

The Frigate Bird Can Soar: adaptation to environmental change in Solomon Islands

Report of the workshop on *Community Adaptation and Resilience: Local Relocations Induced by Rising Sea Levels in the Solomon Islands*

Honiara, 4-5 November 2010

“If the frigate bird can soar above the turbulence of bad weather, so my people can face the future with renewed determination.” – Jack Maebuta

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1 Background

Across Solomon Islands, communities are experiencing the effects of rising sea levels. In some places, this has induced the relocation of entire communities from small islands and atolls to the nearby mainland. Other communities are currently discussing the prospect of relocating to higher ground. While there have been numerous studies on climate change and transnational refugee flows, very little research has been undertaken on localised relocations such as those occurring in Solomon Islands.

Adaptation to migration is an historical feature of local social structures in the South Pacific. Localised mechanisms for land allocation will provide an initial response to sea level-induced relocation events. In fact, local relocations through community-based mechanisms are likely to be cheaper, faster and less productive of food insecurity and conflict than state-organised relocation of settlements.

The goal of this project is therefore to collect, analyse and disseminate information on some of these relocations. The project will produce a series of case studies written by Solomon Islanders on the effects of climate change and relocation in their own communities. Some of the researchers are from communities that are relocating, others are from the landowning communities that are receiving migrants. It is possible that the case studies will reveal some key lessons and patterns that could facilitate community adaptation to climate change, not only in the Solomon Islands but possibly in the South Pacific more broadly. We therefore hope that this research will assist evidence-based advocacy and policy development, with a focus on community adaptation and resilience.

At present, this project has only minimal funding and is being undertaken on a voluntary basis. The research is being conducted by Solomon Islander researchers, with support from the ANU College of Law, Australian National University; the Centre for Risk and Community Safety, RMIT University; and World Vision.

2 The Workshop

On November 4-5, a workshop was held at USP Centre in Honiara, to present and discuss the findings of case studies undertaken in Malaita and Temotu Provinces:

- the possible relocation of the people of Lilisiana, Lau Lagoon, and Ngongasila to mainland Malaita;
- the current relocation of the people of Walande to mainland Malaita; and
- the relocation during the colonial period of Nupani settlers to Santa Cruz.

Further case studies are currently being prepared for Shortland Islands (Western Province), Santa Ana (Makira) and Ontong Java (Malaita). If sufficient funding and support is available in the future, the research will extend beyond these areas to include other case studies. The research team welcomes suggestions or expressions of interest regarding further case studies.

The first workshop was attended by the research team consisting of: Joseph Foukona (University of the South Pacific), Matthew Fakaia (Solomon Islands College of Higher Education), Paul Mae (University of the South Pacific), Ruth Maetala (independent researcher), Jack Maebuta (doctoral candidate, University of New England), Dr Daniel Fitzpatrick (Australian National University), Rebecca Monson (doctoral candidate, Australian National University), and Professor John Handmer (RMIT University). The workshop was also attended by a number of independent interest people, as well as representatives from government agencies and nongovernment organisations including the Solomon Islands Ministry of Foreign Affairs, the Ministry of Justice and Legal Affairs, the Ministry of Education and Human Development, World Vision, Solomon Islands Red Cross; Solomon Islands College of Higher Education; and Live and Learn Environmental Education.

3 The case studies and options for relocation

3.1 Tok stori of climate change in Lau Lagoon – Joseph D Foukona

Joseph Foukona is from the saltwater people of Lau Lagoon, who are considering whether to continue living on their artificial islands, or relocate to the mainland.

The people in Lau Lagoon are experiencing a range of phenomenon that could be expected to increase with climate change. These include a change in seasonal patterns, which is compromising the cyclone preparedness of people, because they no longer know when the dry and wet seasons will occur. The people of Lau are also observing lower low tides, which require people to travel further to fish; and higher high tides, which damage kitchens and wash debris (through the artificial islands).

If people are to remain on artificial islands, their adaptation options include (i) raising houses; (ii) building up the new stone structure; or (iii) building a new island.

However most of the coral has been used up; and the knowledge and skills necessary to maintain and rebuild them are being lost to the younger generations.

