COULD VANUATU CLAIM REPARATIONS UNDER INTERNATIONAL LAW FOR DAMAGES SUSTAINED FROM CYCLONE PAM?

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INTRODUCTION

On the 13th of March 2015, a severe tropical cyclone, identified as "Cyclone Pam," struck the Republic of Vanuatu. It was an unprecedented tropical cyclone which left the Republic in total devastation. It affected and claimed individual lives, destroyed local food sources, flattened many buildings, stripped off trees, broke down communication, ruined infrastructure, and many more destructions that to date are yet to be quantified. In an interview, the President of the Republic of Vanuatu, Mr. Baldwin Lonsdale described Cyclone Pam and its impacts as:

This is a very devastating cyclone in Vanuatu. I term it as a monster, a monster. It's a setback for the government and for the people of Vanuatu. After all the development that has taken place, all this development has been wiped out. So it means we will have to start anew again.³

The President further stated that climate change contributed to the destruction in Vanuatu.⁴ The extent of the damage, and the existence of a strong correlation between extreme weather events

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¹ It was around 7:00 pm on Friday 13th of March, 2015, that Cyclone Pam landed on Vanuatu's shores and struck the Republic of Vanuatu. The 2006 happiest place on planet earth (see Nic Marks, Saamah Abdallah, Andrew Sims and Sam Thompson, 'The Happy Planet Index (HPI) Report' *New Economic Foundation* (online), 2006

http://b.3cdn.net/nefoundation/54928c89090c07a78f_ywm6y59da.pdf (accessed 24 November 2015)) was devastated by this enormous and gigantic super storm. It left an impact that will be recorded in Vanuatu's history, and be remembered by many Ni-Vanuatu people, as the most devastating cyclone to have ever struck their country. There were past cyclone experiences in Vanuatu, such as cyclone 'Uma back in 1987, but there was none with the intensity and the ferocity as Cyclone Pam. It was a category 5 cyclone - the last of all cyclone categories - and is the strongest tropical cyclone on record in the South Pacific region, with wind speeds of up to 170 miles per hour and gusts exceeding 200 miles per hour.

² The interview was conducted when President Baldwin Lonsdale attended the United Nations Conference on Disaster Risk Reduction held on 16 March 2015 in Sendai, Japan.

³ 'AP Interview: Vanuatu president rues cyclone devastation', *The Associated Press* (online) 16 March 2015 http://news.yahoo.com/vanuatu-president-speaks-devastation-cyclone-pam-022602313.html (accessed 22 November 2015).
⁴ Peter Walker and Paul Farrell, 'Cyclone Pam: 24 confirmed dead as Vanuatu president blames climate change', *The Guardian* (online) 16 March 2015 http://www.theguardian.com/world/2015/mar/16/vanuatus-president-blames-climate-change-for-extreme-weather (accessed 13 November 2015); See also Umberto Bacchi, 'Vanuatu cyclone Pam: President blames climate change for 'monster' storm', *International Business Times* (online) 16 March 2015, http://www.ibtimes.co.uk/vanuatu-cyclone-pam-president-blames-climate-change-monster-storm-1492073.

and human-induced climate change,⁵ triggers the question of whether Vanuatu could claim reparation under international law⁶ for the damages sustained as a result of Cyclone Pam. This paper aims to weigh the possibility of pursuing a claim of this nature and how it could be framed under the general law of State responsibility with the objective of achieving reparations for the damage sustained. It should be noted that Cyclone Pam had also caused significant damage to other Pacific Island countries, namely: Tuvalu, Kiribati, and the Solomon Islands. However, for the purposes of this paper, the scope of this discussion will be confined to Vanuatu.

This paper is divided into four (4) parts. The first part provides a brief overview on the impacts of Cyclone Pam on Vanuatu, including how those impacts have affected the enjoyment of specific human rights, and how those impacts can be linked to climate change. The second part attempts to discuss how to frame a State responsibility claim under international law, so as to hold a State liable under international law for the damages sustained from Cyclone Pam. The third part discusses the legal consequences of State responsibility. It elaborates on the various forms that reparation may take, and addresses which forms may be available to Vanuatu in the event a State is held responsible. The fourth part answers the question: could Vanuatu go to court--for example, to the International Court of Justice ('ICJ')--to claim reparations under international law for the damages sustained from Cyclone Pam. This is then followed up by the conclusion and recommendations.

How the impacts of Cyclone Pam affect the enjoyment of specific human rights

Apart from general impact and destruction, this section looks on how the impact of Cyclone Pam has interfered with the enjoyment of basic human rights of the people of Vanuatu. To start with, it is important to consider the relationship between climate change and human rights. The UN Human Rights Council in Resolution 10/4 of 2009 explicitly recognised the relationship between climate change and violation of human rights worldwide. Resolution 10/4 states:

Noting that climate change related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights including, inter alia, the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to self-determination [and] recognizing that while these implications affect individuals and communities around the world, the effects of climate change will be felt most acutely by those segments of the population that are already in vulnerable situations owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability.⁷

The Cyclone Pam case study is a classic reflection of Resolution 10/4. The effects of climate change are being felt globally, but affect mostly the world's poorest nations which have

⁶ In this paper, references to international law refer to public international law (as opposed to private international law).

⁷ The United National Human Rights Council. Human Rights and Climate Change HPC Res 10/4, 10th sees 41st mosting.

⁵ Christopher B. Field, et al (eds) Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of the Intergovernmental Panel on Climate Change (Cambridge University Press, 2012) 160 https://www.ipcc.ch/pdf/special-reports/srex/SREX Full Report.pdf>.

⁷ The United Nations Human Rights Council, *Human Rights and Climate Change*, HRC Res 10/4, 10th sess, 41st meeting, A/HRC/RES/10/4, (25 March 2009) Recital 8 http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_10_4.pdf (accessed 20 November 2015).

contributed least to the problem and can do little to respond. Vanuatu is among those countries that have least contributed to the problem of anthropogenic climate change, but are most vulnerable and susceptible to its effects. A few examples of the specific human rights that were implicated as a result of Cyclone Pam are briefly summarized as follows:

- The right to life⁹ This right is basic to all human rights and is the 'supreme right to which no derogation is permitted even in times of public emergency'. This right provides that every human being is entitled to life to which they shall be protected under the rule of law and not to be arbitrarily deprived of it. The fact that 11 people lost their lives as a result of Cyclone Pam has affected this supreme right and had deprived those people of their basic enjoyment of this human right.
- The right to self-determination 12 This is a very important right 13 because its realization 'is an essential condition for the effective guarantee and observance of individual human rights and for the promotion and strengthening of those [other] rights. 14 Cyclone Pam had implications on this right when it left the affected people of Vanuatu in a state where they were not free to determine for themselves but to solely rely on aid supply for support. 15 Also the affected people were denied their freedom to freely dispose of their natural wealth and resources as it was wiped out or destroyed by Cyclone Pam. 16
- The right to water¹⁷ This right is premised on the idea that women and children shall enjoy adequate living conditions particularly in relation to housing, sanitation, and clean drinking water supply. The impacts of Cyclone Pam had detrimentally affected this right when 110,000 people did not have access to safe drinking water,¹⁸ and no proper sanitation and hygiene as water sources were destroyed and/or contaminated.¹⁹

http://www.wpro.who.int/southpacific/programmes/health_sector/emergencies/health-cluster-28mar2015.pdf?ua=1 (accessed 12

⁸ International Bar Association, Achieving Justice and Human Rights in an Era of Climate Change Disruption. Climate Change Justice and Human Rights Task Force Report (2014) 34.

