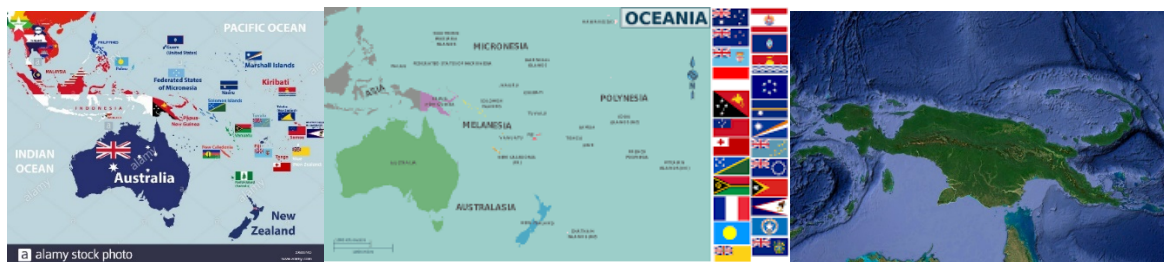


Oceania; Australia's close neighbours

Australia and New Zealand are part of Oceania and as the only first world nations in the island group have a heavy responsibility in assisting the minor nations of the region.

For Australia, New Guinea is just five kilometres from the nearest populated Australian island (Boigu Island) and during periods of glaciation New Guinea and Australia form just one island (**Sahul**) yet most maps don't include the whole of New Guinea as part of Oceania - for good reason: [The US government managed to engineer a meeting between Indonesia and the Netherlands resulting in the New York Agreement, which in 1962 gave control of West Papua to the United Nations and one year later transferred that control to Indonesia.](#) The Papuans were never consulted (but) the agreement did promise them their right to self determination – a right which is guaranteed by the UN to all people in the world; <https://www.freewestpapua.org/>. Little in the way of information comes out of the western end of New Guinea, but exploitation continues (and no 'right to determination' has been exercised). This situation causes almost continuous armed conflict between the Free West Papua movement and Indonesian forces. Yet the UN, in the 1960s and 1970s, pressed for 'self determination' in the Australian administered Territory of Papua New Guinea - and Papuan New Guinea became an independent nation in 1975. 'Self determination' is unlikely to take place in West Papua any time soon so that part of New Guinea will remain outside Oceania for the foreseeable future.

However, it's likely that Australia *will* be called on to assist in that part of New Guinea during times of stress for the indigenous population of West Papua.



Papua New Guinea is Australia's nearest neighbour - the people of Boigu Island are related to nearby Papuans - yet, most Australians are unaware of the desperate situation many people of PNG are in as the climate there warms faster than in Australia, and sea levels rise more rapidly, than in Australia: [Satellite data indicate the sea level has risen near Papua New Guinea by about 7 mm per year since 1993.](#) This is larger than the [global average](#); the latest satellite survey indicates a 'global average' rise of around 4.2 mm per annum. The first climate refugees in the world are considered to be a small island community in Papua New Guinea, in 2005, as salt water entered the groundwater system and ruined their food gardens: [The Carteret Islanders of Papua New Guinea have become the world's first entire community to be displaced by climate change.](#) They're the first official refugees of global warming – and they're packing up their lives to move out of the way of ever-rising waters that threaten to overtake their homes and crops. [The island they call home will be completely underwater by 2015:](#) Asia Pacific Viewpoint, Vol. 57, No. 1, April 2016. For the Highlands of PNG: [El Niño](#) conditions (which occur more frequently now) have brought about starvation due to drought in the thickly populated high valleys; and this is exacerbated by frost descending into even higher valleys where the food gardens are completely destroyed; the population of the higher valleys descending into the already distressed lower valleys to seek assistance (Australian National University Pacific unit, 2017). [Delivering food supplies out from main centres to the remote locations is a costly challenge.](#) And, ironically, it's precisely when rains begin that death rates soar ... while long time temperature records for the Highlands don't exist, some studies report they are one degree hotter than 30 years ago ... Temperature change in the Highlands is also visible as

lower altitude palms like coconuts bear fruit in places they didn't before, and lower altitude diseases, like malaria, become more prevalent: *'PNG's food bowl is all but empty as drought affects 2 million people'*, The Sydney Morning Herald, 2016. Some three million Papua New Guineans live in the highlands of PNG.

