## Vanishing Habitats

A critical discussion of the significance of climate induced displacement within international environmental law and what needs to be done

Aastha Walia\*

## Introduction

nthropogenic influence has a staggering impact upon the environment. Modern production and consumption levels have rapidly increased greenhouse gas (GHG) emissions, consequently catalysing rising sea levels; water shortages; and desertification. Mevers estimates that these changes in the climate will increase the number of those environmentally displaced to 150 million within fifty years. This equates to 1.5% of the predicted global population (10 billion) of 2050.2 This emphasises a necessity to address human mobility as a result of environmental degradation, ensuring those displaced do not continue to suffer. Current frameworks have been unsuccessful in addressing the issue due to opaque binding frameworks, incapable of ascertaining a solution for climate induced displacement. The latter due to the combination of failing to acknowledge the severity of environmental displacement coupled with political and social obstacles. Consequently, a lack of focus exists within the international community to ensure the protection of those affected by climate displacement. This is detrimental for those affected as they lack appropriate rights under international environmental recognised international community must therefore establish effective, longterm mechanisms to aid those threatened with climate induced displacement. This dissertation will emphasise the significance of climate induced displacement, considering actions previously undertaken by the international community and the extent of their effectiveness. Upon analysis of current actions, I will consider the nature of displacement, subsequently proposing reformations and alternate frameworks to better govern the issue. This shall include recommendations to better identify

<sup>1</sup> Norman Meyers and Jennifer Kent, *Environmental Exodus: An Emergent Crisis in the Global Arena* (Washington DC: Climate Institute, 1995)

<sup>2</sup> Ibid

those relocating, as well as imposing preventative measures that improve the mitigating and adaptive capacities of vulnerable states. This way, displacement can be successfully addressed within international environmental law in the short and long-term.

# I. Understanding climate induced displacement

#### 1. Causes

Human mobility is arguably the greatest impact from climate change<sup>3</sup>. 2020 recorded 30.7 million displaced due to weather-related events <sup>4</sup>. Increased greenhouse emissions accelerated environmental degradation, exceeding precious forecasts. Gradual and sudden environmental pressures, such as prolonged droughts; rising sea levels; and mudslides exemplify the changing climate. Thus, land masses most vulnerable to environmental fluctuations are becoming uninhabitable. For example, Sub-Saharan Africa is predicted to experience a reduced availability of water due to environmental degradation<sup>5</sup>. Contrastingly, South Asia and the Middle East are suffering from water stress and rising sea levels<sup>6</sup>. Such extremes in climate have undoubtedly

6 Ibid

<sup>&</sup>lt;sup>3</sup> World Meteorological Organisation and United Nationals Environmental Programme, *Climate Change: The 1990 and 1992 IPCC Assessments* (Intergovernmental Panel on Climate Change, 1992)

<sup>&</sup>lt;sup>4</sup> Internal Displacement Monitoring Centre, 'Grid 2021: Global Report on Internal Displacement' (IDMC, Norwegian Refugee Council, 2021) <a href="https://www.internal-">https://www.internal-</a>

displacement.org/sites/default/files/publications/documents/grid202 1\_idmc.pdf accessed 27 August 2021

<sup>&</sup>lt;sup>5</sup> Internal Displacement Monitoring Centre, 'Grid 2018: Global Report on Internal Displacement' (IDMC, Norwegian Refugee Council, 2018) <a href="https://www.internal-displacement.org/global-">https://www.internal-displacement.org/global-</a>

report/grid2017/pdfs/2017-GRID-part-1.pdf accessed 9 June 2020

resulted in habitat damage, severely affecting people's access to resources and standard of living. The rapid rate of environmental displacement is therefore a global phenomenon, rendering aspects of human mobility irreversible and difficult to mitigate. Should the average global temperature continue increasing at 2-degrees Celsius, coastal areas such as Osaka, Japan will risk becoming entirely uninhabitable<sup>7</sup>. Furthermore, low-lying islands such as the Maldives, will be entirely submerged.<sup>8</sup>

#### 2. Severity

Environmental degradation has had a severe impact upon developing and developed countries alike. Although, the vulnerabilities of developing countries augment its detrimental impacts. The general lack of understanding regarding the link between climate change and certain population movements has resulted in its severity being overlooked. To illustrate, Bangladesh is considered most susceptible to climate induced displacement. Due to its high population density and two-thirds of the land mass being less than 5 metres above sea level (common characteristics for low-lying developing countries), Bangladesh anticipates a 50-centimetre rise in sea level by 2050, resulting in 11% of its land being submerged9. The absence of preventative measures will increase this percentage. Extreme weather, combined with limited adaptive capacities, elucidate the detrimental impacts of climate change upon mobility in developing countries. It must additionally be noted, displacement is not a future consequence. Current riverbank erosion along the Bay of Bengal has pushed 50% of their rural population inland

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<sup>&</sup>lt;sup>7</sup> Scott A. Kulp and Benjamin H. Strauss, 'New Elevation Data Triple Estimates of Global Vulnerability to Sea-level Rise and Coastal Flooding' (2019) 10 Nature Communications 4884

<sup>&</sup>lt;sup>8</sup> Matthew Wadey, Sally Brown, Robert J. Nicholls and Ivain Haigh, 'Coastal flooding in the Maldives: an assessment of historic events and their implications' (2017) 89 Natural Hazards 131

<sup>&</sup>lt;sup>9</sup> 'Human Development Report 2011: Sustainability and Equity: A Better Future for All' (United Nations Development Programme, 2011) <a href="http://hdr.undp.org/sites/default/files/reports/271/hdr">http://hdr.undp.org/sites/default/files/reports/271/hdr</a> 2011 en complete.pdf accessed 29 June 2020

due to salinization. <sup>10</sup> Cyclones Alia (2007) and Sidr (2009) decimated housing, communication, and other infrastructures in Bangladesh, with an estimation of 2.3 million households affected as a result 11. Similar population movements have occurred in Sri Lanka<sup>12</sup>. Insufficient resources within vulnerable, developing countries underlines the necessity for international community to comprehend and respond to climate induced displacement. Comprehension will allow for measures by the international community to be imposed, assisting states who are unable to do so independently.

