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**THE NEED FOR EFFECTIVE
ENVIRONMENTAL GOVERNANCE IN THE
PACIFIC REGION ON CLIMATE CHANGE**

ALENI SOFARA

**THE NEED FOR EFFECTIVE ENVIRONMENTAL
GOVERNANCE IN THE PACIFIC REGION ON
CLIMATE CHANGE**

by

Aleni Sofara

A thesis submitted in fulfilment of the
requirements for the degree of
Masters of Law (LLM)

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School of Law
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February, 2011

DECLARATION

Statement by Author

I, Aleni Sofara, declare that this thesis is my own work and that, to the best of my knowledge, it contains no material previously published, or substantially overlapping with material submitted for the award of any other degree at any institution, except where due acknowledgement is made in the text.

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The research in this thesis was performed under my supervision and to my knowledge is the sole work of Mr. Aleni Sofara.

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DEDICATION

This piece of writing I dedicate to my wife, my children and my grandsons:

Taitafolaoletuamasaga Alan Junior Sofara

and

Tailolomaoana Francisco Alexander Sofara

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To God be the Glory and Honour. In Him, all things are possible; anything is possible.....what more can I say?

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To Gus and Liz, Dan and Mau.....faafetai tele lava and God Bless.

.....
Aleni Sofara

ABSTRACT

There is a pressing need for more effective environmental governance in the Pacific Island countries to address the issue of climate change because it not only raises risks but also increases uncertainties within societies. This research paper aims to identify the major legal and policy challenges posed for Pacific Island countries by the phenomena of climate change. As the world is aware, climate change caused by anthropogenic greenhouse gas emissions is a global environmental problem. Hence, climate change is already happening and it is here to stay. Climate variability and change affects individuals and societies. In particular, this paper will identify the role that law and environmental governance can play in facing these challenges and in responding positively to any potential opportunities as well. Furthermore it will also identify the risks, and the areas that must be considered priority within the region and areas that require strengthening in order to provide sufficient and appropriate awareness and preparedness to the expected consequences as a result of climate change. Strengthened environmental governance by way of preparedness should be in place at all levels to enable it to respond immediately and effectively to emerging environmental challenges as a consequence of climate change.

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RESEARCH QUESTIONS

- What are the existing legal mechanisms available to the Pacific Island countries to regulate the region's response to the problem of climate change?
- What are the most pressing risks for Pacific island countries from CC?
- Do the available legal mechanisms provide adequate means for each Pacific Island country to respond to the challenges and risks of climate change?
- Do these mechanisms provide protection for the people and environments that are or will be adversely affected by climate change?
- Is the region fully aware, well informed and educated on climate change and prepared for climate change impacts when it strikes?
- What can the Pacific Island countries do about the process of climate change generally and more specifically what can they do about managing the likely impacts of climate change?

Research Methodology – Data Material Gathering

- Primary sources such as pieces of legislation, attendance, participation at discussions and paper presentations at international conferences and conventions, as well as personal communications and interviews with the following individuals:
 - Mr. Clark Peteru (Legal Officer SPREP)
 - Officers of the Ministry of Natural Resources & Environment – MNRE Samoa.
 - Mr. Auseugaefa Poloma Komiti (Secretary to Ministry of Prime Minister and Secretary to Cabinet).
 - Mr. Asuao Kirifi Pouono (CEO Ministry of Agriculture).
 - Mr. Iosefatu Reti, Environment Consultant, (PECL) Apia, Samoa.
 - Mr. Alan Resture (A resident of Tuvalu).
 - Mr. Brian Phillips (Ni-Vanuatu delegate Climate Change Training SPREP), Apia.

- Secondary sources such as commentaries, journals and books. Online materials: international conventions on environmental issues and climate change. Reports available: South Pacific Regional Environmental Protection (SPREP). Newspaper articles on climate change.

Summarily, the paper is an attempt to identify areas that must be considered priority by the region and areas that require strengthening in order to provide sufficient and appropriate awareness and preparedness to the expected consequences of climate change. Furthermore, it will provide recommended strategies for enhancing the rights of the citizens of the region who will be affected as a consequence of climate change.

1. Introduction

Climate change is a high priority development focus that is squarely at the forefront of international concerns. The international concern now shifts from the question about whether we can do anything about climate change to the conviction that we cannot afford not to do so. Climate change and sea level rise are now considered a global phenomenon and has been a hot topic of debate and discussions over the years.¹ Climate change is now a serious threat to sustainable developments in the Pacific region and to the survival of Pacific Island countries and communities. The Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report shows unequivocally ‘that climate change is occurring and no doubt caused by human actions. Adaptation to climate change is now an inevitable requirement, as the earth begins responding to greenhouse gases already emitted.’²

In this regard, it is now a concern in the Pacific region especially in the interests of low lying island countries on the adverse implications of climate change, in particular sea level rise. Without serious action, the global economy and the fragile resources of the Pacific will be severely affected.

While one must acknowledge that concerted legal and policy initiatives to environmental issues of climate change are developing in many regions of the world, what is of great concern is the fact that governments, institutions and civil society organisations in the Pacific Islands are not responding effectively to the challenges of environmental governance at the international level. One can say that if Pacific Island governments are not responding effectively at the international level, then how can it be possible for them to respond effectively at the regional level? It is a global matter whereby the world at this time and age cannot afford to overlook the issues of climate change.

¹ Christopher Reeves, 63rd United Nations General Assembly (UNGA) Debate on Climate Change. Online: climatechangetoday.wordpress.com/.../climate-change-hot-topic-at-unga-debate/ (Accessed 14 May 2009).

² The Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report Online: www.ipcc.ch/ipccreports/assessments-reports.htm (Accessed 12/03/2009).

The environmental issues at hand are the present challenges of how the world must effectively protect the environment, bearing in mind that good environmental governance is measured by the effectiveness of strategies and initiatives implemented to achieve environmental goals. The same challenges go for the Pacific Islands. 'It is now widely believed that good governance is a key factor in achieving faster economic growth and development and the perceived quality of governance has become one of the conditions for receiving development assistance and for investing in the country by international investors.'³

The importance of good governance to combat the effects of climate change cannot be over-emphasised. Good governance and sound environmental management are inextricably linked.⁴ However, one may debate whether it is the job of Governments only to effectively control political procedures and environmental laws, or what should be the best mechanisms to employ in its attempt to bring under its control climate change problems?

There is a need for all nations to do all in their powers to ensure that all laws and policies that regulate environmental protection are intact. No one can deny the fact that when all laws and polices are in place, they are expected to provide the required and demanding qualities of proper environmental governing. In doing so, most likely it will make available the appropriate environmental governing structures and may present the proper governing process and procedures in awareness, preparedness, control and monitor the impact of climate change.

This research paper will focus on the need for effective environmental governance in the Pacific region on climate change and intends to cover the principal issues of: (i) how the region can respond to the issues of climate change; (ii) the risks to the region because of climate change; (iii) the protection the region can adapt to climate change and (iv) the extent whereby the region is prepared if disaster strikes.

³ Professor 'Dejo Olowu, 'Environmental Governance and Accountability of Non-State Actors in Africa.' A Rights-Based Approach.' (2007) 32 *South African Yearbook of International Law* 261.

⁴ Wansolwara Online, Good Governance vital for environmental health (May 4th 2005). www.usp.ac.fj/journ/docs/news/index.html (Accessed: 12/02/09).

2. Environmental Governance in International Law

Admittedly, ‘governance’ has become a worn out concept and has since the 1990s been applied by institutions, states, policy-makers, researchers and other commentators to diverse ‘zones’ of human endeavour.⁵ When placed within the environmental context, the concept is generally defined as encompassing the relations and interplay among governmental and non-governmental entities, processes and normative frameworks where powers and functions directly or indirectly influence the use, management and control of the environment.⁶

Environmental governance thus concerns how legal and policy decisions are made, with particular emphasis on participation by human beings who will thereby be directly affected by the outcome of such decisions. An important question arises then: what is the scope and content of environmental governance in international law? Even though the concept of environmental governance originated within the scope of the international community’s concerted responses to the environmental challenges of the mid-1980s and the decades following, there has been an unmistakable recognition that international responses and initiatives would only thrive when effective normative, institutional and policy frameworks are established at the domestic level.⁷

This thinking has even gained added relevance through the common idea that environmental governance holds the potential of promoting the goals of sustainable development.⁸

However, in the present globalisation era, it is evident that the biggest threat to the efficacy of international environmental law is the emergence of powerful multinational enterprises, global warming and climate change.⁹ Whether elsewhere in the world with developing countries or the developing Pacific region, the experience

⁵ Above n 3.

⁶ Michael I. Jeffery QC, *Environmental Governance: A Comparative Analysis of Public Participation and Access to Justice*. *Journal of South Pacific*.
<http://www.pacii.org/journals/fJSPJ/vol09no2/2.shtml> (Accessed 08/01/2009).

⁷ K. Simberg, ‘Stratospheric ozone and climate protection: Domestic Legislation and the International Process’ (1991) 21 *Envtl L* 2174.

⁸ UNEP, Report of the Chair of the Committee of Permanent Representatives to UNEP on International Environmental Governance, Report of the Chair on International Environmental Governance, Committee of Permanent Representatives to UNEP 75th Meeting Nairobi Kenya, 27 June 2001.

⁹ Above n 3.

of developing states has commonly been in enduring of unbridled environmental damage, pollution and depletion in the name of economic investment and development.¹⁰ While enormous amounts of literature have been circulating on the subject of environmental governance, the linkage of national legal and policy initiatives to current multilateral approaches and thinking seems not to be keeping pace.

One must acknowledge that apart from the challenge of synergy, the discourse on international environmental governance is entangled in dire conceptual and theoretical dilemmas. One dimension to these dilemmas is labelled as ‘democratic deficit’ – an unveiled reference to the question of legitimacy pertaining to the roles of international development and environmental governance institutions, weak and poor states, and other decision-makers in the environmental governance sphere.¹¹

This dilemma has found elaboration in the works of numerous authors who persistently query the absence of structures that would ensure multilateral development. Institutions and agencies are accountable to those human beings who are adversely affected by their decisions, actions or inactions.¹² Without doubt, the pursuit of environmental governance at a universal scale is burdened by the fact that there is no central institutional ‘sovereign’ to decree sweeping environmental protection measures at the international level or to insist on compliance. In the absence of such an arrangement, therefore, a fluid system of international environmental governance persists.¹³ Hence, the current system largely reflects the strengths and dysfunctions of international politics and shows the complexity of stimulating efficient collaboration among the divergent community of nations; not the least in environmental matters that demand universal action.¹⁴

¹⁰ Environmental law in developing countries: Selected issues’ *IUCN Environmental Policy and Law* Paper no 43 (2004).

¹¹ Neil Craik, ‘Deliberation & Legitimacy in Trans-national Environmental Governance: The case of environmental impact assessment’ IILJ Working Paper 2006/10, 1 <http://www.iilj.org/documents/2006-10-GAL-Craik-web.pdf> Victoria University Wellington Law Review 381 (Accessed 13 January 2009.)

¹² Steven Bernstein, ‘Legitimacy in Global Environmental Governance’ (2005) 1 *J Intl L and Intl Rel* 139. http://www.allacademic.com/meta/p254253_index.html (Accessed 13 January 2009).

¹³ Jutta Brunee ‘Coping with Consent: Lawmaking Under Multilateral Environmental Agreements’ University of Auckland. (2002) 15 *Leiden J Intl L* 1.

¹⁴ Sir. Geoffrey Palmer, ‘New ways to make international environmental law’ (1992) 86 *AJIL* 259, 270-272.

3. Overview of Environmental Governance in the Pacific

Governance is about ensuring that government resources and powers are used to optimum public benefit. Good governance in environmental issues is a pre-requisite for sustainable development to take place in the Pacific region. Sound policies, with clear programmes and activities that are designed to implement the environmental issues are needed in the region.