There are mechanisms within *kastom* that enable saltwater people to access land for use and even settlement. According to oral tradition, the people living on the artificial islands came to Lau from either the bush, '*sifoa*', or paddling by canoe, '*gaita*'. These two forms of migration have had an impact on tenure – the *sifoa* people often have land adjacent to where they built their artificial islands, whereas the *galia* people do not own land because they are from another place. The origins of people therefore affect the adaptation strategies available to them.

There are also other relationships and mechanisms within *kastom* that could provide for migration, such as intermarriage between groups, and the exchange of fish and root crops between the bush and coastal people. These social relations have a profound influence on land relations in the region. For example, these relationships enable coastal people to seek permission to access land from their in-laws or elders in landowning groups on the mainland. All of the people living on artificial islands such as Kwaleuna, Foufoi'asi and Kwaloai relocated to the mainland after Cyclone Namu

owned land on the mainland, or had connections to tribes on the mainland through their mothers.

Cultural knowledge and respect, and the maintenance of social relationships are also critical to people's options for relocation. For example, children can generally settle with the people of their parents, but the next generation may find it more difficult to stay there.

The options for relocation are probably limited as this region is one of the most heavily populated in north Malaita, and subject to many existing and ongoing land disputes.

3.2 *Walande: My Disappearing Island Home - Matthew Fakaia*

Matthew Fakaia is from the saltwater people of Walande Island, who have relocated to Tetele Land on mainland Malaita.

As was the case in many parts of Solomon Islands, settlement patterns and land tenure in this area changed significantly with missionisation and pacification. During the headhunting days, the bush people lived in the hills, and the saltwater people were therefore able to access the coastal areas of the mainland. After conversion to Christianity, the people of Walande resettled in these coastal areas on the mainland. However the environment was unfamiliar, and many people died – these deaths are often attributed to sorcery or malaria. As a result they ultimately returned to the artificial island.

Walande people have now relocated to Tetele Land on the mainland, and also have a claim over Suuilau Boe Land. These claims are not settled, and are contested to some extent by the bush people. While Tetele Land has only been recently settled, most is now settled or under cultivation, and as the population grows, so too will the pressures on the land.

The relocation commenced in 1987, when funding was secured from the Australian High Commission to bulldoze the land for settlement. Over the next decade, the effects of environmental change meant that the sea wall began to break down, and the

size of waves, loss of mangroves, and declining availability of dead coral made rebuilding it increasingly difficult.

People were unwilling to relocate to Tetele Land, largely because of the stories of previous attempts to settle the area. In order to address this, a church was built on the land, and the Church of Melanesia Bishop spread holy water over the area. People then felt far more confident about relocating there, and in 2009 and 2010, the majority of people from Walande relocated to Tetele Land.

A detailed site plan was developed by a town planner, however there have been problems with getting people to comply with the plan. There have also been problems with sourcing materials for new buildings, and competition over access to materials has contributed to conflict between the saltwater and bush people.

The relocation has had a significant impact on social organisation, culture, and perceptions of place. For example, houses are now further apart than they used to be, and this is associated with a breakdown in community cohesion and cooperation, and presents a challenge to the authority of traditional leaders.

3.3 Community Adaptation and Resilience to Inundation: a case study of Lilisiana Village, Auki - Paul Mae

Paul Mae belongs to the Asisiki group, the bush people who are recognised by the courts as the customary landowners of Auki area.

While the bush/saltwater distinction is significant in Auki area, there are also strong ties between the groups that pre-date colonialism, and relate to histories of exchange, particularly fish-for-taro barter. Since the colonial period and missionisation, these relationships and exchanges have been supplemented by those occurring through church membership/

Settlement of Lilisiana began in the late 1920s, when people from Auki Island (in the harbour) began to move closer to the township. They settled on Kwarinakinaki Land, which they purchased from the Asisiki group. A second wave of settlement occurred after a cyclone in 1952. Since that time, tides and inundation have increased to the

extent that Koloka Island (in Auki Harbour) has been reduced to coral, and tides are reaching the road and coming up the rivers in Auki.

In the late 1990s, a group of settlers from Lilisiana relocated to a site further inland, called Bethany. Reasons given for the relocation included inundation, over-crowdedness, and internal disputes. This group had a connection to the female side of the Asisiki group which facilitated the relocation. At the time of the relocation, there was no intention to assist the entirety of Lilisiana village to move – the intention was merely to assist a small group of people due to social relationships and kinship ties.