#### 3. Concerns surrounding displacement

The link between displacement and climate change is apparent. It can be argued that the international community has intentionally neglected the issue due to the pressure imposed upon areas to provide housing for those seeking refuge. Regarding rural-tourban mobility, an influx of people can strain urban infrastructure. The International Organisation for Migration (IOM) recognises climate induced displacement is likely to result in overpopulation in already dense areas<sup>13</sup>. Developing countries, many already suffering from overpopulation, are likely to

Sivaperuman, Ayyam Velmurugan, Swindra Kumar Singh and Iyyappan Jaisankar, Biodiversity and Climate Change: Adaptation in Tropical Islands

(Academic Press, 2018)

<sup>&</sup>lt;sup>10</sup> Justin Ginnetti and Chris Lavell, 'The Risk of Disaster-Induced Displacement in South Asia' (Internal Displacement Monitoring Centre, https://www.internal-Technical Paper, 2015) displacement.org/sites/default/files/publications/documents/201504ap-south-asia-disaster-induced-displacement-risk-en.pdf accessed 29 June 2020

<sup>11 &#</sup>x27;Cyclone Sidr in Bangladesh: Damage, Loss, and Needs Assessment for Disaster Recovery and Reconstruction' (Government of Bangladesh, 2008) Report, https://reliefweb.int/sites/reliefweb.int/files/resources/F2FDFF067E

F49C8DC12574DC00455142-Full Report.pdf accessed 15 June 2020 <sup>12</sup> Abhaya Balasurya, 'Coastal Area Management: Biodiversity and Ecological Sustainability in Sri Lankan Perspective' in Chandrakasan

<sup>&</sup>lt;sup>13</sup> Oli Brown, Migration and Climate Change (IOM Migration Research Series No 31, 2008) Mc32

jeopardise the availability of health and education services for the existing urban community due to displacement. While this may not be prevalent in developed countries, forced mobility can further result in periods of civil unrest and political concern for states. The latter and former can inhibit long-term development, an especially detrimental consequence for developing countries. McLeman notes a growing hostility against immigration policies from countries, resulting in restrictive international migration<sup>14</sup>. The US have exemplified this by hardening their southern borders under President Trump's immigration deterrence policies, as well as Australia's mandatory detention policy for unauthorised migrants<sup>15</sup>. Developing countries seemingly mirror this notion; Following the 2019 election, India partook in discussions regarding stringent criminalisation for unauthorised immigrants. Countries predicted to be entirely uninhabitable, for example Bangladesh, will resultantly struggle to relocate to neighbouring borders (primarily India and Myanmar) due to hostilities. In light of these attitudes, a question is raised: for populations denied cross-border rehabilitation, where can they go?

# II. Current frameworks governing displacement and their limitations

## 1. The United Nations Framework Convention on Climate Change (UNFCCC)

The extent to which existing frameworks address climate induced displacement must be examined to determine its current significance within international environmental law. Further, recommendations considering their limitations can be

<sup>&</sup>lt;sup>14</sup> Robert McLeman, 'International migration and climate adaptation in an era of hardening borders' (2019) 9 Nature Climate Change 911

<sup>15</sup> Ibid

determined. The UNFCCC is a principal mechanism regarding climate deliberations, establishing numerous frameworks acknowledging displacement. Regardless, the UNFCCC overall fails to specifically outline how displacement is to be addressed, a further elucidation of the lack of focus on displacement by the international community.

#### 2. The Cancun Agreements

The 2010 Climate Change Conference in Cancun underlines preliminary acknowledgement of climate induced displacement. The adoption of the Cancun Agreements advocated undertaking enhance understanding, coordination cooperation with regard to climate change induced displacement, migration and planned relocation.'16 As an initial step towards addressing climate displacement, the Agreements effectively understands the impact of environmental degradation upon human mobility. The Green Climate Fund exemplifies this. Financing projects in vulnerable countries to improve disaster prevention, it implements policies to address displacement in the long-term. 17 Furthermore, the Cancun Adaptation Framework underlines the necessity of international cooperation to improve mitigation and adaptive capacities, improving response measures against displacement. 18 These proposals suggest acknowledgement of the severity of displacement, particularly in developing countries. Therefore, the Cancun Agreements can diminish the severity of displacement as it establishes a cooperative outlook to ensure the prevention of economic disparity between countries when combatting displacement.

As a preliminary mechanism, the Agreements denote encouraging progress towards combatting displacement. There

<sup>&</sup>lt;sup>16</sup> UNFCCC 'Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010', FCCC/CP/2010/7/Add.1, s.14(f)

<sup>17</sup> Ibid

<sup>18</sup> Ibid

are, however, hindrances to its success. Primarily, international cooperation is not regulated. State commitment is essential, otherwise success of the Agreements is limited. Without a binding provision, it is uncertain whether a state will uphold their climate commitments due to prioritisation of other matters. Indeed, the nature of international law is wholly non-obligatory and non-binding in nature, limiting the success of any agreement. Messing proposes near-binding arrangements; establishing an understanding between involved parties that their obligations are legally feasible, thus ensuring a pressure is maintained upon Parties 19. Given that states often do not willingly prioritise climate action, an agreement of this nature will ensure displacement remains of significance and obligations are enforced under international law. Additionally, a process for transferring technologies and finance has not been sufficiently outlined. The Agreement states, 'developing countries that are particularly vulnerable' to the adverse effects of climate change should be highlighted. <sup>20</sup>This fails to objectively determine which countries should be prioritised when allocating resources. Hence, some countries may be disregarded. Therefore, the Cancun Agreements are vague in their guidelines and so limited due to their potential to allocate resources unequally. Consequently, climate induced displacement will be insufficiently addressed under this framework.

#### 3. The Paris Agreement

The 2015 Paris Agreement is an additional achievement of the UNFCCC, underlining the requirement of improving states' vulnerabilities by 'mobilising support for adaptation in developing countries' in relation to environmental degradation<sup>21</sup>.

<sup>20</sup> Ibid s.11

<sup>&</sup>lt;sup>19</sup> Aaron Messing, 'Nonbinding Subnational International Agreements: A Landscape Defined' (2012) 30 The Georgetown Environmental Law Review 173, 185

<sup>&</sup>lt;sup>21</sup> UNFCCC 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015', opened for signature 12 December 2015 (entered into force 29 January 2016) 3

This indicates that the international community recognises the significance of climate induced displacement. This is highlighted by the Agreement encouraging the allocation of technology frameworks, infrastructure and financial resources as aid.<sup>22</sup> These provisions suggest climate induced displacement could be tackled under the Paris Agreement.