⁹ International Covenant on Civil and Political Rights, opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976) art 6(1) ('ICCPR'); See also UNDR, UN Doc A/810, art 3; See also Constitution of the Republic of Vanuatu art 5(1)(a)

¹⁰ Human Rights Committee, *CCPR General Comment No.14 – Article 6 (Right to life) Nuclear Weapons and the Right to Life* Twenty-third sess, UN Doc INT/CCPR/GEC/4723 (9 November 1984).

¹¹ *ICCPR* art 6(1).

¹² ICCPR art 1; See also International Covenant on Economic, Social and Cultural Rights opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976) art 1 ('ICESCR').

¹³ According to The United Nations Human Rights Committee, General Comment No.12: Article 1 (Right to self-determination), the right to self-determination is a very important right, as a result, it was placed as Article 1 of both the *ICCPR* and the *ICESCR* before all other Articles.

¹⁴ United Nations Human Rights Committee, *CCPR General Comment No.12: Article 1 (Right to self-determination)*, Twenty-first sess, UN Doc INT/CCPR/GEC/6626 (13 March 1984).

¹⁵ Anthony Funnel, 'After Pam: Vanuatu struggles to rebuild in cyclone aftermath' *ABC News* (Online) 11 August 2015 http://www.abc.net.au/radionational/programs/futuretense/after-pam:-vanuatu-struggles-to-rebuild/6686574 (accessed 24 November 2015).

¹⁶ Joshua Robertson, 'Vanuatu disaster: the island hit by an earthquake, a volcano then cyclone Pam' *The Guardian* (Online) 17 March 2015 http://www.theguardian.com/world/2015/mar/17/vanuatu-disaster-the-island-hit-by-an-earthquake-a-volcano-then-cyclone-pam (accessed 12 November 2015).

¹⁷ Convention on the Elimination of All Forms of Discrimination against Women opened for signature 1 March 1980, 1249 UNTS 13, art 14(2)(h); See also Convention on the Rights of the Child opened for signature 20 November 1989, 1577 UNTS 3 art 24(2)(c) art 24(2)(c) (*CRC*).

¹⁸ Health Cluster, 'Cyclone Pam, Vanuatu' (Media Release, 28 March 2015)

- The right to education²⁰ This right ensures that education is available and accessible to every child. This right was affected when 70% of education facilities were destroyed, affecting around 57,000 children across three (3) provinces namely: Malampa, Shefa, and Tafea, 21 and around 80% of schools affected to some degree 22 throughout the whole of Vanuatu.
- The right to means of subsistence²³ What it means to have this right is that in no case may a person be deprived of his or her own means of subsistence. This right was affected by the damage that occurred to the food security and the agriculture sector (livestock, fishery, and forestry), ²⁴ and the 96% of crops that were destroyed²⁵ which left people in certain areas with no alternative food stocks, and in need of immediate food, agriculture and likelihood assistance.²⁶
- The right to property²⁷ This right ensures that everyone has the right to own property alone or with others, and shall not be deprived of it. 28 As a result of Cyclone Pam, the right to property had also been affected by the destruction of household goods and properties.²
- The right to a healthy environment³⁰ This right aims at ensuring that everyone enjoys the highest attainable standard of physical and mental health.³¹ This right entails improved environmental hygiene³² and the prevention and treatment of diseases.³³ The enjoyment of this basic human right was implicated when many sustained substantial injuries³⁴ and many contracted other sicknesses and diseases as a result of Cyclone Pam.

November 2015). See also Flash Appeal, 'Emergency Response Plan For Vanuatu Tropical Cyclone Pam March-June 2015' (Media Release 24 March 2015) http://reliefweb.int/sites/reliefweb.int/files/resources/Vanuatu-TCPam flash appeal final%2024MAR2015.pdf (accessed 15 November 2015).

¹⁹ *ICESCR* art 12(2)(d).

²⁰ ICESCR art 13; See also CRC art 28(1).

²¹ Flash Appeal, above n 18.

²² UNICEF, 'Cyclone Pam Humanitarian Situation Report 9' (Media Release 23 March 2015) http://www.unicef.org/pacificislands/UNICEF Pacific Cyclone Pam SitRep No 9 23-24 March 2015.pdf (accessed 11 November 2015).

²³ ICCPR art 1(2); See also ICESCR art 1(2).

²⁴ Flash Appeal, above n 18.

²⁵ Ibid.

²⁶ World Food Programme, 'Vanuatu Tropical Cyclone Pam - Vanuatu Situation Report #5' (Media Release 23 March 2015) http://documents.wfp.org/stellent/groups/public/documents/ep/wfp273075.pdf (accessed 23 November 2015).

²⁷ Universal Declaration of Human Rights, GA Res 217A (III), UN GAOR, 3rd sess, 183 plen mtg, UN Doc A/810 (10 December 1948) art 17 ('UDHR'); see also Constitution of the Republic of Vanuatu art 5(1)(j).

²⁹ Flash Appeal, above n 18.

²⁸ *UDHR* art 17. ³⁰ ICESCR art 12.

³¹ *ICESCR* art 12(1).

³² *ICESCR* art 12(2)(b).

³³ *ICESCR* art 12(2)(c).

³⁴ Health Cluster, above n 18.

