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Introduction

The Pacific island region includes 22 countries and dependent territories¹ comprised of approximately 200 high islands and 2,500 low islands and atolls.² Although the total land area is small at about 90,000 km², these islands cover a large expanse of ocean with the Exclusive Economic Zones (EEZs) totalling over 27 million km².³ The total population of the region is less than 10 million, with Papua New Guinea alone contributing over 6 million.⁴

There is considerable diversity in the Pacific islands region, in terms of the various geographical environments, biodiversity and indigenous cultures.⁵ For example, Papua New Guinea has the largest land area at 461,000 km².⁶ Nauru's land area is just 21 km² making it physically the world's smallest country⁷. Kiribati is comprised of 33 atolls and islands but has

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¹ They 22 include 13 independent states (Federated States of Micronesia, Fiji Islands, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu). The Cook Islands is also included in this category as it is a self-governing territory in free association with New Zealand. In addition there are nine external territories (French Polynesia, Guam, New Caledonia, Niue, Pitcairn Islands, American Samoa, Northern Mariana Islands, Tokelau and Wallis and Futuna). Australia and New Zealand (as well as the US state of Hawai'i) are themselves regionally relevant but industrialised with largely western culture and small indigenous populations. The focus here will be upon the Pacific small island developing states.

² The World Bank, *Cities, Seas, and Storms - Managing Change in Pacific Island Economies Volume III Managing the Use of the Ocean*. The International Bank for Reconstruction and Development/The World Bank: Washington DC, 2000, p.1.

³ Ibid, p.2.

⁴ E Kwa, 'Climate Change and Indigenous Peoples in the South Pacific: The Need for Regional and Local Strategies' in BJ Richardson, Y Le Bouthillier, H McLeod-Kilmurray and S Wood *Climate Law and Developing Countries*. Edward Elgar:Cheltenham, 2011, p.102.

⁵ For a useful summary see EJ Techera, *Marine Environmental Governance: From International Law to Local Practice*. Routledge: Oxford, 2012, at p.161-3.

⁶ J Kinch, P Anderson, E Richards, A Talouli, C Vieux, C Peteru and T Suaesi, *Outlook Report on the State of the Marine Biodiversity in the Pacific Region*, UNEP: Nairobi and SPREP: Apia, 2010, p. 6.

⁷ Ibid. Including the dependent territories, the Pitcairn Islands has the lowest populace at about 50: Kinch et al, op.cit., p. 6

an EEZ of approximately 3.5 million km².⁸ Whereas, Samoa consists of only nine islands with a land area of 2,934km² and the smallest Pacific EEZ at 98,500km².⁹

The unique biological and cultural diversity of the Pacific region is well-recognised.¹⁰ The region has a great degree of biological diversity and endemism.¹¹ The highest level of marine species richness is in Papua New Guinea and the Solomon Islands.¹² The waters of the Fiji Islands are also high in marine biodiversity and contain over 3% of the world's coral reefs¹³ including the third-longest barrier reef in the world.¹⁴

This biological richness is matched by considerable diversity amongst the indigenous peoples. Historically, the inhabitants have been divided into Polynesian, Micronesian and Melanesian peoples, although these anthropological distinctions are no longer considered appropriate.¹⁵ Each country, and in some cases individual islands, have their own traditional knowledge, beliefs and cultural practices; but there are some commonalities including the pattern of human settlement of the Pacific region. This provides a link between the various countries many of which were populated by the pioneering Lapita people.¹⁶ The later European 'discovery', settlement and colonisation from the 17th to 19th centuries followed a similar pattern. All the Pacific Island countries (PICs), apart from Tonga, were colonised by European nations with the British and French being dominant in the region.¹⁷ As noted above, some of the Pacific islands remain external territories, but the majority are now independent. Samoa was one of the first to re-establish independence in 1962 and Palau the last in 1994.

⁸ Ibid.

⁹ Ministry of Finance (Samoa) (2008) '*Strategy for the Development of Samoa: Ensuring Sustainable Economic and Social Progress (2008-2012)*', p.iv.

¹⁰ A Smith and KL Jones, *Cultural Landscapes of the Pacific Islands*. ICOMOS Thematic Study, Paris: ICOMOS, 2007; and P Gerbeaux, T Kami, P Clarke and T Gillespie, *Shaping a Sustainable Future in the Pacific: IUCN Regional Program for Oceania 2007-2012*, Suva: IUCN Regional Office for Oceania, 2007.

¹¹ For a bio-cultural diversity ranking for Pacific islands states see: H Govan, et al. (2009) *Status and potential of locally-managed marine areas in the South Pacific: meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs*. Apia: SPREP/WWF/WorldFish-Reefbase/CRISP, p.15.

¹² Kinch et al, op.cit., pp.23 and 25.

¹³ Sea Around Us Project, *Web Products: Countries' EEZ: Fiji*, Online. Available HTTP: <<http://www.searoundus.org/eez/SummaryInfo.aspx?EEZ=242>> (accessed 24 January 2012).

¹⁴ World Wide Fund for Nature (2005), *Fiji's Great Sea Reef: The Hidden Gem of the South Pacific*. Online. Available HTTP: <http://assets.panda.org/downloads/gsr_summary.pdf> (accessed 26 January 2012).

¹⁵ Hviding has noted that the Melanesian, Polynesian and Micronesian division of island Pacific people was a 17th and 18th century colonial construct, invented '[d]espite considerable cultural-historical overlap': E Hviding, 'Both Sides of the Beach: Knowledges of Nature in Oceania' in H Selin (ed) *Nature Across Cultures: Views of Nature and the Environment in Non-Western Cultures*, Dordrecht: Kluwer, 2003, pp. 245-276.

¹⁶ FR Hickey, 'Traditional Marine Resource Management in Vanuatu: Worldviews in Transformation; Sacred and Profane' in N. Haggan, C. Brignall and L. Wood (eds), *Putting Fishers' Knowledge to Work*, UBC Vancouver: Fisheries Centre Research Report, 2003, p.122.