Whilst its mechanisms could be applicable in principle; the Paris Agreement fails to go beyond recognition of the severity of displacement. There is little acknowledgment of the rights of climate displaced populations, and how such rights can be supported under international law. What is more, the Agreement lacks specificity concerning the process by which displacement is to be combatted. For example, it lacks details on the extent to which aid should be provided. This ambiguity renders the Agreement inept because states are not provided sufficient guidelines outlining their environmental displacement duties. States, therfore, could only fulfil a portion of their obligations. Instead, the Paris Agreement focuses on limiting the temperature increase from greenhouse emissions to 2 degrees Celsius above pre-industrial levels.<sup>23</sup> Indeed, this target will contribute to diminishing the rate of environmental degradation; and in extension, the rate of related displacement. Conversely, focusing on emissions does not allow for focus in the issue of population movements. For the framework to be effective, the lack of specificity must first and foremost be reformed. Thus, specific guidelines targeting climate induced displacement is necessary.

Paralleling the Cancun Agreements, the non-binding nature of the Paris Agreement should be critiqued. It indicates a lack of legal enforceability, providing little motivation for states to adhere to the Agreement's provisions and address displacement. In addition to this, a lack of motivation inhibits the maintenance of concrete and deliberate action, preventing effective international cooperation. Subsequently, it is necessary for such Agreements to be binding in nature in order to improve

<sup>&</sup>lt;sup>22</sup> Ibid

<sup>23</sup> Ibid

their efficacy. Messing's proposals would thus also be applicable to the Paris Agreement.<sup>24</sup> Related policy frameworks are thus more likely to be effective in combatting the issue. Additionally, a binding nature must consider the procedure by which obligations are enforced, such as transparency and reviews of action taken as well as impacts on domestic policies. Without consideration of these factors, it is unlikely states will remain committed to frameworks. As previously mentioned, this will severely inhibit successfully combatting of displacement.

## 4. Warsaw International Mechanism for Loss and Damage (WIM)

WIM (2013) addresses the imminent impacts of climate change upon human mobility, by highlighting losses and damage in vulnerable states. It functions to provide support services (including finance, technology and capacity-building) and promoting a greater understanding of climate displacement.<sup>25</sup> By enabling states to make risk-informed decisions and take preemptive action, WIM can be considered a feasible mechanism by which the adaptive capacities of states can be developed to combat displacement. In comparison to aforementioned frameworks, the Mechanism understands the need to impose immediate measures to tackle displacement, alongside preventing future risks. Like other UNFCCC mechanisms, however, WIM does not adequately outline the severity of displacement. Anisimov and Vallejo report a greater need for the facilitation of dialogue on the magnitude of climate impacts to successfully undertake disaster risk reduction.<sup>26</sup> This indicates that, despite

https://unfccc.int/sites/default/files/resource/Online Guide feb 20 20.pdf

accessed 4 July 2020

<sup>&</sup>lt;sup>24</sup> Messing (no 19)

<sup>&</sup>lt;sup>25</sup> 'Loss and Damage: Online Guide' (UNFCCC guide to Warsaw International Mechanism for Loss and Damage)

<sup>&</sup>lt;sup>26</sup> Ariadna Anisimov and Lola Vallejo, 'Loss and Damage under the UNFCCC: ways forwards for the Warsaw International Mechanism' (2019) 13(19) IDDRI, Issue Brief

recognition of the severity of displacement, WIM outlines policies in a general manner. Indeed, it has not been determined which countries are liable for financing policies and how they will be identified. Therefore, to strengthen the framework, WIM must establish context-specific guidelines for policy implementation. Similarly, Byrnes and Surminski note that WIM must be tailored to specific countries to effectively address the nuances of climate induced displacement <sup>27</sup>. They further recommend the Mechanism act as an 'international overseer by monitoring and reporting on progress.' <sup>28</sup> A regulatory mechanism is necessary in order to uphold state responsibility and ensure the required transfer of funds and technologies to vulnerable states. Without such amendments, WIM will be limited in addressing climate induced displacement.

#### 5. The Nansen Initiative

Conversely, the 2012 Nansen Initiative highlights some overarching success by the UNFCCC to address environmental displacement. The initiative can be credited for the shifting focus on climate action by specifically functioning to protect those displaced. The Initiative outlines policy responses concerned with upholding human rights for those displaced - a provision otherwise absent from the aforementioned frameworks. The Initiative further acknowledges displacement occurs at national and international levels, thus providing long-term and immediate solutions to addressing displacement, the primary ones being to

https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Décryptage/201911-IB1319-L%26D.pdf Accessed 4 July 2020

<sup>&</sup>lt;sup>27</sup> Rebecca Byrnes and Swenja Surminski, 'Addressing the impacts of Climate Change through an effective Warsaw International Mechanism on Loss and Damage: Submission to the second review of the Warsaw International Mechanism on Loss and Damage under the UNFCCC' (London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 2019)

<sup>28</sup> Ibid

develop adaptive capacities and technology.<sup>29</sup> Building on WIM, the Initiative expresses limitations regarding accountability.

According to the framework, responsibility is placed upon states, enabling them to build local and national structures as a response measure to displacement. <sup>30</sup>In addition, the Initiative generates greater international cooperation, generating interest from Norway, Switzerland and Mexico, all of whom pledged to 'cooperate with interested states, UNHCR and other relevant actors with the aim of obtaining a better understanding of such [...] movements.'<sup>31</sup> Should this willingness be maintained by the international community, climate induced displacement can be globally addressed.

For the Initiative to be most effective, certain states must adhere to its guidelines. Major GHG emitters such as the US and China have remained accountable for approximately 27% and 11% of the world's CO2 emissions over the last century respectively.<sup>32</sup> In the absence of their commitment to combatting displacement, the Initiative will only be partially viable. Conversely, McAdam argues international cooperation is insignificant in combatting displacement. <sup>33</sup> Rather, the Initiative must strive to amend existing international law to accommodate climate induced displacement. Given that, UNFCCC frameworks have been unsuccessful in combatting displacement under current legal regimes, perhaps reformations are indeed required. McAdams' assertions are therefore justified. Such reformations could be

<sup>&</sup>lt;sup>29</sup> 'The Nansen Initiative Global Consultation Conference Report' (The Nansen Initiative, 2015) <a href="https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT pdf.accessed 10 July 2020">https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT pdf.accessed 10 July 2020</a>

REPORT.pdf accessed 10 July 2020

<sup>30</sup> Ibid

<sup>&</sup>lt;sup>31</sup> Walter Kalin, 'From the Nansen Principles to the Nansen Initiative' (2012) 41 Forced Migration Review 48, 49

<sup>&</sup>lt;sup>32</sup> 'Global Historical Greenhouse Gas Emissions' *Climate Watch* (Web Page) <a href="https://www.climatewatchdata.org/ghg-emissions">https://www.climatewatchdata.org/ghg-emissions</a> accessed 13 July 2020

<sup>&</sup>lt;sup>33</sup> Jane McAdam, 'From the Nansen Initiative to the Platform on Disaster Displacement: Shaping International Approached to Climate Change, Disasters and Displacement' (2016) 39(4) UNSW Law Journal 1518

capable of accommodating for the rapid rate of displacement and the requirements of the international community to address it.