All ministries of governments involved must fully commit and engage in this process to achieve environmentally sustainable development in the country.¹⁵ It is more likely to be achieved if governments are fully accountable and all its options open to scrutiny.¹⁶ However, the real threats to the Pacific Islands in regards to environmental governance arise from firstly, public negative perception and secondly, policies pursued by island governments which undermine their ability to function effectively.

3.1 *The Negative Perception*

The common public assumption in the Pacific region is that solutions to environmental problems like climate change lie in cash, laws, courses, computers, internet and formal structures, and that assumption points directly to the government.¹⁷ The dominant perception in the Pacific appears to be that environmental problems are the responsibilities of government and government leaders only, and to whatever extent.¹⁸ This approach is manifested within the villages of Maninoa/Siumu, Mulivai/Safata and Saletagaloa/Salelologa in Samoa.¹⁹ This same approach was reiterated by Alan Resture to be the same view by the Tuvalu people that government is held responsible to resolve any arising environmental issue.²⁰

¹⁶ Ron Crocombe, *The South Pacific* (2001) 542.

¹⁷ Above n 2.

¹⁸ Interview with Chief Luamanu Ioe, Village Mayor of Maninoa/Siumu at his residence 12 January 2009. Interview with Malo Tauati, Village Mayor of Mulivai/Safata 03 February 2009 and Interview with Fiu Loimata, Village Mayor of Saleleloga 22 March 2009.

¹⁹ *Ibid.*

²⁰ Interview with Alan Resture, a citizen of Tuvalu, a participant and presenter at the Oceania Development Network Capacity Building Workshop held at the National University of Samoa, Lepapaigalagala Campus 28 – 29 October 2008.

The misconception that environmental solutions are a problem for governments only fails to appreciate the fact that the concept of environmental governance encompasses the relationships and interactions between government and non-government structures, procedures and conventions, where power and responsibility are exercised in making environmental decisions.²¹ It concerns how the decisions are made, with a particular emphasis on the need for citizens, interest groups, and communities generally civil society to participate.²² Effective public participation revolves around their knowledge, their understanding and their awareness of the current climate change which poses grave concerns; without it, many voices may not be heard.

Most important, perhaps, is simply the recognition that the governments are only one part of governance and not nearly as important as many leaders think they are.²³

Civil society, in the sense of community and community organisations, is also the basis of traditional governance.²⁴ An effective civil society will be more able to utilise opportunities for more open government, (transparency and accountability) but these are still constrained in almost all countries of the region. Civil society is separate from, and independent of both the state and the market, and concerned with the relationship of individuals, social institutions and non governmental organisations to both the state and the market.²⁵

It is important that access to government information is perceived and expected to be readily available for consultations and discussions to take place when the need arises, especially in matters of natural disasters as a consequence of climate change.²⁶ The information on environmental matters and climate change issues must not be confined to the urban population only but must be relayed and delivered to all citizens by way of education and awareness programmes. The rural areas must not be isolated from receiving the important information on climate change. Hence, the issues of ‘negative

²¹ Above n 6.

²² *Ibid.*

²³ Above n 18 pg 543.

²⁴ Above n 2.

²⁵ Baeanisia & Faasala, *‘Study Report on Civil Society in the New Millennium.’* (1999).

²⁶ Address by President of Le Siosiomaga Society of Samoa, Mr. Fiu Mataese, Published in the issue of Samoa Observer Newspaper 26 May 2009. Observer Online: http://www.samoaoobserver.ws/index.php?option=com_content&view=article&id=8509:no-climate-change&catid=50:headline&Itemid=62

perception’ and that ‘government is solely responsible’ on environmental matters are not necessarily all bad. However, they can serve as a challenge to regional governments and agencies, NGOs, schools, village councils, village committees, Churches and religious organisations, and as a way to encourage the public to participate in responding to environmental challenges. All citizens are expected to participate if they are fully aware and understand the outcome of climate change: that it is not a government business only, but everyone’s business.

3.2 Ineffective Policies

The quality of good governance and the extent of opportunities for civil society participation are fundamental to effective environmental responsiveness but are not easy to measure. The idea of ‘good governance’ is given different meanings by different organisations, but it is generally characterised as referring to openness, participation, accountability, predictability and transparency.²⁷ Academics and researchers in the region feel that expert opinions and opinion polls reflecting perceptions about governance in the small Pacific states would be very difficult to obtain on a widespread and regular basis.²⁸

3.2.1 Problem with Pacific Islands Countries (PICs) Frameworks

The Asian Development Bank (ADB) Regional Technical Report 2008 indicated poor governance in the region in that “the risks of the Technical Assistance (TA) relate primarily to the availability of primary data and proxy data as required. The report states that information is not located in each Pacific Developing Member Country (PDMC), but instead resides with various external agencies. As a result, collation, cleaning, and filling gaps becomes reliant on strong stocktaking to identify the sources of quality data, and upon the willingness of the holders of data to share information.”²⁹

The governing structure is a problem in the Pacific region environment. According to the Senior Environmentalist with the Secretariat of Pacific Regional Environmental

²⁷ IUCN Environmental Policy and Law Paper No. 70. Governance for Sustainability

²⁸ Above n 2.

²⁹ Asian Development Bank (ADB) Regional Technical Assistance Report, Project Number: 41187 (October 2008).

Programme, (SPREP) it is most likely the environmental legal framework in the region is not only influenced by businesses, but determined by it.³⁰ Hence, governance and sustainability are the environmental mechanisms that require proper and constructive determination yet, to date, regional governments have failed to deliver.³¹ As already mentioned, problems in the Pacific region with environmental governing structures, environmental governing processes and procedures thus fail to deliver to the public at large the required qualities of environmental governance.

3.2.2 Why it is hard to measure good governance.

The lack of policy coherence and consistency is a serious impediment to the implementation of environmentally sustainable development in the region. The clear identification of specific responsibilities needs to be outlined for governments of the region to make some meaningful progress in the implementation of sustainable development. The Pacific Islands Framework for Action on Climate Change 2006 – 2015 recognises that it has a regional responsibility for addressing the risks and effects of climate change in the context of its national sustainable development strategies, reflecting the principles of sustainable development and good governance. Furthermore, it states that good governance ensures the adoption of core principles of accountability and transparency by all stakeholders and at all levels, which is critical for cost effective adaptation against the risks of climate change and greenhouse gas reduction activities.³²

3.2.3 Lack of Political Will.

The International Indigenous Peoples Forum on Climate Change (IIPFCC) whereby most Pacific Island countries are members is quite concerned that ambitious emission reduction targets are not being addressed adequately.³³

3.2.4 What is required for PIC's to move forward.

‘The core role of government in regards to good environmental governance is to

³⁰ Email from Tapa Suaesi (Senior Environmentalist SPREP) <tepas@sprep.org> to Aleni Sofara alenisofara@yahoo.com 05 February 2009.

³¹ Interview with Environmental Sustainable Principal Officer Ministry of Natural Resources and Environment (MNRE) Samoa. 22 April 2009.

³² SPREP Pacific Islands Framework for Action on Climate Change 2006 – 2015.

³³ IIPFCC- Policy Paper on Climate Change- September 27, 2009

provide and maintain the legal framework, relevant policies and to interact with individuals, social institutions and non governmental organisations.’³⁴ There is an urgent need for an acknowledgement by some if not all Pacific Island governments that they are responsible for the continuing loss and depletion of natural capital mainly by failing to implement Convention obligations. The prevailing situation in many of the Pacific Island nations involves:

- Poor management of resources with inequality of access and ownership.
- Promulgation of weak environmental laws which are subject to manipulation by the executive and a failure to implement the laws.
- Inability to implement convention obligations and to integrate and manage them into public policies and programs.
- Lack of State accountability in the use of natural capital and political power to frustrate environmental policies and program.
- Lack of local control over resources, and the removal of decision-making authority or ownership is still a problem.³⁵

The problem is that the expense and high cost of travel to environmental meetings, workshops, trainings and research is extremely high, whereas the end results reveals just a minor and small scale of environmental resolutions and small scale economies in the region.³⁶ The message outreach on environmental protection to outer islands and rural villages is insufficient, and inferior. The message that environmental issues are not for governments only, rather it is everyone’s business, is so far not well established. In this regard then, regional governments have failed to deliver. Like anywhere else, good governance (reporting and implementation, awareness and preparedness) should be focused on environmental sustainability since the Pacific’s greatest asset is its environment.³⁷

A skilled work force is needed at the national level to coordinate policy formulation and implementation of sustainable development. The provincial level authorities must also have skilled personnel to coordinate the implementation of environmental sustainable development in both urban and rural areas. Evidence of the lack of

³⁴ Above n 19

³⁵ Above n 25.

³⁶ Above n 6.

³⁷ Above n 1.

resource capacity is shown by the delay in the region's formulation of its sustainable development policies and strategies. Further, this factor has also impeded close monitoring and surveillance of development activities in terms of proper management and utilization of natural resources.³⁸

3.3 Problems of Communication

Communication and awareness is very important so that the public is provided with the necessary information and knowledge to meaningfully participate in environmental sustainable development activities at the community level. For instance, issues of adaptation and building resilience to the impacts of climate change, natural and environmental disasters, waste management, pollution prevention and risks it poses to the environment and human health - must be effectively communicated to the people.³⁹

Communications can be defined as using the right tool, to promote the right message, to the right people, at the right time. SPREP is committed to supporting its members in their objectives to strengthen the role of communication in promoting sustainable environment development through the provision of communications training workshops,⁴⁰ and it is the duty of regional governments' to provide resources and services to the public at large. The SPREP organization provides environmental advice as well as providing legislative drafting support to its member countries whereas each country sets its own priorities.⁴¹ Each country has its own environmental framework which comprises several key factors such as biodiversity (protected area, invasive species, wetlands, and coral reefs) waste management, sustainable development, and the major issue of facing the Pacific region of climate change. Hence, the importance of such information must be communicated to the general public.

³⁸ Above n 32.

³⁹ Interview with Mr. Clark Peteru, Environmental Legal Officer SPREP, Apia. 01/02/2009.

⁴⁰ SPREP Online: Environmental Awareness. <http://www.sprep.org/topic/awareness.htm> (Accessed 05 January 2009).

⁴¹ *Ibid.*

3.4 Problem of non cooperation

A significant factor in the poor implementation of environmental framework is that environmental personnel do not liaise with legal officers thus creating a bottleneck in the passage of environmental laws. In most countries of the region, the relevant Ministries and Agencies seem to work in isolation from each other. There seems to be no policy consultation on issues of mutual interest. This approach does not help to reinforce each others' efforts to achieve common national sustainable development objectives.⁴²

An area in which there has been some significant activity in recent years that exemplifies the problem of non-cooperation of government effort is in relation to the construction of seawalls. The construction of seawalls to protect settlements against coastal erosion and storm surges serves to be a proper step undertaken in most Pacific countries, however, some stretches of seawalls in Samoa are totally damaged.⁴³ 'There is the possibility of negligence and poor management whereby some constructions not complying with project specifications that resulted in some stretches of seawalls being totally damaged.'⁴⁴ The damaged seawalls in Navua/Fiji are the results from options that have shown to be unsuccessful in solving underlying problems because of the lack of proper evaluation of adaptation options.⁴⁵ To date, it is reported that some communities in the region are currently experiencing frequent inundation further downstream after the construction of a sea wall upstream.⁴⁶

Similarly, there has not been thorough research on the impact of constructing seawalls in the region. In particular, there has not been proper feasibility studies conducted on

⁴² Above n 6.

⁴³ Interview with Iosefatu Reti at his office 22 February 2009. Reti is a Former Senior Environmentalist with SPREP. At present he operates an Environmental Consultancy Office (PECL) Apia, Samoa.

⁴⁴ *Ibid.*

** It was observed by the author that the Siumu seawall is completely damaged, some parts of the seawall is washed out to sea.

