URBAN DEVELOPMENT IN THE PACIFIC

THEMES

- City living:
  The new Pacific Way?

- The politics of urban space

- Negotiating urban space

- Staying safe in the city

- Providing urban services

- Living in the settlements

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Cover photos
Front: New urban settlement, Honiara. (Photo Luke Kiddle)
           Children at the Jittu squatter settlement, Suva. (Photo Tarryn Phillips)

Back: Seaside settlement, Port Vila. (Photo Pamela Thomas)

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URBAN DEVELOPMENT IN THE PACIFIC

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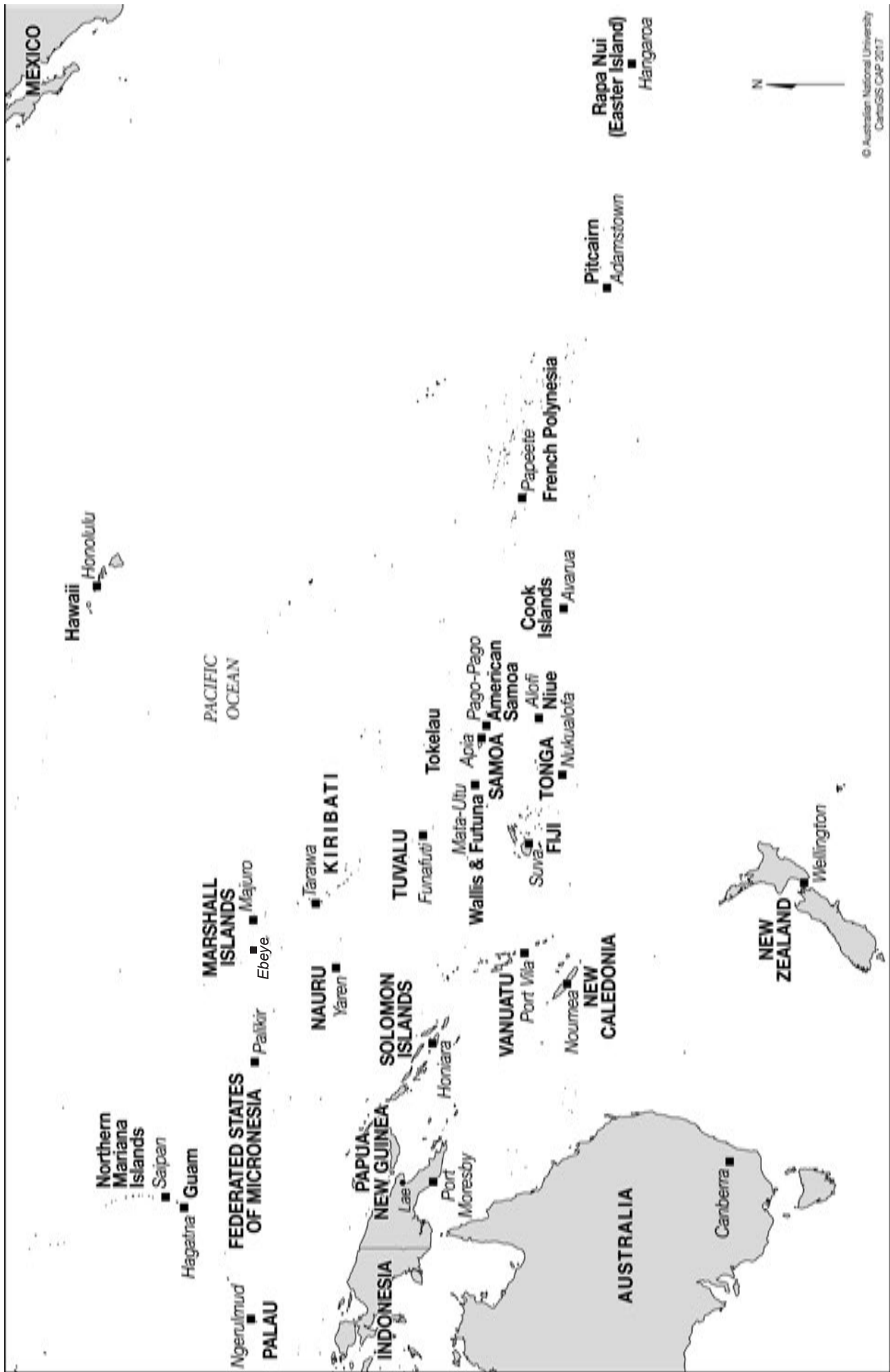
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Hangaroa

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Papeete
French Polynesia

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Hawaii
Honolulu

PACIFIC
OCEAN

Cook
Islands
Avarua

Tokelau

Pago-Pago
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Nuku'alofa

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TUVALU
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NEW
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Wellington

Northern
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INDONESIA

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Urban development in the Pacific

Pamela Thomas and Meg Keen, Australian National University

Introduction

Pacific Island countries are experiencing dramatic social, political and demographic change as urban populations increase and the flow of people moving from rural villages to the towns has become a flood. This issue of *Development Bulletin* considers the impact of rapid, extensive and unmanaged urbanisation on the development prospects of Pacific Island states. The papers consider some of the major factors that impact on urban residents, many of whom live in close knit, ethnically-based informal settlements. Informal settlements can provide a social safety net and entry point into urban life, but they are often crowded, and usually on low-lying or steeply sloped marginal land with no, or very limited, tenure. For many living in the cities there are few employment prospects and urban services are patchy. The papers in this volume explore the realities of living in Pacific towns — the political and policy rhetoric in relationship to what is happening in practice; pathways to urban inclusion and exclusions; and what residents say about 'living on the fringe' in the informal settlements.

In his overview of urbanisation in the Pacific, John Connell points to urban policy neglect with most governments failing to deal with rapid urban growth and in particular mushrooming informal settlements on the urban fringe. The result is that overcrowding and lack of basic services such as sanitation have become pervasive in Pacific towns. Connell argues that urban areas are giving rise to widespread inequalities that were unknown in the past and that are potentially destabilising: 'the rich monopolise the high ground creating new geographical and social divisions'. While there may have been a hope that neglect would discourage future growth, this has not been the case. Even without adequate tenure and services, urban settlements are more numerous and crowded than ever. In Samoa, where it has been assumed that urban migrants would always have access to family land in rural areas, this is no longer the case. Thornton shows there are now poor and landless urban Samoans despite government claims that there is no poverty in Samoa. The story is repeated around the Pacific.

But urban vulnerabilities do not just relate to land access, as Jones and Sanderson, Keen and Barbara show. Most Pacific towns and cities are coastal and particularly prone to environmental hazards and the impact of climate change. Urban settlements are frequently on the most marginal land and in the case of the low-lying and vulnerable atoll countries such as Kiribati and the Marshall Islands, there are increasingly smaller areas to settle as coastal erosion continues. Culpin highlights the challenges for Pacific atoll cities, as more and more people move to the major urban centres of Majuro and Ebeye in the Marshall Islands and Betio in Kiribati, creating some of the most densely settled areas in the world particularly so as they largely comprise single story dwellings. Even so, the urban pull is strong and cities seem to offer hope of a wage job, better services and modern lifestyles. Not surprisingly, a high proportion of urban migrants are young adults looking for a future, and in some cases, freedom from the constraints of traditional lives and obligations.

Securing the urban dream: Land and livelihoods

While cities can be centres for economic and political development, those in the Pacific are not meeting their potential and are what Barbara and Keen call 'underpowered cities' where 'governance and investment shortfalls persist and urban reform is not keeping pace with the needs or demands of urban residents'. Key institutions reflect decades of political neglect and under-resourcing. While plans and policies exist on paper 'in practice the cities are being shaped by more powerful interests which operate relatively unfettered by paper regulations'.

Secure access to land is a major problem for many urban residents and as Foukona illustrates in Honiara, access to secure land tenure is extremely complex and made more so when individuals abuse discretionary powers by leasing urban land for personal gain to friends, politicians and investors. With the rapid increase in the value of urban land

and opportunities for development profits there have been a number of cases where urban settlers, some of whom have lived in the same settlements for three generations, have been forced off the land and their houses bulldozed although the courts ruled in the settlers' favour. The Paga Hill community in Port Moresby is a well-documented case in point. Not even those living on church land feel secure.

But even in this challenging environment, there is clear evidence of considerable urban resilience (see Jones and Sanderson), an ability to find economic niches (see Hukula), and for communities to develop their own organisational structures and access to services, which as Gooden states in the case of water supply in Honiara, are not always strictly legal but help fill service shortfalls. Those living in urban settlements are taking matters into their own hands and creating what Jones calls a 'self-made urban order'.

Sometimes these home grown efforts are supplemented by external interventions. As Kiddle and Hay discuss, in both Honiara and Fiji there are interventions to upgrade informal settlements and provide greater urban security—the challenge is to ensure that top-down efforts are indeed supportive of bottom-up efforts, reinforcing local governance not overwhelming or side-tracking it. In countries like Fiji, there are initiatives to open up customary and state land to private investment and settlement through titling programs. But sometimes this formal institutional arrangement fails to recognise realities on the ground, where customary arrangements can be preferred and perceived as 'good enough'. For example, they do not allow for the deep insecurity of Indo-Fijian farmers who were forced off the land when their 30 year leases were not renewed.

Belonging in town

What is clear from the papers is that some of those living in informal settlements have been there all their lives—it is the only home they have known—but Keen and Carpenter point out from their work in Honiara's informal settlements that even new arrivals can feel that 'This is home now. We find it much easier now to generate income and send our children to school in town'. For urban born youth it can be harder: 'younger generations are lost in a way. In their speaking they belong to the province, but they might not have ever been there…it is a conflict'.

Comparing the different perspectives between Melanesian women in Port Moresby and Kanak women in Noumea, Spark found regional variation. Kanak women living in Noumea had no social association with the city, 'Noumea is nothing. It is French. There is one home—it is Lifou [rural home village]'. In contrast, women in Port Moresby felt 'comfortable in Moresby wherever I am'. Urban experiences are diverse, and the papers in this volume demonstrate the value of gaining a deeper appreciation of the lives and concerns of city dwellers and their implications for policy and planning. Using Hukula's example, planning needs to allow for the innovative ways

in which urban migrants negotiate space for both a new home and a new livelihood with many engaging in small informal business activities in locations that may fall foul of planning regulations, but not only provide a small income but social contact that helps migrants to 'belong' in the city.

Feeling secure in the city

Security is a recurrent issue when discussing urbanisation in the Pacific and includes business security, financial security, land tenure security, and personal security. It is widely believed, particularly by elites, that rapid urbanisation and mushrooming informal settlements have led to a rise in vice and crime, much of it attributed to disaffected young men. Dinnen discusses the nature of crime and violence in Pacific towns and the rapidly expanding private security sector. He observes that as private security companies extend their reach and services, the capabilities and integrity of the police force decline along with their numbers. In PNG, international and national private security companies together have a workforce estimated at 30,000 security guards—more than three times the number of serving police officers.

Personal security and gender violence around the Pacific is a pressing social problem, particularly in urban settings. In PNG it has reached 'emergency' levels with more than two-thirds of PNG women having experienced some kind of gender-based or domestic violence. Rooney points out that PNG's two largest centres, Port Moresby and Lae, have the highest homicide rates in the world and that robbery, assault and family and sexual violence are pervasive…'not only do women face security constraints in earning a living but also have to cope with chronic challenges of violence within their families and their communities, which often leave them victimised and traumatised'. In a new attempt to support those who have been victims, Howes provides information on a Lae-based organisation, *Femili PNG*, which seeks to provide professional case management for victims of violence. Together the papers on security underline the need for a critical look at emerging city trends and the need for appropriate services.

Servicing the city

A common theme throughout this *Development Bulletin* is the paucity of urban services, particularly in informal settlements, including limited and irregular water supply, no waste disposal, patchy electricity, no sewage or latrines, and inadequate transport. Gooden and Pendeverana both agree that providing regular safe water supply to informal settlements is difficult as many householders cannot afford to pay for water and believe it should be a free service. While WHO maintains that 71 per cent of Pacific urban populations have access to improved sanitation and 93 per cent access to improved water supply, Gero, Kohlitz and Willetts found that in informal settlements in Melanesian countries there was a prevalence of 'overcrowded and unreliable standpipes, unhygenic pit latrines and open

defecation'. This is also true of the small island states like the Marshall Islands. The resulting environmental impact of high levels of land, water and marine pollution augers poorly for all Pacific countries.

Health services are an important advantage to living in town but are often difficult to access and are negated by an increase in infectious and lifestyle health problems. Connell, Culpin, Phillips and Narayan agree that town living can lead to a reliance on inexpensive, store-bought food, much of it high in fat and sugar. Across the Pacific, urban lifestyles and unhealthy diets are associated with very high levels of non-communicable diseases such as diabetes, cancers and heart problems. The rapid spread of infectious diseases, such as TB, measles and diarrhoea in urban settlements is exacerbated by densely settled, unserviced and crowded households. The Marshall Islands reflect some of the negative impacts of urbanisation. Thirty seven per cent of children aged two to four years are overweight with 13 per cent already obese by the time they are 13 years of age. Culpin reports that 'People in the Marshall Islands experience one of the highest rates of type 2 diabetes in the world and the disease is established at an early age…half the population over 35 years has diabetes…infectious diseases among children are extremely common'.

But even the wealthier Pacific nations face health issues. Phillips and Narayan report on a health crisis in Fiji's informal settlements and point out that although health professionals will often blame sick people for their poor diet and lack of compliance with medication and treatment, they rarely take into consideration what is actually feasible for the very poor. As these authors point out, it is very difficult to avoid infections in situations where '80 people live in one small block and take it in shifts to sleep in the limited beds available'. Health problems are exacerbated by the increasingly recognised cluster relationship between non-communicable and infectious diseases.

Making cities work better

In Connell's words 'the region needs urban champions at a time when state planning is no longer popular.' Pathways to achieve more dynamic and liveable cities are still evolving, but this volume surveys a number of positive possibilities. For Jones and Sanderson, building urban resilience through support to local and community governance, and capitalising on the 'convening power' of non-traditional groups is part of the solution. They also see value in the Asian Development Bank concept of moving analysis from 'risk to resilience'.

Barbara and Keen, Hukula and Spark highlight the importance of critically considering how cities can be more inclusive in their governance and socio-economic development. Civil society forums, community groups, social media and NGOs are encouraging people to reflect on the ways in which they want their cities to develop and the action they can take themselves. Kiddle and Hay highlight that making progress means developing context-

specific policy solutions, which can include modified planning standards for designated lower income housing areas and taking an 'enabling approach' to upgrading settlements where a variety of land tenures and housing types are supported through both formal and informal arrangements—focusing on what works locally.

Ultimately, as Jones points out, we need stronger 'coalitions of the willing' to ensure communities can access the services they need by expanding partnerships and social networks both in and outside of informal settlements. Gooden shows how achieving better water supply can be achieved. Approaches will inevitably be diverse and multilayered given the social complexity of the cities. Dinnen demonstrates this in the security sector and the need for public-private solutions that include communities, not just government and business. Phillips and Narayan find that mounting urban health issues can only be addressed by a multi-sectoral approach that goes far beyond health departments and hospitals, and Foukona calls for home grown solutions to land pressures as well as better defined regulatory frameworks that are applied equally to everyone.

This won't happen unless there is better connectivity and those on the margins have living spaces that are linked to the core, access to finances to achieve their economic goals, and importantly, feel they have a real stake in the city, its governance and its future. Cities can be the economic heart of Pacific nations, but people are the life blood.

City living: The new Pacific way

The urban Pacific: A tale of new cities

John Connell, University of Sydney

In recent decades, urbanisation has proved seemingly inexorable throughout the Pacific as a consequence of internal migration and natural increase. The Pacific is coming closer to the global situation where half the world's population live in urban areas. Indeed in several Pacific island states, notably the atoll states of the Marshall Islands, Kiribati and Tuvalu, that is already reality. And it has happened extremely quickly. At independence in 1978, Funafuti, the capital of Tuvalu, had less than a thousand people; now it has 5,000, half the country's population, squeezed onto a narrow strip of land. It is scarcely the largest Pacific town but it has many of the same problems—unemployment, environmental degradation and insufficient adequate housing. By contrast the larger Melanesian states seem to lag behind in the proportion of those living in urban areas, yet it is there that large cities are growing. Port Moresby, the capital of Papua New Guinea, is approaching 500,000 people and, by 2030, may well become the first city of over a million in the Pacific. In Fiji, the 20 kilometre wide Suva-Nausori corridor has spawned a new town, Nasinu, in response to growing urban numbers. Urbanisation has created multiple challenges.

Much of this urban growth has followed migration which has had a primarily economic rationale, as people seek the 'fast money' of urban wages, alongside access to better education and hospitals, and a perceived future for their children. Environmental hazards have been regular catalysts to migration, where volcanic eruptions, cyclones and tsunamis have uprooted lives, and climate change is an emerging threat. The four Es—employment, education, entertainment and, more recently, environmental pressures—are all important.

Rapid urbanisation has largely been unplanned and in Melanesia and Micronesia especially has left a legacy of problems. Urban growth has been associated with unemployment, crime, poverty, environmental degradation, traffic congestion, heightened inequality, the rise of the informal sector (and repressions of it), pressures on education, housing, health and other services such as water and garbage disposal. Many urban residents live in informal housing in unplanned settlements, resulting in a tripartite problem of 'over-urbanisation', where cities and towns have been unable to create employment, provide adequate housing and services, such as sewerage and electricity, or manage the environment.

Such wide ranging issues have posed problems where economic growth is static, structures of urban governance and management are lacking or weak (or corrupt), disputes over land are frequent, and urban populations are becoming increasingly permanent. In most Pacific states there is a single primate city, and no real devolution or decentralisation to smaller regional centres. Adding to the complexity, cities are the centres of social change; as Dame Carol Kidu has said of Papua New Guinea, they are 'the complex interface between tradition and modernity' where shiny waterfronts and motorways disguise cultural complexity and the need to celebrate and plan for diversity. Capital cities have not proved to be the crucibles of nationhood that was once anticipated. Solutions are challenging, and dependent on economic growth, slower population growth, more effective service provision and management, adequate data to assess change and innovative approaches to land provision. None of these are easy but all of them are becoming more urgent.

Permanent places

Cities and towns are here to stay; they cannot be ignored and wished away. Yet they remain the 'elephants in the room' that are rarely discussed in policy and practice (Connell 2011). While migrants are often seen to be the main cause of urban growth, particularly in Melanesia, natural increase remains important. Birth rates remain high in several states, mothers are often young, total fertility rates are above four, especially in Papua New Guinea, Samoa and Solomon Islands, and the demographic transition is still to be achieved in parts of the Pacific.

Urban fertility means that towns and cities are the home of second, third and later generations, people who belong to the city, have experienced nothing else and are not migrants with another 'home' to which they might return if urban life does not work out. Some urban residents acquire good jobs, others marry across language and island boundaries and find it convenient to stay in the 'neutral' city. Even 25 years ago, in both Port Moresby and Lae, a third of all children had never even seen their 'home' villages. The towns and cities are their homes, old ideas of circular migration are disappearing and the cities' cemeteries are filling up. At the end of 2015, Port Moresby urban authorities were unsuccessfully pleading with those whose relatives had died there to take them 'home' for burial.

Not only have later generations made the city their home but first generations can also find return more difficult. They are often seen to have voted with their feet and the old kinship safety nets that enabled return have become overstretched, even when poverty, unemployment, old age or social disorder make life difficult. In the towns where 'public sharing and private hiding' become more important, urban safety nets have also collapsed as life has become more individualistic and more difficult.

While the proportion of people living in towns and cities is lowest in Melanesia, with only a quarter of Papua New Guinea's population living in urban areas, the largest, most rapidly growing cities are there. So too are the largest informal settlements. By contrast, in Micronesia and Polynesia, where towns and cities have been long established—along with Honolulu, Apia was the first nineteenth century town in the Pacific—international migration is taking many people overseas so that the towns are only slowly growing. Perhaps the most critical issues, outside of Melanesia, are in Kiribati, where international migration is only temporary so there is no 'safety valve' for rapid population growth. The population growth rate is around two per cent, and half the national population live on the tiny 20 kilometre coastal strip that is South Tarawa: a place of extreme densities and inadequate infrastructure.

Almost everywhere rural-urban migration has brought the steady depopulation of most outer islands. Poverty can be hidden in outer islands, and in the remote upland Melanesian valleys, where there is both a poverty of opportunity and minimal access to crucial educational and health resources, employment opportunities and accessible markets. Like everywhere else in the world the margins are fading, islands on national peripheries have lost population, some being depopulated in French Polynesia and Palau. As youths emigrate, numbers fall, services are inadequately provided, incentives to remain decline, and downward spirals are enhanced. Cities can be the reluctant beneficiaries.

Economy and poverty

While eagerly sought after, and attained by few, prestigious employment exists in town. Pacific cities have limited job opportunities: manufacturing is largely confined to import substitution and the public sector scarcely grows. Such limitations provide no basis for inclusive and sustainable development, and in almost every city and town the annual number of school leavers is greater than the number of new job opportunities. That has given rise to a very visible 'youth bulge' marked by unemployed youth with scarce employment prospects, no inclinations for agricultural work or village life, and few social prospects. That has even produced new words such as 'pasindia' or 'spirim public rod' for the restless unemployed with little to do. Little wonder that, in Polynesian states especially, youths are also the main overseas migrants, a prospect not open to most Melanesians. Women too are often disadvantaged in town, sometimes by educational status, sometimes by societal norms and often by lack of work. Unemployment, poverty and the informal sector have become more visible in island towns. Crime is far from unknown and security services are one of the few growing sectors of urban employment.

Inequalities are most evident in urban areas, especially in Melanesia where the rich monopolise the high ground, creating new geographical and social divisions. Urban growth has made access to food gardens more difficult and urban residents become entrenched in a monetary economy where, as some say, 'even going to the toilet costs money'. Low incomes and a lack of support during illness or unemployment give a sense of frustration, biding time, waiting for uncertain opportunities, sometimes working illegally, securing multiple jobs, maintaining strict budgets and abandoning some 'traditional' obligations, simply to get by. Many urban residents survive rather than prosper in the city.

As in other cities in the global south, the cities of the Pacific have acquired informal sectors, where otherwise unemployed residents have created their own jobs— cleaning, repairing, marketing, recycling goods—on the margins and in the cracks of the formal city. They are too often repressed, like betel nut sellers in Port Moresby, by unnecessary regulation and tendentious aesthetics. In Port Moresby, Suva and Honiara especially, the rise of urban poverty and the informal sector has been marginalised in anti-urban policies, where residents are forced out of urban areas, most dramatically by the bulldozing of settlements, and by attempts to devolve responsibilities from the state. Even urban markets and market vendors have been opposed by urban and national governments, despite their ability to provide employment for youths and women. Informal sector workers lack the security and social protection of others. Some are children, missing out on valuable education. In Honiara governments were bulldozing markets, simultaneously with reports recognising them as invaluable for employment generation (Maebuta and Maebuta 2009). Anti-urbanism, where settlers are out of sight and out of mind, is not however matched by pro-ruralism.

It is seldom recognised that the informal sector plays an important role in employment creation, labour absorption and the marketing of rural produce, while urban residents, many self-employed, purchase a substantial proportion of their food (and other goods) in the markets (Connell 2013).

Only in the markets has the informal sector been of enough importance, as in Tonga, to come into conflict with the formal sector. By contrast, the rise of crime, prostitution and begging are symptomatic of limited economic growth, unemployment, the social costs of urbanisation, and the decline of traditional social control mechanisms. There is nothing dramatic or glamourous about the informal sector, but it is valuable, even essential, for urban life. Yet few governments have sought concerted attempts to devise welfare and employment policies that might reduce the problems (Connell 2003). Indeed, some governments, such as that of Samoa, deny that poverty exists despite the emergence of beggars in Apia. Such denials themselves deny effective policy formation, yet social disorganisation and crime are a function of substantial inequalities in access to land, housing and other services. When aspirations fall behind opportunities, as they increasingly do (Sharp et al 2015), and governments fail to protect their citizens, towns can be seedbeds of discontent.

Informal lives and housing

Informal settlements challenge the nature of urban planning by effectively reversing standard processes, but they are the logical response to land shortages, inequitable land allocation systems and growing inequality (Phillips and Keen 2016). The occupation of land and the construction of houses come first, followed by efforts to acquire services, infrastructure and security of tenure (ADB 2016). In cities where formal processes co-exist the challenges for comprehensive urban planning are considerable.

Settlers must find their own energy, water supplies and sanitation, not easy in marginal sites, which are often prone to hazard, and distant from electricity and water pipes. Informal housing is often sub-standard, and not hazard resistant. In 2010 as many as 70-80 per cent of urban settlers in Fiji were below the poverty line (ADB 2016). It is quite likely that the proportion is higher in Solomon Islands and Papua New Guinea. Poverty alleviation is crucial. Relative and real poverty means that giving access to and paying for services is difficult. Moreover, caring for the aged and disabled in cities has rarely been anything but an afterthought. Many local communities have organised their own settlements and communities to support improved drainage and push for better access to services, and services are gradually reaching many settlements, partly encouraged and supported by external donors. Yet difficulties in gaining access to land and services raises acute questions about human rights and the nature of national and urban citizenship.

There remains a desperate shortage of adequate data on cities in general and informal communities in particular, to assess what is needed in terms of livelihoods and income levels, education, health and disease, access to services and environmental management. Evidence-based policy formation and planning is urgently required. More than enough is known for there to be effective action, but better data would be invaluable.

Coastal squeeze and environmental stresses

With the exception of the highlands of Papua New Guinea, Pacific towns and cities are exclusively coastal phenomena, constructed on some of the most sought after land, competing with agriculture, tourism and fisheries. The expansion of cities has contributed to a coastal squeeze, more recently marked by migration to flood-prone areas and accelerating environmental degradation. Informal housing is mainly on marginal land, rejected by formal housing estates, some of which is coastal and particularly vulnerable to environmental hazards, especially cyclones. That can only worsen as climate change contributes to sea-level rise.

For several decades recent migrants, especially the poor, have had to settle in marginal, low-lying urban areas prone to flooding, rats, insects and disease problems, as in Nuku'alofa, Nadi, Suva and Funafuti. Such areas are particularly vulnerable, having been partly reclaimed from swamps and cleared of mangroves, the outcome of better sites being occupied or beyond economic reach. Even in Fiji, where urban sewerage is relatively extensive, barely a third of residents in the metropolitan Suva-Nausori area are connected to a centralised system; the rest are served at best by septic tanks. Since the topography of the metropolitan area is rugged and soils impermeable, much effluent flows directly into streams and coastal waters. Management is limited, water security is rare and continued unregulated growth worsens such problems.

Atoll towns experience particular environmental stress, including sand mining and gravel extraction for urban construction, reducing marine productivity and accelerating coastal erosion, while removal of mangroves for fuel and construction has weakened defences against marine incursions. Tarawa particularly experiences several critical environmental issues including groundwater depletion and pollution from sewage (with around a third of the urban population using beaches as toilets); over fishing of reefs and lagoons; non-degradable waste disposal; and deforestation which eliminates sources of food, medicinal plants and habitat and increasing the vulnerability of coastlines, contributing to poor nutrition and health related problems. Access to fresh water is a severe challenge, compounded by problems of garbage and sewage disposal, and as climate changes the challenges are likely to intensify. A 'perfect storm' and a massive challenge (Storey and Hunter 2010).

Funafuti and Majuro experience similar difficulties. Atolls offer no places of retreat, no high land, indeed very little land at all. In Majuro and Tarawa urban densities have reached proportions scarcely seen outside Asian cities—posing problems of health, from the possibility of cholera (already experienced in several towns) to HIV/AIDS, tuberculosis and malaria, and risking a rise in respiratory diseases as climate change turns towns and cities into more humid, hotter islands. Even more important are the lifestyle diseases—heart attacks, diabetes and cancer— that accompany more sedentary lifestyles and consumption of fast foods. Already several Pacific cities are contesting the stakes for the obesity capitals of the world.

Waste management is often poorly organised, sites are hard to find and, once again on atolls, space for landfills is scarce and the disposal of toxic wastes (such as batteries) is haphazard and dangerous, especially where there is leakage into vital water lenses. Lack of recycling makes plastics, tins and take-away containers an urban health and aesthetic nightmare. The capacity to collect, sort and dispose of solid waste is stretched thin in many urban areas. Garbage collection is often irregular and may only serve formal housing areas. Much waste is thrown on open dumpsites, including the sea, in the streets, or burnt in open areas. Poor management of municipal waste collection (and dumps and vehicles) results from lack of adequate funding and management and other factors, including access to appropriate land. Limited knowledge and capital and few realistic alternatives result in dumping waste in rivers, roadsides and coasts.

Access to safe water is often erratic and uneven. More acute seasonality may worsen this further. In Honiara nearly 30 per cent of the poorest households depend on unsafe water sources and have no satisfactory sanitation system (Russell 2009). In Fiji, reticulated water supply reaches less than half of urban households, and water losses from leaking pipes are massive, approaching 70 per cent of all water supplied (Kumar 2010). Colonial infrastructure never extended to settlements and has often decayed and rusted into obsolescence resulting in significant water losses. Even when settlements have formal access to water, facilities are poorly maintained, supplies are not guaranteed and settlements are usually the first affected during water shortages. Informal settlements often depend on shared pit toilets, sometimes very close to water courses, and subject to flooding, thus increasingly susceptible to contamination which may contribute to gastroenteritis and dengue fever. Environmental conditions in many informal settlements threaten the health of residents and ultimately that of the wider urban area.

Households cannot always pay for services and are dependent on rainwater. Infrastructure provision and maintenance, and changing attitudes, both hampered by poverty, have not kept pace with growing populations and increased demand. While atoll states experience unusually severe problems in sewage management, because of a combination of water shortages, land tenure constraints and limited resources, sewerage systems are inadequate in many Pacific towns. Symptomatic of the new Pacific cities, toilets are less common than mobile phones and there is no safe public toilet in Port Moresby.

Competing for land

Competition for land is fierce in urban areas; so little land is owned and managed by the state, and urban authorities have only limited ability to influence its overall use and ownership. Moreover, Pacific towns are unusually complex, composed of urban villages, such as Hanuabada in Port Moresby or Suvavou in Suva, now often surrounded by suburbs (and shopping malls) much like those anywhere else in the world, newer tower blocks—valuable for

security—and between and around all these are informal settlements, on land that few others want.

Social relations in town are often centred around kinship and places of origin—people prefer the security of living amongst their kin—but land pressures are inducing change. Even in such settlements as Blacksands in Port Vila, relationships are emerging between settlers from different parts of the country—although not without tensions. In Fiji, settlements commonly include both Indo-Fijians and indigenous Fijians. By contrast, classes are emerging in more formal suburbs where new values shape neighbourhood relationships (Gewertz and Errington 1999). Again this diversity does not make for easy planning and management as society grows further apart, and becomes especially so where walled suburbs, whose occupants see themselves as exclusive, contribute little or nothing to broader, inclusive urban development.

Largely spontaneous development makes planning unusually difficult especially since the state has only limited access to some land within urban boundaries. Consequently, some of the largest settlements, like Blacksands in Port Vila, are both outside formal urban boundaries and constructed on the land of various local landowners, resulting in a variety of leases and tenure conditions. Such tenure can be uncertain, often requiring repeated renegotiation, made more complicated as Melanesian towns and cities have at least seven different kinds of overlapping tenure that frustrate planning (Mecartney and Connell 2017). Potential or actual urban residents must use a diversity of strategies to gain access rights to land, and having gained rights by one means or another are unwilling to lose them (Foukona 2015; Rooney 2017). Informal housing and uncertain tenure are the outcomes where land is the most important resource that any household can have.

As Francis Fukuyama (2008:21) has pointed out, for the Solomon Islands:

> The fact that there are multiple classes of claimants to a particular parcel of land, no strong tradition of delegated authority, and no statute of limitations with regard to customary claims, means that it is extremely difficult...to come up with schemes by which landowners can pool resources to convert customary land into modern alienable property.

As much as anything else it is the task of wrestling with customary land, where society is written on the ground, that has militated against urban planning.

Planning deficits?

Urban planning, even basic land use planning is rare in the Pacific but unregulated urban expansion has increased the costs of urbanisation, especially for infrastructure provision. Many settlements are entirely unregulated, so that urban growth proceeds faster than governments can regulate or keep pace with facilities and services. Public space and recreational space are scarce, offering few opportunities for fresh air and a sense of aesthetics.

Basic infrastructure is rarely the result of public initiatives. Few effective housing policies exist, and state housing is undeveloped and beyond the reach of the poor, so that people have had little option but to provide for themselves. Governments have demolished as much as constructed, so that many people are in effect urbanising the towns themselves, in the face of formal intransigence, neglect and a policy vacuum.

Cities need some degree of autonomy—and a financial and government structure distinct from that of national government—to enable effective planning and management. At the same time, they also need some form of governance that enables local participation and offers transparency. Decisions are made without consultation and participation even though informed public sector intervention is critical; so too is the actual concept of 'public' service. Urban political institutions, such as town councils, barely exist and/or lack authority and resources, and compete with national governments, so have little power and authority to direct and provide services, or embrace wider planning issues. Planning systems, where they exist, are technocratic, bureaucratic and unrelated to fluid socioeconomic systems which are more concerned with regulation than emancipation.

Governments have often failed to commit resources to urban planning and management—since it is rarely seen as a priority—and, where they exist, urban governments have inadequate resources to meet, plan, manage and maintain infrastructure, and sustain basic services. Chronic shortages of skilled staff exist. Policies that once had ephemeral success have been overwhelmed by rapid changes, especially urban population increases, bureaucratic inefficiency and land shortages (Storey and Hunter 2010). Most urban planning strategies have been short lived and lasted no more than a single project cycle, often because particular individuals have moved on, human resources are inadequate, finance has been restricted, power is contested by the nation or corruption derails promising beginnings (Jones and Lea 2007; Mecartney and Connell 2017). Ultimately, urban planning and management has simply failed to garner enough national support.

Public transport only links some parts of the cities. Buses in Fiji and the Polynesian cities have not emerged in Melanesia, although there is a booming private sector of passenger motor vehicles, an informal sector characterised by entrepreneurial zeal. Remarkably there are few bicycles or motor bikes, even in atoll cities where hills are non-existent. No Pacific towns and cities come close to sustainable transport development. Urban sprawl is unhelpful, cars are 'necessities' for the better off, and petrol guzzling four wheel drives are the vehicle of choice, as the Pacific makes its own small contribution to greenhouse gas emissions.

Smart and sustainable cities

Pacific towns and cities are far from sustainability as their sprawl takes over valuable land, water aquifers are depleted and transport belches out noxious fumes. They contribute to reductions in biodiversity and biocapacity, the ability to provide resources and to absorb waste. Nor are they close to becoming smart cities, although smartphone technology and the popularity of mobile phones offer some promise.

Elsewhere in the world, new cities are emerging—places of creativity and connectivity, where contemporary technology links residents, urban governments and service providers, enabling more effective provision of services, faster response to environmental issues or such basic issues as traffic congestion. Crowdsourcing can be one way for urban citizens to help each other, contribute to planning and push for targeted changes, and make their own contributions to sustainable development through participatory action.

Several of the countries of the south have begun to embrace this vision, attempting to integrate Information and Communication Technology (ICT) innovations into urban management, covering a range of urban facilities from schools to drainage systems. At least in theory, ICT allows urban officials to interact directly with urban communities, draw information from them and monitor what is happening in the city, how the city is evolving, and how to enable a better quality of life. Yet no global city is even close to being a smart city, decision making tends to be hierarchical and aligned with vested interests, and the technological costs are considerable (Yigitcanlar 2015). Smart cities suggest a more effective movement towards sustainability and thus equity, by integrating new technologies, social systems and ecological concerns, but there is some way to go in the Pacific. There are presently more basic objectives centred around creating effective urban government and management, and basic engagement with all local residents.

Conclusion: Problems and possibilities

The speed and scope of Pacific urbanisation is unprecedented, and much of it has been unplanned. Notions of tiny islands and idyllic villages with palm trees and lagoons exist but that is not where most people live. City residents are not going away so planning and management is critical. Too many people earn inadequate incomes and live in vulnerable and unhealthy environments, limiting their contribution to national development. Poverty is increasingly an urban problem, transferred from rural areas. Towns and cities offer social mobility and the aspirations of many are focused there, but they must be accessible to all, in a spirit of equity, hope and citizenship, and there needs to be more public space. The global Sustainable Development Goals set out in 2015 have as goal 11: 'Make cities and human settlements inclusive, safe, resilient and sustainable'. A focus on urbanisation is certainly timely, and developing urban resilience is part of the Framework for Resilient Development in the Pacific which Pacific leaders endorsed in 2016.

Inequality is a problem, but policies that integrate spatial management, economic growth, poverty reduction and environmental protection are conspicuous by their absence. Congestion, sprawl and segregation co-exist. Sustainable

long-term development of urban areas requires integrated planning and management across administrative, sectoral and physical boundaries, but progressive policies are yet to play an effective role in developing social cohesion. As the Prime Minister of Papua New Guinea, Peter O'Neill has said: 'Government processes are slow when they demand transparency and fairness'. But slow should not mean a full stop.

Cities, and their inhabitants, have little effective voice, despite being close to government. Urban elites often focus on their own home areas, business interests and the politics of patronage. However, much more positively, many local communities have organised in support of their own interests. Although that does not necessarily link into higher levels of planning and management it may be where the most positive gains can be made. Hard decisions will be needed over land, where no landowners want to relinquish customary tenure or settlers to lose their status, and where ideologies are thoroughly entangled. Fiji was one of the first Pacific island states to recognise the rights of informal settlers and extend services to them, creating a 'policy bridge' and practical ties between the formal and informal sectors (Phillips and Keen 2016). It offers important lessons for other states, and for developing a 'Pacific Way' of effectively managing urban development.

Few Pacific islanders are urban planners, and building towns and cities in small countries that have scarcely experienced economic growth is unusually difficult, with perfunctory aid and diverse expectations of what cities should be like. Little political will exists to remedy these problems and, especially in Melanesia, rapid political turnover is disadvantageous for policy formation. Pacific states need better urban data to plan more effectively and monitor change, but lack of data should not preclude better management. The region needs urban champions at a time when state planning is no longer popular, while urban policy requires a sensitive and progressive rural counterpart, enabling sustained production, adequate services and regional growth centres elsewhere in the country. Even without climate change, environmental management is another priority. Beyond such directions urban planning should embody a vision that conveys the aspirations of governments and people, contributes to social and economic development and, quite simply, offers and provides pleasant places to live and work.

References

ADB (Asian Development Bank) 2016, *The Emergence of Pacific Urban Villages. Urbanization Trends in the Pacific Islands*, ADB, Manila.

Connell, J 2003, 'Regulation of Space in the Contemporary Postcolonial Pacific City: Port Moresby and Suva', *Asia Pacific Viewpoint*, 44, 243-258.

Connell, J 2011, 'Elephants in the Pacific? Pacific urbanisation and its discontents', *Asia Pacific Viewpoint*, 52(2), August 2011, 121-135.

Connell, J 2013, *Islands at Risk? Environments, Economies and Contemporary Change,* Edward Elgar, Cheltenham.

Foukona, J 2015, 'Urban land in Honiara: Strategies and rights to the city', *Journal of Pacific History,* 50(4), 504-518.

Fukuyama, F 2008, 'State building in Solomon Islands', *Pacific Economic Bulletin*, 23(3), 18-34.

Gewertz, D and F Errington 1999, *Emerging Class in Papua New Guinea*, Cambridge University Press, Cambridge.

Jones, P and J Lea 2007, 'What has happened to urban reform in the island Pacific? Some lessons from Kiribati and Samoa', *Pacific Affairs*, 80(3), 473-491.

Kumar, V 2010, 'Water management in Fiji', *Water Resources Development*, 26, 81-96.

Maebuta, H and J Maebuta 2009, 'Generating livelihoods: a study of urban squatter settlements in Solomon Islands', *Pacific Economic Bulletin*, 24(3), 118-131.

Mecartney, S and J Connell 2017, 'Urban Melanesia: The Challenges of Managing Land, Modernity and Tradition', in S McDonnell, M Allen and C Filer, (eds), *Kastom, Property and Ideology: Land Transformations in Melanesia*, 57-84, ANU Press, Canberra.

Phillips, T and M Keen 2016, 'Sharing the City: Urban Growth and Governance in Suva, Fiji', *State, Society and Governance in Melanesia Discussion Paper* 2016/6, Australian National University, Canberra.

Rooney, M 2017, ''There's Nothing Better than Land': A Migrant Group's Strategies for Accessing Informal Settlement Land in Port Moresby', in S McDonnell, M Allen and C Filer, (eds), *Kastom, Property and Ideology: Land Transformations in Melanesia*, 111-143, ANU Press, Canberra.

Russell, L 2009, *Stayin' Alive: A report on urban livelihoods in Honiara, Solomon Islands*, APHEDA, Sydney.

Sharp, T, J Cox, C Spark, S Lusby and M Rooney 2015, 'The Formal, the Informal and the Precarious: Making a Living in Urban Papua New Guinea', Australian National University, *State, Society and Governance in Melanesia Discussion Paper* 2015/2, Canberra

Storey, D and S Hunter 2010, 'Kiribati: An environmental 'perfect storm'', *Australian Geographer*, 41, 167-181.

Yigitcanlar, T 2015, 'Smart cities: An effective urban development and management model?', *Australian Planner*, 52(1), 27-34.

Urban resilience: Informal and squatter settlements in the Pacific Region

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The term 'resilience' has gained popular currency among aid agencies, donors, and regional, national and local governments as an approach to responding better to shocks and stresses encountered by communities, people and systems. Policy and practice approaches strongly rely on this term, with its application transitioning from one associated with disaster management and climate change to one now associated with a range of challenges, including urban development. Notwithstanding this, resilience has its critics.

This paper reviews what resilience as both a broad concept and as a consequent set of policies and practices means in the Pacific urban context, with a specific emphasis on the growing number of informal and squatter settlements. It also discusses the increasing urban focus of resilience and what it means for Pacific Island Countries (PICs). The paper concludes with a discussion on what might be needed for urban resilience to be enacted successfully for vulnerable and poorer urban dwellers such as the increasing numbers who live their lives in informal and squatter settlements.

Pacific urban context

While many policymakers and planners may be unsure how to address the myriad challenges and problems associated with urbanisation, there can be no denying the impacts and consequences associated with the continuing urbanisation of the Pacific region (see Map 1). The Pacific has experienced rapid, unmanaged urbanisation during the latter half of the twentieth century as Pacific Island countries confronted the growth of 'villages' into towns and towns into cities. Issues of human resource and technical capacity, combined with an entrenched anti-urban bias centred around towns and cities as hubs of 'immorality' and the need for migrants to return to the subsistence affluence of the rural village, permeated regional and national urban policy. This ambivalence to understanding the concept of 'urban' and of the positive and negative challenges of the wider urbanisation process as nuanced in the Pacific region is reflected in a legacy of growing levels of inappropriately sited development, a lack of awareness of hazard risks, and inadequate appreciation of related planning tenets such as the 'public interest'. The provision of basic urban services, for example, such as water supply, sanitation, drainage, and safe and affordable land for development has not been able to keep pace with growing demand (ADB 2013). In addition, urban poverty contributes to the exposure and vulnerability of people and assets within the urban milieu (ADB 2012).

Map 1: The Pacific regions and its three subregional groupings: Melanesia, Micronesia, and Polynesia. Source: ADB 2012.

In 2015 the PICs had an estimated population of 10.9 million persons with approximately 2.5 million residing in formally defined urban areas. In absolute population numbers, this is equivalent to 23 per cent of the total Pacific population. In other words, nearly one in every four Pacific Islanders is an urban resident (Jones 2016). In 2015, 10 out of 21 selected PICs were defined as more than 50 per cent urban, while 12 had urbanisation rates greater than 40 per cent. Concurrent with trends seen in Pacific Island countries and the wider Pacific over the last 25 years, urban growth rates continue to be higher than rural growth rates in nearly all Pacific Island countries. The exceptions to this trend are those countries subject to declining population, primarily due to out-migration, or those that have peri-urban or productive rural hinterlands that remain formally classified as rural (Jones 2016).

Concurrent with urban growth is the continued rise of unplanned urban growth, with most change associated with: livelihoods and the informal economy, (that sector of the economy which is untaxed and unregulated by any form of government); and the growth of informal and squatter settlements (see Figure 1). The largest numbers of informal and squatter settlements are in the Melanesian capital cities - Port Moresby, Honiara, Port Vila, and Suva - and smaller towns of Micronesia, such as South Tarawa and Majuro. The recurring pattern in Pacific towns and cities is that they all contain a proportion of informal and squatter settlements to varying degrees, with the largest numbers being in Port Moresby, the biggest city in the Pacific region. Port Moresby has some 45-50 per cent plus of its population residing in informal or squatter settlements, as well as in the original 'native village' enclaves such as Hanuabada, that was established in the colonial era (see Figure 2).

Figure 1: The informal economy underpins household survival in informal and squatter settlements in the Pacific. Image of central markets in Suva, Fiji. (Photo: Paul Jones).

Country and Capital City	Population of Main City 2013	Estimated Settlement Population	Annual City Population Growth Rate	Annual Settlement Population Growth Rate	Settlements as % of City Population 2013	Settlements as % of City Population 2023
Honiara, Solomon Islands	64,600	22,600	3%	6- 26%	35%	64%
Suva, Fiji (Greater Suva Area)	244,000	50,000	2%	8%	20%	31%
Port Vila, Vanuatu	44,000	15,400	4%	3- 12%	35%	43%
Port Moresby, PNG	500,000 to 700,000	225,000 to 315,000	2%	5- 8%	45%	56%

Figure 2: Urban populations and growth of informal settlements in selected Pacific Island countries (Pacific Regional Infrastructure Facility, 2015).

The link between natural hazards and environmental risk is reflected in a growing number of informal and squatter settlements that continue to emerge on customary, state and freehold lands, as well as residents who seek accessible and affordable land and housing. The lands where settlers take up occupation have often been identified by the formal planning system as unsuitable for planned formal urban development as they are increasingly identified as vulnerable lands because they may be flood prone, subject to land slips, have steep slopes, or are deemed necessary for environmental protection. Locations are usually poor quality and risky, such as along tidal rivers and estuaries and waste disposal sites. One of the key challenges of growing numbers of informal and squatter settlements therefore is to not only better understand how they are formed and evolve, but to better manage their permanency and integration within Pacific towns, cities, and national development plans and policies.

Does resilience help?

The concept of 'resilience' has a number of definitions. The Rockefeller Foundation (2015) defines resilience as, 'the capacity of individuals, communities and systems to survive, adapt, and grow in the face of stress and shocks, and even transform when conditions require it. Building resilience is about making people, communities and systems better prepared to withstand catastrophic events – both natural and manmade – and able to bounce back more quickly and emerge stronger from these shocks and stresses'. This definition makes two things clear:

1. The first is that resilience operates at the individual, community and systems levels. This is important because there are different levels of responsibility regarding who does what according to these levels. For example, individual resilience is (unsurprisingly) in the purview of the individual to accomplish. This however relies on the other levels. For communities (or perhaps for urban areas, neighbourhoods) and their governance, the capacity to organise; for systems, the role of varying levels of government; and for the private sector, to deliver and manage goods and services including utilities such as water, sanitation and healthcare.

2. The second point is that resilience can occur before, during and after a catastrophic event. Resilience is therefore not just about more effective post-disaster relief and recovery, but is also aligned with pre-disaster measures that reduce vulnerability to a disaster and lessen its impact, or perhaps even prevent the disaster from occurring. In this light, resilience is therefore as much a developmental concern as a disaster management approach. This is important, given the consistent critiques of the separation of development and disaster preparedness and the consequences for disaster recovery efforts that often do not go far enough, for example, providing short term responses that do little to address longer term concerns, such as in the case of temporary shelter provision after a disaster.

Resilience and its application in particular to urban centres has grown in recent years. For example, the Rockefeller Foundation's 100 Resilient Cities Initiative works in 100 cities around the world to build partnerships and programmes designed to help 'cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century'. Resilience is also a key component of the UN Sustainable Development Goals 9 and 11 which aim to 'make cities and human settlements inclusive, safe, resilient and sustainable', and 'build resilient infrastructure' respectively. 'Resilience' and 'resilient' are also prominent within the New Urban Agenda (NUA) ratified at the United Nations Conference on Housing and Sustainable Urban Development (HABITAT III) in Ecuador in 2016, appearing 29 times. In the NUA, resilience is used to refer to efforts to combat climate change and environmental sustainability.

The concept of resilience has become popular not only due to considerable donor backing, but also because of its utility. The 2016 International Federation of Red Cross and Red Crescent Societies (IFRC) World Disasters Report (Sanderson and Sharma 2016) observes the following benefits of resilience. First, it provides convening power as

politicians will readily stand by calls to 'build resilience' in ways they might not have done had the rallying cry been 'less vulnerability'. Secondly, resilience cuts across disciplines and boundaries. This is perhaps due to its roots in a number of sources including engineering (where the phrase 'bounce back' emerges), psychology, and ecology (Romero-Lankao, Gnatz, Wilhelmi and Hayden 2016). The inter-disciplinary nature of resilience can be very helpful when addressing the needs of vulnerable people in the totality, rather than according to any one particular sector, for example, water or sanitation. This shift to a more holistic understanding has long been seen as a prerequisite for better efforts at responding to disasters more effectively and finding resonance in urban responses. In particular, it is reflected in current debates concerning the benefits of adopting 'area-based approaches' in disaster recovery (Sanderson and Sitko 2017; Parker and Maynard 2015).

The concept of resilience of course has its critics. A common critique is that in calling communities and people 'resilient', the burden on duty bearers such as local governments to provide support is diminished. For example, after Hurricane Katrina a common protest against the lack of support from affected people was 'don't call me resilient!' (Kaika 2017). Also, the wide range of definitions and resilience models is for some more confusing and ends up muddying contexts, rather than clarifying and contributing to a better understanding of challenges such as those posed by urban growth and environmental change.

What does urban resilience look like in the Pacific?

Reflecting on the growing interest in adopting the term elsewhere, resilience as an approach to addressing urban challenges has been recently used in a range of contexts in the Pacific. Three case study examples are briefly presented here to illustrate the way in which resilience is positioned and situated in the Pacific urban context.