The right to adequate and secure housing³⁵ - This right ensures that everyone has the adequate standard of living, adequate food, and housing.³⁶ This right was affected when 75,000 people were in need of shelter³⁷ as 15,000 houses were either destroyed or severely damaged, including the destruction of food, household goods and properties.³⁸

This non-exhaustive list above shows not only how the impacts of Cyclone Pam have affected the enjoyment of specific human rights in Vanuatu, but reflects how Cyclone Pam had impacted Vanuatu as a whole. This may trigger the specific question whether international human rights law could serve as, or consolidate, the legal basis of a reparations claim related to Cyclone Pam under international law. This claim would similarly involve evidential questions related to the link between Cyclone Pam and climate change. However, this paper does not intend to go down the human rights path and does not attempt to explicitly examine whether or not human-induced climate change is a violation of human rights from an international law perspective, though the authors believe it is. Instead, this paper will focus on international climate change law serving as, or consolidating, the legal basis of a claim for reparations under international law.

Link between Cyclone Pam and climate change

This section aims to demonstrate that a link can be established between Cyclone Pam and climate change. In the abovementioned interview, President Lonsdale, blamed climate change for the destruction that occurred in his country. In his exact words, he was quoted as saying:

"[w]e see the level of sea rise ... the cyclone seasons, the warm, the rain, all this is affected ... [t]his year we have more than in any year ... yes, climate change is contributing to this [destruction]."³⁹

Precisely because this statement has triggered much debate, it is a helpful starting point in exploring the possible link between Cyclone Pam and climate change. To claim reparations for Cyclone Pam damage based on climate change-related obligations necessarily involves some kind of causation test. In other words, there must be a link between the damage on the one hand and climate change on the other. However, it remains unclear what test is contained in international law, as there is a lack of international jurisprudence on climate change. For the purposes of this paper, the Authors will assume that a moderately stringent causation test will need to be met: that climate change *materially contributed* to the damage. This is an appropriate test, as it puts the burden of proving causation on the claimants while the test is not so stringent as to make any claim for climate change-related damages impossible.

In the lead-up to exploring this link, it is important to first recall the overwhelming body of scientific evidence which establishes that the emission of anthropogenic greenhouse gases ('GHGs') is the main cause of climate change. Indeed, by ratifying the *United Nations*

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³⁵ ICESCR art 11.

³⁶ *ICESCR* art 11(1).

³⁷ Health Cluster, above n 18; See also Flash Appeal, above n 18.

³⁸ Flash Appeal, above n 18.

³⁹ Peter Walker and Paul Farrell, above n 4; see also Umberto Bacchi, above n 4.

Framework on Climate Change Convention ('UNFCCC'), States have acknowledged that climate change is a result of man-made activities. Article 1 of the *UNFCCC* stipulates:

"Climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.⁴⁰

With near global ratification of the UNFCCC, virtually all States agree with this notion. This notion has been confirmed repeatedly since 1992 by the Intergovernmental Panel on Climate Change ('IPCC'), 41 including its most recent Fifth Assessment Report ('AR5') – which is the most comprehensive up-to-date scientific assessment of climate change that represents the consensus view of the world's leading climate scientists. Specifically, AR5 established with a 95% degree of probability that human activity is the dominant cause of global warming. 42 The AR5 also stated that warming of the climate is "unequivocal" and evidenced by a range of observed events, including higher atmosphere and ocean temperatures; diminished snow and ice caps; and rising sea levels. 43 This indicates that the scientific evidence on anthropogenic climate change is stronger than ever and it is indeed virtually certain that human activity is the primary cause of anthropogenic climate change.

This leads us to the question how anthropogenic climate change relates to cyclones in general, or to Cyclone Pam in particular. A first point to note is that cyclones have long occurred in the Pacific Region, and cyclone activity predates the industrialization period. The claim that climate change is the direct cause of a particular cyclone is therefore not plausible. Instead, the evidence points at a more indirect relationship. Inferences may be drawn from scientists' observations⁴⁴ that unusually mild sea surface temperatures and added water vapor helped the storm intensify before hitting Vanuatu. 45 Indeed, in the area where Cyclone Pam intensified, the ocean

⁴⁰ United Nations Framework Convention on Climate Change, opened for signature 4 June 1992, 1771 UNTS 107 (entered into force 21 March 1994) art 1 ('UNFCCC').

⁴¹ IPCC is the international body for assessing the science related to climate change. The IPCC was set up in 1988 by the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP) to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation. See IPCC - Intergovernmental Panel on Climate Change Official Website http://www.ipcc.ch/.

⁴² The Climate Development Knowledge Network (CDKN), The IPCC's Fifth Assessment Reports: What in it for Small Island Developing States? (2014) 2 available at https://www.ipcc.ch/report/ar5/ (accessed 20 November 2015).

The Intergovernmental Panel on Climate Change, Summary for Policymakers, (Cambridge University Press, 2013) 2. ⁴⁴ See, for example, Christopher B. Field, et al (eds) above n 5 (noting that '[a] changing climate leads to changes in th frequency, intensity, spatial extent, duration and timing of extreme weather and climate events, and result in unprecedented extreme weather duration and timing of extreme weather and climate events') and Kerry Emmanuel, 'Severe Tropical Cyclone Pam and Climate Change' Real Climate (online) 2 May 2015, http://www.realclimate.org/index.php/archives/2015/03/severe-tropical-cyclonepam-and-climate-change ((suggesting that 'the number of tropical cyclones worldwide could exceed 100 per year by about 2070, compared to an average of 90 per year at the moment.' See further Thomas Knutson et al., Tropical Cyclones and Climate Change (2010) 3 Nature Geoscience 157-163) (suggesting that 'sea surface temperatures in most tropical cyclone formation regions have increased by several tenths of a degree Celsius during the past several decades' and predicting that 'GHG emissions will cause cyclones to shift towards much stronger storms, with intensity increases of 2 to 11% by 2100') and James P. Kossin and Timothy L. Olander and Kenneth R. Knapp, 'Trend Analysis with a New Global Record of Tropical Cyclone Intensity' (2013) 26 Journal of Climate 9960-9976 (concluding that 'the intensity of cyclones of all strengths in the South Pacific has increased by 2.5 [meters] per second per decade, with the strongest 20% increasing by as much as 5 [meters] per second per decade'). Finally, see Yosuke Adachi, 'Human Lives at Risk Due to Eustatic Sea-Level Rise and Extreme Coastal Flooding in the 21st Century' (2015) 7 Weather, Climate, and Society 118-132) (suggesting that 'sea level rise could cause at least 84 to 139 extra deaths per year from cyclone-related coastal flooding in the United States by 2100').