The seawall at the village of Faga/Faasaleleaga is just too high. When huge waves splash against the seawall, the sea water will go over the seawall. There is no way the sea water could be washed back to sea. It will remain on the road for a long time.

⁴⁵ Melchior Matakai, Kanayathu Koshy, and Veena Nair, *Implementing Climate Change Adaptation in the Pacific Islands: Adapting to Present Climate Variability and Extreme Weather Events in Navua (Fiji)*. AIACC Working Paper No. 34 June 2006 www.aiaccproject.org. (Accessed 17/04/2009)

⁴⁶ *Ibid.*

the consequences. In Samoa, the constructions of seawall projects are tendered to private construction companies under the supervision of civil engineers from the Ministry of Works, Transport and Infrastructure (MWTI). The result of damaged seawalls now blames the MWTI for having failed to closely monitor the development of the project. It is important to note that the MWTI failed to seek environmental advice from the Ministry of Natural Resources & Environment (MNRE) or environmental advice from SPREP in this instance.⁴⁷

Another classic example of confusion on environmental policies can be said of a current problem situation in Samoa. A Cabinet Directive Order (Fono Kapeneta) FK 12/05 whereby a decision is made for environmental protection purposes, that application for any building code project in Samoa shall not be granted by the Ministry of Works, Transport and Infrastructure (MWTI) unless the site is inspected, approved and consent is granted by the Ministry of Natural Resources and Environment. (MNRE)⁴⁸

The public is not well informed of such policy, in fact, the majority of the Samoan population, especially the rural areas are not aware of the process approved by Cabinet.⁴⁹ To date, building permits are granted to applicants by MWTI mostly without the approval and consent of MNRE. How the MWTI issue permits without the approval and consent of MNRE is a mystery. The Environmental Officer with MNRE explains that the many stop notices served to building projects issued by MWTI without MNRE approval and consent gives the impression that the public has no knowledge whatsoever that an approval and consent from MNRE is required.⁵⁰

The system requires the MWTI to inform the applicant to obtain approval and consent of MNRE. One can say that either the MWTI failed to inform the applicants, or there are some other forces or influences that result in MWTI granting building permits without MNRE approval and consent. The important questions is whether this is the proper and appropriate system....that the public can only be informed of the required approval and consent by MNRE when applying for a building permit with MWTI?

⁴⁷ Above n 6.

⁴⁸ Cabinet Directive (FK 12/05) Confirmed interview 12 February 2009 with Mr. Auseugaefa Vaasatia Poloma Komiti, Chief Executive Officer Ministry of Prime Minister and Secretary to Cabinet.

⁴⁹ Above n 33.

⁵⁰ *Ibid.*

Generally, it is not for the public to come to the government for information. Rather it is the government that should take the information out to the public. Such is a classic example of government's failure to use the right tool, failure to promote the right message, failure to inform the right people, at the right time thus, failing overall to present the proper governing process and procedures in environmental governance.

The foregoing examples illustrate some of the apparent discrepancies in the implementation of international and regional objectives in relation to principles and practices of sustainable development. Stakeholders at some level seem uncommonly unaware of governmental policies and procedures and are quite distant from the process. The general public are naturally disadvantaged by their lack of awareness of governmental policies and procedures, which public officials are supposed to modify. The problems of ineffective policies, communication and non-cooperation add glitches to the system. Complications with dissemination of information from governments to the public at a level that is acceptable to all stakeholders, is a huge undertaking and is probably not unique to the region. All these elements have implications for practice and propriety as well as in maximising the effectiveness of policies and procedures within their relevant frameworks.

The problems outlined above stem from non-cooperation between government ministries and the government's failure to enforce its laws and policies. The damage to the seawalls clearly implies the need for qualified personnel in the civil engineering profession, proper scientific researchers and environmentalists' to monitor such projects.

3.5 The Impact of Culture on Governance

Much of the Pacific history is built around languages, values, identity, perspectives and consequent commitments because its everyday life functions and operates under cultural perspectives.⁵¹ Culture, customs and traditions in the region are still strong, well respected and intact, thus playing a vital role in decision making at every level. The Pacific region remains a predominantly family-oriented society and as a result,

⁵¹ Above n 18 pg 544.

emphasis will continue to be placed on cultural elements, family connections, the chiefly system and so forth.

The chiefly system in the region is essentially a traditional governing system, serving social, economic and political functions, and a system based on affective ties.⁵² Furthermore, the culture in the region manifests itself in an ideology known as the Pacific Way: hence, the Pacific Way encapsulates all aspects of life, social, economic and political.⁵³ Thus, it gives clear views of the regional framework and indication of the solidarity of the cultural structure of chiefs and their families, the chief and his people. The chief is the authority and must be respected. For example, in the Kingdom of Tonga, it is considered a crime to criticise the King or any member of the royal family.⁵⁴

It has been generally argued that there can be two perspectives on cultural traditions in relation to governance. Firstly, ‘customs are those from which all benefit, such as sharing and cooperation; and secondly, customs are designed to consolidate the power of the ruling class.’⁵⁵ In most circumstances the chiefly aristocracy comprising the respect demanded by the chiefs from the community and the controlling powers of the chiefs over the community still remains. In general observation, most political leaders are also traditional leaders in the region. Those affective ties that characterise “pacific” styles of governance also tend to conflict with more modern international standard of transparency in governance and issues of corruption frequently arise.

Corruption is one of the major impediments to environmental sustainable development and other national development objectives in the Pacific region. To a certain extent, the ineffective public service, increased problems with law and order,

⁵² Iati Iati, ‘The Good Governance Agenda for Civil Society’ in Elisa Huffer and Asofou So’o, *‘Governance in Samoa’* (2007). 71.

⁵³ *Ibid.*

⁵⁴ *Ibid.*

⁵⁵ Futa Helu, *‘Tradition & Good Governance’* SSG No. 3, (1997) ANU, Canberra.

poor education and health services, customs and traditions and other social and economic difficulties facing the country are indicative of the severity of this issue.⁵⁶

The following case studies illustrates examples of corruption emanating from chiefly systems peculiar to certain individuals and society, and their impact on regional efforts to harness complicity in the event of environmental damages.

Case A: SAMOA.** In Samoa, a high chief of the village of Saleimoa⁵⁷ give orders to his family to clear the mangroves next to his piece of land for reclamation for the purpose of constructing his children's business. It did not obtain consent from the Ministry of Lands, Survey and Environment (MNRE). It is reported to the (MNRE) by other villagers.⁵⁸ A letter to advise and order the chief to refrain from reclaiming was immediately discharged under the Lands, Survey and Environment Act 1998.⁵⁹

In the letter, it emphasised in particular, section 95 specifying two of the principal functions of the Ministry under this part of the Act which are:

"(a) to advise the Minister on all aspects of environmental management and conservation including:

- (i) policies for influencing the management of natural and physical resources and ecosystems as to achieve the objectives of this Act;*
- (ii) (ii) the potential environmental impact of any public or private development proposal;*
- (iii) ways of ensuring that effective provision is made for public participation in environmental planning and policy formulation processes in order to assist decision making at the national and local level; and*

(b) to ensure and promote the conservation and protection of the natural resources in environment of Western Samoa."

⁵⁶ Above n 40.

^{**} The author is from the village of Saleimoa and has a fair understanding of this case.

⁵⁷ Saleimoa Village in the Constituency of Sagala Le Falefa situated 13 km west of Apia, the Capital of Samoa.

⁵⁸ See Above n 49.

⁵⁹ Lands, Survey and Environment Act 1998 Paclii Online: URL: <http://www.paclii.org/ws/cases/WSSC/2003/54.html> (Accessed 10 February 2009.)

In addition, Section 104 of the Act, it gives the Minister specific additional powers to enable the Ministry to carry out its functions under Part VIII.

"Power to assess the environmental implications of any development project or proposal which involves, or will involve, the consumption of terrestrial, coastal or marine natural resources, or any change in the established use of any such resources".

Three weeks later, a second letter was discharged again to advise the chief, but by then, the building was completed and the business had started its operation. In effect, the enforcement of environmental laws require the political leaders to be transparent in carrying out their powers and duties as authorised by law, and further requires the environmental staff to have adequate training in understanding the laws and its process.⁶⁰

This matter raises some crucial questions:

- Why did it take three weeks for the second letter to be discharged?
- Why did the Ministry (MNRE) fail to follow up the first letter?
- Why was the chief not charged under Section 122 of the Act?

Section 122 provides:

(1) Every person commits an offence who acts in contravention of any of the provisions of this Division and shall be liable on conviction to a fine not exceeding \$5,000.

(2) A Court may, in addition to any penalty provided for by this section, order the offender to repair or restore under the supervision of the Director any damage done by him as a consequence of his offence, and, if the Department shall have undertaken work pursuant to paragraph (b) of section 121 of this Act, the Court may in its discretion, order the offender to pay the Department all or part of the expenses incurred by the Department in so doing and the amount so awarded shall be deemed to be a judgment debt due to the Department from the offender

⁶⁰ Above n 40.

*and may be enforced in any manner in which a judgment or order of the Court for the payment of a civil debt may be enforced.*⁶¹

Case B: VANUATU. In the 1998 Public Report on the Breach of the Leadership Code and the misuse of the Cyclone Betsy account by a former Prime Minister. The investigation into the operation of the account reveals the former Prime Minister as failing and unwilling to distinguish between funds that belong to the people of Vanuatu, and funds that are his own. It must be borne in mind that Cyclone Betsy is a matter that involves all Ni-Vanuatu - the people, the land, the economy and the environment.⁶²

The same leader while acting as Minister of Lands in 2001 with the Powers of Section 8 and 9 of the Land Reform Act [Cap 123] on behalf of disputing landowners granted a lease of over 200 acres to his son with no premium and later resells the lease for an alleged sum of Vt10,000,000.00.⁶³

Using the same powers afforded under the Land Reform Act [cap 123] to the Minister of Lands, on 11th April 2006 the same leader grants himself and his son under different names two new leases on the Second Lagoon in Port Vila. Small premiums are paid, but shortly after, he resells these titles making huge profits in the process at the expense of the true land owners.⁶⁴

Case C: SOLOMON ISLANDS. Most politicians (Big Chiefs) directly benefit from logging and are shareholders in logging companies. They are the exact people who do not want to make proper laws in regards to protecting the environment because it threatens their sources of income. For instance, one of the strong advocates against the proposed Forestry Bill in the Solomon Islands is a Member of Parliament of North New Georgia Constituency and heir to his father's share in the Golden Spring Timber

⁶¹ Paclii Online: URL: <http://www.paclii.org> (Accessed 10 March 2009.)

⁶² Vanuatu Ombudsman Report "*Breach of the Leadership Code and Misuse of Cyclone Betsy Account by Former Prime Minister Maxime Carlot Korman*" [1998] VUOM 6; 1998.06 (26 February 1998). Paclii Online URL: <http://www.paclii.org/vu/ombudsman/1998/6.html>

⁶³ Vanuatu Daily Post Articles emailed by Brian Phillips piccap@vanuatu.com.vu 18 May 2009.

⁶⁴ *Ibid.*

Company which has been operating in New Georgia since the early 1990s. Plainly, this is one of the key reasons why there is lack of political will to enforce and enact better laws such as the long overdue Forestry Act 1999 to regulate logging in the country.⁶⁵

Previous research has shown that some Political Leaders in the Solomon Islands expect additional fees to carry out work normally considered part of their duties. In 1994 allegations are made that the Minister of Commerce & Employment, when negotiating with the managing director of Berjaya's Star Harbour Timber Co. Ltd, received an offer of \$10,000 in order for him to endorse their application for the purchase of Star Harbour Timber Company. This kind of practice affects the integrity of some government agencies and officers across the country and further hampers the effective regulation of logging.⁶⁶

It comes not as a surprise in Samoa, Vanuatu, Solomon Islands and definitely other islands in the region that these matters disappear in thin air. No charges are laid against the chief in Samoa. The chief is a staunch and strong supporter of the government. The business continues to operate and most probably the matter is "resolved within the top level"⁶⁷ and in the *faa-Samoa*.⁶⁸ The Vanuatu leader continues to be in Parliament despite numerous reports involving him in multiple breaches of the Leadership Code.

