

Community Engagement: Rebuilding Samoan Fale Post 2009 Tsunami

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Abstract

In 2010, a team of Unitec volunteers worked with Habitat for Humanity (HfH) in Samoa, rebuilding fale (traditional houses) alongside the villages, using collaborative techniques derived from Samoan cultural customs. Experience at the time indicated that the Unitec's team acknowledgement of the villagers' existing knowledge of both traditional and modern carpentry skills encouraged a high level of local participation in the building process. This impression was later tested through research in 2012 that found that the buildings were still in good condition and that the villagers had been satisfied with the overall process conducted by the group. The study approach was qualitative interviews and observations, and was analysed through the application of two research frameworks: the Kestle Model (Kestle et al., 2008) and 'Talking to the Buildings' (Potangaroa, 2008). In addition, information was sought about the potential value of trade training skills and qualifications that some villagers had gained. Findings showed that 'value generation', 'knowledge integration', 'process integration' and 'timely decision-making' had overall been positive from the villagers' perspective, due to the cultural approach taken by the group. The villagers did, however, consider that they had not had sufficient input into the initial planning process, although the matai (village chiefs) had been consulted by the Samoan Government and HfH before the rebuilding project started. This paper concludes with a recommendation that disaster management organisations integrate local cultures as a fundamental aspect of any project, from the initial planning, to implementation.

Keywords: Disaster Relief, Cultural Values, Community Engagement.

Introduction

On 29th September 2009, an earthquake of a magnitude of 8.3 triggered a tsunami that crashed into Samoa, American Samoa and Tonga, killing about 200 people. In Samoa, some 20 villages were destroyed, leaving 3,500 people homeless. Habitat for Humanity (New Zealand), in partnership with the Samoan government, immediately responded to this disaster by funding and supervising the construction of some 250 fale, or traditional houses, on selected sites on the tsunami-ravaged south-eastern coast of Upolu. Habitat for Humanity (HfH) organised teams of volunteers to build the fale, and, working under Samoan supervisors, all volunteers learned to build "the Samoan way" (HfH, 2009). 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.

This paper examines the 'success' of one of those teams, from the Unitec Institute of Technology, and evaluates it in terms of the number and quality of the fale this team constructed in the village and the satisfaction that villagers found with wider aspects of the team's involvement. It was hoped that such a study might explain why this team successfully constructed five fale, plus the carpentry for a further three, during their two weeks on the project, in comparison with two being the average number constructed by each of the seven previous groups. In particular, this paper focuses on the value of engaging fully with Samoan cultural mores while undertaking the reconstruction work.

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 an attempt to identify practical steps that future volunteer rebuilding projects might incorporate when faced with disasters in other parts of the world.

A year after the HfH Samoan fale reconstruction project was completed, it was decided by Unitec together with HfH to examine the approach taken by the Unitec building team, from both the Matai (Chiefs') and villagers' points of view. The Unitec team had adopted collaborative techniques grounded in Samoan cultural customs; and the integration of local traditions and values used by that team formed the basis for their engagement with the villages.

In addition, the research aimed to discover if the opportunity to gain trade qualifications and skills had also been seen as valuable by village members, and whether having additional building qualifications had improved villagers' quality of life as well as employment opportunities.

Steps Leading to the Reconstruction

At the initial stage of the project, Unitec Carpentry lecturers were informed that a team of builders was required to go to Samoa to work on the fale reconstruction project and that 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?

As the principal author of this paper comes from Fiji, he appreciated that Samoans firmly hold to their beliefs and culture. He recognised that while volunteers from New Zealand can provide modern tools, technology and skills, 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 such an approach could build good relationships and develop collaborative engagement between the locals and the volunteers. In turn, this could help foster understanding and respect while empowering the volunteers to successfully construct the fale expected within the timeframe.

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. Therefore, this seemed to be the right moment to break down this barrier by working within existing Samoan cultural practices.