45 Andrew Freedman, 'Vanuatu's president makes a leap in tying Cyclone Pam to Climate Change' *Mashable* (Online), 17 March

^{2015,} http://mashable.com/2015/03/16/vanuatu-cyclone-pam-global-warming/ (accessed 2 November 2015).

temperature was up to 2 degrees Celsius higher than average for that time of the year (3.6 degrees Fahrenheit)—which is likely to be attributable at least in part to global warming. 46 And as a result of sea level rise, the impact of super-Cyclone Pam became even more damaging.⁴⁷

We may conclude that irrespective of the effects of climate change on the frequency of cyclone occurrence, the best available science indicates that climate change-induced increases of sea temperatures intensify tropical storms. This means that there is a link between the intensity of Cyclone Pam on the one hand and climate change-induced increases of sea surface temperatures on the other. In addition, a link can be established between sea level rise and the damage brought about by Cyclone Pam in Vanuatu. In sum, Cyclone Pam would not have been as intense and damaging as it was if there would not have been climate change.

FRAMING A STATE RESPONSIBILITY CLAIM

General law of State responsibility

This part discusses the general law on State responsibility and its relevance to Vanuatu's potential reparations claim for the damages sustained from Cyclone Pam. The general law of State responsibility was codified by the International Law Commission's ('ILC') in its Articles on Responsibility of States for Internationally Wrongful Acts ('ARS'), which are the product of more than 40 years of work by ILC on the topic. 48 This law is important because the existing climate change regime does not address the questions of when, how and by whom climate change damage sustained by a State should be compensated. Due to this gap, the "particularly vulnerable"49 States have typically asserted that they are justified in seeking compensation from States who have emitted most GHGs in the atmosphere; a view which is shared by some academic writers who have opined that under international law, 'States are obliged to compensate the directly or indirectly affected States for the damage caused.'50

There exists 'in any legal system liability for failure to observe obligations imposed by its rules – known as responsibility in international law.'51 This is derived from one of the fundamental principles of international law that States must not harm or violate the rights of other States.⁵² Grounds for claims of responsibility will be created once States fail to observe obligations – usually through the breach of one or more of the customary international law obligation(s) or because of a breach of a treaty obligation.⁵³ As a result, firstly, States can be held responsible for violations of international law; and secondly, States will be obliged to make full reparation for

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ James Crawford and Simon Olleson, 'The Nature and Forms of International Responsibility' in Malcolm D. Evans (ed), International Law (Oxford University Press, 2012) 441, 447.

This term refers to States that are mostly developing, and are especially vulnerable to the adverse effects of climate change due

to poor economies, geographical location, and low-lying nature.

50 Roda Verheyen, "Establishing State Responsibility for Climate Change Damage" Climate Change Damage and International Law: Prevention Duties and State Responsibility (Martinus Nijhoff Publishers, 2005) 52.

51 DJ Harris, Cases and Materials on International Law (Sweet & Maxwell Ltd, 6th ed, 2004).

⁵² Richard S.J. Tol and Roda Verheyen, 'State responsibility and compensation for climate change damages—a legal and economic assessment' (2004) 32 Energy Policy 1109 https://www.mi.uni-hamburg.de/fileadmin/fnufiles/publication/tol/enpolliability.pdf (accessed 17 November 2015).

⁵³ Matthew Craven, 'Statehood, Self-determination, and Recognition' in Malcolm D. Evans (ed), International Law (Oxford University Press, 2012) 214.

the damages caused. Thus, in the absence of a specialised regime governing responsibility and liability, the law of State responsibility is 'applicable to treaty-based and other rules of international law to the extent it reflects international customary law.'54

It is important to note that although the ARS are as such not binding on States, most of the articles indeed reflect customary international law. Therefore, to establish State responsibility, Vanuatu will need to venture into detail the relevant articles of the ARS. To start with, the basic principle of State responsibility is provided in Article 1 of the ARS which states that '[e]very internationally wrongful act of a state entails the international responsibility of that state. Article 1 of the ARS has been given wide recognition in practice. For example, the Permanent Court of International Justice (PCIJ) 'affirmed in the Phosphates in Morocco Case that international responsibility is established immediately if a [S]tate has committed an internationally wrongful act against another [S]tate. Article 2 of the ARS stipulates that:

There is an internationally wrongful act of a State when conduct consisting of an action or omission:

- (a) Is attributable to the State under international law; and
- (b) Constitutes a breach of an international obligation of the State.⁵⁸

Crawford and Olleson hold that 'the fulfillment of these conditions is a sufficient basis for international responsibility, as has been consistently affirmed by international courts and tribunals.' The implication of this basic principle is that Vanuatu needs to show that a State has committed an internationally wrongful act (i.e. action or omission) by breaching an international obligation attributable to that State in order to make a successful State responsibility claim. Of course, this involves identifying a State that could be held responsible.

Which State could be held responsible?

Determining who to sue is one of the greatest challenges involved in a State responsibility claim related to a climate change- phenomenon. One could argue that in practice, almost every State is responsible for at least some GHG emitting activities and therefore selecting one State over another is almost impossible. And as it currently stands, there is no international law on how to apportion damages between multiple wrongdoers or causes of climate change. However, it should be noted that Vanuatu could likely bring a State responsibility claim against a State or States, without being able to identify one GHG emitter who is responsible for the specific

⁵⁴ Ann-Charlotte Rosenblom, *Claiming State Responsibility for Climate Change Damages* (Masters Thesis, University of Lund, 2009) 38, available at http://lup.lub.lu.se/luur/download?func=downloadFile&recordOld=1561576&fileOld=1565681 (accessed 18 November 2015).

⁵⁵ Even before their adoption, the articles were cited in decisions made by the International Court of Justice ('ICJ'). The United Nations General Assembly has commended in resolution 56/83 that States give attention to the ARS, and annexed the articles to the resolution.

⁵⁶ International Law Commission, Articles on the Responsibility of States for Internationally Wrongful Acts, with commentaries 2001, GA Res 56/83 ('Commentaries on ILC ARS').

⁵⁷ Ann-Charlotte Rosenblom, above n 54, 31; See also *Phosphates in Morocco Case* (1938) P.C.I.J., Ser. A/B, No. 74.

⁵⁸ International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts art 2 ('ILC ARS').

⁵⁹ James Crawford and Simon Olleson, above n 48, 451.

⁶⁰ Roda Verheyen, above n 50, 297.

damages caused by Cyclone Pam. Indeed, international jurisprudence suggests that Vanuatu could make a claim against any one wrongdoing State or against several States, as long as the judgment does not affect the interests of a third State not party to the proceedings. The implication is that Vanuatu could claim against States in breach of their obligations under the *UNFCCC* or their reduction obligations under the *Kyoto Protocol to the UNFCCC* ('Kyoto Protocol'), where '[t]he breach of the obligation would itself constitute the required fault and no further negligence needs to be shown. This makes it unnecessary to 'apportion' responsibility – Vanuatu could just pick one obvious culprit and let that State sue others if it is found responsible, or Vanuatu could claim against all States that appear to be in breach of their obligations.