Example 1: In 2013, the Asian Development Bank (ADB) released the key publication, *Moving from Risk to Resilience: Sustainable Urban Development in the Pacific*. While defining urban resilience as 'the ability to withstand and recover from unexpected shocks associated with natural hazards and climate change' (ADB 2013:vi), the assessment argues that resilience can be strengthened by taking a wider focus on its relationship and linkages to urban planning and management. In this setting, the assessment recommends a series of actions such as improved natural hazard and climate change data, greater urban service coverage tied to spatial planning, improved infrastructure design standards, and effective emergency disaster response and post-disaster recovery systems.

Most importantly, the report recommends a shift to 'risk resilience' by improving urban governance arrangements, as well as human and resource support. Of significance here is the recommendation to move away from 'top down' land use planning and adapt 'bottom up' solutions. The latter would utilise systems based thinking rather than sectoral

approaches, thus improving institutional coordination rather than working as 'silos'. Moving towards sustainable urban development therefore implies a potential for greater cross sector urban resilience capacity (ADB 2013).

Example 2: The Pacific Urban Agenda (PUA) was initially developed at a UNESCAP sub-regional workshop in 2003, and adopted at its sixtieth session held in 2004. The Pacific Islands Forum Leaders subsequently endorsed the PUA in 2005 and it was included in the Pacific Plan. Building on these initiatives, the fourth Pacific Urban Forum (PUF 4) was held in April 2015, and resulted in the endorsement of the most recent PUA. The event was attended by urban policy makers, and local and national government, as well as development partner representatives.

Four key recommendations were endorsed in the resolutions of the 2015 PUA, of which Recommendation 2 included the concept of resilience, and similar to the ADB assessment, focused on the impact of natural hazards and climate change as a factor in increasing social, economic and environmental costs within urban settings. Importantly, those residents most impacted were the most vulnerable communities who do not have the means and capability to cope with disaster and climate change risks, such as those in informal and squatter settlements. As a result, the PUA recommended closer alignment between urban planning, disaster management and climate change, and that these should be considered part of urban management strategies and infrastructure development plans at regional, national and city levels. As the PUA is a regional policy, its resilience is framed in a broad policy setting and includes no definition of what resilience or being resilient means.

Example 3: Branded as a joint strategy for the Honiara City Council and Solomon Island Government, the Honiara Urban Resilience and Climate Action Plan (HURCAP) 2016 has its overall objective as strengthening the resilience of Honiara. Due to its location, Honiara has a history of being at high risk to a range of natural hazards, such as earthquakes, tropical cyclones and tsunamis. In the modern era, issues of lack of capacity and of understanding the role of urban planning have constrained the city's ability to deal with urban population growth. This includes population change driven by natural increase, but also the influx of migrants moving to Honiara in search of improved lifestyles including employment, services and education.

One consequence of this growth has been the rapid rise in informal and squatter settlements within the existing urban boundary plus the peri-urban areas of Honiara. Due to the poor housing conditions and their location in environmentally sensitive areas, the residents of such locations are highly susceptible to natural hazards. HURCAP indicates that addressing the resilience needs of vulnerable communities in informal settlements will not only reduce the impact of natural hazards, but also provide a valuable platform for implementing climate change adaptation measures and enhancing community resilience into the future. The plan refers to the challenges underpinning the 'urban resilience agenda' and that all stakeholders have a role to play across a myriad of issues.

As a result, urban resilience action plans include addressing housing, water, sanitation and waste, health, well-being, ecosystem services and disaster risk reduction and management (Trundle and McEvoy 2016).

The term 'resilience' is used 126 times in the HURCAP and is used in many contexts ranging from 'inform resilience strengthening actions' to 'resilience needs to be understood as a dynamic characteristic of a city, one that will continue to change as a consequence of urbanization processes and local and global environmental change' (Trundle and McEvoy 2016:90,104). One of the key strengths of HURCAP is that it takes the notion of urban resilience beyond the secular focus solely on climate change adaptation and risk of natural disasters and hazards, to the development setting and condition of the urban realm of Honiara, including informal and squatter settlements.

Transitioning to a deeper understanding of resilience in urban Pacific

This paper argues that the adoption of resilience to address urban challenges in the Pacific provides opportunities, but also challenges for realigning policy and programming approaches. Reflecting on the above examples, what we see is resilience used in a number of different contexts and senses.

- Urban resilience is anchored in mainstream definitions of resilience which promote first and foremost the ability to deal with naturally triggered disasters and climate change.

- Some assessments define urban resilience generally in a broad non-context specific setting, some do not.

- Urban settings are increasingly seen as important due to their major concentrations of administration, essential social and physical services, people, and hubs of economic activities. Despite their inefficiencies and poor management, Pacific towns and cities are acknowledged as places of high Gross Domestic Product (GDP) (ADB 2012). Because of these overlapping concentrations, communities and infrastructure at varying levels are exposed to greater risks from climate change and natural hazards.

- The adverse impacts of disasters and climate change are exaggerated in Pacific towns and cities, as they contain the highest physical concentrations of poorer communities who are already vulnerable and at risk. The evidence shows that most of these urban dwellers live in informal and squatter settlements (Jones 2016) and therefore climate change, natural hazard and urban vulnerability are intertwined.

- Urban resilience is posited as either the condition of a community and its controlling systems at a point in time, or as an aspirational goal. There is concern with 'capacity and condition' in the context of response and recovery.

- Notions to enhance resilience are anchored in 'formal system solutions' that embody ideals and aspirations of what communities and systems should be, and importantly, are based around hierarchical deterministic plans and policies driven by stakeholders who may have other values and motivations. This is an important consideration when considering the relationship of resilience to urban sustainability and raises the question of whose sustainability?

How then can resilience be adopted as a beneficial approach for the urban Pacific? Reflecting on the key themes identified above and taking into account wider debates and experiences of resilience elsewhere, three opportunities emerge. The first is to adopt 'resilience for real', that is, to embrace the full meaning of the term. This means in particular addressing events both before and after disasters strike. In adopting this understanding, resilience acts as a bridge between the chronic (poverty) and the acute (disaster). The HURCAP, for example, uses resilience in this manner wherein focusing on resilience provides the starting point for addressing contributing and interrelated development issues. Another is the strengthening of National Disaster Management Offices (NDMOs) as part of efforts to improve disaster preparedness which can play a critical role in strengthening community level preparedness. For example, Fiji's NDMO undertook training for 200 communities through the Pacific Community Integrated Disaster Risk Reduction Programme, involving the creation of disaster committees and the development of disaster plans (Tuifagalele and McLaren 2016).

The second opportunity lies in taking and advocating a greater people centred approach in Pacific Island Countries. A constant element in urban development and disaster based approaches for decades is the theme that the most effective approaches for improving conditions among those most vulnerable, need to start with affected individuals (Chambers 1995). New tools and approaches based on this understanding could help, such as 'area-based approaches' (ABAs), that 'support people after a disaster in a specific location to transition effectively from relief to recovery, and is most effective with existing structures and can be scaled up' (Sanderson and Sitko 2017:8). ABAs have gained significant traction in recent years for tackling urban disasters, and have been endorsed by the Inter-Agency Standing Committee (IASC 2017) and the newly convened Global Alliance for Urban Crises (GAUC 2016).

The third opportunity, and challenge, is to address the critiques of resilience and realign them so that they reflect the uniqueness of the Pacific urbanisation context. For example, 'being resilient' means that: (i) government is 'off the hook' and that addressing underlying development issues can be delayed and/or responsibility negated, and (ii) governmental approaches need to adopt policies and practices that engage and support vulnerable neighbourhoods in meaningful ways that support existing governance structures. In replacing vulnerability, the ADB's strategy 'Moving from Risk to Resilience' needs to capitalise on the convening power of 'resilience' as noted earlier. Another opportunity for convening power lies in the United Nations Sustainable Development Goals (SDGs) and the 2016 NUA which offer greater insights and understanding of how cities evolve and work, but

require leadership and a shift away from 'business as usual' approaches to see real change on the ground. In the Pacific urban context, this means greater work in advocating that resilience does matter for the urban poor if urban resilience is to gain real meaning and impact in Pacific towns and cities. Otherwise, urban resilience will be seen as just another top down global concept not grounded to the realities of the Pacific.

References

International Rescue Committee (IRC) and Mercy Corps 2016, "ADAPT Analysis Driven Agile Programming Techniques", www.rescue.org/adaptcasestudies.

ADB (Asian Development Bank) 2012, *The State of Pacific Towns and Cities - Urbanization in ADB's Developing Member Countries*, Pacific Studies Series, Manila.

ADB (Asian Development Bank) 2013, *Moving from Risk to Resilience: Sustainable Urban Development in the Pacific*, Asian Development Bank, Manila.

Chambers, R 1995, 'Poverty and livelihoods. Whose reality counts?' *Environment and Urbanization*, 7 (1), April. Available at: www.archidev.org/IMG/pdf/p173.pdf

GAUC (Global Alliance for Urban Crises) 2016, HABITAT III, 'The New Urban Agenda Key Messages', GAUC, Geneva. Available at: http://urbancrises.org/sites/default/files/2016-10/HABITAT_III_NUA_Messaging_for_Alliance.pdf

IASC (Inter-Agency Standing Committee) Reference Group Meeting Humanitarian Challenges in Urban Areas Revised Workplan for 2015-17. IASC, Geneva.

Jones, P 2016, *The Emergence of Pacific Urban Villages - Urbanization Trends in the Pacific Islands*, Pacific Studies Series, Asian Development Bank, Manila.

Kaika, M 2017, "'Don't call me Resilient Again!' The New Urban Agenda as Immunology ... or what happens when communities refuse to be vaccinated

with 'smart cities' and indicators', *Environment and Urbanization* , 29 (1), London.

Pacific Region Infrastructure Facility (PRIF) 2015, Unsettled: Water and Sanitation in Urban Settlement Communities in the Pacific, Sydney.

Parker, E and V Maynard 2015, 'Humanitarian response to urban crises a review of area-based approaches', IIED working paper, July. Available at: www.alnap.org/resource/20505

Rockefeller Foundation 2015, *100 Resilience*. Available at: www.rockefellerfoundation.org/ourwork/topics/resilience/

Romero-Lankao, P, D Gnatz, O Wilhelmi, and M Hayden, 2016, 'Urban Sustainability and Resilience: From Theory to Practice', *Journal of Sustainability*, 8,1-19.

Sanderson, D and A Sharma, 2016, 'Making a case for resilience' in *World Disasters Report*, IFRC, Geneva

Sanderson, D and P Sitko, 2017, 'Urban area-based approaches (ABAs) in post-disaster contexts', Guidance note for Humanitarian Practitioners, IIED, London.

Trundle, A and D McEvoy 2016, 'Honiara Urban Resilience and Climate Action Plan (HURCAP)' with UN-Habitat Cities and Climate Change Initiative and RMIT University Climate Change Adaptation Program.

Tuifagalele, A and M McLaren, 2016, 'Small-island preparedness: learning from Fiji and Tropical Cyclone Winston', Text Box 4.5, 122, in Sanderson, D and A Sharma (eds) 2016, 'Resilience: saving lives today, investing for tomorrow'. *IFRC World Disasters Report*, IFRC, Geneva.

UN-Habitat and Commonwealth and Local Government Forum (CLGF), 2015, Pacific Urban Forum 2015, Towards a new urban agenda: Harnessing opportunities in a post-2015 environment. Available at: http://www.clgfpacific.org/userfiles/3/file/2015%20Pacific%20Urban%20Forum%20Resolution%20and%20Outcomes%20Document.pdf

Urbanisation in Melanesia: The politics of change

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Cities have the potential to be drivers of national development, but in Melanesia they are not meeting their full potential. Political and institutional arrangements are failing to manage the pressures of rapid urban growth. The result is 'underpowered cities'—where governance and investment shortfalls persist, and urban reform is not keeping pace with the needs or demands of urban residents (Clark et al 2017).

Key institutions such as municipal councils remain weak, reflecting decades of political neglect and under-resourcing. At the national level, urban responsibilities can be fragmented and poorly defined with most agencies focusing on rural and regional development (Mecartney and Connell 2017). The majority of political representatives feel no need to promote urban agendas because most electorates in Melanesia are rural, and even in urban electorates many voters maintain strong political and social linkages to their rural places of origin, with some even returning to these areas to vote. While urban plans and policies exist on paper to direct development, in practice the city is being shaped more by powerful interests which operate relatively unfettered by paper regulations.

This article considers the reasons why urban politics in Melanesia have 'shallow roots' (Barbara and Keen 2016) and why communities struggle to shape urban development. It considers the consequences of this shallow polity, and the potential for more widespread political engagement in the future. Currently, there are structural and political forces militating against more inclusive development, but the process of urbanisation can change social relations and plant the seeds for higher levels of political activism on urban issues. This paper examines some of the opportunities in urban environments for stronger collective action that can build social and physical capital in cities, while minimising the potential for social tensions.

Shallow urban politics in Melanesia

Urban institutional development in Melanesia has failed to match the growth of urban communities, resulting in policy and political neglect (Connell 2011). The strong rural bias has dominated Melanesian politics since pre-independence days, consistently prioritising provincial representation and programs. For example, in Solomon Islands, 15-20 per cent of the population lives in Honiara but is represented by only three (or 6 per cent) of the 50 national Members of Parliament (MPs). Lacking a strong voice in national parliaments, urban communities find it hard to counter the assessment of political leaders that priority should be given to rural and regional communities where most voters live, and to create an appreciation of the important links between urban and rural development.

Policy follows politics in Melanesia, as epitomised by the increasing program focus on decentralisation and the growth of constituency development funds (CDFs), finances controlled by MPs, as a key way to deliver local services. While CDFs are not unique to the region, the Melanesian variant is noteworthy both for the high level of government funding allocated to them (relative to other forms of spending), their rapid growth and weak accountabilities. For example, in Solomon Islands, CDFs of around AU$56 million (SBD330) are allocated to MPs on an electorate basis (Batley 2015). Crucially, from an urbanisation perspective, CDF systems have developed in ways which privilege small rural electorates over larger urban ones. For example, the East Honiara electorate in Solomon Islands had an estimated voting population of around 16,000 in 2010, compared to the North Vella Lavella electorate in Western Province with an estimated voting population of around 2,500 (Haley et al 2015)—both receive similar CDFs. A similar situation exists in PNG (Howes et al 2014). The inequity of CDF allocations is thus huge, and will only become more inequitable as urban growth continues, possibly fuelling future urban discontent.

Added to financial pressures, are pressures on the limited land available within urban boundaries. Scarce urban land under increasing migrant pressures has led to evictions, conflict and insecurity across Melanesia (ADB 2016; Bryant-Tokolau 2014; Foukona 2016). As cities spill over into peri-urban land and informal settlements—those areas without legal land tenure—tensions rise further, exasperated by the politics of urban neglect in which urbanisation is cast as a social 'bad' to be countered through limiting informal settler rights to services. This anti-urban policy bias has proven remarkably persistent despite the permanent nature of urban communities and rising populations. It has had the effect of preventing or delaying urban political and institutional reforms which could better cater for large urban populations, and better enfranchise urban communities. The absence of such reforms has made it difficult to proactively manage Melanesian cities and harness their potential as drivers of national development.

Urban spaces and places: Struggling to flourish

The way in which cities have developed spatially has compounded the challenges of political organisation in Melanesia. The sprawling nature of many Pacific cities with their large informal settlements on urban outskirts has kept many urban communities geographically fragmented and marginalised. Informal settlements now dominate the peri-urban areas of capital cities. These communities do not legally exist, making them highly vulnerable and largely excluded from urban plans and services (ADB 2016).

Urban fragmentation inhibits the development of cohesive urban identities and social networks from which urban-based social movements might emerge. In the absence of this social capital, political action to address urban grievances and encourage inclusive urban development has tended to be patchy, rather than systemic.

These socioeconomic realities of urban life in Melanesia mean that the structural foundations that have supported strong urban political movements elsewhere, such as an urban based labour movement or strongly networked residents with common concerns, are largely absent. The low levels of industrialisation in urban centres and the persistence of informal and subsistence urban economic activities do not provide a strong basis for the political organisation of workers or commercial interests. Because the private sector in cities is dominated by many small enterprises, and a just few larger enterprises, this means that many employers with interests in reforming the operation of the urban economy lack scale and resources to counter those usually larger employers who benefit from poorly regulated or 'grey' economic zones, such as property and land development (Craig and Porter 2014).

In the absence of strong, locally grounded social movements and political organisations, urban based activism is often driven, if it occurs at all, by externally supported NGOs. By necessity, much of this activism is apolitical and focused on technical and administrative reforms. It has the potential to strengthen formal institutions and systems, including by helping broker relationships between disjointed state agencies, but rarely stimulates socially transformative processes. Throughout Melanesia for example, development partners are working with women in market places to better organise workplace governance and local policy and in individual settlements to 'upgrade' services, but their development projects rarely reach beyond local areas or issue specific policy targets. Lacking political ballast, in the form of strong and organised political support from powerful social actors or political parties, these approaches struggle to achieve reforms that encroach upon the vested interests of powerful urban actors. The apolitical nature of much development partner support also makes it difficult to engage with sensitive urban development issues such as property ownership and taxation, which could alienate powerful interests and spark political resistance.

Even if social pressures for urban reform grow, the current weak and under resourced nature of government agencies responsible for urban management makes it hard for them to deliver on their mandates. Key political institutions such as municipal councils struggle to play a strong role in shaping urban development for a number of reasons, including inadequate revenue sources and limited administrative capacity. Even better resourced national agencies, such as Ministries of Land and/or Housing, generally lack enforcement capacity, so sound urban plans and policies are rarely fully implemented. For example, much urban land is settled without permits or secure tenure (about 40 per cent of settlements are 'informal' in Honiara; about 45 per cent in Port Moresby); developments occur

without required approvals, such as in vulnerable coastal and riverine areas of cities; and utilities are accessed illegally—in places like Honiara 'non-revenue' water accounts for about 60 per cent of supply, that is water supplied but not paid for because of illegal tapping or leakages (Solomon Water 2013).

In a self-perpetuating cycle, the historically poor management of urban development, reflected in inadequate service coverage and infrastructure investment, has undermined the credibility of, and support for, urban authorities and the socioeconomic development of cities. Such institutional weakness in many respects parallels the broader weaknesses of post colonial states in the region (Dinnen 2008). Like elsewhere, part of the problem is that current, largely Western transplanted, institutional and political frameworks struggle to get traction in Melanesian societies with very different cultural values (Numbusa and Koczberski 2012).

Melanesian cities: Fertile terrain for inclusive politics?

While urban communities in Melanesia have shallow political roots, it is important to recognise that the process of urbanisation is slowly creating conditions conducive to a more meaningful and potentially more consequential urban politics. Informal settlements are slowly being recognised as an important part of cities, for example there are more options to gain recognition of land title in informal settlements, and policy innovation is occurring to allow better access to urban services, such as pre-paid schemes. Greater integration across sectors is also occurring. In Port Moresby, the Liquefied Natural Gas (LNG) and other large projects have driven the growth of a more extensive urban service sector. Following political pressure to increase the benefits of LNG exploitation to urban areas, ExxonMobil has assisted with boosting urban electricity generation for Port Moresby. In Honiara, the Solomon Islands Chamber of Commerce and Industry are more politically engaged on urban development issues because of their importance to business interests, particularly in the areas of urban connectivity and service access (Keen et al 2017).

Growing urban economies are in turn creating the basis for an emergent middle class (Barbara, Cox and Leach 2015) who have the potential to be an important constituency demanding political recognition and reform. The Melanesian middle class, to the degree it exists, is still small—mostly engaged in public administration and the private sector. But this group is notable for its urban identity and increasing connectivity. Persistent poor service delivery, high cost housing and low infrastructure investments has led to a stronger push for reform. In Honiara, intolerable traffic congestion has led to political pressure on politicians and development partners to take more concerted action to finally address infrastructure bottlenecks. Critical housing shortages in some countries, has created a public call for action, for example policy initiatives to encourage higher density and more affordable housing. In Fiji, the government is now providing lower

cost housing options and allowing residents, mainly from the middle class, to access superannuation to pay for housing (Phillips and Keen 2016).

Finally, changes in urban demography and connectivity have the potential to support new forms of social activism and urban based social movements, previously unimagined. Large numbers of citizens now live in close proximity to each other and can interact electronically as well as physically—a stark contrast to many rural communities across the region. Social media is helping communities initiate conversations about how they are governed and enabling them to begin to recognise themselves as a constituency with discernable interests. For example, social forums such as Forum Solomon Islands International and PNG Loop raise issues and push for reforms in relation to inadequate urban services and unaccountable development processes.

While the political ground still needs cultivation, it nevertheless provides a basis from which a more active urban political constituency might emerge. If current urban population growth rates are sustained, Melanesian society will become increasingly urban. In Fiji, which is the most urbanised Melanesian country with more than 50 per cent of the population living in cities, the political tides already appear to be turning. In the last election the Bainimarama government of Fiji placed urban development higher than ever on the policy agenda likely driven by a desire to appeal to the growing numbers of urban voters, particularly in the Nausori–Suva–Lami corridor, and to harness the development potential of the cities given the stagnation of the agricultural sector (Lal 2014; MacWilliam 2015).

Supporting the emergence of more inclusive urban politics

Urbanisation has long been recognised as a potential driver of political and social change (Fukuyama 2012). However, it is not inevitable that urbanisation will of itself lead to the emergence of a stronger and better organised urban constituency, or more inclusive forms of urban development. More effective urban politics must emerge endogenously, build on social and cultural foundations, and be driven by urban communities. Strong political leadership and partnerships within, and across, urban communities will be key.

There are interesting examples of increasingly sophisticated urban activism as communities organise to demand positive change. In Honiara, the Young Women's Parliamentary Group mounted an effective urban campaign demanding improvements in public transport. The group circulated a petition that received over 5000 signatures, conducted a radio awareness campaign and held public forums. They used this public support to lobby MPs to establish a special select committee. In 2013, the committee held a public inquiry, organised public forums and accepted submissions before releasing a final report with policy recommendations. The result was a public policy process that was relatively transparent, accountable and inclusive

(Barbara and Haley 2014). Legislation is now being mooted to strengthen the powers of the Honiara City Council to regulate bus routes.

These examples are significant, but highly localised. A long term challenge centers on how best to support urban communities to scale up their collective action. Helping build a more knowledgeable and better networked constituency for urban change will be critical to achieving effective collective action. This will involve working with local communities to define development priorities and pathways for action. Few urban groups can navigate the complex and often opaque relationships between different tiers of governments, nor understand the technical challenges involved in planning, land development and service delivery. Empowering urban communities by equipping them with knowledge can be a basis for activism and identifying realistic solutions. Support for more participatory forms of decision making through civic forums and community based initiatives represent a useful complement to democracy building programs focused on national parliaments and agencies far removed from local challenges. Even so, change requires political will and community support; much still needs to be done to overcome resistance to investing in cities.

Capitalising on critical and popular urban development opportunities can help to build social capital, infrastructure and political commitment in cities. For example, large scale regional events such as the Festival of Pacific Arts and the Pacific Games often lead to significant urban development programs of wide national benefit. Ensuring that event planning is participatory and inclusive provides a tangible way of engaging both urban and rural communities, and deepening community trust. Poorly managed and elite driven, such national events have the potential to provide unprecedented rent seeking opportunities and 'white elephant' infrastructure not suited to localities and not maintained. Getting the fit between development and social priorities right is key.

One particularly difficult area requiring more attention is the perception that urban development comes at the expense of rural communities. Local and global evidence suggests that rural communities can enjoy significant development dividends from well managed urbanization processes (Keen et al 2017; Veneri and Ruiz 2013). However, this requires the development of effective transport, communications, financial and market connections between rural communities and urban centres, so rural areas can capitalise on market and service delivery opportunities provided by growing cities. Helping communities to identify areas where stronger rural-urban connectivity can yield high socioeconomic returns would assist in creating stronger support for urban development.

Embracing opportunities

All too often in Melanesia, cities are framed as a risk, overlooking the potential of rapidly growing urban areas to drive development. To engage more productively

with urbanisation, new theories of urban change and conceptualisation are needed which recognise urban centres as dynamic places that are home to potentially significant political communities and development opportunities. Investing in cities is investing in national development, if urban-rural connectivity is strong. Urban centres, properly supported, can stimulate positive processes of economic, social and political change.

Notes

[1] In PNG, CDFs are known as District Service Improvement Programs.

References

ADB (Asian Development Bank) 2016, *The Emergence of Pacific Urban Villages: Urbanization trends in the Pacific Islands*, Asian Development Bank, Manila.

Barbara, J and N Haley 2014, *An Analytical Framework to Engage with Developmental Leadership in the Pacific*, Report prepared for the Pacific Leadership Program, Suva, June 2014, http://www.plp.org.fj/wp-content/uploads/2016/05/PLP_DL-Scan_Report.pdf, accessed 10 March 2017.

Barbara, J, J Cox and M Leach 2015, 'The Emergent Middle Class in Timor-Leste and Melanesia: Conceptual Issues and Developmental Significance', *State, Society and Governance in Melanesia Discussion Paper* 2015/4, Australian National University, Canberra.

Barbara, J and M Keen 2016, 'Urban Politics in Melanesia: Shallow Roots', *State, Society and Governance in Melanesia In Brief* 2016/9, Australian National University, Canberra.

Batley, J 2015, 'Constituency Development Funds in Solomon Islands: State of Play', *State, Society and Governance in Melanesia In Brief* 2015/67, Australian National University, Canberra.

Bryant-Tokalau, J 2014, 'Urban Squatters and the Poor in Fiji: Issues of Land and Investment in Coastal Areas', *Asia Pacific Viewpoint*, 55(1).

Clark, G, T Moonen and E Moir 2017, *Underpowered Cities*, LSE Cities Series, London School of Economics and Politics, London, https://lsecities.net/media/objects/articles/underpowered-cities/en-gb/, accessed 25 April 2017.

Connell, J 2011, 'Elephants in the Pacific? Pacific Urbanisation and its Discontents', *Asia Pacific Viewpoint* 52(2).

Craig, D and D Porter 2014, 'Post-conflict pacts and inclusive political settlements: institutional perspectives from Solomon Islands', *ESID Working Paper No. 39*, September, http://www.effective-states.org/wp-content/uploads/working_papers/final-pdfs/esid_wp_39_craig_porter.pdf, accessed March 2017.

Dinnen, S 2008, 'The Solomon Islands intervention and the instabilities of the post-colonial state', *Global Change, Peace and Security* 20(3).

Foukona, J 2016, 'Solomon Islands' Urban Land Tenure: Growing Complexity', *State, Society and Governance in Melanesia In Brief* 2017/5, Australian National University, Canberra.

Fukuyama, F 2012, *Political Order and Political Decay: From the Industrial Revolution to the Globalisation of Democracy*, Profile Books, London.

Haley, N, K Zubrinich, J Barbara, K Baker and H McMahon 2015, *2014 Solomon Islands Election Report*, May 2015.

Howes, S, A Mako, A Swan and C Wiltshire 2014, *A lost decade? Service Delivery and Reforms in PNG 2002-2012*, National Research Institute and the Development Policy Centre, Canberra.

Keen, M, J Barbara, J Carpenter, D Evans and J Foukona 2017, *Urban Development in Honiara. Harnessing Opportunities, Embracing Change*, State, Society and Governance in Melanesia Program, Australian National University, Canberra.

Lal, B 2014, 'In Frank Bainimarama's Shadow: Fiji Elections and the Future', *Journal of Pacific History*, 49(4).

MacWilliam, S 2015, 'Bonapartism in the South Pacific: The Bainimarama Government in Fiji', *State Society and Governance in Melanesia Discussion Paper* 2015/10, Australian National University, Canberra.

Mecartney, S and J Connell 2017, 'Urban Melanesia: The Challenges of Managing Land, Modernity and Tradition', S. McDonnell, MG Allen and C Filer (eds.) *Kastom, Property and Ideology: Land Transformations in Melanesia*, Australian National University Press, Canberra.

Numbusa, G and G Koczberski 2012, 'Migration, Informal Urban Settlements and Non-Market Land Transaction: A Case Study of Wewak, East Sepik Province, Papua New Guinea', *Australian Geographer*, 43.

Phillips, T and M Keen 2016, 'Sharing the City: Urban Growth and Governance in Suva, Fiji', *State, Society and Governance in Melanesia Discussion Paper* 2016/6, Australian National University, Canberra.

Solomon Water 2013, *The Solomon Water Development Plan*, 2013–2015, Honiara, 22 April 2013.

Veneri, P and V Ruiz 2013, *Urban-to-Rural Population Growth Linkages: Evidence from OECD TL3 Regions*, OECD Regional Development Working Papers, 2013/03, OECD Publishing.

The rules of the game: Legal and political influences over land access in Honiara

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In Honiara, land access for residential, recreational and commercial purposes is an ongoing urban challenge, particularly as land values rise rapidly and the profits from development steadily escalate. Both customary and state sanctioned mechanisms are used to shape how urban land title and development is arranged. I draw on Ribot and Peluso's (2003) theoretical framework to define access as the 'ability to benefit from the thing' where the 'thing' of concern in this case is urban land. This theoretical model provides a lens through which we can analyse who benefits from urban land in Honiara and through what processes.

This paper explores contemporary land tenure complexities, the challenges associated with them and how they have been addressed in Honiara. Particularly relevant to land allocations in Honiara has been the Commissioner of Lands and the Land Board. Prior to the establishment of a Land Board in 2014, the Commissioner of Lands had discretionary administrative powers to determine people's access to urban land in Honiara, including when to exercise force as a process of exclusion (Hall et al 2011; Fraenkel 2004). I argue that the way the Commissioner of Lands exercised administrative power allowed some people control over access to urban land while others had to pursue access through different strategies, for example through leveraging claims of indigeneity (Allen 2012). I then examine the changes to the land laws which allowed for the establishment of a Land Board and how this has contributed to addressing access to urban land in Honiara.

Contemporary tenure complexities – an overview of the rules of the game

Most land in Solomon Islands is under customary land tenure and is regulated under customary law – a recognised source of law under Section 76 of the Constitution. Such recognition, on paper at least, has integrated customary law into the formal legal system (Corrin 2001), which then provides the legal basis for the recognition of customary rights in relation to land and marine tenure. According to customary law, every member of a landholding entity such as a tribe, clan or family is vested with the rights to use and access customary land in different ways. Non-owners usually have limited or usufruct rights, such as right of use, easement, or right of way.

However, the majority of the land within the Honiara town boundary is government land that is held mainly as public land or registered estates, which can be leased out for either residential or commercial purposes. These lands were acquired by the government through a long historical process of alienation (Moore 2015; Foukona 2015; Foukona and Allen 2017). Once registered, the estate title owner has indefeasibility, except for overriding public interests or instances where the High Court issues an order to set aside the registration because of fraud or mistake. The estates are subject to payment of premiums and rentals, and also to any development conditions prescribed initially by the Commissioner of Lands, now the Land Board. The cost of acquiring land premiums as part of the transaction for acquiring perpetual or fixed term estate (FTE) titles is very expensive (see Keen and McNeil 2016). Recently measures have been introduced to reduce the costs of FTEs for low income people but whether urban authorities have the capacity to enforce them remains to be seen.

Once a Solomon Islander has title in either a registered perpetual or fixed term estate within Honiara that person could easily transfer the proprietary interest either by sale (*inter vivos*) or will. Such a person could also lease an estate to which they have title to a Solomon Islander for any specified period, but if the lease is to a non-Solomon Islander, a prior written consent from the Commissioner of Lands (now Land Board) must be obtained. The Land and Titles Act provides for the granting of periodic

and not fixed term leases of public land. Initially, the Commissioner of Lands had the power to grant such a lease but now such power is vested in the Land Board.

Since Independence very little public land has been leased by the Land Board. The legislation allows for the granting of easements and profits over perpetual and fixed term estates, as well as registered leases. Easement in the form of right of way could be created over public land by the Land Board. The legislation also allows for the use of perpetual estates and fixed term estates as security for loans but only by way of a registered charge and not mortgage. During the early colonial period, leasing of customary land to non-Solomon Islanders (referred to as 'native leases') was usually granted by the High Commissioner on behalf of the landowners.

After Independence in 1978, the Constitution protected Solomon Islander landownership interests by prohibiting non-Solomon Islanders from owning land. It provides that only Solomon Islanders and a limited class of persons could own and hold land as registered perpetual estates. It also provides that there should be prior negotiation with landowners before customary land could be compulsorily acquired for a public purpose. Even so, the Land and Titles legislation recognises that under customary tenure Solomon Islanders have the right to acquire, hold, enjoy, use and dispose of customary land in accordance with current customary usage.[1] Such legal provisions allow customary land owners, particularly near the Honiara area, to permit other Solomon Islanders to occupy their customary land subject to implied or expressed conditions, and these dealings are common.

Urbanisation has put tremendous pressure on traditional institutions responsible for the management of customary land, but there has been very little state intervention to facilitate adaptation to the cash economy or to support customary land development. Consequently, appropriate processes of access and acquisition of customary land outside the Honiara town boundary are unclear, of dubious enforceability, and largely unrecorded. The situation is made more complex because of the lack of land recording and registration, undocumented genealogies, contested land boundaries, questionable valuation methods, unscrupulous land administration practices, and unaccountable landowner representatives. The extent to which such land dealings occurred on the periphery of the Honiara town boundary and elsewhere provided the impetus for the violent conflict on Guadalcanal from 1998-2000, which led to a breakdown in law and order (Allan 2013).

Challenges to urban land — how the rules are applied

The Town and Country Planning Act provides for the establishment of a Town and Country Board in Honiara and each of the nine provinces. The Town and Country Board in Honiara is responsible for development planning within the city and permission must be obtained from the Board for any developments. The Board is also authorised

to establish a planning scheme for all planning areas within its jurisdiction. It must consider this planning scheme along with other prescribed considerations before deciding to grant permission for any development (Foukona and Paterson 2013). Enforcement of planning requirements has always been a problem, and this has contributed to settlements, housing, land reclamation and other activities which do not comply with town planning requirements and can increase urban vulnerability to disasters and health risks.

Despite the existence of the Town and Country Planning Act as the legal instrument that provides planning provisions for urban land, its application is limited to urban spaces within the Honiara city boundary, and the Honiara Local Planning Scheme 2015 deals with urban land development within Honiara only. Any peri-urban development beyond the city boundary takes place on an *ad hoc* basis through both conventional and unconventional ways with people building on any vacant plot of land they identify. Most of these vacant plots are public land to which the Commissioner of Lands holds the perpetual estate title. People assert their claims to these vacant plots of land simply by constructing either permanent, semi-permanent or traditional houses. In most cases such constructions take place without compliance with the Honiara City Council Building Code (UN-Habitat Report 2015).

Due to a lack of enforcement of urban planning and building laws, people establish informal settlements and construct houses on road reserves, flood plains, steep slopes and vacant spaces within Honiara or beyond its boundary (Honiara Local Planning Scheme Report 2015). These settlements are increasing in numbers and encroaching into customary domains or registered land outside the Honiara city boundary and within Guadalcanal Province's jurisdiction (Keen and Kiddle 2016; Keen et al 2017). Some of the settlers building in these areas assert that the land is waste land and not useful for public development. Others argue that they would protect their asset whether or not they have the legal title to the land. Such strategies of leveraging indigenous claims are reinforced by the fact that most informal settlements in Honiara are based on provincial or island affiliation, some of them for one or more generations. This creates a strong sense of group identity, security and protection. Therefore, evicting these settlers through a court order is a challenge. The recent land confrontations between settlers and the Hatanga Group in West Honiara when a High Court eviction order was enforced is an example (Koli 2017).

The Commissioner of Lands had the discretionary power to administer state and public land, allocate property interests to others and was responsible for overseeing the payment of premiums and rentals by estate titleholders and compliance with development conditions. Over time, there have been issues of outstanding land rental payments and non-compliance with development conditions. While the Commissioner of Lands had the power to order the forfeiture of urban land due to non-compliance with development conditions, in many instances the

Commissioner did not do so. There have also been instances where the Commissioner of Lands was criticised by the public as 'exercising his discretionary powers in ways that appear to be beyond the textual legal meaning of how such powers should be exercised as prescribed by the Land and Titles Act' (Foukona and Allen 2017).

Despite these criticisms there have been few court challenges or prosecutions. The implication of this is that urban land is controlled by individual elites, politicians, local businessmen and Asian investors, thereby creating an unaffordable private real estate market. Also, there were instances that show how the Commissioner of Lands in exercising his discretion, was able to manipulate the law. Given the weak linkage between the Town and Country Planning Act and the Land and Titles Act the Commissioner of Lands was able to grant an area to an investor despite the area not being properly planned or being reserved for a future road expansion or dump site (UN Habitat 2012; Foukona and Allen 2017). For example, in 2013 the Honiara City Mayor, Andrew Mua, complained that the Commissioner of Lands granted part of an area reserved for the Honiara dump site to Asian investors and other individuals (Namosuaia 2013).

Land law changes: What's actually different?

The continual media reports and public complaints about the way in which the Commissioner of Lands repeatedly abused his discretionary power by leasing urban land to his friends, politicians and investors for personal gain, provided the political impetus for amendment of the Land and Titles legislation. This legislative amendment abolished the discretionary powers of the Commissioner of Lands and provided for the establishment of a Land Board with powers to allocate interest in urban land, develop urban land and ensure land administration is fair, equitable and transparent[2].The Land Board also has the power to resume part or all of a fixed term estate relevant for a public purpose[3]. These changes in the land law are premised on the assumption that vesting discretionary powers in a Land Board rather than an individual would provide for the better allocation and management of urban land.

The Land Board comprises twelve voting members and five non-voting members and is able to address the issue of abuse of discretionary power by the Commissioner of Lands. However, it does not eliminate political manipulation because some of the voting members are either directly appointed by the minister or the minister makes the appointment based on a nomination from Cabinet, Chamber of Commerce and Ministry of Women. The other voting members are permanent secretaries and two are from Honiara Municipal Council. The Chair of the Board is a voting member appointed by the minister. The non-voting members are people with technical skills relating to land. Indirectly, the ruling government has influence over who would be appointed as a voting member, regardless of whether such member has any technical expertise in dealing with urban land.

Since the Board's establishment in December 2014 it has produced an annual report in 2015 detailing how it has allocated urban land to various applicants. While this demonstrates transparency and accountability, accessing some of the urban land allocated by the Land Board is difficult, as its decisions to allocate urban land are based on information from a mapping grid outlining boundary lines and plot numbers. Such information does not reflect what is actually happening on the ground and, in some cases, an informal settlement has been established or settlers are occupying the land. In other instances, identifying and accessing the allocated land was difficult because boundary markers had been altered as a result of where and how houses were constructed. An added complication occurs when officers in the Ministry of Lands are uncooperative or make excuses to avoid facilitating the land transfer process.

Conclusion

Access to urban land in Honiara is a complex challenge because of the nature of landholding arrangements. There is an increasing demand for access to urban land for residential, recreational and commercial purposes and this has contributed to unscrupulous land dealings. The lack of enforcement of urban planning and building laws has contributed to the uncontrolled way in which settlements are expanding in Honiara and beyond its boundary. In the past, the questionable ways in which the Commissioner of Lands exercised his power to allocate urban land also shaped how, and who, had access to it. The state, through legislative reform, has attempted to address these problems through the establishment of a Land Board. While this is a positive step, accessing urban land remains an ongoing legal and spatial challenge in Honiara. Addressing this challenge requires a coordinated effort between various stakeholders who live in Honiara and beyond the city boundary.

Notes

[1] See 239 of the Land and Titles Act, Cap 133.
[2] (Section 8A, Land and Titles (*Amendment*) Act 2014)
[3] (Section 142A, Land and Titles (*Amendment*) Act 2016).

References

Allen, MG 2012, 'Land, Identity and Conflict on Guadalcanal, Solomon Islands', *Australian Geographer*, 43(2), 163-180.

Allen, MG 2013, *Greed and Grievance: Ex-Militants' Perspectives on the Conflict in Solomon Islands, 1998-2003*, University of the Hawai'i Press, Honolulu.

Corrin, JC 2001, 'Customary law in conflict: The Status of Customary Law and Introduced Law in Post-Colonial Solomon Islands', *Commonwealth Law Bulletin*, 27(2), 1290-1303.

Foukona, JD and MG Allen 2017, 'Urban Land in Solomon Islands: Powers of Exclusion and Counter Exclusion', in McDonnell, S, MG Allen and C Filer, (eds), *Kastom, Property and Ideology: Land transformations in Melanesia*, ANU Press, Canberra.

Foukona, JD 2015, 'Urban Land in Honiara: Strategies and Rights to the City', *The Journal of Pacific History*, 50(4), 504-518.

Foukona, J and D Paterson 2013, 'Solomon Islands' in Paterson, D and S Farran (eds), *South Pacific Land Systems*, University of the South Pacific Press, Suva.

Fraenkel, J 2004, *The Manipulation of Custom: From Uprising to Intervention in the Solomon Islands*, Victoria University Press, Wellington.

Honiara Town and Country Planning Board 2015, 'Shaping Honiara's Future: Honiara Local Planning Scheme.' Honiara Ministry of Lands, Housing and Survey and Honiara City Council.

Hall, D, P Hirsch and T Li 2011, *Powers of Exclusion: Land Dilemmas in Southeast Asia*, NUS Press, Singapore.

Hou, T and D Kudu 2012, 'Solomon Islands: Honiara Urban Profile', United Nations Human Settlements Programme (UN-Habitat).

Koli, J 2017, 'Hatanga Slams Police over Lack of Support', *Islands Sun*, 4th May.

Keen, M and A McNeil 2016, 'After the Floods: Urban Displacement, Lessons from the Solomon Islands', *State Society and Governance in Melanesia In Brief* 2016/13, Australian Nagtional University, Canberra.

Keen, M and L Kiddle 2016, 'Priced out of the Market: Informal Settlements in Honiara, Solomon Islands', *State Society and Governance in Melanesia In Brief* 2016/28, Australian National University, Canberra.

Keen, M, J Barbara, J Carpenter, D Evans, and J Foukona, 2017, '*Urban Development in Honiara: Harnessing Opportunities, Embracing Change', State Society and Governance in Melanesia Report Series*, Australian National University, Canberra.

Moore, C 2015, 'Honiara: Arrival City and Pacific Hybrid Living Space', *Journal of Pacific History*, 50(4), 419–436.

Namosuaia, D, 2013. 'Land Risk', Solomon Star, 7th June.

Ribot, J C and NL Peluso 2003, 'A theory of access', *Rural Sociology*, 68(2), 153.

UN-Habitat 2012, *Solomon Islands National Urban Profile*, United Nations Human Settlements Programme, Nairobi: Kenya.

UN-Habitat, 2015, ' Socioeconomic Survey', UN-Habitat, Honiara.

Informal settlement upgrading: Lessons from Suva and Honiara

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Informal settlements around Melanesia are increasing rapidly. In response to this growth a number of initiatives are being undertaken to improve the security and quality of life of those living in them. This paper considers the creation of informal settlements in the greater Suva and Honiara areas using recent information from UN-Habitat's Participatory Slum Upgrading Programme (PSUP). It reviews interventions to upgrade informal settlements in Fiji and Solomon Islands and considers lessons for other Pacific nations grappling with the complexities and challenges of escalating informal settlement populations.

Informal settlement in greater Suva and Honiara

Recent information for Fiji shows that close to 20 per cent of the national population live in informal settlements in the Suva area and in secondary cities and towns including Nadi, Lautoka, Ba, Levuka and Labasa (Peoples Community Network (PCN) 2016). The greater Suva area, comprising the urban areas of Suva, Lami, Nasinu and Nausori and their respective peri-urban areas, houses 71 per cent of the nation's informal settlement population – specifically 54,200 people estimated to be living in 117 discrete informal settlements.

Fijian informal settlements are located on native, state, and freehold land. The UN-Habitat's PSUP study showed that 45 per cent of informal settlements are on native land, 36 per cent on state land and 19 per cent on freehold land. In municipal areas, 51 per cent of settlements are on state land while in peri-urban areas 77 per cent are on native land (PCN, 2016). Research has shown that land tenure is a critical variable influencing perceived security of tenure for informal settlers in Fiji, although there are important differences for Indigenous and Indo-Fijian settlers. For example, Indo-Fijian settlers were more likely to have negative perceptions of tenure security, particularly when living on community or native land (Kiddle 2010a).

In the Solomon Islands, PSUP data shows there are close to 4,000 informal settlement households within Honiara's municipal area. These households constitute around 28,000 people, approximately 40 per cent of Honiara city's population. Many of these informal settlers live in 36 informal settlement zones across municipal Honiara. Others live in smaller pockets across the city on land allocated to government agencies for other uses, or road reserves. In addition, a large number reside in informal settlements outside of Honiara's municipal area in Guadalcanal Province. All evidence suggests that informal settlements across greater Honiara are growing quickly, certainly exceeding the pace of urban growth (UN-Habitat 2016:4).

Informal settlements within Honiara's municipal area are located on state land, many of which have been settled for 30-40 years with significant recent growth. In the peri-urban areas of Guadalcanal Province, informal settlements are located on customary land, access to which for residential settlement may involve feasting or *chupu* (traditional gift exchange) (Foukona 2017). This is similar to the *vakavanua* arrangements that are often used to obtain access to customary land in Fiji (Kiddle 2009). However, as Foukona states, urbanisation has put enormous pressure on the traditional mechanisms for the management of customary land in the absence of state intervention and that 'appropriate processes of access and acquisition of customary land outside the Honiara town boundary are unclear, or of dubious enforceability, and largely unrecorded' (ibid) – a situation that is likely to reduce *de facto* security of tenure for settlers in these areas.

Global intervention efforts

Global efforts and accompanying theory aimed at improving conditions for informal settlements stretch back to the early 1960s. Broadly, intervention efforts can be divided between resettlement programs and *in situ* settlement upgrading. In many cases resettlement programs were unsuccessful, stymied by being located on cheap, peripheral land, with inadequate or high cost transport connections, and high costs of new dwelling construction. Settlement upgrading, which favoured incremental 'self-help' housing improvements utilising the energy and resourcefulness of settlers themselves supported by favourable government policy, has generally proved more successful (Wekasa et al 2011).

In situ settlement upgrading typically follows two broad approaches: legalisation methods that attempt to provide legal security of tenure through provision of titles; and a broader range of approaches that seek to increase perceived or *de facto* security of tenure in settlements and recognise that in most contexts, a broad continuum of tenure categories exist (Kiddle 2010b).

Perceived security of tenure approaches reflect the understanding that tenure security can be generated through a variety of different means, for example, increasing the rights of residents to use/settle on land, extending existing customary arrangements, and increasing the range of tenure options available (Payne 2001). Overall, these can form pragmatic and affordable approaches to improving shelter standards in settlements. *In situ* approaches can be:

- Sectoral (for example, focused on water, access, sewerage, or tenure) and often incremental (for example, full coverage of the settlement is provided in multiple phases);

- focused on integrated infrastructure provision but typically without the provision of full tenure; or

- comprehensive with full subdivision and titling. Many key practitioners and organisations in recent decades favour a sectoral 'incremental' approach particularly for housing (MIT 2017) and provision of infrastructure such as streets.

Settlement upgrading in Fiji

Fiji has a long and strong history of settlement upgrading efforts and is unique in the Pacific for its combination of local efforts alongside a diversity of international programs. Fiji is also one of the few Pacific nations with a substantial and well-functioning social and affordable housing sector through the Public Rental Board, Housing Assistance Relief Trust and, for middle income households, the Housing Authority. Despite this, housing provision for low and often moderate income households is dramatically outstripped by need which remains a significant driver of the continued expansion of informal settlements (PCN 2016).

The Fijian Government's approaches to informal settlement upgrading are elaborated below.

Comprehensive in situ and resettlement upgrading programmes: The Fiji Department of Housing operates several settlement upgrading programs including the home grown Squatter Settlement Upgrading Programme which includes full subdivision planning, infrastructure delivery, and completed plan and title registration. This programme enables *in situ* upgrading by allowing existing residents to remain in their current 'temporary' dwellings while upgrading works proceed. Resettlement is also offered if dwellings fall on access easements or proposed property parcel boundaries (Bola 2015). This programme has delivered 453 serviced lots across Fiji and is in the process of delivering a further 920 lots that are expected to benefit close to 7,000 informal settlers (ibid). However, there have been implementation concerns relating to compensation provided for necessary relocation, eligibility thresholds to acquire resulting parcels (Kiddle 2011), project management and procurement issues (Habitat for Humanity 2009), and the fact that resettlement sites are on the urban fringes far from employment (Barr 2007).

Titling programmes: The two agencies that administer titling programs in Fiji are the *iTaukei* Land Trust Board (iTLTB), who are land managers for customary land owners, and the Ministry of Lands and Mineral Resources who manage state land. Programs run by these agencies grant leases to informal settlers on native and state owned land respectively, representing an important channel of tenure upgrading. However, these programs typically do not include provision of infrastructure such as roads, drainage, sewerage or housing improvement support. A key criticism is that they often do not complete the planning approvals, subdivision surveying and registration stages (Nadkam Consultants 2016), and thus do not formally integrate these areas into the municipal area. Gaining a land settlement title after a project is announced often encourages additional settlement on the site, usually on access easements and boundary lines of proposed property parcels, and on environmentally marginal lands (Ubitau 2016). This can require expensive revision of subdivision and infrastructure plans (ibid).

These experiences reflect some of the failures in freehold titling programs which global good practice now recommends against (Payne and Durand-Lasserve 2013).

Facilitation: A number of alternative planning and management pathways for upgrading are also present which are primarily sectoral in that they are focused on one component of upgrading. The Water Authority of Fiji (WAF) has managed to have one of the highest rates of water provision in Pacific informal settlements by requiring only personal identification and land owner consent rather than land tenure documentation to provide access to water (World Bank 2015). WAF has minimised risks to their infrastructure by installing meters on the boundary of land parcels and enabling informal settlers to connect their own PVC pipes to their dwellings. The Department of Town and Country Planning has also established a specialist zoning category which provides for modified planning standards, such as reduced street widths, which reduces costs for upgrading. The Suva Urban Growth Management Action Plan notes that new sewerage extension areas will allow for informal settlements to be connected to the trunk mains from on-site systems (ADB 2015).