#### 6. The Peninsula Principles

Paralleling the Nansen Initiative, the Peninsula Principles target climate induced displacement by espousing the protection of displaced populations under international human rights law, with a structured and preventative disposition. This includes enshrining the principles of non-discrimination, which likely addresses hostilities arising from cross-border movements. The Principles additionally appear better suited to addressing displacement as they initiate greater international cooperation. Countries such as the US, Australia, the United Kingdom and Germany - major greenhouse emitters - pledged to the Principles 34. As a development upon these obligations, the Principles further advocate for vulnerable states to outline what they require in order to combat displacement. <sup>35</sup>Arguably, this is the most effective mechanism by which climate induced addressed because it remedies displacement can be aforementioned framework limitations. For example, the specific identification and allocation of resources for different countries coupled with a collaborative effort made by states to address displacement. The Principles, however, have not been established by a governmental organisation, unlike UNFCCC frameworks. Nor have they been approved by similar organisations. Given this, official implementation enforcement appears difficult. Conversely, their detachment from institutions such as the UN arguably removes political prohibitions, ultimately inhibiting the international community from prioritising climate induced displacement. Enforcement mechanisms must be established, however, to legitimatise the Principles.

35 Ibid

<sup>&</sup>lt;sup>34</sup> The Peninsula Principles: On Climate Displacement Within States (Displacement Solutions, 18 August 2013)

## III. Determining responsibility

#### 1. The "polluter pays" principle (PPP)

The International Organisation of Migrants (IOM) notes, the relation between greenhouse gas emissions and environmental degradation is directly proportional. <sup>36</sup>Primary polluters should consequently be held responsible for those forced to relocate. Similarly, US domestic law maintains that polluters are responsible for the effects of their pollution - ironically, the US are hesitant to uphold their responsibilities to mitigate their actions as major polluters of the international community. 37 There are multiple mechanisms, however, by which states can be held accountable for displacement in relation to their emissions. The PPP is a viable mechanism to assess this. Under international law, the PPP involves the imposition of taxation in accordance with polluters' emission percentuale<sup>38</sup>. Arguably, a combination of America's and international law's definition would effectively identify who is responsible for addressing internal and cross-border displacement. This can be executed with a taxation mechanism, the finances of which can be used to invest in development projects for states vulnerable to

<sup>&</sup>lt;sup>37</sup> Stefanie Sommers, 'The Brownfield Problem: Liability for Lenders, Owners, and Developers in Canada and the United States' 19 [2008] J. INT'L ENVTL. L. & POL'Y 259

<sup>&</sup>lt;sup>38</sup> Polluter Pays Principle (Organisation for Economic Cooperation and Development Publishing, 2008) <a href="https://www.oecd-ilibrary.org/docserver/9789264044845">https://www.oecd-ilibrary.org/docserver/9789264044845</a>-

en.pdf?expires=1595345883&id=id&accname=guest&checksum=73D F1B54C60CF39DA143F62A530A2A3D accessed 21 July 2020

displacement. Conisbee and Simms support this notion, arguing responsibility for the environmentally displaced should be regarded an extension of the PPP and those affected 'should be by protected recompensed and those responsible.' <sup>39</sup> Furthermore, such taxations will deter current and future emissions, due to the subsequent increase in the cost of polluting. The principle has been enshrined into numerous conventions regarding environmental degradation such as the Treaty on the Functioning of the European Union (TFEU) which explicitly states the cost of environmental degradation should be borne by the polluter.<sup>40</sup> In light of this, application of the PPP is a viable principle by which the international community can aptly recognise actors upon whom they should impose policy frameworks to address displacement. As emphasised by Mamlyuk, without this, responsibility to address the effects of environmental damage and related displacement becomes the burden of the general community<sup>41</sup>. Given the variances in mitigation and adaptive capabilities for states, this most certainly will inhibit climate induced displacement being effectively combatted.

Indeed, Mamlyuk's assertions can be disagreed with. Given that states are generally unwilling to comply with taximposing mechanisms, the PPP may be difficult to impose and is thus more a theoretical notion as opposed to a practical one. To illustrate, the United States' reluctance to embrace their environmental duties has been apparent with the Trump administration announcing its withdrawal from the Paris Convention by the end of 2020<sup>42</sup>. Certainly, this unreceptive

<sup>&</sup>lt;sup>39</sup> Molly Conisbee and Andrew Simms, *Environmental Refugees: The Case for Recognition* (New Economics Foundation, 2003) 29

<sup>&</sup>lt;sup>40</sup> Consolidated versions of the Treaty on the Functioning of the Europeans Union (TFEU) [2012] OJ L 129/35, art 191(2)

<sup>&</sup>lt;sup>41</sup> Boris N. Mamlyuk, 'Analysing the Polluter Pays Principle through Law and Economics' 18(1) (2009) Se Envtl LJ 39, 42

<sup>&</sup>lt;sup>42</sup> Michael R. Pompeo, Secretary of State, 'On the U.S. Withdrawal from the Paris Agreement' *U.S. Department of State* (Press Statement, 4 November 2019)

https://www.state.gov/on-the-u-s-withdrawal-from-the-parisagreement/ accessed 14 June 2020

disposition will greatly hinder actions taken to combat climate displacement. Thus, Conisbee's and Simms' argument regarding responsibility is rendered futile. Arguably, this may be rectified by making the PPP a near-binding mechanism.