Attributing activities to a State

After identifying the State to sue, the next step is for Vanuatu to attribute activities to the State. Chapter II of the ARS (Articles 4 - 11) provides the circumstances in which activities can be attributed to a State.⁶³ In relation to cases concerning climate change damage being mostly the acts of those of private corporations and individuals. Article 8 of ASR provides that 'the conduct of a person or group of persons shall be considered an act of a State...if the person or group of persons is in fact acting on the instructions of, or under the direction or control of, that State carrying out the conduct.'64 This Article implies that once an activity has been licensed, it is deemed to be under the control of the State. Moreover, Article 11 states that any conduct of private persons or private entities is to be considered an act of that State once the State in question acknowledges or accepts the conduct as its own. 65 According to Verheyen, since the biggest emission activities like transport and electricity are subject to licensing, as such once a State approves the behavior, through permitting policies in that regard, that State is explicitly or implicitly responsible for GHG emissions of private entities. 66 This was ruled by the Tribunal in Trail Smelter Case, 67 thus both Articles 8 and 11 are reflective of international case law. 68 'The ICJ has considered attribution by omission in similar terms in cases like Corfu Chanel Case, the Tehran Hostage Case, Nauru Case and Nicaragua Case' 69

69 Ibid.

⁶¹ This is exemplified in the *Certain Phosphate Lands in Nauru, Nauru v Australia*, Preliminary Objections, Judgment, [1992] ICJ Rep 240. See also *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, Merits, Judgment. I.C.J. Reports 1986, 14. See further Joy-Dee Davis, *State Responsibility for Global Climate Change: The Case of the Maldives*(Master of Arts in Law and Diplomacy Thesis, Tufts University, 2005) 65, available at http://fletcher.tufts.edu/Research/Student-Theses-Archive/2004-2005 (accessed 15 November 2015).

⁶² Eva Hostettler, 'State Responsibility and Climate Change' (Paper presented at the Summer Academy, United Nations University Institute for Environment and Human Security, 2008) available at https://www.ehs.unu.edu/article/read/574 (accessed 12 November 2015).

⁶³ Article 4 provides that the conduct of organs of a State shall be considered an act of the State. Article 5 provides that the conduct of persons or entities exercising element of governmental authority shall be considered an act of the State. Article 7 provides that the conduct of an organ of a State or of a person or entity empowered to exercise elements of governmental authority, even if it exceeds its authority, shall be considered an act of the State. Article 8 which provides that the conduct of a person or group of persons acting in the instructions of, or under the direction or control of a State, shall be considered an act of that State. Article 11 provides that a conduct acknowledged and adopted by a State as its own shall be considered an act of that State.

⁶⁴ ILC ARS, above n 58.

⁶⁵ Ibid.

⁶⁶ Roda Verheyen, above n 50.

⁶⁷ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

⁶⁸ Keely Boom, *Exposure to legal risk for climate change damage under the UNFCCC, Kyoto Protocol and LOSC: a case study of Tuvalu and Australia* (PhD Thesis, University of Wollongong, 2012) 240 http://ro.uow.edu.au/cgi/viewcontent.cgi?article=4926&context=theses (accessed 19 November 2015).

Obligations

Paragraph (b) of Article 2 of the ARS provides that internationally wrongful acts of a State (i.e. action or omission) must constitute a breach of an international obligation of that State. Vanuatu would, therefore, need to identify the obligations that are legally binding on a State at the time the alleged wrongful act was committed. International obligations may derive from any source of international law. The four main sources can be found in Article 38(1) of the Statute of the International Court of Justice⁷⁰ and of these, as suggested above, international conventions (treaties) and customary international law are the most relevant in the context of climate change.

Relevant international conventions include but are not limited to, the UNFCCC and the Kyoto *Protocol*. The principle pacta sunt servanda is the basis for the binding nature of treaties⁷¹ as reflected in the 1969 Vienna Convention on the Law of Treaties ('VCLT'). Article 26 of the VCLT states that '[e] very treaty in force is binding upon the parties to it and must be performed by them in good faith.⁷²

Relevant obligations can also be derived from Customary international law. Customary international law is developed out of two main elements: 'an established, widespread, and consistent practice on the part of the States; and a psychological element known as the opinio juris sive necessitatis ...'73 - which basically reflects the belief of States that behaviour is prohibited or prescribed by international law.⁷⁴ Customary international law is in principle binding on all States, except for States that are "persistent objectors" to the rule in question. In the context of climate change, the no-harm rule is an important rule of customary international law. Indeed, the rule can be interpreted as giving rise to an obligation for States to protect the climate system--which naturally extends to areas beyond national jurisdiction.

Obligations derived from the UNFCCC

For the purpose of claiming reparations for climate change damage, it is necessary to examine the obligations contained in the lex specialis of the UNFCCC and the Kyoto Protocol. The UNFCCC has near universal ratification and the commitments contained therein suggest that the Parties have a legal duty to avoid dangerous climate change. The Kyoto Protocol on the other hand sets forth legally enforceable targets for industrialized countries, which are listed in Annex I. Thus, each of these instruments entail obligations for States to limit and stabilize their GHG emissions in the atmosphere.

⁷⁴ Ibid.

⁷⁰ Statute of the International Court of Justice art 38(1), listed the four main sources as: international conventions/treaties; international custom (general custom accepted as law); general principles of law; and judicial decisions and the teachings of most highly qualified publicists.

Hugh Thirlway, 'The Sources of International Law' in Malcolm D. Evans (ed), *International Law* (Oxford University Press,

⁷² Vienna Convention of the Law of Treaties 1969, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980).

⁷³ Hugh Thirlway, above n 71, 102.

⁷⁵ Yigates Mengstie, 'The Legal Basis for Reparation Claim for Climate Change Damage Under International Law: The Perspective of Vulnerable Developing Countries' (LLM Thesis, Addis Ababa University, 2010) 56, available at https://chilot.files.wordpress.com/2013/01/the-legal-basis-of-reparation-claim-for-climate-change-damage-under-internationallaw.pdf (accessed 12 September 2015)

⁷⁶ Kyoto Protocol to the UNFCCC

There is an ongoing debate amongst commentators as to whether or not the *UNFCCC* contains substantive commitments. The *UNFCCC* is described as a "law making"⁷⁷ treaty by some, while others perceive it as devoid of legal rights and obligations. For instance, Okamatsu argued that being a framework convention, the *UNFCCC* does not define specific rights and obligations. On the other end of the spectrum, Voight argues that it "...is defendable that the objective of the *UNFCCC* is to provide a *duty of prevention* with regard to dangerous climate change". Bodansky on the other hand is neutral on this debate and suggests that the *UNFCCC* 'lies somewhere between a framework and a substantive convention', and establishes more extensive commitments than other framework conventions.