Although similarly extreme conditions have, so far, not been reported more widely in Oceania; although more intense tropical cyclones are bringing greater life threatening danger to small island populations in the path of seasonal cyclones. The danger of sea level rise, particularly on oceanic atolls, will bring more disaster to the region: *the ground we played on as children is now a swimming area, the sea like the weather, has changed, we can't predict what will happen but erosion of our island continues and with each storm larger parts of sand and soil, with chunks up to three metres thick; our family graves, originally located in the centre of the island, are being washed away and we have to gather the remains to reinter*; an islander interviewed on ABC Radio National, mid 2020. Tropical cyclones and other storms are increasing in strength and are already causing extreme damage, with calls for assistance from the two larger nations; which triggers immediate airlifting of food and medical supplies to remote islands.

Worldwide: More than 11,000 disasters have been attributed to weather, climate and water-related hazards over the past half century, involving two million deaths, yet one in three people around the world are still not adequately covered by early warning systems. That is one of the key findings of the (USA) 2020 State of Climate Services multi-agency report. In Australia poor air quality from more extreme bushfire smoke, burn offs, and dust storms, is killing over 30,000 people a year: from part of a letter signed by medical people and researchers from across Australia and addressed to the national minister responsible for health, late 2020. These figures will continue to rise.



Cyclone Winston: Category 5 Storm, 'The Strongest Ever' To Hit Fiji

The **'Worldometer'** puts the population of Oceania at 42 million, with 30 million of that being the combined populations of Australia & New Zealand. Of the 12 million living in the smaller nations of Oceania, most dwell in Papua New Guinea which has a population approaching 9 million (there has been no recent census in PNG). Taking the whole of New Guinea, which is the second largest island in the world - Greenland being the largest - its highest mountain, at 4,884 metres, is more than half the height of Everest (the highest on the PNG side is 4,509 metres) plant life on the island numbers 13,634 species ("two thirds endemic") making the island the planet's most speciose island' (surpassing, Madagascar, Borneo and Sumatra): Rhett A. Butler, 5 August 2020: Mongabay. There are 3,962 species of trees in New Guinea or about four times the number found across all of North America. New Guinea and nearby islands alone contain over 1,000 quite separate languages (some 850 of which are within PNG) quite 'separate' languages and different to the extent that a language at one end of New Guinea is more different to a language from the other end than English is to Mandarin. Melanesia, including Australia, is home to (thousands of languages) one of the greatest linguistic diversities in the world. In comparison, Polynesia lacks great diversity, because they are all descendants of a migrant community from southern China (the proto-Austronesians) and have the same language family: World Languages/Oceania.

The Australian explorer, scientist and author, Tim Flannery, describes New Guinea as a landmass which sprawls like a vast prehistoric bird across the sea ... New Guinea is Australia's bow wave. Australia (racing north eastward at around 70 mm per annum) has been accumulating islands and fragments of other continents along its leading edge ... This geology also explains why New Guinea's flora and fauna resembles Australia's. Although it is close to south east Asia, New Guinea has no tigers, rhinos or elephants, but (along with

salt water crocodiles, cassowaries and very large snakes) it does have kangaroos, New Guinea's kangaroos, however, live in trees. Nine thousand years ago (people) living in high mountain valleys had already developed intensive agriculture ... They had begun this process at a time when my European ancestors were still chasing woolly mammoths across the tundra: *Throwim Way Leg*; 'text publishing', 1999.

For such a richly green place as PNG, on the eastern end of the large island, to be experiencing hunger must mean that the very steep rise in temperature adds to concurrent problems of development and steep population increase. Australia is committed to providing a half billion dollars directly to the PNG Government each year and over \$100,000 per annum in grants in aid; this in addition to emergency relief and grants arriving from other nations. And yet, that such high level problems are occurring in the still young nation seems to indicate that social problems may be involved. For another continent it's said: "Every time there's a famine in Africa where they grow maize, if they were growing sorghum millets or other crops, they would survive the drought,": Bruce French of Food Plants International (which, online, lists over 30,000 edible plants of the world so far). There are similar answers to be found within PNG. Some Highlands villagers have long opted for one solution by growing casava (*Manihot esculenta*; domesticated in west-central Brazil) as an insurance against drought; the 'manioc' tubers achieve impressive size as the shrub is allowed to grow over a number of seasons. But that this and many other options aren't being acted on more widely indicates that political, field, and social problems are likely to be the main cause of climate related food shortages in the Highlands.



Musa ingens, the Giant Highland Banana.
Once grown for its large edible corm.

The Australian Administration of the Territory of Papua and New Guinea failed to hand over a working model of rural development at the time of Independence. Australia had been hard pressed by the UN to bring about self determination for the joint Territory of Papua & New Guinea; the 'New Guinea' part being an ex German colony captured by Australian troops at the outbreak of WW1. This speed of change may have led to some confusion among the newly recruited PNG rural development officers. The PNG field service obviously still struggles (I check online) to find an appropriate model for rural development for field officers to put into practice; without such a model the service will continue to be challenged and many rural clans will continue to suffer, as a consequence, periodic torment from climate change!