The negative perception of corrupt governments in the region is largely blamed on culture.⁶⁹ Furthermore, the problems of communication and non-cooperation are issues of great importance that need to be addressed and resolved in particular to prevent further corruption as emanating from known cultural systems and hierarchies. Hence, these types of breaches of law by traditional and political leaders must stop. Serious efforts must be made by Pacific region governments to address such unethical situations.

⁶⁵ Ilan Kilo, (LA 326 Research Paper, University of the South Pacific School of Law, 2007).
Topic: "Describe the legal regime for regulating logging activities in the Solomon Islands and evaluate the effectiveness of this regime in protecting the environment and the interest of resource owners."

⁶⁶ *Ibid*

⁶⁷ Above n 33.

⁶⁸ *Faa-samoa* is customary and traditional settlement of disputes between the chiefs.

⁶⁹ Peter Lamour and Nick Wolanin, (eds) 'Corruption & Anti Corruption' (2001) 121.

The region requires the support of the international community in combating this disease in this part of the globe.⁷⁰ There is no point in governments seeking industrial and technological advances in relation to environment and climate change if the traditional and political leaders are not responsible. The PIC's and their respective governments must do all in their power, with the support of civil societies, to properly address and integrate issues of environmental and climate changes consequences in national policies and strategies.

⁷⁰ *Ibid.*

4. Environmental Laws in the Region

A look at the environmental laws in the region will illustrate the necessity for the process to be in place and to gauge an understanding and an indication of how integrating pieces of legislation and regulations with overall plans and management of resources will impact the region. The role of the Secretariat of Pacific Regional Environmental Programme (SPREP) and other related international bodies such as United Nations Environmental Protection, (UNEP) and the International Union for Conservation of Nature (IUCN) are important and are discussed simply for the global expertise they provide and their regional credibility on environmental issues.

The Secretariat of the Pacific Region Environmental Programme (SPREP) provides environmental advice and provides legislative drafting support to its member countries; hence, each country sets its own priorities.⁷¹ In the region, it is noted that certain Acts and Regulations are put in place by governments to govern the conduct of national activities, especially in areas of resource management and sustainable use of natural resources. These legal instruments set the parameters under which private sector and others can conduct their businesses.⁷²

However, the legislative platform at this stage consider matters individually (i.e. sectoral laws for environment, economics and social development) or at best in an aggregated manner. Integrated environmental and development planning envisaged for sustainable development by UNEP and SPREP are hampered by the lack of integrated suites of law that link population, investment and development laws with land management and resource utilisation laws, natural resource management and environmental protection laws.⁷³ Without such basic implementation foundations for decision making, the governments in the region will be hard-pressed to make positive steps toward sustainable development.⁷⁴

⁷¹ Above n 40.

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ Above n 4.

Monitoring, surveillance, and enforcement of existing and new integrative laws must be effectively carried out to ensure that development activities are conducted within the set legal requirements. In order to do so, the relevant Ministries and Agencies must have the necessary research facilities, technical experts, and other resources to discharge such important functions. The use of performance measures and economic incentives through planning criteria, laws and planning instruments could relieve the heavy cost of prescriptive laws, policies and practice criteria. Such avenues need to be explored in the near future to ensure that integrated environmental and development planning systems of the future do not place unnecessary burdens on the already slim resources of government.⁷⁵

Most countries in the South Pacific have enacted legislation in relation to environmental protection, or have enacted sectoral legislation containing environmental protection provisions. However, most countries in the region have not enacted comprehensive environmental legislation, resulting in a fragmented approach to biodiversity conservation. In most cases, existing laws do not comprehensively address the obligations of state parties under international biodiversity agreements.⁷⁶

In 2006, the IUCN conducted a thorough investigation and reported that environmental legislation in many countries in the Pacific region is a mixture of out-dated sectoral laws, unenforced framework legislation and inapplicable models. The common problems include:

- Gaps and omissions (for particular sectors, such as waste management, or processes, such as environmental impact assessment);
- Statutory law in conflict with customary law, resulting in one law on paper and another law in practice;
- Inadequate institutions to administer; implement and enforce the law.⁷⁷

A classic example is the introduction of comprehensive environmental legislation, such as Fiji's *Sustainable Development Bill*, which has been a controversial process, resulting in substantial delays and conflict. The limited resources of national

⁷⁵ Above n 33.

⁷⁶ IUCN South Pacific Regional Environmental Law, Scoping Report, Online: http://cmsdata.iucn.org/downloads/scoping_report_combined.pdf

⁷⁷ *Ibid.*

governments in the region, combined with domestic controversy regarding land use regulation and economic development priorities, have resulted in significant delays in the drafting and enactment of comprehensive environmental legislation in a number of countries.⁷⁸

There are critical matters of compliance in some development arenas such as climate change, forestry, mining and land-use intensification. Enforcement must be addressed to prevent the negligence of the countries' laws and regulations, thus compromising their environmental and sustainable development objectives.

⁷⁸ *Ibid.*

5. Climate Change.

Climate change is an issue that is multi-dimensional, cutting across all segments and sectors of society.⁷⁹ Climate change and sea level rise are now considered a global phenomenon. In the coming decades, scientists expect climate change to have an increasing impact on human and natural systems.⁸⁰ In warmer areas like the Pacific region, accessibility to food, water, raw materials, and energy are likely to change.⁸¹ Human health, biodiversity, economic stability, and national security are also expected to be affected by climate change.⁸² Climate model projections suggest that negative effects of climate change will significantly outweigh positive ones.⁸³

It thus becomes a worrying forecast and thus requires the Pacific community leaders to both urge the international community to take action, and to take more proactive actions on climate change in domestically. Prior to the August 2008 Pacific Leaders Forum in Niue, over 100 representatives of non-governmental organisations from across the Asia-Pacific - including the main Pacific peak bodies and NGOs – made urgent calls and appeals to the Australian Prime Minister and the New Zealand Prime Minister to do more to help the Pacific with climate change, in particular, increasing migration and resettlement.⁸⁴

Through the Secretariat of the Pacific Regional Environment Programme, the Forum Leaders requests working in cooperation with other regional and international agencies and bilateral climate change programmes – to continue to meet the individual needs of its member countries through its mandated role of:

- strengthening meteorological services

- consolidating and distributing information on climate change
- strengthening adaptation and mitigation measures, and
- increasing Pacific Island countries' capacity to manage their engagement

in the United Nations Framework Convention on Climate Change; and to secure new

⁷⁹ Above n 41.

⁸⁰ Gabrielle Walker and Sir David King, *The Hot Topic About Climate Change* (2008) 47.

⁸¹ Above n 41.

⁸² *Ibid.*

⁸³ *Ibid.*

⁸⁴ Press Release of Oxfam New Zealand in Samoa Observer issue 10 July 2008.

and additional financial and technical resources to do this work.⁸⁵

The presence, involvement and participation of Pacific Island Nations at international forums and conventions on environmental and climate change discussions serves as a constant reminder to the world the Pacific region as victims of this legacy and of the repercussions of unmitigated environmental consequences of climate change. The international community should thoroughly consider the Pacific region contributing less to the cause of climate change but is now the most vulnerable to climate change. Furthermore, the developed countries contributing more to gas emission must take precedence in leading and implementing proactive action in order to arrive at some real and achievable solutions to climate change.

5.1 Carbon Trading and Gas Emission

In 1992, most developed countries in the world agreed to the United Nations Framework Convention on Climate Change (UNFCCC), which is designed to impose limits on greenhouse gas emissions and thus minimise the adverse effects of climate change.⁸⁶ Carbon trading markets are developed to bring buyers and sellers of carbon credits together within the standardised rules of trade.⁸⁷ The process of buying and selling carbon credits is basically that large companies or organisations in the developed countries are assigned a quota of carbon that they are allowed to emit. If a company's emissions are less than its quota then it can sell credits if emissions are more then it will need to buy carbon credits.⁸⁸

Oxfam New Zealand in their press release suggests three key things: “First, to reduce emissions to meet Kyoto Protocol obligations and without having to buy offsets of international emissions. Second, ... to carry the message that there should be binding targets at the international level through the United Nations negotiations and be prepared to sign up ... to reduce emissions by at least 13 per cent by the year 2020; and thirdly, [for] Australia and New Zealand and the international community ... to

⁸⁵ Above n 86.

⁸⁶ Carbon Currency: Nova Science in the News.
Online: <http://www.science.org.au/nova/054/054key.htm>

⁸⁷ Carbon Trading: A Primer for Forest Land Owners.
Online: <http://www.carbon.sref.info/>

⁸⁸ Carbon Trading Definition: Online: www.astralweb.co.uk/amr-glossary.html

support Pacific Island Countries with money and technology for defending themselves against climate change impacts which are already happening in the Pacific.”⁸⁹

However, ‘there is still grave concern about developed countries not fulfilling their commitments to the objectives of the United Nations Framework Convention on Climate Change (UNFCCC) as they continue to renege on these responsibilities and avoid legal liabilities by manipulating flawed solutions through market based carbon trading initiatives that only serve to exacerbate the problem instead of curbing it.’⁹⁰

“Without immediate action, hundreds of thousands of people will be displaced by climate change in the coming decades. Pacific Islanders are already affected, with their islands very vulnerable to sea level rises, storm surge and loss of food security and water supplies.”⁹¹

The likely impacts of climate change on Pacific Island states have been described as follows: *“While the impact of climate change will be felt everywhere, the IPCC has reconfirmed that small islands will be hit first and hardest through increases in sea level and extreme weather events. Not only are small islands most vulnerable, but they also have limited capacity to adapt to the worsening impact of climate change.”*⁹²

Accordingly, climate change is a priority focus in the region. Whilst very few Pacific States are required to meet binding emission reduction targets under the Kyoto Protocol, those states will nevertheless play an important part in the operation of the agreements as partners for joint implementation, clean development mechanism (CDM) and other projects.⁹³ The objective of the UNFCCC is *“to achieve ... the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt*

⁸⁹ Above n 40

⁹⁰ Above n 29.

⁹¹ Above n 31.

⁹² Leferve, J. quoted in Craig, D. Robinson, N. and Kheng-Lian, K. Resources Vol. 2 *Capacity Building for Environmental Law in the Asian and Pacific Region – Approaches and Resources* Vol. 2 p. 802 (2002, ADB, Manila Philippines).