Article 2 of the *UNFCCC* establishes the "ultimate" objective of the Convention which is "... to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent "dangerous" anthropogenic interference with the climate system.' 83 We suggest that the phrase "dangerous anthropogenic interference with the climate system" must be interpreted as meaning if and when the "adverse effects of climate change" occur. 84 According to Article 1 of the UNFCCC, the definition of "adverse impacts of climate change" is when "significant deleterious effects" occur in the environment or biodata. 85 In this context, it is 'reasonable to say that the term dangerous refers to adverse effects of climate change which have significant deleterious effects on composition of ecosystems, human health and welfare'. 86 Moreover, the term "objective" may be used interchangeably with the phrase "object and purpose" on the basis that the term "ultimate" is used as a qualification.⁸⁸ The objective therefore 'acknowledges climate change as a problem and helps legitimize it as a matter of international concern.'89 Article 2 also explicitly endorses "preventive principle", which requires State Parties to control various activities that may pose risk and cause environmental damage, as embodied in the Trail Smelter Case⁹⁰ where the tribunal ordered Canada to prevent future injury. 91 Although the exact meaning of Article 2 may be subject to controversy, its inclusion as a separate article in the operational part of the treaty suggests that it gives rise to legal obligations. Indeed, as Verheyen has emphasised, Article 2 is contained in the operative part of the treaty and provides for an environmental quality standard by setting a threshold for the UNFCCC and all future legal instruments. 92 According to

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⁷⁷ Philippe Sands, Principles of International Environmental Law (2nd ed, 2003) Cambridge, Cambridge University Press.

⁷⁸ Akiko Okamatsu, 'Problems and Prospects of international Legal Disputes on Climate Change' (paper presented at the Berlin Conference on Human Rights Dimensions of Global Environmental Change, 2005).

⁷⁹ Ibid.

⁸⁰ Christina Voigt 'State Responsibility for Climate Change' (2008) 77 Nordic Journal of International Law 1-22

⁸¹ Daniel Bodansky, 'United Nations Framework Convention on Climate Change: A Commentary' (1993) 18 Yale J. Int'11 451.
⁸² Ibid.

⁸³ UNFCCC art 2.

⁸⁴ Keely Boom, above n 68.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Daniel Bodansky, above n 81.

⁸⁹ Ibid

⁹⁰ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911

⁹¹ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911

⁹² Roda Verheyen, above n 50.

Verheyen, the term "dangerous anthropogenic interference with the climate system" provides a normative threshold and the time-element for this threshold is provided in the second sentence.⁹³

In addition, Article 4(2) contains more specific obligations for industrialised States: as Voight puts it, this Article 'can be interpreted as entailing a concrete obligation for industrialized Parties or Annex 1 Parties to reduce their GHG emissions, thus complementing the objective.'94 It requires that all the *UNFCCC* Parties:

adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emission of greenhouse gas and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the convention... ⁹⁵

However, like Article 2 of *UNFCCC*, Article 4(2) remains controversial and there is no consensus as to its proper interpretation. Christian Reus-Smit stated that:

At the Earth Summit in 1992, many environmental organisations (NGOs) were highly critical of the "soft" legal form in which the commitments were expressed. The notable absence of any binding timetable or targets for greenhouse gas emissions reduction in the 1992 document ... was widely seen as a failure of commitment. 96

A contrasting perspective which is, in our view, more sensible is taken by Voigt, who states that Article 4(2) of *UNFCCC* 'when interpreted in a teleological way in the light of the objective of the Convention sets forth an "obligation of conduct" to reverse the long term trend of ever-increasing [GHG] emissions'. This perspective makes sense, as the conduct prescribed by Article 4(2) is paramount in stabilising atmospheric concentrations of GHGs at safe levels. Similarly, Verheyen proposes that Article 4(2) requires Annex 1 Parties to modify their long-term trends of trends of GHG emissions; a view that is supported by three arguments. Firstly, all Parties are bound by the objective set out in Article 2 of the Convention; secondly, Annex 1 Parties are committed under Article 4(2) to take the lead in mitigation measures; and thirdly, Annex 1 Parties must ensure that a modification of GHG trends is consistent with the objective in Article 4(2). Based on these arguments, it can indeed be concluded that Article 4(2) of the *UNFCCC* in conjunction with Article 2 *obliges* all Annex I State Parties to secure the stabilisation of atmospheric concentration GHGs through various actions and adoption of policies and other measures. This conclusion is supported by the term "shall" in Article 4(2), which confirms, in our view, that Article 4(2) does entail a substantive legal obligation.

⁹³ Roda Verheyen and Peter Roderick, 'Beyond Adaptation: The Legal Duty to Pay Compensation for Climate Change Damage' (2008) *WWF-UK*.

⁹⁴ Yigates Mengstie, above n 75, 57.

⁹⁵ *UNFCCC* art 4.2(a).

⁹⁶ Christian Reus-Smit, *The Politics of International Law* (Cambridge University Press, 2004).

⁹⁷ Christina Voigt, above n 80.

⁹⁸ Roda Verheyen, above n 50.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

Thus in establishing a wrongful act, Articles 2 and 4(2)—taken together--can be understood as a primary rule that has been breached by Annex I Parties who have failed to act in accordance with that rule—for example, Annex 1 States that have increased their emissions since the ratification of the *UNFCCC*, ¹⁰² and presumably every Annex I State that has failed to make the deep emission cuts required to prevent dangerous climate change. According to Verheyen, a Claimant State may refer to the inadequacy of the respondent State's climate action plans in the quest to prove that a breach has occurred. ¹⁰³ In support of this argument, reference can be made to Article 18 of the *VCLT* which provides that a State is obliged to refrain from acts that would defeat the object and purpose of a treaty it has signed. ¹⁰⁴ Furthermore, Article 31(1) of the *VCLT* could possibly be used to further support the above argument since it requires a treaty to 'be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose. ¹⁰⁵ In that context, the lack of compliance with a treaty obligation, for example, the lack of compliance with Article 2 and 4(2) of *UNFCCC*, will result in the defeat of the ultimate objective of the *UNFCCC*. Therefore, it may amount to an internationally wrongful act to which a State can be held responsible.