International partnerships: Fiji has also been successful in harnessing considerable international development partner support for settlement upgrading. The Asian Coalition for Community Action (ACCA) programme has been brought to Fiji by the PCN, an active community based organisation representing informal settlement communities. The ACCA programme is an initiative of the Asian Coalition of Housing Rights (a network partner of Slum Dwellers International) which has been localised in the form of the Fiji Citywide and Townwide Informal Settlement Upgrading Programs now operated by the Department of Housing and PCN. Globally the ACCA program places a strong emphasis on:

- Community level empowerment, mobilisation, networking, research and mapping;

- cooperation and partnership with government, particularly local government; and

- establishing citywide development funds and community savings groups to fund upgrading through incremental housing projects (ACHR 2014).

PCN have been active participants in brokering partnerships between communities, government and development partners by implementing programs in a way that reflects their own unique approach to community empowerment and upgrading. PCN have also led a significant *in situ* housing upgrading project of over 150 dwellings in central Suva which has used a blended finance model and has attracted funds from the German charity Misereor and the Fijian Government.

UN-Habitat have had a strong involvement in Fiji for many years with support for policy development, climate change vulnerability assessments, and particularly the PSUP which is implemented in partnership with the Department of Housing and PCN. Where the ACCA-initiated Fiji Town and Citywide Informal Settlement Upgrading Programmes have been instrumental in building partnerships at a local community and local government level, the PSUP has been particularly influential in establishing stronger collaborative relationships between PCN and the government to deliver major research and policy outcomes. The research capacity PCN has built through this process can support a more structured approach to decentralising planning and implementation. This decentralised approach is envisaged in the PSUP sponsored draft Fiji Informal Settlement Upgrading Strategy and pilot projects (Fiji Department of Housing and UN-Habitat 2017).

Climate resilience, disaster response and upgrading: A more recent emphasis on informal settlement upgrading in Fiji has been to build climate change resilience into the upgrade planning process both at a community level and at the system level. UN-Habitat involvement includes vulnerability assessments, participatory planning, and implementation guides for climate-sensitive environmental, infrastructure and livelihood projects. The latter include capacity building and institutional strengthening at a municipal and national level to orient planning to respond to the many climate change challenges Fiji faces. A partnership between the Asian Development Bank, Monash University and the Wellcome Trust is also at the early stages of a program that takes a water sensitive urban design approach and blends hard infrastructure and ecosystem-based adaptation approaches to enhance sanitation as well as manage increased flood risks and impacts of drought (Brown et al 2017). The project also aims to deliver public health and environmental data on the outcomes of alternative water management approaches. Climate resilient, new dwelling construction in informal settlements is also undertaken by Habitat for Humanity Fiji (HFH 2017) and local charity, the Muslim League.

Settlement upgrading in Solomon Islands

Unlike Fiji, Solomon Islands does not have a long or highly successful history of informal settlement upgrading efforts. In part, this has been influenced by a pronounced rural bias from political leaders where urban issues have typically struggled for traction (Barbara and Keen 2016). Also in contrast to Fiji, there is no formal low income housing provision from the government or other providers leaving poor urban dwellers or people looking to move to town to their own devices. Overall, huge chunks of the urban population are priced out of the market given the extremely high cost of formal sector housing and simply have no other option but informal settlement (Keen and Kiddle 2016).

Since the mid-2000s, the Ministry of Lands, Housing and Survey (MLHS) has been working on informal settlement upgrading through subdivision planning and offering fixed-

term estate, (FTE) and long-term, state land leases. These offers have been made to existing settlers within many of the 36 informal settlement zones within municipal Honiara. However, the process has been stymied by lengthy bureaucracy and the fact that many informal settlers just cannot afford the up-font premium (around $AU7–12,000), ongoing annual land rentals, and council rates (Keen and McNeil 2016:2). Similar issues have also reduced the effectiveness of a new subdivision, April Ridge, that was created specifically for families—mainly informal settlers—acutely affected by the Honiara flooding of April 2014 (ibid).

Overall, informal settlement upgrading efforts have been slow and of limited effectiveness in Honiara. However, the government has accepted the permanence of the majority of current informal settlements on state land within municipal Honiara, although questions remain about some settlements highly exposed to natural hazard risk. There have been no evictions from informal settlements on state land which is likely to increase the current settlers' *de facto* security of tenure and possibly reduce incentives to pay the relatively high cost of a FTE.

Despite the government's efforts with subdivision planning and tenure upgrading, infrastructure and service provision within informal settlements remain limited or absent. Access roads are generally in poor condition and pedestrian access has been improved by the construction of a number of concrete access paths and 'Jacob's ladders', although coverage is not comprehensive. Organised solid waste collection is absent, resulting in waste being burnt, buried or simply discarded nearby. Water supply coverage is often irregular and much poorer than in formal housing, and water connections are at times restricted by the need for Solomon Water to see evidence of legal land tenure before new household connections can proceed, although this policy seems opaque and applied ad hoc. Access to electricity is also lower than in formal housing parts of the city and toilet facilities are generally inadequate (World Bank 2015).

To date, the PSUP process in Solomon Islands has produced urban profiles of Honiara, Auki in Malaita, and Gizo in Western Province as secondary urban centres. Further profiling of Honiara was also undertaken to consolidate data and gain a fuller picture of the informal settlement situation, including in peri-urban areas of Honiara in Guadalcanal Province. This followed efforts to facilitate the formation of Community Development Committees in a number of pilot areas to help direct future upgrading efforts to meet the particular needs of individual communities. The UN-Habitat profiling work has informed an informal settlement upgrading strategy that is currently in draft but expected to focus on continued tenure conversion in current informal settlement zones, staged infrastructure provision, and the facilitation of incremental improvements in the built environment (such as reduced standards for new subdivisions and a proposed special building code for low-income housing) (Kudu 2016). UN-Habitat has also funded a climate change vulnerability assessment for Honiara that informed the Honiara Urban

Resilience and Climate Action Plan launched in March 2017 and includes actions around hotspot informal settlements (Honiara City Council and Solomon Island Government 2017).

In addition to the UN-Habitat work, a range of other initiates of relevance have been generated by the Solomon Islands Government. A national urban policy is being finalised to help manage ongoing urbanisation. Reflecting increased awareness and concern about affordable housing, a national housing policy is planned that may offer some discrete strategies for the provision of housing for low-income earners. In June 2016, the inaugural Solomon Islands National Urban conference was held enabling dialogue between national stakeholders for the first time. Overall, however, it remains to be seen whether these work streams will gather important political champions and generate increased resourcing for settlement upgrading. Currently, the only efforts remain the Ministry of Lands, Housing and Survey's slow progress with subdivision planning and tenure conversion that are constrained by affordability issues. Fresh thinking and new approaches may be needed.

Discussion

Fiji is more advanced than other PICs when it comes to settlement upgrading in the Pacific – certainly more advanced than Solomon Islands. This has been aided by:

- Early government recognition of informal settlements;

- the important recognition of the basic rights of informal settlers (the right to non-eviction is recognised in the Constitution, for example);

- policy frameworks that actively recognise and target informal settlements (the National Housing Policy, and the Fiji Citywide Informal Settlement Upgrading Strategy); and

- an active community based organisation, the PCN, representing and advocating for informal settlement communities and leading flagship upgrading efforts.

In contrast, Solomon Islands has no guiding comprehensive policy surrounding housing, or informal settlements specifically. Current and planned work on the national urban policy, housing policy, and informal settlement upgrading strategy—if comprehensive and implemented—may see more progress in the next few years. Political champions will be needed.

Fiji in particular showcases the progress that can be made with upgrading, especially if international partners and finance can be mobilised. Fiji also illustrates that providing alternative planning and management pathways for upgrading can be effective, particularly as an important step in building locally, culturally and economically appropriate regulatory frameworks. WAF's recognition of human rights to water as the primary concern (rather than administrative and risk procedures) is an example of

an agency taking a proactive approach. Another example that Fiji is implementing—and that has been suggested for Solomon Islands—is modified planning standards for designated lower income housing areas, although a cautious approach is needed.

Fiji also illustrates that government-led comprehensive upgrading is possible, although unlikely to meet the true scale of informal settlement growth. The Fiji Housing Policy, for example, champions a progressive 'enabling' approach though this has not yet resulted in sustainable decentralised upgrading pathways. The decentralisation of upgrading responsibility to partnerships between local government, community based organisations, and technical assistance providers, and in negotiation with land owners, are among the most successful approaches internationally (ACHR 2014; UN-Habitat 2015) and could work in Fiji more systematically. However, the achievement of scale via this approach does rely on a clear framework for these respective roles and systems and processes for coordinated action. This approach has been strongly signalled in the Fiji Informal Settlement Upgrading Strategy developed through the PSUP process in the form of guidelines for community-led upgrading.

As the Pacific rapidly urbanises, informal settlements will continue to grow and be exposed to increased hazards. Recognition of the scale of the issue is needed, and must be accompanied by comprehensive, but contextualised, approaches guided by local partners. *In situ* upgrading, with a flexible approach to tenure, rather than resettlement programs, must be prioritised. Tenure should be seen as occurring along a spectrum with individual titles being only one possible outcome, and often one with adverse market and social outcomes (Payne and Durand-Lasserve 2013). Given that large proportions of Pacific informal settlements, including in Fiji and Solomon Islands, are located on customary land, gaining free, prior and informed consent from landowning groups is also critical to meet key social safeguard requirements of development partners. Involving landowning groups could be facilitated in various ways, but enabling customary and community level governance systems to play a role and interact with and influence formal governance mechanisms in order to form hybrid approaches (Jones 2016) will be a key approach.

References

ACHR (Asian Coalition for Housing Rights), 2014, Fifth yearly report of the Asian Coalition for Community Action Programme, Asian Coalition for Housing Rights, Bangkok.

ADB (Asian Development Bank), 2015, Suva Urban Growth Management Action Plan, Manila. Barbara, J and M Keen 2016, 'Urban politics in Melanesia: Shallow roots', *State, Society and Governance in Melanesia In Brief*, 9, Australian National University, Canberra,

Barr, K 2007, Squatters in Fiji: The need for attitudinal change, Citizen's Constitutional Forum Housing and Social Exclusion Policy Dialogue Paper, 1, Suva.

Bola, K 2015, Director of Housing, personal communication.

Brown, R, K Leder and T Wong 2017, 'Water-sensitive innovations to transform the health of slums and environment', *The Conversation*, http://theconversation.com/water- sensitive-innovations-to-transform-health-of-slums-and- environment-71615, accessed 23 May 2017.

Fiji Department of Housing and UN-Habitat 2017, Fiji Citywide Informal Settlement Upgrading Strategy, unpublished.

Foukona, J 2017, 'Solomon Islands' urban land tenure: Growing complexity', *State, Society and Governance in Melanesia In Brief*, 5, Australian National University, Canberra,

Habitat for Humanity (HFH), 2009, *Poverty housing in the developing nations of the Pacific islands*. Bangkok, http://reliefweb.int/sites/reliefweb.int/files/resources/A683A2AF32E84694492575BB000B34F7-Full_Report.pdf, accessed 23 May 2017.

Habitat for Humanity, (HFH), 2017, *Transitional shelter—in partnership with the New Zealand Aid Programme*, http://hfhfiji.wixsite.com/hfh-fiji/ts-slideshow, accessed 23 May 2017.

Honiara City Council and Solomon Islands Government (HCC) and (SIG), 2017, Honiara Urban Resilience and Climate Action Plan, http://www.fukuoka.unhabitat.org/programmes/ccci/pdf/HURCAP_final_Endorsed.pdf, accessed 23 May 2017.

Jones, P 2016, *Emergence of Pacific urban villages: Urbanization trends in the Pacific Islands*, Asian Development Bank, Manila, https://www.adb.org/sites/default/files/publication/201291/pacific-urban-villages.pdf, accessed 23 May 2017.

Keen, M and GL Kiddle 2016, 'Priced out of the market: Informal settlements in Honiara, Solomon Islands', State, Society and Governance in Melanesia In Brief, 28, Australian National University, Canberra.

Keen, M and A McNeil 2016, 'After the floods: Urban displacement, lessons from Solomon Islands', *State, Society and Governance in Melanesia In Brief*, 13, Australian National University, Canberra,

Kiddle, GL 2009, 'Vakavanua settlement in Fiji', *Just Change*, 16(23).

Kiddle, GL 2010a, 'Perceived security of tenure and housing consolidation in informal settlements: Case studies from urban Fiji', *Pacific Economic Bulletin*, 25(3),193-214.

Kiddle, GL 2010b, 'Key theory and evolving debates in international housing policy: From legalisation to perceived security of tenure approaches', *Geography Compass* 4(7), 881-892.

Kiddle, GL 2011, Informal Settlers, Perceived Security of Tenure and Housing Consolidation: Case Studies from Urban Fiji, PhD Thesis, Victoria University, Wellington, http://researcharchive.vuw.ac.nz/bitstream/handle/10063/1946/thesis.pdf?sequence=1, accessed 23 May 2017.

Kudu, D 2016, Solomon Islands Draft Informal Settlement Upgrading Strategy, [presentation] Solomon Islands National Urban Conference, Honiara, Solomon Islands, 29 June 2016.

Massachusetts Institute of Technology (MIT), 2017, *Incremental housing*, http://web.mit.edu/incrementalhousing/, accessed 23 May 2017.

Nadkam Consultants 2016, *UN-Habitat Participatory Slum Upgrading Programme (PSUP) Phase 2: Policy and regulatory framework review*, Fiji Department of Housing, unpublished.

Payne, G 2001, 'Urban land tenure policy options: Titles or rights?' *Habitat international*, 25(3), 415-429.

Payne, G and A Durand-Lasserve 2013, *Holding on: Security of tenure—Types, policies, practices and challenges*, Office of the High Commissioner for Human Rights.

Peoples Community Network (PCN), 2016, *UN-Habitat Participatory Slum Upgrading Programme Phase 2: Fiji informal settlement situation analysis*, Suva, Fiji.

Stokes, CJ 1962, 'A theory of slums', *Land economics*, 38(3), 187-197.

Ubitau, M 2016, Consultant, personal communication.

UN-Habitat 2015, *A practical guide to designing, planning and executing citywide informal settlement upgrading programmes,* Nairobi, https://unhabitat.org/books/a-practical-guide-to-designing-planning-and-executing-citywide-slum-upgrading-programmes/, accessed 23 May 2017.

UN-Habitat 2016, *Draft Honiara City-wide Informal Settlement Analysis*, Ministry of Lands, Housing and Survey, Honiara.

Wekesa, BW, GS Steyn and FF Otieno 2011, 'A review of physical and socio-economic characteristics and intervention approaches of informal settlements', *Habitat international*, 35(2), 238-245.

World Bank 2015, *Unsettled: Water and sanitation in urban settlement communities of the Pacific*, Washington DC, http://reliefweb.int/sites/reliefweb.int/files/resources/127-Unsettledper cent20-per cent20Waterper cent20Sanitationper cent20inper cent20Urbanper cent20Settlementsper cent20inper cent20theper cent20Pacific.pdf, accessed 23 May 2017.

Informal and squatter settlements:
The self-made urban order shaping Pacific towns and cities

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While urban policymakers may wish to see Pacific towns and cities evolve as a result of actions embodied in structured plans and policies, the reality is that Pacific urban areas are increasingly shaped by unplanned social, economic, and physical changes occurring outside the domain of formal planning and governance systems. These changes are associated with the growth of informal and squatter settlements which are considered by the state to be illegal and non-compliant. These city-making processes do not align with the prevailing norms and values established by the bureaucracy, middle class and elite who create, monitor and, from time to time, enforce such systems. They challenge conceptions of what urban planning and management are in the Pacific, and importantly, question the role and place of growing numbers of informal and squatter settlements in the Pacific urban milieu.

Informal and squatter settlements have become a permanent and growing feature of Pacific towns and cities as residents work outside formal state-based rules and regulations and use their own protocols and governance mechanisms to secure housing, land tenure, and access to water and electricity. In most Pacific urban areas informal and squatter settlements have become the dominant form of urban development as acknowledged by the Asian Development Bank (ADB) in the introduction to their recent Pacific Urban Update 2016 which states, 'Informal settlements dominate urban growth, and are now a permanent feature of the urban landscape in many Pacific towns and cities' (ADB 2017:2). This paper explores some of the key features that characterise the permanency of this phenomenon and suggests that it is time to rethink and reimagine Pacific informal and squatter settlements.

The growth of informal and squatter settlements

Pacific informal and squatter settlements are not new and were present in small concentrations primarily in fringe and peri-urban areas in towns like Port Moresby, Honiara, Suva and South Tarawa in the mid-twentieth century (Jones 2016a). Their presence gained a more permanent foothold in the 1960s as Pacific Island countries gained independence and began determining their own national and urban destinies. Rural to urban migration, the rise in sociocultural orders previously suppressed by the colonial regimes, and the ambivalence of indigenous leaders to enforce the rules and regulations left by the colonialists, has resulted in the emergence of a unique Pacific style of urbanisation which includes informal and squatter settlements co-existing and co-evolving side by side with formally planned towns and cities. Earlier notions that such settlement types were a temporary aberration in town growth and that gains in economic growth would ensure their transition to 'better' urban layouts where residents had security of tenure, services and infrastructure, have long been proved wrong (ADB 2012). Informal and squatter settlement communities are now socially, economically and spatially connected to all facets of contemporary life in Pacific towns and cities. This includes land trading and land development, housing construction, and participation in the formal and informal economies.

In the new millennium, informal and squatter settlements are a permanent element of Pacific urban growth patterns (see, for example, ADB 2012; Australian Agency for International Development 2008; Chand and Yala 2008; Habitat for Humanity 2009; Jones and Lea 2007; Jones 2012a, 2012b, 2016a, 2016b; UN-Habitat 2012). In 2012, the numbers of residents living in Pacific informal and squatter settlements was estimated at one million (ADB 2012), and is now likely to be in the order of one and a half to two million persons when considering censuses under enumeration. The largest numbers of settlements are located in the Melanesian capitals as well as the smaller towns of Micronesia, especially South Tarawa and Majuro. In 2015, it was conservatively estimated that 45 per cent of the Port Moresby population lived in informal and/ or squatter settlements, followed by 35 per cent in Port Vila and Honiara, and 20 per cent in the greater Suva metropolitan area (Pacific Region Infrastructure Facility 2015). Recent estimates for metropolitan Honiara indicate some 40 per cent of the city population is living in informal settlements which are equivalent to a population of 28,000 persons across some 36 informal settlements primarily on state lands (Keen and Kiddle 2016). The key lesson learned is that these settlements are pervasive and will continue to expand.

Defining informal settlements and squatter settlements in the Pacific

While the term 'informal settlement' is used casually and there is much slippage between informal settlements and other terms such as slums in the global literature (see the 2016 New Urban Agenda, for example), the terms informal and squatter settlement have specific meanings in the context of the Pacific region. As a general rule, the term 'squatter settlement' has been used to describe residents illegally occupying state, freehold and customary lands, while on the other hand residents who occupy land under an agreement with traditional or customary land owners fall under the category of 'informal settlements'. For example, in Fiji, 'informal settlement' is defined as ''a settlement of dwellings occupying Fijian customary (Native) land with some type of informal consensual arrangement with Fijian landowners but without any legal form of security of tenure" (ILO 2010:96). In the Pacific region, the use of these two terms dominates and they are often differentiated based on local circumstances and contexts. In Samoa, Fiji, and Kiribati, for example, the term 'squatter settlement' is commonplace, while in the Solomon Islands and PNG, the term 'informal settlements' is dominant (see, for example, Chand and Yala 2008; Jones 2012a; Keen and Kiddle 2016). However they are classified, these communities are all territorial networks characterised by being illegal

according to the rules and regulations of the prevailing formal state system; having non-formal land tenure status; having inadequate housing standards and environmental conditions; and low levels of access to services and infrastructure (see Table 1).

In this setting, formal statutory state rules and controls relating to land, planning, building and service provision have little relevance and meaning in the life of settlers (Jones 2012a).

Table 1: Key features of informal and squatter settlements in the Pacific region

Settlement type	Key features	Land preference
Squatter settlement	• community or cluster of families of kin or ethnic association who invade land with or without the landowners or occupiers' agreement • some rent and tenure may be negotiated with the land custodian/other settlers • ethnic and kin mix may be heterogeneous or homogenous • settlements can be longstanding or recent • lack of basic infrastructure and services • varied enforcement by government, such enforcement driven by demand for land for higher use	State, customary, leased and alienated lands
Informal settlement	• settlers negotiate tenure arrangements with customary landowners often through relationships forged by intermarriage, trade and commerce • short-term poverty concerns can lead to allocation of individual land parcels to new migrants • lack of basic infrastructure and services • little enforcement by government, with customary landowner rights paramount	Customary lands

Adapted from Jones 2016a

The morphology of informal and squatter settlements

Reflecting on the procedures used in the occupation and development of informal settlements in Asia (Dovey and King 2011), three processes can be identified in the development of Pacific informal and squatter settlements:

1. Individuals or families settling in peri-urban and 'bush' areas outside the designated urban boundary (for example, settlements in Honiara, Port Vila and Kiritimati island);

2. settling on vacant and semi-vacant lands within the urban area, and thus staking boundaries for occupation (for example, Port Moresby); and

3. occupying space within or on the 'boundaries' of existing settlements and thus intensifying existing enclaves (for example, settlements in South Tarawa, Honiara and Suva).

While some informal and squatter settlements may develop on state, customary or freehold lands within planned housing areas, the majority are flourishing in residual locations that the formal system deems unsuitable, hazardous and/or marginal for development. These areas are often vulnerable to climate change, as well as environmental and natural disasters such as cyclones and flooding. They are also prone to eco-system degradation by the settlers themselves as shown in the large loss of mangroves in Suva (Bryant-Tokalau 2014). As a result, the formal planning system that compartmentalizes land use zones and sets land tenure types and the rights and responsibilities that come with them, plays a large part in determining where informal and squatter settlements are located.

Common locations for settlements

Some of the most common urban locations for informal and squatter settlements (which are repeated in patterns across the Pacific region) are:

- The edge of rivers and estuaries;
- lands accreted on ocean and lagoon foreshores;
- electricity easements;
- mangrove wetlands;
- tidal lagoons and swamps;
- cemeteries (see Figure 1);
- peri-urban 'edge' lands;
- waste disposal sites;
- vacant state and customary lands; and
- existing land-locked overcrowded native villages (Jones 2016a).

Figure 1: Squatter housing surrounds a cemetery located in the middle of the Bonriki water reserve which is the main public water supply for South Tarawa. Photo: Paul Jones

While this typology helps us to understand the patchwork pattern of informal and squatter settlements throughout the Pacific, it also demonstrates that the boundaries between informal and squatter settlements can be blurred. With increasing populations, migration, and the escalating

pressure for affordable and accessible land and housing, the physical boundaries and other social and economic features differentiating settlement types have become far from discrete. This muddiness is often evident in native or traditional urban villages originally created by colonialists marking out their town plans and undertaking surveys during the land alienation process. The original landowners of a locality were forced to cluster into defined small village areas, thus segregating them from other town and city residents, often expatriates, as well as other indigenous landowning groups. Norwood (1984) noted the blurring of settlement types and boundaries in Port Moresby in the early 1980s '…[in] some cases separate offshoots have developed from urban villages and it is difficult to say whether such offshoots are more properly classified as parts of the urban village or as squatter areas' (Norwood 1984:69).

As a result of the influx of migrants and intermarriage, informal and squatter settlements continue to occur within and outside the boundaries of native and traditional villages. Thus, while a settlement may be called a native or traditional urban village, it may contain pockets of informal or squatter housing. Conversely, an informal settlement may contain squatter housing. These Pacific 'urban reserves' with their mix of original landowners, their descendants and more recent newcomers who may be squatting or granted *de facto* tenure are now often land locked and grossly overcrowded, and have some of the worst urban environmental conditions in the Pacific. Hanuabada in Port Moresby and Betio Village in South Tarawa provide examples. Some countries such as Samoa, Fiji and PNG have created legislation to acknowledge the unique customary land rights and associated stewardship responsibilities associated with these urban villages now spatially trapped in the urban milieu. As such, understanding the intricacies of fragmented settlement morphology in Pacific towns and cities, including notions of what is planned and unplanned, legal and illegal, has become more complex.

Out of place or in place? Ordered or unordered?

Across the Pacific, informal and squatter settlements are generally viewed as unplanned. Land tenure is perceived by state and international institutions as problematic and the form and structure of often overcrowded settlements can appear to outsiders as arbitrary (ADB 2012; Jones 2016a; Pacific Regional Infrastructure Facility 2015). However, the reality is many informal and squatter settlements are well organised and indeed planned, despite their stigma as illegal entities and interpretation by policy makers and planners as problems to be 'fixed, solved and corrected' (see Figure 2). Informal and squatter settlements in the Melanesian capitals and South Tarawa have all been cited as being managed to varying degrees through local rules, socio-cultural protocols and community governance systems (ADB 2012; Jones 2016a). Many settlers, for example, participate in organised subsistence activities, settlement markets, and the wider informal

Figure 2: The block patterns of Pacific informal and squatter settlements may appear chaotic and ad hoc, however in most cases, there is a clear set of rules and principles that underpin the form and shape of settlements such as in this South Tarawa example.

economy. Additionally, some settlement committees and their members have managed to gain direct access to government and donor funded projects and programs. This participation is often forged through social, kin and local political networks. In this context, social capital is incredibly important as many settlers are connected socially and/or by place to a specific informal or squatter settlement with wider connections to ethnicity, kin or other settlements, both urban and rural. Underpinning such connections and the operation of wider settlement planning frameworks are often longstanding traditional socio-cultural orders—for example, the *Fa'a samoa* in Samoa and the Vakavanua system in Fiji—that bind residents, their households, and kin/ethnic groups (Jones 2016a). Within these orders social, economic and governance relationships occur emphasising affiliations of varying strength to land, social groupings and subsistence. Within a Pacific urban context, these social frameworks provide settlers and their settlements with a sense of identity, status, connectivity and security (Jones 2016b).

Land markets and trading in urban customary land remains active. Little has changed over the last 30 years with the inability to mobilise customary land in an orderly, controlled, and planned manner as sought by the formal system in the Pacific region in the 1980s. It remains the same today (Lea 1983). Thus, depending on the lens used to view the issue, the nature of arrangements to access and secure rights on urban customary and state land remains transformative and resilient, enabling it to meet current urban housing needs. Transactions continue to occur in varying robust reiterations, but they are not through the unified land registration system that the state and international development agencies desire to minimise 'risk' and maximise certainty in formal investment. Rather, many of the processes in creating and sustaining informal and squatter settlements can be termed incremental, bottom up and adaptive. A key strategy in supporting these communities is to build on the structures and processes that constitute the existing social, economic and governance frameworks, in order to 'formalise and regularise' informal and squatter settlements. Identifying common approaches rather than applying a 'one size fits all' template is paramount.

In this setting, the key features defining the logic and order of informal and squatter settlements can be summarised as:

- Fluid public/private space boundaries that residents transgress, contest and or negotiate in the absence of local or state enforcement. As a result, there is an irregularity of settlement layouts especially in housing frontages, and pedestrian and vehicular access ways;

- a pattern of habitation where the introduction of buildings and marking of boundaries comes first, followed by networks for services such as water, electricity and roads. To a large degree, this sequence of occupation is the reverse of top down strategic and masterplan approaches which lay out the formal morphological elements of blocks, plots, circulation spaces, services and open space first, before allowing owners and residents to occupy land and housing;

- a strong reliance on local socio-cultural orders and their unifying norms, values and protocols which gain their strength from the interplay with place, locality, language, kin, clan, ethnicity and social capital. This includes the use of social safety nets and reciprocity which link residents in varying levels of cohesiveness;

- communities that show resilience where financial capital is low and environmental and natural hazard constraints are high. This resilience is reflected in innovative low cost housing construction, material adaptability and accessing basic services such as kin networks and social capital;

- a strong vibrant market in customary/state land dealings and house/room rentals which, for many landowners, provides financial security in the immediate and short term; and

- the use of bottom up, adaptive governance solutions based around a mix of social groupings of elders, chiefs, 'big men', committees, the church and other social groupings.

In short, squatter and informal settlements represent a bottom up dynamic order sitting within a top down formal framework producing unique settlements where the urban coherence and settlement interfaces (such as policy, institutional and regulatory) can be blurred, multiple, and disjointed, yet co-evolving. Despite the anti-settlement rhetoric that emerges from time to time, the order is implicitly accepted by many Pacific stakeholders as the status quo.

Realigning our conceptions of order

Although progress on managing urbanisation is slow and erratic with only PNG, Samoa and Fiji in the Pacific having national ministries focused on improved urban land and housing outcomes, there are a range of initiatives underway. At a national level, there are sound policies such as the Fiji National Housing Policy (2011), the Samoa National Urban Policy (2013), and the National Urbanisation Policy for Papua New Guinea, 2010-2030. At a regional level, there are varying UN-Habitat partnerships in place undertaking urban sector development and Participatory Slum Upgrading Programme profiles created by UN-Habitat for Honiara, Port Vila and key towns and cities in Fiji. These initiatives provide the basis for potential follow-on urban investment intervention by key development agencies, such as the World Bank, ADB, European Commission, and the New Zealand and Australian governments. As a general observation, there has been a strong increase in the active presence of non-government organisations working in situ with settlers in informal and squatter settlements.

However, moving from policy to local implementation remains a challenge due to issues of technical and human capacity, funding, political inertia and the unintended and unknown consequences that arise when tampering with urban land (Jones and Kep 2014). At the settlement scale, support vacillates for microcredit schemes, site servicing and tenure upgrading. A handful of Pacific countries have taken initiatives to recognise informal and de facto land tenure in informal and squatter settlements and provide improved infrastructure and services especially for longer term established communities. Fiji was one of the first Pacific nations to recognise the rights of settlers, extend services to communities, and in 2016, completed a draft informal settlements strategy. As a general rule, Fiji leads the way in the Pacific region in supporting and upgrading informal and squatter settlements (Jones 2016a; Phillips and Keen 2016). Bryant-Tokalau (2014), for example, cites a number of positive 'step by step' policy, institutional and general attitude changes at the NGO, government and private sector level in supporting informal settlements and squatters in Fiji. Additionally, there have been positive initiatives in Honiara to also initiate subdivision plans and convert state tenure to leases, although progress is slow (Keen and Kiddle 2016).

However, there is no 'silver bullet' to addressing the challenges that come with flourishing informal and squatter settlements in the Pacific. Their persistence and growth are also symptoms of:

- Broader national structural issues associated with varying economic growth rates, poor governance and an inequitable distribution of wealth;

- variable gains in human development indicators and a lack of political interest in urban management both nationally and regionally (Keen and Barbara 2015) including how to make towns and cities more livable and

effective, both socially and economically;

- bureaucratic national and local governments whose processes and institutions are slow, cumbersome and unable to provide a coherent response to urban development needs; and

- deep seated sociocultural values, norms, attitudes and aspirations of Pacific Islanders that continually challenge conceptions of how towns and cities should be planned, including land tenure security (ADB 2012; Jones 2016a; Mecartney 2014).

It is now time to rethink the role of informal and squatter settlements and Pacific urbanisation generally. Uneven as they are, it is clear that the benefits of urbanisation do not trickle down to all Pacific urban dwellers. Major challenges exist for policy makers and practitioners in where they see informal and squatter settlements in the urbanisation process. Pacific urban areas are complex and multi-faceted reflecting the imprint of customary landowners, more recent newcomers such as colonialists and expatriates, and new value systems which collectively result in many ways to plan and organise the city. However, much of the richness of this socioeconomic complexity is glossed over by ignorance or lack of understanding in current formal Pacific plans and policies.

There is a need to move on from judgments often based on perceptions of visual chaos and questions of aesthetics and hard line functional separation and poor amenities that underlie many mainstream negative reactions, conceptions and solutions to informal and squatter settlements. The application of such middle class planning values partly explain why planning theory and practice is unable to

confront underserviced roads, plots, blocks and messy land tenure as they do not fit mainstream conceptions of order, 'beauty' and the 'one size' fits all approach common to Pacific national and regional projects and programmes. As such, an uneasy tension exists in Pacific urban areas between a desire for formal order and development, and addressing increased diversity as expressed in growing numbers of informal and squatters' settlements. The simple dualistic concepts of formal and informal development, which embed terms such as informal and squatter settlements in the development discourse, need to be counterbalanced with a deeper understanding of how local activities and people that make Pacific towns and cities fit and come together (see figure 3).

Conclusions

In conclusion, the need to unpack the nature of this Pacific urban order, including the unique physical and social processes at play in creating informal and squatter settlements, is well overdue. A shift is required to support and enhance 'inclusive' practices that incorporate local knowledge and recognise the strength of non-formal governance systems already at work. Simultaneously, a greater stakeholder coalition of the willing is needed to ensure that all settlements and their communities have access to clean water, sanitation, good drainage, health services, affordable housing and secure land.

The biggest challenge in rethinking the urban Pacific is to acknowledge that the form and structure of Pacific towns and cities will continue to be unordered, organic, haphazard, 'non-linear' and often independent of state rules

Formal system "top-down" phasing of development

1. Land certificate - title
2. Planning approvals
3. Land subdivision
4. Infrastructure provision
5. Building - construction
6. Occupation
7. Compliance certificate

Emergence of many hybrid arrangements

Informal system "bottom-up" phasing of development

1. Occupation/land tenure agreement/nonagreement
2. Plot allocation - subdivision
3. Community networking
4. Secure infrastructure
5. Incremental building work
6. Expansion of kin network

Pacific Towns and Cities Shaped by a Multiplicity of Contested Activities and Processes
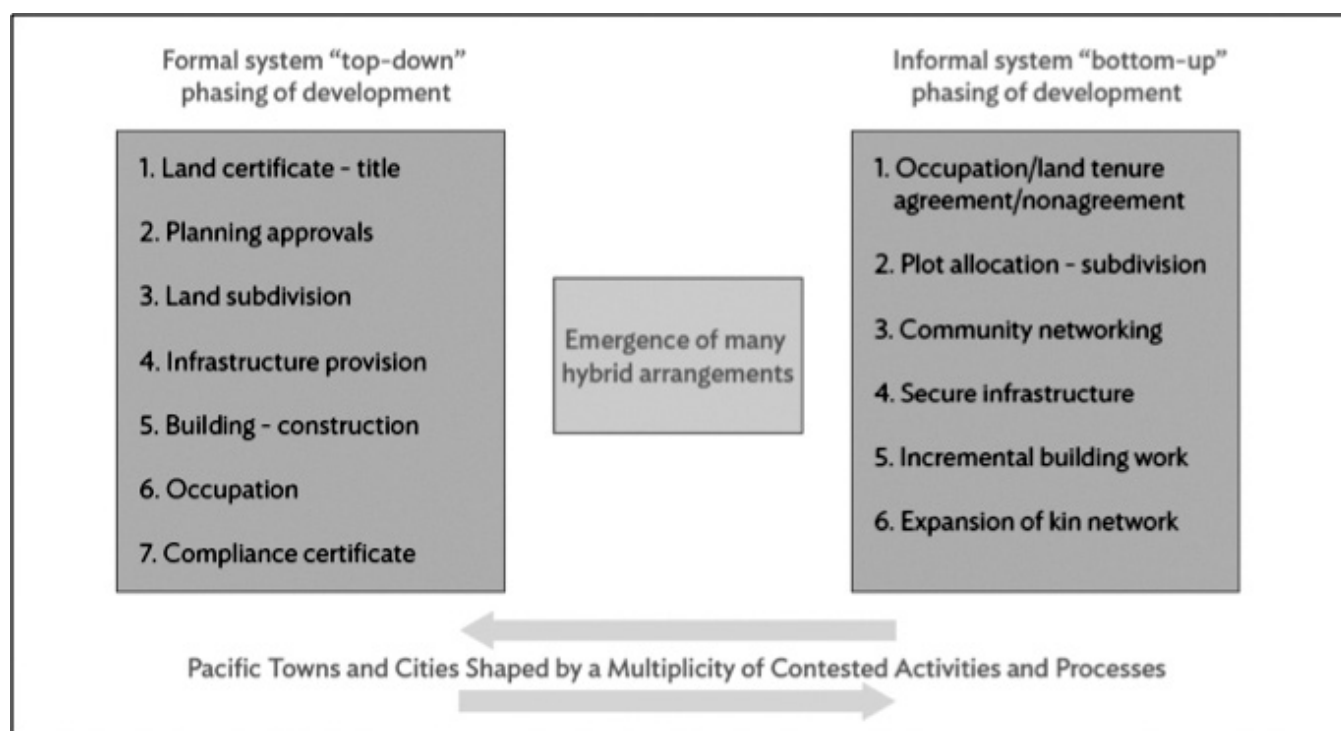
Figure 3: Urban planning and management in the Pacific requires recognition of the multiplicity of processes at work in shaping increasingly complex towns and cities. (Jones 2016a).

and regulations. While some development stakeholders may find this confronting as it threatens their vision of what comprises a Pacific town and city, this is the normal self-made urban order most visibly expressed in informal and squatter settlements. Supporting this order and its governance requires embracing a greater nuanced understanding, 'planned' contextual solutions and restructured projects and programs that reflect the diversity and complexity of self-made Pacific towns and cities.

References

ADB (Asian Development Bank) 2012, 'The State of Pacific Towns and Cities: Urbanisation in ADB's Developing Member Countries', *Pacific Studies Series,* Manila.

ADB 2017, *Pacific Urban Update* 2016, Manila.

Australian Agency for International Development 2008, 'Making Land Work (2). Case studies on customary land and development in the Pacific', Canberra.

Bryant-Tokalau, J 2014, 'Urban Squatters and the Poor in Fiji: Issues of Land and Investment in Coastal Areas', *Asia-Pacific Viewpoint*, 55(1), 54-66.

Chand, S and C Yala, 2008, 'Improving access to land within the settlements of Port Moresby', *Special Publication No 49*, National Research Institute of Papua New Guinea, Port Moresby.

Dovey, K and R King, 2011, 'Forms of informality: morphology and visibility of informal settlements', *Built Environment*, 37(1),11-29.

Habitat for Humanity 2009, *Housing Poverty in the Developing Nations of the Pacific Islands*, Asia Pacific Office, Bangkok.

ILO (International Labour Organisation) 2010, *Child Labour in Fiji*. ILO Country Office for South Pacific Island Countries, Suva.

Jones, P 2012a, 'Searching for a little bit of Utopia—understanding the growth of squatter and informal settlements in Pacific towns and cities', *Australian Planner*, 49 (4), 327-338.

Jones, P 2012b, 'Pacific Urbanisation and the Rise of Informal Settlements: Trends and Implications from Port Moresby', *Urban Policy and Research*, 30(2),145-160.

Jones, P 2016a, 'The Emergence of Pacific Urban Villages—Urbanisation Trends in the Pacific Islands', *Pacific Studies Series*, Asian Development Bank, Manila.

Jones, P 2016b, 'Informal Urbanism as a Product of Socio-Cultural Expression: Insights from the Island Pacific',in S Attia, S Shabaka, Z Shafik and A Aty (eds.), *Dynamics and Resilience of Informal Areas: International Perspectives*, Springer, 165-181.

Jones, P and M Kep, 2014, 'Understanding Urbanisation in the Papua New Guinea Context', J Richie and M Verso (eds.), *Securing a Prosperous Future: Papua New Guinea*, Crawford House, Melbourne.

Jones, P and J Lea 2007, 'What has happened to urban reform in the island Pacific? Some lessons from Kiribati and Samoa', *Pacific Affairs*, 80(3), 473-491.

Keen, M and J Barbara 2015, 'Pacific Urbanisation: Changing Times', *State, Society and Governance in Melanesia In Brief*, 2015/64, Australian National University, Canberra.

Keen, M and L Kiddle 2016, 'Priced Out of the Market: Informal Settlements in Honiara, Solomon Islands' *State, Society and Governance in Melanesia In Brief*, 2016/28, Australian National University, Canberra.

Lea, J 1983, 'Customary Land Tenure and Urban Housing Land: Partnership and Participation in Developing Societies', S Angel et al, eds., *Land for Housing the Poor*, Select Books, Singapore, 54-72.

Mecartney, S 2014, 'An Urban Pacific—the challenge of managing change', paper presented at the Australian Association for Pacific Studies Conference, 23 April, University of Sydney.

Norwood, H 1984, 'Port Moresby: urban villages and squatter areas', *Occasional Paper No. 2*, University of Papua New Guinea Press, Port Moresby.

Pacific Region Infrastructure Facility 2015, *Unsettled: Water and Sanitation in Urban Settlement Communities in the Pacific*, Sydney.

Phillips, T and M Keen, 2016, 'Sharing the city: Urban Growth and Governance in Suva, Fiji', *State Society and Governance in Melanesia Discussion Paper No 6*, Australian National University, Canberra.

UN-Habitat 2012, *Solomon Islands: National Urban Profile*, Nairobi.

Pacific urbanisation: Is landlessness a challenge to SDG11 in Samoa?

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Previous research has identified the emergence of 'landless' groups in Apia, the capital of Samoa (Thornton et al 2013). This creates a challenge for Apia's urban planners to achieve the Urban Sustainable Development Goal (SDG) 11, which focuses on sustainable cities and communities. In 2002, Samoa established a Planning and Urban Management Agency (PUMA), to 'holistically' deal with climate and environmental issues in urban and peri-urban areas through its Samoa National Urban Policy (2013). This is viewed as an integrated form of urban governance because it includes formal and informal village representation. However, being 'landless' in Samoa cuts across social, cultural and conventional boundaries that lie beyond the scope of typical urban planning and urban management systems. This paper discusses key development challenges related to urbanisation in the Pacific, with particular attention given to 'landlessness' in Samoa.

Reflecting global population trends, 59 per cent, or 38 million, people living in small island developing states reside in urban areas. The Pacific is viewed as the fastest urbanising region in the world, with annual urban growth rates of 4.3 per cent and 16 per cent in peri-urban areas (UN-Habitat 2015). The remoteness and small size of the Pacific Island developing countries contributes to a particularly high degree of risk in terms of economic shocks and escalating hardship, as well as poverty and natural disasters that are aggravated by the impacts of climate change (Rey et al 2017; Veitayaki et al 2017). These risks can have a particularly damaging impact on urban areas where populations are concentrated and vulnerable to natural disasters.

Urbanisation in Pacific Island countries

Managing urbanisation through coordinated national and regional development planning is increasingly viewed as a key strategy for urban management and for integrating the three pillars of sustainable development—economic, environmental and social (UN-Habitat 2015). On the United Nation's Sustainable Development Knowledge Platform, urban sprawl is assessed as one implication of population growth outpacing available land, as cities expand far beyond their formal administrative boundaries. From 2000 to 2015, the ratio of land occupation to the population growth rate in Eastern Asia and Oceania was the highest in the world (ibid).

Lack of available land and urban sprawl often result in overcrowding in inner city slum settlements in Eastern Asia, however, within Oceania, land tenure arrangements, and changes to them, can also drive change in urban settlements. For example, expanding squatter settlements in the inner and peri-urban areas of Fiji, are as much due to dominant land access rights as they are to economic

hardship and worsening natural disasters. For example, Fijian Indians do not benefit from customary land rights and can only lease land, thus rendering them vulnerable to changes in land use decisions made by indigenous landowners. The decision by the Native Land Trust Board to not extend the 30 year land leases that expired in the mid-1990s under the Agricultural Landlords and Tenants Act effectively triggered significant squatter settlement expansion as thousands of Fijian Indian farmers sought alternative livelihoods in urban and peri-urban areas.

Landlessness in Samoa also appears to be partly due to the politics of exclusion in customary land arrangements. This differs from the Fijian situation as Samoa is more ethnically homogeneous and it is a commonly held view that all Samoans have land rights. However, in Samoa, leasing land is largely restricted to former colonial Crown lands or current state owned lands in and around Apia, as the former colonial administration make it difficult for urban migrants to secure land.

Urbanisation in Samoa

Samoa's population of 196,315 is based on an estimated annual growth rate of 0.8 per cent with an urban population of 35,567 based on an annual growth rate of about minus 0.5 per cent. The 2011 census, shows most people reside on the main island of Upolu, specifically in North West Upolu (NWU) and the Apia Urban Area (AUA) (Samoan Bureau of Statistics'(SBS) 2011). Although the census data projects a net population loss due to outmigration, Upolu is experiencing urbanisation and increasing densities within the AUA. The underlying reason for the discrepancy is the way an 'urban area' is currently defined. In the Samoa National Urban Policy (2013), an 'urban area' is defined for the purpose of enumeration as 'non-agricultural'. Using this definition effectively excludes several of Apia's urban villages experiencing rapid population growth and increasing built environments, for housing and economic activities. The enumerated urban areas contain the villages within the electoral constituencies of Vaimauga West and Faleata East. While those in Vaimauga East (Lauli'i, Letogo, Vailele, Fagali'i) and Faleata West (Vaitele, Saina, Siusega, Ulululoa, Tuanaimato) are excluded, as they have a mix of land uses, consisting of economic and 'non-urban' uses, such as agriculture. When these four districts are combined, the urban population of Samoa has actually increased by 21 per cent, as reported by SBS census data (at 10 year increments, from 1981-2011).

On Savai'i, the largest of the Samoan islands in terms of land area, the development of the port village of Salelologa was made possible through negotiations between the formal state and village government—viewed by some as a one-sided affair with the Samoan Government having the upper hand—and led to the creation of a secondary urban

growth node. For the government, developing Salelologa is, in part, an attempt to relieve the capital city Apia of development pressures associated with urban drift. It is also expected to better accommodate and service the tourism sector on Savai'i, which is considered to not have reached its full potential. This could be said for both of the main islands—with the majority of services for tourists located in the AUA (Samoan Tourism Sector Plan 2014-2019).[1]

Population increase has led to the growth of new settlements along a significant corridor extending from greater Apia to the Faleolo International Airport in NWU. This peri-urban corridor includes many new settlements that are located on previously state owned land, overseen by a statutory corporation formerly known as the Western Samoa Trust Estate Corporation (WSTEC). In the 1990s, designated WSTEC land—post-1996, Samoa Trusts Estate Corporation—comprised largely of coconut plantations created during German colonialism, and was the target of a government initiated land grab for economic growth and job creation. The government initially sought to encourage commercial farming on these lands, but a lack of interest in commercial farming led to the decision to subdivide the WSTEC lands into ¼ acre housing plots. These subdivisions became very popular for those untitled Samoans seeking freehold land ownership which is independent of the influence of the *matai* (family chief) in terms of land resource allocation.

The flow of rural migrants, particularly from Savai'i, to greater Apia reflects certain push-pull factors that are also symptomatic of urbanisation elsewhere in the Pacific region, namely improved employment opportunities, education and healthcare (ADB 2012). For youth, pull factors include the lure of perceived modern urban lifestyles. Where church run schools are located in the urban area, some households have relocated to greater Apia to be closer to their children. As high rates of in-migration occur, pockets of poverty and income inequality are expanding in Apia and this is reflected in the spread of sub-standard housing and increasing 'suburban dystopia' (Thornton et al 2013). There is also a growing frequency of reports about youth crime and domestic violence, which are generally attributed to restlessness, fragmentation of kinship and decline in membership of Samoa's mainline or traditional church denominations (Thornton et al 2010).

Are there really 'landless' Samoans?

Although most Samoans have ties and access to customary land, this is largely an entitlement serving the extended family members, or *aiga*. Each *aiga* has a specific *matai*, or chief, who has traditional control over specific areas of customary land. Untitled men are those who do not hold a chiefly title and so do not have control over the distribution of land rights. Kinship and social networks involve a reciprocal system of gift giving, where material and financial support are exchanged, shared and redistributed. In practice, the recognition of such ties and access to usufruct rights to land depend on co-residence and service to the family, the *matai* and the village. Those who move

away and do not maintain ties for themselves and their children may become effectively landless. Increasing hardship in Samoa seems to be having a profound effect on kinship relations at the village level, which may provide the impetus for some households to relocate from rural village to 'urban village' settlements.

Latai-Niusulu (2015) and Thornton (2013) found that a person can be 'landless' if he/she is an untitled Samoan with no familial claim to *matai* lineage. While a *matai* as trustee of *aiga* land can allocate land for untitled family members to use, there is growing concern that due to population growth there might not be enough land available for each family within the *aiga*. For urban families seeking to return to their ancestral village, maintaining rural ties may determine successful reintegration as well as acceptance. However, they might be viewed as a financial liability to the family, especially if they are untitled as there appear to be concerns over the prospect of urban-rural returnees and that Samoans may be 'too proud' to return to their natal village if they are experiencing poverty and hardship.

The issue of landless families and individuals was raised as a growing concern in both the Samoan National Human Development Report (SNHDR) (So'o et al 2006) and the Census of Population and Housing (Government of Samoa 2001). According to the 2006 SNHDR and 2001 census documents, some of the most vulnerable households were urban villagers without land. Muagututi'a (2006:58) also raised as a 'new public concern' the issue of landless individuals and households that are experiencing hardship. Thornton et al (2010) found that as hardships increase and kinship ties fray, low income groups often shift allegiances to new, or non-traditional, churches. More recent research suggests that landless groups are more likely to withdraw from reciprocal kinship relationships than seek alternate church membership. For low income households in Samoa, both informal and alternate *de facto* tenure were identified through social networks, such as church membership, which have been effective in providing households with decades of secure land tenure, but are currently threatened by the 'push' for economic development (Thornton 2013).

The Catholic Church and the Samoan Government have attempted to relocate families leasing church and government lands in the AUA for alternative urban settlements. Some of these families, despite living on lands for generations, have not maintained lease payments due to economic hardship. More recently, the government has expressed concerns regarding the safety of some of these alternative settlements as increasingly high tides are flooding low lying households.

The Catholic Church also has economic development ambitions for their extensive land assets in the AUA. The church essentially considers leasing lands to households experiencing hardship, particularly to those unable to pay, as counter-productive to the development needs of the church. This is viewed by some as a contradiction to the traditional pro-poor mission of the church (Thornton et al 2013), and is an important catalyst leading both to an

increase in the number of Samoans seeking private land ownership and also to an increasing prevalence of low income households without the means to purchase private land or formal leasehold through church membership. In both cases, some urban households are effectively landless and increasingly dependent on food and income sources from outside the reciprocal system of familial and rural village exchanges and customary land use. These findings reflect a further disconnect of Samoans from their traditional norms and values, including their ancestral past, and their mainstreaming into an increasingly Pacific urban way of life.

