Buildings' frame work (Potangaroa, 2008). In addition, information was also sought about the potential value gained from on the job trade training skills and qualifications that some villagers had achieved.

a) Talking to the Buildings

In order to use measurable criteria when evaluating the completed fale, a technique was employed known as 'Talking to the Buildings'. This involved assessing 10 diverse patterns for each building giving each a significance score from 1 to 4, with 1 representing 'Not significant' 4 being 'Very significant'. The 10 patterns were mapped across three spatial areas of a house these were typically: the area outside the fale; the area immediately inside the building, then any other further spatial divisions further within. The observations were carried out by the Fijian researcher, guided by the match he perceived between the pattern and its optimal description (shown in Table 1).

It was Alexander who first suggested that architecture was about "patterns" or rules of thumb used by practitioners and that "the more living patterns there are in a place – a

¹² Global Facility for Disaster Reduction and Recovery GFDRR Samoa– 2009– PDNA Assessed Total Earthquake And Tsunami Impact At 22% of GDP <https://www.gfdr.org/node/327> accessed July 2013

¹³ World bank Rebuilding paradise – Samoa's recovery from the 2009 tsunami (30% of GDP) <http://blogs.worldbank.org/eastasiapacific/rebuilding-paradise-samoas-recovery-from-the-2009-tsunami>

¹⁴ Lewis, J. (2003). Island Anthology. Published on Island Vulnerability.

¹⁵ Kelman, I. (2003). "Intrigue of Islands – What are They?". Views (U.K. National Trust), issue 38, Summer, pp. 70-72,

room, a building, or a town – the more it comes to life as an entirety, the more it glows, the more it has that self-maintaining fire which is the quality without a name (Alexander, 1979). And when a building has this fire, then it becomes a part of nature. Like ocean waves, or blades of grass, its parts are governed by the endless play of repetition and variety in the presence of the fact that all things shall pass. This is the quality itself.”. At that time he and his associates suggested 253 such patterns (Alexander et al, 1977) that were 25 years later reduced to 10 essential ones. They commented that “while it seems to us that the original notion – that good houses are made of deep, traditional patterns, grounded in human experience- is still valid, practice has made us realize that the really crucial patterns are far fewer in number than we had previously thought; and that this smaller group of patterns is more powerful than we had previously imagined”. They go on to state that “While there may be many dozens, even hundreds of patterns that go into the making of homes, there is only a handful that we now say are essential...”(Jacobson et al, 2002). And it is these essentials that form the core of the Talk to the Buildings approach.

b) The Kestle Framework

The Kestle Framework is a multi-disciplinary management framework for collaborative international projects on remote sites. It has been extensively tested in the humanitarian aid context, notably in West Darfur, Sudan and in Banda Aceh, Indonesia. It has been a robust model for categorising issues of "value adding" of humanitarian aid in remote locations, following natural disasters against 4 key factors namely:

- Timely Decision Making (the characteristic of summing up a situation/s and making a decision in a time frame relevant to it. This can be with less than full information and hence there can be a tradeoff between being 'timely' on one hand while on the other being 'impulsive and impatient').
- Process Integration (is essentially a holistic approach that underlines the unity of the overall process rather than the optimization of any part of it.)
- Knowledge Integration (is the process of threading, merging or possibly synthesizing of knowledge from various viewpoints into a larger more expansive model or framework).
- Value Generation (refers to the value that the client and stakeholders place on the project outcomes, and will vary according to the differing clients' and stakeholders' expectations of the project/s, and these can vary not only between stakeholders but also between client groups)

The model provides a framework to compare what has been seen and experienced in the field, versus what was perhaps planned away from it. From a comparative review of the 4 factors emerges a picture of how and where "value adding" has been achieved.

It should be noted that while the research underpinning this paper explores the way in which integration of Samoan village values into the process of

construction appeared to be a significant aspect in the rebuilding process, this is not a theoretical anthropological or ethnographic study but rather an attempt to identify practical steps which future volunteer rebuilding projects might incorporate when faced with disasters in other parts of the world.(It may also be useful in Auckland given it's significant Samoan population as indicated earlier).

The research was completed in the last quarter of 2011, just over a year after the HFH Samoan fale reconstruction project was completed in June 2010

STEPS LEADING TO THE RECONSTRUCTION

At the initial stage of the project, Unitec Carpentry lecturers were informed that a team of builders were required to go to Samoa to work on the fale reconstruction project and they were invited to volunteer. Questions were raised about ways of working with the Samoan village people. How would they respond when the tutors tried to share their skills and knowledge, and, what about the language barrier? Such issues are commonly encountered in the day to day teaching and training at Unitec.