¹⁷ Govan et al, op.cit., p. 14.

In the majority of PICs the populations are predominantly indigenous, such as Vanuatu where about 94% of the people are ni-Vanuatu.¹⁸ The exception is Fiji where just over half of the people are indigenous Fijians and 36% of Indian origin.¹⁹ Importantly, it has been noted that unlike the Indian Ocean island nations and Caribbean countries ‘Pacific indigenous cultures have remained strong’²⁰ and this includes their profound cultural and spiritual connection to nature.²¹ To a great extent the indigenous peoples continue to live traditional lifestyles with many people working in subsistence farming, with their limited income usually being derived from agriculture and fishing as well as in some cases logging or tourism.²² Their reliance upon biological resources is not limited to sustenance and livelihoods, but extends to deeply-rooted cultural practices involving the use of the region’s biodiversity.

In terms of the legal systems, upon independence for the most part customary land ownership was restored and at least limited recognition given to customary law.²³ However, Western parliamentary and legal systems introduced during colonial times were not displaced. Concurrently, many local people continue to adhere to customary laws. Thus, the PICs are legally pluralist with often fragmented legal frameworks that include customary law and community-based management, colonial-era statutes and post-independence legislation.²⁴ This creates considerable complexity when legal strategies are being developed to address contemporary environmental challenges such as climate change.

The Pacific region includes countries lying in similar positions along the ‘spectrum of development’²⁵ in that they are all developing countries, although in differing economic positions. Relevantly, five PICs are listed as both small island developing states (SIDS) and

¹⁸ K Brown, *Reconciling Customary Law and Received Law in Melanesia: The Post-Independence Experience in Solomon Islands and Vanuatu*, Darwin, NT: Charles Darwin University Press, 2005, p. 28.

¹⁹ As at 2007: Fiji Islands Bureau of Statistics, *Key Statistics*. Online. Available HTTP: <<http://www.statsfiji.gov.fj/>> (accessed 26 January 2012).

²⁰ The World Bank, *Regional Engagement Framework FY2006-2009 For Pacific Islands*, The International Bank for Reconstruction and Development/ The World Bank: Washington DC (2005), at 2.

²¹ Gerbeaux, et al, op.cit.

²² See for example: Vanuatu Protected Areas Initiative, *Vanuatu Brief Overview and Map*, Online. Available HTTP: <http://www.positiveearth.org/vpai/vanuatu_map.htm> (accessed 26 January 2012).

²³ In some areas of the Pacific up to 90% of land is in the hands of traditional owners

²⁴ BJ Richardson, Y Le Bouthillier, H McLeod-Kilmurray and S Wood ‘Introduction: climate law and developing countries’ in BJ Richardson, Y Le Bouthillier, H McLeod-Kilmurray and S Wood *Climate Law and Developing Countries*. Edward Elgar, p.11.

²⁵ HM Osofsky, ‘Defining sustainable development after Earth Summit 2002’, (2003) 26 *Loyola of Los Angeles International and Comparative Law Review*, 111–25.

Least Developed Countries (LDCs).²⁶ LDCs are vulnerable to climate change due to their lack of financial and other resources which are needed for adaptation.²⁷ SIDS are restricted in their options due to small populations, small land areas, vulnerability to natural disasters, and susceptibility to external market forces.²⁸ Most PICs have economies reliant on one or two sectors such as forestry, fisheries or agriculture. More recently tourism has been an expanding industry and ‘in 2004, 19 of the top 25 countries ranked according to the contribution of tourism and travel to their gross domestic product (GDP) were SIDS.’²⁹ Furthermore, the Pacific region relies ‘heavily on imports of petroleum products’ and ‘fossil fuels are typically the single largest import item’³⁰ which further constrains options for sustainable development. While a substantial portion of the regional population has electricity³¹ it is dependent upon biomass. The reliance on wood supplies places extreme pressure on forest areas which are at risk of over-harvesting and further contributing to the removal of carbon sinks.³²

It is clear that Pacific island peoples will be disproportionately burdened by climate change. The PICs are the least responsible for global greenhouse gas (GHG) emissions yet are likely to suffer the worst effects of climate change. This has been recognised both by the *Intergovernmental Panel on Climate Change* (IPCC) at the global level and at the regional and national levels.³³ In response, the PICs have taken an active role in international climate governance, and have also recognised that approaches must be tailored to this region³⁴ and indeed the domestic contexts. Unlike many other parts of the world, there are well-established regional institutions in the Pacific which can respond to climate change.³⁵ In

²⁶ These are Kiribati, Samoa, Solomon Islands, Tuvalu and Vanuatu: UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), *The Impact of Climate Change on the Development Prospects of the Least Developed Countries and Small Island Developing States*, 2009, p.13.

²⁷ Ibid at 7.

²⁸ Ibid at 8.

²⁹ Ibid at 11.

³⁰ X Yu, R Taplin, AJ Gilmour, 'Climate Convention Implementation: An Opportunity for Pacific Island Nations to Move Toward Sustainable Energy Systems' (1997) 21(4) *Environmental Management*, 493-504, p.494.

³¹ In some areas over 50% of the population has electricity supply – more so in urbanised areas with supply to rural and remote islands areas being very limited: (Xiaojiang Yu, 1997) at 496.

³² Yu et al, op.cit., p.496.

³³ Mimura, N., L. Nurse, R.F. McLean, J. Agard, L. Briguglio, P. Lefale, R. Payet and G. Sem, 2007: Small islands. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 687-716.

³⁴ Kwa, op.cit., p.103.

³⁵ Ibid.

particular, some regional bodies have a strong interest in capacity building through the development of model legal frameworks, and these will be explored below.