There is also the reality that much PNG development planning is provided by external experts from across the world, with little or no understanding of the social complexities involved, with the result that most of these outside planned projects are doomed to failure.

The non inclusion of clan leadership in the planning and implementation processes ensures that appropriate implementation is unlikely to be achieved. In New Guinea and its islands clan leadership is mostly through the **Big Man** system, where intense competition (and virtually nil hereditary input) produces very capable leadership. This is a system I operated within in my decade of field work as a rural development officer in the Territory; from my first day in the field (when posted to a patrol post in the Gulf of Papua) when a small Big Man group arrived at my rat infested bush materials office next to a beach. By accepting their offers to visit their villages, and through linking up with other Big Man groups I achieved

immediate success and so continued in that vein in all my field work. Alas, this essential aspect of rural development field work was not included in the eventual handover at Independence.

I found the Big Man in each clan and village to be not only, of necessity, of very high intelligence – even those in the Highlands who were raised in Neolithic circumstances (which including cannibalism) and were adults at ‘first contact’ – but, also of necessity, to have gained equally high social nous.

If only *our* political leaders had that combination of leadership attributes!!

I received virtually no orientation on arrival in the Territory, being a newly recruited field officer on contract for 12 years I was perceived as ‘temporary’, *which was very lucky!* I had avoided being indoctrinated and so entered into field work on a more promising note. Experiencing much success at my first posting I found it essential to seek, and include, the assistance and guidance of Big Man networks in all future field work.

Individuals anywhere in the world, the science tells us, are *‘inductive learning machines’* and deep immersion as a leader, be it as a Neolithic clan leader or a leader even in high academia will result in equally deep learning. And the more socially intense the learning, the greater the acquisition of social nous. Being a Big Man leader in rural PNG, within village and clan life among close relatives and fostering good relations with other clans, exposes the Big Man to daily challenges within a complexity of social interactions, and this inevitably leads to a very high level of social nous. Without Big Man inclusion, and equivalent leaders among other social groupings in Oceania, even very well planned rural projects, drawn up by external experts or by local experts are set to fail.

I began my fieldwork on the coast, out of a small patrol post, so didn’t realise that working with Big Man networks was an unusual approach – until I reached the Highlands. I was advised there that villagers would “fall asleep during any talk on development” and that “clan women were so inferior that they weren’t worth bothering to include” in the process. Within a week or so of field work with Big Man networks I proved both views to be untrue! Most previous rural development effort had been carried out through a farmer trainee program (‘producing’ western style industrial farmers?!) working out of a Territory wide network of extension centres; an initiative which had failed to bring about rural development and was discarded just before I arrived in the Territory. The ‘trainees’ had been used as cheap labour to establish cash crops (to produce coffee, copra, rubber, cocoa, and livestock) in numerous villages, the villagers didn’t complain! It wasn’t true rural development, but it did provide valuable capital within clans; which together with the social nous of Big Man networks provided a firm basis for some very promising (and more permanent) village development projects.

One younger Eastern Highlands Big Man (a Big Man entrepreneur) who headed up large, government initiated, a ‘savings and loans society’ for the whole population of the Province (he must have received some initial basic but formal education; perhaps in a missionary school) stood up at one village meeting and produced an estimate of how much coinage from coffee earnings had been buried across the Province– he had spoken to three Australian bank managers the afternoon before to gain an estimate of the amount of coinage which had gone out but not returned during the current coffee harvest. *‘The coffee harvest season is only half over, yet \$2.5 million worth of coins have been buried so far; let nobody say they have no money to invest!’* – the figures were written on the back of a cigarette packet. The coffers opened after that (I wished I had thought of gaining such a sound estimate!) and congealed lumps of coinage and old bank notes were produced to gain the investment required to set up a fresh foods marketing cooperative; to market the greater quantities of food garden produce, following permanent pig proofing of beef cattle boundary fencing. The availability of such a large amount of village capital promised the likelihood of sound village development to come.

People of subsistence societies *live in kin based institutions and these kin based organisations provide members with protection, insurance and security caring for sick,*

injured and less endowed members as well as the elderly. These intensive kinship networks nurture a non WEIRD psychology (a 'non western' psychology) creating a more collectivist mindset with greater conformity, ... and group loyalty: a loose quote from research comparing western psychology with mainly subsistence groups at the University of Harvard, in 2020; hence the term WEIRD psychology. The western world having evolved (socially) away from most of the world and to have reached an industrial revolution, and wealth.

When this difference is taken into account for PNG fieldworkers, who each owe allegiance to their own clan but are engaged in the rural development of other clans, it's easy to see that difficulties will arise; particularly in a reluctance to establish a working relationship with Big Man networks within clan systems strange to them. Yet these challenges have to be overcome by any rural field service before any development projects can reach permanent success.