In addition, the principal author of this paper comes from Fiji and appreciated the cultural nuances and norms of Pacific culture. He recognised that while volunteers from New Zealand can provide modern tools, technology and skills (the resilience that Coles and Buckle talked about earlier), he reflected on how he and the other visitors might be able to demonstrate that the culture of Samoa was valued in practice. He felt that integrating the two could build a cohesive foundation from which to work.

Once the Unitec team arrived in the village, there was a distinct feeling of tension amongst the local people, with some villagers already on site standing back from the visitors. It became clear that no one was ready to move forward to work with the new arrivals. This was surprising as seven previous teams of volunteers had already worked in the village building fale during the preceding 14 weeks? Something needed to be done.

DEPLOYMENT OF CULTURAL PRACTICE

Members of the team bought some *kava* root which, once prepared, makes a traditional drink used by Pacific Islanders at special meetings and welcoming ceremonies. The highest rank Matai present on site was asked for approval to perform a traditional *Ava* (a Samoan word, asking permission to come into their village) and it was planned that, with the help of an interpreter, that meeting would be used to ask the chiefs for their support.

The Matai agreed to hold the kava ceremony and that event appeared to be the beginning of the team's success and that sense mentioned earlier.

Following this formal gathering, the Matai then held a second meeting with the villagers. Subsequently men came out in force, one member stepping forward from each family. The team later learned from other villagers that the Samoans were pleased that their culture had been respected and that the New Zealanders had acknowledged the traditional building skills that the villagers already held.

During the eight days that the Unitec team worked in the village they managed to complete five fale and finish the carpentry work on a further three houses, requiring only the floors and roofs to be added. Figure 2 shows an almost complete fale together with its Samoan village builders.

Due to the large number of villagers who turned up at the construction site every day, three building parties were organised, with a fourth dedicated to preparing the ground for construction. This allowed the visiting volunteers to work mainly in a supervisory and engineering role. This situation had the added advantage of establishing trust with the village men while overtly demonstrating that the visitors recognised the value of their current skills. At the same time, the team were able to further train some of the villagers and up-skill those who already had knowledge of carpentry by introducing them to modern technology, materials and craftsmanship. Figure 3 shows two apprentices preparing a fascia board, one of who is a Matai gaining his own building qualification.



Figure 2: Fale in final stage of completion Figure 3: Apprentices at work

Each morning started with a normal site meeting as well as prayers, while the work day finished in the same fashion (see Figure 4). The Matai were asked to give speeches of encouragement and church elders were asked to pray for the reconstruction team daily. A number of village women took on their traditional roles of supporting the builders by preparing food for them all throughout the day. When the two weeks were over a formal thanksgiving feast was also organised by the villagers.



Figure 4: Villagers during a morning site meeting before work commences.

As a result of this community collaboration the village people fulfilled the challenge of forming their own Habitat Construction team and demonstrated that they did not need any further volunteers to come to the village to work with them. They had won the confidence of HFH as well as the trust of the Samoan Government. They became the only village who finished all the fale planned to be built before the end of the Rebuilding Project timeline.

RESEARCH DESIGN

It was intended to organise separate interviews with different members of the village community in order to encourage a free flow of information. It was planned that 1:1 interviews would be held with each of the three Matai (chiefs) who were involved in the original project. It was proposed to then interview 6-8 villagers during a *talanoaga* session (focus group) without the Matai being present, although the same questions would be used as a basis for all interviews. The villagers would be invited by HFH so that they would be relatively independent views both from the Matai and the researcher who had also been involved in the rebuilding.

In addition, observations would be carried out - using the 'Talk to the Buildings' approach.

ACTUAL RESEARCH

Two 1:1 interviews were carried out with villagers, both of whom spoke English, prior to the official meeting with the Matai. One of these was with a villager who had subsequently used his building experience to continue his education and gain formal building trade qualifications. The other interview was with a female community worker who lived in the village and who had worked closely with the HFH project.

The Matai then decided that they would prefer to meet as a collective group, a meeting that, according to Samoan custom would also be attended by all the

male villagers in a non-speaking capacity. 14 Matai took part in this meeting, their answers being later translated and transcribed.

The differences between the plan and the actual research occurred organically to fit in with the village circumstances. It is worth noting that in an original briefing in New Zealand, HFH had recommended that initial interviews should be conducted without the Matai being present in order that villagers might be enabled to express their opinions, a situation which was only partly achieved.

RESULTS

i) Interview with a village community worker

Leela, whose background is that of a qualified social worker, organised food for the volunteers during the rebuild and had also been provided with a fale. She had lived her whole life in the village but had connections outside the village and with government officials. During her interview she stressed the high level of satisfaction the villagers felt with the building project and then made a number of key points: the importance of culture in communication; the need for more in-depth volunteer orientation; and the benefits of the training gained by the village men.