Conclusion

As in the wider Pacific island region, Samoa is urbanising rapidly due to domestic push-pull factors, external pressures for economic change and economic hardship. Improved and coordinated urban management strategies will be important to provide infrastructure needs for a growing urban population. As urban planners in the Pacific seek holistic solutions to climate and environmental issues, it is important to consider the nature of landlessness, its connection to traditional norms and values, and economic hardship. It is these social, cultural and economic issues that will determine Samoa's progress in building sustainable cities and communities.

Notes

[1]Samoan Tourism Sector Plan (2014-2019) can be accessed at: http://samoatourism.org/section/9/intelligence

References

Bryant-Tokelau, J 1995, 'The myth exploded: urban poverty in the Pacific', *Environment and Urbanization*, 7(2), 109–29.

Bryant-Tokalau, J 2014, 'Urban squatters and the poor in Fiji: Issues of land and investment in coastal areas', *Asia Pacific Viewpoint*, 55(1), 54-66.

Government of Samoa 2001, *Report of the census of population and housing* 2001, Ministry of Finance, Apia.

Joseph, V, A Thornton, S Pearson and D Paull, 2013, 'Occupational transitions in three coastal villages in Central Java, Indonesia, in the context of sea level rise: a case study', *Natural Hazards* 69, 675-694.

Kiddle, G 2010, 'Contemporary Urban Squatting in Fiji: Recent Trends, Intervention and a Potential Policy Framework', *Fijian Studies*, 8(1), 83-98.

Latai-Niusulu, A 2015, 'The Role of Institutions in Place-making and Securing Livelihoods for Urban Residents in Samoa: Exploring Resettlement Programmes at Sogi and Taufusi', *Journal of Sāmoan Studies*, 5, 54-71.

Muagututi'a, SR 2006, 'The human development indices', A So'o, U Va'a and T Lafotanoa (eds), *Samoa National Human Development Report: Sustainable Livelihoods in a Changing Samoa*, 47–68, Centre for Samoan Studies, National University of Samoa, Apia.

Mawuli, A, R Guy, 2007, *Informal Social Safety Nets: Support Systems of Social and Economic Hardship in Papua New Guinea*, Special Publication 46, National Research Institute of Papua New Guinea, Port Moresby.

Rey, T, L Le De, F Leone and D Gilbert, 2017, 'An integrative approach to understand vulnerability and resilience post-disaster: the 2015 cyclone Pam in urban Vanuatu as case study', *Disaster Prevention and Management: An International Journal*, 26(3).

Samoa National Urban Policy 2013, *Sustainable, resilient and inclusive city*, Planning and Urban Management Agency, Ministry of Natural Resources and Environment, Government of Samoa, Apia, Samoa.

So'o, A, U Va'a and T Lafotanoa, (eds) 2006, *Samoa National Human Development Report: Sustainable Livelihoods in a Changing Samoa*, Centre for Samoan Studies, National University of Samoa, Apia.

Thornton, A, T Binns and MT Kerslake, 2013, 'Hard times in Apia? Urban landlessness and the church in Samoa', *Singapore Journal of Tropical Geography*, 34(3), 357-372.

UN-Habitat 2015, *The State of Asian and Pacific Cities 2015*, UN-Habitat (the United Nations Human Settlements Programme) and ESCAP (the United Nations Economic and Social Commission for Asia and the Pacific).

Veitayaki, J, V Waqalevu, R Varea and N Rollings, 2017, 'Mangroves in Small Island Development States in the Pacific: An Overview of a Highly Important and Seriously Threatened Resource', *Participatory Mangrove Management in a Changing Climate*, 303-327, Springer, Japan.

Transition to modernity: Migrant settlements and customary land issues in Port Moresby

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For Papua New Guineans, the transition from traditional lifestyles in rural villages to modernity in urban settlements started around 60 years ago. Those most affected by this change are the 13 per cent of the rural population who now make up the rapidly growing urban centres. In this short time, they have relinquished their traditional subsistence lifestyles in isolated settlements to live among fellow countrymen in some of the most socioculturally diverse settlements on the planet. Although lifestyles have changed in the urban setting, traditional norms and values still inform the adjustment to urban settlement and livelihoods.

This paper highlights some key issues involved in this rapid transition including: the features of traditional social organisation and its ability to integrate non-kin; the key challenges of urban settlement; and recent urbanisation policy.

Traditions and cultures

The history of settlement of Port Moresby as the capital of Papua New Guinea (PNG) started in the 1950s. Before then, the linguistically and culturally unique groups from the islands, coastal and inland areas of PNG lived in scattered, isolated villages numbering a few hundred people where each of around 840 different language groups had their own cultures steeped in traditions passed down through generations. This diversity of cultures has been so successful because their social systems focus on social cohesion that provides a common identity reinforced by social protection based on obligation and reciprocation. Such practices have ensured kinship group membership providing broadly equal opportunities for self-sustaining livelihoods and security.

Despite massive change since colonisation began, kinship structures have retained their resilience. Kinship and inheritance patterns are mainly organised through marriage along parental lines of descent. However, these arrangements remain flexible to accommodate individuals who do not share kinship bonds, thereby expanding the prospects of the group by widening the networks of obligation and reciprocation. This social diversification takes place through marriage and the adoption of individuals from other kinship groups.

At the centre of traditional understanding of land is kinship identity and belonging to place. This is based on being one with the forces of nature that explains peoples' existence and passage through time. Rituals enacted through stories, dance and legends that centre on protection of land laid claim to by ancestors are passed down through the generations. This inherent sense of belonging imparts deep

respect and obligation to an area's maintenance and ensures customs and behaviours adjust to changes to meet this end. As such, the descent-group leadership, in consultation with the community, oversees the community's changing circumstances and needs for land resources and its use.

Land in pre-colonial Port Moresby

Settlement of the South Papuan coastal area, now known as Port Moresby, has had a long history of relocation of villages during periods of hostilities between and within the original inhabitants and immigrant groups (Oram 1981). The area was originally populated by Koita and Koiari Papuan language speakers and were later joined by Eastern and Western Motu groups, descendants of seafaring Austronesians who originally arrived in PNG some 2500 years ago (David et al. 2011). Around 500 years ago, peaceful settlement in their current locations was brokered with Koita and Koiari inter-marrying with Eastern and Western Motu groups, respectively (Oram 1977; Swadling 1981).

The contemporary traditional villages in Port Moresby are a mixture of primarily Koita-only villages and inculturated Motu-Koita villages. The latter developed when the Koita moved into the established Motu villages and adopted the Motu language and many of their cultural norms. Although the Koita relinquished their language and culture, they remained in overall control of providing land access to Motu groups (Allen 1977: 249).

The Motu-Koita and Koita traditions of land inheritance primarily follow patrilineal descent rules. However, these inheritance patterns also accommodated such changes as fathers passing on land to daughters at marriage as well as people being adopted into the village group inheriting land access (Oram 1976). Over time, other changes to land access have resulted in overlapping land access interests. In the case of mixed kinship lineages, upon the death of a primary land access holder, land access determination is returned to the original group for resolution (Haynes 1990: 71–74). Overall, traditional norms have been flexible and have adjusted to changing social circumstances. These sorts of changes included Koita customary groups sharing land access with Motu-Koita groups when land was in abundant supply and sufficient to meet their land-based subsistence needs. Such examples illustrate the traditional understandings of land access and how accommodating outsiders was founded on a collective understanding of land access for all members, with land territory oversight remaining with the original occupiers. It is this long history of integration within these groups that may have predisposed them to accommodating settlers over the last 60 years.

Changes to traditional understandings and customary land

In 1873, before Australia took control of what became the Territory of Papua and New Guinea, the London Missionary Society bought[1] blocks of Hanuabada land located along the coast on the outskirts of Port Moresby for their Polynesian missionaries (Oram 1976: 12–26). The missionaries' immersion in village life and developing understanding of cultural ways aided acceptance of their presence and message. The scriptures formed the basis of enlightenment and pressure for the Motu-Koita to abandon customs deemed inappropriate from religious and Western viewpoints. Within 10 years, the missionaries had translated the gospels into Motu and children were being schooled in English. Although gradual, change to traditional practices and a new emphasis of developing community around church activities developed. The increasing familiarity that Hanuabadans developed with outsiders paved the way for occupation and later township development of the area by the Australian Colonial Administration, and also provided the foundations for advantageous social relations.

In 1885, the first land blocks in Port Moresby were bought by the British administration but much of the land after these initial purchases was acquired without purchase. Development of the township proper did not take place until the Australian administration took over from the British in 1906 (ibid. 27–62). From this period onwards, Port Moresby with its rapid influx of Europeans was at the centre of the greatest change to traditional ways. A strict policy of excluding nearby villagers from administration areas was enforced from the outset and the colonial administrators who were selective in their dealings with individuals appointed 'chiefs' with whom to negotiate land matters. These appointees were often those who had successfully converted to Christianity but were not necessarily the descent-group leaders or big men within the village community who were traditionally responsible for making such decisions. What impact this may have had on the leadership common to the Motu-Koita and Koita is unclear but it may explain why ongoing modern-day contestations regarding these early land dealings exist. Furthermore, European concepts of 'custom', 'landownership' and 'law' that have been adopted have no equivalent meaning to traditional societies (Filer 2006). Since such concepts had no relationship to traditional frames of understanding, it is not surprising that people found ways to apply their own meanings that gave them relevance.

Land as a commodity

The introduction of the cash economy under colonialism brought with it the concept of land having a monetary value. Land became a commodity, with an owner, a surveyed boundary and legal title that enabled the owner to sell or lease the land and use the title as collateral for obtaining bank loans. The laws relating to land in PNG were originally developed during colonial times to legally define and register customary landowning groups and to transfer compensation payments for resource exploitation. Determining the 'owners' is complicated both by the various descent systems customary group have and by boundaries that change over time. Those subjected to these laws have manipulated the ownership and boundary criteria which now form the basis for ongoing contestation between members of landowning groups (Filer 2006 2007; Jorgensen 2007). This is mainly because many do not fully comprehend the significance of legal arrangements and steady sources of income and economic development are not common for most Papua New Guineans. These same laws have been reviewed and redesigned to mobilise customary land for development, including urbanisation. This is discussed later.

Rural migrant settlement on urban customary land

The initial wave of rural–urban migration to the capital began after WWII when colonial restrictions still applied to free movement of indigenes. These migrants had Motu kin connections from Gulf and Papua Provinces and were readily incorporated within Port Moresby's traditional villages and not subject to the administration's oversight. Lifting restrictions on migration in the early 1960s coincided with increasing investment in education, commerce, and health in Port Moresby after which time, the population rapidly transitioned to one increasingly dominated by Papua New Guineans (Oram 1976: 85). Since then, migration to the capital from the highlands, coastal and islands' regions of the country has continued unabated, primarily in response to rural underdevelopment.

The ethnically diverse mix of traditional groups coming together for the first time was widely anticipated to be the cause of considerable social tension. This was especially the case after two pre-Independence riots that mobilised Papuans against New Guineans in Port Moresby. The riots were in response to the influx of 'outsiders' usurping opportunities from the Papuans (Nelson 1974; Somare 1975) and were widely anticipated to be a forerunner to continuing violence in relation to rural migrant settlement in the capital. However, since these incidents, there have been no mass rallies or riots instigated either by customary landowning groups or the multi-ethnic settlement population in response to their exclusion from urban development. Although ethnic violence does occasionally occur between settlement groups, these have largely been localised and of short duration. This is a significant testament to the flexibility and patience shown on all sides despite the ethnic diversity and entrenched inequalities that have continued to increase since. It also demonstrates the long term experience and capacity of the Motu-Koita and Koita groups to accommodate outsiders in their land territories.

At Independence in 1975, the new indigenous political elite expressed their vision for the protection of customary ways and equal participation in development under the PNG

Constitution. However, a legal framework and policies for urban development through rural–urban migration were not forthcoming; neither were there any visionaries to champion the cause of equal participation for those living in traditional villages or rural migrant settlers increasingly taking up residence in urban areas. Instead the colonial legacy of excluding rural migrants from the formal urban setting and planning was adopted, largely denying them access to housing, urban services or avenues to gain the necessary skills for employment opportunities.

Private housing and rental market costs have continued to be prohibitively high and beyond the means of rural migrants. In the absence of any formal avenues to make demands for adequate shelter or urban services, rural migrants have relied on their shared history of traditional norms with kin connections to negotiate customary land access. Their settlement patterns reflect the strong sociocultural bonds that kinship provides in ethnic group co-location. Many of the longer standing settlements have seen a rise in multi-ethnic groups forging alliances and a greater mix of socioeconomic groups living together. These changes point to growing ethnic tolerance and development of a widening community structure. Their mainly basic, self-help housing structures reflect both the availability of funds to build as well as tenure uncertainty in the face of ongoing evictions and demolition of settlements to make way for urban infrastructure development. The rise in political patronage, often in contravention of the formal and legal processes, has helped favoured settlers gain access to land and to water and power supply lines that traverse nearby settlements (Repič 2011).

Settlement growth and lack of administrative oversight

The absence of coordinated institutional and administrative oversight of settlement development, largely due to the lack of recognition of the permanency of settlements, is reflected in the paucity of accurate data representing urban settlement development and growth. According to recent estimates, about one million people now live in Port Moresby with around half the population living in over 138 settlements, increasing at the rate of approximately 20 settlements per year (Anis 2008; UN-Habitat 2016; Walter et al. 2016). The distribution of settler populations on customary and state land remains unclear. However, the now exhausted availability of state land for settlement, the expansion of peri-urban settlement on customary land occurring since the 1980s, and an average annual migrant population increase of 7.8 per cent from 1980 to 2000 are all factors that indicate that customary land is the only option for rural migrants to secure land access (Chand and Yala 2012: 145). The rapid increase in urban land values and the use of customary land as the primary asset of landowners have been the main drivers for customary landowner groups developing quasi-legal arrangements with settlers. These arrangements help to secure an equitable return for landowners in the absence of a legal framework for customary land dealings (ibid.; Rooney 2017).

Claims on customary land

The contemporary scale and pace of urbanisation and the commodification of land in Port Moresby reveal a complex diversity of interest groups making claims on customary land with increasing litigation over access and ownership conflicts. Customary land groups, while continuing to contest the validity of colonial alienation of land, at the same time engage with settlers — on both state and customary land — using traditional norms and financial arrangements that bridge the traditional and legal mechanisms for land access (Goddard 2011; Rooney 2017). Increasing outright settlement on customary land has frustrated customary groups' capacity to obtain benefits for what is their only asset. Migrant settlers, who now significantly outnumber the customary landowning groups in Port Moresby, represent multiple urban born generations made up of diverse ethnic groupings that consider themselves permanent residents with rights to the city. Although documentary evidence is increasingly used to record transactions between migrant settlers and customary land owners, these are neither in line with formal processes or recorded by formal institutions with oversight in land dealings and urban planning (Chand and Yala 2012). Adding to this complexity, urban property developers have bypassed legitimate avenues using the more expedient methods of political support to gain access to customary land.

Policies to mobilise settlement upgrading

After 25 years of political inaction regarding urbanisation, a new political visionary appeared to take up the challenge of unplanned urbanisation on behalf of urban migrant settlers and customary landowners. The Honourable Dame Carol Kidu, the then Minister for Community Development, first raised the issue in Parliament as a matter of national concern in the late 1990s. Her commitment to bring about change in the face of initial lacklustre support in the Parliament set in motion the establishment of the Office of Urbanisation and the development of the National Urbanisation Policy (GoPNG 2010). The policy on unplanned settlement was seven years in the drafting and comprehensively addresses the wide ranging administrative, institutional and legal changes required to redress the complex issues that have developed in the absence of urban planning and management. It identifies an essential need to deal with dysfunctional institutional and administrative cultures, but falls short of identifying how such deficiencies might be addressed or any punitive measures to stem the corruption that has become commonplace in dealings with land, housing and settlements (Walter et al. 2016). The policy also envisages using the colonial land law to compulsorily acquire customary land for water, power and road easements, unless landowners voluntarily give the land to the state (GoPNG 2010: 23). This seems likely to threaten the goodwill of customary land owners and reduce the likelihood of a smooth transition towards mobilising customary land for urban settlement.

Incorporated Land Groups

Based on the problems created with the incorporation of customary land groups in resource projects, the PNG Constitutional and Law Reform Commission (CLRC) has recommended reforms to land legislation in relation to incorporated land groups (ILGs) (CLRC 2008). The reforms have been made specifically to protect the rights of all customary group members against the monopolising actions of individuals within the group. All ILG members must now prove rights to group membership by birth certificate and land boundaries are required to be surveyed. The group's constitution requires annual general meetings, providing bank records of land dealings and to follow specified codes of conduct and dispute resolution processes. In Port Moresby, complexities have been created in customary land claims due to multiple groups holding title to the same land due to past fragmentation of groups (Rooney 2017). Whereas in the past such practices of shared access to land were a feature of the flexibility of customary land arrangements, these issues are not easily reconciled under the current land laws. Despite reforms to the incorporation of customary groups, significant concerns remain regarding the exclusion of members within landholding lineages and the cumbersome and costly nature of the incorporation processes (Wangi 2016).

The latest development in implementing the urbanisation policy and plan is the UN-Habitat-led multi-stakeholder strategy to upgrade all settlements and traditional villages in the National Capital District (NCD) in the decade 2016–2026 (UN-Habitat 2016). The strategy is the first step in achieving the PNG Vision 2050 goals of alleviating urban poverty and providing adequate housing and utilities to all city residents and ensuring proper management of these initiatives. The strategy's focus is on providing secure land tenure, relocating and replacing all settlement and traditional village housing, and providing urban services, schools, clinics, shops and market facilities. Financing schemes for housing are proposed as is skills training for employment. Given the sociocultural significance of settlement layouts and the location of traditional villages, acceptance of such proposals should be considered with caution.

These plans and strategies all underline the profound changes needed to equalise the disparities in living conditions and access to services in urban areas in PNG. The time frame of 10 years appears overly ambitious and unexpected issues will undoubtedly arise during the upgrading process. Significant to a smooth transition will be genuine consultation and ownership of the strategy by all involved, including customary land owners and settler communities. What has been typical of such external agency programs in the past is a formal top down process of delivery where success is hampered by informal bottom up development practices. The importance of gaining trust among landowners and rural migrants is critical for the participation required for them to take ownership of the NCD citywide upgrading strategy. Of equal importance will be to find ways to resolve the quasi-legal land access arrangements from the perspectives of both landowners and rural migrant settlers who will not participate meaningfully in the process if they perceive that they are being side-lined for the sake of expediting agendas that leave them questioning whether they will be worse off.

Conclusion

Pre-colonial experience of complex land dealings between early occupants and more recent migrants reflect flexible arrangements by the customary landowners to manage their dealings with urban settlers. While a majority of settlers suffer significant inequality in the shape of a lack of secure title and access to services, overall the growth in just 60 years of the Pacific Island's largest city and largest concentration of informal settlers has occurred relatively peacefully. Only since the late 1990s has recognition that settlements are permanent led to an emergence of urbanisation policy directed to addressing the needs of both customary landowners and settlers. Implementation of the urban policy initiatives, however, are likely to face many practical difficulties that must be addressed for the citywide settlement and traditional village upgrading strategies to be sustainable.

Notes

[1] A typical payment for a block of land was 'a shirt, hatchet, knife, and pocket handkerchief' (Oram 1976: 22).

References

Allen, J 1977, 'Fishing for Wallabies: Trade as a Mechanism for Social Interaction, Integration and Elaboration on the Central Papuan Coast' *The Evolution of Social Systems*, J Friedmann and M J Rowlands (eds), 419–55, Duckworth, London.

Anis, A 2008, 'Concerns over Settlements', *The National Newspaper*, August 18.

Chand, S and C Yala, 2012, 'Institutions for Improving Access to Land for Settler-Housing: Evidence from Papua New Guinea', *Land Use Policy* 29 (1), 143–53.

Constitutional Law Reform Commission (CLRC), 2008, 'Review of Incorporated Land Groups and Design of a System of Voluntary Customary Land Registration', Report No. 5. Port Moresby, Independent State of Papua New Guinea National Land Development Program.

David, B, I McNiven, T Richards, S Connaughton, M Leaversely, B Barker, and C Rowe, 2011, 'Lapita Sites in the Central Province of Mainland Papua New Guinea', *World Archaeology* 43 (4), 576–93.

Filer, C 2006, 'Custom, Law and Ideology in Papua New Guinea'. *The Asia Pacific Journal of Anthropology* 7 (1), 65–84.

——— 2007, 'Local Custom and the Art of Land Group Boundary Maintenance in Papua New Guinea: Anthropological Perspectives', in *Customary Land Tenure and Registration in Australia and Papua New Guinea: Anthropological Perspectives*, J Weiner and K Glaskin (eds), 135–73, Asia-Pacific Environment Monograph 3, Australian National University, Canberra.

GoPNG, 2010, 'National Urbanisation Policy 2010–2030', Office of Urbanisation, Government of Papa New Guinea, Port Moresby.

Goddard, M 2011, Bramell's Rules: Custom and law in contemporary land disputes among the Motu-Koidu of Papua New Guinea, *Pacific Studies* 34(2/3), 323-47.

Haynes, C 1990, 'Urban Land Tenure and Administration in Papua New Guinea', PhD Thesis, Australian National University, Canberra.

Jorgensen, D 2007, 'Clan-Finding, Clan-Making and the Politics of Identity in a Papua New Guinea Mining Project', in *Customary Land Tenure and Registration in Australia and Papua New Guinea: Anthropological Perspectives* J Weiner and K Glaskin (eds), 57–72, Asia-Pacific Environment Monograph 3, Australian National University E Press, Canberra.

Nelson, H 1974, *Papua New Guinea: Black Unity or Black Choas?* Penguin Books Ltd., Australia.

Oram, N 1976, *Colonial Town to Melanesian City: Port Moresby 1884-1974*, ANU Press, Canberra.

———1977, 'Environment, Migration and Site Selection in the Port Moresby Coastal Area', in *The Melanesian Environment*, J Winslow ed), 74–99, ANU Press, Canberra and Angus and Robertson, Sydney.

——— 1981, 'The History of the Motu-Speaking and Koitabu-Speaking Peoples according to Their Own Traditions', in *Oral Tradition in Melanesia*, D Denoon and R Lacey (eds), 207–230. University of Papua New Guinea and Institute of Papua New Guinea Studies, Port Moresby.

Repič, J 2011, 'Appropriation of Space and Water in Informal Urban Settlements of Port Moresby, Papua New Guinea,' *Anthropological Notebooks* 17 (3), 73–87.

Rooney, M 2017, 'There's Nothing Better than Land: A Migrant Group's Strategies for Accessing Informal Settlement Land in Port Moresby', in *Kastom, Property and Ideology: Land Transformations in Melanesia*, 111–43, ANU Press, Canberra.

Somare, M 1975, *Sana: An Autobiography of Michael Somare*, Niugini Press Pty Ltd., Port Moresby.

Swadling, P 1981, 'The Settlement History of the Motu and Koita Speaking People of the Central Province, Papua New Guinea', in *Oral Tradition in Melanesia*, D Denoon and R Lacey (eds), 240–51. University of Papua New Guinea and the Institue of Papua New Guinea Studies, Port Moresby.

UN-Habitat, 2016, 'NCD Citywide Settlement Upgrading Strategy 2016-2026', National Capital District Commission, UN-Habitat, Port Moresby.

Walter, P, C Yala and S Aleker, 2016, 'Improving Urban Development in Papua New Guinea', The National Research Institute Discussion Paper 145, National Research Institute, Port Moresby.

Wangi, T 2016, 'Challenges and Success Factors for Customary Land Registration in PNG'. Papua New Guinea National Research Institute Blog, accessed 10 November 2016 at: https://pngnri.org/challenges-and-success-factors-for-customary-land-registration-in-png/

Making a home in the city:
Ideas of employment and work

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Settlements in Papua New Guinea have always been associated with low income earners and unemployment. This categorisation leads to assumptions about criminality, urban safety and vagrancy. A settlement, though physically part of Port Moresby, epitomises the contradictions of an ideal urban social life, the world of the city where you can thrive to make a living through paid employment or street selling in the informal economy. The growing middle class including business people and white collar workers and the educated elite of Port Moresby continually condemn settlements as crime infested locales, connected to the city through potholed roads and illegal utility connections, where unemployed people spend their days sitting around gambling, planning criminal activities and engaging in other behaviour considered socially unacceptable. These assumptions are largely based on negative media coverage, a western informed idea about what a modern Port Moresby should look like, coupled with a lack of knowledge of the lives of settlement residents. The ongoing debate about settlements and urbanisation has been prevalent in Papua New Guinea (PNG) since the 1970s (Strathern 1972; Oram 1976). The daily newspapers regularly publish letters from Port Moresby residents condemning settlers and urging the government to take a tougher stance by repatriating them to their home provinces. In addition to the more traditional forms of media, the internet has given Papua New Guineans the opportunity to debate such issues on online forums, facebook, blogs and on websites concerning PNG.

Because settlements are stereotyped as the breeding gounds for anti-social behavior they are often the target for police operations and demolition exercises which are mostly knee jerk reactions by government authorities when pressured by public opinion on issues such as crime and unemployment (Dinnen 2001).

Public opinion about settlements also seems to be shared by policy makers and bureaucrats. Recent government documents about urbanisation portray settlements as places where low income earners, unemployed people and criminals live[1]. Government policies and plans have been formulated to address what is perceived to be a problem of modernity and development (or lack of it). International NGOs and donors in their efforts to address developmental catch phrases such as 'poverty alleviation' and 'gender equality', also depict the experience of settlement life in ways that affirm the conventional ideas about them. While I do not necessarily disagree with the claims made by international donors and government agencies, I think there is a need for a more nuanced understanding of settlements and their populations.

This paper presents ethnographic evidence that supports and strengthens Goddard (2005), Barber (2003) and more recently Rooney's (2015) research that challenges stereotypical notions of urban settlements. It is based on my doctoral fieldwork (2009-2010) at an urban settlement in Port Moresby comprising people from Morobe Province and known locally as the Morobe *blok*. The paper presents examples of the employment experiences of residents of the *blok* together with their ideas about work. I also include examples of how residents of Port Moresby settlements who come from many different backgrounds are able to make a home in a rapidly modernising city.

Places of employment and types of work

In Morobe *blok*, settlement dwellers engage in paid formal work, informal income generation, or both as the uncertainty of employment, low wages and the rising cost of goods and services requires innovative income generating options. This situation also applies to many other settlements in Port Moresby as Umezaki and Ohtsuka (2003) show. The involvement in extra income generating activities by wage earning *blok* dwellers is not localised to the *blok*, and in front of suburban homes the sale of ice

blocks, mobile phone top-up cards and other small items is a highly visible activity. This type of entrepreneurship by urban dwellers has been obvious since the late 1970's. For example, people from the Mount Hagen area in the Western Highlands (Hageners) who were employed in the early seventies engaged in other forms or income generation such as taxi driving (Strathern 1972) as an avenue to make more money. The sale of betelnut, fruit, art and craft outside designated market places is also a characteristic of urban living that has expanded over time. Ranck (1982) divided the informal retail trade into three catergories: urban markets, many of which were established during colonial times; side-walk traders or street sales people; and mobile trading vans and *liklik stoas* (small trade stores), or what are commonly known as a tucker box. The following examples illustrate how settlement dwellers make and think about money.

Bank teller to *buai* seller

Tuo is a regular vendor at the *blok's* main bus stop market. Tuo states that with marketing he gets more money than he did when he was working full time as a bank teller. He makes between $AU27 and $AU39 profit daily from his *buai* (betel nut), cigarette and lolly sales. He said he is better off now that he is formally unemployed because when he was working he would *buk*[2] money, drink a lot and go to clubs. He said when he started to sell *buai*, some people were surprised because they knew him as a bank employee and his daily presence at the bus stop was to catch the bus to go to work in town and not to sell *buai* at the bus stop market. Now that Tuo is not in waged employment, he does not feel pressured to socialise with his friends in the same way as when he was employed. He now feels he has more money because he does not engage in drinking and night clubbing. This is not to say that men who are formally employed are the only ones who consume large amounts of alcohol because young, single *buai* sellers also buy beer and drink away profits. For Tuo, it is not only about money but about being in a different place where there are not the social relationships which activate ideas of drinking, borrowing money and going to clubs.

The irony of Tuo's situation also lies in the western derived idea of work and prestige where it is assumed that a bank teller would have more money than a *buai* seller due to the nature of their jobs. Tuo said he was thinking of looking for waged employment again. This consideration was not based on a need to go back to work as a means to survive because Tuo knows that he can earn money from selling *buai*. It is more a case of knowing he has options. Tuo was one of a number of people I met who left their paid jobs and were doing other kinds of work. It is through meeting people like Tuo and Victor, whose story I tell next, that I want to show how *blok* people think about work.

Victor and the flawa lain (Flower people)

Amongst the weekday movements of *buai* and urban gardeners are the *flawa lain* who come by with their wheel barrows full of soil or leaves which they collect to look after their plants. The *flawa lain* sell their plants only on the weekend because their chances of selling their flowers are maximised by the increase in numbers of city residents travelling on the main Sogeri road. Flower gardening enthusiasts regularly travel to Nine Mile to view and buy the seedlings cultivated by *blok* gardeners. Four wheel drive vehicles and dark glass sedans pull up along the dusty roadside and their occupants come out of their air conditioned vehicles to inspect the flowers and on many occasions purchase seedlings to take to their homes in the city. Prices of seedlings range from 50 cents to $AU6 depending on the species.

Victor, who is in his thirties, owns a small landscaping and pot plant hire business and cultivates a wide range of flowers for most of which he knows the scientific name. He is very determined to succeed in his business and not long after meeting me, he seized the opportunity to ask me for assistance in promoting his business. Victor decided to go into business for himself after working at various places as a gardener. He also worked for a flower and landscaping business owned by an expatriate. Victor said he realised that he knew as much as the *waitman* (white man) when it came to gardening and plants and he thought the waitman did not adequately remunerate his workers. While aspiring to gain more work, Victor said that it is really difficult to do business in Port Moresby if you are a grass roots[3] man.

> It's who you know, I don't know anyone in government and in business so when I approach people to market my business, they are not interested. My plants are on hire at two big companies and one government organisation but honestly that's not a lot. My overhead costs are large because I don't have my own truck which means when I have to go to the different offices to change the flower pots, I need to find people in the block who have cars available for hire. Can you help me market my business please? You work for the government, can you use your connections to assist me? I just need some more exposure and so I can get more jobs and hopefully make enough money to one day buy a car.

By seeking my assistance, Victor was essentially asking me to grant him access to a network which he felt was inaccessible to him. He was hopeful that with my assistance he may be able to access a network of relations which he could then convert into business opportunities. Victor and I put together a flyer advertising his small business, which I sent to various contacts. As a result, Victor successfully acquired a number of small landscaping jobs. After he was remunerated for his first job, Victor came to my house and shared $AU9 with me. When I refused his money, he insisted saying that it was my assistance that helped him get a small work contract therefore it was right that I have a share of his good fortune. Success in the Melanesian context means including all those who have contributed to one's wellbeing. In this case, Victor felt compelled to give me money from his work contract as his way of acknowledging my contribution as well as keeping our relations in mind in case there was a need to further help each other.

Wok sikiriti (security work)

Mark was unemployed when I first met him. He was pursuing a court case against his former employer for unlawful dismissal. During the year I was conducting fieldwork Mark found employment as a driver for the dog unit of an international security company. He worked for nearly three months before resigning to take up another job as a driver for the British owned security company G4S. Security jobs pay a minimum wage of around $AU120.70 a fortnight, however, as a driver Mark's salary is closer to $AU201. Mark's role as a driver allows him to earn a wage above that of a static *siggy* (security guard), because the job of a driver comes with the responsibility of driving company vehicles and transporting static security officers to their work locations. Mark aspired to work for a company like G4S because the salary is better than other security firms and also because G4S is associated with the PNG LNG project. Therefore, Mark believes those who are employed by G4S, and work specifically at the project site, may have better benefits such as training and maybe the opportunity to work at the project site in the Highlands as well.

Employment as a security guard is seen as unskilled menial work, however the private security industry in Port Moresby is a big business and the demand for security workers is large with both local and international firms advertising and holding day recruitment drives to hire static guards, drivers and dog handlers. Work in waged employment does bring a sense of prestige, however it does not necessarily equate to financial security for urban dwellers. Many families like Sarah's, whose story I tell next, supplement their wages through street sales and other income generating activities.

A health worker and *bisnis meri* (business woman)

Sarah is a health worker who works at the Port Moresby General Hospital and is sometimes referred as the *nurse meri*. Sarah could be considered well off as she and her husband (a mechanic) had jobs and Sarah also engaged in other income generating activities such as chicken farming and *dinau moni* (money lending). From her informal businesses and their combined employment Sarah and her husband were able to send their daughter to a private Christian school in town. They own a second hand car which they use when it is free of mechanical problems.

As a health worker, Sarah's take home salary ranges around $AU337 a fortnight while her husband, a qualified mechanic who works for a leading automotive distributor, is paid about the same as Sarah. Sarah works seven day shifts with two or three days off between shifts depending on whether she is working a day or night shift. She employs a baby sitter who lives nearby to help her with her children and this enables her to travel early to the hospital if she is assigned to work a night shift (10pm-6am) or to sleep at the hospital if she works an afternoon shift (2-10pm) and has difficulty with transport . Sarah rarely talks about her work except to say that the ward is always busy because there are not enough nurses or community health workers to serve the increasing number of patients at the hospital.

Apart from being a qualified community health worker, Sarah is also an astute businesswoman who, while holding down a full time job, also has a *kakaruk bisnis* (chicken business) and a money lending business. In the same way that Sarah's extra income generating activities are not limited to the *blok*, her money lending business is not limited to settlements, but is a feature of urban living with many people living on money lending either as sellers or borrowers. It entails loaning money to trusted customers for a profit. There are different levels of interest usually set by the creditor themselves depending on different factors such as competition and knowledge of customers. The minimum amount of money one can borrow is $AU4.50 which generally requires a repayment of interest of $AU1.50 or $AU2.25 a fortnight. In some cases creditors consider it acceptable for their debtors to pay the 'interest' every two weeks and repay the *mama moni*, or original loan amount, when they are able to. By doing this the debtor is avoiding the accumulation of interest which, if added on every two weeks, would end up costing the borrower double or more than the original loan. By paying only the interest on a loan the debtor is continuously acknowledging the relationship between the two which indicates that the debtor is thinking about the lender and the money that it is owed. While money lending essentially operates on good faith, non payment of debts is also known to be the cause of disputes (Goddard 2005).

Conclusion

What I have described here illustrates the resilience and innovative ways that settlement dwellers choose to earn a living. While many settlement residents are involved in the informal economy, it is also important to note that the different kinds of employment and ideas of work are not confined to settlement life, and the hardships of urban life are not limited to those who are resident in settlements. Suburban Port Moresby also reflects the kinds of livelihoods described in this paper essentially blurring the lines between settlements and suburbs and the formal and the informal (Sharp et al 2015).

Notes

[1]See National Capital District Settlements Plan 2007-2011; National Urbanisation Policy 2010-2030:52; Papua New Guinea Development Strategic Plan 2010-2030

[2]Borrow money on credit.

[3]In the PNG context the 'grass roots' are low income or unemployed people. Settlers are often classified as grass roots.

References

Barber, K 2003, The Bugiau Community at Eight Mile: An urban settlement in Port Moresby, Papua New Guinea, Oceania, 73, 287-297.

Dinnen, S 2001, *Law and order in a weak state: Crime and politics in Papua New Guinea*, University of Hawai'i Press, Honolulu

Goddard, M 2005, *The Unseen City*, Pandanus Books, Canberra.

GOPNG (Government of Papua New Guinea 2011, District Settlement Plan 2007-2011, Port Moresby.

Oram, N 1976, *Colonial town to Melanesian city: Port Moresby 1884-1974*, Australian National University, Canberra

Ranck, S 1982, 'New Dimensions Emerging in Port Moresby's Retail Sector', *Australian Geographer*, 15(3), 180-182.

Rooney, M 2015, 'Money and values in urban settlement households in Port Moresby Part 1: Money is important, so are children, water and firewood', *State, Society and Governance in Melanesia in Brief*, 2015/18, Australian National University.

Sharp, T et al. 2015, 'The formal, the informal, and the precarious: Making a living in urban Papua New Guinea', *State Society and Governance in Melanesia Discussion Paper* 2015/2, Australian National University.

Strathern, M 1972, *No Money on Our Skins: Hagen Migrants in Port Moresby*, New Guinea Research Unit, Port Moresby.

Umezaki, M and R Ohtsuka, 2003, 'Adaptive strategies of Highlands-origin migrant settlers in Port Moresby, PNG', *Human Ecology* 31(1), 3-25.

Capital cultures: Gender, place and belonging in Port Moresby and Noumea

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*Noumea is nothing. It is French.
There is one home—it is Lifou*
(Christianne, 42, Noumea 2016).

I feel comfortable in Moresby wherever I am
(Marie, 33, Port Moresby 2015).

These quotations encapsulate differences between the perspectives of educated and employed Kanak women in Noumea and their counterparts in Port Moresby. Where Christianne reports no attachment to the town in which she lives, Marie sees Moresby as home. While these women have much in common—including being Melanesian, of similar age, having tertiary education qualifications from overseas, and being employed in white collar professions in the capital cities of their countries of origin—Christianne grew up in a French colony, while Marie was raised in what was then a newly independent Papua New Guinea (PNG). Their different relationships with the urban places they live in reflect the impact of the colonial past on the present as this is differently manifest in the unique towns of the Pacific.

In this paper, I explore Melanesian women's relationships with the capital cities of Noumea and Port Moresby. To do so I draw on conversations, email exchanges, interviews and focus groups with 16 Kanak and 12 Papua New Guinean women. Illustrating their profoundly different views about the urban areas in which they live, I argue that it is important to attend to the distinct voices of women that inhabit the towns and cities of the Pacific. Although they might all be described as middle class Melanesians, these Kanak and Papua New Guinean women inhabit cities that are differently shaped by colonial place making and the experience or absence of independence.

In the last 40 years, there has been an increasing focus on the 'wicked problems' (Rittel and Webber 1973) of urbanisation in the Pacific. Academics and development practitioners discuss squatter settlements, crime, poverty, ethnic conflict and corruption as well as the challenges presented by climate change and globalisation (see for example Oram 1976; Norwood 1984; Connell and Lea 1993; Connell 2003; Goddard 2010; Repic 2011). There is rarely much consideration of the difference gender makes to the experience of inhabiting towns and cities and when gender is mentioned it is almost exclusively discussed in relation to the security and safety problems women face when they are in public spaces, including markets and accessing public transport (UN Women 2012). Consequently, the dynamism of cities and the opportunities urban spaces offer women to forge a more independent and interesting life for themselves tend to be overlooked (Massey 1994; McDowell 1999; Rose 1993).

Unique histories of colonialism and its differential impacts on Pacific towns are also under researched aspects of writing on urbanisation in the region. But as Paul Jones notes in his report for the Asian Development Bank (2012), Pacific 'urban villages' have emerged under different colonial regimes and administrative systems and this can affect social dynamics. While some urban centres have developed in countries with a degree of pre-colonial commonality in terms of genetics, culture and history, Apia in Samoa for example, others, including the towns and cities of PNG, contain the most ethnically and culturally diverse populations in the world.

The geography of these countries also shapes social relations and urban identities. While women living in Apia or Noumea can and frequently do return to their villages, thereby maintaining important familial and cultural connections, women whose families migrated to Port Moresby from the islands of PNG in the 1980s typically have only attenuated ties with their traditional places of origin (Macintyre 2011).

Who comes to the city and what they do is influenced by independence or national sovereignty which affects local control over employment policies. After independence in 1975, PNG introduced nationalisation, which meant that expatriates who sought to work there were required to apply for visas where previously they had been entering the country as an Australian territory. These changes resulted in an exodus of white public servants from PNG in the 1970s and 80s. Alongside this, the city's labour profile also changed. Moreover, as Melissa Demian (2017) notes, in the formal sector, Port Moresby has seen the most growth in clerical professions which tend to be occupied by women, thus giving rise to 'a feminisation of the workforce'.

In contrast, Kanaks in Noumea are in the minority including as employees in the formal sector. Those that are employed tend to work in 'blue collar' and service industry roles rather than in the public service or as professionals. Despite efforts to enable Kanaks to participate in education and employment, the gap between the indigenous population and other ethnic groups has increased since 2009 (Pacific Islands Forum, 21 August 2016) and there is a particularly low participation rate among indigenous populations and women (Le Queux and Graff 2015). The deeply entwined relationship between the history of the independence movement and labour activism in New Caledonia add weight to the theory that the situation is unlikely to change unless the country achieves independence in the 2018 referendum.

As a capital city in the settler colony of New Caledonia, Noumea is an outlier in Melanesia. French, conservative, safe, these are all words used to describe Noumea that are not used about Port Moresby. Moresby also is unique among Melanesian towns—the size of its population, the level of security concerns and the ethnic diversity of its inhabitants—mean that it too must be considered on

its own terms. It is thus helpful that in both places the women with whom I have spoken about these matters are all tertiary educated and employed. Most are aged in their thirties or early forties and many have gained at least some of their educational qualifications in New Zealand, Australia or France. A high proportion of those who took part in the research were not in a relationship at the time of interview, though more of the women in Noumea had children. All the interviews took place in English, a disadvantage for some of the Kanak women for whom this is a second or third language and who are less likely to speak English on a regular basis in their workplaces than their Papua New Guinean counterparts.

Educated and employed women in Port Moresby

The majority of the women with whom I spoke in Port Moresby have grown up in town. Many also have parents who have lived there most of their lives. These women know no other home in PNG and even those who arrived in Moresby more recently are not interested in returning to their place of origin.

Beth's story is illustrative. Now 30 and working for an Australian company, Beth first came to Moresby 10 years ago from a village outside Wewak. She moved in with her sister to complete a university degree. Despite the cost of living and restrictions on personal freedom she experiences as a young woman in Moresby, Beth has no intention of moving back either to Wewak or the nearby village in which she grew up. Declaring 'I don't think I'd like to go anywhere else. I'd rather stay here', Beth mentioned as reasons, the opportunities for employment and entertainment afforded by Port Moresby that are not available elsewhere in PNG.

Similarly, when asked about life in Moresby, Melissa said she couldn't imagine living elsewhere. For her, in comparison to the other provinces of PNG, Moresby represents a place of personal freedom where she can wear what she likes without considering how she will be perceived. It is also important for Melissa that Moresby offers a range of consumer and leisure choices. Indeed, for her this means that life in Moresby is akin to life in Sydney.

> It's [Moresby] changed at such a fast pace, it almost feels no different if you live in Sydney or Port Moresby, so I've been in Sydney for almost a year for work and it, you just come back to Moresby, it's almost like that. You have certain places to go… you know you can afford it (Melissa, 33, Port Moresby 2015).

Because of her income, Melissa experiences few barriers to accessing a range of venues in Moresby, including places long associated with colonial exclusion. For instance, discussing the Port Moresby Yacht Club Melissa said she went there to eat with her children along with 'the Australians and the Papua New Guineans that could afford it'.

This was not the case among all those I spoke with, however. For example, discussing the Yacht Club, Meg said:

> …the first impression you get when you step into the lobby, you see all these white faces of all these white people…there are all these photos of white people. I'm not sure, they must have been the first members of the club and all you see is just white faces. You don't see anything familiar when you go into that lobby area (Meg, 25, Port Moresby 2015).

Susan confirmed that it was usually expatriates who went to the Yacht Club and described it as having an 'old colonial style and feel.' This meant that for her: 'it's safe but it's just that you don't want to go in there and feel uncomfortable' (Susan, 30, Port Moresby 2015).

In other salubrious venues in Port Moresby, security guards use dress codes to exclude Papua New Guineans. This shows that intersecting class, gender and ethnic barriers play a role in shaping the cafes, shopping centres, hotels and gyms that are proliferating in the new Moresby. Nevertheless, the city's urban educated women appreciate having more places they can go.

Despite these changes, concerns about personal security present a daily challenge to women's experience of 'feeling comfortable' (Radice 1999; 2015) in Port Moresby. Women navigate their mobility in the city with assistance from male family members, trusted taxi drivers and in some cases, drivers provided through their workplaces. A few take public motor vehicles but many prefer not to because of concerns about personal safety. Some of those with whom I have spoken have been assaulted and robbed at bus stops and on buses.

Meg outlined some of the ways women in Moresby navigate personal safety:

> One of the things about working for an organisation that is really high on security. For instance, if we were to stay after 9pm then we have the privilege of getting a UN escort so we get to contact them and where we are. They get our location and trace us and lead us all the way back home. That is like the extreme of how bad it gets at times. For us, it's a must because it's the privilege. But in most cases where I have to get my family members to pick me up after 9 or 10 then one of my brothers would have to be driving…there must be one or two boys sitting in the car to come pick me us up. Just to ensure if anything goes wrong then the boys are there with us (Meg, 25, Port Moresby 2015).

Meg's reliance on her male relatives is replicated by many women in Moresby (Spark 2014). This is made easier because most continue to live with their families of origin well into their thirties, primarily because of the high cost of living. While they may receive relatives from 'the village' into their homes, particularly if they still live with their parents, most are less likely to do so once their parents die. Women in this cohort typically construct their obligations as being to their children (if they have them), parents and siblings (Spark 2017).

Despite the colonial feel of some venues and the challenges with navigating personal security, it is inappropriate to represent Moresby as a place that is always hostile to women. For women who possess the markers of class—a salary, education, the capacity to buy and rent houses—the city is home, 'in and through vicissitudes and not just despite them' (Casey 1993). As Marie said: 'I feel comfortable in Moresby wherever I am' (Marie, 33, Port Moresby 2015).

Veronica, a Papua New Guinean woman who has worked in Noumea for 10 years but who returns to Moresby on a regular basis, supported this perspective:

> I*t's not so bad now in Moresby. A few years ago you wouldn't feel safe to take a walk in the evening or go to go out and drive, but it feels much safer. It feels better. It's really positive how things have changed there. I think there's lots more things that you can do at night and that gives people more freedom to move. There's still places you wouldn't want to go at night and so on. But I feel much better being there than a few years ago when we moved out. Being able to move at night and so on* (Veronica, 42, Noumea 2016).

For Veronica, Noumea may be safer and have better schools to which she can send her children, but Moresby is more comfortable because it 'feels Melanesian'. For her living in Noumea is 'like you're living in Australia or somewhere…it's not Melanesian.' Kanak women concur with this perspective, indicating the significance of independence in shaping the experience of comfort and belonging in urban areas. This difference also demonstrates that while colonised people necessarily assert their identity through links to land, in an independent nation, identity acquires new dimensions and citizenship itself becomes an authentic identity.

Educated and employed Kanak women in Noumea

The majority of the women with whom I spoke in Noumea had spent time in town as children. Because of limited access to schooling in their places of origin and a generalised preference among their parents to live in tribou or outside Noumea, most had come to Noumea for schooling rather than because their parents were based there. A number had lived in boarding schools or with other family members as teenagers, going home on weekends or school holidays.

Some of the women discussed the discomfort Kanak people experienced in Noumea before the signing of the Noumea Accord, the 1998 agreement with France that acknowledged Kanak people's right to a greater degree of political power. Gladys, for example, said:

> *Before that the Kanak people were, it's not that they were not allowed…they were absolutely not allowed into the city except for work. In those times, the feeling was still there…they were allowed to come and shop and everything. But the feeling was*

> *still there. You couldn't stay with Kanak people in a group in the middle of the city. You had to move. Because it was for white people. No one used to go, none of the Kanak people used to go to the beaches. Baie de Citron, Anse Vata Bay, not one Kanak person on the beach at that time. Impossible. It was not forbidden by any law. It was just the way it was. So, after the Noumea Accords, it changed. It changed* (Gladys, 42, Noumea 2016).

Because it is seen as 'white' and 'French', Kanak women have little connection to Noumea. While life in town does not present the challenges to personal security that women in Port Moresby experience, Kanak women describe Noumea as unhomely. The following quotes are illustrative:

> *Here in Noumea, it's a white city. I mean, it's a mini Paris in the Pacific. So I guess, I don't know, you don't have that sense of being in the Pacific, being in Noumea* (Rose, 33, Noumea 2016).

> *Noumea is very much more French, also. Not exactly have the same values as locally. So that's why I think also there is this, they [Kanaks] don't connect that much to the cities here. Cities around the Pacific Ocean, like in all the other Pacific islands, especially the Melanesian countries, they're really Melanesian cities. It's not European. Here it's really a western city…That's the big difference. So yeah, it's normal for me that we don't connect to Noumea city, because it's too westerner. It's not like the rest of the Melanesian countries' cities* (Gladys, 42, Noumea 2016).

Thus, for Kanak women, Noumea is a functional place, a place to work and send children to school but not a place with which they have a positive affective connection. As Christianne said:

> *We live here, we work here, but in Noumea it's like, I live in Sydney or I can live in Dubai or Auckland… there is nothing, there is nothing in Noumea* (Christianne, 42, Noumea 2016).

Rose echoed this, adding that for her 'home' is the island of Ouvea, where her family comes from:

> *Noumea is mostly where I work, where my children go to school. But if we talk about home, home would be the islands, home would be Ouvéa, home would be Goosanah, home would be my parent's place* (Rose, 33, Noumea 2016).

As Rose's statement makes clear, Kanak women have a markedly different relationship with their familial places of origin than their counterparts in Port Moresby.

All of the Kanak women to whom I spoke explained this connection saying that while of necessity they must spend much of their working lives in Noumea, they return to *tribou* to regenerate themselves.

> *Going back to Lifou for custom ceremonies is like a force, energy, spiritual regeneration. It is the same for my daughters'* (Karen, 42, Noumea 2016).

I need to come back to Lifou. It's like a resource. It's energy for me. I must survive here because we have to work, to pay too, it's life. But when I want to be me, to be my identity and my fight, my energy, I come back to my sweet home Lifou (Lily, 45, Noumea 2016).

You are defined first from the earth you are linked to. The piece of land you are linked to. So it's extremely important. Even if you live in the city, when you meet someone, you say, "Where are you from"? It's where, which piece of land are you from, that means. Because that's your identity (Gladys, 42, Noumea 2016).