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 meaning a ceremony to ask permission to come into their village) and it was planned that, with the help of an interpreter, the 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. 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 1 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 the villagers' skills. At the same time, the team was 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 1: Fale in final stage of completion.

Figure 2 shows two apprentices preparing a fascia board, one of whom is a Matai that had subsequently gone on to gain a building qualification from a locally based training Institute.

Each morning started with a normal site meeting as well as prayers; the work day finished in the same fashion (see fig. 3). 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 2: Apprentices at work.

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 Habitat for Humanity as well as the trust of the Samoan Government. Their village became the only one where all the fale planned to be built before the end of the Rebuilding Project timeline were finished.



Figure 3 : Villagers during a morning site meeting before work commences.

Research Methodology

A qualitative approach was used in this study comprised of interviews and observations, with *Koha* as the method of obtaining information from the participants (*Koha* is the thanksgiving meal shared amongst all the participants). In addition, preliminary discussions were held in New Zealand with HfH officers who gave their support to the investigation.

In order to formalise the findings and triangulate the results, two established frameworks were employed, in addition to the villagers' perceptions revealed during the interviews. These were, 'Talking to the Buildings' (Potangaroa, 2008) and the Kestle Model (Kestle et al., 2008). The former was primarily an observational tool designed to evaluate the structure and use of the buildings, while the latter was employed during the analysis stage.

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' (Potangaroa, 2008). This involved assessing 10 diverse patterns for each building, giving each a significance score from 1 to 4, with 1 representing 'Not significant' and 4 being 'Very significant'. The 10 patterns were mapped across three spatial areas of a house; these typically included the area outside the fale, the area immediately inside the building, and 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). This procedure was adapted from an original evaluation system designed by Jacobson et al. (2002).

b) Kestle Model

The process used to analyse the key factors in the HfH Samoan rebuild was adapted from the Kestle Model (2008). This is a multi-disciplinary management framework for collaborative international projects on remote sites that was developed and subsequently tested in the humanitarian aid context in Darfur and in Aceh. It had been found to be very effective in modelling and interpreting the issues related to the provision of humanitarian aid in remote locations, following natural disasters. The Kestle Model provides a framework for comparing what has been seen and experienced in the field, versus what was planned by management in the various organisations. This comparative analysis aims at demonstrating where specific value has been added (or is perceived to have been added).

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 both of the Matai and the researcher involved during the time of the original rebuilding.

In addition, observations would be carried out using the 'Talk to the Buildings' evaluation (Potangaroa, 2008).

However, that didn't exactly happen and instead two 1:1 interviews were carried out with two English -speaking villagers, prior to the official meeting with the Matai. One of them was a another villager who had (subsequent to Unitec's involvement) used this building experience to continue his education and gain formal building trade qualifications. The other interview was conducted with a female community worker who lived in the village and who had worked closely with the HfH project. These were nonetheless valuable interviews.

But, 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. A total of 14 Matai took part in this meeting in which their answers were 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.

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 construction 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 rebuilding process, there had been times when there had been a lack of communication, which had resulted in the failure of some previous 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, 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 sense 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, 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, 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 a 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 on to 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 [local training institution] 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 contribute ideas and requests to the visiting volunteers. His experience was that when the Unitec team was asked to slightly reduce the height of his fale and also change the location of the toilet, 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 language barrier. 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 installed.

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 were attributed to each. Values of 1 or 2 were deemed to have less significance (and therefore have less relevance to that pattern) than values of 3 or 4.

Table 1: The relative significance of patterns across Fales 1 – 5. Source: authors

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	Lack of input regarding site location by owner
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
The flow through rooms	3	3	3	3	3	Open plan
Composing with materials	2	2	2	2	2	Local timbers untreated
Sheltering roof (form of the roof carries the look and meaning of shelter	3	3	3	3	3	Simple, well-constructed
Parts in proportion	2	2	2	2	2	All fale of equal design
Capturing light	3	3	3	3	3	All open to light and well- ventilated

Overall, this evaluation indicated that all the fale patterns showed almost identical levels of significance between one another. The only exceptions to this, as highlighted in Table 1, were the creation of internal rooms in fale 3 and 4. This caused a higher significance score to be allocated to these two buildings. The second clear result was the uniformly low significance of 'private edges'. This was due to the normal lack of private areas in traditional Samoan villages and indicated that this pattern was not applicable in this development.