⁹³ *Ibid.*

naturally to climate change, to ensure food production is not threatened and to enable economic development to proceed in a sustainable manner."⁹⁴

Currently there is no regional mechanism to support the Pacific Island countries specifically in carbon trading, however some of the countries in the Pacific region are interested in this area and are members of an alliance of countries with forests known within the international climate change process as the Coalition of Rain Forest Nations (CFRN) that brings together interested Pacific Island countries and countries from Asia, South America and Africa to voice the interests of these groups in the international climate change process.⁹⁵

Adaptation funding has always been a key issue for the Pacific Island countries given the high vulnerability of islands and the limited capacity to adapt to the adverse impacts of climate and sea level change. Carbon trading under the climate change convention therefore provides an opportunity for Pacific Island Countries with forests to derive funding from the sale of carbon credits for sustainable development including adaptation financing and the development of renewable energy technologies.⁹⁶

The effective participation of Pacific Island Countries in the international climate change process is crucial to ensure the region benefits from carbon trading and carbon finance. Equally important is the need for the establishment of national policy frameworks and institutional arrangements within each country of the Pacific region to facilitate and guide national action and activities relating to carbon trading at the national level.⁹⁷

5.2 Change is Inevitable

It appears that most people have now come to realise that climate change is upon each and every breathing human being, and most would probably also say that if we do not

⁹⁴ *Ibid.*

⁹⁵ Brian Phillips, Vanuatu National Meteorological Services, Port Vila, Vanuatu. piccap@vanuatu.com.vu

⁹⁶ *Ibid.*

⁹⁷ Interview with Anne Rasmussen, Project Manager Climate Change, Ministry of Natural Resources and Environment, Samoa. anne.rasmussen@mnre.gov.ws

do anything to change the way we live, things are going to get worse. However, it is important to note that all the evidence suggests that the Pacific region and the world will experience significant and potentially highly dangerous changes in climate in the coming future *no matter what we do now*.⁹⁸ Hence, it is correct to say that the problem of climate change is one of legacy. Pacific island economies and the livelihood of Pacific peoples are now shaped by climate sensitive sectors and therefore climate change is a risk to the socio-economic livelihood of all countries in the region. All climate-related risks show increases as a result of global warming. There is already evidence of the impacts of climate change in the Pacific Development Member Countries (PDMC). For example, an increase in the frequency of severe cyclones has recently been experienced in Cook Islands, Fiji Islands, Samoa, and Vanuatu.⁹⁹ The pressing risks include increase in intensity and frequency of cyclones, droughts, coral reef damages, and sea level changes....that results in agricultural development, food security, and health problems.

5.2.1 Cyclones

Hurricanes will probably not increase in numbers, but are likely to get stronger and will last longer and turn to become cyclones.¹⁰⁰ Cyclones are much larger and more sprawling than hurricanes and they deliver unpredictable weather, but also essential rain to large swathes that will result in flooding due to heavy rainfall. Whether they change in number or intensity depends on a complex set of variables including temperature, moisture levels, and how quickly the temperature changes from hot tropical weather to the mild and freezing. In such circumstances, there is likelihood of some areas that used to receive more rain will receive less rain, and other areas with tropical weather would receive rain together with fierce winds.

The aftermath of every cyclone brings about different diseases as the direct effects of temperature changes. It is without a doubt the Pacific region is vulnerable to these health effects because the region has relatively poor means of resources and increased flooding will cause death directly or indirectly through diseases. It is also likely that more impoverished individuals in the region will suffer the consequences

⁹⁸ Above n 81.

⁹⁹ Above n 31.

¹⁰⁰ Interview with Ausetalia Titimaea, Chief Meteorological Officer , Apia, Samoa. 11/04/2009.

of these changes disproportionately.¹⁰¹ Poorer sectors of the region lack the necessary natural, technical and social resources to tackle these climatic-induced health changes.¹⁰²

5.2.2 Droughts

Droughts and heat will be devastating. It is expected to become increasingly common in the region, and expected to exist for longer periods.¹⁰³ The region is likely to suffer the consequences of dry and hot seasons that will cause wildfire, affect the crops, and will definitely affect the limited water supply for consumption in the islands, and no doubt cause health problems.¹⁰⁴ Further, it is expected to be a vital threat to the food security. 'At lower latitudes especially in the Pacific region tropical climate is expected to send crops production tumbling.'¹⁰⁵ 'Agriculture is expected to be affected by carbon dioxide fertilisation effect and climate change will affect the growth and yield of grown products.'¹⁰⁶ Many of the changes concerning agriculture are related to temperature and precipitation whereby it is expected to be noted the decrease in crop yields due to heat stress and decreased soil moisture, as well as related problems due to soil erosions.¹⁰⁷

5.2.3 Coral Reef

Again, the Pacific Island economies and the livelihood of Pacific peoples are shaped by climate sensitive sectors therefore climate change is a risk to the socio-economic livelihood of all countries. Within the next few decades, the Pacific region and the world's coral reefs are going to be hit hard by the whammy of a more acidic ocean and rising sea temperatures. Although individual coral species are unlikely to become extinct, many existing coral reefs will bleach and die, which in turn will affect the people who rely on the fish they shelter for tourism and subsistence income.¹⁰⁸ Of course, risks to fish supply because of corals around small tropical islands will pose as a problem and a threat.

¹⁰¹ Frances Drake, *'The Science of Climate Change'* (2000) 206

¹⁰² F. Pearce, *'Global Warming'* (1996) 122

¹⁰³ Above n 53.

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

¹⁰⁶ Above n 46.

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.*

5.2.4 The Rising Sea Levels

Scientists agree that as the oceans warm, they do expand.¹⁰⁹ This effect, coupled with melting glaciers, is already raising sea level all over the world and notably raising and affecting the Pacific region. The ocean at present is surprisingly lumpy; currents and the spinning planet send water sloshing from one ocean basin to the next.¹¹⁰ The rising ocean will bring erosion and flooding to many coastal regions, as well as turning coastal wetlands into salt marshes. In certain places like the Pacific region where most people reside in the coastal area, the rise in sea level will be even greater and is determined that people are close enough to suffer from what will be increasing deadly storm surges that bring the sea flooding inland.¹¹¹ This too, will affect the many who live in developing countries where they have the least financial resources to adapt and are more dependent on local food and water supplies.

The world can no longer afford to delay actions. The region needs to overcome this realisation and accept the fact that climate changes is well and truly established in our midst and will be part and parcel of our daily activities. The governments in the region must provide direction for community sustenance through established through awareness programmes, legislations and regulations that encompass international guidelines.

5.2.5 Development

Many of the variations that climate change will bring over the next few decades will exacerbate the development problems already faced and experienced by the Pacific region. Even today in the region, there is undernourished population, and the projected drop in food production in low latitude areas will make it even worse. Lack of access to clean water is a current problem and is expected to get worse in the future. The rural poor depend more than anyone on ecosystems for their livelihoods. Reduced water flow in some areas may make energy supplies from hydropower less reliable. And of course, there is the danger that competition for dwindling resources could exacerbate problems of local, national and regional security.¹¹²

¹⁰⁹ Above n 40.

¹¹⁰ Above n 63.

¹¹¹ Above n 64.

¹¹² John J. Berger, *Beating the Heat* (2000) 55.

5.3 The Impact of Climate Change

For some years now, the people on the low-lying atolls in this region of the world have worried that the land they call home and have occupied for centuries and more will within their lifetime disappear into the ocean. The same ocean that has nurtured them and their ancestors can no longer be relied upon to do the same for their children. In fact, it is the very ocean that now threatens their children's survival. There is a plight to be pitied.¹¹³ But pity will not help the people of such island states as Tuvalu and Kiribati. They need action and they need it very soon if they are to have any hope of survival.

“The low lying island nations such as Tuvalu and Kiribati are already facing rising seas, storms and king tides that are having a terrible impact, seeing the sea level rise of several metres this century.”¹¹⁴

5.3.1 Tuvalu

For Tuvalu, which has an average height of less than two metres, such sea level rises would be a disaster. Tuvalu is made up of nine low-lying islands with a total land area of about 26 square kilometres with an Exclusive Economic Zone of some 900 square kilometres. Six of the islands are coral atolls whereas the other three consists of land rising from the seabed. All are low-lying islands with no point on Tuvalu being higher than 4.5 meters above sea level. It was formerly known as the Ellice Islands of the Gilbert and Ellice Islands until 01st October 1978 when it gained its independence from Great Britain.¹¹⁵

5.3.2 Kiribati

Kiribati consists of 32 low-lying atolls and one raised island with 719 square kilometres of low-lying coral atolls surrounded by extensive reefs. Kiribati was formerly known as Gilbert Islands and a colony of the United Kingdom until 12 July 1979 when it became an independent state.¹¹⁶

¹¹³ Russel Hunter, Editorial “Debate on the Sinking Atolls” Samoa Observer Edition 22 May 2009.

¹¹⁴ The Tuvalu Islands. Online: <http://www.tuvaluislands.com/islands/islands.html> (Accessed 08/04/ 2009.)

¹¹⁵ *Ibid.*

¹¹⁶ Kiribati. Online: <http://www.state.gov/r/pa/ei/bgn/1836.htm> (Accessed 08/04/2009).

Kiribati and Tuvalu lead campaign against global warming, arguing that climate change could see the islands swamped by the rising sea level in the not so distant future.¹¹⁷ The 2007 Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) reaffirms the Third Assessment Report of IPCC (2002) that outlines what is to be expected by the year 2100 with the only uncertainty relating to the timing and magnitude of the changes, not its occurrence.¹¹⁸

5.3.3 Retreat is Impossible

It is ironic that Kiribati and Tuvalu are required to commit to resources they do not have to address climate change despite the islands having contributed very little to pollution. Both Kiribati and Tuvalu will be the worst victims. While the industrialised countries ponder over their loss of employment and industries, Kiribati and Tuvalu are considering migration and resettlement abroad in foreign land.¹¹⁹ Any option of retreat inland or elsewhere is impossible in Kiribati and Tuvalu where there are only thin strips between the lagoon and the ocean.

¹¹⁷ Above n 22.

¹¹⁸ Above n 2.

¹¹⁹ J. Veitayaki et al (2007) *Declining reliance on marine resources in remote South Pacific*.
Online: <http://scholar.google.com/scholar?q=veitayaki+et+al+2007&hl=en&um=1&ie=UTF-8&oi=scholar>. (Accessed 22/04/2009.)

6. Carbon Offset Schemes (Reforestation)

The existing environmental laws in the region can provide some level of support; however, it is determined quite insufficient to meet the full cost of adaptation for all the Pacific Islands.¹²⁰ Each individual country will have to look outside the existing mechanism and lobby for adaptation support (bilateral or multilateral support). Of equal importance is the need for the development and enforcement of environmental management policies and legislation (environmental governance) at the national level to protect the people and the environment.¹²¹ Effective national environmental management at the national level may ensure that the support engaged from existing mechanisms is effective in the protection of people and the environment in the region.

Tackling climate change requires scaling-up efforts to help developing countries invest and adapt to its immediate consequences. Rich and poor countries must be committed to finding solutions and creating a sustainable planet for all. There are economic opportunities for the Pacific region if each Pacific country is to be involved in the carbon offset scheme by way of tropical reforestation. Many carbon offset schemes rely on planting new trees to counteract rising carbon dioxide levels and the climate change they cause.¹²²

On the surface, carbon offset schemes appear to offer a win-win solution. People can assuage their guilt over yet another business flight, or drive to the shops, by paying for trees to be planted or investing in renewable technology.¹²³ Reforestation and forest preservation carbon offset projects fight climate change by sequestering carbon dioxide emissions from the atmosphere in trees and soil and have many co-benefits for the community and local wildlife.¹²⁴

Forest preservation can create job opportunities, maintain and expand wildlife habitats, protects biodiversity, and improves environmental quality. Whilst the

¹²⁰ Above n 31.

¹²¹ *Ibid.*

¹²² Ed Young, 'Reforestation' Online:

<http://www.environmentalresearchweb.org/cws/article/opinion/30246-23k>

¹²³ *Ibid.*

¹²⁴ Report on Reforestation. Online:

http://www.carbonfund.org/site/pages/our_projects/category/Reforestation

Pacific region does not have a major role in carbon reduction, there is a significant potential opportunity to take on reforestation, plant trees and preserve its forests.¹²⁵ Deforestation and forest degradation have resulted in species loss and direct contribution to climate change.¹²⁶

However, at present, the activities of logging companies in some countries of the region pollute rivers, destroy cultural sites and cause enormous loss to rare species of plants, animals, insects and birds. The destruction of forests also has harmful effects on the life of local communities in most countries of the region.¹²⁷ According to the CEO of the MAFF, relevant laws are currently being drafted to properly regulate the logging industries in Samoa, especially to enforce the policy of *cut one and plant one, two or three*.

¹²⁵ Interview with Asuao Kirifi Pouono, Chief Executive Officer, Ministry of Agriculture, Forestry and Fisheries (MAFF) Samoa. pouono_a@maff.gov.ws

¹²⁶ Above n 112.