#### 2. The equity principle

Effectively combating displacement involves vulnerable states improving their adaptive capacities. Imposing the PPP is insufficient in satisfying this prerequisite as its emphasis is on major polluters whom, commonly, are developed countries capable of independently combatting displacement. Therefore, there is a "divide" between states more and less capable of preventing displacement. The equity principle acts as an appropriate mechanism to rectify this division. It advocates an equal distribution of responsibility, as well as the capacities, technologies and finances of states. Moreover, it is necessary for the international community to adopt an equitable response to addressing climate induced displacement as it was asserted that 'the right to development must be fulfilled as to equitably meet developmental and environmental needs of present and future generations.' <sup>43</sup>

This "divide", however, created conflicting perceptions regarding the severity of displacement and how to fairly address it. Developed countries have generally been dismissive of the prevalence and severity of displacement. Members of the industrialised world are commonly appointed to determine the sharing of resources, hence what they deem "fair" is likely to be skewed by their perception of displacement. The sharing of resources may resultantly be affected. Therefore, developing countries may receive limited or inappropriate resources to develop their adaptive capacities against displacement. Moreover, such disregard indicates a lack of incentive by the international community to address climate induced displacement. Indeed, the

<sup>&</sup>lt;sup>43</sup> John Ashton and Xueman Wang, 'Equity and Climate: In Principle and Practice' (Pew Center, Global Climate Change, 2003) <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.588.3093&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.588.3093&rep=rep1&type=pdf</a> accessed 11 July 2020

2014 Intergovernmental Panel on Climate Change (IPCC) report emphasises the necessity of burden sharing to address displacement, but there is little information as to its application, rendering it a vague and inept adoption of the equity principle.<sup>44</sup> A divisive international community further hinders the combatting displacement because, Müller notes, the international community has no inclination regarding *how* to equitably manage burdens, such as future displaced Bangladeshis. <sup>45</sup> Therefore, successful implementation of the equity principle is possible only by lessening this divide with compromise and a restructuring of states' priorities. <sup>46</sup>Without such reformations, the absence of international cooperation will continue, inhibiting the combatting of climate induced displacement.

## IV. Suggestions for a way forward

### 1. Distinguishing displaced persons

There have been numerous terms of reference to describe environmentally induced mobility. Although they have been used interchangeably, it must be noted they are in fact distinguishable, connoting differing consequences under international law. Debatably, the lack of a singular term has contributed to the international community failing to address and identify the severity of displacement. It is therefore necessary to establish a coherent term for climate induced displacement which ensures the population gain legal recognition and protection relevant to

<sup>&</sup>lt;sup>44</sup> Christopher B. Field and Vincente R. Barros (ed), Climate Change 2014 Impacts, Adaption, and Vulnerability, Part A: Global and Sectoral Aspects (Cambridge University Press, Intergovernmental Panel on Climate Change, 2014)

<sup>&</sup>lt;sup>45</sup> Benito Müller, Equity in Climate Change: The Great Divide (Oxford Institute for Energy Studies with the support of the Shell Foundation, 2002)

<sup>46</sup> Ashton and Wang (n 43)

their circumstances. This can be obtained by amending existing legal terms, such as "migrants" and "refugees". Alternatively, to guarantee variances of the displaced population are accounted for, it may be necessary for a separate term entirely

#### 2. Environmental migrants

Amending migrant status to allow for *environmental migrants*, may enable appropriate rights for those forced to relocate. The UNHCR defines migrants as those choosing to move to improve their standard of living, often searching for better labour opportunities or education.<sup>47</sup> Under migrant status, individuals are subject to the legal framework of their new host country, although are generally protected from inhumane treatment or labour exploitation, which may arise from a hostile milieu. In a climate context, populations may predict displacement, and so pre-emptively decide to relocate. Thus, migrant status is applicable. To accommodate for environmental displaced people, the IOM have suggested migrants additionally be defined as those 'who, predominantly for reasons of sudden progressive changes in the environment [...] are obliged to leave their habitual homes or choose to do so [...] and who move within their country or abroad.' 48Existing migrant status must, in light of this, be revised to include those partially independent in deciding to move due to environmental degradation - not only those entirely independent (as inferred by the UNHCR's definition).

The absence of these reforms makes the adoption of migrant status in the climate context invalid as it is not wholly inclusive of the displaced population. Migrant status can further be developed to predict the scale of displaced populations by examining migratory patterns. Ionesco proposes amending

<sup>&</sup>lt;sup>47</sup> 'UNHCR viewpoint: "Refugee" or "Migrant" – Which is Right?' UNCHR UK (Web Page, 11 July 2016) https://www.unhcr.org/news/latest/2016/7/55df0e556/unhcr-viewpoint-refugee-migrant-right.html accessed 26 June 2020

<sup>48 (</sup>n 36) 13

regular mobility pathways to determine migration strategies in relation to environmental degradation, subsequently imposing relevant protection policies to address climate displacement.<sup>49</sup> In this way, she maintains, environmental migrants can be granted humanitarian visas into countries pre-emptively, as well as 'regional and bilateral free movement agreements' to address border control hostilities.<sup>50</sup> Such a predictive framework can determine where displaced populations are likely to migrate, thus quickening the process for crossing borders and ensuring the protection for those already displaced.

On the other hand, an environmental migrant may be at a disadvantage, particularly post-relocation. This is because cross-border migration involves stringent immigration laws that are possessed by various countries and groups such as the United States, Australia and the European Union. Hostile attitudes inhibit migrants from entering certain countries or fully assimilating into their new homes. For example, they could be prohibited from political participation. As mentioned earlier, climate migrants may aggravate political, economic and social tensions, in light of climate talks being historically volatile within the international community. Arguably, these issues would only emphasise the feeling of displacement experienced by this population, despite having relocated.

### 3. Environmental refugees

Adopting *environmental refugee* status may prove a more advantageous alternative for climate displaced people. Refugee status is a well-established term within international law,

<sup>&</sup>lt;sup>49</sup> Dina Ionesco, 'Let's Talk about Climate Migrants, Not Climate Refugees' *United Nations Sustainable Development Goals* (Web Page, 6 June 2019)

https://www.un.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees/ accessed 26 June 2020 <sup>50</sup> Ibid

providing protection to those fleeing from states of conflict or persecution under the 1951 Refugee Convention<sup>51</sup>. As contended earlier, environmental degradation is the consequence of anthropogenic action, similar to armed conflict. Therefore, those suffering from environmental consequences should be similarly protected. Hermsmeyer emphasises the inadequacies of the international refugee mechanism due to its denial of rights for the environmentally displaced population. 52 Thus, numerous reforms are necessary for this term to be applicable. The necessity of internationally providing aid to environmentally displaced people has been repeatedly underlined. Given that rights granted under refugee status include support from aid agencies and the UNHCR, environmental refugee status will certainly contribute to achieving this,. Furthermore, state obligations to combat climate displacement is enforced. Should the rights of refugees expand for environmental circumstances, the Convention would ensure they are not expelled from another state or forced to return to their country whilst their lives still remain under threat. 53This is unlike migrant status, which does not guarantee protection from expulsion. Refugee status would therefore be an appropriate action towards addressing climate induced displacement, providing sufficient protection for those relocating.