I had the good fortune to take over monthly meetings of Big Man networks from across the Eastern Highlands, set up the Provincial rural development officer who was leaving the Province. The meetings were being held to prepare the clans of the Province for forthcoming village cattle projects funded by the World Bank for the Administration and distributed, as large loans, to clans via a new Territory development bank. The Territory wide large and expensive village beef breeding project failed dismally for all the reasons mentioned above – handling large monthly bank repayments became problematic for clans, and, as all the livestock were meant for breeding, as was rewarding elderly clan members with meat; there were many more social problems. When visiting a coastal province many years later, and having viewed empty cattle yards and paddocks extending over a large area of river flats, I asked the provincial secretary of agriculture where all the livestock had gone; his answer "I calculate that some 30 thousand head of cattle had 'gone bush' together with a similar head of buffalo!". What a headache for the provincial vets attempting to control livestock diseases!

Working with the Big Man networks in the Eastern Highlands, on the other hand, led to much success in rural development – and, with those monthly meetings, I had a flying start in establishing close contact with many of the Big Man groups of the Province. The international body studying languages (SIL-PNG Branch) list the Eastern Highlands Province as having 36 languages (but this includes some parts now within neighbouring provinces) I had close contact with people speaking some six of those languages, but information flowed out rapidly to other Big Man networks (who wished to be included) – and a great deal of information flowed back to me within those monthly meetings. As there was also close contact between Big Man groups and local government councils, information flowed between these institutions and, occasionally, there was also a flow of some appropriate financial assistance for large cooperative projects.

It is this flow of information and the large cooperative projects that result which makes me confident that major problems arising from rapid warming and equally rapid sea level rise will be best addressed by including local leadership (within clans or communities) in the planning and execution of appropriate aid projects. Planning and execution of projects from above will inevitably lead to inadequate addressing of the social problems arising during implementation, and there is likely to be much waste and inappropriate action.

On Highland village women, I did experience female leadership within a village meeting. I had been advised that all (highland) village women weren't worth including in development meetings (coastal clan women were seen as being more responsive) but I soon found otherwise; one of my early village meetings was a village women's meeting arranged by the village Big Man! That was a very welcome surprise, and following that meeting clan women became very much part of development; to the extent that they came on visits to a government research station where research work with subsistence food plants was taking place. All the village women at that first meeting were clothed in trade store garments (their traditional dress for working in their food gardens consisted of very brief bush materials) and at the meeting they looked for all the world like a choir; their views on development,

expressed by a leading woman, were impressive. The village Big Man had opened the meeting by stating that only women would be able to ask questions of the Big Man visitors (which included me) and the questions from the village women were to the point and well thought out; which was indeed impressive. Over 30 years later, in a seminar at the Pacific unit of the ANU in Canberra, I was seated next to the PNG Minister for Women's Affairs, so I asked if she was experiencing success; "[Only in the eastern Highlands](#)"; she replied (and she then described the location; it was where that village women's meeting had occurred so long ago). Some advances in rural development prove to be permanent!

Although I have arrived at this view through my Melanesian experience, I believe that involving these intelligent social leaders in virtually all rural adjustment and advancement projects may be seen as essential to gain success across the whole of Oceania; and such projects to include preparation for the approaching disasters forecast due to climate change.

Social life in Melanesia has massive complexity, indicated by its vast range of languages, but many forms of social complexity ranges right across the whole of Oceania (and also the world) even when just one language becomes dominant. PNG doesn't become less complex as the major lingua franca, **Tok Pisin**, becomes dominant; or as **English** grows in potentially greater dominance as formal education becomes the norm across the land. Taking social complexity into account when planning for potential disasters arising across Oceania will be a big task, but without such an approach there will be a continuing and substantial wastage of funding and resources, and, sadly, there is – as already experienced through starvation in PNG highlands and the enforced evacuation of a small coastal island – potential for much social disruption and loss of life. As has occurred, and is continuing to occur, in Australia – due to extreme bushfires and more – and will continue to occur in island nations in the path of more extreme and more dangerous tropical cyclones.

This will become even more problematic as more nations from outside Oceania take closer interest in the region; 'angling' for more than fish! The People's Republic of China is now taking more interest in the island nations of the Pacific, and that giant nation is more than willing to splash cash around to achieve its own ends. And to what ends remains opaque at present.

For all the above reasons it's certainly time for both the first world nations within Oceania, Australia and New Zealand, to take greater note of the increasing climate related problems emerging in the region of which they are part; and, hopefully, any reassessment will include finding ways to engage intelligent local leadership in the process of adjustment and advancement in all local societies within this far flung oceanic region.