She explained that both before and during the rebuild there had been times when there had been a lack of communication, which has resulted in failure by some earlier teams to work effectively. Some of the teams did not formally introduce themselves to the locals or explain in any detail how the work was going to progress. Whereas, she said that the Unitec team had arranged a formal introduction ceremony, kept people informed on a daily basis and, at the end of the working day, spent time sharing kava with the local men. She noticed this process had produced a strong awareness of camaraderie and a feeling of brotherhood.

Leela emphasised that there had been a great value in having a Pacific Islander liaising between the villagers and the volunteers:

You came with your Fijian cultural mix and that's the important thing. In the Pacific Islands, we are going to need more people like yourself to be team leaders or supervisors, because the volunteers that come from all over the world have no idea of our culture. You need somebody who knows how this moves, somebody with heart, somebody with the understanding. Not to say to discriminate from the palagi {foreigners}, but you are going to need somebody from the Pacific - but not necessarily our own people from here.

Although she underlined the value of the overall building project, she gave a number of examples of the way the villagers' requests had been ignored, particularly during the planning stages. The only input they were offered was

on the placement of the individual houses, but when they asked to alter the locations of some of the toilets (this is discussed later) – there was no one who was willing to take the authority, *'no one was able to say 'let's do this'.*

Towards the end of her interview, Leela praised the training work done by the Unitec team, both formally and informally. She explained the effect this had had on the younger village men:

Yes, definitely they all got qualified. They've got couple of Carpentry certificates to be builders in Australia, and New Zealand. Now, when they apply for a job, they can get the same wage as carpenters that come from overseas.

She concluded by stressing the need for more effective co-ordination between villagers, government and the agency involved. There was also a requirement to have a liaison or a mediator between the people who get the houses, the workers, the volunteers and the overall supervisor (Habitat for Humanity). Her final words were, *"Oh, it's so lovely to see that our dignity has been restored!"*

ii) Interview with a village carpentry student

Siale had been one of the young village men who had taken part in the rebuilding as a carpenter's hand whose family also gained a new fale. He subsequently went onto complete a building qualification, and aided by the practical skills gained on the construction site, he graduated the following year with a Certificate in Carpentry and Joinery. His work on the fale was assessed as part of the practical requirement of this course.

He explained how important the acquisition of this formal qualification had been to him:

It gives me a job, so now I am able to support my dad and my mum - the family. Yes, because when you left, I went ahead to do a carpentry Course offered by APTC and graduated with a Carpentry and Joinery certificate. So, when you left, I got a carpentry job in town. My priorities are changed, my lifestyle is changed so I'm no more a village man now - I'm working!

It was also clear in his conversation that he and his friends had valued the respect shown by the visiting Unitec team:

Especially when you came to us with all the Matai, with us sitting around the Kava ceremony, exchanging words of respect, respecting each other. That's great, that's a great cultural oriented session. I think I can see some similarities in our culture, yes, that's great.

Finally, Siale commented on the opportunity to input ideas and requests to the visiting volunteers. His experience was that when the Unitec team were asked to slightly reduce the height of his fale and also change the location of the toilet (see discussion later) both these requests were complied with.

iii) Interview with the Matai

After initially describing difficulties they had found connected to government funding in general, the Matai confirmed that all the fale that had been built were satisfactory although only 28 houses had been constructed in total. This was despite the fact that there were 60 plus families in the village who had initially needed new homes. They explained that all of the new fale were occupied even though some were only used for sleeping by families who worked elsewhere during the day.

When questioned about the traditional lines of authority connected to house building, they made it clear that following Samoan tradition, this ultimately resided in the hands of the Matai:

The Matai are in charge, they instruct the aumaga {council of untitled men}, they must obey because the chiefs are in charge of the village. Although Tafua is the head of the village, the authority lies collectively with all the chiefs. The reason why the chiefs and aumaga work together is firstly to make sure the job gets done quickly because there is the obligation on the aumaga to obey the chiefs. For example when the aumaga helped you build, you were the leaders, but it was on our order that they came to help in order to help the project move quicker.

The Matai considered that the Unitec team had shown due respect to the hierarchy of the people, and had overcome the barrier of language. However, they did state that they had not been able to provide sufficient input during the pre-planning stage of the rebuild. Nevertheless, they were satisfied that a correct decision had been taken (by the government) to relocate the village inland, away from the coast. They added that the water supply had still not been laid on.

Overall they believed that the help they had received had been of great benefit to them, *“Without your help, we would still be trying to build new houses - still trying to rebuild our village.”*

iv. Talking to the buildings

All five of the buildings completed by the Unitec team were evaluated against the ten patterns, and values of 1 to 4 (1 being low relevance and 4 being the highest) attributed to each. These are tabulated below in table 1.