Finally, it is important to note also that almost all Parties to the *UNFCCC* are also Parties to the Kyoto Protocol. However, this does not mean that the latter has superseded the former. The Kyoto Protocol itself reaffirms the ultimate objective of the *UNFCCC* and was never meant to lower standards contained in the Convention. In fact, it provides quantified targets and compliance mechanism to facilitate accountability within the *UNFCCC* regime. The existence of this accountability regime does not mean that no State responsibility can arise when Article 4(2) is violated. After all, Article 4(2) has never been amended and continues to be binding on all the Annex 1 Parties.

Obligations derived from customary international law (i.e. the no-harm rule)

For the purpose of claiming reparations for climate change damage under the law of State responsibility, it is useful also to examine the obligations deriving from customary international law. As noted above, most relevant to climate change is the no-harm rule. In its advisory opinion 241 (1996) on *Legality of the Threat or Use of Nuclear Weapons*, the ICJ has confirmed that the no-harm rule is part of international customary law and therefore encompasses a legally binding obligation for all States. ¹⁰⁶ The no-harm rule was first applied in the *Trail Smelter Case*, ¹⁰⁷ where the Tribunal held that:

Under the principles of international law ... no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of

¹⁰⁵ VCLT art 31(1).

¹⁰² Yigates Mengstie, above n 75, 58.

¹⁰³ Roda Verheyen, above n 50.

¹⁰⁴ *VCLT* art 18.

¹⁰⁶ Legal Response Initiative, 'No-harm rule and climate change' (Briefing Paper, UK Department for International Development, 2012).

¹⁰⁷ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

another or the property of others therein, when the case is of serious consequence and the injury is established by clear and convincing evidence. 108

Following the *Trail Smelter Case*, ¹⁰⁹ the no-harm rule has been entrenched as a well-established principle or rule of customary international law and was reflected in numerous international instruments¹¹⁰ which includes, for instance, Principle 21 of the Stockholm Declaration which

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. 111

More relevant to the purpose of this paper, is the mentioning of the no-harm rule in recital 8 of the Preamble of the UNFCCC which is quite similar to Principle 21 of the Stockholm Declaration. Recital 8 of the Preamble states:

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. 112

In light of the above, a State's engagement in GHG emission activities within its national territory with the potential to cause damage to other States beyond its national territory would trigger obligations under the no-harm rule to avoid such damage. Conversely, Vanuatu can argue that it has the right not to be harmed by the acts and omissions of other States. The standard of care here is crucial: it appears that establishing a violation of the no-harm rule involves demonstrating that a responsible State has failed to exercise 'due diligence' in regulating and controlling its GHG activities within its own national territory. According to current literature, due diligence is said to comprise at least the following elements: foreseeability or knowledge that a certain activity could lead to transboundary damage; 113 the opportunity to act or prevent; 114 and proportionality in the choice of measures required to prevent harm or minimize risk. 115 In addition, the no-harm rule does not only obligate a State to prevent trans-boundary harm but also

¹⁰⁸ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

¹⁰⁹ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

¹¹⁰ UNFCCC Preamble.

¹¹¹ Declaration of the United Nations Conference on the Human Environment, UN GAOR, 21st Plen mtg, U.N. Doc. A/Conf.48/14/Rev. 1(1973) (16 June 1972)

http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503 (accessed 20 November 2015); see also Patricia Birnie, Alan Boyle and Catherine Redgwell, International Law & the Environment (Oxford University Press, 3rd 2009) 143. 112 *UNFCCC* Recital 8 Preamble.

¹¹³ Christoph Schwarte & Ruth Byrne, 'International Climate Change Litigation and the negotiation process' (Foundation for International Environment Law and Development (FIELD), October 2010); See also Christina Voigt, above n 81; See also Roda Verheyen, above n 50.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

to limit the risk of such harm occurring. 116 This is evident from the ILC's commentary to the 2001 Articles on Prevention of Transboundary Harm from Hazardous Activities which noted:

that acting with due diligence requires a State to take unilateral measures to prevent significant transboundary harm or at any event minimize the risk thereof... Such measures include, first, formulating policies designed to prevent significant transboundary harm or to minimize the risk thereof and, second implementing those policies. Such policies are expressed in legislation and administrative regulations and implemented through various enforcement mechanisms.¹¹⁷

Accordingly, if Vanuatu can show that despite a responsible State foreseeing that GHG activities would lead to significant transboundary harm, that State failed to act with due care or failed to take reasonable and proportionate measures to protect the environment from transboundary harm, that State may be considered to have breached the no-harm rule. A classic example of how the no-harm rule can be formulated in Vanuatu's favour is reflected in the recent *Case Concerning the Aerial Herbicide Spraying (Ecuador v Colombia)* before the ICJ. This concerned a dispute where Ecuador alleged that the aerial spraying of toxic herbicides by Colombia into Ecuador's territory had caused serious damage to people, plants and the environment. Ecuador requested, amongst other things, a declaration that Colombia had breached an international obligation and an order obliging it to '...take all steps necessary to prevent, on any part of its territory, the use of any toxic herbicides in such a way that they could be deposited onto the territory of Ecuador; and (iii) prohibit the use, by means of aerial dispersion, of such herbicides in Ecuador, or on or near any part of its border with Ecuador.' This case illustrates how Vanuatu could formulate its argument in light of the no-harm rule.

LEGAL CONSEQUENCES OF STATE RESPONSIBILITY

Duty to cease the wrongful conduct

Article 30 of the *ARS* provides that a State that is responsible for an internationally wrongful act is under an obligation to cease the act if the act is continuing, ¹²⁰ and to offer appropriate assurances and guarantees of non-repetition. ¹²¹ According to Paragraph 5 of the commentary to Article 30 of the *ARS*, 'the function of cessation is to put an end to a violation of international law and to safeguard the continuing validity and effectiveness of the underlying rule'. ¹²² In framing a State responsibility claim related to climate change damage, Vanuatu may seek and demand another State to cease the action or inaction that leads to the emission of dangerous levels of GHGs into the atmosphere. For appropriate assurances and guarantees of non-repetition, Paragraph 11 of the commentary to Article 30 of the *ARS* provides that they are concerned with the restoration of confidence on a continuing relationship. ¹²³ Vanuatu may seek

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¹¹⁶ Trail Smelter Arbitration (United States v. Canada) [1941] 3 RIAA.

Report ILC, 53rd session, Commentary 393 in Christina Voigt, above n 80, 22.

¹¹⁸ Case Concerning the Aerial Herbicide Spraying (Ecuador v Colombia) Order of 30 May 2008. I.C.J. Reports 2008, p.174; see also The Hague Justice Portal http://www.haguejusticeportal.net/index.php?id=9285 (accessed 19 November 2015).