The strength, regeneration and identity that urban based Kanak women gain from returning to *tribou* confirms that forms of traditional connection are given greater priority in colonised places that have not become independent. Port Moresby women, born and raised in an independent nation, are able to forge new versions of identity based on their experiences as urban inhabitants of a challenging but politically free environment. Conversely, Kanak women locate belonging outside the town that has been forged by and remains under French rule. As noted above, in colonised places, indigenous identity must of necessity reference links to land while in an independent nation, there is space to create identities based on new forms of belonging including in and to urban areas.

Before concluding, it is important to note another key difference that emerged in the discussions with Kanak women. Far more than their Papua New Guinean counterparts, Kanak women were concerned about the place of Kanak men, especially their sons. Noting that tribal connection mattered less for women in the city, because 'in the Kanak culture the girls are to be married and they don't have land' they said 'land is belonging to the man' (Ruth, 45, Noumea 2016). It was particularly challenging for single mothers to try and ensure this connection because they sometimes struggled to maintain their sons' relationships with their fathers. Some women solved this by forging adoptive bonds between their brothers and their sons, thereby ensuring their sons would have a place. For instance, Yiiciipo, who was separated from her sons' father, said:

When my son born, and I choose to keep my son with me…I introduce him to my brothers, and told them that one is my son, I will keep him with me, and you are like an anchor, and one, the first one told me that I don't have any boys, I don't have any sons, I will just take your gift and I will take your son as my son (Yiiciipo, 37, Noumea 2016).

Ruth is also a single mother of two boys and was planning to do the same with her brothers:

I'll give my kids to my brother. Like in the clan he's my brother's son, but he stay with me. That's the solution I find to know that I can be sure that he's got his place somewhere in the Kanak society (Ruth, 45, Noumea 2016).

For the Kanak women with whom I spoke these matters were of considerable concern. Conversely the educated women in PNG were raising their sons to be successful in the modern world of Port Moresby, rather than as individuals who needed to connect with their 'traditional origins'. Indeed among this cohort in PNG, versions of masculinity associated with distorted (and for some outdated) views of gender are often seen as 'customary' and in need of revision.

Conclusion

The unique histories of these two Melanesian places continue to shape women's relationships with both urban and village places in the present. Where middle class women in Moresby feel at home in most places (with the exception of venues dominated by expatriates) despite concerns about personal safety, Kanak women locate identity in *tribou*.

Moreover, there is a political dimension to Kanak women's connections with their familial places of origin that is less relevant for women in Moresby. Overall, urban women in PNG are more inclined to frame their urban challenges in relation to inequalities of class and gender, whereas Kanak women affirm their bonds with Kanak culture and are more cautious about discussing gender and class. As Rose said, when asked to comment on the differences between Noumea, Suva and Port Vila, the latter 'are in independent countries'.

As Kanaks in New Caledonia approach the 2018 referendum, their vexed relationship with the city of Noumea will be one of many threads they are likely to consider in deciding whether or not to vote for independence.

References

Casey, E 1993, *Getting back into place: toward a new understanding of the place world*, Indiana University Press.

Connell, J 2003, 'Regulation of space in the contemporary postcolonial Pacific city: Port Moresby and Suva', *Asia Pacific Viewpoint*, 44(3), 243–257.

Connell, J and J Lea 1993, *Planning the Future: Melanesian Cities in 2010*, National Centre for Development Studies, Australian National University.

Demian, M 2017, 'Sexed in the City: The Urban Form of Women-with-Rights in a Port Moresby Boarding House', forthcoming, *Signs*.

Goddard, M 2010, 'Introduction: About Moresby', *Villagers and the City: Melanesian Experiences of Port Moresby, Papua New Guinea*, Sean Kingston Press, 1-18.

Jones, P 2012, 'Pacific Urbanisation and the Rise of Informal Settlements: Trends and Implications from Port Moresby', *Urban Policy and Research* 30(2), 145-160.

Le Queux, S and S Graff 2015, 'Employment relations in New Caledonia: overview and focus on Indigenous Labour Activism', 29th Annual Conference for the Association of Industrial Relations Academics of Australia and New Zealand.

Macintyre, M 2011, 'Money changes everything: PNG women in the modern economy', *Managing modernity in the Western Pacific*, University of Queensland Press, St Lucia, 90-120.

Massey, D 1994, *Space, place and gender*, University of Minnesota Press.

McDowell, L 1999, *Gender, Identity and Place: Understanding feminist geographies*, Polity Press, Cambridge.

Norwood, H 1984, *Port Moresby: Urban Villages and Squatter Areas*, University of Papua New Guinea Press.

Oram, ND 1976, *Colonial Town to Melanesian City*, ANU Press, Canberra.

Radice, M 1999, "Feeling Comfortable: The Urban Experience of Anglo-Montrealers", PhD Thesis, National Library of Canada.

Radice, M 2015, 'Microcosmopolitanisms at the Urban Scale', *Identities: Global Studies in Culture and Power*, 22(5), 588-602.

Repic, J 2011, 'Appropriation of space and water in informal urban settlements of Port Moresby, Papua New Guinea', *Anthropological Notebooks*, 17, 73-87.

Rittel, H and M Webber 1973, 'Dilemmas in a general theory of planning', *Policy Sciences* 4, 155-169.

Rose, G 1993, *Feminism and Geography: the limits of geographical knowledge*, Polity Press, Cambridge.

Spark, C 2014, 'We only get the daylight hours: gender, fear and freedom in urban Papua New Guinea', *Security Challenges*, 10 (2), 15-32.

Spark, C 2017, 'I won't go hungry if he's not around': "working class" women's agency in intimate relationships', *Transformations of Gender in Melanesia*, ANU Press, Canberra, 115-140.

UN Women 2012, *Making Port Moresby safer for women and girls: Report on scoping study findings*, Port Moresby, UN Women.

Living on the fringes: Voices from those living in the settlements of Honiara

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In the past 40 years nothing has really changed for us. It [Honiara] is slowly developing…the government say they have a vision, but nothing happens. They strategise and they plan, but nothing happens, things don't change because the government doesn't see the real stress here [in the settlement] (Woman community leader, peri-urban area, Greater Honiara 2016).

This is home now. We find it much easier now to generate income and send our children to school in town (Woman resident, peri-urban area, Greater Honiara 2016).

There's a steady flow of rural migrants to Melanesian cities, pursuing hopes that they can secure jobs, services and modern amenities. However, the reality for some new arrivals can be less attractive as they struggle to secure a home, earn a living and access urban services. Given limited housing and its high costs, most live in informal settlements, that is communities that lack legal land title and basic services. The needs and priorities of those living in informal settlements are mostly neglected by modern planning systems because these settlements do not legally exist within official plans and further migration to the city is being discouraged.

Finances for urban development and infrastructure in Melanesian cities are very limited due to the lack of institutional capacity, inequitable revenue sharing between levels of government, and ineffective rate and fee collection. Central institutions and development partners invest mainly in development activity in planned urban zones to stimulate commercial investment, service legal land holdings and strengthen regulatory frameworks. The result is many living in informal areas sit outside of planning and policy making processes. Those working in the informal sector, such as in urban markets, rarely attract support and lack legal recognition. So, informal settlers and workers live on the fringes of the cities where they are often geographically pushed to the outskirts, unable to access land titles and basic services, and frequently economically marginalised.

This paper explores the insights from interviews, discussion groups and workshops held over 2015-16 of more than 150 men and women living in Honiara. In particular, it draws heavily on insights gathered from discussions in three informal settlements about the urban challenges, opportunities and aspirations of settlement residents. While our research reveals local concerns about familiar issues of social exclusion and inequality, it also highlights disconnects between urban residents' needs and policy directions, and between the formal and informal sectors. Some recent policy innovations and new urban institutions are starting to bridge these divides, and these are also explored.

Solomon Islands: Urban transformation and mal-adaptations

Globally, Solomon Islands is experiencing some of the fastest urban population growth rates globally at about 4.4 per cent per annum, twice the rate of national population growth. These averages, based on the census data 2009, can mask even higher growth in outer urban areas which can reach 12 per cent (SINSO 2012). Time phase maps of rapidly growing settlements, such as in West Honiara, show the significant change and, closer up, the organic, rather than orderly, nature of urban growth (Figure 1, see pg 11). Despite hardships, crowding and patchy services, most informal settlers plan to stay. Cities remain a place of hope for accessing better incomes, services and lifestyles than in rural areas.

Unfortunately, the fast pace of change is not benefiting everyone. Urban growth is largely unmanaged in Honiara, and public investment in infrastructure is low. The Honiara City Council budget only increased one per cent in the 2011-13 period, far behind urban population growth creating service shortfalls. Public investment in informal settlements rarely occurs because they are not part of urban planning areas and officials worry that investment could encourage more rural to urban migration. But neglect will not make urban problems go away and they remain the 'elephant in the room', highly visible but not actively managed (Connell 2011).

Many migrants settle on the fringes of the city in informal settlements because they are unable to afford to buy land or a house. These settlements have a variety of land tenure and access agreements. Some occupy customary land, often in the surrounding areas of Guadalcanal where access is either unwanted or by informal agreement with landowners; others settle without title on 'unused' public or private land within Honiara or by arrangements with those already legally or illegally occupying the land. High housing costs, overly complex planning frameworks, and limited space—Honiara only occupies 22 square hectares—mean informal settlements are likely to continue to expand.

The rapid growth of Honiara is leading to urban mal-adaptations, or changes that do not lead to greater stability or sustainability (Boyden 2004). For example, growing traffic congestion recently resulted in public transit providers shortening their bus routes. Commuters were forced to pay several fares to get into town, trebling costs for some, while eroding service. Those we interviewed felt this change produced a disincentive to work, or take produce to market, as income earnings were reduced. Other urban trends are also mal-adaptive and can lead to urban spatial exclusions. Rising property values, like elsewhere, squeeze lower income people out of central areas and away from the services they need. In Honiara, rising land values have also led to the use of public spaces for commercial
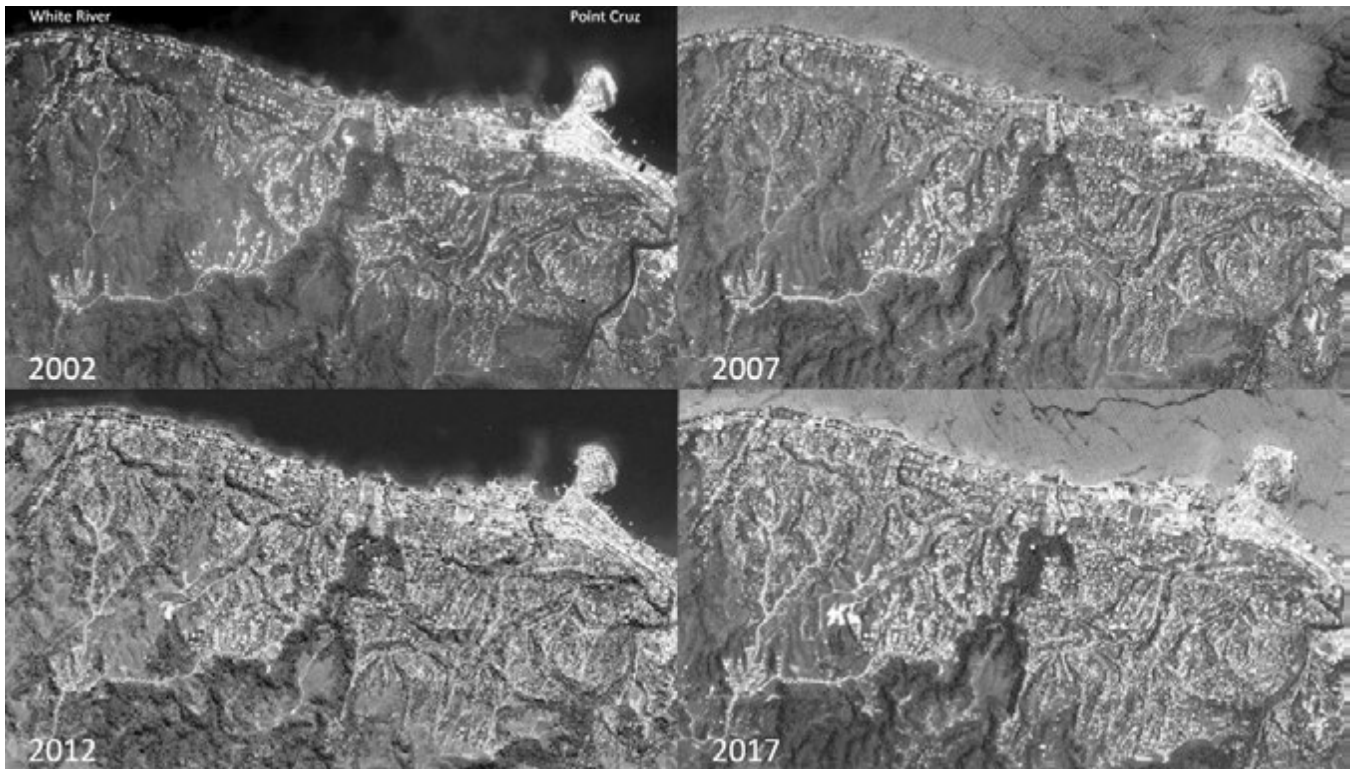
Figure 1: Rapid population growth in West Honiara. Image Source: GoogleEarth

development. In our community discussions, informal settlers were particularly concerned about the lack of investment in social infrastructure, services and community governance, and generally felt excluded from policy development processes. These issues are explored in more detail below.

Urban identity and legitimacy: Who belongs in the city?

Few of the people we talked to in the informal settlements identified strongly with the city whether they had been in Honiara for a long or short time. Linkages back to provincial villages remain strong, with many settlements organised along ethnic lines and newcomers sustained by kin-based networks. While this helps connect people it tends to be within narrow social groupings, and over time linkages back to places of origin can become less meaningful to the new urban generation. One settlement resident likened Malaitan communities in the city to 'refugees' who have left their homes and have no way back: 'we say we are Malaitan but we would no longer be welcomed in Malaita.' The growing youth population in the city can also be trapped between the contemporary and the customary within cities:

> *Younger generations are lost in a way. In their speaking they belong to the province, but they might not have ever been there. In real life, they are Honiara citizens…it is a conflict within each person* (Senior Community Liaison Officer, Honiara, 2016).

More complex cross-ethnic relations are slowly emerging from intermarriage, employment and study experiences. This blending and bridging of identities can create new

urban identities although for many we interviewed the sense that they belong in the city is still lacking. Many are disconnected from their indigenous, traditional roots but still struggle to feel connected to the city because of the social and physical exclusions already discussed. Participants in our study highlighted the lack of a sense of personal security, rights to services, and inclusion in policy and plan development as factors that worked against a feeling of belonging in the city. Many resented having no rights to services in informal settlements, even when they had negotiated land access arrangements with traditional landowners. Some felt customary arrangements provided 'good enough' security but wanted their land tenure legally recognised, not only for legitimacy but also for better access to services.

Little understanding of urban governance and decision making processes also made some feel alienated and disadvantaged. The need for better knowledge sharing and inclusive decision making processes was raised in a workshop with Guadalcanal officials and customary landowners. They wanted more support in understanding: how land and markets could be legally developed; how services could be extended to their land; and how financial mechanisms could be established to underpin development efforts.

> *We need expertise, this is the first time for us to deal with urban pressures, squatters and all. We need to get the right information to the people, to understand what is a land trustee, how it affects landowning tribes.…People need to know what are the options. They need to decide, be part of it, own it* (Senior official, Guadalcanal Province, 2016).

There are few public forums and outreach processes that demystify planning processes and stimulate dialogue on how Western and centralised planning and urban land management systems can support, and work with, more traditional and customary ones. At the Guadalcanal peri-urban stakeholders' workshop scepticism about the inclusiveness of urban land allocation and planning systems came to the fore. Concerns had their roots in the past when colonial administrations appropriated customary and provincial land for commercial and urban development without adequate community consultation and, more recently, urban land allocations are judged to favour elites (Foukona and Allen 2016). The lack of transparency and engagement means many are reluctant to engage with, and support, formal planning processes:

> *There's a reluctance to register customary owned land because there is a fear that culture won't be respected, a fear that if you register land government will steal it away. We need a mechanism to help us and protect our land. Make sure we get lease benefits and annual rental. Any system has to be home grown* (Leader/landowner in peri-urban area, 2016).

New policy adaptations are beginning to give greater legitimacy to communities and their governance structures. Support to, and further development of, ward and community committees are being piloted in the hope that a more decentralised governance system can better engage urban settlers. The Solomon Islands Ministry of Lands, Housing and Survey is also undertaking a review of options for customary land development in the urban context—importantly this review and options paper is being conducted by Solomon Islanders with deep knowledge of land law and custom. This reflects a growing acceptance that informal settlement residents and customary landowners will have to be integral to the better management of expanding urban centres in the Pacific Islands.

'Affordable housing areas': Informal settlements reconceptualised

In the Pacific, informal settlements have evolved largely as a response to inadequate and inequitable land and housing policies since the end of World War II (Goddard 2001). Images of informal settlements are often conflated with disadvantage, but this is not always the case. Although poverty and unemployment are frequently higher in the informal settlements (Union Aid Abroad-APHEDA 2009), settlements provide homes for a wide socioeconomic range of people. Residents of the settlements we visited included doctors, lawyers, aid workers, teachers, and even Honiara's former mayor.

In a city with little affordable housing or vacant land, these settlements are the main entry point to urban living. Tellingly, at the inaugural Solomon Islands National

Urban Conference in June 2016, local delegates referred to informal settlements as 'affordable housing areas'. Demand for housing far outstrips supply, driving costs up. The cost of purchasing a house in Honiara can be 50 to 70 times the national median income. Solomon Islands Home Finance Limited (SIHFL), which is responsible for providing affordable homes, acknowledges that very few can afford their houses. In the last six years, 97 per cent of SIHFL homes have been sold to the government for public servants. For the poor in Honiara, there is no state based affordable housing scheme; indeed, there are few in Melanesia. Where they exist, they are limited in coverage, subject to real or perceived allocation biases, and often dependent on development partnerships (Phillips and Keen 2016).

With the housing market out of reach for most of the population, informal settlements continue to multiply. In Honiara, there are now 36 informal settlements that accommodate approximately 40 per cent of Honiara City's population (UN-Habitat 2016). Increasingly, they are located on customary land where there is little support for traditional landowners who wish to develop their land. There are also few protections for those who rent land from customary landowners. As the returns to those who develop land in urban areas rises, incentives for personal profit can divide communities and exclude the less powerful, creating even more mal-adaptations and social tensions. For example, Monson (2015) observed that land sales in the peri-urban areas, such as Kakabona, have strained community cohesion as elites jostle for economic advantage under new institutional arrangements governing land titling.

With inadequate support from government and limited access to services and jobs, a few settlement leaders are leveraging their communities' social capital and networks to boost development prospects.

> *In [our settlement] there's been rapid growth and lots of water pollution—we are now about 300 people, 40 households. We worry about security, youth issues, drugs, and jobs. So, we establish a co-op society to employ our youth, a canteen for women to work in, and built a community hall with development partner funds and community work, so youth had a place to go, to socialise. We've made our own by-laws. We are not waiting, we are doing things ourselves.* (Honiara settlement leader, 2016).

For their inhabitants, informal settlements are their social safety net, and a practical solution to urban land scarcity and unaffordable housing. While not conforming to neat planning layouts and regulations, many of these informal settlements have a community based order founded on shared social values and networks. Mounting urban pressures left unaddressed can tear at social cohesion within these settlements, if urban planning policies and processes do not create supportive linkages between local and higher level governance frameworks, and put checks of rent seeking behaviour at all levels.

Finding a place in the city: policy and politics

While formal institutions often push for legal land tenure and well defined planning zones, the lesson from Melanesia is that many residents and landowners in informal settlements are not looking for property rights transformation, but rather recognition and central support of customary land tenure and access arrangements. In the words of the Premier of Guadalcanal province (2016):

> *We are not about opposing development. It's about how government recognises customary land and looks after the interests of landowners.*

More dialogue between officials and landowners concerning urban planning and service provision could create common understandings about roles and responsibilities, and ways to better integrate formal and informal sectors of the urban environment. Many Melanesian researchers working on urban issues caution against Western solutions reliant on creating private property rights. They highlight the value of building on existing informal institutions and consulting with customary landowners to create an urban land management system with more cultural resonance and reflective of the socio-ethnic diversity in cities (Jones 2016; Numbasa and Koczberski 2012).

Imposing urban plans and concepts without community engagement can create social tensions. A senior planner in Honiara explained how surveying pegs delineating the boundary between Honiara and Guadalcanal province had to be removed because 'the lines on the map' reflected land appropriated by government when Honiara was established and remained disputed by customary landowners. In our interviews and workshops, few participants talked of plans or boundaries. Much more attention was given to housing, livelihoods and services, thus focusing on functionality, not the form of the city. While the new Honiara Local Planning Scheme 2015 adds a semblance of structure and spatial form to the city, in practice planning frameworks and local governance arrangements play a small role in shaping urban development. Government simply lacks the reach, authority and arguably, interest (Craig and Porter 2014; Jones 2012).

In practice, physical boundaries between formal and informal parts of the city in Honiara are fuzzy and contested, creating artificial divisions and social tensions. Unlike customary land tenure based largely on concepts of flexible use rights and multiple agreements, planning boundaries appear unnecessarily rigid to local officials, and contrary to observed, or even desirable, arrangements:

> *In reality, this is one continuous city in terms of the flow of people and services…if we are to address urban issues at Henderson [a peri-urban area of Honiara located in Guadalcanal province], we have to see through these imaginary lines…we're sometimes stuck on plans. We need to change the way we view things* (Senior Guadalcanal Provincial officer, ANU-Guadalcanal Workshop, 2016).

These seemingly artificial divisions can leave many stranded. It is not only planning frameworks and access to services and land that can divide, support for economic activities across formal and informal sectors is also an area of concern in the settlements. There is under investment in the informal sector where many work, for example, market spaces are crowded, often unsafe and frequently without needed infrastructure and amenities, despite their important role in development, and in linking formal and informal economies through supply chains. To a large extend, as the city grows there is an assumption that the informal sector will simply be subsumed by the formal sector, but evidence on the ground is sparse.

Making connections in the city

Bridging institutions can create linkages between the formal and informal sector, and improve economic opportunities and living standards. Too often the dominant policy approach to urban development is to privilege the formal over the informal by investing in infrastructure beneficial to commercial activities, while neglecting vibrant economic areas. In Honiara, only two urban markets are technically legal and more effort is put into control than investment. None of the Honiara markets have had substantial investment in them for decades, and many informal vendors have been subject to harassment and efforts to shut street markets down. This is a frustration to those who recognise the huge development benefits of the informal economy.

> *New markets are the solution to a lot of problems, traffic congestion, livelihoods—but the idea needs more attention—more markets, nice markets, nice buildings. But the question is who to push this? The Council, the Land Ministry? It's most powerful if it comes from the Ministry level, but they don't seem to care* (Senior Honiara planner, 2016).

Residents of informal settlements, particularly women, often emphasised the need for more markets and better facilities to enhance their livelihood prospects and security. One leader of the Guadalcanal Province's Council of Women argued: 'Markets are not just an important need, it's a great development need. I cannot say how important it is. It is urgent.' Yet she, and the women she represented, felt excluded from the Honiara Central Markets because of increasing demand on crowded spaces and preferential treatment for locals. Her group wanted to develop their own market to service the Henderson/East Honiara area but needed support to understand, and gain access to, planning approval processes. To date the government has had a 'tin ear'. Even so, markets are a mainstay of the urban economy—ignoring them is poor urban development.

Banking services are another area of neglect holding back livelihoods and urban development. Savings and credit facilities are inaccessible for most people living in informal settlements because of their lack of collateral and predictable income. Yet, access to credit is needed to establish, or expand, economic activities. Unregulated loan schemes are available to some, but according to settlement residents, interest rates can be 20 per cent or more. Women

interviewed spoke of the need for credit to grow their market based businesses, and meet unexpected expenses. Even so, debt distress from usurious loan schemes can result in significant bullying and pressure on relatives to help shoulder the burden, causing community and family disputes. Stronger accountability measures to enhance, but not shut down, these informal microfinance services are preferred, as well as more encouragement for banks to extend their services to lower income earners.

Looking toward tomorrow

Despite the challenges of city living, many informal settlers we interviewed preferred living in Honiara to provincial areas, even if they often felt they were living on the fringes of the city with limited economic opportunities, political voice and sway over formal planning systems. Most planning processes have been technocratic and focused on formal plans and centralised controls, and have lacked entry points for meaningful community engagement.

The social fabric of the city needs more concerted action to strengthen and hold it together. This could take many forms but key will be approaches that connect residents of informal settlements with policy making processes, economic opportunities and city services. There are many possibilities for positive progress including:

- Community based governance structures linked to central institutions;

- hybrid property rights systems that recognise and support customary land development;

- markets to facilitate income generation; and

- social spaces and events to help develop urban identities and networks.

Informal settlements will persist and grow over time, the social capital and networks they embody is a strength within cities that could be much better valued. Far more channels of communication and points of engagement in urban planning and policy making could be established with informal communities so the voices from the settlements can be heard.

References

Boyden, S 2004, *The Biology of Civilisation: Understanding Human Culture as a Force of Nature*, UNSW Press, Sydney.

Connell, J 2011, 'Elephants in the Pacific? Pacific Urbanisation and its Discontents', *Asia Pacific Viewpoint* 52(2), 21-35.

Craig, D and D Porter 2014, *Post-Conflict Pacts and Inclusive Political Settlements: Institutional perspectives form Solomon Islands*, ESID Working Paper No 39, University of Manchester.

Foukona, J and M Allen 2016, 'Urban Land in Solomon Islands: Powers of Exclusion and Counter-Exclusion', in S McDonnell, M Allen and C Filer (eds), *Kastom, Property and Ideology: Land Transformations in Melanesia*, ANU Press, Canberra.

Goddard, M 2001, 'From Rolling Thunder to Reggae: Imagining Squatter Settlements in Papua New Guinea', *The Contemporary Pacific*, 13(1), 1-32.

Jones, P 2012, *Managing Urban Development in Papua New Guinea: Planning for Planning Sakes?* Working Paper No. 33, Deakin University, Geelong.

Jones, P 2016, *The Emergence of Pacific Urban Villages— Urbanization Trends in the Pacific Islands*, Pacific Studies Series, Asian Development Bank, Manila.

Keen, M and A McNeil 2016, 'After the Floods: Urban Displacement, Lessons from Solomon Islands', *State Society and Governance in Melanesia Program* In Brief 2016/13, Australian National University, Canberra.

Keen, M, J Barber, J Carpenter, D Evans and J Foukona 2017, 'Urban Development in Honiara: Harnessing Opportunities, Embracing Change', *State Society and Governance in Melanesia Program*, Australian National University, Canberra.

Monson, R 2015, 'From Taovia to Trustee: Urbanisation, Land Disputes and Social Differentiation in Kakabona', *Journal of Pacific History* 50(4), 437-449.

Numbasa, G and G Koczberski 2012, 'Migration, Informal Urban Settlements and Non-market Land Transactions: A case study of Wewak, East Sepik Province, Papua New Guinea', *Australian Geographer* 43(2), 143-161.

Phillips, T and M Keen 2016, 'Sharing the City: Urban Growth and Governance in Suva, Fiji', *State Society and Governance in Melanesia Program Discussion Paper 2016/6*, Australian National University, Canberra.

SINSO (Solomon Islands National Statistical Office) 2012, *2009 Population and Housing Census: Report on Migration and Urbanisation*, National Statistical Office, Honiara.

UN-Habitat 2016, 'Draft Honiara City-Wide Informal Settlements Analysis', UN-Habitat, Honiara.

Union Aid Abroad-APHEDA 2008, 'Stayin' Alive: Social Research on Livelihoods in Honiara', APHEDA, Sydney.

Rethinking Honiara's water supply: Voices from the settlements

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This paper investigates the impact of Honiara's rapid growth on the status, levels and problems associated with providing water supply to the city. The study focuses on the distribution system and its capacity; water demand and supply and consumption per capita. At household level, it reviews water availability, accessibility and quality. The study covered 60 households from the twelve administrative wards in Honiara City and four key informants from government agencies who were interviewed about the institutional aspects of water supply. In addition, six Honiara residents were engaged in focus groups at different times during this study.

Growth of Honiara City

Honiara[1] became the capital of the British Solomon Islands Protectorate in 1946 and since then has continued to grow both spatially and demographically. Growth was influenced by a number of 'push-pull' factors including improved transportation and communication, better working conditions for Solomon Islanders, growth of new industries offering employment, better educational and health services and the existence of intricate kinship wantok networks that provided accommodation for rural relatives (Lal and Fortune, 2000:95). Between 1970 and 1999 the number of households in Honiara increased from 2,209 to 6,921 and the population from 12,006 to 49,900 (Solomon Islands Government, 1999). Today there are an estimated 8,981 households and a population of 64,609 (Solomon Islands Government, 2009).

Mountain ridges to the south of Honiara have restricted expansion southward, and as a result most expansion occurs on the eastern and western sides of the city where there is now a high concentration of industries and population. This pattern of growth has implications not only for the land tenure system but also for the provision of basic urban services such as water supply.

Water supply network and water demand

Honiara City's water supply is developed according to a zonal system. Normally, the zones operate independently but can be interconnected. There are five main zonal water sources supplying water to Honiara city. These are: Kongulai Spring, Rove Spring, Tuvaruhu Bore well, Kombito Spring, and Panatina Bore well. Together, they provide water to about 95 percent of Honiara but increasingly demand for water in Honiara is greater than the capacity to supply it. As table 1 shows the demand for water has increased threefold with a total demand growth rate of about 124 percent between 1996 and 2016. This has serious planning and management implications for sustained water supply to Honiara where increasingly water demand is not only residential but industrial and commercial.

Table 1: Water Demand and Growth in Honiara, 1996-2016

Category	1996	2001	2006	2011	2016
Water Demand (m³)	8,896	12,444	16,753	20,946	26,192
% Growth	-	+39.8	+34.6	+25.0	+25.0

Source: Solomon Islands Water Authority, 2013

Capacity and supply of water in Honiara

With escalating demand for water in Honiara there is a significant gap between current supply and the total supply capacity. The estimated total supply capacity from all water sources was 28,142 m³/day but the current water supply from the sources listed below was 20,442 m³/day (see Table 2).

Table 2: Water supply and supply capacity by water sources

Water Source	Current Water Supply m³/day	JICA Improvement m³/day	Projected Supply Capacity (m³/day)
White River High Level	8,000	2,600	10,600
White River Gravity	3,888	-	3,888
Rove Spring	3,888	3,500	7,388
Panatina	3,197	1,600	4,797
Tuvaruhu/Mataniko	1,469	-	1,469
Total	**20, 442**	-	**28,142**

Source: Solomon Islands Water Authority, 2001 and 2013.

Alternatively, a South Pacific Applied Geoscience Commission's (SOPAC) (2001) study shows that the maximum daily water demand in Honiara was 25, 719 m³/day (Table 3 below) while the Solomon Island Water Authority (SIWA) Works Plan (Table 2 above) shows the level of supply to be 20, 442 m³/ day, leaving a supply gap of 5,277 m³/ day. In other words, the level of water demand in Honiara far outweighs supply. SOPAC's study shows that the per capita water demand for domestic customers in Honiara was 274 l/p/d while the per capita water consumption in the city was 164 l/p/d, leaving a gap of 110 l/p/d for each city resident.

Table 3: Water demand and consumption in Honiara city

Category	Data
Population in town boundary	60,365
Leakage ratio (%)	40
Per capita water consumption for domestic customer (litres per day)	164
Per capita water demand for domestic customer (litres per day)	274
Maximum daily water demand (m³/day)	25,719

Source: SOPAC, Miscellaneous Report, 2001.

Water consumption, coverage and availability

SOPAC (2001) reported 6,000 domestic connections in Honiara and a 76 per cent water supply coverage with a per capita consumption rate of 200 l/p/d while Kew Consultant Company Ltd, (2007) recorded more than 95 per cent water supply coverage. In addition, the SOPAC's study highlighted availability of water on a 23 hourly basis for Honiara.

In a later study, JICA (2007), found more than 7,000 Honiara household connections to the SIWA lines, with a daily water consumption rate of 150 l/p/d in an average household size of seven persons. However, this consumption level falls far below the WHO's prescribed limit of 250 l/p/d. The JICA (2007) study further revealed that the industrial sector has high water demands consuming between 5,000 - 6,000 kilolitres per day.

As these studies demonstrate, while the number of household connections to SIWA (now Solomon Water) lines increased over the years, the overall water consumption level declined.

Household experiences of water availability

At the micro level 60 households were surveyed to examine water availability. They comprised both households in informal (squatter) and formal (non-squatter) settlements. The survey revealed that 70 per cent of households experienced water shortage while 28 per cent did not. Two per cent did not respond to the question.

This affirms the increasing concern of Honiara residents with regard to water availability and confirms the results of earlier studies conducted by international and regional institutions including World Bank (1995), Asian Development Bank (1997) and SOPAC (2001). More recently, studies undertaken in 2007 by KEW Consultant Company, the Global Environment Facility, UNDP and UNEP have noted that Honiara's water availability is irregular.

As figure 1 shows only 25 per cent of households in Honiara had 24 hour water supply while less than two per cent had intermittent water supply available between three to six hours and another two per cent received water for 12 hours per day. Another two per cent of households stated that they received water for less than one hour.
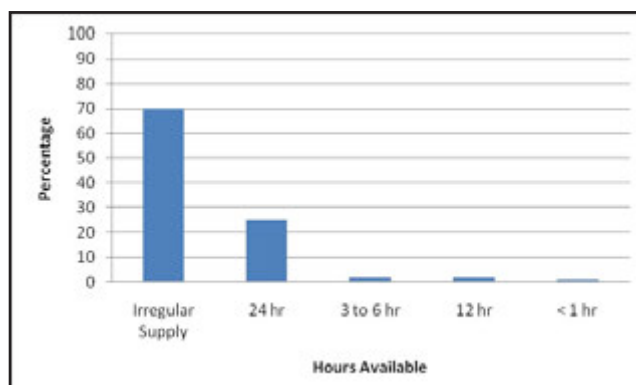

Figure 1: Water availability in Honiara

Overall, about 75 per cent of households get water supply for less than 23/24 hours, contrary to SIWA's (Solomon Water) official policy of a 24 hour water supply services to residents of Honiara.

Water quality

As noted earlier, there are five main water sources supplying water to Honiara. These sources experience problems that severely affected the quality of water in the city. For example, the Panatina Bore well has an immediate catchment area of 30 hectares on both government and customary land with residential houses built within the catchment and further residential houses expected to be developed. The establishment of residential houses within the catchment area result in land clearance and septic tanks close to the bore well. This has affected water quality as has wastewater from surrounding villages which flood the bore well during rainy seasons. This increases water turbidity and contamination. The most serious contamination problems arise with the use of pit toilets and septic tanks. An additional problem is that water in catchment areas is often used by villagers for washing and swimming. The increased intensity of human activity within the water catchment have significantly affected water quality. These problems are similar for other water sources such as the Rove Spring and the Kongulai Spring, where the catchment areas span customary land where land owners at times make accessibility to regular and reliable water supply to Honiara citizens problematic.

Poor water quality was reported by 62 per cent of households in the survey, while 33 per cent of households reported good to very good water quality. Respondents from East Kola Ridge and Tanuli Ridge in central Honiara reported the water was unsafe to drink after rain. A further investigation in the Ontong Java Settlement revealed a similar story.

The way forward

The government, through Solomon Water, must adopt a demand–side water management approach with a focus and emphasis on people and not only water technology. There is also a need to support the augmentation of water supply to bridge the gap between supply and demand. It is strongly felt that an integration of both technical and non-technical

approaches could pave the way forward for effective water governance in Honiara city.

The adoption of a decentralized and a bottom up approach with greater community involvement is important. This is particularly true for Honiara which draws 70 per cent of its water from sources located within customary land boundaries. The continuous influx of rural migrants highlights the need for water education and awareness in rural Solomon Islands as well as in urban centers. A rural-urban linkage approach to water education and awareness would be appropriate.

At the state level, the government must have political will to address urban issues particularly of water in Honiara. It must place water as a key priority as it plays a critical role not only in health but also in achieving sustainable development under the Millennium Development Goals (MDGs). Access to water is a fundamental human right and an important factor in providing a better life and higher standard of living for the people of the Solomon Islands.

Note

[1]The name 'Honiara' initially derived from 'Naho-ni-ara', the Guadalcanal word for facing the Ara, the east and the southeast trade winds, or the place of the winds.

References

ADB (Asian Development Bank) 1997, 'Country Assistance Plan (2000-2002), Solomon Islands', http://www.adb.org, accessed 5/01/08.

Japan International Cooperation Agency(JICA) 2007, 'Preliminary Study on the Project for the Improvement of Water Supply System in Honiara and Provincial Centres in Solomon Islands', Japan International Cooperation Agency, Honiara.

KEW Consultant Company Ltd. 2007, 'Solomon Islands Water Governance Programme', Final Report, Honiara.

Lal, VB and K Fortune, 2000, *The Pacific Islands: An Encyclopaedia*, University of Hawaii Press, Honolulu, Hawaii.

Quigley N, SG Beavis, I White, 2016 Rainwater harvesting augmentation of domestic water supply in Honiara, Solomon Islands, *Australasian Journal of Water Resources*, 20(10) 65-77.

Solomon Islands Government 1999, 'Report on Solomon Islands Population and Housing Census', Honiara.

Solomon Islands Government 2009, 'Report on 2009 Population and Housing Census', Retrieved from file:///C:/Users/lincy/Downloads/2009_Census_Report-on-Honiara%20(1).pdf.

Solomon Islands Water Authority, 2001, 'SIWA Capital Works Plan 1996-2006, Ministry of Mines and Energy, Unpublished, SIWA, Honiara.

Solomon Islands Water Authority 2013, *The Solomon Island Water Development Plan 2013-15*, SIWA,Honiara

Southall, A 1988, 'Small Towns in Africa Re-visited', *African Studies Review*, 31:3.

South Pacific Applied Geoscience Commission (SOPAC) 2001, 'Draft Water, Sanitation and Hygiene Strategy for SOPAC (2001-2004)', SOPAC Miscellaneous Report 444, Suva, Fiji.

World Bank 1995, *Managing Urban Environmental Sanitation Services in Selected Pacific Island Countries*, East Asia and the Pacific Region, World Bank, Washington.

The inexorable rise of private security in Papua New Guinea

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The growth of private security is a global phenomenon, with the fastest expansion in recent years taking place in the developing world. Worth around US$165 billion worldwide in 2009, the industry is set to reach an estimated US$267 billion in 2018 (WSS 2016). While there is limited data available, Pacific Island countries appear to be conforming to the larger international pattern of private security vehicles, uniformed personnel, guard dogs and company logos. The industry has become a significant source of employment and favoured form of investment in many countries. As elsewhere, this reflects both an increase in demand for private security and a growth in the supply of such services.

This paper examines the dramatic growth of private security in Papua New Guinea (PNG), the Pacific region's most populous and insecure country and the one with the largest urban population. As well as looking at the dimensions and character of the commercial sector, the paper will examine the critical issue of industry regulation and the relationship between private security and the national police force, the Royal Papua New Guinea Constabulary (RPNGC). The concluding section considers the political economy of this expanding sector and its potential implications for security governance in PNG in the years ahead.

Reasons for the growth of private security

The rise of private security in PNG reflects three broad intersecting trends: exceptionally high levels of insecurity experienced, particularly, though not exclusively, in the fast growing urban centres; declining confidence in the capabilities and integrity of the small and increasingly dysfunctional RPNGC; and increasing rates of foreign and local investment in private security in the context of PNG's prolonged natural resources boom.

Concerns with crime and violence have a long history in PNG. They acquired prominence during the decolonisation process as the old colonial administrative system was gradually dismantled. When restrictions on movement were lifted in the 1960s, young rural migrants flocked to town in seach of improved social and economic opportunities (Strathern 1972). Levels of recorded crime in the national capital, Port Moresby, increased, and the spectre of urban crime emerged as a key source of public and private anxiety (Clifford 1976). These concerns have grown exponentially in the decades since, following broader patterns of urban growth. Although PNG has the lowest urbanisation rate (at 13 per cent) among Pacific Island countries, its substantially larger scale means that it has the biggest urban population in the region, estimated at between 800,000 and one million people (ABD 2016). Well over half this number live in Port Moresby, which is by far the Pacific's largest city.

PNG's towns have acquired notoriety as violent and crime ridden places. Port Moresby and Lae were identified in a 2010 report as two of the world's most dangerous cities, with homicide rates of 33 and 66 per 100,000 persons respectively (Lakhani and Wilman 2014a). Much urban crime has been attributed to the activities of *raskol* gangs, comprised of disaffected young men from the burgeoning informal settlements found in all the main towns. The evolution of these gangs has been depicted as one of progressive organisational sophistication with the spread of criminal activities from socially disadvantaged communities to more respectable suburbs, the recruitment of better educated members, increasing use of firearms in response to reactive policing tactics, and growing connections to more powerful political and business actors in an expanding urban milieu where criminal opportunities are continuously expanding (Harris 1988; Dinnen 2001). Firearms are widely available and regularly used in criminal activity.

While the poor quality of available data makes it difficult to measure the scale of crime, surveys and anecdotal evidence suggest that violence and victimisation

rates in PNG are among the highest in the world. Levels of unreported crime are extremely high, particularly in respect of sexual offences. One recent report claimed that family violence had reached 'emergency' levels (HRW 2015), with more than two thirds of PNG women having experienced some form of gender based or domestic violence, and in some parts of the country, 80 per cent of men have admitted to committing sexual violence against their partners. Women and girls are also vulnerable in public spaces, with survey data indicating that 55 per cent of females surveyed had experienced violence in Port Moresby's markets (UNW 2012). There are significant variations in victimisation patterns between places, as well as over time. Shifting crime 'hot-spots' exist in the larger towns (NCD 2008).

Faced with escalating 'law and order' problems, the RPNGC has been severely handicapped by limited resources and increasing organisational dysfunction (Peake and Dinnen 2014). Lack of responsiveness to reported incidents, perceptions of corruption, criminality and routine brutality (HRW 2006) have undermined already low levels of public confidence. Household victimisation surveys confirm that lack of trust in the police is a major contributor to high levels of insecurity in urban areas (Guthrie 2013).[i] The integrity of the force has been further eroded by the penetration of extensive patronage networks that have affected senior appointments, how investigations have been conducted, and accentuated growing factionalisation within the police. The high turnover of police commissioners, as well as the suspension, sacking or marginalisation of officers investigating serious allegations of corruption, are indicative of an alarming trend that has profoundly damaged the organisation.

The relatively small size of the RPNGC set against rapid population growth is another major challenge. While the overall population has more than tripled since 1975 to its current estimate of 7.8 million people, the police have only increased by around 30 per cent (Dorney 2016). According to a 2010 report, PNG had approximately one police officer for every 1,406 head of population, compared to an average of 1:359 for all Pacific Island states (COA 2010). A 2012 report stated that there were around 105 officers for every 100,000 people, well below the UN recommended minimum police strength of 222 officers per 100,000 people (Project Gutenberg 2012). More recent estimates put the size of the force at between 7,000-8,000 officers. [ii] In 2013, the Governor of the National Capital District complained that there were less than 1,000 officers in Port Moresby with an estimated population of 700,000 (ABC News 2013).

Private security has emerged, in large part, as a way of filling the security gap. The corporate and business sector has been a major force behind the development of the private security sector, both as a consumer and supplier of security services. PNG's crime problems have long been viewed as a major additional cost of doing business there. For example, a 2012 business survey found that 80 per cent of respondents reported that crime had affected their business and investment decisions, and there was little

confidence in the police and judicial system (INA and ADB 2012). As well as providing extra security for employees and property, businesses pay high insurance premiums and have difficulty in attracting international staff. World Bank research shows that concerns with crime and violence among the PNG business community are more than four times the regional average in East Asia and the Pacific, and comparable with countries like El Salvador, Venezuela and the Democratic Republic of Congo (Lakhani and Wilman 2014b). The same research indicates that business investment in security personnel and infrastructure, at around 84 per cent of all companies surveyed, is significantly higher than the average for East Asia and the Pacific, Sub-Saharan Africa and Latin American regions.

Private security providers

According to PNG's Security Industries Authority (SIA), which issues licences to security companies, the number of licensed companies grew from 173 in 2006 to 462 in 2014, with a workforce of around 30,000 security guards (Isari 2016). Though these figures do not include the large number of unlicensed security companies and personnel, they nevertheless represent over three times the number of serving police officers and is more than the combined strength of PNG's three 'disciplined' services (police, military and correctional service). According to some observers, private security is now the country's third largest employer, after agriculture and the public service. Companies vary in size, services offered, areas of operation, as well as national origins. They include transnational security corporations and large locally owned firms, through to numerous smaller operators. The three largest companies are Guard Dog Security (around 3,622 guards), G4S Secure Solutions Ltd (around 3,390) and Black Swan International (around 780). Security at the controversial Australian funded refugee processing centre on Manus is provided by an Australian owned company, Wilsons Security, which has around 622 employees on the island and sub-contracts with a local landowner company that employs a further 280 guards.

Security companies are concentrated in PNG's urban centres, although also operate in rural areas where major resource developments are located, including Southern Highlands, Western Highlands, Hela and Enga. Static asset protection is provided to extractive projects, agricultural plantations, government offices, shopping centres, airports, hospitals, schools, banks, embassies and private residences. Other services include close personal protection, escorting mobile assets, security training, security assessments, emergency evacuations, rapid response capabilities, as well as the supply, installation and monitoring of electronic surveillance systems.

The SIA has conservatively estimated the value of the industry in PNG as between PNGK833 million and PNGK1 billion[1]. Although not registered as security companies, the large mining corporations operating in remote parts of the country are another significant employer of security personnel. For example, the Porgera gold mine in Enga has an asset protection department of around 300 employees to provide security within the special mining lease.

Regulation

PNG is one of only two Pacific Island countries (the other being Tonga) that have legislation covering the regulation of the private security industry. The Security (Protection) Industry Act 2004 established the SIA and vests it with a number of functions, including the issuing and revocation of operating licences. The SIA is chaired by the RPNGC Commissioner and includes representatives from the security, insurance, mining, agriculture and manufacturing industries, as well as representatives from the trade unions and churches. Its effectiveness is hampered by limited resources (around 12 staff all based in Port Moresby) and rapid industry growth. There are still no clear guidelines for the issuing and cancelling of licenses and other challenges include the large number of unlicensed operators, discipline problems, underpayment of security guards by some companies and the provision of unapproved training courses. With strong industry input, the SIA has drafted 88 recommendations to clarify ambiguities in the 2004 Act and improve its effectiveness. These are currently awaiting approval by the National Parliament.

At a regional level, the Pacific Islands Forum Secretariat has recently resumed discussions around the growth and weak regulations surrounding private security in the Pacific islands, raising the possibility of a regional regulatory framework (ABC News 2016).

Relationship between private and public security providers

A close and increasingly interdependent relationship exists between the private and public security sectors. Both sectors share the same challenging operating environment and, in the case of the larger companies, undertake many of the same activities. The RPNGC Commissioner chairs the SIA, and many senior industry employees have previous police or military experience in PNG or overseas. Bigger operators, such as Guard Dog Security, regularly assist their under resourced RPNGC colleagues by, for example, providing fuel and tyres for vehicles. Superior resources available to the high end of the private market include sophisticated communications, surveillance and tracking systems that are unavailable to the RPNGC. Informal networks have also led to intelligence sharing between the two groups.

Collaboration between the police and business community has a long history in PNG. This includes special policing services provided to logging and mining projects operating in remote rural locations. Such arrangements are often covered by formal agreements or MoUs between the parties and might include the payment of allowances, transport costs, and provision of meals and accommodation. Some private security employees also serve as part time reserve constables, exercising the same powers as regular officers. There have also been frequent allegations of serving officers moonlighting as security officers for private clients, often while wearing uniforms and using police equipment. Such unofficial arrangements have been condemned by senior police officials.

Although extensive interaction between police and private security occurs in practice, concerns are regularly raised about the potentially negative impacts of the burgeoning private sector on the performance and standing of the police. These include sensitivities about private providers encroaching on areas that police regard as their exclusive preserve, concerns that the growing prominence of private providers diverts attention away from the need to adequately resource the police, as well as perceptions that public-private security collaborations might entail privileging powerful business interests over police responsibilities to ordinary citizens.

Some of these issues were highlighted in PNG's 2013 National Security Policy (NSP), which warned of foreign-owned companies engaging 'in areas designed for PNG state agencies' . According to the NSP, the involvement of these companies 'undermines the state's ability and authority to deliver public safety and security' and 'is compounded by the growing negative public sentiments against their presence which is viewed as undermining and denying local participation in the industry'.

Political economy

While the growth in private security parallels the declining capabilities of the police, it is also connected to broader changes in PNG's political economy. Economic growth has generated rising demands for security services among corporate clients, domestic and international organisations, as well as among wealthy individuals living in secure urban enclaves. As well as providing significant numbers of low paid jobs to Papua New Guineans, the demand for private security presents an attractive opportunity for both foreign and local investors.

It is widely believed that there is significant domestic investment in private security companies, ranging from landowner groups that are recipients of resource rents to wealthy members of PNG's political and business elite who have established or bought into some of the larger companies. In this respect, the 'proliferation' of private security companies highlighted in the NSP is not just a result of foreign companies entering the market but also the growth of domestic investment and entrepreneurship. The NSP nevertheless identifies a likely growing trend as influential domestic interests seek to dominate this lucrative and dynamic sector by restricting the role of international players. The recent activism of the SIA, as indicated by its proposed reforms to strengthen the regulatory provisions in the 2004 Act, also suggest attempts by the larger companies to consolidate their dominance by driving out smaller competitors.

In relation to political elites, it would be worth examining whether any of the off-budget constituency development funds available to MPs are being spent on private security provision at constituency levels. Broader concerns about the potential for conflict of interests and corruption among the political actors controlling such funds also apply. Growing levels of elite investment in private security also

raises the issue of the disincentive for political decision makers to invest in supporting and strengthening the struggling public security agencies, notably the police. While investing in building effective law enforcement capabilities might be viewed cynically as not in the interests of predatory members of the political elite, the rising investment in, and reliance upon, private security providers might be an additional factor in explaining government neglect.