Climate refugee status, on the other hand, is not without limitations. Ionesco maintains, current climate population movements are generally internal. <sup>54</sup> Internal population movements, however, are not accommodated for under existing refugee law. Therefore, environmental refugee status does minimal to combat present, regional climate induced mobility. It is thus applicable solely in future instances when states become uninhabitable, resulting in cross-border movement. Additionally,

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<sup>&</sup>lt;sup>51</sup> Convention Related to the Status of Refugees (adopted 28 July 1951, entered into force 22 April 1954) 189 UNTS 137 (Refugee Convention), art 1

<sup>&</sup>lt;sup>52</sup> Heidi A Hermsmeyer, 'Environmental Refugees: A Denial of Rights' *Contemporary Topics in Forced Migration* (University of Chicago, 2005)

<sup>&</sup>lt;sup>53</sup> Convention relating to the Status of Refugees (Adopted 28 July 1951, entered into force 22 April 1954) 189 UNTS 137 (Refugee Convention) <sup>54</sup> Ionesco (n 49)

considering the aforementioned political, social and economic tensions, it is undeniable environmental refugees would act as similar catalysts to these issues as environmental migrants. The United States, for example, is party to the 1951 Convention. Despite their commitments, the Trump administration has repeatedly expressed an unwillingness to accept refugees, claiming they '[do not] have any rights [in America].'55 This suggests, if refugees escaping armed conflict are unwelcome, climate refugees are unlikely to be treated otherwise. Consequently, environmentally displaced people may not receive viable rights under refugee status. Moreover, refugee protection may undermine necessary preventative measures displacement. The adoption of environmental refugee status connotes long-term relocation elsewhere, thus repatriation to their original country is void. Should the international community shift focus on providing protection under refugee status, it may limit resources directed towards preventing climate displacement before relocation occurs. It is necessary population movements are minimised or temporary where possible, not encouraged.

#### 4. Curating a new term

Upon deliberation of the terms above, curating a new term may be more appropriate. It is necessary, then, to advocate for a human rights-based approach by which international and internal displacement is addressed. Further, appropriate protections and resources must be legally recognised. While advocating the inclusion of environmental refugees within the protection of the Refugee Convention, Conisbee and Simms propose radical policy change to address the limitations of existing terms. <sup>56</sup> These policy changes could include the drafting of an entirely new

USA: "You don't have any rights here", Amnesty International (Report, October

https://www.amnesty.org/en/latest/research/2018/10/usa-treatment-of-asylum-seekers-southern-border/ accessed 15 June 2020

<sup>&</sup>lt;sup>56</sup> Molly Conisbee, Andrew Simms, 'Environmental Refugees: The Case for Recognition (2003), New Economics Foundation (2003)

Convention, specific to those suffering from environmental degradation. <sup>57</sup> Certainly, limitations in existing terms of recognition can be addressed to ensure various circumstances of displacement are accounted for. Additionally, they suggest incorporating displaced people into the Geneva Convention under 'environmental persecution', ensuring they are protected from suffering. <sup>58</sup> Adherence to these prerequisites guarantees effective legal protection against displacement. Parallel to this, those responsible for the persecution – major polluters – would also be held responsible for their actions. This could include the imposition of a fine under international law, which could then be used to finance projects in relation to addressing displacement. Without appropriate legal recognition and protection under international law, displacement will not be successfully combatted.

#### 5. The role of corporations

The international corporate sector plays an integral role in combating displacement-related climate action. A 2017 report concluded that 100 active fossil fuel-producing corporations are responsible for 71% of greenhouse gas emissions. Corporate polluting habits contribute to state emissions. <sup>59</sup> Hence, they are equally responsible for subsequence impacts on human mobility. Resultantly, a duty is owed, as members of the international community, to address displacement. Furthermore, international corporations tend to have a quasi-detachment from states and can function outside state control. This can address any political implications which arise due to environmental displacement. Additionally, emphasising the role of corporations can motivate state cooperation, due to corporate ability to influence states.

<sup>57</sup> Ibid

<sup>58</sup> Ibid 38

<sup>&</sup>lt;sup>59</sup> Paul Griffin, 'The Carbon Majors Database: CDP Carbon Majors Report 2017' (Carbon Disclosure Project, July 2017)

<sup>60</sup>Some corporations are already taking remedial action to correct their polluting habits, such as the BP Oil Spill Fund, established subsequent to the environmental harm caused by the Deepwater Horizon oil spill in 2010. Similarly, funds can be redirected into projects developing the adaptive capacities of states. Abate develops upon this, suggesting the establishment of investment projects by corporations to combat displacement in both the long and short term. <sup>61</sup>

#### 6. Replacing vanishing habitats

Preventative measures are imperative to combat climate induced displacement. Should these measures be insufficient, however, mechanisms must be in place. To accommodate for inevitable displacement of vast populations, states can be "created". An example is the artificial island of Hulhumale, in the Maldives. It was reclaimed and developed to be a more climate-resistance land mass, fortified with walls to protect against rising sea-levels. Hulhumale is predicted to be completed in 2026, following COVID-19 restrictions, and is projecting to house up to 130,000 displaced individuals. <sup>62</sup>Indeed, for states such as Bangladesh, the creation of a replacement habitat appears the most suitable solution. Factors, nonetheless, inhibit the completion of such projects. Director of the Maldives Marin Research Centre, Shiham Adam, claims the greatest inhibitor to the success of this

and Behavioural Sciences, 150

<sup>&</sup>lt;sup>60</sup> Marcel Kordos and Sergei Vojtovic, 'Transnational Corporations in the Global World Economic Environment' [2016] 230, *Procedia: Social* 

<sup>&</sup>lt;sup>61</sup> Randall S. Abate, 'Corporate Responsibility and Climate Justice: A Proposal for a Polluter-Financed Relocation Fund for Federally Recognised Tribes Imperilled by Climate Change' [2013] 25(1) Fordham Environmental Law Review 10

<sup>&</sup>lt;sup>62</sup> 'Maldives Urban Development and Resilience Project (P163957) (The World Bank, Implementation Status & Results Report, 20 April 2020)

http://documents1.worldbank.org/curated/en/964061587382929293/pdf/Disclosable-Version-of-the-ISR-Maldives-Urban-Development-and-Resilience-Project-P163957-Sequence-No-01.pdf accessed 13 July 2020

reconstructive framework is finance. <sup>63</sup>An obvious solution to this is the intervention of the international community to direct finance into such projects. Implementation of the Green Climate Fund would certainly aid in the development of such projects, as it would ensure capacity building for these states. But such geoengineering projects have not been globally recognised by the international community. Only the Maldives are currently undergoing such developments. These geoengineering projects must be expanded worldwide, particularly where relocation to the Maldives may otherwise prove arduous. This elucidates the necessity of international cooperation to address climate induced displacement, as additional projects require coordination and burden sharing to be successfully implemented globally.