At present, however, a far larger relocation is under discussion. The proposal is still in the preliminary phases, and no decisions have been made, nor has any formal agreement been entered into. In contrast to the relocation of Walande, which was instigated by the saltwater people, the proposed relocation of the Auki Island people has been initiated by the customary landowners.

A Relocation Package is being developed for a large area of land. This has been made possible by the fact that the majority of the Asisiki group live in the hills and have little interest in the land closer to the sea. The package includes a proposal to subdivide the land into plots for families, who would acquire registered title to the land. This is intended to provide an incentive for families to relocate, as well as ensure the tenure security of future generations.

The site for the relocation will be primarily for residential rather than gardening land. Gardening land will be dealt with separately, and at present many of the Auki Island people already have access to land for gardens further inland.

This case study may provide a model for internal relocations within the country. In many situations, it is the people who are threatened by environmental change who seek a site for relocation. In this case, it is the customary landowners who are initiating change. The Asisiki leadership intend to approach the government for support (for example through mapping) once the relocation has been planned and arrangements are in place.

It is important to note that the proposal appears to have been driven by a particularly visionary tribal spokesperson, who has encouraged the Asisiki people to see the Auki Island people as “part of us” rather than “others”. Some of the customary landowners are also interested in building a closer relationship between the Asisiki people and the Auki Island people, and in the further development of the coastal area.

Sources of vulnerability in the future include the potential for re-emergence of old land disputes over the area identified for the relocation, as well as the potential for struggles over leadership.

3.4 Relocating Ngongasila People: is it just a dream? - Ruth Maetala

Ruth Maetala is from the saltwater people of Ngongasila, through her mother’s side. They are exploring their options for relocation to mainland Malaita.

Ruth pointed out that there is a lot of literature on gender and natural disasters; gender and conflict; gender and natural resources, but very little on gender and climate change, particularly in Solomon Islands and elsewhere in the Pacific.

Ngongasila is a coastal island, about 1-1.5 kilometres off mainland Malaita. The island is about 300 metres wide and 4-5 metres above sea level. In the 1960s, residents of Ngongasila began to construct protective structures. Since the 1990s, the elders have noticed a change in wind directions that is contributing to the degradation of the island. Residents of Ngongasila also report changes in the structure and size of the island; an increase in the size of waves; and increase in the frequency of large waves; and stronger winds that are associated with heavy rainfall and large waves.

Residents of Ngongasila are now discussing the possibility of relocation to mainland Malaita. The sites identified for possible relocation are Adakoa and Atori.

In 2006, a land transaction for the communities of Kwai and Ngongasila was initiated. This was facilitated by the Late Hon Joses Sanga, who was then MP for East Kwara’ae Constituency. In May 2007, a payment of SID\$10,000 was made to the customary landowning group at Atori. The significance of this payment is now disputed. At the time it was made, it was described in the local language as a payment

for the engagement of the land to the people (akin to an engagement to be married). The payment is now regarded as a ‘token’ by some parties, rather than a part-payment of the land for relocation.

Following the payment, an interim Relocation Committee was established in Honiara in 2008. At present, however, there is a lack of support necessary to maintain the committee. There are plans to reinstate it, and look at ways of dealing with relocation that fit within the cultural framework of the people.

Social and leadership structures on Ngongasila are highly complex. Ngongasila was settled after people converted to Christianity through the SSEM. The residents of Ngongasila and their tribal chiefs can trace their heritage to many places, including Kwara’ae, Santa Ana, ‘Are’are, Walande, North Malaita, and Lau Lagoon. As a result of this complexity, land ownership on Ngongasila is highly contested and a source of disputes.

The complexity of tribal leadership and genealogies among the population of Ngongasila creates both a resource for and obstacles to relocation. The people of Ngongasila trace their heritage and make claims to land in many other parts of Malaita. This enabled people to identify Atori and Adakoa as potential sites for relocation, but it also means that relocation would challenge the current social fabric of the island, with leadership and authority becoming even more uncertain than they are at present.