¹²⁷ *Ibid.*

7. International Support

Taking action on climate change for the Pacific Islands is obviously something that the Pacific Island nations cannot do themselves. The concern of the region on climate change, especially Kiribati and Tuvalu has been heard loud and clear by the international community. The UN General Secretary Ban Ki-moon in his address stated: “I am heartened that the Pacific Island Countries are making their voices heard on the subject of climate change. Climate change is not a science fiction. As your countries know all too well, it is real and present. The voice from the Pacific Islands is that ‘they contribute the least to carbon emission, and yet, they at present suffer the most from it, and in the future will continue to suffer.’¹²⁸

The UN General Secretary goes on to say that the voice of the island nations plays a major role in shaping the international policies on global climate change and acknowledges that AOSIS succeeds in committing the industrialised countries to bear the burden in tackling the challenges of global climate change by obliging the developed countries to transfer technology, scientific and financial capabilities to less developed countries for the purpose of mitigating the impacts of climate change. ‘The developing countries assert that this approach is equitable given the differing socio-economical, political and cultural backdrop between the developed and the developing.’¹²⁹

The vulnerability of low lying coastal countries to adverse effects of global climate change has led to the formation of Alliance of Small Island Nations (AOSIS).¹³⁰

The existing mechanisms provide the Pacific region with the opportunity to raise concerns and seek financial support for adaptation and mitigation but given the diverse backgrounds of the parties especially under the UNFCCC, often the issues of the region may not be fully addressed. However, the UNFCCC provides opportunities for Pacific Island countries to identify vulnerabilities and adaptation priorities for financing within the UNFCCC or through support from bilateral and multilateral

¹²⁸ The UN General Secretary’s message to the Pacific Islands Forum Summit Meeting, Niue 19 August 2008. <http://www.ens-newswire.com/ens/aug2008/2008-08-19-02.asp>

¹²⁹ Pacific Climate Change Roundtable Meeting. National University of Samoa, Lepapaigalagala. 14th – 17th October 2008.

¹³⁰ AOSIS consists of 36 member countries including Pacific Island countries and they represent 1/5 of total UN membership.

initiatives. The effectiveness of a country's response will also depend very much on the efforts of individual country and the effectiveness of the climate change institutional arrangement in each country.¹³¹

All independent countries of the Pacific region are parties to many international treaties and conventions having inbuilt mechanisms to implement combat against climate change issues,¹³² and are members of many regional and international organizations and institutions that can also assist their countries to implement its environmental sustainable development objectives.¹³³

The volume and quality of technological and scientific assistance, and financial support the island countries get from such international entities depend very much on the performance of each country to achieve its sustainable development objectives. This includes the establishment of appropriate legal and institutional mechanisms to cater for sustainable development in the country; the formulation of national sustainable development policies and strategies as well as clearly designed programmes and activities to implement environmental sustainable development in the country.¹³⁴

Forest based schemes are but small beginnings of a nation's efforts to mitigate against climate change impacts, and from these small projects which are initially economically motivated can later expand to larger projects. There are economic opportunities for the Pacific region if each Pacific country is to be involved in the carbon offset scheme by way of tropical reforestation. Many carbon offset schemes rely on planting new trees to counteract rising carbon dioxide levels and the climate change they cause.

While taking concrete actions to improve on these fronts, there is a need for the Pacific island nations to actively engage with international organizations and

¹³¹ Above n 40.

¹³¹ Samisoni Pareti, Samoa Observer Newspaper, *'Pacific "Hands on", not "hands up on Climate Change"* 11 November 2008.

¹³² Report: Convention on Biological Diversity: An Information Package for Pacific Islands Countries, (SPREP).

¹³³ *Ibid.*

¹³⁴ Above n 128.

institutions to solicit their support and assist with the collective addressing of sustainable development challenges. Such approach could help to leverage international support and assistance to complement the national efforts in the implementation of the required commitments to environmental sustainable challenges.

However, as reported by the Samoa Observer Newspaper, “the lack of attendance at preparatory meetings like the one held in Samoa 14th – 17th October 2008, as well as the constant changing of government negotiators would only benefit the industrialised and heavy polluting countries. It is the same problem the Pacific island governments face in their trade negotiations with the European Union, and the common trend where regional delegates mostly bypass the meetings while attending to shopping trips or entertainment. But worst of all, is their noticeable absence in times of voting. The latest casualty is Tonga’s deputy prime minister Dr. Viliame Tangi who, despite the endorsement by Pacific Islands Forum Leaders of his candidacy for the top World Health Organisation position in its Asia/Pacific office in Manila, lost out by a mere vote because five Pacific government representatives were reportedly absent at the crucial time of voting.”¹³⁵

There is always this general assumption that the strong participation of countries of the "South" in the global warming and climate change debates are largely due to the fact that it provides them opportunity to exert leverage on developed countries.¹³⁶ Hence, Pacific island governments must front up to be transparent and accountable.

As a matter of fact, financial constraint is one of the principal factors that affect the regions implementation of the environmental sustainable development commitments.¹³⁷ In this context, the regional governments must value the support and assistance of bilateral and multilateral development partners as well as NGOs, and Churches in complementing the Government’s efforts to respond to such commitments.¹³⁸ If a comparison is made between current greenhouse gas emissions of developing countries and the emissions of developed countries when they are at an

¹³⁵ Above n 135.

¹³⁶ *Ibid.*

¹³⁷ Damien Lawson, Friends of the Earth Australia. Online <http://www.foe.org> (Accessed 12 February 2009.)

¹³⁸ Emerging Forces in Environmental Governance.

Online: <http://www.unu.edu/unupress/new/ab-EmergingForces1095.html> (Accessed 14 March 2009.)

equivalent level of development, the current developing countries are likely to be more efficient.¹³⁹

7.1 The Question of Relocation

Research has shown that many people from low lying islands will not be able to remain on the land of their ancestors for the reason that it will no longer exist. The phenomenon we have come to call global warming is reducing the polar ice caps with the result that the sea level is rising and now threatens to submerge the low-lying atolls that so many Pacific islanders call home. Where can they go? How does a nation uproot itself and re-establish in a foreign land – assuming a foreign land will accept them?

Relocation is a very sensitive issue, and becoming an environmental refugee in a foreign land for one thing does not carry any good connotation. As in any developed country versus developing country negotiation, the stakes are hopelessly stacked against smaller island nations like the ones in the Pacific. The biggest challenge for the Pacific Islands is the issue of relocation due to sea level rise. “Relocation is the unthinkable option perhaps for many of us in the Pacific but there must be acceptance that some places cannot continue to be occupied or utilised (as they are today) in the future.”¹⁴⁰ Being ready to move as seawater encroaches and renders unusable agricultural and residential land will just have to be accepted.¹⁴¹

The United Nations Inter-Governmental Panel on Climate Change (IPCC) released its records that the current global temperatures are projected to rise between 1.4 degrees C and 6.4 degrees C between 1990 and 2100. Between the same period, ‘global sea level is projected to rise between 20 and 60cm.’¹⁴² Using such projections, the process of relocation is definitely inevitable. “Relocation just seems to suggest that we are giving up our rights, our heritage and our nation, however, we will just accept our fate. It has all to do with our land, our culture and our people.”¹⁴³

“In Poznan December 2008, the Prime Minister of Tuvalu almost brings the roof of the auditorium down in a rousing standing ovation in response to his emotional plea

¹³⁹ *Ibid.*

¹⁴⁰ Above n 133.

¹⁴¹ Above n 92.

¹⁴² Professor Patrick Nunn, is a member of the United Nations Inter-Governmental Panel

¹⁴³ Above n 22.

that "... Tuvaluans would not accept defeat on climate change. It is our belief that Tuvalu as a nation has a right to exist forever..."¹⁴⁴

However, "it is unfortunate that despite the strong voices from Tuvalu, Kiribati, the Pacific region and AOSIS in the last decade pushing for adequate responsibilities by the developed countries as root causes of climate change, to take the necessary actions to meet the objectives of UNFCCC on curbing climate change, as well as accept some legal liability and accountability to the disastrous results of their irresponsible actions by continuing to engage in industrial activities that cause continued large scale emissions of greenhouse gases into the atmosphere, it is now evident that their current pre-occupation in the UNFCCC is about resource mobilisation and ignore the ethical and moral obligations to push the Annex 1 countries to deliver on their commitments to the UNFCCC to accept hard and timely emission cut targets and to prevent "dangerous" climate change obligated on them by the convention."¹⁴⁵

At the risk of being pedantically repetitive, it is however important to note the concern and worry these people have on the low-lying atolls in this region of the world, that the land they call home and have occupied for centuries and more will disappear within their lifetime into the ocean. "Now, it is not a matter of why, and how, but simply a matter of when?"¹⁴⁶

They may well be societies in decline. Their young people are leaving – which has been recognised as the beginning of decline in small island communities all over the planet. "On the other hand, such declines have been identified, controlled and even reversed...but that can not happen if there is no land left for them to stand on."¹⁴⁷

The United Nations General Assembly asks the UN organizations to intensify efforts to assist small islands that are already feeling the adverse effects of global warming, including flooding. The 192-nation assembly adopts a resolution to address the issue

¹⁴⁴ Above n 117.

¹⁴⁵ Comments of Fiu Mataese, President 'OLE SIOSIOMAGA SOCIETY' of Samoa. Published Samoa Observer Edition 22 May 2009. www.samoaoobserver.ws

¹⁴⁶ *Ibid.*

¹⁴⁷ Above n 131.

of possible security implications created by climate change.¹⁴⁸ As the rest of the world continues to debate the security implications of climate change, for the Pacific region, the problem is astoundingly real as those on the islands have nowhere to go to as sea level rises.

¹⁴⁸ News item on climate change reported by the Samoa Observer 04th June 2009. Published Samoa Observer Edition 22 May 2009. www.samoobserver.ws

8. Strategies in the Pacific

Mitigation and adaptation strategies are opposite ends of the single most important crisis facing the international arena at the present time, a cause and effect situation so to speak, and the longer the delay in formal action, the costlier the outcomes worldwide in terms of human lives and resources. Although the two processes are at opposite ends of the continuum, according to Action Aid, clearly developed countries who have for decades contributed to the present day climate crisis are obligated to compensate impoverished nations which are bearing the brunt of global warming,¹⁴⁹ notwithstanding the climate crisis is now exacerbated by developing nations accounting for ‘two thirds of the new emissions into the atmosphere.’¹⁵⁰

8.1 Mitigation

If globally, the world persists to do nothing to the way people drive, burn coal, use power, raze forests and keep livestock, the population will globally emit 58 billion tonnes of carbon dioxide every year by 2020.¹⁵¹ Quantitatively, the largest share of greenhouse gases emitted globally are from power generation (26%) industry (19%), deforestation and forest degradation (17%) and transportation (13%).¹⁵² This pattern of emission production is mirrored the world over irrespective of development level of the country, including Pacific Islands. It is therefore not unreasonable to expect mitigation strategies or emission reductions and focus to not mirror this pattern especially when most countries are trying to ‘catch up’.

A comprehensive strategy to curb Greenhouse Gas (GHG) emissions would require world policies that will make mitigation efforts affordable, even aggressive world policy may have to be considered to give at least 10-15 years of ‘breathing space.’¹⁵³ Already, doubts are in circulation about the success of the Copenhagen Summit in December 2009 where 20,000 experts and heads of government will descend to set

¹⁴⁹ Action Aid: Compensating for Climate Change. Principles and Lessons for Equitable Adaptation Funding, (December 2007) pg 3.

¹⁵⁰ Organisation for Economic Cooperation and Development (OECD) Climate Change Mitigation (2008) pg 6.

¹⁵¹ Oxfam Briefing Paper. Climate Change, People and Poverty. Oxfam International (2009) pg 24 www.oxfam.org.

¹⁵² Above n 149.