<sup>&</sup>lt;sup>63</sup> Nenad Jaric Dauenhauer, 'On front line of climate change as Maldives fights rising seas' *New Scientist* (Web Page, 20 March 2017) <a href="https://www.newscientist.com/article/2125198-on-front-line-of-climate-change-as-maldives-fights-rising-seas/">https://www.newscientist.com/article/2125198-on-front-line-of-climate-change-as-maldives-fights-rising-seas/</a> accessed 13 July 2020

#### Conclusion

In conclusion, the impact of climate change upon human mobility is of great significance. This has not been, however, appropriately brought to light under international environmental law. The international community is therefore obliged to make various reformations to current legal frameworks to successfully address the matter. It can be established, failure to act will universally result in detrimental consequences for people's standard of living. Analysis of existing frameworks designed to combat the impacts of environmental degradation suggests that international institutions are wary of imposing policies which may interfere with domestic policies. Indeed, there have been strong inhibitors against combatting displacement. Based on these conclusions, it is necessary to establish succinct and concrete frameworks by which displaced populations can be legally identified and protected under international and domestic law. Vague and unimposing policies will otherwise continue to inadequately address climate induced displacement. Despite such policies, actions will remain insufficient in the absence of international cooperation and an emphasis on burden sharing. Variations in the vulnerabilities and capacities of states will be accommodated for in this regard, thus enabling an appropriate allocation of resources. Additionally, maintaining this ideology will ensure effective strategies thus allowing for an equitable mechanism by which the issue can be addressed and further regulate states' commitment to combatting climate induced displacement. More extensive, concrete research may be required to outline the relation between state emissions and human mobility, and how polluting actions can be mitigated fairly to effectively adapt to displacement. In doing so, there can be an apt transfer of finances and technologies within the international community. Extensive action is required to combat climate induce displacement, but the international community must begin by acknowledging its growing significance for any implementation to be effective.

## **Bibliography**

#### Books, articles, journals

Abate R S, 'Corporate Responsibility and Climate Justice: A Proposal for a Polluter-Financed Relocation Fund for Federally Recognised Tribes Imperilled by Climate Change' [2013] 25(1) Fordham Environmental Law Review 10

Ahmed B, Who Takes Responsibility for the Climate Refugees?' (2017) International Journal of Climate Change Strategies and Management <a href="https://www.emerald.com/insight/content/doi/10.1108/IJCCSM-10-2016-0149/full/html">https://www.emerald.com/insight/content/doi/10.1108/IJCCSM-10-2016-0149/full/html</a> accessed 29 May 2020

Allen M W and Craig C A, 'Rethinking Corporate Social Responsibility in the Age of Climate Change: A Communicative Perspective' (2016) 1 Int J Corporate Soc Responsibility 1 <a href="http://jcsr.springeropen.com/articles/10.1186/s40991-016-0002-8">http://jcsr.springeropen.com/articles/10.1186/s40991-016-0002-8</a> accessed 19 June 2020

Anisimov A and Vallejo L, 'Loss and Damage under the UNFCCC: ways forwards for the Warsaw International Mechanism' (2019) 13(19) IDDRI, Issue Brief

https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Décryptage/201911-IB1319-L%26D.pdf Accessed 4 July 2020

Arnall A, 'Resettlement as Climate Change Adaptation: What Can Be Learned from State-Led Relocation in Rural Africa and Asia?' (2019) 11(3) Climate and Development 253 <a href="https://doi.org/10.1080/17565529.2018.1442799">https://doi.org/10.1080/17565529.2018.1442799</a> accessed 29 May 2020

Balasurya A, 'Coastal Area Management: Biodiversity and Ecological Sustainability in Sri Lankan Perspective' in Sivaperuman C, Velmurugan A, Singh S K and Jaisankar I, *Biodiversity and Climate Change: Adaptation in Tropical Islands* (Academic Press, 2018)

Brown O, Migration and Climate Change (IOM Migration Research Series No 31, 2008)

Conisbee M and Simms A, Environmental Refugees: The Case for Recognition (New Economics Foundation, 2003)

Georgeson L, Maslin M, Poessinouw M and Howard S, 'Adaptation Responses to Climate Change Differ between Global Megacities' (2016) 6 Nature Climate Change 584
https://www.nature.com/articles/nclimate2944 accessed 17 June 2020

Hermsmeyer H A, 'Environmental Refugees: A Denial of Rights' *Contemporary Topics in Forced Migration* (University of Chicago, 2005)

Hermwille L, Obergassel W, Ott H E, Beuermann C, 'UNFCCC Before and After Paris – What's Necessary for an Effective Climate Regime?' (2017) 17(2) Climate Policy 150

Kalin W, 'From the Nansen Principles to the Nansen Initiative' (2012) 41 Forced Migration Review 48

Khan M R, 'Polluter-Pays-Principle: The Cardinal Instrument for Addressing Climate Change' (2015) 4(3) Laws 638 <a href="https://www.mdpi.com/2075-471X/4/3/638">https://www.mdpi.com/2075-471X/4/3/638</a> accessed 16 June 2020 Kordos M and Vojtovic S, 'Transnational Corporations in the Global World Economic Environment' [2016] 230, *Procedia: Social and Behavioural Sciences*, 150

Kulp S A and Strauss B H 'New Elevation Data Triple Estimates of Global Vulnerability to Sea-level Rise and Coastal Flooding' (2019) 10 Nature Communications 4884 <a href="https://doi.org/10.1038/s41467-019-12808-z">https://doi.org/10.1038/s41467-019-12808-z</a> accessed 29 June 2020

Maguire R, 'Incorporating International Environmental Legal Principles into Future Climate Change Instruments' (2012) 6(2) Carbon & Climate Law Review 101 <a href="https://www.jstor.org/stable/24324084?seq=1#metadata\_info\_tab\_contents">https://www.jstor.org/stable/24324084?seq=1#metadata\_info\_tab\_contents</a> accessed 16 June 2020

Mamlyuk B N, 'Analysing the Polluter Pays Principle through Law and Economics' 18(1) (2009) Se Envtl LJ 39

McAdam J, 'From the Nansen Initiative to the Platform on Disaster Displacement: Shaping International Approached to Climate Change, Disasters and Displacement' (2016) 39(4) UNSW Law Journal 1518