¹¹⁹ Case Concerning the Aerial Herbicide Spraying (Ecuador v Colombia) Application Instituting proceedings, 31st March 2008.

¹²⁰ *ILC ARS* art 30(a). ¹²¹ Ibid art 30(b).

¹²² Commentaries on ILC ARS art 30 Para 5.

¹²³ Ibid Para 11.

assurances which in practice are normally given verbally, 124 while preventive measures, such as repealing of legislation, may be sought as guarantees of non-repetition. 125

Duty to make reparations

In addition to cessation and non-repetition, there is a duty to make reparations. One of the most important principle of public international law is that 'the breach of an engagement involves an obligation to make reparation in an adequate form.' According to Crawford and Olleson, '[r]eparation therefore is the indispensable complement of a failure to apply a convention and there is no necessity for this to be stated in the Convention itself.' Also, the underlying principle is that reparations must wipe out the consequences of the breach; in other words, it must 'put the parties as far as possible in the same position as they would have been if the breach had not occurred.' 128

Article 31 of the ARS captures this principle and states that a State is obliged to make full reparation for any injury caused. The commentaries on the *ARS* reiterate that it is a well-established principle in international law – as established by the PCIJ in the *1927 Chorzow Factory Case*. The PCIJ stated that '[i]t is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation ...'. The Court also stated that:

... reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law. 132

Article 34 of ASR envisages that '[f]ull reparation for the injury caused... shall take the form of restitution, compensation and satisfaction, either singly or in combination ...'. ¹³³ In the context of injury caused by Cyclone Pam, it is impossible to restore the situation *ex ante*—especially, deaths caused by Cyclone Pam are irreversible. Therefore, the two appropriate remedies in this case are actions aimed at preventing further damage and compensation for already occurred damage. Indeed, it would appear that compensation is the only possible redress for unavoidable damage caused by extreme weather events.

¹²⁴ Ibid Para 12.

¹²⁵ Ibid

¹²⁶ James Crawford and Simon Olleson, above n 48, 447.

¹²⁷ Ibid.

¹²⁸ Ibid

¹²⁹ ILC ARS, above n 58.

¹³⁰ Factory at Chorzow case, merits, judgment [1928] PCIJ ser. A. See also Christina Voigt, above n 80.

¹³¹ Factory at Chorzow case, merits, judgment [1928] PCIJ ser. A.

¹³² Ibid.

¹³³ ILC ARS, above n 58.

While the *ASR* defines injury as "damage whether material or moral", in practice, this has not been so. In the *Trail Smelter Case*, ¹³⁴ the tribunal awarded compensation to the United States only for damage to land and property caused by emissions from a Canadian Smelter. ¹³⁵ The ecological damage or "pure" environmental damage caused by Cyclone Pam may not be compensable in this case and thus compensation that will actually be received may be limited to financially assessable damage i.e. injury to persons and property only, also known as consequential environmental damage. It should also be considered that Vanuatu has also emitted GHGs to some extent, although a negligible amount. As such, Vanuatu might also be partly responsible for the climate change damage, and thus the extent of the reparation must be adjusted accordingly. ¹³⁶ This issue is regulated in Article 39 of *ASR* which states that '[i]n the determination of reparation, account shall be taken of the contribution to the injury by wilful or negligent action or omission of the injured State ... in relation to whom reparation is sought. ¹³⁷

HOW COULD VANUATU ENFORCE THESE LAWS?

Article 42 of the ARS provides that an injured State is entitled to the implementation of State responsibility. This means, amongst other things, that Vanuatu as an injured State is entitled to invoke the responsibility of a responsible State or States. In invoking the responsibility of responsible States, Vanuatu shall give notice of its claim to the responsible State or States and specify in particular, (i) what measures the responsible State should take in order to cease the wrongful act, and (ii) the form of reparation that Vanuatu may elect to seek. This could be done either bilaterally (between States) or by bringing a case before an international judicial body, such as the ICJ. Our contribution focuses on the latter option.

Bringing a case to the ICJ

According to Article 36(2) of the *Statute of the ICJ*, State parties may deposit at any time declarations recognizing the compulsory jurisdiction of the ICJ. Such declarations may be made conditional or unconditional. When made unconditional, the case is straightforward. However, when made conditional, it means a State has accepted the ICJ's compulsory jurisdiction but subject to reservations. Within such reservations, States tend to exclude certain types of disputes, which they wish not to sue upon, or be sued upon. However, the easiest way for Vanuatu would be to sue a State that has accepted the Court's jurisdiction as compulsory. It is important to note that most Annex 1 countries have recognised the compulsory jurisdiction of the ICJ, based on reciprocity. The real obstacle is that Vanuatu has not recognised the ICJ's compulsory jurisdiction yet, which probably bars it from bringing a claim regarding Cyclone Pam. On that note, if Vanuatu accepts the jurisdiction of the Court as compulsory, it could probably bring this type of claim in the future. This is not to suggest that there might not be other avenues Vanuatu could pursue to invoke responsibility—the ICJ is not the only forum, and indeed Vanuatu could invoke responsibility simply by having its Head of State or Minister of Foreign Affairs make a statement to that end.

¹³⁴ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

¹³⁵ Trail Smelter (Canada/United States) (1938 and 1941) 3 RIAA 1911.

¹³⁶ Christina Voigt, above n 80.

¹³⁷ ILC ARS, above n 58.

¹³⁸ Ibid art 42.

¹³⁹ ICJ website http://www.icj-cij.org/homepage/ (accessed 12 November 2015).

CONCLUSION AND RECOMMENDATIONS

This paper has discussed whether or not Vanuatu could successfully claim reparations under international law for the damages sustained as a result of Cyclone Pam. It has demonstrated that making a successful reparations claim is not impossible. Despite the absence of an existing climate change regime that would address the questions of when, how and by whom climate change related damages should or could be compensated, the general law on State responsibility can help frame a State responsibility claim. Should Vanuatu decide to bring this type of claim, Vanuatu could pick one obvious culprit and let that State sue others if it is found responsible, or Vanuatu could claim against all States that appear to be in breach of their obligations. However, to be able to proceed, Vanuatu may need to recognise the compulsory jurisdiction of the ICJ based on reciprocity. Also, if Vanuatu is to rely on international human rights law as a legal basis for its claim, Vanuatu, may need to consider becoming a State party to the *International Covenant on Economic, Social and Cultural Rights* ('ICESCR'). Lastly, as it stands, the current jurisprudence on this subject area is yet to be further developed. Therefore, there is a need for a case of this nature to be litigated in order to shed more light and expand the jurisprudence in this area. Who knows, this Vanuatu Cyclone Pam case, if litigated, may set the precedent.