¹⁵³ OECD (2008) pg 10.

out a clear path and timetable to achieve these aims, fully aware that the two most important powers and great emitters of GHG have pursued separate tracks for years. Developing countries, which includes China, prefer the 1997 Kyoto Protocol framework where rich countries are required to take on ‘legally binding emission reductions’ and even more so in the next round of commitment’ starting 2013.¹⁵⁴ The United States on the other hand wants a ‘bottom up’ agreement that will include every country, including pacific islands who can well reduce their own local air pollution, pledging to a legally binding deal inclusive of monitoring and reviewing progress to ensure that these pledges are honoured.¹⁵⁵ After all it is Pacific Islands that will be wiped off the globe as a consequence of climate change.

Schemes such as taxing carbon emission or acquiring permits (cap and trade) to reduce emissions are already in operation in some countries. The permit options seems to be the preferred one as it can be implemented at the national or international level, covers all sectors or a specific one and it can be ‘banked’ for later use. It also makes allowances for ‘decoupling’ of who undertakes abatement and who pays for it,¹⁵⁶ an arrangement that stands to benefit even islands in the Pacific. Thus, carbon taxes, levies on carbon trading mechanisms, air and maritime levies, and fossil subsidies are options for generating new funds for the adaptation needs of the most vulnerable countries, especially the Least Developed Countries.

8.2 Adaptation

However, ‘only a fraction’ of the much needed funds for adaptation have been pledged. Oxfam estimates that adaptation costs could be upwards of \$50 billion annually.¹⁵⁷ How to collect from emitter nations their pledge amounts is extremely difficult to contemplate let alone implement. Credibility and flexibility are essential components to the achievements of success in these strategies. In simpler terms, adaptation consists of planning and implementing coping mechanisms to adjust to the effects of climate change—such as increased temperatures and more frequent and

¹⁵⁴ Above n 151.

¹⁵⁵ *Ibid.*

¹⁵⁶ Above n 151, pg 20

¹⁵⁷ *Ibid.*

intense floods and droughts. Poor communities have been adapting to climate change for years, although they might not recognize their efforts as such.

The recent tsunamis in the Pacific Islands which wiped out several villages and leaving a death toll of over 200 has overnight ‘educated’ the people to react quickly and appropriately in the event of another tsunami occurring but the psychological impact remains immeasurable.

Adaptation is defined by the IPCC as ‘adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderated harm or exploits beneficial opportunities.’¹⁵⁸ Adaptations also ‘consists of planning and implementing coping mechanisms to adjust to the of climate change’. It enumerates the various mechanisms available to developing countries struggling to adapt to the impact of climate change.¹⁵⁹ It describes five qualifying principles for effective adaptation funding which are: democratic governance, civil society participation, sustainable and compensatory financing, non-economic policy conditionality and access for the most vulnerable. These principles and examples are discussed throughout the thesis.¹⁶⁰

Action Aid notes ‘burdensome requirements’ that make access to funding difficult to some communities. While it emphasizes the obligation by rich countries to fund the adaptation needs of the most vulnerable countries, it also imposes access conditions that negate aid, such as ‘the holding of recipient governments accountable, or as a commitment device or even to induce policy change, which gives the donor agencies much policy influence.’¹⁶¹

Differences also arise in interpretation of mandates, terms and conditions that are imposed on these funding projects such as ‘studies, assessments and planning to practical, real benefits’ ‘incremental costs’, ‘national benefits to global environmental benefits’ ‘aid versus compensation and grants not loans’, even the merging of several funding sources under one body. These patterns of inaction and stalling at the

¹⁵⁸ (IPCC) 4th Assessment Report

¹⁵⁹ Above n 149.

¹⁶⁰ *Ibid.*

¹⁶¹ *Ibid.*

international level of discussion and policy making are likewise duplicated and mirrored at the national level and both serve to undermine ownership and accountability.

8.3 Proper Governance

A system of democratic governance will ensure that all decision-making power, rights, and responsibilities are equitably distributed among the countries represented in the mechanism. There are various ways to ensure democratic decision-making. Options include each country representing one vote (referred to as one-country-one-vote); or a more complex voting system that weights voting share according to various factors such as population density, emissions levels, and vulnerability to climate change; or a double majority system in which decisions have to gain a majority of votes under a weighted system as well as a one-country-one-vote system.¹⁶²

Another important aspect of democratic governance is meaningful transparency and accountability. Accountability in the funding relationship must flow not only from recipients to donors, but also from donors to recipients, including communities of poor and excluded people. This means ensuring transparency and clarity on amounts and sources for all funds received and amounts and uses for all disbursed funds.¹⁶³ It is also necessary to create an enforcement mechanism to allow poor countries to hold their governments and donors accountable to the commitments they have made. Where appropriate, gender-disaggregated data should be used for allocation and disbursement and incorporated into public documents.

8.4 Civil Society Participation

It is widely accepted that ownership is the cornerstone of development; unless poor countries are able to direct their own development paths, development will fail to be inclusive, sustainable, or effective. Country ownership of development programs should be understood not only as government ownership; the involvement of civil society stakeholders in the formulation and delivery of policy and programs should be

¹⁶² Above n 149.

¹⁶³ *Ibid.*

seen as integral parts of ensuring real ownership. With respect to adaptation, poor communities have already been coping with climate change for decades, and they know best what strategies for adaptation will work in their local contexts. For these reasons, the adaptation funding mechanism must guarantee community level participation — particularly through leaders or institutions accountable to poor people, such as parliaments, local government, community-based organizations, women’s organizations, farmers’ organizations, labour unions, and so forth. Participation of women and women’s organizations is essential, as funding for adaptation must address the needs of poor women.¹⁶⁴ Civil society participation will be the key in deciding how funds are disbursed and used as well as by whom the projects are implemented, monitored and evaluated.

¹⁶⁴ *Ibid.*

9. Awareness and Preparedness

While education, training and awareness programs are generally delivered to professionals, the broader community also needs to know about the key role law plays in protecting the environment, conserving biological diversity, and the know-how to combat climate change. “Ecologically sustainable development can only be achieved if members of the community are aware of their rights and the consequences of their daily activities. Again, community education can cover issue-based topics, such as land rights, illegal logging and natural resource management, or skill-based topics, such as advocacy, lobbying and submission writing.”¹⁶⁵ Local awareness programs need to be delivered to landholders, conservationists, and staff of community-based organisations, other stakeholders and especially the community at large. However, the current problem as previously mentioned is the problem of communication, a problem of the whole Pacific region whereby the public is not well informed of environmental issues and climate change problems and are not aware of climate change issues. When disaster strikes, small Pacific islands economies will be hard hit. “Coupled with growing population movement to urban centres and natural resource degradation, climate change increases the risks these countries face.”¹⁶⁶ Hence, the Pacific regions require the following:

9.1 *The Need to Adapt*

In the Pacific region, ‘although climate change has become a hot topic, there is still a lot of public uncertainty about it.’¹⁶⁷ According to the Disaster Risk Reduction Regional Office of the International Federation of Red Cross and Red Crescent Societies there are signs around the world that changing weather patterns are making traditional knowledge less applicable or even obsolete in some places. The classic examples are emerging in the Solomon Islands where changes have occurred to weather patterns that people depend on for knowing when to plant crops. This is affecting livelihoods in these areas and making people more vulnerable to food shortage which makes it clear that communities will be forced to adapt. Of course, it

¹⁶⁵ IUCN South Pacific Regional Environmental Law, Scoping Report, Online: http://cmsdata.iucn.org/downloads/scoping_report_combined.pdf

¹⁶⁶ Red Cross/Red Crescent Climate Centre. Online: www.climatecentre.org

¹⁶⁷ *Ibid.*

leaves the Pacific region with no choice, hence the only logical option is to learn to adapt to these changes through adapting to climate variability and extreme events.¹⁶⁸

Adapting to present climate variability and extreme weather events is an early opportunity to enhance the resilience and the adaptive capacity of the region to future climate change. Moreover, adaptation to climate change in a socio-economically disadvantaged community such as the Pacific region will be better approached from a broader development framework.¹⁶⁹ This approach is conducive in this case, so that each government within the region can oversee (management structure for adaptation) the implementation of adaptation measures and incorporate adaptation measures in the development plans for that particular area.¹⁷⁰ In addition, the autonomous adaptation initiated by individuals and communities should be encouraged with appropriate incentives and clear demarcation of responsibilities of governments and communities in planning and implementing adaptation measures. Furthermore, governments of the region can also engage development partners (including funding agencies) through bilateral and multilateral arrangements to provide technical and financial support for the implementation of adaptation options.¹⁷¹

It is to be expected that each national government in the region and its agencies will take appropriate actions such as developing (or improving) national policies to regulate developments in climate-sensitive sectors and geographic areas under a national adaptation policy framework.¹⁷² More importantly, such policies should be climate proof.¹⁷³ Climate proofing at the national policy level is one of the major ways to mainstream adaptation. Although it's application at the sector level, for example, climate proofing of building codes, tourism and land-use plans can yield immediate positive results. Climate proofing at the national policy level is also

¹⁶⁸ Above n 46.

¹⁶⁹ *Ibid.*

¹⁷⁰ *Ibid.*

¹⁷¹ *Ibid.*

¹⁷² Above n 44.

¹⁷³ A risk-based approach to adaptation is shorthand for reducing, to acceptable levels, the risks due to climate variability and change including extreme events (Assessments of Impacts and Adaptations to Climate Change, 2005).

essential to strengthen the enabling environment for adaptation, and set the foundation for the integration of climate change adaptation into development plans and policies.¹⁷⁴

9.2 Ways to Adapt

Raising awareness effectively is by making it relevant; simply by telling the people exactly how climate change will affect their lives and their future.¹⁷⁵ People of the Pacific have for centuries adapted to climate related extremes, however socio-economic progress and development has undermined or has resulted in the loss of traditional coping mechanisms. Awareness is the key factor to ensure informed decisions to reduce risks and to build resilience. Awareness can never be enough and should be a continued activity for all Pacific Island countries to ensure that people are continuously equipped with necessary information to build resilience.¹⁷⁶

Preparedness for climate change should be one of the first things each government must now act upon to map which stakeholders are present in their respective countries and what it is they are doing. It is important to note that the Government of Samoa has taken the initiative to conduct a Summit to establish a platform that will bring all stakeholders that have vested interests in climate change to share experiences and information, develop networks and foster opportunities to work together to achieve common goals, and highly recommends that other countries of the region must follow suit. The purpose is to attract stakeholders to the cause of climate change adaptation, mitigation and sustainable development in Samoa.

It is without a doubt that such forums in the region will provide opportunities for stakeholders to discuss common challenges, goals and positions for the region within the climate change discourse across different negotiating levels (local, national, regional and international). It will also provide an opportunity for all key members to come together to discuss and provide a way forward through a harmonising approach to address climate change as it affects everyone.

¹⁷⁴ Above n 153.

¹⁷⁵ Above n 152.

¹⁷⁶ Above n 156.

The key outcomes will be: (i) To engage in a wide range of stakeholders that include government ministries, corporations, private sector, non government organizations, civil societies, communities, and locally-based regional and international organizations, to share information and climate change experiences. (ii) To inform stakeholders on actions undertaken in the implementation of climate change programmes and policies in each government in the region. (iii) Discussions and disseminating information on new, existing and key emerging issues, results and programs relating to climate change and development in the region. (iv) To share lessons learned and building partnerships and networking for harmonizing and mainstreaming of climate change programmes into development.¹⁷⁷

¹⁷⁷ Above n 160.

10. Recommendations.

This research has discussed the many aspects of policies and processes concerning environmental developments for regional sustainability deemed necessary and desirable, particularly in concerted national and regional responses to devastating environmental consequences as a result of climate change. It further highlighted areas of deficiencies and impediments to the process and progress of these developmental objectives and projects for international environmental and economic sustainability at all levels. The need for more research is indisputable, and the follow up of these researches and their outcomes are indispensable, especially at these levels and should be made mandatory. This research also highlighted the apparent need for the Pacific region to submit unified and considered responses in matters of legislation, policies and procedures to be consistent, relevant and operable to achieve the objectives concerning these sustainable developments in the region; and the following recommendations will undoubtedly reveal.