Much literature has been published on both the predicted impacts of climate change and responses to it.³⁶ Less attention has been given to an exploration of the role of climate change law and policy in developing countries in general and this region in particular.³⁷ Furthermore, the legal scholarship, domestic law and policy and discussion of litigation to date has focused on mitigation,³⁸ whereas it is clear that the PICs have appropriately directed their attention to adaptation. Therefore, an exploration of this area is timely. This chapter will provide an overview of the impacts of climate change in the Pacific and consider the regional responses. It will explore how PICs have been involved in the development of and responded to international law including the *United Nations Framework Convention on Climate Change* (UNFCCC) and *Kyoto Protocol*. While each state and territory has a different set of priorities there are some synergies between them and key regional institutions and projects will be explored here. It is not possible to analyse all the national initiatives, but some key domestic legal developments will be considered. Finally some remaining challenges and opportunities for the region are outlined.

The Pacific Climate Change Dilemma

Many of the PICs face the same social, economic and environmental challenges. These include, amongst others, increasing local populations following a previous period of outward migration, growing urbanisation, environmental fragility including restricted land areas and limited financial resources driving a focus on economic development. Environmental issues, such as pollution, waste management, over-fishing and land clearing, all impact natural resources, physical environments and traditional lifestyles in the region. All of these problems will be exacerbated by climate change.

³⁶ Yu et al, op.cit.; International Institute for Sustainable Development (IISD), *First Nations Carbon Collaborative Indigenous Carbon Leadership: Voices from the Field*, IISD: Winnipeg, 2011.

³⁷ Richardson, et al, op.cit., p.1.

³⁸ JB Ruhl, 'Climate Change Adaptation and the Structural Transformation of Environmental Law' (2010) 40(2) *Environmental Law* 343-431.

The predicted effects of climate change are well-known and include sea-level rise, ocean warming and acidification, alternations to weather patterns including increased cyclonic activity and changing rainfall patterns. Sea-level rise will at the very least disrupt indigenous peoples and at the worst will result in the displacement of whole communities. It has been noted that '[c]limate change puts the long-term sustainability of societies in atoll nations at risk.'³⁹ Of the five island nations in the world comprised entirely of low lying atolls, four are in the Pacific: Kiribati, the Republic of the Marshall Islands, Tokelau, and Tuvalu.⁴⁰ If they were to become uninhabitable the ensuing migration and assimilation would cause further losses in terms of indigenous heritage and possibly the complete disappearance of individual minority cultures. Sea level rise will also have economic effects. For example, inundation of outer islands will alter the baselines which under the *United Nations Convention on the Law of the Sea* (UNCLOS) are used to calculate EEZs. The size and extent of EEZs are important not so much for local communities but because fishing rights in these waters are sold to other nations (including developed and often physically remote nations). These rights contribute significantly to national economies and therefore climate change will impinge upon already limited financial resources. Ultimately rising sea level threatens the very existence of countries and therefore raises issues of statehood.

Although inundation is the most extreme outcome, salt water infiltration of the freshwater lens is likely to be the first impact which will affect the ability of these islands to support human habitation. This, together with changes in rainfall patterns and extreme weather events, will be the most immediate problems. The majority of indigenous people in the region live in the coastal zone and climate variability will also affect agriculture and thus lead to food security issues. Some commentators have argued that in the shorter term sea surface temperature rise 'poses the greatest long-term risk to atoll morphology'.⁴¹ For example, declines in coastal marine species will affect subsistence as well as artisanal fisheries. Furthermore, coral bleaching and extreme weather events will affect emerging and other established livelihoods based on tourism. Changes to species abundance and distribution will affect the ability of people to fish upon which the majority rely for subsistence livelihoods. Even the higher volcanic islands will be negatively impacted. General health and well-being

³⁹ Adger et al, op.cit., p. 333

⁴⁰ N Adger, J Barnett and W Neil, 'Climate Dangers and Atoll Countries' (2003) 61 *Climate Change*, 321-337, p.322.

⁴¹ Ibid, p. 323.

concerns include issues such as loss of key food sources, building materials and livelihoods and extend to issues such as climate-induced changes to disease vectors.⁴²

These physical impacts will be compounded by damage to intangible heritage, as traditional knowledge and cultural practices are dependent upon sacred sites, animals and plants. Changes to species habitats, abundance and movement will also result in the loss of traditional knowledge about ecology, medicine, arts and crafts. Even meteorological changes will have an impact on Pacific island heritage as they may impact upon traditional oceanic navigation practices for which Pacific island peoples are well known. The IPCC have acknowledged that small island states face ‘the possible loss of whole cultures’.⁴³ However, it may be that these cultural impacts will have a more profound effect than first appears. Small island states including those in the Pacific have generally been resilient to environmental disturbances and traditional knowledge in particular may provide valuable information.⁴⁴ In addition customary institutions and subsistence lifestyles have assisted communities to cope with change in the past. Therefore cultural impacts could have deeper effects by damaging this flexibility and resilience. Thus climate change will affect lives and livelihoods, negatively impacting upon indigenous lifestyles and threatens the very way of life of Pacific peoples.

It is also clear these effects are not all in the distant future. Research indicates that surface air temperatures in the Pacific have generally increased by between 0.4-0.7°C between 1951 and 1990, with some areas increasing by as much as 0.9°C in the last century.⁴⁵ Pacific island nations have contributed negligibly to climate change making only a very small contribution to global energy consumption and GHG build-up.⁴⁶ Indeed LDCs and SIDS from all regions together contribute just over 1% of global GHG emissions. Yet PICs are likely to be the countries suffering some of the first and worst damage. This has been well-recognised at the international level. The IPCC’s Fourth Report indicates that ‘developing countries particularly Small Island Developing States are particularly vulnerable to climate change’.⁴⁷

⁴² B Opeskin, ‘Malaria in Pacific populations: seen but not heard?’ (2009) 26 *Journal of Population Research* 175–199.

⁴³ Adger et al, op.cit., p. 326.

⁴⁴ Kwa, op.cit., p.109.

⁴⁵ Yu et al, op.cit., p. 494.