For a major donor like Australia that has invested millions of dollars into capacity building engagements with the PNG police over many years, the massive expansion of private security and its impact on public policing has attracted surprisingly little interest. While there are many potential risks involved, there are also opportunities presented by the growth of private security including serious consideration of how more deliberate and transparent engagement between the two sectors might contribute to improving the quality and reach of security provision for all Papua New Guineans, including its most vulnerable groups.

PNG's national security landscape is multi-layered and dynamic. It comprises diverse, though often overlapping, sets of providers – state, private, as well as many community-based actors – existing in different configurations in different parts of the country. Among the many gaps in our knowledge about security governance in PNG are the politics and power relations that will shape the future of both security and insecurity in this Melanesian nation and its rapidly growing cities.

Notes

i The O'Neill government has committed to increasing the size of the RPNGC to more than 13,000 by 2020 and 24,000 by 2030, though most commentators consider such aspirations as highly unrealistic (Conery and Claxton 2014). Recruitment was suspended in 2017 ostensibly to review the recruitmernt system after alleged allegations of and bias in police recruitment.

ii Unclear whether this figure includes both sworn and non-sworn personnel. (Interview with senior RPNGC officer, Port Moresby, 20 March 2017)

[1]$AU1.85 to $AU2.2 million

References

ABC News 2013, 'PNG police concerned by private security plan', ABC News, 5 January 2013. http://www.abc.net.au/news/2013-01-04/an-port-moresby-security-plan-am/4452518

ABC News 2016, 'Calls to regulate the growing industry of private security in the Pacific?'. http://www.abc.net.au/news/2016-05-24/calls-to-regulate-the-growing-industry-of-private/7441832

ADB (Asian Development Bank) 2016, *The Emergence of Pacific Urban Villages – Urbanization Trends in the Pacific Island*s, ADB, Manila.

Clifford, W 1976, 'Urban Crime in Papua New Guinea' in D Biles (ed), *Crime in Papua New Guinea*, Australian Institute of Criminology, Canberra.

Commonwealth of Australia 2010, *Security challenges facing Papua New Guinea and the island states of the southwest Pacific*, Australian Senate Foreign Affairs, Defence and Trade Reference Committee, Vol.II, February 2010, Canberra.

Connery, D and K Claxton 2014, *Shared interests, enduring cooperation. The future of Australia-PNG police engagement*, Australian Strategic Policy Institute, Special Report, October 2014, Canberra.

Dinnen, S 2001, *Law and Order in a Weak State: Crime and Politics in Papua New Guinea*. University of Hawai'I Press, Honolulu.

Dorney, S 2016, *The Embarassed Colonialist*, Lowy Institute and Penguin Books, Sydney.

Guthrie, G 2013, 'Social factors affecting violent crime victimisation in urban households', *Contemporary PNG Studies: DWU Research Journal*, 18, May 2013.

Harris, B 1988, *The Rise of Rascalism: Action and Reaction in the Evolution of Rascal Gangs*, Institute of Applied Social and Economic Research, Discussion Paper 54, Port Moresby.

HRW (Human Rights Watch) 2006, *Still Making Their Own Rules: Ongoing Impunity for Police Beatings, Rape and Torture in Papua New Guinea*, HRW, New York.

HRW (Human Rights Watch) 2015, *Bashed Up: Family Violence in PNG*, HRW, November 2015, New York.

INA (Institute of National Affairs) and ADB (Asia Development Bank) 2012, *The Challenges of Doing Business in Papua New Guinea. An Analytical Summary of the 2012 Buiness Environment Survey by the Institute of National Affairs*. https://www.adb.org/sites/default/files/publication/31209/challenges-doing-business-papua-new-guinea.pdf

Isari, 2016, 'Information paper on the security industry in PNG', Security Industries Authority, 23 May 2016, Port Moresby.

Jones, P and M Kep 2012, 'Understanding Urbanisation in the PNG Context', paper presented to the Symposium on 'PNG Securing a Prosperous Future', Alfred Deakin Research Institute, Deakin University, Geelong, 13 April 2012.

Lakhani, S and A Wilman 2014a, *Trends in Crime and Violence in Papua New Guinea*, World Bank, Washington DC.

Lakhani, S and A Willman 2014b, *Gates, Hired Guns and Mistrust: Business Unusual*, World Bank, Washington DC.

Ncd (National Capital District) 2008, *Urban Community Crime Victimisation Survey*, Law and Justice Secetariat, Monitoring and Evaluation Unit, Port Moresby.

Government of Papua New Guinea (GoPNG) 2013, *National Security Policy*, Port Moresby.

Peake, G and S Dinnen 2014, 'Police Development in Papua New Guinea: The Need for Innovation', Security Challenges, 10(2), 2014: 33-51.

Project Gutenberg 2012, *List of Countries by Numbers of Police Officers*. http://www.gutenberg.us/articles/list_of_countries_by_number_of_police_officers

Strathern, M 1972, *No Money on Our Skins: Hagen Migrants in Port Moresby*, New Guinea Research Bulletin 47, Port Moresby.

UNW (UN Women) 2012, 'Making Port Moresby Safe for Women and Girls: Report on Scoping Study Findings', PNG Country Office, Port Moresby.

WSS (World Security Services) 2016, 'Industry Study with Forecasts for 2016 and 2012'. http://www.freedoniagroup.com/brochure/29xx/2978smwe.pdf

Responding to gender based violence in an urban setting:
The early story of *Femili PNG*

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Gender based violence is a major problem in many countries and certainly in Papua New Guinea (PNG), where it is sometimes referred to as an epidemic. In PNG, there is increasing recognition of the need to address gender based violence, or family and sexual violence (FSV) as it is often referred to, by way of growing awareness and prevention programs as well as support to victims or survivors. This paper considers one part of this growing national response - the creation and early years of the Lae based NGO, *Femili PNG*.

As PNG urbanises, it needs to develop its own response to gender based violence. While it is too early to judge the full success of early initiatives like *Femili PNG*, its creation should be welcomed as a positive aspect of Melanesian urbanisation.

National dynamic and local context

The establishment of *Femili PNG* in 2013 can be understood as a response to both a national dynamic and to a unique set of local circumstances. At the national level, there was a growing awareness among activists in PNG that there needed to be more emphasis on case management, that is, on working with survivors to help them get the outcomes they wanted whether it be emergency accommodation, police and/or judicial action, or counselling. While there had been progress in creating or strengthening services for survivors, more needed to be done to help survivors access these services. This sentiment was articulated by Ume Wainetti, the head of the PNG Family and Sexual Violence Action Committee in a lecture she gave in 2013 at the Australian National University when she said:

> *We have family support centres and we are getting support to roll them out throughout the country and also for the safe houses. But what is really lacking is our skills to manage cases, so that good and proper assistance is given to survivors* (Wainetti 2013).

This thinking at the national level was reflected in the experience of a *Médecins Sans Frontières* (MSF) project that ran in Lae from 2007 to 2013. Through this project, MSF supported and managed the Family Support Centre (FSC) of the Angau Hospital, Lae's main hospital. The FSC provided, and continues to provide, medical and psycho-social support to survivors of gender based violence.

The MSF project had made clear the magnitude of the problem: it received about 3,000 clients a year (Lokuge *et al*. 2016). While this project was generally viewed as a success, an evaluation of the intervention by ANU epidemiologist Dr Kamalini Lokuge in October 2012 suggested that more support was needed. Dr Lokuge's

evaluation 'found that while the FSC was effective in providing medical and psycho-social care to survivors, its long term impact was limited by the essential need for, but very limited access survivors had to, other core FSV services' (PNG FSVCMC 2013:7). Two findings of the evaluation buttressed the need for a case management system:

> 'First, the majority of adults presenting to the FSC throughout the period from 2008-2012 were women affected by intimate partner violence, and secondly, almost half of survivors presenting following sexual violence perpetrated by someone other than an intimate partner during this same period were children. These are groups for which comprehensive FSV services coordinated through case management are essential' (PNG FSVCMC 2013:7).

The Lae experience reinforced the growing consensus of the importance of case management in the PNG context. Issues of timing and resources also suggested that Lae would be a good place to trial a concerted case management response. MSF had decided to close its Lae FSC project in mid-2013. While the FSC itself was to continue within the Angau Hospital, albeit on a smaller scale, a number of the staff formerly on the MSF payroll were not going to be retained. They included the MSF Lae Project Coordinator, an Australian expatriate, and a number of counsellors who while working at the FSC, had seen the need for a more holistic case management approach and having done whatever they could to help clients access other services were keen to do more. Together with a small number of administrative and support staff, the team had a unique combination of experience and commitment to provide the nucleus for a new project focused on case management in Lae.

While it is easy in hindsight to understand the rise of *Femili PNG* as a case management organisation, at the time the path forward was far from obvious. While it was clear that something more was needed beyond medical care and that good use could be made of the departing MSF staff, it took some time before the focus on case management emerged.

As one real problem for the MSF staff had been the lack of functioning safe house capacity in Lae, one early idea was to establish a new safe house. However, given that Lae already had two safe houses for adults, and a third for children, a better solution would be to work with these existing safe houses and help them provide more reliable accommodation for women and children in need. Lae had the capacity to provide several services that survivors could benefit from, including services within the police department, the courts, and the welfare office. The challenge was to work with the existing services to leverage greater benefits for the thousands in need.

From case management to Femili PNG

Once it was decided that this new resource would focus on case management in Lae, the next question for the project's proponents was the nature of implementation. Three principles shaped the response.

The first was that the response should be Papua New Guinean. The project's supporters believed that external resources and support would be critical, but that they should be delivered in partnership with local resources and in a supportive role. Local ownership was critical for sustainability and for long term success. In this regard, the approach would differentiate itself from the MSF project, which was not only funded, but also implemented, by an international organisation.

A second driving principle was that the implementing body should be an NGO. This desire to set up an organisation outside of government should not be mistaken for a dismissal of the key role played by government in this area. It was recognised from the start that most of the key service providers were in government, but government organisations in PNG are often afflicted by resource and governance problems. If the case management agency was positioned within government, it would run the risk of facing similar problems. Some supporters also felt that persuading the government to establish a well resourced case management program would take years if not decades, even with the prospect of external funding available.

A third principle was that due to the pervasiveness of gender based violence in PNG, the case management program should be a permanent institution. These three principles led to the creation of a PNG registered NGO that was initially registered in early 2013 as the PNG Family and Sexual Violence Case Management Centre. In 2014 its name was changed to the simpler *Femili PNG*.

Securing the staff for the organisation was an important priority. Staff included Stephen Howes and Kamalini Lokuge from the Australian National University, Howes in the position of Chair and Lokuge as Director; and Daisy Plana, the former MSF Project Coordinator in Lae, as CEO.

Other early steps were to create a Lae Advisory Committee to build local support and a Technical Advisory Group to provide expertise. Vague concepts and aspirations had to be translated into a design document and budget which was submitted to the Australian Department of Foreign Affairs and Trade (DFAT) in mid-2013, and then again based on comments received in early 2014. Part of the feedback from DFAT was that it could not provide direct funding to a new NGO without a financial track record; *Femili PNG* would need to partner with an international NGO with an established reputation. Oxfam, which managed an Eliminating Violence Against Women program in PNG, agreed to join forces with the organisation and provide financial and reporting oversight.

The Australian Government announced in 2012 a ten year, $320 million Pacific Women Shaping Pacific Development initiative. One of the four objectives of this program was to reduce violence against women, including providing better services to survivors. This large, multi-country program provided a natural source of funding for the proposed Lae case management centre. It was also fortuitous that during this time, the Australian Government developed an increased interest in Lae. As part of the offshore migrant processing and resettlement deal that Australia and PNG entered into in 2013, it was agreed that Australia would reconstruct the Angau Hospital.

In February 2014, on a trip to Lae, Foreign Minister Julie Bishop announced $3 million in funding for the *Femili PNG* Case Management Centre in Lae.

Three years of operations

Femili PNG opened its doors in June 2014 with a staff of eight – all but one were PNG nationals, and all but one ex-MSF. Initially, it was envisaged that *Femili PNG* would receive clients as a result of both direct and indirect referrals. However, finding accommodation that was secure enough proved impossible. The organisation had to settle for an insecure office in which it was not possible to see clients, so all clients were seen in the offices of referring partners. While this model limited client numbers, it also made it more likely that only the highest risk clients would be seen, namely those that other partners thought they could not manage on their own. The initial target was to see 25 new clients per month. The target was increased to 33 per month in 2015 and has generally been met or exceeded.

One strength of *Femili PNG* is its monitoring and evaluation. Often, monitoring starts and stops with client numbers, and getting clients in the door is a necessary step on the road to obtaining outcomes. Judging success in the provision of complex services such as case management is not easy. Though the services required vary from client to client, data compiled from intake forms ensures accurate information on the number and characteristics of clients. Follow up data on clients every six months allows for tracking of outcomes. The main assistance provided to clients is emergency accommodation, protection orders, and other legal policing support. In a few extreme cases, assistance is provided to clients to help them relocate. A summary of the results from the first two years of operation can be found in a PowerPoint presentation available at the *Femili PNG* website (Lokuge 2017).

While the services we deliver for our clients are of paramount importance, increased attention has been given over time to raising awareness, both of *Femili PNG's* services and of the problem of gender based violence more generally. Senior PNG staff have spoken at various public fora and in the national media on this. In April 2017, *Femili PNG* hosted a very successful speaking tour of the 2015 Australian of the Year and gender based violence campaigner, Rosie Batty.

Femili PNG's initial success was acknowledged in April 2017 with notification from DFAT that it would extend the program's funding at roughly current levels for a further five years. At the time of this writing, *Femili PNG* has grown to an organisation with 20 staff including one in

Canberra, and a Development Manager with particular responsibility for fund raising, policy development and reporting. Over the last three years, the management structure has been further developed and national staff play increasingly important roles. Increased focus on quality client care has been provided by hiring a volunteer, international case management expert.

An extensive suite of policies has been developed that cover financial management, human resources, case management, security, fraud, and child protection. A number of strong partnerships have been forged at the local, national, and international level (the latter with similar organisations in Australia and the Philippines).

Particular attention has been paid to both client and operational security. In addition to its renown as a trouble spot for gender based violence, Lae has the highest murder rate in the Asia Pacific region and one of the highest in the world, according to the World Bank (Lakhani and Willman 2014). Operationally, this leads to a double security burden of keeping the client safe from the perpetrator and the added responsibility of keeping staff safe when at work and when moving around town. Elaborate protocols have been developed in response and so far have been effective.

Lessons learnt and challenges

The success of *Femili PNG* vindicates the nationally focused approach taken so far. Overall, the experience confirms what is now fairly orthodox in international development; that aid and external partnerships can work very well when they come in behind local players and national champions.

The experience also reinforces the point that successful development, particularly institution building, takes time. More specific to the context of gender based violence in PNG, *Femili PNG's* success also suggests that case management is useful in the PNG context and that partnerships can achieve change. It is difficult to quantify the value of case management or even to prove a positive value, but the comments of others provide some insight. Zuabe Tinning, the chair of the Morobe Family and Sexual Violence Action Committee, commented as follows in July 2016:

> All organisations were working in isolation until Femili PNG came into the picture two years ago. Their staff physically walked from office to office to connect all of us to address family and sexual violence issues in Lae. Femili PNG connected all of us together.

Australian Federal Police Sergeant Mandy Arnold has been based in Lae for the last couple of years. She has been quoted in an Australian Associated Press report as saying that *Femili PNG* is 'the glue between the police force, courts, health system and women's shelters.'

Whatever success the organisation has achieved to date, it is far too early to declare victory. *Femili PNG* faces significant challenges going forward in the areas of national expansion, financial sustainability and operational resilience. Concerning national expansion, *Femili PNG* was created in Lae, but from the start, had national ambitions. Already, initial steps have been taken to expand through training and developing national networks. The organisation plans to support similar, smaller efforts in other urban and perhaps rural centres. Already, an increasing range of responsibilities is being taken on by national staff, and the CEO is increasingly focused on the national agenda.

An advantage for long term sustainability is that the organisation's core expenses are modest, encompassing salaries for our national staff, rent, and operational costs to cover petrol and phone bills, as well as the daily costs of our safe house clients. While the costs of an organisation such as *Femili PNG* should be affordable, it nevertheless has to be funded. Australian aid has been generous, however, indefinite reliance on aid cannot be assumed. Aid programs struggle to fund recurrent costs.

Therefore, a fundamental challenge for the organisation is to diversify its funding base. There are many potential sources including the PNG government; PNG private sector and individuals; and the Australian private sector and individuals. None of them are easy to reach, but some progress has been made and a recent estimate indicates that 25 per cent of *Femili PNG* costs are now covered by sources other than Australian aid. One particularly encouraging dynamic is growing private sector support, as exemplified by recent signings of memoranda of understanding with Trukai (PNG's main rice supplier) and the PNG Business Coalition for Women.

The third and final challenge facing *Femili PNG* is operational resilience. A common refrain for staff is that the organisation can achieve nothing on its own, and that only with the cooperation and hard work of our operational partners is success possible. While this is certainly an important maxim, it also reveals a key vulnerability: in a volatile public sector environment (for example, PNG is currently experiencing a period of acute fiscal stress) success cannot be guaranteed, and sustainability of any success even less so.

Conclusion

PNG is still predominantly a rural country, but it is urbanising. The path breaking PNG domestic violence incidence studies carried out by the PNG Law Reform Commission in the 1980s found that 'two-thirds of rural wives had been hit by their husbands' and that '56 per cent of wives of low income earners and 62 per cent of elite wives had been physically assaulted by their husband' (PNG Law Reform Commission 1992:Table 1). Likewise, the Fiji Women's Crisis Centre (FWCC) study of domestic violence in Fiji found that 'prevalence is considerably higher in rural areas' (FWCC 2013). Specifically, it found that the 'lifetime prevalence of moderate and severe physical partner violence among ever-partnered women was 66 per cent in rural areas and 55 per cent in urban areas' (FWCC 2013: Figure 4).

The reason that PNG should focus on providing services to survivors in larger urban settings such as Lae is not that violence is worse in such settings, but rather that it is more feasible to provide such services in urban settings. PNG is no different from other countries in that there is more likely to be a police service, a court, a hospital, a child welfare office, and a safe house in a large city than in a smaller city or town, and certainly than in a rural area.

Femili PNG is not the only organisation in PNG delivering case management services, but it is the first to do so in one of PNG's two biggest cities. While it is too early to reach a definitive judgement regarding the success of such a young initiative, its promising start should be welcomed as a positive aspect of Melanesian urbanisation.

Note

[i] Professor Stephen Howes is Director of the Development Policy Centre, Crawford School of Public policy, ANU and chair of Femili PNG; Denga Illave is Operations Manager and Daisy Plana, CEO.

References

Fiji Women's Crisis Centre (FWCC) 2013, '*Somebody's Life, Everybody's Business! National research on women's health and life experiences in Fiji (2010/2011): a survey exploring the prevalence, incidence and attitudes to intimate partner violence in Fiji'* Fiji Women's Crisis Centre.

Lakhani, S and A Willman, 2014, 'Trends in crime and violence in PNG', *The World Bank Research and Dialogue Series: The Socio-economic Costs of Crime and Violence in Papua New Guinea*, Paper No. 1.

Lokuge, K et al. 2016, 'Health services for gender-based violence: MSF experience caring for survivors in urban PNG', PLoS ONE 1, 11(6), e0156813. doi:10.1371/journal.pone.0156813.

Lokuge, K 2016, 'Client characteristics and service provision in the initial two years of program', powerpoint presentation to Pacific Women M&E Workshop, May 2017, *www.femilipng.or*g.

PNG Family and Sexual Violence Case Management Centre (PNG FSVCMC, now called *Femili PNG*) 2013, 'PNG Family and Sexual Violence Case Management Centre (CMC) Design Document', December 2013, Lae.

PNG Law Reform Commission, 1992, *Final Report on Domestic Violence*, Report No.14 of 1992, Papua New Guinea Law Reform Commission, http://www.paclii.org/pg/lawreform/PGLawRComm/1992/2.html.

Wainetti, U 2013, 'Combatting family and sexual violence in PNG: what has been achieved and what is needed', Lecture at the Australian National University, 22 May, 2013.

Social protection and social safety nets in urban PNG

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With an emphasis on the poorest and most vulnerable members of society, development agencies conceptualise social protection as interventions that support social security through enabling access to sustainable and resilient livelihoods and, providing coping measures to deal with hardship. This includes identifying and mitigating the risks people face in their livelihoods individually and collectively (Commonwealth of Australia 2017). Globally, the applicability of formal social protection mechanisms driven by development actors has drawn debate as to the fiscal viability and applicability within the political economy of developing countries (Nino-Zarazua et al 2011; Slater 2011).

In the Pacific, social protection, safety nets and urbanization have attracted increasing attention in recent years. This is reflected in the policies of the Australian Government as the major donor in the region (Commonwealth of Australia 2017). This paper draws on this recent work to highlight some key considerations for social protection in urban Papua New Guinea. Following Jolly et al (2015) this paper argues for the need to move beyond income, labour markets, transfers and social insurance towards acknowledging social protection as a holistic approach that also encompasses vulnerabilities and risk faced by those who are poor. It should also address social injustices arising from prevailing inequalities in society and the law (Waring et al 2013).

These arguments resonate with the urban PNG context. Whilst economic growth is a key driver in urban livelihoods and social protection, urban residents face dynamic and rapid changes that shape their ability to secure land and housing, water and sanitation, and services such health and education. Understanding and addressing social protection in PNG requires starting with an understanding that for most urban Papua New Guineans the economy and social life are not separate spheres (Polanyi 2001; Sharp 2016). Policy makers need to strike a balance between a development agenda that promotes formal social protection interventions and that supports local social practices.

Urban PNG

Urbanisation processes began at the time of colonisation and at present around 13 per cent of Papua New Guineans now live in urban settings with around 50 per cent of the urban population living in the two largest centres of Port Moresby and Lae. Urban areas comprise considerable diversity in culture, ecology, geography and economic activities (Bourke and Harwood 2009). Despite being the capital, Port Moresby is cut off from the rest of the country by road. In contrast, Lae is linked to the Highlands region and Madang by the Highlands Highway, and is a major industrial centre. Population mobility and fluidity between urban and rural areas continue to influence

circular migration so that many people retain links to their homes (Litau 2009). Even so, for an increasing number of people, urban residence is permanent with many unable or unwilling to return home. This diversity and the rapid change mean that each urban centre needs to be considered in its particular ecological, economic, political and social context.

Historically, Pacific Island countries have emphasised customary principles and self reliance as reflected in government policies. Traditional social structures, land access and local customary practices are interconnected (Filer 2007). Gift exchange is an important part of ensuring continued social group identity and associated land access and use rights (Bainton 2010; Filer 2007). Papua New Guineans' lives depend on closely knit social and kinship networks where mutual support is morally valued. These basic principles shape urban Papua New Guineans' sociality, and along with the historical and place based contexts, mean that urban citizens draw on diverse and multiple sources of political, economic and cultural value systems to survive, many of which are highly gendered (Jolly et al 2015). Sustaining life from formal waged employment, income earned in the informal economy, and traditional forms of ceremonial and mutually supportive exchange are not mutually exclusive, but are interrelated parts of everyday life (Sharp et al 2015).

However, rapid change and increasing inequalities lead to particular vulnerabilities in urban settings. The tension between global market processes and informal/moral economic processes which form the basis for traditional social safety nets, is evident in urban areas. Dependency on money and waged employment and commodified land markets, means some of the traditional forms of social protection erode. New social patterns also challenge traditional forms of kinship relationships. Income and other forms of structural inequality have contributed to visible class distinctions in PNG society (Gewertz and Errington 1999). The following sections explore key basic needs of land and housing, water and sanitation, and services like health and education, and security in the urban context.

Land and housing shape the urban political economy

Urban land and housing involve multi-tiered discourse among customary landowners, the state, property developers, state leaseholders and migrants who wish to settle on land (Rooney 2017). Historical colonial migration and housing policies that regulated the movement and settlement of indigenous migrant workers have left a visible legacy that divides urban spaces between formal housing and informal settlements (Goddard 2010; Oram 1976). As a result, formal housing areas are usually occupied by expatriate and elite indigenous government officials and private sector employees. The informal or low cost housing areas are usually occupied by lower income families. This

history also influences housing and land policy in urban areas. On the one hand, authorities have tolerated urban informal settlements.

Shared family housing strategies are a common feature of urban life. Most people cannot afford the rent or mortgage rates for the formal housing sector and rely on being accommodated by relatives or moving into informal settlements (Kaitilla 1999). In urban areas, the poorest and most vulnerable are dependent on others for their housing needs – either living with relatives in formal housing or in settlements. As a result land and housing are transacted in diverse ways (Chand and Yala 2012).

Therefore, a simple distinction between formal housing and informal settlements as markers of those who are poor or rich obscures the complexity of the dynamics of land and housing in PNG. There are both relatively rich and poor people residing in both formal and informal housing arrangements. Whether people choose to live in formal or informal housing arrangements, they face social, economic and moral choices about their living arrangements which impact on crowding or household finances. Choosing to live in informal settlements is cost effective and involves collective negotiations and social relationships (Rooney 2017). Threats of eviction from property developers and the state however, mean that residents of settlements need the social connections and resilience to negotiate their claims and possession of the land using all political avenues—the court systems as well as engagements with customary landowners (Lasslett 2012; Rooney 2017). Moreover, as land in urban areas becomes more valuable, wealthier residents of cities are seeking land in informal settlements and also making use of their social connections to access it. In the process, poorer people living in settlements become displaced and have to move to other locations.

This process is also gendered and women in particular face social and cultural pressures to be hospitable and generous, and make their homes available to family. Faced with overcrowding and its associated problems, women are often the family members who initiate moves.

In terms of vulnerability in housing, what matters is a person's or family's ability to secure housing, rather than their residential location within a formal or informal settlement area. A person's ability to secure formal tenancy lease or housing mortgage reflects their income but they might be housing several families. Some families live with relatives in formal areas despite not having the ability to rent or mortgage. On the other hand, a person's ability to secure housing and land in the settlement reflects their social resilience. Other families with more income prefer to live in settlements to be more cost effective and be able to afford other important things like education. Newcomers to urban settlements, especially when they are moving from the homes of relatives in formal areas can face vulnerability in shelter as they seek to establish themselves in a settlement.

The transitionary process into the settlement usually involves residing with kin in the settlement or erecting a temporary shelter made of canvas whilst waiting to secure more tenured land and materials to build. Access to a piece of land involves nurturing and securing approval from local residents and leaders in processes that require the ability to interact with local mediators. Vulnerability in securing shelter in urban spaces is multifarious as are the powers of the actors involved. Vulnerability is most acute when poorer people are in transient situations. In recent years there has been a greater incidence of evictions in the name of development. Social safety in terms of shelter requires us to focus on those who are dependent on others for housing, who carry the burden of housing others, who are in a transient situation resulting from loss of housing such as loss of employer provided housing, eviction from a hosts home, or eviction as a community of settlers or displacement by wealthier people or by developments in the city.

Water and sanitation, and services

Access to water is an important example of how the political economy of urban service delivery shapes social protection. The land dynamics described above means that those who opt to live in informal settlement arrangements often reside on land that is customary or state land. Nationally, there are improvements in the provision of water to vulnerable urban communities, however, the success of these rely on local governance and the ability of local leaders to engage with water and city authorities to ensure a regular water supply to their community.

In urban settlements in particular local governance mechanisms for securing water services are important and collective action is required. These local processes can also lead to tensions within communities (World Bank 2014). Residents of informal settlements along with urban authorities and elected politicians rely on water governance systems that draw upon principles of 'community service obligations'. Water services affect the community collectively and individually. For example, when the collective bill is not paid water is cut and the entire community is affected. While financial mechanisms to support and facilitate the supply of water are key, it is also important to ensure that local governance mechanisms include processes to negotiate between urban municipal entities supplying water and residents paying bills. This can involve multiple negotiations and actors (Rooney 2016a).

The legally defined divisions between what constitutes formal residential spaces and informal or illegal urban settlements is a key factor shaping the delivery of services like water, education and health services in urban PNG. Urban communities without legal tenure over land are usually disqualified from having formal government services provided until the land has been secured. Lack of water and sanitation facilities arising out of the urban water supply arrangements also disqualify urban communities from accessing government funds. Churches and NGOs are particularly important in engaging in this context and good at working with collective bodies at local levels (Rooney 2016a).

Money, incomes and food security

In urban areas people are more reliant on cash incomes for accessing food. Income earning strategies and stability rely largely on the labour market generated by the formal employment economy. However, for most low wage earners, wages do not last the entire fortnight cycle and thus families supplement waged income with other income sources. Unemployment is high, with men more likely to be in waged employment while women are mostly engaged in the informal economy (Galgal 2011; Gibson 2013). Most families therefore combine waged incomes with income generated from non-waged income such as street vending or sales of items from small market stalls near their homes. Women's income generation efforts in the non-waged sector are often impeded by the unequal burden of care and household unpaid work that they bear.

Social relationships play an important role in survival and livelihood strategies of urban residents where families rely on shared family incomes (Mawuli and Pera 2007; Storey 2010). In addition to their individual and clan exchange commitments, they are expected to support their extended family and kin. Cultural principles of exchange, including the moral ethos of generosity and reciprocity, are invoked to ensure that support is continued. Those who earn relatively high cash incomes come under immense pressure to distribute their earning and this can lead to loss of productivity and morale resulting in people leaving their employment (Monsell-Davis 1993). In this context, where income is unequally distributed and there are large number of low income earners, people with low or no incomes rely on food sharing for their daily meals. Food shortages are a challenge for poorer urban families. This means that from a household perspective the division often drawn between formal and informal economies are arbitrary.

Security crime and security

High levels of violence and crime, and the weak capacity of law and justice systems cross cut all the above issues. The two largest centres, Lae and Port Moresby, have among the highest homicide rates in the world with 66 per 100,000 and 33 per 100,000 people, respectively (Lakhani and Willman 2014). Robbery, assault and family and sexual violence are prevalent forms of violence. High crime rates not only severely impact the business and investment environment but also productivity. Poverty and unemployment are drivers of disenfranchisement and disillusionment and a large population of youth are key factors driving violence (Dinnen 2001; Lusby 2017). Social and cultural factors that influence the status of women and gender inequality drive family and sexual violence.

Chronic violence presents a dilemma for family social safety nets. Not only do they face security constraints in earning a living but also have to cope with chronic challenges of violence within their families and their communities, which often leave them victimised and traumatised. In the process women and children are often the most affected; directly victims of physical violence or indirectly via reduced social and economic empowerment.

In contrast to a weak police force there exists a large, growing and diverse security industry that exists to deal with crime and violence–drawing on fear of crime, while also providing employment for many young men[1]. Operating parallel to formal law and justice systems are highly localised and largely autonomous local institutions for mediation driven and overseen by local leaders and actors. This is particularly true in urban settlements. In general crime, violence and conflict mediation are dealt with mostly autonomous from the state. Police interventions are usually in the form of an overt raid or to deliver eviction notices for land. In a recent report commissioned by the World Bank the authors note the mediation capabilities of local urban institutions and the importance of recognising what works in urban settings (Craig, Porter, and Hukula 2016).

Conclusion

In urban PNG perhaps the two key issues that cross cut all areas of social protection are the nature of contestations over land tenure. The divide between those who reside in legal and illegal land tenure settings, as well as the mobility between these two spaces create a political economy particular to urban space. This divide has also been reinforced by a policy stance that has been repressive towards settlements, the informal sector, and poor sections of the population more generally.

In this context, urban governance is complicated by the overlapping forms of authority – formal state governance, local customary and traditional institutions which characteristically function in disparate ways. This makes it difficult to rely on a single form of governance. For example, in Port Moresby there is a lack of coordination between the National Capital District Commission and the Office for Urbanisation. The system of local level governments and ward councils that are provided for under the legislation do not appear to function in the city. The increasing trend towards allocating elected members of the National Parliament with District Services Improvement Program funds has also led to a situation where MPs increasingly use funds to engage directly with communities in client-patron like arrangements. These engagements are important for securing services like water and tend to intensify during election periods, but they are largely ad hoc and are not necessarily consistent with broader urban plans. Although there is a customary landowners' assembly it is fraught with capacity and funding problems which limit its ability to engage with other institutions.

From a policy perspective, support for urban governance needs to be based on coalitions and partnership that accommodate and work flexibly within these multilayered and contested structures. Building coalitions of shared interests and values between urban spaces locally, nationally, and internationally might be one approach

to strengthening urban governance. Likewise, strong economies will provide the basis for employment and therefore partnerships with the private sector are important.

Note

[1] See Dinnen, this issue

References

Bainton, NA 2010, *The Lihir Destiny: Cultural Response to Mining in Melanesia*, ANU E Press, Canberra.

Barber, K 2010, 'Urban households, means of livelihoods, and village identity in Moresby', M Goddard (ed.), *Villagers and the city*, Sean Kingston publishing, Wantage.

Chand, S and C Yala 2012, Institutions for improving access to land for settler-housing: Evidence from Papua New Guinea, *Land Use Policy*, 29, 143-153.

Commonwealth of Australia 2017, Social Protection: Aid Fact Sheet, Department of Foreign Affairs and Trade. Canberra.

Craig, D, D Porter, F Hukula 2016, 'Come and See the System in Place: Mediation Capabilities in Papua New Guinea's Urban Settlements', World Bank Group, Washington, D.C.

Dinnen, S 2001, *Law and Order in a Weak State: Crime and Politics in Papua New Guinea*, University of Hawai'i Press, Honolulu,

Filer, C 2007, Local Custom and the Art of Land Group Boundary Maintenance in Papua New Guinea, Weiner J, and K Glaskin (eds), *Customary Land Tenure and Registration in Australia and Papua New Guinea: Anthropological Perspectives*, ANU Press, Canberra.

Galgal, K 2011, Income Generation Scoping Study (Port Moresby Urban Settlements and Peri Urban Villages), World Vision, Papua New Guinea.

Gewertz, D, F Errington, 1999, *Emerging class in Papua New Guinea: the telling of difference*, Cambridge University Press, New York, USA, Cambridge, UK.

Gibson, J 2013, Technical report: The labour market in Papua New Guinea (With a focus on the National Capital District), Department of Economics, University of Waikato.

Godard, M (ed) 2010, *Villagers and the city*, Sean Kingston Publishing, Vantage.

Jolly, M, H Less, K Lepani, A Napua, M Roonehy, 2015, Falling through the net: Gender and Social Protection in the Pacific, Discussion Paper for UN Women New York, Progress of the World's Women, 2015-16.

Kaitilla, S 1999, Invisible Real Estate Agents and Urban Housing Development on Customary Land in Papua New Guinea, *Environment and Urbanization* 11, 267-276.

Lakhani, S, A Willman, 2014, The Socio-Economic Costs of Crime and Violence in Papua New Guinea, The World Bank Group, Washington DC.

Lasslet, K 2012, The Demolition of Paga Hill, International Crime Initiative (ed), Economic and Social Research Council, British Academy, United Kingdom.

Litau, J 2009, 'Macro and micro links of internal migration in Papua New Guinea: case studies of migration to rural and peri-urban Morobe and Eastern Highlands', PhD Thesis, Australian National University.

Lusby, S 2017, 'Securitization, Development and the Invisibility of Gender', Macintyre M and C Spark (eds) *Transformations of Gender in Melanesia*, ANU Press, Canberra.

Mawuli, A, G Pera, 2007, 'Urban Squatter Settlers' Livelihood in the National Capital District: Case Studies', Mawuli, A, R Guy (eds), *Informal Social Safety Nets: Support Systems of Social and Economic Hardships in Papua New Guinea*, National Research Institute, PNG.

Monsell-Davis, M 1993, 'Safety net or disincentive? Wantoks and relatives in the urban Pacific', National Research Institute (eds), National Research Institute, PNG.

Nino-Zarazua, M, A Barrrientos, S Hickey, D Hulme, 2011, 'Social Protection in Sub-Saharan Africa: Getting the Politics Right', *World Development*, 40, 163-176.

Oram, N 1976, *Colonial town to Melanesian city: Port Moresby 1884-1974*, ANU Press, Canberra.

Rooney, MN 2016a, Water, the urban age and the SDGs: reflections on Port Moresby, Papua New Guinea, Development Policy Blog, Australian National University.

Rooney, MN 2017, 'There's Nothing Better than Land': A Migrant Group's Strategies for Accessing Informal Settlement Land in Port Moresby', McDonnell, S, MG Allen, C Filer (eds), *Kastom, Property and Ideology: Land Transformations in Melanesia*, ANU Press, Canberra.

Sharp, T, J Cox, C Spark, S Lusby, MN Rooney, 2015, The Formal, the Informal, and the Precarious: Making a Living in Urban Papua New Guinea, *State, Society and Governance in Melanesia Discussion Paper,* Australian National University.

Slater, R 2011, 'Cash transfers, social protection and poverty reduction', I*nternational journal of social welfare*, 2011, 250-259.

Storey, D 2010, 'Urban Poverty in Papua New Guinea', National Research Institute, PNG.

Waring, M, AN Mukherjee, E REID, M SHIVDAS 2013, 'Anticipatory social protection: Claiming dignity and rights', Commonwealth Secretariat, London.

World Bank 2014, 'Papua New Guinea - Sanitation, Water Supply and Hygiene in Urban Informal Settlements', Water and Sanitation Program, World Bank Group, Washington DC.

Perceptions of vulnerability, tenure security and resettlement issues of informal settlers in Papua New Guinea

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Pacific Island Countries (PICs) have high levels of exposure to natural hazards including earthquakes tsunamis and cyclones. Those living in urban settlements are particularly hazard prone as they are often located on low lying land or coastal land subject to erosion, land degradation, increased storm surges, and salinization of valuable water supplies. Informal settlers often have limited infrastructure, little access to services, uncertain security of tenure, and low levels of adaptive capacity. Many are at risk of being evicted or losing access to land and livelihoods after a disaster. These factors make informal settlers particularly vulnerable to shocks and stresses.

This research seeks to understand vulnerabilities to land tenure issues and climate change together with the resilience of those living in informal settlements in Wewak, northern Papua New Guinea. Climate vulnerability is related to the exposure of the settlements to hazards and the extent to which settlers' experience of previous events influence their perception of climate-related risks.

Field work involving informal interviews and a questionnaire was conducted in three informal settlements in Wewak. The questions were designed to gauge respondents' perception of climate risks and their security of tenure. It also sought opinions on the advantages and disadvantages of being resettled and to better understand the implications of decisions about resettlement.

Case study settlements

Wewak, with a population of over 200,000 in 2001, is the fifth largest urban centre in PNG. The area has experienced significant urban growth over the last few decades based on natural population growth and significant migration. Poor quality road networks throughout the province leave many areas inaccessible by road and the provision of goods and services is particularly difficult. This has been a driver for migration to Wewak from disadvantaged rural areas including the Highlands and outer islands (Numbasa and Koczberski, 2012). A significant wave of urban growth in Wewak occurred between the end of World War II and Independence in 1975, during which time the town developed as an administrative and commercial centre. Thirty years ago, settlers from the East Sepik Province negotiated to settle on customary or Catholic Mission land and many continue to live in these settlements. By 1974 almost half the housing in Wewak was informal and by 1987 there were 29 ethnically based settlements (Numbasa and Koczberski, 2012).

The land tenure systems in Wewak include customary, state, private (freehold) and Catholic Mission lands. A typical process for acquiring settlement land involves a member of one ethnic group negotiating with the customary landowners for agreement to access the land. In some cases uncertainty over land ownership has meant that those in squatter settlements have not faced pressure to pay to lease the land. In other circumstances the customary landowners see the settlers as having only temporary occupation of the land.

The case study settlements in Wewak District were Basis Mengar settlement, Nuigo settlement and Saksak compound. Basis Mengar settlement is located along the coastline, while Nuigo and Saksak compound settlements are further inland. The research included interviewing 28 households in Basis Mengar, 29 in Nuigo and 30 in Saksak. These communities have different land tenure arrangements and varying climate related risks.

Basis Mengar settlement is located on customary land in the peri-urban areas of Wewak town with a community comprising migrants originally from the Murik Lakes on the east coast of Wewak. Almost all of the houses are semi-permanent and constructed using bush materials, due to restrictions placed on them by the land owners (Mitchell et al 2016).

Nuigo is the largest settlement in Wewak, where people from Sepik River settled by agreement on former Catholic Mission owned land, which has since been converted to state land. Nuigo is located on flat land that spreads into the foothills. Houses are constructed of permanent materials in some cases, however many have used materials such as off-cuts from the nearby timber mill, tin sheets, and used corrugated roofing. A small number are made from bush materials (Mitchell et al 2016).

The Saksak settlement is located on swampy land closer to the coast between the main road and Meni customary village. The Church allowed employees to settle on this land and over the years several groups from the Sepik River also settled there. The Catholic Mission has since transferred the land back to the customary land owners and settlers need now to negotiate with the customary land owners regarding continued access to the land. As a result all the houses are built from either semi- permanent or bush materials.

Perceptions of climate vulnerability and adaptive capacity

Each settlement has different climate change risk concerns. Table 1 provides responses to the question 'What climate change impact does the community face?' while Table 2 provides settlers' perceptions of vulnerability to specific climate related impacts, and what they feel is their ability to adapt to change.

Table 1: The major climate risks perceived by respondents in each settlement (Adapted from Mitchell et al, 2016)

Climate Risks	Basis Mengar	Nuigo	Saksak
Storm surge and sea level rise	25%	24%	0
Coastal erosion	75%	21%	0
Flooding	0	0	3%
Strong winds	0	0	0
Drought	0	55%	97%

Basis Mengar: Of the three settlements, Basis Mengar is the most exposed to sea level rise and after heavy rain is subject to flooding from the mangrove stream. Not surprisingly, 75 per cent of respondents considered the greatest climate impacts were coastal erosion while 25 per cent considered storm surge and sea level rise to have the greatest impact. As Table 2 indicates all respondents considered they were vulnerable or very vulnerable to sea level rise and 86 per cent considered they were vulnerable or very vulnerable to flooding. Perceptions of ability to adapt to climate impacts were mixed with just over half considering their ability to adapt to changing climate impacts to be low or very low while 36 per cent thought they had medium adaptability.

Nuigo: This settlement is located on land reclaimed from a swamp of sago groves where the land becomes waterlogged and swampy during the prolonged rainy season. Respondents considered the greatest climate impacts were drought, 55 per cent, storm surge and sea level rise, 24 per cent, and coastal erosion 21 per cent. Sixty five per cent of respondents considered they were less vulnerable or not vulnerable to sea level rise and nearly half respondents considered they were vulnerable or very vulnerable flooding. This could indicate that the people had developed coping strategies to live with the seasons, though 66 per cent of respondents considered their adaptive capacity to be low or very low.

Sasak: Ninety-seven per cent of residents in Saksak considered drought to be the major climate related impact. Seventy per cent of respondents considered themselves to be not vulnerable, or less vulnerable, to sea level rise, while 77 per cent considered they were not vulnerable, or less vulnerable, to flooding. More than half, 53 per cent, considered their ability to adapt to climate change to be medium or high, but 43 per cent considering their adaptive capacity to be low or very low.

Perceptions of security of tenure

Tenure security was assessed by asking respondents about the perceived threat of eviction and whether the government or the community recognised their right to settle there. As Table 3 indicates, despite the majority of respondents in each of the Wewak settlements having lived there for more than 20 years, a key factor in their

Table 2: Perceptions of vulnerability to sea level rise and flooding, and of adaptive capacity (Adapted from Mitchell et al, 2016)

Perception of vulnerability	Basis Mengar	Nuigo	Saksak
To sea level rise	Very vulnerable 54% Vulnerable 46% Limited vulnerability 0% Not vulnerable 0%	Very vulnerable 17% Vulnerable 18% Limited vulnerability 62% Not vulnerable 3%	Very vulnerable 0% Vulnerable 30% Limited vulnerability 70% Not vulnerable 0%
To Flooding	Very vulnerable 32% Vulnerable 54% Limited vulnerability 7% Not vulnerable 7%	Very vulnerable 28%, Vulnerable 20% Limited vulnerability 52% Not vulnerable 0%	Very vulnerable 0% Vulnerable 23% Limited vulnerability 77% Not vulnerable 0%
Level of adaptive capacity	High 7% Medium 36% Low 43% Very low 14	High 21% Medium 14% Low 0% Very low 66%	High 3% Medium 50% Low 43% Very low 3%

perception of tenure security was whether they thought the government would protect their rights to land. However, only respondents in Nuigo (formerly Mission land, now state land) considered that they had secure tenure and were not vulnerable to eviction. The majority of people in Basis Mengar settlement and Saksak compound felt that they were vulnerable to eviction and land grabbing. While most respondents in Basis Mengar settlement believed that their property rights were recognised by the community, they felt that the government would not protect their land rights. The local perception in Wewak is that informal settlers are temporary residents who are given limited rights for the activities they can undertake on the land.

Comparing the responses on security of tenure with vulnerability and adaptive capacity, some patterns emerge. For Basis Mengar there is a positive correlation between perceptions of high vulnerability to sea level rise and flooding, low levels of adaptive capacity, and less secure tenure. They feel very vulnerable to flooding and sea level rise, have relatively poor adaptive capacity, and less secure tenure.

The responses for Nuigo show a positive correlation between low levels of vulnerability to sea level rise and to flooding with more secure tenure, 86 per cent. However, there is not a positive correlation with the low levels of adaptive capacity.

In Saksak there is a positive correlation between low levels of vulnerability to sea level rise and to flooding and medium levels of adaptive capacity. However, there is not a positive correlation with less secure tenure.

Table 3: Responses from case study settlements on land tenure security (Adapted from Mitchell et al 2016)

	Basic Mengar Settlement (on customary land)	Nuigo (on State land)	Saksak Compound (on freehold land)
How long have you been living in this settlement/village?	More than 20 years 86% Ten to twenty years 4% Less than ten years 10%	More than 20 years 90% Ten to twenty years 10% Less than ten years 0%	More than 20 years 53% Ten to twenty years 30% Less than ten years 17%
How did you gain access to this land?	Tribal inherited 4% Customary arrangements 82% Informal arrangements 14%	Customary arrangements 3% Informal arrangements 83% State land 14%	Informal arrangements 100%
How secure is your tenure?	Very secure 11% Secure 11% Less secure 43% Not secure 36%	Very secure 86% Secure 10% Less secure 3% Not secure 0%.	Very secure 0% Secure 0%) Less secure 70% Not secure 30%
Are you vulnerable to eviction or land grabbing?	Very vulnerable 39%, Vulnerable 36% Less vulnerable 21% Not vulnerable 4%.	Very vulnerable 3% Vulnerable 7% Less vulnerable 31% Not vulnerable(59%	Very vulnerable (60% Vulnerable 7% Less vulnerable17% Not vulnerable 7%
Are your property rights recognised by others?	Yes 54% Not sure 25% To some extent 7% No 14%	Yes 34% Not sure 7% To some extent 10% No 48%	Yes 20% Not sure 20% To some extent 17% No 43%
Does the government protect your access to land?	Yes 0% Not sure 21% To some extent 7% No 71%	Yes 24% Not sure 31% To some extent 42% No 3%	Yes 0% Not sure 80% To some extent 0% No 20%

Resettlement priorities for households

When asked about their feelings on being resettled, the results differed for the three villages. A majority of respondents in both Basis Mengar, 61 per cent, and Nuigo, 63 per cent, either disagreed or strongly disagreed that they should be resettled. This did not appear to be directly correlated to their perceptions of tenure security as the majority in Basis Mengar, 79 per cent, considered they were less secure or not secure, whereas almost all respondents in Nuigo considered they were very secure or secure.

However in Saksak 70 per cent either agreed or strongly agreed that they should be resettled, with all considering that their tenure was less secure or not secure.

Most respondents in these three settlements have land in other areas where they could be resettled (Basis Mengar 64 per cent, Nuigo 66 per cent, Saksak 77 per cent), however this was not seen as something that would improve their tenure security or vulnerability to climate related risks. It may, however, be a factor that mitigates the risk of loss of access to land through resettlement.

Respondents in all three settlements felt that resettlement would affect their tenure and livelihoods and more than half in Basis Mengar, 52 per cent, agreed or strongly agreed that resettlement would impact on tenure and livelihoods. This seemed to have a larger bearing on their resettlement response than climate change risk.

Lessons for resettlement decision-making

Communities and villages moving to other locations is part of the history of the Pacific Islands. Many of these resettlements have proven difficult in the short-term with vulnerable groups facing the greatest difficulty in being accepted at the new site.

Decisions about resettlement are complex, encompassing issues such as access to livelihoods, land availability, the provision of infrastructure, and the location of informal urban settlements in areas of hazard risk (Campbell et al 2005; Correa et al 2011; Connell 2012). They require thorough consultation with all stakeholders and the recognition of legitimate land tenure rights at the original and resettlement sites.

Resettlement during disaster recovery is contentious as it is difficult to avoid later land conflicts. In a recent example, following the 2009 earthquakes and tsunami in Samoa, vulnerable coastal communities were resettled to higher land further from the coast. The challenge was to find suitable land that did not cause tension with the customary owners. Some people spontaneously relocated inland on land owned by their community, but the relocation of others required pressure from the authorities. These settlers later returned to their land of origin as they sought to protect their land and resume their livelihoods (Government of Samoa 2009).

Resettlement should be considered carefully against a range of legal, environmental, cultural and social criteria before the decision is made. Resettlement decisions in PNG will also require effective coordination and consultation between government agencies and customary groups. Voluntary resettlement schemes often are the most

Table 4: Responses from settlers in three Wewak settlements on resettlement (Adapted from Mitchell et al 2016)

	Basic Mengar Settlement	*Nuigo*	*Saksak Compound*
How secure is your tenure?	Very secure 11% Secure 11% Less secure 43% Not secure 36%	Very secure 86% Secure 10% Less secure 3% Not secure 0%	Very secure 0% Secure 0% Less secure 70% Not secure 30%
Should your household be resettled?	Strongly disagree 18% Disagree 43% Agree 25% Strongly agree 14%	Strongly disagree 17% Disagree 46% Agree 34% Strongly agree 3%	Strongly disagree 27% Disagree 7% Agree 57% Strongly agree 13%
Would resettlement affect your tenure and livelihoods?	Strongly disagree 21% Disagree 21% Agree 25% strongly agree 33%	Strongly disagree 17% Disagree 31% Agree 38% Strongly agree 14%	Strongly disagree 17% Disagree 13% Agree 50% Strongly agree 20%
Do you have land in other areas you could be resettled to reduce your risk of disaster?	Yes 64% Not sure 7% No 29%	Yes 66% Not sure 31% No 3%	Yes 77% Not sure 20% No 3%

effective, helping to reduce risks of natural hazards, as well as protecting livelihood options and tenure security. Another factor that complicates the concept of resettlement in PNG is that most respondents to this research did not believe that they would welcome a resettled group or that they would be welcome in the group they resettled into, indicating that great care would be required in selecting land to resettle communities.