Table 1: The Talk to the Buildings Scoring for Fales 1 - 5

Pattern of fale numbered 1 – 5	1	2	3	4	5	Comment
Inhabiting the site (Response between house and site)	2	2	2	2	2	Putting aside the issue of the toilet location raised in the interviews. Generally a lack of input from local people on the location of the fale.
Creating rooms, outside and inside	2	2	3	3	2	Mostly crowded together, except fale 3 and 4
Places in between	3	3	3	3	3	Space available
Refuge outlook	3	3	3	3	3	Vista satisfies inhabitants
Private edges, common core	1	1	1	1	1	No private areas except for the raised platform and the stairs.
The flow through rooms	3	3	3	3	3	Essentially, relative to the stairs
Composing with materials	2	2	2	2	2	Local timbers (untreated), corrugated iron roofing and concrete floors. Standardised
Sheltering roof	3	3	3	3	3	Simple, well-constructed and dominant.
Parts in proportion	2	2	2	2	2	Relative to its position to other buildings. All fale of equal internal layout.
Capturing light	3	3	3	3	3	All open to light well ventilated

v. The Kestle Framework

The definition of "success" from the view point of the villagers was examined using the Kestle framework that suggested the following framework.

- Decision making: Toilet layout and a closer integration between the volunteer building teams and the villagers as identified by all of the villagers. Also, they recognised the importance of having a Master carpenter in charge who understood the process of Pacific decision making.
- Knowledge integration: Perhaps a new appreciation of the fale layout and cultural values?

- Process integration: The value adding of community engagement that seemed to support the increased number of fale built, on time and to an acceptable standard. Some aspects of understanding between the Project planners (primarily the Samoan government, HFH and the Matai) could be improvement.
- Value generation: Training turned into qualifications, all fale in use and general satisfaction.

DISCUSSION

The interviews suggest that the seemingly "simple" things that the team did resulted in a strong engagement of the village that was well remembered over one year later. In particular it was interesting to note the "corrective" work related to the toilet.

Based on requests from architects outside of Samoa it was strongly suggested that a WASH (water-sanitation-hygiene) element be included with the fale and hence a toilet was incorporated into it as shown in figure 5 below.



Figure 5: The fale and adjacent toilet

Unfortunately this did not work at all with the traditional fale set up and in a western New Zealand context would be equivalent to having a toilet directly off your lounge or living room. However, because the fale was a "gift" it was not culturally possible for people to say that there was a problem; at least not till there was a "safe place" (as the team had done) for this to be discussed and resolved. Traditionally toilets and bathing areas are located in the rear of the fale "complex" somewhere in the area shown dashed¹⁶ in figure 6 below rather than in the front.

¹⁶ UNESCO, 1992. The Samoan Fale

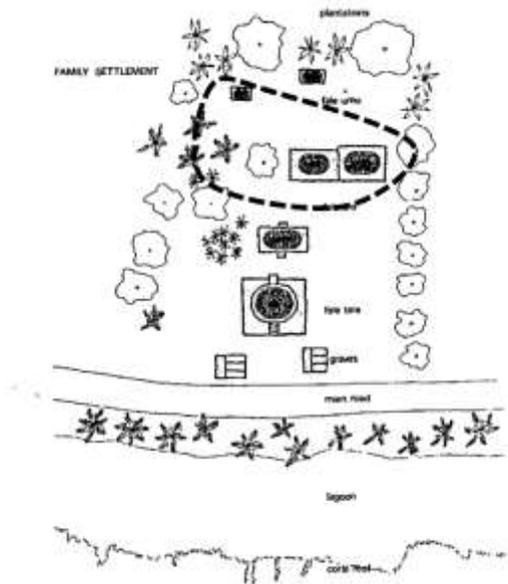


Figure 6: The Traditional Fale complex from "The Samoan Fale", UNESCO 1992.

This was a major achievement of the team that was missed by international architects, international aid practitioners simply because of a lack of engagement.

Beyond this issue the Talk to the Buildings suggested that there was a strong cultural fit under refuge/outlook (that suggests that the villagers may have perhaps had more input that may have been apparent), sheltering roof and places in between. The capturing light because of its tropical climate context was perhaps not so critical but necessary nonetheless.

The key value adding was that they were all still in use, which is often taken for granted in aid/assistance situations. And it would have been interesting to compare to other fale (given that they were apparently all the same design) not constructed by the team. As suggested earlier by Coles and Buckle one would expect there to be a higher "vacancy" rate where there was not the same engagement despite the resilience imparted.

These seemed to have all contributed to that "sense" identified by the team.

CONCLUSIONS

As this suggested in the title of this paper it is "the seeming simple" things that would seem to allow community engagement as opposed to the complicated, vague and perhaps policy driven advice indicated earlier by CDEM. We, the disaster management responders, have possibly missed something.

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