⁴⁶ Ibid.

⁴⁷ GEF, UNDP, SPREP, op.cit., p.6.

In response, many PICs have prioritised sustainable energy systems including renewables, with hydro power accounting for 5-10% of total energy supply and solar also being relevant.⁴⁸ But even if global emissions stabilised today, this would not prevent impacts in the Pacific. As noted by the President of Kiribati '[m]itigation efforts therefore will not be able to reverse our situation.'⁴⁹ Accordingly, the strategic focus in the region is likely to be on adaptation rather than mitigation.

While most of these nations have mitigation and adaptation strategies, law and policy to effectively facilitate change is nascent. In some cases plans have been put in place, but these have not in general included legal frameworks. For example, in Palau a review of existing legislation indicated that 'no effort has been made in the past to address any climate change issues in the State plans, policies and budgets'.⁵⁰ Although this report related to only one country it was found that this was a common scenario and 'a general observation that is true for most Pacific Islands.'⁵¹ Clearly law has a role to play in the 'multipolicy mix'⁵² that will be needed to address climate change adaptation, but the question remains as to how it can be best utilised to address the coming challenges. The next section explores legal developments at the international, regional and domestic level.

Climate Change Law and Policy in the Pacific

International Law and Pacific Island states

The risks of climate change and the attention given to the issue at the international level have not escaped PICs and they have been active in a number of contexts. These include engagement with relevant international law related to the issue of statehood and forced migration as well as the UNFCCC framework and activities of the IPCC. A significant amount of attention has been given to the legal issues associated with climate change

⁴⁸ Yu et al, op.cit., p. 496. In Fiji for example hydro supplies 90 per cent of total electricity requirements: ibid p.498.

⁴⁹ Republic of Kiribati, Statement by His Excellency Anote Tong, President of the Republic of Kiribati to the United Nations General Assembly, 25 September 2008. Online. Available HTTP: <http://www.un.org/en/ga/63/generaldebate/pdf/kiribati_en.pdf> (accessed 26 January 2012).

⁵⁰ GEF, UNDP, SPREP, op.cit., p.17.

⁵¹ GEF, UNDP, SPREP, op.cit., p.17.

⁵² Ruhl, op.cit., p.429.

displacement.⁵³ Indeed the IPCC has acknowledged that ‘one of the gravest effects of climate change may be those on human migration.’⁵⁴ This topic raises some significant international law issues for which there is no simple answer. Although there have been cases of the extinction of states in the past, and island abandonment, the extermination of PICs due to sea level rise is a unique situation.⁵⁵ Issues include the continued statehood of inundated island nations as well as the status of climate refugees. The UNFCCC and the *Kyoto Protocol* do not address migration issues, however some Pacific SIDS have taken the lead with Tuvalu, for example, already negotiating an immigration programme with New Zealand.⁵⁶ Attention has also turned to other areas of international law, including human rights and humanitarian law, in the search for legal remedies and recourse.

It has been Kiribati and Tuvalu who have argued in favour of a human rights based approach to climate change induced displacement. The threats and impacts noted above implicate a number of human rights including self-determination, health, food, housing and ultimately the right to life. However, the *UN High Commission for Human Rights* has not supported climate change as a violation of human rights.⁵⁷ Therefore it is unclear whether human rights law will provide much assistance to indigenous peoples in the Pacific. The other area of relevance is international refugee law and in particular the 1951 *Convention Relating to the Status of Refugees* (Refugee Convention) and its 1967 *Protocol*. As these instruments provide protection for people forcibly displaced due to persecution and conflict, they do not seem to respond to climate change. Article 1 of the Refugee Convention appears to exclude the climate change situation by defining a refugee as someone with a ‘well-founded fear of being persecuted’. Without a clear legal remedy for people displaced by climate change there have been for the development of a specific regime. Proposals include the development of a new protocol to the UNFCCC or Refugee Convention or alternatively the establishment of a standalone convention.⁵⁸ However, commentators have described refugee law as a

⁵³ S Park, *Climate Change and the Risk of Statelessness: The Situation of Low-lying Island States*, United Nations High Commissioner for Refugees (UNHCR): Geneva, 2011.

⁵⁴ IPCC, ‘First Assessment Report,’ Contribution of Working Group II to the First Assessment Report of the Intergovernmental Panel on Climate Change (Potential Impacts of Climate Change), 1990, p.103, para. 5.0.10.

⁵⁵ Park, *op.cit.*, p.6.

⁵⁶ Adger et al , *op.cit.*, p.at 329

⁵⁷ J Knox, ‘Linking human rights and climate change at the United Nations’ (2009) 33 *Harvard Environmental Law Review* 491.

⁵⁸ F Bierman and I Boas, ‘Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees,’ Global Governance Working Paper, No 33 – November 2007; D Hogkinson, T Burton, S. Dawkins, L. Young & A. Coram, ‘Towards a Convention for Persons Displaced by Climate Change: Key Issues and Preliminary Responses,’ *The New Critic*, Issue 8, September 2008. For a summary see J McAdam,

‘cumbersome tool’ to address climate displaced people and it remains to be seen whether this avenue will prove effective.⁵⁹

Statelessness and displacement, however, are not the most immediate concerns and the prevention or amelioration of the effects of climate change is a primary objective.⁶⁰ Again this has been recognised by Pacific PICs by their focus on adaptation strategies in particular. There is little doubt that PICs need international assistance to deal with climate change as they have limited financial and technical resources to address impacts and operationalise adaptation, or indeed, mitigation strategies. The costs of adaptation are significant and it has been estimated, for example, that US\$100 million is needed to build effective sea walls in the Marshall Islands which is significantly more than the GDP.⁶¹ Assuming adaptation is the key goal then for PICs, many of whom are also LDCs, the question is how to raise the necessary funds for adaptation strategies. The starting point is the flexible mechanisms and funds available under the UNFCCC as well as other avenues including litigation.