Conclusions

This research confirms that while there are broad correlations between perceptions of tenure security, vulnerability, and adaptive capacity, it varies between and within settlements. What we also found was that the perception of tenure security varied between villages in the same region. It cannot be assumed that the adaptive capacity, cultural norms or tenure arrangements associated with customary tenure are the same everywhere in PNG, or indeed are the same for each of the Wewak settlements as perceptions varied within villages depending on underlying tenure and how the land is accessed. Two of the settlements in Wewak believed that they had secure tenure and were not vulnerable to eviction. However, in Saksak, the perception was that tenure security was low, and the threat of eviction was high. Not surprisingly, respondents there had a perception of poor tenure security and thought that they should be resettled.

Land tenure systems are not static, and the rules and processes around land tenure and property rights have adapted over the centuries to changing circumstances. The current pressures of climate change and urbanisation also require the existing land tenure systems to adapt. The question is how? It is a matter for the local communities to consider as they will be central to this process. As Jones (2012b) notes, 'adjusting and fine-tuning land tenure systems, such as mobilising land in localities where urban growth pressures are strong and land values are rising, triggers tensions and internal disputes with landowners and landowning groups'.

Respondents in all settlements (except Saksak) stated that resettlement would not be a climate change adaptation option unless supported by the government with a guarantee of tenure security at the new site and government support to maintain existing livelihoods or develop new ones near the resettlement site. Long-term sustainability of resettlement decisions in PNG will require effective coordination between government agencies and customary groups in order to reduce hazard risks and protect livelihoods. Helping local communities adjust and become more climate resilient will require transparent and effective consultation and community based partnerships with customary groups and government as key stakeholders.

References

Campbell, J, M Goldsmith, and K Koshy 2005, Community Relocation as an Option for Adaptation to the Effects of Climate Change and Climate Variability in Pacific Island Countries (PICs), Final report for APN project 2005-14-NSY-Campbell, Asia-Pacific Network for Global Change Research, Accessed 6/2/2017, http://www.pacificdisaster.net/pdnadmin/data/original/APN_2009_PICS_community_relocation.pdf

Connell, J 2012, Population Resettlement in the Pacific: lessons from a hazardous history? *Australian Geographer*, Vol. 43, No. 2, pp127-142.

Correa, E 2011, Populations at risk of Disaster: *A Resettlement Guide*, with F Ramirez, and H. Sanahuja, World Bank and GFDRR, Washington, Accessed 6/2/2017, http://www.gfdrr.org/gfdrr/sites/gfdrr.org/files/publication/resettlement_guide_150.pdf

Government of Samoa 2009, Samoa Post-Disaster Needs Assessment Following the Earthquake and Tsunami of 29th September 2009.

Jones, P 2012b, Managing Urbanisation in Papua New Guinea: Planning for Planning's Sake?, Working Papers Series 2, No 33, Alfred Deakin Research Institute.

Mitchell, D, D Orcherton, G Numbasa and D McEvoy 2016, The implications of land issues for climate resilient informal settlements in Fiji and Papua New Guinea, RICS Trust, March 2016.

Numbasa, G and G Koczberski 2012, Migration, Informal Urban Settlements and Non-market Land Transactions: a case study of Wewak, East Sepik Province, Papua New Guinea, Australian Geographer, 43()2,143-161.

The healthcare challenges posed by rapid urbanisation in the Pacific: The view from Fiji

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Like many Pacific island countries, Fiji is undergoing rapid urbanisation, and its authorities are struggling to meet the needs of a bulging urban and peri-urban population with respect to land, housing availability and service coverage. In this paper we draw on the case study of Suva and its surrounding urban areas to reflect on the healthcare challenges posed by urbanisation in Melanesian cities. Ultimately, this paper highlights how personal, political, environmental and cultural determinants intersect to heighten disease and disability in an urbanising context.

Background: Urbanisation in Fiji

Fiji's population of approximately 875,000 is predominantly made up of Indigenous Fijians, referred to as *iTaukei* (57 per cent), and Indo-Fijians (38 per cent) who are mostly descended from Indian indentured labourers (*girmitiyas*) forcibly transported to Fiji by the British administration to work on colonial plantations (FIBOS 2007). Several factors initially delayed and then accelerated urbanisation in Fiji. Colonial policies once constrained the ability of *iTaukei* and Indo-Fijians to live and work in cities and *girmitiya* families inevitably settled in rural areas due to the location of the sugar and copra industries. Further, as seen across the Pacific, colonial administrators restricted *iTaukei* migration to urban areas until the 1960s (Chung and Hill 2002). After these restrictions were lifted, rising poverty in rural areas and increased opportunities in urban areas led to increased rural to urban migration across Fiji. Furthermore, urbanisation was heightened between 1997 and 2014, when thousands of sugarcane leases expired and weren't renewed, which forced many farming families and out of work farmhands to move to urban areas (Naidu and Matadadra 2014). The devastation of tropical cyclones such as Winston in 2016, and the subsequent scarcity of building materials further pushed many people out of affected rural areas towards cities.

By 2010, over half of the Fijian population lived in the greater Suva urban area (GSUA), which includes Suva and the nearby towns Lami, Nasinu and Nausori. As more and more people have flocked to the GSUA, this has exacerbated sprawling informal settlements, poverty and unemployment. The term 'informal settlements' refers to both 'squatters' (Fijian vernacular for those who reside unlawfully on freehold or state land) and people who have made informal agreements with owners to settle on native land. The official figures regarding the number of informal settlements in Fiji is contested, although it is estimated by the advocate for the poor, Father Kevin Barr, that about 20 per cent of Greater Suva residents live in informal settlements (Barr, pers. comm., 2 June 2016). Settlers range from families who have been settled for generations to those who are newly migrated, and their housing situations can range from insecurity and abject poverty to relative security. However, informal settlements are generally characterised by poor quality and precarious housing, overcrowding, limited, or no, service provision such as water, electricity or waste collection, and insecure land tenure (Kiddle 2010), although settlements are comparatively better serviced in Suva than elsewhere in the Pacific (Phillips and Keen 2016). The focus of this paper is the health and healthcare implications of this rise in informal settlements brought about by urbanisation.

Three areas of research inform this paper. It draws on ethnographic fieldwork examining healthcare provision in informal settlements surrounding Suva in 2016 by Phillips; data from 41 interviews with informal settlers, healthcare practitioners, policymakers and NGO representatives, along with participant observation of outreach nurses on their domicile visits. Secondly, this paper benefits from the experience and insights of Narayan, a Fijian medical doctor who has practiced for

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12 years, and took the position of sub-divisional medical officer at the Nausori Medical Centre in 2016. Thirdly, it builds on and advances, a review of relevant literature addressing the healthcare challenges posed by urbanisation, particularly across the Pacific.

Fiji's shifting urban disease profile

Suva Sub-Divisional Health Services provides a range of public health and primary care services to the population within the Suva Medical Area. The area is covered by seven medical health centers, one tertiary hospital, three specialised hospitals and three private hospitals with the support of numerous private clinics to serve the greater Suva area. However, health care providers in the GSUA are grappling to manage a double burden of disease, which is having a particularly alarming impact in informal settlements. Firstly, although there has been a general improvement in Fiji's healthcare response to infectious diseases such as HIV/AIDS and tuberculosis (TB) over time, these diseases remain disproportionately prevalent amongst poorer populations, and are more difficult to manage within a highly mobile demographic. Secondly, there is a crisis with respect to growing rates of premature mortality and disability caused by 'lifestyle' diseases, otherwise known as non-communicable diseases (NCDs)— including diabetes, heart disease, respiratory disorders and cancers. Indeed, the Pacific region has one of the fastest growing rates of NCDs globally. Approximately 80 per cent of deaths are currently attributed to NCDs, the majority of which are premature (WHO 2015). This has meant that Fiji's life expectancy has plateaued at a low 69 years since the late 1980s due to premature mortality from NCDs (Tuitama et al 2014).

The high rates of NCD-related complications in Fiji, particularly in poorer settlements, are often explained as a result of high risk behaviour, and low health literacy amongst the residents. At one level, NCDs are caused by behavioural risks such as smoking, excessive alcohol, poor nutrition and physical inactivity. Public health billboards that address these risks are everywhere in Suva, encouraging individuals to make healthy choices. In Suva, for example, roadside billboards implore people to 'invest' in their health by exercising, to quit smoking for their childrens' sake, and 'kick the salt' (see Phillips, McMichael and O'Keefe forthcoming). Further, if people are ill, they are encouraged to present to the doctor early and comply with medical advice. Moreover, there is palpable frustration amongst healthcare providers that NCD-related disability and early death are often caused by delayed or non-use of healthcare services and non-compliance with medication (Nakajima et al 2014). This is backed up by a recent study about foot amputations connected to Type 2 diabetes at the Colonial War Memorial Hospital (CWMH) in Suva (Kumar et al 2014). Of the 938 amputations performed at the CWMH during 2010-2012, over three quarters of all patients had poor glycaemic control, which means they had not been monitoring their sugar levels, nor taking diabetic medications, which include both tablets and insulin. Over

15 per cent had not been diagnosed with diabetes before they presented with foot sepsis, which means they had also neglected to seek treatment in a timely fashion. Many were smokers. In response to this trend, a large billboard out the front of CWMH reads: 'In Fiji, a person with diabetes mellitus loses a foot from untreated infections every 12.5 hours. Have you checked your feet and blood pressure today?'

Thus, the debate about poor health outcomes along the Lami-Suva-Nausori corridor is often reduced to the idea that individuals are failing in their responsibility to prevent disease and to seek timely medical attention. Yet, while high risk behaviour certainly plays a part, this paper highlights the range of intersecting determinants that exacerbate health threats in informal settlements.

Environmental determinants

The health crisis in Fiji's informal settlements is compounded by the fact that NCDs are increasingly evidenced to have a syndemic—or cluster—relationship with infectious diseases. For example, given that Type 2 diabetes compromises the immune system, its increased prevalence can invoke the reactivation and spread of diseases such as TB (Littleton and Park 2009). In turn, like diabetes, TB interacts with environmental factors such as smoking, overcrowding and poor nutrition. This was pertinently illustrated in one visit to an informal settlement near Nasinu, in which Phillips sat with a zone nurse during her appointment with an *iTaukei* man whose leg had been amputated just a week earlier due to diabetes. He could not afford a wheelchair and was too heavy for his family to carry, which meant he could not attend the medical centre in person. The nurse examined the dressing on his leg (it had been well bandaged) and checked his medication adherence. He was not taking the correct medication, to which she implored "*Kere-kere* (please), this is important, you might lose the other leg". He and his extended family lived in a small two bedroom, corrugated iron house of approximately 18 square metres, which was attached to one large block divided into eight similar sized houses. The settlement had only recently been connected to clean water supply. Approximately 80 people lived in the block and due to the overcrowding, residents took shifts to sleep in the limited beds available. Along with high rates of diabetes in the community, there had been several recent confirmed cases of TB. As illustrated by this case, there are multiple synergies between NCDs and infectious diseases, and their mutual presence has an amplified negative effect (Littleton and Park 2009).

Politico-economic determinants

Critics have argued that blaming NCDs on specific behavioural risks like smoking and poor nutrition is not sufficient to explain the high rates of NCDs amongst poorer populations (Glasgow and Schrecker 2015). This is because, on the one hand, it negates further explanation of how chronic stress and anxiety—themselves a product

of economic insecurity and stigma—might be causal mechanisms of NCDs (Offer et al 2012). Moreover, high exposure to these lifestyle risks in the Pacific could be seen to have a more fundamental cause. Examining obesity prevalence in Nauru, McLennan and Ulijaszek (2015) highlight that it is the massive sociocultural changes wrought by colonisation (including the introduction of sedentary lifestyles, tobacco, alcohol and processed diets) that set the conditions for NCDs to take root so quickly in the Pacific. Moreover, Pacific countries continue to be on the periphery of the globalised free market, which restricts the ability (and sometimes will) of governments to regulate the manufacture, importing, sale, price, advertising and taxing of unhealthy products (Gouda et al 2015). Multinational and local corporations capitalise on, and encourage, Pacific Island populations' preference for inexpensive, nutrient poor and energy rich foods. These include fatty lamb flaps imported from New Zealand and Australia (Gewertz and Errington 2010) and two minute noodles from Asia, which have become a staple in the diet of the urban poor (Errington, Fujikura and Gewertz 2013).

Importantly, policymakers in the Fijian Ministry of Health, international health agencies such as the WHO and other NGOs have attempted to implement a multisectoral approach to combat NCDs across Fiji, including better regulation of food, tobacco and beverage industries (see Snowden 2013), and most notably a recent landmark tax on sugar. However, these forms of regulation are to some extent hampered by the ongoing influence of industry, which is enabled through free trade agreements (Hendriks et al 2015). Moreover, the ability of these regulatory efforts to shape the advertising and pricing of products and shift people's dietary choices rests largely in the formal market and does not necessarily extend to informal settlements, where many people purchase their food from non-licensed vendors.

Cultural and religious determinants

There are, also, several cultural elements that can incite informal settlers to avoid or selectively engage with biomedical services in lieu of other treatment options.

iTaukei have a complex ethnomedical system that pre-dates European arrival, which includes the use of traditional herbal remedies, tattooing and massage. In particular, the use of medicinal plants is still engaged by approximately 80 per cent of the Fijian population (Nakajima et al 2014). There are many varied ways in which informal settlers selectively use and/or combine traditional remedies and Western medicine. Some consult designated herbal experts within the community, while others simply utilise local plants on family members' advice. Some only use medicinal plants and refuse to take medication, whereas numerous participants prefer to use medicinal plants for several days after feeling sick, and only present to the hospital or medical centre if their condition gets worse. Perhaps most problematically, it is common for people with

diabetes mellitus to need emergency amputations because they have been putting *drau ni weleti* (papaya leaves) on infected legs.

Further, Christian faith—which is central to Fijian governance at every level—plays an integral role in medical decision making. For many Fijian Christians, prayer is considered to be medicinally effective, and *tala-talas* (preachers) are endowed with healing powers. In turn, this shapes how informal settlers use, or decide not to use, medication prescribed by healthcare practitioners.

Finally there is a strong interplay in the *iTaukei* community between medical beliefs and spirituality. The existence of evil spirits produce explanations of risk that run alongside, and sometimes clash with, biomedical models about NCDs. Since accusations of sorcery often lead to violence in the Pacific, recent constitutional changes in Fiji have made it illegal to accuse an individual of sorcery or witchcraft. Yet, it remains a powerful explanatory framework for some cases of illness and this can obstruct medical and public health messages (Phillips, McMichael and O'Keefe forthcoming).

Structural determinants

Poor health outcomes in rapidly urbanising areas are also exacerbated by an increasingly overstretched public health system. Due to a paucity of funding, healthcare practitioners in the GSUA regularly complain of insufficient space, limited and unreliable technology, and patchy pharmaceutical supplies. For example, while the Nausori medical centre outpatient clinic and emergency centres are overcrowded, zone nurses who are charged with outreach have limited access to cars and therefore often rely on public transport to get to their domicile appointments, severely limiting the number of patients that can be seen each day. All of these restrictions constrain their ability to meet the healthcare needs of their patients.

Indeed, in Papua New Guinea, the decline of biomedical services has led Cox and Phillips (2015:37) to argue that Melanesian communities can 'lose their collective memory of the efficacy of biomedicine, reducing it to simply another option alongside magical means, or even an inferior option when compared with the healing power of God.' Similarly in informal settlements in Suva, prayer and ethnomedical remedies were elevated as options when people's accessibility to biomedical services and pharmaceuticals were limited. Nevertheless, given the extent to which herbal medicines and faith healing are culturally entrenched, their use is likely to continue even when medical services are improved and Western medicines become more freely available.

Conclusion

As Fiji grapples to manage an expanding urban and peri-urban population surrounding Suva, this gives rise to familiar problems of urbanisation, such as precarious and overcrowded informal settlements, unemployment, poverty and overstretched services. This sets the conditions for both

communicable and non-communicable diseases to take root more quickly, and makes disability and premature death more likely amongst this demographic.

Public health discourses tend to hold individuals responsible for preventing disease and seeking timely and appropriate medical attention. However, along with individual lifestyle choices, there are multilayered and intersecting causes of poor health outcomes amongst informal settlers. Causes include environmental issues of housing insecurity and overcrowding; international trade agreements (and informal unregulated markets) that increase exposure to unhealthy diets amongst the urban poor; ethnoreligious determinants that shape and delay treatment seeking in the Fijian context; and structural determinants that mean healthcare staff and resources are unable to meet the needs of their growing patient base. A dedicated, multi-sectoral approach is required to address this growing gap in health outcomes and healthcare access amongst the expanding urban poor in Melanesian cities.

References

Chung, M and D Hill, 2002, 'Urban Informal Settlements in Vanuatu: Challenge for Equitable Development', report prepared for the Pacific Islands Forum Secretariat and UN Economic and Social Commission for Asia and the Pacific, Pacific Operations Centre, Suva.

Cox, J and G Phillips, 2015, 'Sorcery, Christianity and the Decline of Medical Services', Miranda Forsyth and Richard Eves (eds), *Talking it Through: Responses to Sorcery and Witchcraft Beliefs in Melanesia*, ANU Press, Canberra.

Errington, F, T Fujikura and D Gewertz, 2013, *The noodle narratives: the global rise of an industrial food into the twenty-first century*, University of California Press, Berkley.

FIBOS (Fiji Islands Bureau of Statistics) 2007, 2007 *Census of Population and Housing*, http://www.statsfiji.gov.fj/statistics/2007-census-of-population-and-housing, accessed 13 May 2017.

Gewertz, D and F Errington, 2010, *Cheap meat: flap food nations in the Pacific Islands*, University of California Press, Berkley.

Glasgow, S and T Schrecker, 2015, 'The double burden of neoliberalism? Noncommunicable disease policies and the global political economy of risk', *Health and Place*, 34, 279-286.

Gouda, HN, NC Richards, R Beaglehole, R Bonita and AD Lopez, 2015, 'Health information priorities for more effective implementation and monitoring of non-communicable disease programs in low and middle income countries: lessons from the Pacific', *BMC Medicine*, 13(1), 1.

Hendriks AM, M Delai, AM Thow, JS Gubbels et al, 2015, 'Perspectives of Fijian policymakers on the obesity prevention policy landscape', *BioMed Research International*, Article ID 926159.

Kiddle, L 2010, 'Contemporary Urban Squatting in Fiji: Recent Trends, Intervention and a Potential Policy framework', *Fijian Studies*, 8(1), 83-98.

Kumar, K, W Snowdon, S Ram, S Khan, M Cornelius, I Tukana and S Reid, 2014, 'Descriptive analysis of diabetes-related amputations at the Colonial War Memorial Hospital, Fiji, 2010–2012', *Public health action* 4(3), 155-158.

Littleton, J and J Park, 2009, 'Tuberculosis and syndemics: Implications for Pacific health in New Zealand', *Social Science & Medicine*, 69(11), 1674-1680.

McLennan, AK and SJ Ulijaszek, 2015, 'Obesity emergence in the Pacific islands: why understanding colonial history and social change is important', *Public health nutrition*, 18(8), 1499-1505.

Nakajima R, K Nakamura, A Turagabeci and T Takano, 2014, 'Barriers to medication adherence among patients with non-communicable diseases: Fijian health professionals' perceptions', ????????????, 29(4), 313-320.

Naidu, V and A Matadradra, 2014, 'The Namara (Tiri) Squatter Settlement in Labasa: an In-Depth Study', *SGDIA Working Paper Series*, no. 1. Suva: School of Government, Development and International Affairs, University of the South Pacific, Suva.

Offer, A, R Pechey and S Ulijaszek (eds.) 2012, *Insecurity, Inequality and Obesity in Affluent Societies*, Oxford University Press for the British Academy, Oxford.

Phillips, T and M Keen, 2016, 'Sharing the City: Urban Growth and Governance in Suva, Fiji', *State Society and Governance in Melanesia Discussion Paper Series 6*, http://ssgm.bellschool.anu.edu.au/sites/default/files/publications/attachments/2016-09/dp_2016_6_phillips_and_keen.pdf, accessed 13 May 2017.

Phillips, T, C McMichael and M O'Keefe (forthcoming), 'We invited the disease to come to us': Neoliberal public health discourses and community causal attribution for non-communicable diseases in Fiji', *Critical Public Health*.

Snowdon, W, A Raj, A Kanungo, G Waqa and H Robinson, 2013, 'Non-communicable diseases and health system responses in Fiji', *Working Paper Series*, 34.

Tuitama, LT, S Young-soo, H Clark, C Tukuitonga and R Beaglehole, 2014, 'Acting on the Pacific crisis in non-communicable diseases', *The Lancet*, 384, 1823-1824.

WHO 2015, *Noncommunicable diseases progress monitor*, World Health Organization, Geneva.

Child health and nutrition in the Marshall Islands

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This paper considers the health of children in the Republic of the Marshall Islands, one of the most urbanised countries in the Pacific with approximately 77 per cent of its population living in two urban centres, Majuro or Ebeye (Government of RMI 2012). Ebeye is the fifth most densely settled island in the world (Wikipedia/org 2017). The high levels of urbanisation and overcrowding, together with the high cost, limited availability and limited preference for fresh food, impact on child health.

Although, the majority of Pacific Island nations have experienced sufficient reductions in infant and child mortality to have met the 2030 target for mortality set in the Sustainable Development Goals (SDGs) and these improvements are now flowing through to better overall life expectancy among men and women, the most recent country observations show that children in three Pacific Island nations - Kiribati, the Republic of the Marshall Islands (RMI) and Papua New Guinea - face 'excess' mortality in both under-five and neonatal age groups. When considering maternal and child health in the Marshall Islands both geographic and historic factors continue to influence child morbidity and mortality.

Geography, history and health

The Marshall Islands, like Kiribati, comprises a number of small, widely scattered coral atolls with very limited land area, coralline soils that support only minimal agriculture, and considerable vulnerability to climate change (Connell and Lea 1995). Extreme weather conditions over the last 10 years have led to atoll inundation, a rapid loss of land and houses, salt water intrusion into water supply and, in Marshall Islands, loss of food crops from severe drought (Heine lecture 2017). There is no surface water. The populations of both countries have experienced very rapid in-migration from outer atolls and are now largely urban with very high urban population densities (Connell 2017). Between 2000 and 2009, 11,000 Marshallese migrated to the urban areas (UNICEF 2013) leading to an increased reliance on imported food and resulting in considerable health problems from both infectious and lifestyle diseases for children.

Historically, the urban populations of Ebeye and Majuro, include large families relocated from the atolls of Bikini and Enewetak to allow for American nuclear testing following World War II. Missile testing continues today and the consequences of both testing and relocation are still felt (UNICEF 2013). Since 1945, three generations of these families have continued to receive American pensions and food aid.

Currently, an estimated 55,300 people live in the Marshall Islands (SPC 2016). Majuro, the capital, has a population of 27,797 (Government of RMI 2012) and Ebeye, a

very small island of just 0.360 square kilometres and a population of around 15,000, has a population density of 41,667 per square kilometre (ibid). Urbanisation and high population density have put tremendous pressure on land as well as the provision of basic social services such as health, clean water, sanitation, housing, and classroom space, all of which are essential to children's growth and development (UNICEF 2013).

In Majuro, there are considerable social and economic inequalities and housing and living conditions vary considerably from well built, spacious modern houses to overcrowded shelters constructed of recycled, corrugated iron clinging to the shorefront (UNICEF 2013). Due to continued high fertility rates, nearly one-half of the Marshall Islands population is under the age of 18 years. In the urban areas, one-third of households have nine or more members, and one-fifth use only one room for sleeping. Forty per cent of households contain at least one child not living in the same household as either natural parent (Government of RMI 2012). Large household numbers contribute to the high level of poverty that persists, with one in two people living below the poverty line (ADB 2015) and eligible for American food aid. While overall fertility has declined from 7.2 births per woman in the 1988 to 4.1 in the 2011 Census, the teenage fertility rate remained largely unchanged over the same period. One in ten births in the Marshall Islands is to a teenaged mother. At the time of the 2007 Demographic and Health Survey (DHS), one in four teenaged girls had previously given birth or was pregnant. Children born to teenaged mothers have a significantly higher risk of dying in the first year of life (59 per 1,000 compared to 28 per 1,000 among children born to mothers aged in their thirties).

Maternal mortality in the Marshall Islands is high, at 105 per 100,000 live births (SPC 2016). (The SDG target is 70 or fewer deaths per 100,000 live births). Risk factors in maternal health also effect child morbidity and mortality.

Closely spaced pregnancies and childbirth put women and their babies at risk especially in combination with inadequate nutritional habits. This in turn impacts on child health, particularly those that are breastfed. For example, vitamin A deficiency in pregnant women means breast milk does not maintain adequate vitamin A for infants. At the cessation of breastfeeding, which occurs earlier than recommended in urban Marshall Islands, the prevalence of vitamin A deficiency increases, leading to greater susceptibility to severe infections among children.

As a result of a 1994-95 study which estimated that 55 per cent of children aged one to five years had moderate vitamin A deficiency and eight per cent severe deficiency, the Ministry of Health instigated a vitamin A distribution program whereby supplements are allocated to children aged six months to 12 years and all women who have just

given birth. This greater awareness of the need for foods rich in vitamin A has been maintained in Majuro, with nearly three-quarters of mothers eating some fruits and vegetables rich in vitamin A, and over one-half reporting having received post-partum vitamin A supplements (Government of RMI, 2011).

Infrastructure and administrative services

In 2015, only three per cent of people in the Marshall Islands had drinking water piped into their dwellings, a level that has not increased since the 1990s (WHO 2016a). Overall, only five percent of people are using unimproved drinking water sources while the other 92 per cent who are largely urban dwellers use improved sources such as rainwater collection, public taps or standpipes. Three-quarters of urban dwellers have access to improved sanitation (84 per cent in Majuro and Ebeye and 56 per cent in rural areas) however, only one-third of children's stools are disposed of safely (21 per cent in rural areas and 41 per cent in the two urban areas) and disposable diapers continue to be thrown in the sea washing up on the beaches and further inland during tidal surges. Only 20 per cent of schools have adequate water supply and only10 per cent have sanitation (WHO 2016a).Improved water and sanitation conditions in the Marshall Islands have helped address exposure to diarrhoea-causing agents, but continued efforts in community health education are required to improve the situation.

Prenatal care services are free, and 95 per cent of Marshallese mothers attend at least once, but the services received may not fully meet maternal needs. Of women who had a live birth in the five years preceding the 2007 DHS, just over one-half spoke of pregnancy complications, and only one-fifth claimed to have received two or more tetanus toxoid injections to protect against potentially fatal neonatal tetanus. These services are available in the two urban areas but are very difficult to access for outer island women. With such a high proportion of the population in urban areas with relatively easy access to health services, antenatal coverage is reasonably good in the Marshall Islands with 92 per cent of live births receiving at least one visit to an antenatal service, and 77 per cent receiving more than the recommended four or more visits (Government of RMI 2011). Although initial breastfeeding at birth is almost universal, the Marshall Islands has one of the lowest levels of exclusive breastfeeding in the Pacific (SPC2016).

Child morbidity and mortality in Marshall Islands

Three out of every 100 children born in the Marshall Islands die before they reach five years of age, and two of these will have died before their first birthday (SPC 2016).

Large declines in child mortality occurred from the 1980s to the end of the 1990s, but minimal improvement has been observed since then. The rate of decline has not kept pace with the rest of the Pacific region.
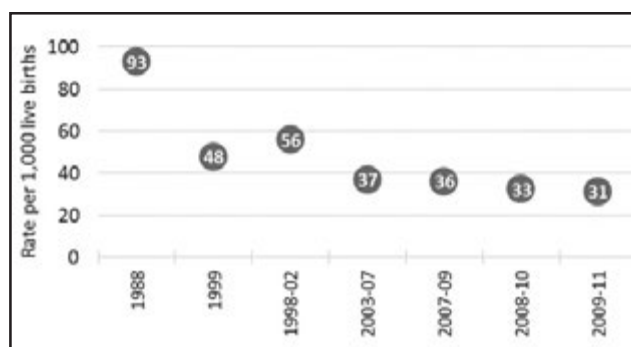

Figure 1: Under-five mortality rate in the Marshall Islands (deaths per 1,000 live births) (Source of data: SPC, NMDI.)

Statistics on the cause of death show the continued presence of 'preventable' deaths in children, namely infections and injuries, which account for more than one-third of deaths among those under five. This suggests the impact of crowded urban households, poor sanitation practices and an absence of early medical intervention.
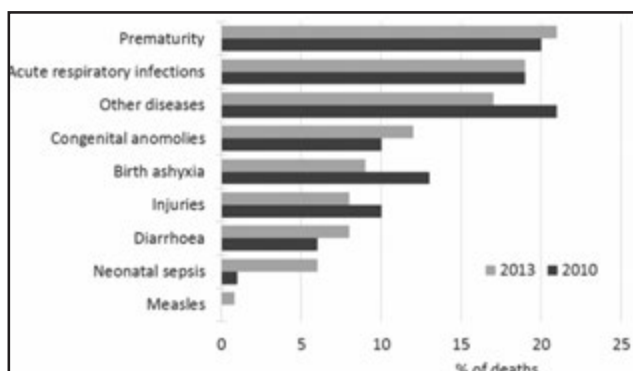

Figure 2: Causes of under-five deaths, 2010 and 2013, Marshall Islands (Source of data: WHO 2016b.)

Diarrhoea continues to lead to deaths in young age groups, accounting for eight per cent of all deaths among children under five in 2013. While a marked improvement from a decade ago, when diarrhoea caused 17 per cent of deaths in this age group, this remains double the Pacific average. One in ten children under five years were reported to have had diarrhoea in the two weeks before the 2007 DHS, rising to one in five among one year olds. In Majuro, approximately half of those children with diarrhoea were taken to a health care provider.

Estimates of the proportion of low birth weight infants (defined as less than 2500 grams) vary according to year and source of estimate. From the last decade, they have varied between 15.8 per cent and 23.5 per cent, and the 2007 DHS reported figure was 18 per cent (Government of RMI 2011). While not uncharacteristically high for the Pacific region, this is likely to be associated with the one-fifth of child deaths that are attributable to prematurity.

Food and nutrition

An estimated 37 per cent of children in urban areas, aged two to four years are overweight with 13 per cent of children already obese by the time they are aged 13 to 15 years of age (SPC 2016).

Last decade, nearly two in every five infants under the age of two were not meeting the minimum acceptable diet, and one in five were not meeting the minimum meal frequency. Overall, this led to 13 per cent of children aged five years and under being classified as malnourished in the 2007 DHS (10 per cent in urban areas, 19 per cent in rural areas, and over 20 per cent in the lowest three wealth quintiles).

As in much of the Pacific, populations are simultaneously dealing with under-and over-nutrition which leads to adult obesity and burgeoning non-communicable diseases (NCDs). Over one-half of adult women and 39 per cent of men in the Marshall Islands are obese and blood glucose are also above the Pacific average, with one-quarter of men and nearly one-third of women aged 25 years or more recording elevated blood glucose (WHO 2016b).

People in the Marshall Islands experience one of the highest rates of type 2 diabetes in the world, and the disease is established at an early age. It is estimated that nearly three in ten people aged 15 years and over, and one in two people over 35 years of age have type 2 diabetes (Davis 2008). The reality of this can be seen in the morbidity outcome – one-half of all surgical procedures in the Marshall Islands are amputations as a result of diabetes.

Changing diet is widely recognised as a major health issue for Pacific Islanders, particularly for those in the Marshall Islands due to a lack of land for food production and the readily available imported American food aid. Even when available, traditional Marshallese food products are often expensive and viewed as too time consuming to cook. For nearly 60 years, a high proportion of Marshallese have been recipients of American food aid, in the form of canned and dried food, much of it high in sugars, fats and carbohydrates. The heavy reliance on bought food or food aid is due in part to those families relocated from American nuclear testing on Bikini, Enewetak and nearby atolls. These nuclear refugee families continue to receive regular compensation payments and American food aid exacerbating the lack of incentive to grow food or to cook it.

The agricultural sector is small but still important to the livelihood of households and the Marshall Islands economy. However, the current tariff structure does not extend price incentives for local food producers (farmers and fishers), and livestock production is almost exclusively for subsistence (FAO 2012). Local fishing and consumption of fresh fish have both decreased across urban and rural areas, although commercial fishing for the overseas market continues to play a significant role in the primary sector economy. In 2012, fishing activities accounted for about 10 per cent of total employment, providing the largest private sector source of employment (FAO 2014).

Outer island communities in particular have become less self-sufficient and are now heavily reliant on remittances and purchased foods (Government of RMI 2007). As a result, an estimated 80 to 90 per cent of food calories are imported. With fresh produce being the most costly of all items, the purchasing preference is for non-perishable items such as rice, instant noodles, canned meat and soft drinks. Food imports make up about 30 per cent of the total import bill in the Marshall Islands increasing household exposure to currency and commodity price variability, as well as the increased health risk from high fat, high sugar, and high salt foods. Some households spend up to half their household income on food (FAO 2014).

The most recent Household Income and Expenditure Survey (HIES) in 2002 showed canned meats, mainly corned beef and SPAM, represented nine per cent of all expenditure on food items, more than the total spent on fruit and vegetables combined. More than one-half of expenditure on non-alcoholic beverages (and five per cent of total expenditure on food items) was on cola soft drinks and Kool-Aid (a flavoured powder mixed with sugar). Other common food purchases were rice, chicken, canned tuna, fresh fish, instant noodles and doughnuts.

Food inflation jumped dramatically to 18.6 per cent in 2008 (from the range of zero to four per cent between the years 2000 to 2007), further impacting on the affordability and access to food (ILO 2017). It was about this time that improvements in under five mortality rates started to diverge from the general Pacific pattern and the rate of improvement stalled.

A high dependency on development assistance and food imports is complicated by vulnerability to natural disasters which further depress food security. For example, the Marshall Islands was recently the recipient of food assistance for disaster relief due to a severe drought. From October to December 2016, the United States provided $US300,000 for household distribution to 3,000 impacted individuals.

Government response to food and nutrition needs

The government of the Marshall Islands has recognised the need to improve food security, nutrition and the retention of traditional local foods while also addressing economic dependency and resilience to disasters and climate change (Heine 2017). But there is limited capacity to address nutritional issues in the Pacific, with an absence of local nutrition training opportunities (Grieve 2013). Fiji is the only Pacific Island country providing specialised tertiary level nutrition training.

A National Plan of Action for nutrition and NCDs is in operation. Elements of the plan include the promotion of nutritious eating with emphasis on local foods; an increase in the production and consumption and of local produce through the development of taxation strategies and agricultural policies; and re-establishing the school lunch program using local food and supporting health education in schools. For example, the locally grown pandanus fruit, naturally high in Vitamin A, formed part of a national program to promote locally grown produce. The 2002 HIES showed pandanus fruit was the second most purchased fruit or vegetable after bananas, accounting for 10 per cent of expenditure in this category.

School feeding programs are enshrined in Public Law 1991-125 (and 2008 revision) to guarantee school children access to nutritious food but budgetary constraints saw a reduction in the delivery and quality of this program.

Augmenting the school lunch menu with suitable nutrition guidelines and regulating local food content inclusion (50 per cent or more) could generate multiple benefits. In addition to improving children's nutritional intake, by using locally grown foods, school feeding programs can also guarantee a steady market demand and thus a reliable income stream for smallholder farmers.

The 'Health Promoting Schools' initiative was launched in 2008 with in-country training by WHO and a memorandum of understanding signed between the Ministries of Health and Education to implement this programme. The Education Department employs two health and nutrition specialists who could administer appropriate lunch menu choices (FAO 2014). The elementary school curriculum includes nutrition training up to grade 8. A curriculum benchmark expectation is that students will be able to use their knowledge of food groups to plan healthy meals.

The Diabetes Wellness Centre promotes healthy food, healthy cooking and healthy lifestyles, and advocates at the political level on eating healthy. Sponsored by various charities, in late 2015, the Majuro Agroforest Park (located at the Leroij Atama Zedkaia Memorial Hospital) opened, allowing patients to pick fresh fruits and vegetables. Locals, trained by technical experts in gardening, are now transferring these seeding and harvesting skills through community workshops (Marshall Islands Journal 2016).

Conclusion

A combination of the geography and history of the Marshall Islands, together with the increasing rate of climate change and the impact of three generations of reliance on, and preference for, American food aid and store bought food and drinks is now evident in the shockingly high rates of diabetes and lack of improvements in child health. With the same vulnerability to climate change, rapid urban migration and shortage of agricultural land it is not surprising to see similar trends in Kiribati where urban population density increases each year. While Marshallese can and do migrate to other American territories this option is not available to the I-Kiribati. In the Marshall Islands, efforts are now being made to encourage healthier eating patterns and greater consideration for nutritious food for infants and small children, in particular during the early years when malnutrition can have lasting impacts on mental and physical development. But while food aid and food imports of particularly low nutritional value remain free or of relatively low cost, and while limited land, climate change and serious water shortages and drought make local agriculture risky, achieving healthier eating patterns will require considerable and consistent support from both government and non government organisations. It is hoped that similar nutritional programmes are to be put in place in Kiribati.

Note:

In the Marshall Islands, a nutrition survey is currently underway and a new 2017/18 Household Income Expenditure Survey is in the planning stages. Data from these surveys will provide valuable information to assess the success of initiatives in the areas of healthy food promotion and local food production in the Marshall Islands and what actions need to be undertaken in the future.

References

ADB (Asian Development Bank) 2015, *Key Indicators for Asia and the Pacific*, 2015 Edition.

Connell J and JP Lea, 1995, *Pacific 2010: Urbanisation in Polynesia*, National Centre for Development Studies, Australian National University.

Crocombe R, 2001, *The South Pacific*, University of the South Pacific, Suva.

Davis, B 2008, 'Defeating Diabetes: Lessons from the Marshall Islands', *Today's Dietician*, 10(8), 24-27.

FAO 2014, *Policy options for improved food security in the Republic of Marshall Islands*, August 2014.

FAO 2012, *Pacific Multi-Country CPF Document 2013 – 2017*: For the Cooperation and Partnership between FAO and its 14 Pacific Island Members.

Grieve, H, J Busch-Hallen, and K Mellor, 2013, 'Undernutrition in Pacific Island Countries: an issue requiring further attention', *Women's and Children's Health Knowledge Hub*, May 2013.

Government of the Republic of the Marshall Islands 2012, *2011 Census Report*, Economic Policy, Planning and Statistics Office, Republic of the Marshall Islands, and the SPC Statistics for Development Programme, 2012.

Government of the Republic of the Marshall Islands, 2011, 2007 *Demographic and Health Survey*, Economic Policy, Planning, and Statistics Office Majuro, Republic of Marshall Islands.

Government of the Republic of the Marshall Islands, 2003, 'A Situation Analysis of Youth and Women', Government of the RMI with assistance from UNICEF.

Government of Republic of Marshall Islands, 2007, *National Action Plan for Disaster Risk Management* 2008-2018, November 2007.

Heine Hilde, President of the Republic of the Marshall Islands, lecture at the Australian National University, May 16, 2017.

ILO, *Labour Statistics Database*, accessed May 2017.

Pacific Community (SPC), *National Minimum Development Indicators Database* (NMDI). Accessed November 2016.

Pacific Islands Forum Secretariat (PIFS) 2015, *2015 Pacific Regional MDGs Tracking Report*, September 2015.

The Marshall Islands Journal 2016. 'Agroforest Park opening', January 15 2016.

UNICEF, 2013, https://www.unicef.org/infobycountry/ marshallislands_statistics.html, 27 December 2013.

UNICEF, 2013, *Children in the Republic of the Marshall Islands: An Atlas of Social Indicators*, UNICEF Pacific.

UNICEF, 2013, 'UNICEF Situation Report No.1, Drought situation Reppublic of the Marshall islands', May 10, 2013.

United Nations, 2015, http://www.un.org/sustainabledevelopment/ sustainable-development-goals/

WHO, 2016a, *Sanitation, Drinking Water and Health in Pacific Island Countries.*

WHO, 2016b, *Marshall Islands: WHO statistical profile.*Ward RG and A Proctor, 1980, *Kiribati: South Pacific Agriculture: Choices and Constraints*, Australian National University, Canberra.

Wikipedia https://en.wikipedia.org/wiki/Ebeye-Island access July 15 2017.

Water supply to informal settlements in Honiara

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Like many other Pacific Island cities, Honiara is facing significant population growth. Its current greater urban population (including surrounding Guadalcanal province) is around 109,000 including the 35,000 living in informal settlements. The urban population is forecast to grow to about 280,000 by 2050 (Waugh 2015), although some estimate 350,000 (Garu 2016). Similar growth is occurring in other provincial towns including Gizo, Munda, Noro and Auki. Household sizes are unknown, although some estimates place the average household size in Honiara at over seven residents. The Solomon Islands population is largely dependent on subsistence agriculture or fishing. Formal employment opportunities are rare and many people in urban areas make a living through informal activities such as taxi driving, producing and selling betelnut, or running market stalls.

Urban infrastructure needs are acute, particularly following a period of political instability and fighting, known as the tensions, between 1998 and 2003. Around 200 people were killed, almost 20,000 displaced, existing urban infrastructure was seriously damaged and the government was bankrupt. Wharf and road infrastructure are only slowly rebuilding after years of neglect, electricity prices are amongst the highest in the world, and reliable access to fresh water is limited. Supply of safe water is a critical element of urban infrastructure but one that is fraught with problems. This paper focuses on some of the lessons learned by the Solomon Islands Water Authority or Solomon Water, in rebuilding an effective water supply.

Solomon Water

Solomon Water is a state-owned enterprise, governed by the State-owned Enterprise Act. It has its own legislation as a water authority and an independent Board of seven directors, to whom the general manager reports. The directors are responsible to two accountable government ministers. Solomon Water provides water supply to approximately 100,000 people in Honiara as well as limited sewerage services to about 20 per cent of the city. Water supply is also provided to the provincial towns of Noro, Auki and Tulagi.

Providing water services has always been a challenge in Solomon Islands because of inadequate infrastructure, water resource access, and lack of financial resources. By 2010 the situation had reached crisis point. During the tensions and beyond, Solomon Water struggled to operate. More than 65 per cent of water produced was not paid for, primarily due to theft and leakage, while revenue collection from registered customers was poor. A huge, unmanageable debt to the electricity supplier had accrued such that, in 2010, Solomon Water was technically insolvent. Adding to water supply strains, its main surface dam at Kongulai was blown up during the tensions, and a number of boreholes

were completely destroyed. Water was available to parts of Honiara for only about five hours per day, but the quality was not guaranteed.

When a new Board was appointed in 2010, one of its first actions was to replace most of the executive staff. Technical advisors and executives funded by the Australian Department of Foreign Affairs and Trade (DFAT) were appointed. They developed a Rapid Action Plan for recovery which was followed in 2013 by a Two Year Plan, supported by DFAT and the Japan International Co-operation Agency Programme. The Two Year Plan included significant capital expenditure work as well as capacity building and reform of other aspects of the business.

Solomon Water now has approximately 130 staff and services about 9,000 customers, with revenue around $SBD120 million. It is a reputable organisation able to meet its operational expenses, including, from late 2017, paying its two expatriate executive managers. Water in Honiara is chlorinated only and generally meets WHO standards for coliforms about 95 to 98 per cent of the time. Occasionally following rain, the surface water in-takes, which provide about 40 per cent of the city supplies, become discoloured and are usually shut down. Chlorination is provided in the town of Noro and will be extended to Auki and Tulagi this year to improve cloriform counts.

The cost of water is relatively high in relation to the median Honiara household income of $SBD58,791 (SI National Statistics Office 2015)—the base domestic rate being around $SBD6 per Kl, rising to around $SDB10 for consumption in excess of 30 Kl per month. For comparison, typically a loaf of white bread costs $SBD9 and 1kg of white rice $SBD13.

Informal settlements

While this paper focuses on issues associated with informal settlements, it needs to be noted that many of the problems and solutions discussed here are not unique to the informal settlements and also occur in formal living areas.

There are many informal settlements in and around Honiara as well as in some provincial towns. Formal access to land through properly structured sub-divisional process is virtually non-existent, and many informal settlements are springing up on government and even privately owned or customary land in the provincial areas around the Honiara city boundary. The settlements are frequently tribally based where peoples of specific traditional groups congregate and live together in one area. Some areas are bound by simple community structures with chiefs taking leadership roles. NGOs and other charitable organisations frequently provide support or social services where needed. The settlements seldom have formed roads or other infrastructure and

simply grow over time, with little or no control or structure. Access to some homes is often on foot by steep, muddy pathways with no lighting or safety measures. Some donor support programmes are now constructing 'Jacobs ladders' to allow better access into these areas. It is not uncommon to see pig pens built over small streams within the settlements, which frequently also act as rubbish disposal areas. Some homes are not typical squatter shacks, but rather well constructed homes on concrete foundations with tin roofs, electricity, toilets, septic tanks, and other facilities. There are, however, some less formal timber homes, some with leaf roofs and no facilities. Open defecation or shared long drop toilets are quite common.

Despite the rapid growth of informal settlements, there are few formal processes to prevent and evict squatters. Government has been granting Temporary Occupation Licenses to some settlers to formalise their illegal occupation but there are problems with illegal settlement in water catchment areas. Solomon Water has designated catchment areas which are intended to preserve catchment water quality, but management of these areas is poor. We are just now starting to exercise some control and attempt to prevent further development within these areas. But it is not just informal settlements that create management challenges, we recently needed to instigate formal action against a government department that was building several houses in a catchment area and failed to stop work on our request.

Water supply to informal settlements

Payment for water is an on-going problem. In my view there are two major reasons for people not paying for their water—unwillingness to pay and inability to pay. The Solomon Islands is among the poorest countries in the world and a number of people may not be able to afford to pay for water. Generally, poverty is greatest in the rural provincial areas. Those living in Honiara or the larger provincial towns, while poor, generally have some ability to pay—possibly through family support via the *wantok* system.

It is my view that most customers can actually <u>afford</u> to pay for water but seem to have the view that it is an absolute right and consequently should be free, or they choose to spend their money on other things. Historically, Solomon Water's rate of revenue collection was low and a customer could accumulate a large debt before they were disconnected. Today the days outstanding for accounts has been reduced to below 90 days and continues to decrease as we become more efficient at collection, and the huge historical backlog has been brought under control.

Some argue that Solomon Water should not be selling water because it belongs to the people of Solomon Islands. Our response is that we are not actually selling the water, simply recovering the added value cost of collection, pumping, treatment and delivery to the customer's door. Free water is available at a local stream or off the roof

during rain should they wish to collect it. Ironically, around 48 per cent of all people in urban areas own a cell phone (SI National Statistics office 2015) and are often available on their cell phone to provide reasons as to why they cannot afford to pay their water bill.

Theft of water is common and we regularly uncover new and ingenious ways that this is done, including drilling holes or removing bolts on steel reservoirs, cutting into pipe lines, removing water meters between the monthly reading cycle, turning meters back, and reconnecting disconnected supplies overnight to fill tanks, to name a few. Corruption through payments to staff for free water connections or to not read meters has also occurred in the past and could still be happening even though Solomon Water has strict policy and assertive action when such practices are discovered.

Practical and community based solutions are being offered to some informal settlements. Some are assisted with water supply through NGO, church or other support mechanisms, and may have storage tanks, stream collection points, water, sanitation and hygiene facilities or similar. In one area on the outskirts of Honiara alongside a major river, water is either drawn directly from the river, or sometimes infiltration wells are dug in the sandy river bank in an attempt to provide rudimentary filtration to the water at a low cost.

The legislation governing Solomon Water and its activities allows for provision of water to gazetted urban areas of the Solomon Islands only, being generally the city of Honiara and the capital towns of the provinces. Despite this, Solomon Water has been providing reticulated water to some informal settlements in Honiara and the surrounding areas in Guadalcanal province.

Revenue collection in all areas is challenging, even more so in the informal settlements. In late 2015, Solomon Water went to disconnect a number of customers in a settlement of 3,000 people who had accumulated a significant debt and clearly had no intention of paying for the water used. Our staff were chased out of the settlement by men with sticks and machetes. Our pipes were then vandalised a few days later, following which the settlement was disconnected, with the exception of a few customers with a good payment history.

Waste water

Solomon Water also provides rudimentary waste water services to about 20 per cent of Honiara, mainly in the older areas developed under Colonial rule in the 1950s and 1960s. Customers connected to the wastewater reticulation system pay a unit charge as a percentage of their water consumption, or in some cases a flat fee. Other than two short pumped outfalls into the harbour, most wastewater is discharged directly to beaches or waterways with no treatment. One pumped discharge in the CBD/port area has basic filtration. Even though water is not fully treated,

people swim, bathe, draw water and wash fish in the waters near to the discharge points.

Where no reticulated sewage is provided by Solomon Water, both legally developed and informal homes and businesses have either septic tanks with direct discharge to the ground (no soakage fields), or no toilet facilities at all. Typical geology in many areas is limestone 'coral rock' or clays providing little attenuation to the bacteriological loads.

Management strategies for informal settlements

In the face of rapid urbanization and ever increasing demand for water services, Solomon Water has developed strategies to manage informal settlements which include:

Revenue management and prompt action. Active management of customer accounts is vital to helping people understand that they need to pay for water, and ensures outstanding debt does not grow to become unmanageable for households. We have dedicated staff to follow up on accounts and the target is to collect all accounts at 30 days. The Board of Directors recently approved a debt management policy to this effect, which also provides for prompt disconnection of unpaid accounts and debt repayment schemes for residential customers.