It is essential that relocation occurs in a gender-sensitive manner, and that the coping strategies of different people in the community are carefully addressed. At present, however, discussion and decision-making regarding the possibility of relocation remain the preserve of men. While women have a very strong influence within the home, they lack a voice in broader community discussions. Any influence they have on community-wide discussions about land issues occurs through their husbands, uncles or sons. Women also have more limited access to some forms of customary knowledge, and it is generally men who have the knowledge necessary for discussions regarding land and relocation.

Relocation may involve new forms of ‘knowledge’ such as access to legal documentation. Ruth pointed out that it is necessary to consider whether this may offer new opportunities for women, or whether women will be excluded not only from ‘cultural knowledge’ but also ‘legal knowledge’.

Ruth also explained that her capacity to undertake this research was compromised by her identity, and this has implications for policy regarding climate change adaptation. For example, as both a woman, Ruth must obtain permission from her uncles and leaders in order to ask questions about, and speak about, land issues. The complexity of tribal leadership described above makes this particularly difficult. In addition, Ruth has married into another tribe (as is usually the case), and traces her claims to Ngongasila through her mother’s side. This raises questions about her involvement in land matters concerning Ngongasila. Ruth cannot speak about land issues unless she has been chosen by her people as a valid spokesperson on land issues on Ngongasila and the relocation process.

3.5 Climate Change Adaptability in Low-Lying Atolls in Temotu Province, Solomon Islands: A Story of Nupani settlers on the Move for Survival and Resilience - Jack Maebuta

While the other four case studies concern situations in which people are trying to relocate, or relocations are currently underway, this case study concerns people who have already moved. The Nupani settlers have already been relocated twice, and are now in the process of a third phase of relocation.

Nupani is a Polynesian atoll island that can currently sustain a maximum of 30 people. The first relocation occurred in 1963, when a total of 45 people (3 tepuke carrying 15 people each) relocated to the island of Tinakula. Coastal erosion and sea-level rise had started to affect their main source of food, and prior to the first relocation, they had already **explored** the island of Tinakula and started to plant root crops there. This relocation was instigated by the community, who relocated after being instructed to do so by the chiefs.

The second relocation occurred in 1971, when Tinakula erupted. By that time, the island supported a population of about 160 settlers. The settlers got into a boat and travelled to Santa Cruz, where they were accommodated in temporary camps and supported by local people for almost a year. The colonial government wanted to acquire 100 hectares of land for the settlers, but was only able to acquire 50, from an elder who offered his land because of his good relationship with the settlers. This relationship was based on trade relations that preceded the colonial era.

Today, the population of the Nupani settlers has outstripped the capacity for the land to sustain them. In addition, part of the land has been lost due to sea level rise and encroachment, and is no longer suitable for gardening or settlement. The land is also subject to competing claims of customary ownership - the people that know that the land was acquired by the government are suppressing that information and fabricating stories about the ownership of the land.

Some men from Santa Cruz and other islands have married women in the settlement, and they generally prefer to live there than elsewhere, due to the income generation opportunities available in the settlement. The main source of income for the settlers is fishing, and they earn more than people who are employed by the government in the provincial centre. It is therefore unsurprising that people are unwilling to move.

Despite the income generation opportunities in the settlement, the third relocation has begun - some settlers are negotiating to move to Vanikoro island on an alienated land. Some people have already relocated there. These families have skilful negotiators, who approached the provincial member of that particular island, who agreed to give them a portion of the alienated land.

4 Key themes arising from the workshop

4.1 Possible impacts of climate change

In discussing the impacts of climate change on their communities, the workshop participants acknowledged that the science of climate change is often characterised by uncertainty and controversy. It is not clear whether the impacts below are associated

with climate change, however they are the sorts of changes that could be expected to occur as a result of anthropogenic climate change in the future:

- People are experiencing very low and very high tides. This has many impacts, some of which are not immediately obvious. For example, in Lau Lagoon, tides can affect the ability of children to get to and from their school on the mainland.
- People are also observing unpredictable weather patterns and strong winds.
- Agriculture is being affected, and people need to adopt new agricultural methods in order to ensure their food security. For example, in some places swamp taro has historically played an important role in ensuring food security, however today saltwater intrusion is ruining gardens.
- The various impacts of climate change, as well as the need to relocate, are affecting people's identities and attachment to place. For example:
 - In many cases the people affected are saltwater people who have a strong connection to the sea. This makes it difficult for them to relocate to the mainland, even if they have access to land there.
 - The settlement at Ngongasila formed around an SSEC mission, and most people would therefore trace their genealogies to other places. As a result, relocation challenges the social fabric of the entire island.
- People are confused and lack understanding of the causes of the changes they are experiencing, and this appears to compound their psychological vulnerability.