The PICs have taken an active role in global climate change negotiations.⁶² Indeed it has been said that the PICs see climate change as an ‘international issue’ and one which developed countries must address through GHG emission reductions.⁶³ In response it is acknowledged in the Preamble to the UNFCCC that ‘low-lying and other small island countries...are particularly vulnerable to the adverse effects of climate change’ and that ‘those that are particularly vulnerable...should be given full consideration’ with developed countries to assist ‘in meeting costs of adaptation’.⁶⁴ Of significance is the Alliance of Small Island States (AOSIS),⁶⁵ a group of over 40 nations, including 16 PICs,⁶⁶ which emerged during early

Refusing ‘refuge’ in the Pacific: (de)constructing climate-induced displacement in international law in Paul Piguat, Antoine Pecoud, Paul de Guchteniere *Migration and Climate Change* 2011 Cambridge University Press: Cambridge, 2011, p.102-137.

⁵⁹ McAdam, op.cit.

⁶⁰ Park, op.cit., p.17.

⁶¹ G Leane, ‘Climate Change in Oceania: Responses to the Kyoto Protocol’ in Geoff Leane and Barbara von Tigerstrom *International Law Issues in the South Pacific* Ashgate:

⁶² P Clark and I Millar ‘Climate Change and the Law in the Pacific Islands’ in Wayne Gumley and Tevor Daya-Winterbottom, *Climate Change Law: Comparative, Contractual & Regulatory Considerations*, Thomson Reuters: Pyrmont, 2009.

⁶³ Yu et al, op.cit., p.494

⁶⁴ UNFCCC Preamble and Article 4.

⁶⁵ Alliance of Small Island States, Online. HTTP: <<http://aosis.info/>> (accessed 1 February 2012). AOSIS has also developed the Small Island Developing States Network (SIDSnet) as a forum for information sharing and communication.

⁶⁶ They include the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

negotiations. It was this group which called for a 20% reduction in emissions from 1990 levels by 2005.⁶⁷ Subsequently Papua New Guinea and other *Coalition of Rainforest Nations*, including the Solomon Islands and Vanuatu, argued for financial mechanisms for reducing emissions from deforestation (REDD).⁶⁸ PICs have continued their involvement at the global level and in the lead up to COP17 in Copenhagen 2009, they noted that ‘a strong global agreement is vital’ calling for ‘states to reduce global emissions by at least 50 per cent below 1990 levels by 2050’.⁶⁹ Relevantly Pacific states called upon ‘developed economies to strengthen the seriousness and credibility of their claims at Copenhagen by putting in place domestic policies and legislation now to achieve emission reductions and targets’.⁷⁰ Almost all Pacific states have ratified the UNFCCC and the *Kyoto Protocol*.⁷¹ Furthermore, most have submitted National Communications for the initial period⁷² and five have prepared a National Adaptation Programme of Action (NAPA).⁷³ This demonstrates PICs commitment to and recognition of the importance of law in addressing climate change.

The UNFCCC framework provides various mechanisms that might be of assistance to PICs. In particular the flexible mechanisms under the *Kyoto Protocol* may be of particular benefit. For example, the Clean Development Mechanisms (CDM) permit a developed country to invest in projects in developing countries for which they receive certified emission reductions. The benefit to the developing country is the investment at the domestic level and potential for technology transfer. However, to date, few PICs have been involved in CDM projects.⁷⁴ In part this may be due to the lack of developed legal, institutional and policy frameworks that would facilitate CDM. For example, if projects involve carbon sinks and

⁶⁷ For a summary of the role of AOSIS in climate negotiations see UNFCCC, Party Groupings. Online. HTTP: <http://unfccc.int/parties_and_observers/parties/negotiating_groups/items/2714.php> (accessed 1 February 2012).

⁶⁸ Clarke & Millar, op.cit., p.105-6.

⁶⁹ Pacific Island Forum Secretariat, *Pacific Leaders' Call to Action on Climate Change*. Annex A to the 2009 Forum Leaders' Communique, 2009. Online. HTTP: <<http://www.forumsec.org/resources/uploads/attachments/documents/Pacific%20Leaders%27%20Call%20to%20Action%20on%20Climate%20Change%202009.pdf>> (accessed 23 January 2012).

⁷⁰ Ibid.

⁷¹ UNFCCC, Status of Ratification of the Convention. Online.

HTTP: <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php> (accessed 23 January 2012).; UNFCCC, Status of Ratification of the Kyoto Protocol. Online.

HTTP: <http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php>. (accessed 23 January 2012).

⁷² UNFCCC, *Non-Annex I National Communications*. Online. HTTP: <http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php> (accessed 23 January 2012).

⁷³ UNFCCC, *NAPAs received by the secretariat*. Online.

HTTP: <http://unfccc.int/cooperation_support/least_developed_countries_portal/submitted_napas/items/4585.php> (accessed 23 January 2012).

⁷⁴ Kwa, op.cit., p.113.

forestry then indigenous customary land rights are likely to be effected and appropriate legal governance is essential to equitably involve all stakeholders and avoid conflict.⁷⁵

Another area of particular interest for PICs is the REDD programme which includes the protection and regeneration of forest areas as carbon sinks. PICs have been vocal in arguing that they should be compensated for the 'function' that their forests are providing.⁷⁶ Again if programmes are to be facilitated in this area they are likely to involve customary lands and cannot be operationalised without the involvement of local people. Therefore, legal and policy frameworks are needed to support REDD programmes and to ensure appropriate consent, management and benefit sharing arrangements are in place.