Discussion

Objective analysis of the interview responses is always open to the challenge of bias, as the villagers' answers may be influenced by Pacific cultural politeness compounded by a perception of gratitude or indebtedness. However, the variety of replies, taken together with the application of two established research frameworks support the original hypothesis of this research – that the project team did carry out a successful project and this was largely due to the careful use of culturally-appropriate techniques throughout the endeavour.

The overall success of this rebuilding project was finally examined using the Kestle framework (2008) which explored four key factors: 'value generation', 'knowledge integration', 'process integration' and 'timely decision-making'. The detailed aspects of each of these parameters are shown in figure 4, modified to fit the context.

Value generation: The number and quality of fale built by the Unitec team amply fulfilled the expectations of the villagers from all ranks of the village hierarchy. Everyone interviewed in the village drew a strong connection between this quantifiable achievement and the behaviour displayed by the team in recognising local customs, ranging from the involvement of the Matai to the sharing of kava at the end of each working day.

Knowledge integration: This appeared to be successful at both a formal and an informal level, although there was some discrepancy around the number of men who gained building qualifications. The Matai considered that only a couple had achieved this qualification while the young builder interviewed claimed that a number of his contemporaries had also been successful.

Process integration: This was an area where three of the main criteria had been achieved (the number of fale built on time and to an acceptable standard as determined through the 'Talking to the Buildings' framework). However, aspects of collaboration between Project planners (primarily the Samoan government, HfH and the Matai) showed areas where further improvement could be undertaken.

Decision-making: The value of having a closer integration between the volunteer building teams and the villagers was 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".



Figure 4: Value, Knowledge Integration, Process Integration and Decision making. Source: authors

Recommendations

This study might help to develop a good model for implementing cultural practices and understandings during external disaster relief projects based on the responses of the villagers and Matai, which should be of benefit to future work undertaken by NGOs and other training organisations. In particular, it will help future projects involving Habitat for Humanity and Unitec to integrate local cultures as a fundamental aspect from the initial planning of any project, implementation, and through to its completion. Furthermore, in order to show proper cultural respect, and to benefit the Samoan community, it is hoped that face-to-face feedback will also be provided in Samoa. These findings indicate that policies should be designed to cater for different cultural demands at both national and person-to-person levels. Finally, information gathered may be used to recommend changes and improvements to interventions by outside agencies in disaster relief projects.

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References

Habitat for Humanity - HFU. 2009. *HFH New Zealand Ramps Up Rebuilding In Tsunami-Hit Samoa*.

http://www.habitat.org/asiapacific/news/2009/12_23_2009_New_Zealand_Boosts_Rebuildi ng in_Tsunami_Hit_Samoa.aspx#P1_19. (Accessed 1 October 2012)

Higginson, F.L. and Beynon, J. 1992. The Samoan fale. Thailand: UNESCO-AGFUND.

Kestle, L., Storey, B. & Potangaroa, R. 2008. Towards the validation of a conceptual design management model for remote site projects. In: A. Dainty (ed): *Conference Proceedings of the 24th Annual ARCOM* (Association of Researchers in Construction Management) *Conference*. September 1-3, 2008, Cardiff, UK, 185-194.

Jacobson, M., Silverstein, M. and Winslow, B. 2002. *Patterns of home: The ten essentials of enduring design.* Newtown CT: The Taunton Press.

Potangaroa, R. 2008. *Talk to the buildings.* Paper presented at the Central South University Research Seminar, June, Changsha, China.

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