4.2 *Adaptation and resilience are at the local level*

- The case studies demonstrated that people are already organising themselves to respond to climate change, with very little or no support from external actors. For example:
 - The people of Walande lay claim to two parcels of land. Both parcels were given to them during the colonial period, and were subsequently paid for (in

order to provide increased security of tenure). Walande Community began preparing for resettlement on to one of these sites in 1987.

- The Asisiki people (who have been held by the courts to be the landowners of Auki area) are currently developing a Relocation Package for families at Lilisiana settlement, which would enable them to move further inland.
- The people of Ngongasila paid a sum of money to a tribal group to secure land at Atori, however the significance of that payment (and therefore access to the land) is now disputed.
- The case studies also demonstrated that the capacity for adaptation exists at the local level. This capacity emerges from *kastom*, rather than from the laws or policies promulgated by the state.
- Each of the case studies showed that *kastom* provides mechanisms for people to move and acquire land. However climate-induced relocations raise new issues, in particular the mass movement of people on a permanent basis. For example, intermarriage has historically been a common means to secure access to land, and there is rarely any objection to children settling with their parent's people. However landowners may object to the next generation remaining there.

4.3 The role of external actors

- In the case of Lilisiana, Lau Lagoon and Walande, adaptation has been initiated by local people without any assistance. The relocation of Nupani settlers to Santa Cruz occurred with significant intervention by the government during the colonial period. Of the more recent cases, there was only one – that of Kwai and Ngongasila – in which a local Member of Parliament provided support.
- There are instances in which the support provided by external actors is inappropriate. For example, in the case of the Nupani settlers, the colonial government originally wanted to settle people on the Duff Islands, which are rocky and barren. The workshop recognised the utilisation of the Rural Constituency Development Fund (RCDF) for land acquisition to assist

communities in their relocation costs. The workshop participants also discussed some more recent cases, in which the support provided by NGOs for adaptation appears to be inappropriate.

- The case studies suggested that external actors such as Government, donors and NGOs should be actively supporting local initiatives, and in particular supporting dialogue between actual or potential migrating and receiving communities.
- The workshop participants also discussed the fact that the church has an authoritative voice inside communities, and also has a responsibility to use that position. Workshop participants believed that this was particularly the case where the church has been involved in resettlement issues in the past. For example, the church was the reason for the migration of people to Ngongasila, and church leaders therefore have a responsibility to mediate, build relationships and support dialogue.

4.4 The need for a flexible institutional framework

- There is a disconnection between the informal (or *kastom*) and formal (or state) procedures and leadership. Workshop participants believed that the government, NGOs and donors can play a greater role in supporting local initiatives, but that this requires coordination and an institutional framework.
- *Kastom* varies immensely from place to place, and institutional frameworks for supporting adaptation must recognise this variability. The imposition of uniformity on a variable environment is likely to undermine resilience and local adaptation mechanisms, and possibly even increase vulnerability (for example by exacerbating conflict).
- The experience elsewhere in the world demonstrates that the way money flows is critical to adaptation and resilience. Large sums of money can make local adaptation more difficult, particularly if channelled through state that lacks transparency and accountability.

4.5 *There is a need for further research and consultation*

- The case studies demonstrated that there are a number of obstacles to supporting adaptation and resilience at the local level:
 - given the diversity and plurality of Solomon Islands, developing an institutional framework for climate change adaptation will be difficult;
 - at present, very little is known about the impacts of climate change, or the forms of vulnerability and resilience experienced at the local level; and
 - there appear to be cases in which the forms of support provided by external actors have been inappropriate.
- The workshop participants noted that there is a need for further research and consultation, particularly at the local level with the communities affected.
- The workshop participants also expressed concern that a ‘quick fix’ may be adopted that is inappropriate to the context of Solomon Islands. They emphasised the need to support local initiatives and advocacy that is driven by local people. There is a need for research to support the development of evidence-based policy.

Further information on this project can be obtained from:

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