Ratification of the UNFCCC has given PICs access to facilities and mechanisms under the treaty as well as funding opportunities provided by the Global Environment Facility (GEF). The GEF funds projects in developing countries that relate to a global problem such as climate change. To date 13 PICs have accessed the GEF Special Climate Change Fund as part of the Pacific Adaptation to Climate Change project.⁷⁷

In terms of other avenues, Palau has announced it will seek an advisory opinion from the International Court of Justice to seek clarification as to the 'obligations and responsibilities under international law of a State for ensuring that activities under its jurisdiction or control that emit GHGs do not cause, or substantially contribute to, damage to another State or States.'⁷⁸ Others such as the Federated States of Micronesia have also explored potential action.⁷⁹ Horn, in analysing the advantages and disadvantages of litigation as an effective tool for PICs in their battle against climate change, concluded that while litigation is an option substantive issues such as standing and jurisdiction combined with the practical matters of cost and delay make it a challenging option.⁸⁰ While it is certainly possible that Pacific Islanders could use international law to bring actions under the various treaty systems, these have yet to achieve much success in the area of climate change. Nonetheless it may be a

⁷⁵ Ibid, p.114.

⁷⁶ Ibid, p.117.

⁷⁷ GEF, UNDP, SPREP, op.cit., p.3-4.

⁷⁸ Communication from the Permanent Mission of Palau to the United Nations.

⁷⁹ CY Mulalap 'Islands in the Stream: Addressing Climate Change from a Small Island Developing State Perspective' in this volume.

⁸⁰ L Horn, 'Is Litigation an Effective Weapon for Pacific Island Nations in the War Against Climate Change' (2009) 12(1) *Asia Pacific Journal of Environmental Law* 169-202.

useful strategy to encourage government and industry action.⁸¹ Indeed if Palau obtains an advisory opinion this may serve to clarify the law on climate change and encourage action by other state government.⁸² However, any specific actions based on UNFCCC obligations are likely to be hampered by its soft wording and lack of concrete state responsibilities.⁸³

Ultimately courts cannot resolve global issues such as climate change. Furthermore, as they are not large emitters PICs cannot directly significantly reduce GHG emissions nor can they control the actions of other states to ensure the necessary reductions. Therefore, options must be sought within the region, and law and policy has a significant role to play in this regard.

Regional Action

As noted above there are a number of relevant regional organisations and environmental protection has been an important driver of Pacific cooperation.⁸⁴ These include the Secretariat of the Pacific Community (SPC) which has the broadest membership at 26 states including Pacific SIDS, external territories and other influential nations in the region.⁸⁵ It provides technical assistance and capacity building to member states, as well as carrying out scientific research. The Pacific Islands Forum Secretariat (PIFS) again has a wide membership of Pacific SIDS as well as Australia and New Zealand, and also forum observers.⁸⁶ The Secretariat of the Pacific Environment Programme (SPREP) is the most significant environmental agency in the region and comprises 25 members: 21 Pacific Island countries and Territories and four developed countries.⁸⁷ SPREP was originally part of the UNEP Regional Seas Programme and in 1991 was established as an independent regional organisation.⁸⁸ Its purposes include promoting cooperation, assisting with environmental

⁸¹ Ibid, p.193.

⁸² Ibid, p.176.

⁸³ Ibid, p.177.

⁸⁴ C Giraud-Kinley, 'The Effectiveness of International Law: Sustainable Development in the South Pacific Region' (1999) 12 Georgetown International Environmental Law Review 125-176, p. 127.

⁸⁵ Membership includes American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji Islands, France, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United States of America, Vanuatu and Wallis and Futuna.

⁸⁶ The members are Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The forum observers are Timor Leste, Tokelau, Wallis and Fortuna, the Asian Development Bank and the World Bank.

⁸⁷ American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, France, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United States of America, Vanuatu and Wallis and Futuna.

⁸⁸ Giraud-Kinley, op.cit., p.135-6.

protection and ensuring sustainable development, through the development of action plans.⁸⁹ It plays an important part in disseminating information via the *Pacific Environment Information Network* which provides an electronic library of lessons learned and best practice environmental management.⁹⁰ The final regional body of relevance is the South Pacific Applied Geoscience Commission (SOPAC) which has climate change as one of its specialist areas and aims to raise awareness and assist with policy formulation.

There has been wide endorsement of various regional strategies including the *Pacific Plan*.⁹¹ The *Pacific Plan* is the principal document which addresses the challenges facing Pacific island nations and provides a roadmap for sustainable development. Its goals include strengthening cooperation and integration by enhancing and stimulating regional economic growth, sustainable development, good governance and security. More specifically, the *Pacific Islands Framework for Action on Climate Change 2006-2015* leading on from the earlier *Pacific Islands Framework on Climate Change, Climate Variability and Sea Level Rise 2000-2004*.⁹² The goal is to build capacity and resilience in the region to deal with the risks and impacts of climate change. Although it does not create legal rights or responsibilities the framework identifies ‘good governance ... in climate change activities management’ and the mainstreaming of ‘climate change considerations ... into national policies, planning processes, plans and decision-making’ as expected outcomes by 2015.⁹³ SPREP has been given the task of developing the supporting *Pacific Islands Action Plan on Climate Change 2006-2015*. The current draft refers to the need to review existing energy and climate legislation and assist countries to develop and implement legislation and institutions to ‘climate proof communities ... against climate change’.⁹⁴

While there are a number of other initiatives,⁹⁵ of note is the *Niue Declaration on Climate Change* which was adopted in 2008. Commitments include the development of tailored approaches to combat climate change in the Pacific and to support action at the international level to draw attention to the impacts of climate change on territorial integrity and national

⁸⁹ Secretariat of the Pacific Regional Environment Programme (SPREP), *SPREP's Structure*, Online. Available HTTP: <<http://www.sprep.org/sprep/about.htm>> (accessed 25 December 2010).

⁹⁰ Secretariat of the Pacific Regional Environment Programme, *SPREP Annual Report: 2009*. Pacific Year of Climate Change, Apia: SPREP, 2010, p. 39.

⁹¹ Kinch et al, op.cit., p.30.

⁹² Clarke & Millar, op.cit., p.106.

⁹³ *Pacific Islands Framework for Action on Climate Change 2006-2015*, Principle 2.