Reduced connection costs. When I first joined Solomon Water it quickly became apparent that some customers would request a new connection and be provided with a price for this, often around $SBD4000, depending on the distance to the nearest main. The customer never returned as the cost was prohibitive and either made an illegal connection or was supplied by a neighbour. In response, these connection costs were reduced quite significantly to make it more affordable in the hope that at least we would then receive some revenue and recover the connection cost over time.

'Cash Water'. Solomon Water has recently trialled a pre-paid water meter similar to the 'Cash Power' used in the Solomons to provide electricity. Such systems have been widely used in parts of Africa for many years. The system has a number of advantages in that it allows customers to pay a water consumption payment as well as a debt recovery component within a single $ per Kl charge. This will facilitate an even lower connection fee with the capital cost of the connection and any outstanding debt to be repaid over time. It also means customers effectively disconnect themselves when the prepaid top up expires, avoiding staff conflict and revenue loss in making disconnections and reconnections.

'Cash Water' will however not stop theft and we still need to visit areas and be vigilant for illegal connections. The meter units have an anti-tamper device which shuts down the meter if there is any attempt to remove or fiddle with the unit, and then our staff need to visit the customer and reactivate the unit.

As knowledge of the trial has spread we have received much positive feedback about the system and many requests to connect others. The Board has now approved a full scale roll out of 'Cash Water' to all (approximately 8,000) domestic customers and commercial customers with poor payment history.

Community messaging. With the proposed major rollout of 'Cash Water', we are intending to provide comprehensive material relating to why people should pay for water in an attempt to overcome the apparent lack of willingness to pay, or misunderstandings about water charges. This will highlight the added value provided by safe water through chlorination (or treatment where practiced), and the convenience of delivery to the householders door.

We also intend to be quite blunt in our messaging regarding illegal water connections or other forms of theft of water. Essentially the messaging will highlight that those people who access water (or sewage connections) illegally are in fact stealing money from the good people who consequently have to pay more for their water, and in fact are subsiding the theft. At government and other key stakeholder level, messaging will highlight that safe drinking water provides significant community benefit through reduced illness and absenteeism from work, reduced hospital admissions and improved child wellness.

Solomon Water also has a community education officer who, along with our engineering staff, visits schools and community centres to discuss health and hygiene, and frequently works alongside NGOs or other government departments. A more comprehensive range of pamphlets and education material is to be developed.

Management of compromised pipes. When trunk mains were laid many years ago to provide water across Honiara most were placed on government land, which has now become informal settlement areas. There are often many illegal connections to our network. The ground conditions are frequently very hard, with much of the geology being underlain by a limestone 'coral rock', so sometimes the pipes are shallow, or in some cases smaller pipes are even laid on top of the ground.

The most efficient method to quickly remove illegal connections is sometimes to simply lay a new line, and reconnect the registered customers only. When non-registered customers complain (as many do) we can then discuss with them their illegal connection and provide a registered connection. In some settlement areas we use galvanised iron pipes above the ground making it a lot more difficult for illegal connections to be made, and also having the pipe visible for easy inspection by our staff.

Community standpipes. In a few informal areas we have installed community standpipes and some of these are paid for via a community rate, while others provide free water. This was seen as preferable to having people damage the pipe network by making illegal connections, and fulfils one of the State-owned Enterprise objectives of being an organisation that exhibits a sense of social responsibility. Over time these will be converted to individual household 'Cash Water' connections or perhaps require payment via pre-paid top up tokens to access water through the standpipe. This system is used in parts of Africa but we are concerned that unless the messaging is well understood, vandalism of our installations will occur as people will begin paying for what has been a free supply.

Water quality. Water in Honiara is chlorinated and we undertake routine testing at the extremities of the network to confirm appropriate chlorine residual. Currently we do not sample fully in accordance with the frequency or total area coverage required, but are slowly making improvements in this area. A concern is that due to low water pressures, many people run water into their own tanks, sometimes mixing it with roof or other water. The quality within the tanks is unknown, and ultimately beyond the scope
of Solomon Water responsibility.

Conclusion

Informal settlements in Honiara and other provincial towns within the Solomon Islands will continue to grow rapidly, and possibly at an even greater rate than in the past. Neither funding nor the systems to provide adequate infrastructure services to the settlements are forthcoming and it will be necessary for Solomon Water to continue to look for ways to manage the supply of safe water as best it can.

Considering the state of the network and company in 2010, a significant transformation has occurred, and Solomon Water is now able to focus on improvements to supply duration, asset management and water quality. Significant donor funding is required to facilitate implementation of the recently completed Strategic Plan which sets the direction for the future.

Note:

[1.] The views and opinions expressed in this paper are those of the author and do not represent official statements from DFAT, Cardno or Solomon Water.

References

Pacific Region Infrastructure Facility (PRIF) 2015, Unsettled: Water and Sanitation in Urban Settlement Communities of the Pacific.

Garu, M 2016, 'Minister of Lands presentation to urbanization conference', Solomon Star, 28 June 2016.

Gooden, I 2016, Solomon Water: a long road to excellence, but you have to start somewhere…, paper presented to Water NZ conference 2016.

Pasquali, V 2015, The World's richest and poorest countries, https://www.gfmag.com/global-data/economic-data/worlds-richest-and- poorest-countries, accessed 6 August 2016. Piringi, C 2016, 'Payment to ex-militants a "ticking time bomb"', Solomon Star, 11 January 2016.

Solomon Islands National Statistics Office 2015, Solomon Islands 2012/13 Household income and expenditure survey: National analytical report, www.statistics.gov.sb/sinso-documents, accessed 29 April 2017.

Waugh, R 2015, 'Solomon Islands MEHRD AMD Initial Population Growth Projections'.

World Health Organisation 2014, WHO warns of malnutrition in flood affected areas in Solomon Islands, http://www.wpro.who.int/southpacific/mediacentre/releases/2014/nutrition-Solomons-flashflood/en/, accessed 6 August 2016.

Informal settlements in the Pacific and links to sustainable development

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This paper explores the contemporary issues associated with informal settlements in the Pacific in the context of the Sustainable Development Goals (SDGs), particularly SDG 11—Sustainable Cities and Communities. We explore the challenges of water and sanitation service provision in informal settlements, and describe steps being made to address these challenges. Finally, we look at the future of informal settlements in the Pacific in the context of sustainable development, examining specific examples of progress in Solomon Islands and Fiji.

As urban populations grow, so too have rates of urban poverty and populations residing in informal settlements. Given the lack of suitable housing, large numbers of new settlers have no choice but to live in temporary shelters or on marginal land. Informal settlements are characterised by overcrowding, poor access to services (including water, sanitation and electricity), roads and drainage. Settlement areas are also more highly prone to natural hazards such as flooding due to their location on marginal land including mangroves, riverbanks, floodplains and steep slopes (ADB 2016). Informal settlements can exist in many different forms, from newly established settlements of disparate individuals, to those mimicking rural villages through their more mature governance and micro-economic systems (ibid). This, along with the heterogeneity of Pacific Island countries in general, highlights the need for careful consideration in supporting the sustainable development of informal settlements—an issue that cuts across many of the SDGs. As for all complex development challenges, an inclusive approach is required, as advocated by the SDGs. Governments, civil society, the private sector, donors, multilateral organisations and other actors have roles to play to ensure development progress is made for people residing in informal settlements.

Drivers of Pacific informal settlements

Urbanisation is influenced by a combination of forces including globalisation, climate change and natural disasters.

Globalisation: The forces of globalisation are contributing to the urban pull in the Pacific, as described elsewhere in this issue of Development Bulletin. Western and capitalist lifestyles are influencing the values, goals and social norms of Pacific Islanders, resulting in a shift away from communal lifestyles to those more closely tied with individual wealth (Mecartney and Connell 2017). Community and individual expectations of what a desirable lifestyle constitutes are also changing (Connell 2010). This has led to a shift from subsistence to cash economies, and has seen Pacific residents seek paid employment, health and educational opportunities in town. These rural to urban migrants often find themselves forced to live in informal settlements due to lack of availability of affordable housing elsewhere in the city or town.

Climate change and natural disasters: Climate change and natural disasters contribute to rural to urban migration, and also impact upon the conditions and realities for those living in densely populated urban areas. Climate change is rendering some land unproductive through sea level rise and coastal erosion (Connell 2013). Subsistence livelihoods traditionally depended upon by the majority of Pacific Islanders are becoming more difficult, driving the move away from traditional lands and family. Climate change driven migration is seen by some as an adaptive strategy (Fitzpatrick 2015), however it is highly contentious given the underlying cause is the result of carbon emissions from wealthy, far away countries and the fact that Pacific Islanders have strong connections to land, which can be lost as they migrate to the cities (Smith and McNamara 2015).

Natural disasters such as tropical cyclones and droughts are expected to intensify. This, along with the uncertainty of when such events will occur next, will affect people's decisions to leave their subsistence livelihoods for urban locations. Such migration patterns will therefore continue to drive urban population growth, including those of informal settlements.

Key challenges for Pacific informal settlements

Numerous challenges surround the issue of informal settlements in the Pacific. Two are described below; land availability and tenure, and the impacts of natural hazards.

Land availability and tenure: Urban property and land rights, particularly with regards to customary land, are rarely adequately addressed in Pacific urban policies due to the complexity, diversity and key differences from public and freehold systems of land tenure (Mecartney and Connell 2017). Governments often struggle to accommodate systems that differ markedly from policy frameworks which draw on colonial legacies, and are based on historic boundaries, legislation and documented records. Urban boundaries sometimes exclude the growing peri-urban areas where informal settlements are located; therefore government agencies charged with urban management have no jurisdictional responsibilities within these areas (Jones 2012). These and other challenges are significant for informal settlements in the Pacific because newcomers to urban areas need to find ways to negotiate and be accommodated by both systems—traditional customary tenure and formal legalistic government systems. Often, the result is 'temporary' tenure claimed by squatting—and a reason why there is opposition to new urban dwellers (Mecartney and Connell 2017). This will continue to be a challenge for urban policy, particularly with climate change acting as a driver of migration, as

governments are usually reluctant to intervene in matters regarding customary land. Agreements between rural-to-urban migrants and urban customary landowners are sometimes entered into informally, lacking transparency and accountability, and thus create a source of conflict should miscommunications or misunderstandings around the detail take place (Fitzpatrick 2015).

An additional challenge for governments and policy makers is lack of data upon which to base decisions. The nature of settlements and the activities that are undertaken in them are outside the formal system, thus are not easily trackable or measurable. This challenge has been highlighted as one needing to be tackled from a sustainable development perspective, given the SDGs have sub-national goals and targets which rely on sources of data that are absent in the case of informal settlements (Arfvidsson et al 2017).

Impacts of natural hazards on informal settlements: Natural hazards such as tropical cyclones and flooding are a key challenge for people living in informal settlements. When natural disasters occur, it is these areas that are most severely affected, as occurred with tropical Cyclone Winston in Fiji in 2016. Emergency shelter relief and assistance with sanitation in informal settlements in Suva and other urban areas in Fiji was a priority post-Cyclone Winston given the widespread damage to housing in communities (IFRC 2016). Another example comes from the Solomon Islands, where the 2014 flooding prompted a review of the vulnerability of Honiara's informal settlements to natural hazards and climate change. This review revealed numerous issues including pollution of drainage systems, lack of basic sanitation, and erosion of coastal areas upon which communities were located and risk of landslides (Trundle and McEvoy 2016). These issues are likely to worsen as further natural disasters occur, and when the impacts of climate change become increasingly apparent.

Urban development planning can undermine resilience to climate change and natural hazards, which can have serious implications for residents of informal settlements. For example, the removal of natural protective barriers such as mangroves can exacerbate the impacts of sea level rise and erosion. These unintended consequences of poor urban planning increase the vulnerability of informal settlements. For this reason, targets for SDG 13 (Climate Action) require governments to integrate climate change considerations into national policies, strategies and planning—including policies related to urban and city planning. SDG target 13.1 calls on governments to implement local risk reduction measures that enhance the resilience of ecosystems (UN 2016). Such measures would act to protect residents in informal settlements in the Pacific, given their typical proximity to coastal areas vulnerable to flooding.

Case study: WASH in informal settlements

The delivery of adequate and equitable water, sanitation, and hygiene (WASH) services is essential to upgrading informal settlements in the Pacific In addition to providing a foundation for healthy and dignified lives, accessible and appropriately managed WASH services enable sustainable communities through control of pollution, development of local economies via a healthier workforce, and improve the agency of women who are disproportionately affected by restricted WASH services. However, informal settlements in the Pacific typically suffer from WASH services that fail to meet the basic needs of their inhabitants, and effects of climate change could be expected to worsen those conditions.

While urban populations in the Pacific generally have high rates of access to improved water and sanitation infrastructure, regional figures belie troubling evidence that thousands of people living in informal settlements are routinely denied rights to safe water and sanitation. Global monitoring suggests 71 per cent of Pacific urban populations reportedly have access to improved sanitation and 93 per cent have access to improved water supplies (WHO et al 2015). Yet, recent investigations in informal settlements in Melanesian countries have revealed the prevalence of overcrowded and unreliable standpipes, unhygienic pit latrines, and open defecation (Schrecongost and Wong 2015).

These conditions are particularly stressful for women who are subsequently exposed to a heightened risk of physical insecurity, harassment and sexual violence (Amnesty International 2011). Informal settlements in Polynesia and Micronesia are also frequently characterised by limited access to piped water and an absence of sewerage and wastewater treatment (McKay 2009).

The poor state of WASH in informal settlements in the Pacific region reflects a worldwide trend amongst developing countries, but small Pacific Island developing states face unique challenges arising from their natural geography. Low lying atoll countries like the Republic of the Marshall Islands and Kiribati rely on scarce groundwater resources that are threatened by sanitation pollution and unchecked water extraction. Fringing reef systems, which provide invaluable livelihood resources for many Pacific communities, are degraded by the discharge of untreated wastewater into the ocean. Finally, Pacific Islands are highly exposed to severe weather events that frequently disrupt water and sanitation services, and with climate change can be expected to intensify. The precarious, improperly designed, and unregulated water and sanitation systems found in informal settlements thus often vitiate and are vitiated by the natural environment to a much greater degree than found elsewhere in the world.

Groundwork to improve the delivery of WASH services in Pacific informal settlements is underway. Water utilities in Papua New Guinea, Fiji, Solomon Islands and Vanuatu have made efforts to improve services to these settlements. Examples of such efforts include provision of community standpipes with special tariff rates that allow

users to share a single meter, placement of meters at the edge of settlements to sidestep land tenure requirements, improved understanding of customers' willingness to pay, and creation of a special fund for financing new water connections for low income users (Schrecongost et al 2015). Meanwhile, the Sanitation Marketing and Innovation Program in these same countries, driven on the ground by Live and Learn Environmental Education, seeks to engage women and men in facilitating self financing enterprises that improve public and environmental health through construction of appropriate sanitation facilities and promotion of hygienic activities in informal settlements (Civil Society WASH Fund 2015).

The SDGs and the future for Pacific informal settlements

Ensuring an equitable and sustainable future for people living in informal settlements requires an integrated and inclusive approach that addresses the range of issues present in such areas. The SDGs provide an integrated framework for tackling this challenge—one that recognises the importance of various actors' participation in decision making. The SDGs offer an integrative framework for tackling the multi-dimensional challenges in the Pacific, including those associated with informal settlements. The SDG Goal 11 includes targets to achieve safe, resilient and sustainable urban settlements (UN-Habitat 2016). It specifically addresses the challenges associated with informal settlements and slums, given that adequate access to shelter and housing targets 820 million people worldwide.

Goal 6 (clean water and sanitation) has targets to reach universal access and progressive reduction in inequalities including for those in informal settlements. The initiatives described in the WASH case study above represent important steps toward improving the accessibility of WASH in informal settlements and thus contribute towards both Goals 6 and 11. However, their scale and scope must be widened to deal with cascading effects on social and environmental sustainability.

Interlinkages also exist across other SDGs. For example, the promotion of gender equality (Goal 5), which is sorely needed in the Pacific where there are disturbingly high rates of gender based violence and discrimination (UN Women 2011). Goals 13 and 14 (protection of life on land and below water) are also relevant for informal settlements, given the fragility of ecosystem services in the Pacific (Duncan 2011). At the time of writing, efforts are currently underway to make choices on the SDG targets and indicators on which the Pacific region will prioritise, and within this, a firm commitment to addressing the situation in urban informal settlements is much needed.

Some authors have noted that international frameworks, such as the UN Declaration of Human Rights and indicators associated with SDG 11 may not provide national governments with adequate motivation to alter their national policy. However, they may provide some indication and guidance of the type of policy directions needed to address the complex problems associated with informal settlements (Phillips and Keen 2016) and can be a point of leverage for civil society and other actors.

Examples of progress

Developing effective urban policy in the context of the abovementioned challenges in the Pacific is a complex task, requiring participation from diverse actors from a range of sectors. Genuine engagement with informal settlers and their communities is needed, including those typically excluded from such decisions—women, youth, and urban non-customary land owners (Mecartney and Connell 2017). Such engagement is rare and there are few forums and opportunities for these discussions to take place. Furthermore, media coverage of urban issues are usually negative and rarely cover the many opportunities (Keen and Barbara 2016), setting the scene for narrow, problem-focused public discourses.

There are some examples of positive change, however. In the Solomon Islands, Honiara City Council has worked with external agencies to develop the 'Honiara Urban Resilience and Climate Action Plan', released in March 2017, (Trundle and McEvoy 2016). The plan includes mention of informal settlements and the need to address pressing environmental issues. The document notes that comprehensive community consultations were undertaken, including with government and non-government organisations. Despite these positive first steps, informal settlements residents still remain largely excluded from these dialogues, and this will likely continue until ways are developed to support greater inclusion in policy making and formal planning processes, for example by legislative reforms that ensure equity for informal settlers (Foukona 2017).

The Fijian government was one of the first in the Pacific to extend rights to informal settlers. There has been a significant shift in urban policy with regards to how informal settlers are viewed. For example, the National Housing Policy and even the Constitution include protection against arbitrary eviction (Phillips and Keen 2016). Senior government officials have also acknowledged the need to adhere to the UN Charter for Human Rights, with regards to the government supporting informal settlers in finding adequate housing (ibid). A progressive policy has been established to allow informal settlers to access land at reduced costs. Such a policy has mutual benefits for both informal settlers and the government. Settlers are provided with an entry point to the housing market and access to basic services (ibid). Furthermore, the government has a greater awareness of population numbers in peri-urban areas and can therefore better plan for service needs into the future. This approach addresses the informal settlement challenge head on, as opposed to dodging the issue by excluding such areas in urban population records, as is done elsewhere (Jones 2012).

Along with these location specific examples, social and technical change across the region—including in technology, finance and transport—is also providing progress for residents of informal settlements. Mobile phone technology provides better connectivity between urban residents and their rural dwelling families (Keen and Barbara 2015). Finally, Jones (2012) and ADB (2016) note the growth and expansion of 'urban villages' in the Pacific, which are urban, often unplanned and 'informal' settlements, with traditional rural village-like characteristics, including kin based governance structures, micro-economic activities (for example, mini-stores and canteens) and home gardening. They bring higher levels of urban social security and provide social mechanisms for dealing with urban poverty and hardship. (ADB 2016). Settlements such as these are likely to continue to grow and expand, requiring a rethink and adjustment of how urban planning and policymaking take place to accommodate the needs of these populations.

Conclusion

The role and composition of urban areas in the Pacific are diverse and ever changing, with informal settlements becoming a key feature of all Pacific cities and towns. Urbanisation patterns are likely to continue on the same path, meaning increasing numbers of urban residents and growing populations living in informal settlements. Climate change, natural disasters and the forces of globalisation will continue to drive such migration patterns, forcing governments of the region to directly address the needs of an increasing number of residents in urban areas.

As rural livelihoods grow more untenable and as growing urban populations necessitate more social welfare, the pressure increases for governments to proactively plan how to provide the structure for people to secure their wellbeing in towns and cities. The next steps are to draw on progress to evolve more effective policy approaches for addressing the complex sustainable development issues facing informal settlements within the Pacific Island context.

The SDGs provide a framework and policy guidance for tackling the complex challenges associated with informal settlements. Some governments, for example Fiji and the Solomon Islands (among others) are implementing policies and plans that aim to address these issues. Concerted efforts are needed by national and subnational governments, as well as donors and the non government sectors, to harness the potential of informal settlements and provide residents and their communities with a future that offers the possibility of fulfilment and wellbeing.

References

Arfvidsson, H, D Simon, M Oloko and M Moodley 2017, 'Engaging with and measuring informality in the proposed Urban Sustainable Development Goal', *African Geographical Review*, 36(1),100-114.

Amnesty International 2011, *Where is the dignity in that? Women in Solomon Islands slums denied sanitation and safety*, London.

ADB (Asian Development Bank) 2013, *Moving from risk to resilience: Sustainable urban development in the Pacific, Pacific Study Series*, Asian Development Bank, Manila, Philippines.

ADB (Asian Development Bank) 2016, *The Emergence of Pacific Urban Villages: Urbanization Trends In The Pacific Islands*, Pacific Studies Series, Manila, Philippines.

Civil Society WASH Fund 2015, *Civil Society Organisations and WASH service delivery in the Pacific: Synthesis Report of the Pacific Regional Learning Event*, Canberra.

Connell, J 2010, 'Pacific islands in the global economy: Paradoxes of migration and culture', *Singapore Journal of Tropical Geography*, 31, 115–129.

Connell, J 2013, 'Soothing Breezes? Island perspectives on climate change and migration', *Australian Geographer*, 44(4), 465-480.

Duncan, D 2011, *Freshwater under threat Pacific Islands: Vulnerability assessment of freshwater resources to environmental change*, Bangkok, http://www.pacific-iwrm.org/community/showthread.php/42-UNEP-SPC-Pacific-Islands-Freshwater-Vulnerability-Assessment-Report, accessed 14 May 2017.

Fitzpatrick, D 2015, *Land and human mobility in the Pacific: The effects of natural disasters*, discussion paper for the Nansen Initiative, https://www.pacificclimatechange.net/document/land-and-human-mobility-pacific-effects-natural-disasters-discussion-paper, accessed 14 May 2017.

Foukona, JD 2017, 'Solomon Islands' Urban Land Tenure: Growing Complexity', *State, Society and Governance in Melanesia 'In Brief'*, 5, Australian National University, Canberra.

IFRC (International Federation of the Red Cross/Red Crescent Societies) 2016, *Emergency Plan of Action (EPoA) Fiji: Tropical Cyclone Winston*.

Jones, P 2012, 'Pacific Urbanisation and the Rise of Informal Settlements: Trends and Implications from Port Moresby', *Urban Policy and Research*, 30(2), 145–160.

Keen, M and J Barbara 2016, 'Pacific urbanisation: changing times', *DevPolicy Blog*, Feb 25, 2016, http://devpolicy.org/pacific-urbanisation-changing-times-20160225/, accessed 13 March 2017.

McKay, J 2009, *Poverty housing in the developing nations of the Pacific islands*, Bangkok, https://www.habitat.org/sites/default/files/ap_HFHAP_Pacific_Report.pdf, accessed 14 May 2017.

Mecartney, S and J Connell 2017, 'Urban Melanesia: The Challenges of Managing Land, Modernity and Tradition', S Mcdonnell, MG Allen and C Filer (eds.), *Kastom, property and ideology land transformations in Melanesia*, Australian National University Press, Canberra.

Phillips, T and M Keen 2016, 'Sharing the City: Urban Growth and Governance in Suva, Fiji', *SSGM Discussion Paper 6*, Australian National University, Canberra.

Schrecongost, A and K Wong 2015, *Unsettled: Water and Sanitation in Urban Settlement Communities of the Pacific*, Washington DC.

Schrecongost, A et al 2015, 'Delivering water and sanitation to Melanesian informal settlements: Preliminary findings of a review of WASH services in informal settlements of the Melanesian region', *Journal of the Australian Water Association*, 42(3), 40–43.

Smith, R and KE McNamara 2015, 'Future migrations from Tuvalu and Kiribati: exploring government, civil society and donor perceptions', *Climate and Development*, 7(1), 47–59.

Trundle, A and D McEvoy 2016, *Honiara Urban Resilience & Climate Action Plan*, with UN-Habitat's Cities and Climate Change Initiative and RMIT University Climate Change Adaptation Program, RMIT, Melbourne.

UN, 2016, *Goal 13 Take urgent action to combat climate change and its impacts*, https://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-13.pdf, accessed 28 April 2017.

UN-Habitat 2016, *SDG Goal 11 Monitoring Framework: A Guide to Assist National and Local Governments to Monitor and Report on SDG Goal 11 Indicators*, UN-Habitat et al, February 2016.

UN Women 2011, *Ending Violence against Women and Girls: Evidence, Data and Knowledge in Pacific Island Countries*, Suva, Fiji.

World Bank 2015, *Unsettled: Water and Sanitation in Urban Settlement Communities of the Pacific*, World Bank Group and Water and Sanitation Program, with UN-Habitat, UNICEF and ADB.

WHO et al 2015, *Sanitation, drinking-water and health in Pacific island countries: 2015 update and future outlook*, Geneva.

Youth in search of a future:
Urban drift, education and work in Timor-Leste

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The population of Timor-Leste is characterised by a youth bulge, most strongly evident in the urban areas. The urban drift of youth is driven by greater urban opportunities for education, training and work. Generally, youth have perceived that 'employment' means a government or private sector job, the opportunities for which are very limited while agriculture is seen as an activity of last resort. Now, after 15 years of independence, this paper analyses the situation of young men and women in Timor-Leste from a development perspective, and considers new strategies to address the growing and urgent need of young men and women to access greater economic opportunities.

Youth and the transition from school to work

'Youth' is often defined as the age group making the transition from education to work but in countries with a high youth population and limited work opportunities, people may be considered as 'youth' up to 30 or 35 years of age. This is the case in Timor-Leste where the age for youth used in the 2005 National Youth Survey and the 2016 Youth Wellbeing Survey was 15-35 years (Ferreira 2016).

Defining 'youth' as those in the transition from education to work is to understand it as a phase of life. However, in Timor-Leste there is also a traditional view in which youth refers to those who are unmarried. This conceptualisation of youth can differ between genders because men marry much later than women. In Timor-Leste almost a quarter of women aged between 20-35 years are married[1] by the age of 18 in contrast to only four per cent of men married at this age. By 25 years old, 80 per cent of women, but only 50 per cent of men, are married (NDS 2010). Thus married women, although young, are expected to engage in domestic work and are often socially excluded from activities that might be orientated towards youth.

Since independence in 2002, the message that both girls and boys should attend school has been largely accepted by the community, particularly for primary school but it continues to be common for young women to be stopped from further study at puberty, especially if the school is far away and parents have concerns about their safety and purity. Children normally attend primary school in their village, but often need to move to an urban area to attend pre-secondary school, that is, after year 9. Further, nearly half of all secondary school students are in Dili with the rest in district towns. This results in many rural children leaving home to attend post-primary education, staying with extended family members, other families, or even living independently. Young people studying away from home often have a high degree of independence, especially the boys who face less family control. Once in an urban area they are likely to stay to look for work or training opportunities after they have finished their study.

The expectations of those who have attended secondary school are high, with the idea of 'employment' strongly linked to working in a government office (Ostergaard 2005). Education was not available to the majority of the population prior to the Indonesian occupation, and young people recall that during the occupation, Indonesian teachers encouraged children to attend school saying that education would enable them to get a government job (Wigglesworth 2016) so it is not surprising that secondary education is still expected to be a passport to a job. These expectations are unrealistic because each year around 18,000 children leave school with low skill levels, and the number of new jobs available, even in Dili, are only a few hundred (Lao Hamutuk 2016).

In rural areas, parents often pay school fees in expectation that their child will bring an income into the family after they graduate, and that education will provide a better life than their marginal subsistence. Thus, returning to work on the family farm does not meet the expectations of either the parents or youth. In the districts, where there are even fewer formal employment opportunities than in Dili, agricultural work and other forms of casual paid work are still excluded from people's concept of employment.

Many young people, particularly men, migrate to Dili or the main town in their district, hoping to find training opportunities or work while young women are more likely to be kept at home. Rather than an office job, driving taxis, running minibuses and street trading have become major income generation activities for young Timorese with few skills. These activities are seen as transitional work while awaiting the desired office job.

Young people have also moved to the small towns in their district, where there are often local organisations offering computer skills training and English classes, both of which are popular because they are strongly associated with increased chances of getting paid work. It is not uncommon for young people to work as volunteers in a local NGO as a way to build skills and connections that may increase their chances of getting future paid work. The urban areas offer better functioning mobile phone services than in the rural areas and digital communication has become an important means of socialising through social media and hearing about opportunities for jobs and training.

Youth in the labour force today

Overall, only 31 per cent of the working age population is in the labour force which is much lower than the global average of 75 per cent for least developed countries. At 21.3 per cent, female labour force participation is among the lowest in the world (ILO 2016). Close to a quarter of young people are, economically speaking, idle—they are

neither in the labour force nor studying, though some may be engaged in the informal economy. For both men and women, the chances of becoming employed increase as they get older.

The 2015 census data shows that 56 per cent of the population aged 15-64 were economically active, either working or looking for work. The highest rates of economic inactivity are found in Dili because of the very high proportion of young people who are students (Ferreira 2016). From 2010 to 2013 there was a 45 per cent increase in the total working age population in Dili, around 22 per cent were migrants who moved to Dili for economic and educational reasons (ILO 2016:11).

Urbanisation, employment and development

The lack of jobs has been a long term issue in Timor-Leste. Ten years ago, Timor-Leste underwent a major political crisis, in which under educated and under employed youth engaged extensively in street violence. Since then the government, using petroleum revenues, as well as international donors have supported social programmes including for youth employment and training. USAID has engaged in a youth work readiness programme, '*Prepara Ami ba Servisu*' (PAS), to provide out of school men and women between the ages of 16 and 30 with workforce development training in their rural communities. This was benefiting over 2,000 youth, 54 per cent of whom were women, in nine districts of Timor-Leste (EDC 2010). At the same time, Australia's aid programme in Timor-Leste has funded competency standards and accreditation processes for vocational training and employment, and supported the ILO implemented Youth Employment Promotion Programme. This programme provides job counselling and skills training to Timorese looking for work, as well as work experience through short-term jobs in public works, such as rehabilitating and maintaining the country's rural roads using temporary local labour, particularly youth.

In 2012, the Youth Employment Programme was estimated to have assisted 78,000 young women and men under 30 years of age to get temporary work, but it was estimated that only five per cent could be linked to ongoing employment opportunities (DFAT 2014). Permanent jobs remain elusive, and for most young people, the availability of jobs continues to be small compared to the large cohort of youth leaving formal education in search of work. Some of the youth who have participated in these programmes have established small businesses and others, at least, have good building blocks for future work.

The proportion of women seeking work is significantly lower than that of men. Using a definition of 'employed' as 'someone that works at least one hour for a wage in the week prior to the survey, or who works in unpaid labour for an enterprise owned by their household' and 'Not in Education, Employment or Training' (NEET) as a measure of young people out of work and education, more than half

the female population are in NEET by the age of 25 to 29. Young women are likely to be engaged in housework; some of these may want work but have given up looking but in addition to doing housework 58 per cent are engaged in other economic activities (Curtain 2012). It is likely that women's labour growing and selling food is incorrectly considered as an extension of women's housework role, rather than classified as productive work.

Migrant employment

To deal with lack of employment opportunities, the Timorese Government announced in August 2017, that it is seeking opportunities overseas for youth employment.[2] The Government has initiated bilateral programmes to promote temporary overseas migration for young people to work in Australia and South Korea. The South Korean temporary workers programme is a government to government initiative with Timor-Leste becoming the fifteenth Asian country to join the Korean Employment Permit System (EPS) for youth aged between 18 and 35. Between 2009 and 2015, this programme has enabled 2,000 young Timorese to work in Korea (Wigglesworth and Fonseca 2016). Since 2012, the Australian Seasonal Workers Programme has to date enabled 593 Timorese, aged between 26 and 35, to work in seasonal activities for a few months a year.[3]

The lack of gainful employment in Timor-Leste is highlighted by the flow of Timorese migrant workers to cities in the United Kingdom, with an estimated 16,000 Timorese there for work. Unlike the the two programmes discussed, finding work in the UK is an individual endeavour and as many are there on Portuguese passports they are not entitled to consular support. According to the author's research , many, including university graduates, take unskilled work in UK meat processing factories, restaurant kitchens, and provide warehouse labour for supermarket chains. A recent survey showed that a fifth of all families have a family member overseas (IRI 2016).

Returning migrant workers who have expressed a desire to establish enterprises with the new skills they have gained in small agricultural and fishery enterprises in Korea are frustrated that they do not know how to access support for establishing small businesses (Wigglesworth and Fonseca 2016). Seasonal workers from Australia have also learned useful skills in hotels and restaurants which could be valuable in strengthening the eco-tourist potential in Timor-Leste by providing the accommodation and transport services needed for international visitors. Many returned migrants claim they lack either the skills or finance required to establish a business, but their new attitudes towards working hard, achieving production targets and being on time, will put them at an advantage over those youth who have not worked since leaving school.

The way ahead

Timorese urban youth have limited opportunities to access formal employment; their age, education and gender all affect their ability to gain employment. There is a widespread expectation among school leavers that education should lead them to a job in the formal sector, but primary and pre-secondary educated people are most likely to be self-employed, or in a family enterprise. Women are half as likely to get a job as their male counterparts, but are also less likely to identify as unemployed, due to their unpaid domestic labour responsibilities which masks their work aspirations and economic productivity. Women are often considered better managers of money than men. Given the strong gender division of labour in the city and rural areas, more needs to be done to ensure women's voices are heard. In cities, where the need for income to support households is high, female resourcefulness in productive enterprises could be better supported.

In an 'infant' economy the culture of business and entrepreneurship needs to be established and supported, especially in rural areas to open up economic opportunities outside of the cities. The experiences of Timorese migrants working overseas in small businesses could be leveraged. Opportunities to enhance business and technical skills are needed but they need to be placed in the municipalities, not in Dili.

Young people need to be supported to transform their thinking about employment options, and to embrace more dynamic entrepreneurial activity. Stemming the flow of youth to the city depends, in part, on rural development and enabling rural entrepreneurial activities for income generation. The opportunities to meet the food needs of a growing urban population are many, and include the introduction of new crops and methods, food processing and preservation techniques to reduce food losses during rural-urban transport.

When local enterprises can provide a greater supply of fresh Timorese produce to the urban areas, the gulf between urban and rural development will start to be reduced. To redress the current imbalance, where opportunities are concentrated in Dili, promotion of small enterprise development needs to be supported to encourage young people to stay in the rural areas.

Notes

[1] Marriage in Timor-Leste is defined as when the person began living with her/his first spouse or partner.

[2] Jacinto Barros Gusmão, General Director of SEPFOPE in a press release on 1 August 2016.

[3] Data from SEPFOPE office, November 2016.

References

Curtain, R 2012, 'A Census Report on Young People in Timor-Leste in 2010', National Statistics Directorate, Dili.

DFAT (Department of Foreign Affairs and Trade) 2014, 'Evaluation of Australian aid to Timor-Leste', Office of Development Effectiveness, DFAT, Canberra.

Education Development Centre 2010, *Prepara Ami ba Servisu*, Quarterly report 30 July 2010, Education Development Centre, Washington, http://pdf.usaid.gov/pdf_docs/pdacx360.pdf, accessed 22 April 2017.

Ferreira, E 2016, 'Launch of the main results of the 2015 Census of Population and Housing', Director General of Statistics, Ministry of Finance, November 2016, www.statistics.gov.tl/wp-content/uploads/2016/11/Launch_2015_census_presentationEnglish.pdf, accessed 22 April 2017.

ILO (International Labour Organization) 2016, *Structural Transformation and Jobs in Timor-Leste*, International Labour Organisation, Dili.

Inder, B and K Cornwall, 2016, 'Private Sector-driven Development in an Infant Economy', *Research Paper Series on Timor-Leste RP-TL4-English*, 60, Monash University, Clayton.

IRI (International Republican Institute) 2016, 'Poll by Centre for Insights in Survey Research', International Republican Institute, Dili, November 2016.

Lao Hamutuk, 2016, 'Rights and Sustainability in Timor-Leste's Development', November 2016, www.laohamutuk.org, accessed 22 April 2017.

NDS (National Directorate of Statistics) 2010, 'Timor-Leste Demographic and Health Survey 2009-2010', National Directorate of Statistics, Ministry of Finance, Dili.

Ostergaard, L 2005, *Timor-Leste Youth Social Analysis*, World Bank, Dili.

RDTL (Republica Democratica de Timor-Leste) 2011, 'Timor-Leste Strategic Development Plan 2011-2030', Dili.

SEPFOPE and ILO 2016, 'Timor-Leste Labour Force Surveys 2010 and 2013: Main Trends Based on Harmonized Data', ILO, Dili.

Wigglesworth, A 2016, *Activism and Aid: Young citizens' experiences of development and democracy in Timor-Leste*, Monash University Publishing, Clayton.

Wigglesworth, A 2017, 'Transitional Livelihoods: Timorese migrant workers in the UK', paper delivered to Australasian Aid Conference, ANU Canberra, February 2017

Wigglesworth, A and Z Fonseca, 2016, *Experiences of young Timorese as migrant workers in Korea*, paper presented at the Australasian Aid Conference 2016, Canberra, http://devpolicy.org/2016-Australasian-aid-conference/Papers/Wigglesworth-Fonseca-Experiences-of-young-Timorese-workers-in-Korea.pdf, accessed 22 April 2017.

Book review

ACTIVISM AND AID: Young citizens' experiences of development and democracy in Timor-Leste

Author: Ann Wigglesworth

Activism and Aid provides a detailed review of the experiences of young people in Timor-Leste following the brutal fight for independence from Indonesia and the impact of the subsequent flood of international aid and aid organisations. The author had an unusual opportunity to study the first years of development of a new nation and the forces that shaped it. She examines the first 10 years of 'development', the development paths available, and the experiences and involvement of young people from different backgrounds in trying to negotiate between the values of customary life and urban modernisation to build a nation based on active participation in civil society and governance. In particular, this book provides detailed insight into the thoughts and actions of two generations of young people during these 10 crucial years - those involved in the liberation struggle, many of whom missed out on education and were traumatised by the violence before, during and after independence and young people today many of whom are urban and unemployed, but some of whom are volunteers in civil society-based organisations. The book successfully identifies the ways in which local community-based organisations, in particular the Catholic Church, have provided an organisational focus for both independence and for participation in bottom-up development that reflects Timorese visions of an independent nation.

The discussion on the difficulties and underlying tensions between internationally promoted development and the aspirations of the Timorese, in particular the aspirations of young, provides valuable developmental insights. The book critiques the overwhelming number of aid agencies and the very limited extent to which they considered the Timorese concept of active citizenship. It very successfully employs the voices of younger generations of activists to provide perspectives on 'doing development' as a means of engaging in affairs of State.

In considering the impact of aid and aid organisations in Timor-Leste, the author points to growing development inequalities between urban and rural areas, a situation that is increasingly common in Pacific Island countries. The largely rural population continues to adhere to customary leadership and values and has almost no contact with the capital or the benefits of development. This has led to high levels of inequality and in effect, two societies – one that emphasises community well-being over individual self-interest in contrast to the individualism of the western world of those living in town.

Ann Wiggleworth's study demonstrates that "government processes based on western democratic ideals can inadvertently create parallel systems to existing customary processes based on different understanding, logic and principles of community values, rights and responsibilities". It points clearly to the unintended consequences of development plans and policies that are ignorant of, or do not take into adequate consideration, Timorese culture and beliefs or the influence of the Church as perhaps, the country's most far reaching and powerful organisation for mobilising development activities.

For those working in the area of development and most specifically development in post-conflict situations this book is a well-researched and valuable addition to the post-conflict literature.

Activism and Aid provides valuable chapters on custom, gender issues and youth conflict and the problems associated with rapid urban migration of young people looking for education and employment. I would recommend this book to those interested in development, aid, urbanisation, inequality and post-conflict societies and the impact of all five on the lived experience of young men and women.

Activism and Aid: Young Citizens' Experiences of Development and Democracy in Timor-Leste is published by Monash University Publishing. Hard copies are available from AETA, Melbourne, Livros e Companhia Bookshop, Dili; Glebe Books, Sydney and the Asia Bookroom, Canberra. Hard copy $39.95. An electronic version for Kindle is $24.14 or free on HTML. It is available through the website:

http//www.publishing.monash.edu./books/aa-9780980510874.html

Pamela Thomas

Books and films

Film synopsis

'The Opposition' documentary: The fight for Paga Hill, Port Moresby

Hollie Fifer, Media Stockade and Andre Frankovits, Beacon Films Pty Ltd

'The Opposition' is an award-winning investigative documentary set in Papua New Guinea that follows the struggle of local leader Joe Moses to save his 3,000 strong community from being forcibly evicted from their homes at Paga Hill, Port Moresby. Despite betrayals, police brutality and risks to his own life, Joe battles through the courts for three years fighting those who want to take away his community's home.

The saga starts on Mother's Day, Port Moresby 2012 when 100 policemen wielding machetes and assault rifles descend on the Paga Hill settlement to bulldoze their houses to make way for a new multi-million 'master planned development' including a five-star hotel, marina wharf and executive residential apartments which will 'set a new precedent in PNG'[1].

As the struggle unfolds, Joe Moses recruits a coalition of allies including Dame Carol Kidu, investigator Dr. Kristian Lasslett and a motivated team of pro-bono lawyers. Piecing together the evidence, *The Opposition* shines a light on the pressures of urban development at a time when displacement is becoming a common occurrence for communities around the world.

The timeline of events at Paga Hill

1987 Paga Hill declared a national park. However, the government department charged with its maintenance was disbanded.

1988 A developer named Paga Hill Landholding Company (PHLHC) submits an expression of interest in developing the site.

1997 With Ministerial support, PHLHC granted a five year Urban Development Lease to develop the site. At the time the lease was issued, the land was still zoned open space. PHLHC was owned by Rex Paki, Felix Leyagon and Fidelity Management Pty Ltd. The latter owned by Gudmundur Fridriksson and Byron Patching.

2000 Registration of a new company, the Paga Hill Development Company, entirely owned by Fidelity Management Pty Ltd.

2000 PHDC granted a 99 year lease for a prescribed rent. The CEO of both companies is Gudmundur Fridriksson.

2000 The rent for Paga Hill under the 2000 Urban Development Lease is K250,000 per year with an improvement covenant of K10 million and a handwritten amendment reducing the rent to K50,000 per year.

2009 PHDC negotiates a revised 99 year business lease. The annual rent is officially reduced to K50,000 and the improvement covenant to K5 million.

2012 February 16, an eviction order is made by the District Court of Papua New Guinea and on April 4 an ultimatum is delivered to the community giving them options for leaving the settlement including moving to Six Mile, the site of a large decommissioned dump and a K17,000 settlement[2].

In pursuit of justice, community organizers enlisted the support of a wide range of international organizations. One of these is the International State Crime Initiative, "a multi-disciplinary, cross-institutional and international initiative designed to gather, collate, analyse and disseminate research based knowledge about criminal state practices, and resistance to these practices".

May 2 2012 The police come to Paga Hill to prepare for the eviction and tell the community that an eviction order has already been granted by the courts. The community organized to stay the order and this was denied by the court on 11 May with the community being given until 18 May to move out. The community, led by resident Joe Moses, took action for a stay on humanitarian grounds to halt the demolition. The appeal by the community was to be heard on May 12.

May 12 2012 Without waiting for the court hearing the police arrived with bulldozers and began to tear down houses, beginning with Joe Moses' and his neighbours' houses. The then leader of the Opposition in the PNG Parliament, Dame Carol Kidu, a strong supporter of the community's rights, objects and comes to Paga Hill in an attempt to prevent the threatened eviction. She is taken away by the police but later released without charge. The stay is granted by the court and once Joe arrives at Paga Hill community, the police stop the demolition.

29 January 2014 The National Court rules in favour of the Paga Hill Development Company stating that Portion 1597 boundaries went from the summit of Paga Hill to the waterfront[3] and therefore includes the land on which the settlement is located. The community appeals.

29 May 2014 Four policemen come to Mr. Moses' reconstructed home in Paga Hill Settlement and attempt to arrest him without an official arrest warrant. Tear gas canisters were deployed within the community and shots fired in the air. Mr. Moses refused to leave with the police officers when they failed to produce a warrant and insisted on accompanying the police officers in his own vehicle to the police station to verify if there was an official arrest warrant against him. Upon arrival to the police station, both in downtown Port Moresby and in Boroko, Mr. Moses found that there was no arrest warrant against him. Outside the police station, while Mr. Moses was speaking with his lawyer, intoxicated plainclothes officers

attempted once again to arrest him, but were unsuccessful. Due to the ongoing police surveillance, harassment and threats, Mr. Moses went into hiding to avoid arbitrary arrest.

3 June 2014 The police issue a press release entitled 'NCD Police on hunt for Joe Moses for unlawful discharge of firearm'. The statement claims that Mr. Moses had escaped from custody, and is the subject of a manhunt. It is also alleged that Mr. Moses owned a firearm, without a license. However, Mr. Moses did not own a firearm, and no official arrest warrant had been issued against him.

1 July 2014 With the presentation of evidence from a new land survey which showed that Portion 1597 was a separate area of land from the piece of land leased to Paga Hill Development Company, the Supreme Court rules in favour of the Paga Hill community.

21 July 2014 Police undertake another demolition in the Paga Hill community.

25 July 2014 The Royal Papua New Guinean Constabulary's Chief Superintendent Nicholas Miviri issues a letter to the General Manager of Curtain Bros PNG Ltd stating,

"This office has been advised that you are alleged to be unlawfully causing destruction to structures and evicting persons living at Paga Hill in the National Capital District. We have been served copies of the Supreme Court Orders dated July 1, 2014 and which has been verified at the Supreme Court Registry to be correct… You are instructed to cease all forms of demolition or eviction until Police are fully satisfied that your activities are lawful based on our investigations."

September 2014 Mr. Moses receives threatening messages, including drawings and death threats at his office at the University of Papua New Guinea.

10 October 2014 The final demolition and forced eviction of the Paga Hill community. The police burn the school, the church and the houses, bash women and children at gunpoint and flatten the community which is forced to leave.

To join 'The Opposition's' campaign to seek justice for the Paga Hill Community visit: http://theoppositionfilm.com/#take-action

#TheOpposition@OppositionDoc

Notes

[1] "Property developer Gummi Fridriksson on leave to concentrate on business interests in PNG", *The Australian*, 16 October 2012

[2] http://www.pngblogs.com/2012/10/not-just-criminals-response-to-paga_30.html and https://www.greenleft.org.au/content/papua-new-guinea-aust-exec-admits-role-human-rights-abuse

[3] Orders 3 and 4 of the National Court of January 29 re Proceedings OS No. 573 of 2012

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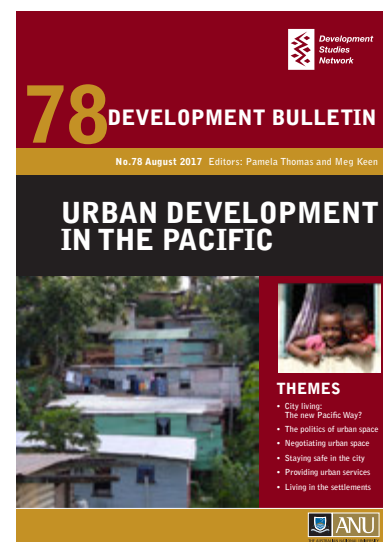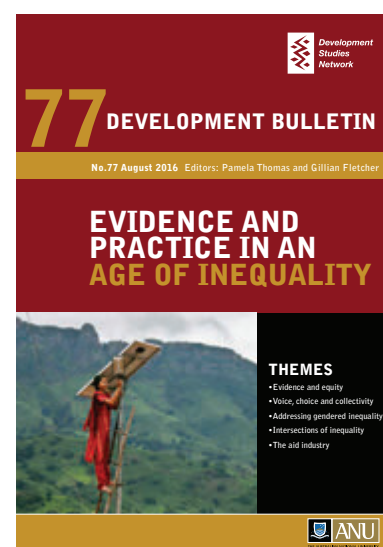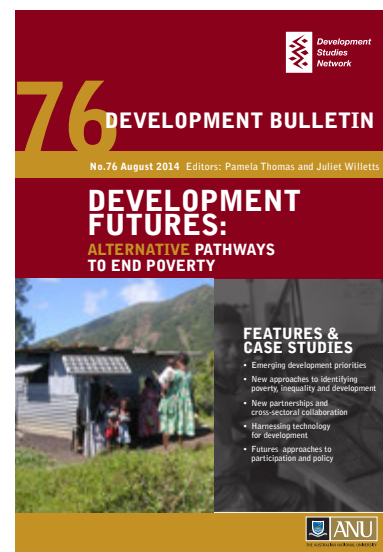Water, Governance and the Political Economy

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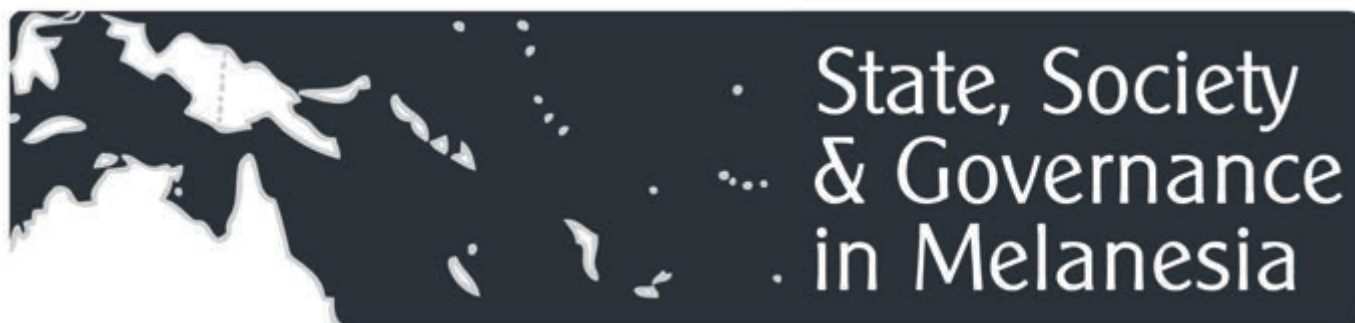Population Change in Asia and the Pacific

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