- Environmental governance in the Pacific region requires guidance and right tools from agencies and organisations with direct responsibilities for implementing obligations under the United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention in Biological Diversity (UNCBD) and the United Nations Convention to Combat Desertification (UNCCD) to enable self-reflecting and identifying strengths and weakness to meet these obligations.¹⁷⁸
- The Pacific governments must analyse national priorities and identify how best to mobilize and allocate resources to implement the UNFCCC, UNCBD, and UNCCD conventions in a coordinated and cost-effective manner.¹⁷⁹
- Pacific Island governments must front up in regards to: Transparency, Accountability and Good Governance.
- A challenge to the Pacific governments that the current environmental issues require new approaches. A range of effective diverse actions are required at

¹⁷⁸ United Nations Framework Convention on Climate Change, Online:

<http://www.unfccc.int/resource/docs/publications/handbook.pdf>

¹⁷⁹ The Pacific, Prepared by the Task Force for the Regional Implementation Annex for Asia. Online: <http://unccd.int/regional/rcm/docs/UNCCDRCMsAsia300409.pdf>

both national and international level with inalienable human rights providing the basis for consideration of the issue of environmental refugee. (Relocation)¹⁸⁰

- The Pacific governments must develop a region-wide program through the Secretariat of the Pacific Regional Environmental Programme (SPREP) that encompasses immediate and urgent adaptation activities that address current and anticipated adverse effects of climate change.¹⁸¹
- The Pacific governments require a framework to guide coordination and implementation of adaptation initiatives in each country, through a participatory approach and building synergies with other relevant environmental and related programs, and develop a specific priority program of action for adaptation to climate change.
- To become enforceable, environmental policies in the region must be translated into environmental law.

For the Pacific to continue to enjoy the security of existence, the regional governments must pass appropriate environmental laws in accordance with guidelines set by the international agencies and conventions. The region's success in its combat against climate change depends heavily on proper implementation and management of national and internationally funded objectives and projects, as well as strategies to cope arising environmental problems. The regional governments must ensure that the common principles and ideals in regards climate change are promulgated, practised, and adhered to for the common good of man.

¹⁸⁰ International Human Rights of Migrants: Challenges of the New Decade. Online: <http://www3.interscience.wiley.com/journal/119035018/abstract?CRETRY=1&SRETRY=0>

¹⁸¹ United Nations Framework Convention on Climate Change. 'VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE IN SMALL ISLAND DEVELOPING STATES.' Online: http://unfccc.int/files/adaptation/adverse_effects_and_response_measures_art_48/application/pdf/2007_02_sids_adaptation_bg.pdf

11. Conclusion

All that has been said so far assumes that the people of the Pacific region desire to live with the fundamental right to freedom, equality and adequate conditions of life in an environment of quality that permits a life of dignity and well-being, and that also entitles one to a healthy and productive life in harmony with nature. Hence, this research has attempted to examine the legal and policy frameworks in regulating environmental protection, climate change and management within the broader agenda of environmental governance in the Pacific region in general, and how these have failed to adequately tackle environmental issues including climate change in particular.

The emphasis discussed so far in this paper points directly to the negligence and poor environmental governance in the Pacific region on climate change weakening the environmental laws. The major concerns in the Pacific region this paper have managed to point out, lies with inadequate laws, unenforced laws and improper management. Regional governments, institutions and civil society organisations in the Pacific Islands are not responding effectively to the challenges of environmental governance at the international level, and attitude that must change.

Consequently, the analysis and recommendations that have been presented in this document depends critically on the attitudes and values of each island nation for their success, especially the political will of its leaders. While noting the abundance of international laws, regional treaties, diverse policies and institutional mechanisms including financial and other contributions to the region, this paper has been able to identify gaps and weaknesses in governance, and it has also provided suggestions for a realisation of approaches as recommended.

It cannot be denied that there is environmental harm and climate change threats to the Pacific islands whereby determination of effective governance is imperative and highly demanded.

12. Bibliography

Books:

- AUSAID, (2008) '*Making Land Work*' Volume Two: Case Studies on Customary Land and Development in the Pacific.
- Baeanisia & Faasala, (1999) 'Study Report on Civil Society in the New Millennium.'
- Ben Boar, (1998) 'International Environmental in Asia/Pacific.'
- Elise Huffer and Asofou So'o, (eds), (2000) 'Governance in Samoa.'
- F. Pearce, (1996) '*Global Warming.*'
- Frances Drake, (2000) '*The Science of Climate Change.*'
- Gabrielle Walker and Sir David King, (eds), (2008) '*The Hot Topic About Climate Change*'
- John J. Berger, (2000) '*Beating the Heat.*'
- Peter Lamour and Nick Wolanin, (eds) (2001) '*Corruption & Anti Corruption.*'
- Ron Crocombe, (2001) '*The South Pacific.*'

Academic Papers:

- Bernstein, 'Legitimacy in Global Environmental Governance' (2005)
- Maria Adebawale, 'Environment and Human Rights: A New Approach to Sustainable Development.' The Northern Alliance for Sustainability.
- 'Dejo Olowu, 'Environmental Governance and Accountability of Non-State Actors in Africa.' Nelson Mandela School of Law, University of Fort Harare, South Africa.
- K. Simberg, 'Stratospheric ozone and climate protection: Domestic Legislation and the International Process' (1991) 21 *Envtl L* 2174.
- McGoldrick, 'Sustainable development and human rights: An integrated conception' (1996) 45 *ICLQ* 796.
- Mariana T. Acevedo, 'The Intersection of Human Rights and Environmental Protection in the European Court of Human Rights.' Columbia University; J.D, 1999.
- Futa Helu, '*Tradition & Good Governance*' SSG No. 3, (1997) ANU, Canberra.

Ilan Kilo, LA 326 Research Paper, University of the South Pacific School of Law, 2007.

Jutta Brunee, 'Coping with Consent: Lawmaking Under Multilateral Environmental Agreements' University of Auckland. (2002) 15 *Leiden J Intl L*

Sir. Geoffrey Palmer, 'New ways to make international environmental law' (1992) 86 *AJIL* 259, 270-272.

Reports:

Action Aid: Compensating for Climate Change. Principles and Lessons for Equitable Adaptation Funding (2007).

Organisation for Economic Cooperation and Development (OECD) Climate Change Mitigation (2008).

Report of the Chair of the Committee of Permanent Representatives to UNEP on International Environmental Governance. UNEP 75th Meeting Nairobi Kenya, 27 June 2001.

Report of the UN Conference on Environment and Development 3-14 June 1992 UN Doc A/CONF151/26/Rev1 1992.

Pacific Climate Change Roundtable Meeting Report. National University of Samoa, Lepapaigalagala. 14th – 17th October 2008.

Report: Convention on Biological Diversity: An Information Package for Pacific Islands Countries, (SPREP).

The Stockholm Declaration on the Human Environment' (1973) 14 *Harvard Intl LJ* 423-515.

The Pacific Institute of Advanced Studies in Development and Governance (PIAS-DG) 'Good Governance Indicators in the South Pacific.' USP (2006).

Asian Development Bank (ADB) Regional Technical Assistance Report, Project Number: 41187 (October 2008).

Pacific Science Congress 1997 on: 'Challenges to Sovereignty, Security and the State.'

Environmental Law in Developing Countries: Selected issues' *IUCN Environmental Policy and Law Paper* no 43 (2004).

Online Materials:

Damien Lawson, *Friends of the Earth Australia*. Online <http://www.foe.org>

Emerging Forces in Environmental Governance. Online:
<http://www.unu.edu/unupress/new/ab-EmergingForces1095.html>

International Human Rights of Migrants: Challenges of the New Decade. Online:
<http://www3.interscience.wiley.com/journal/119035018/abstract?CRETRY=1&SRETRY=0>

IPCC 2007 Fourth Assessment Report.
<http://www.ipcc.ch/ipccreports/tp-climate-change-water.htm>.

IUCN South Pacific Regional Environmental Law, Scoping Report, Online:
http://cmsdata.iucn.org/downloads/scoping_report_combined.pdf

J. Veitayaki et al (2007) *Declining reliance on marine resources in remote South Pacific*. Online:
<http://scholar.google.com/scholar?q=veitayaki+et+al+2007&hl=en&um=1&ie=UTF-8&oi=scholar>.

Melchior Mataki, Kanayathu Koshy, and Veena Nair, *Implementing Climate Change Adaptation in the Pacific Islands: Adapting to Present Climate Variability and Extreme Weather Events in Navua (Fiji)*. AIACC Working Paper No. 34 June 2006
www.aiaccproject.org.

Michael I. Jeffery QC, *Environmental Governance: A Comparative Analysis of Public Participation and Access to Justice*. *Journal of South Pacific*.
<http://www.paclii.org/journals/fJSPL/vol109no2/2.shtml>

Neil Craik, 'Deliberation & Legitimacy in Trans-national Environmental Governance: The case of environmental impact assessment' IILJ.
Working Paper 2006/10, 1 <http://www.iilj.org>

Oxfam Briefing Paper. *Climate Change, People and Poverty*. Oxfam International (2009) www.oxfam.org.

Red Cross/Red Crescent Climate Centre. Online: www.climatecentre.org

SPREP: Environmental Awareness. Available Online.
<http://www.sprep.org/topic/awareness.htm>

Statute: *Lands, Survey and Environment Act of Samoa 1998*. Paclii Online:
URL: <http://www.paclii.org>

Steven Bernstein, 'Legitimacy in Global Environmental Governance' (2005)
1 *J Intl L and Intl Rel* 139. http://www.allacademic.com/meta/p254253_index.html

The UN General Secretary's message to the Pacific Islands Forum Summit Meeting, Niue 19 August 2008.

<http://www.ens-newswire.com/ens/aug2008/2008-08-19-02.asp>

The Tuvalu Islands. <http://www.tuvalu-islands.com/islands/islands.html>

The Pacific, Prepared by the Task Force for the Regional Implementation Annex for Asia. Online: <http://unccd.int/regional/rcm/docs/UNCCDRCMsAsia300409.pdf>

The Kiribati Islands. <http://www.state.gov/r/pa/ei/bgn/1836.htm>

UN Draft Declaration on Human Rights and the Environment E/CN4/Sub2/1994/9.

<http://www1.umn.edu/humanrts/instree/1994-dec.htm>

United Nations Framework Convention on Climate Change. 'VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE IN SMALL ISLAND DEVELOPING STATES.'

Online: http://unfccc.int/files/adaptation/adverse_effects_and_response_measures_art_48/application/pdf/200702_sids_adaptation_bg.pdf

United Nations Framework Convention on Climate Change, Online:

<http://www.unfccc.int/resource/docs/publications/handbook.pdf>

Vanuatu Ombudsman Report, Paclii Online URL:

<http://www.paclii.org/vu/ombudsman/1998/6.html>

Interviews:

- * Clark Peteru, Legal Officer SPREP.
- * Alan Resture, participant and presenter at the Oceania Development Network Capacity Building Workshop held at the National University of Samoa, Lepapaigalagala Campus 28 – 29 October 2008.
- * Luamanu Ioe, Village Mayor of Maninoa/Siumu.
- * Malo Tauati, Village Mayor of Mulivai/Safata.
- * Fiu Loimata, Village Mayor of Saletagaloa/Saleleloga.
- * Anne Rasmussen, Project Manager Climate Change, (MNRE) Samoa.
- * Douglas Nga Chau, Environmental Officer, (MNRE) Samoa.
- * Iosefatu Reti, Environmental Consultant (PECL) Apia, Samoa.
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Newspaper:

Samoa Observer Newspaper.

Wansolwara Online

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