⁹⁴ *Pacific Islands Action Plan on Climate Change 2006-2015*, Principles 2 and 3.

⁹⁵ For example, the *Pacific Islands Climate Change Assistance Program* (PICCAP).

security in the Pacific. It has been said that it is implicit in the Niue Declaration that existing national laws and policies on climate change in the Pacific are deficient.⁹⁶

SPREP has also developed a number of initiatives related to climate change including the *Pacific Islands Climate Change Assistance Programme*, the *Capacity Building for the Development of Adaptation Measures*, *Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project* (funded by GEF) and the *Pacific Adaptation to Climate Change (PACC) Project*.⁹⁷ This latter project is funded by GEF and implemented by SPREP and United Nations Development Programme (UNDP). It provides funds and support for national climate change adaptation projects in the areas of coastal management, food production and security, and water resources management and involves 13 Pacific countries. However, neither this nor any of the other initiatives described above directly relate to the development of law and legal frameworks.

Other regional initiatives include a focus on energy. Indeed the region as a whole has set sustainable energy systems as a priority.⁹⁸ The UNDP funded and administered Energy Division of the South Pacific Forum Secretariat is an example involving ten PICs focusing on energy efficiency.⁹⁹ Law can play an important part in facilitating and supporting these projects but as will be seen below, few of the Pacific SIDS have adopted specific domestic legislation. While it is beyond the scope of this chapter to consider every policy and activity in the Pacific, it is clear that they are not limited to government agencies and institutions. A number of non-governmental organisations in particular, are active in the region and engaged in capacity building for adaptation.¹⁰⁰

National Initiatives

⁹⁶ Kwa, op.cit., p. 116. There are also some longstanding regional environmental treaties, such as the *Convention on the Conservation of Nature in the South Pacific (1976)* and the *Convention for the Protection of the Natural Resources and Environment of the South Pacific (1986)*, but neither make reference to climate change.

⁹⁷ Ibid, p.114.

⁹⁸ Yu et al, op.cit., p.496.

⁹⁹ Ibid, p.497.

¹⁰⁰ For example the IUCN Pacific Mangrove Initiative Project: IUCN Regional Office for Oceania, *Pacific Mangrove Initiative Project Document*, IUCN: Fiji, 2000. In addition, the IUCN has assisted with building legal capacity in the region through the Pacific Centre for Environmental Governance: IUCN, *Pacific Centre for Environmental Governance*. Online. HTTP: <www.iucn.org/about/union/secretariat/offices/oceania/oro_initiatives/oro_initiatives_pceg/> (accessed 1 February 2012).

While international and regional efforts are important it is also clear that domestic and local action is needed. Although many PICs have developed strategies in this regard, few have implemented specific laws and policies.¹⁰¹ For example, the Solomon Islands is one of five countries to have developed a NAPA which recognises the need for response measures, a coordinating body and support mechanism.¹⁰² But arguably a legal framework is also needed to implement all elements of the plan. The Fiji Islands has developed a *National Climate Change Policy Framework* in 2007, focusing on adaptation, to be implemented through existing legislation on planning, forestry and sustainable development.¹⁰³ Niue has developed a *National Climate Change Policy* one objective of which is to ‘establish an effective regulatory and institutional framework’.¹⁰⁴ Options to achieve that goal include review of existing ‘relevant legislation, regulations, standards and practices.’¹⁰⁵ And, Samoa has also sought financial assistance in order to prepare a climate change policy.¹⁰⁶ Papua New Guinea set up an *Office of Climate Change and Carbon Trading* in 2008 with responsibility to guide action on forestry and carbon sinks,¹⁰⁷ but further developments are needed to participate in REDD programmes. The Republic of the Marshall Islands has established an *Office of Environmental Planning and Policy Coordination* as a focal point for projects submitted internationally which relate to climate change¹⁰⁸ and to ‘[w]ork in partnership with other government ministries and agencies, and the international community to prepare strategies to mitigate the negative impacts of climate change and prepare adaptation plan.’¹⁰⁹ Tonga has established a *Ministry of Environment and Climate Change* whose functions include the preparation of climate change plans and policies and to ensure ‘laws of the Kingdom relating to the management and protection of the environment and climate change adaptation and mitigation are reviewed, implemented and enforced.’¹¹⁰ Similarly the Solomon Islands has established the *Ministry of Environment, Climate Change, Disaster Management and Meteorology*.

¹⁰¹ Kwa, op.cit., p.111.

¹⁰² The other four are Kiribati, Samoa, Tuvalu and Vanuatu. UNFCCC, *NAPAs received by the secretariat*, op.cit.

¹⁰³ Kwa, op.cit., p.111.

¹⁰⁴ Government of Niue, *National Climate Change Policy*, 2009, Objective 5.

¹⁰⁵ Ibid, Strategy 5.6

¹⁰⁶ Kwa, op.cit., p.112.

¹⁰⁷ Ibid, p.111.

¹⁰⁸ *Office of Environmental Planning and Policy Coordination (OEPPC) Act 2003* (Marshall Islands) section 408(1)

¹⁰⁹ *Office of Environmental Planning and Policy Coordination (OEPPC) Act 2003* (Marshall Islands) section 405(g).

¹¹⁰ *Environment Management Act 2010* (Tonga) sections 8(1) (f) and (g) respectively.

Beyond policies and plans the question remains as to whether specific climate change legislation is needed or whether a better approach would be to utilise existing laws to address the issues.¹¹¹ There is at present no Pacific model for a climate change adaptation statute although in other areas, model legislation has been prepared to assist PICs.¹¹² Furthermore, there is little in the way of guidance in the broader literature¹¹³ with ‘very limited integration of climate change issues into national legislation in the region’.¹¹⁴ Where climate change has been dealt with it has been included in existing statutes. For example, the Tongan *Environment Management Act 2010* makes specific reference to climate change. It is noted as ‘an act to establish the ministry of environment and climate change to ensure the protection and proper management of the environment and the promotion of sustainable development’ with one of the objects being to ‘co-ordinate the role of Government in relation to all environmental management, including climate change issues, and decision-making processes,’¹¹⁵ to ‘promote meaningful public involvement in relation to issues of environment management, including climate change’¹¹⁶ and to ‘facilitate implementation of measures to increase the resilience of the Kingdom and its environment to climate change.’¹¹⁷

In 2010 Vanuatu amended the environmental impact assessment provisions in the *Environmental Management and Conservation Act 2002* to change the definition of ‘significant environmental impact’ to include ‘the degree to which the adaptation to, and mitigation of climate change is affected’.¹¹⁸ Furthermore, climate change issues are to be recorded in its Environmental Registry and climate change activities, impacts and issues are to be included in state of the environment reports.¹¹⁹ Vanuatu has also passed specific legislation to implement its international obligations in the *Framework Convention on Climate Change (Ratification) Act* [Cap 218]. However this does not extend beyond annexing the Convention. However, under the *Environmental Management and Conservation Act*

¹¹¹ For a discussion of this issue in the US context see Katherine M. Baldwin, ‘NEPA and CEQA: Effective Legal Frameworks for Compelling Consideration of Adaptation to Climate Change’ (2009) 82 *Southern California Law Review* 769-808.

¹¹² For example, this approach has been taken in relation to the development of laws to safeguard traditional knowledge and cultural expression. See E Techera, ‘Safeguarding Indigenous Bio-Cultural Heritage in the South Pacific Small Island States’ (2010) 17 *Policy Matters* 29-33.

¹¹³ Ruhl notes that the literature ‘offers very little in the way of concrete frameworks for building hard law to apply at national, state, and local governance scales’: Ruhl, *op.cit.*, p.381.

¹¹⁴ Clarke & Millar, *op.cit.*, p.107.

¹¹⁵ *Environment Management Act 2010* (Tonga) section 4(a).

¹¹⁶ *Environment Management Act 2010* (Tonga) section 4(b).

¹¹⁷ *Environment Management Act 2010* (Tonga) section 4(g).

¹¹⁸ *Environmental Management and Conservation (Amendment) Act 2010* (Vanuatu) section 3 amending section 2 of the *Environmental Management and Conservation Act 2002* (Vanuatu).

¹¹⁹ *Environmental Management and Conservation (Amendment) Act 2010* (Vanuatu).

amendments the relevant Minister is given power to make regulations in relation to implementation of the UNFCCC.

Other examples include Kiribati where the *Building Act 2006* requires a sustainability report to be prepared in respect of building approvals which must consider the effects that climate change may have on a building.¹²⁰ In other countries there are general requirements to take all environment related issues and impacts into account but no specific mention is made of climate change.¹²¹ While there are no specific laws focused on climate change adaptation, countries such as the Solomon Islands have developed national disaster management legislation with an accompanying institution to coordinate and oversee disaster management responses.¹²²

Conclusion

Law and policy can play a significant role in assisting to mitigate GHG emissions and adapt to climate change. International law has an important standard setting, capacity building and educative role. It is in the area of capacity building that it offers the most to PICs in terms of their efforts to address climate change. In particular the technology transfer and financial assistance offered through the UNFCCC framework and GEF are beneficial for PICs many of whom are also LDCs.¹²³ In addition, the CDMs are useful in as much as they will allow regionally relevant developed countries, such as Australia and New Zealand for example, to invest in renewable energy production and other projects in PICs.¹²⁴ These initiatives offer much hope in terms of the introduction and expansion of renewable energy in the region.

Although the utilisation of general environmental laws will be important in terms of land use planning and adaptation to climate change, it would seem that some specific laws will also be essential. Funding to date, through bodies such as GEF, has done little to advance climate change law in the Pacific. While there may not be a good argument for developing climate change adaptation legislation, it will be necessary to establish institutional and legal

¹²⁰ *Building Act 2006* (Kiribati) section 19(1)(h)

¹²¹ *Environment Act 1998* (Solomon Islands), *Environment Management Act 2005* (Fiji Islands) 2005, *Environment Act 2000* (Papua New Guinea).

¹²² *National Disaster Council Act 1989* (Solomon Islands).

¹²³ Yu et al, op.cit., p.501.

¹²⁴ (Peel, 2008) at 930

frameworks to take advantage of specific tools, such as CDM and REDD programmes. In addition there might also be other avenues, including heritage and tort laws, which could be explored further as a means to obtain compensation to pay for adaptation.¹²⁵ Furthermore, if adaptation is the key approach that PICs are to take then capacity building is essential. Lack of adequate funds and technical resources currently limits the actions that PICs can take. It is clear that greater utilisation could be made of the mechanisms available within the UNFCCC framework but appropriate legal governance is needed. Legal frameworks must be tailored to the specific Pacific context and may include community-based approaches which have proved effective in relation to other environmental concerns and have been picked up through the *Capacity Building for the Development of Adaptation Measures in Pacific Island Countries* project.¹²⁶

Although it has been said that ‘environmental law has discovered adaptation’¹²⁷ it is clear that much remains to be done in designing effective legal frameworks. While some PICs have developed specialised agencies with enabling legislation, others have embedded climate change within existing law and policy. In the coming years the effectiveness of these approaches will need to be assessed, strengths and weaknesses identified and the perennial problem of enforcing environmental law addressed. By sharing experiences best practice legal options can be identified and technical capacity strengthened across the whole of the Pacific.

¹²⁵ See K Ruddock and D Green ‘What Legal Recourse do Non-State Islands Have to Obtain Resources to Adapt to Climate Change?’ (2011) 7(2) *Macquarie Journal of International & Comparative Environmental Law* 69-91, particularly as regards the rights of non-state indigenous actors in the Pacific region.

¹²⁶ Clarke & Millar, *op.cit.*, p.108-9.

¹²⁷ Ruhl, *op.cit.*, p.429.