McLeman R, International Migration and Climate Adaptation in an Era of Hardening Borders' (2019) 9 Nature Climate Change 911

Messing A, 'Nonbinding Subnational International Agreements: A Landscape Defined' (2012) 30 The Georgetown Environmental Law Review 173

Meyers N and Kent J, Environmental Exodus: an emergent crisis in the global arena (Washington DC: Climate Institute, 1995)

Mohammed N, "Climate Change and Displacement in Bangladesh: Issues and Challenges" in Leal Filho W. (eds) *Handbook of Climate Change Adaptation* (Springer 2015)

Shabalala D, "Climate Change, Human Rights and Technology Transfer" in Molly K Land and Jay D Aronson (eds) New Technologies for Human Rights Law and Practice (Cambridge University Press 2018)

Sommers S, 'The Brownfield Problem: Liability for Lenders, Owners, and Developers in Canada and the United States' 19 [2008] J. INT'L ENVTL. L. & POLY 259

Terminiski B, 'Environmentally-Induced Displacement. Theoretical Frameworks and Current Challenges' (2012) Centre d'Etude de l'Ethnicité et des Migrations, Université de Liège Research Paper <a href="https://www.weadapt.org/sites/weadapt.org/files/legacy-new/knowledge-base/files/1121/50e6b5828f417environmentally-induced-displacement-terminski-1.pdf">https://www.weadapt.org/sites/weadapt.org/files/legacy-new/knowledge-base/files/1121/50e6b5828f417environmentally-induced-displacement-terminski-1.pdf</a> accessed 28 May 2020

Tol R S J, 'The Polluter Pays Principle and Cost-Benefit Analysis of Climate Change: application of Fund' (2006) FEEM Working Paper No.88.2006

https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=907456 accessed 16 June 2020

Wadey M, Brown S, Nicholls R J and Haigh I, 'Coastal flooding in the Maldives: an assessment of historic events and their implications' (2017) 89 Natural Hazards 131

#### Additional publications

Apap J, 'The Concept of "Climate Refugee": Towards a Possible Definition' (European Parliament briefing, February 2019)

https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS\_BRI(2018)621893\_EN.pdf accessed 9 June 2020

Ashton J and Wang X, 'Equity and Climate: In Principle and Practice' (Pew Center, Global Climate Change, 2003) http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.588.3093&rep=rep1&type=pdf accessed 11 July 2020

Boano C, Prof Zetter R and Dr Morris T, 'Environmentally Displaced People: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration' (Refugees Studies Centre, November 2008)

Bodle R, Donat L and Duwe M, "The Paris Agreement: Analysis, Assessment and Outlook' (Umwelt Bundesamt, Working Paper, 28 January 2016)

https://www.ecologic.eu/sites/files/event/2016/ecologic institute 20 16 paris agreement assessment.pdf accessed 10 June 2020

Byrnes R and Surminski S, 'Addressing the impacts of Climate Change through an effective Warsaw International Mechanism on Loss and Damage: Submission to the second review of the Warsaw International Mechanism on Loss and Damage under the UNFCCC' (London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 2019)

Field C B and Barros V R (ed), Climate Change 2014 Impacts, Adaption, and Vulnerability, Part A: Global and Sectoral Aspects (Cambridge University Press, Intergovernmental Panel on Climate Change, 2014)

Gahre C, 'The Nansen Conference: Climate Change and Displacement in the 21st Century' (Norwegian Refugee Council, 2011) <a href="https://www.unhcr.org/4ea969729.pdf">https://www.unhcr.org/4ea969729.pdf</a> accessed 12 June 2020

Ginnetti J and Lavell C, "The Risk of Disaster-Induced Displacement in South Asia" (Internal Displacement Monitoring Centre, Technical Paper, 2015) <a href="https://www.internal-displacement.org/sites/default/files/publications/documents/201504-ap-south-asia-disaster-induced-displacement-risk-en.pdf">https://www.internal-displacement-org/sites/default/files/publications/documents/201504-ap-south-asia-disaster-induced-displacement-risk-en.pdf</a> accessed 29

<u>June 2020</u>

'Loss and Damage: Online Guide' (UNFCCC guide to Warsaw International Mechanism for Loss and Damage)

https://unfccc.int/sites/default/files/resource/Online Guide feb 20 20.pdf accessed 4 July 2020

Migration, Environment and Climate Change: Evidence for Policy (MECLEP) Glossary (International Organisation for Migration, 2014) <a href="https://publications.iom.int/system/files/pdf/meclep\_glossary\_en.pdf">https://publications.iom.int/system/files/pdf/meclep\_glossary\_en.pdf</a> Planguage=en accessed 20 June 2020

Müller B, *Equity in Climate Change: The Great Divide* (Oxford Institute for Energy Studies with the support of the Shell Foundation, 2002)

The Peninsula Principles: On Climate Displacement Within States (Displacement Solutions, 18 August 2013)

Polluter Pays Principle (Organisation for Economic Cooperation and Development Publishing, 2008) <a href="https://www.oecd-ilibrary.org/docserver/9789264044845-en.pdf?expires=1595345883&id=id&accname=guest&checksum=73DF1B54C60CF39DA143F62A530A2A3D">https://www.oecd-ilibrary.org/docserver/9789264044845-en.pdf?expires=1595345883&id=id&accname=guest&checksum=73DF1B54C60CF39DA143F62A530A2A3D</a> accessed 21 July 2020

Pompeo M R, Secretary of State, 'On the U.S. Withdrawal from the Paris Agreement' U.S. Department of State (Press Statement, 4 November 2019)

https://www.state.gov/on-the-u-s-withdrawal-from-the-parisagreement/ accessed 14 June 2020

Richards J and Bradshaw S, 'Uprooted By Climate Change: Responding to the Growing Risk of Displacement' (Briefing paper, Oxfam International, 2017) <a href="https://www-cdn.oxfam.org/s3fs-public/file\_attachments/bp-uprooted-climate-change-displacement-021117-en.pdf">https://www-cdn.oxfam.org/s3fs-public/file\_attachments/bp-uprooted-climate-change-displacement-021117-en.pdf</a> 6 June 2020

Wilkinson E, Kirbyshire A, Mayhew L, Batra P and Milan A, 'Climate-induced Migration and Displacement: Closing the Policy Gap' (Overseas Development Institute, briefing, October 2016)

World Meteorological Organisation and United Nationals Environmental Programme, *Climate Change: The 1990 and 1992 IPCC Assessments* (Intergovernmental Panel on Climate Change, 1992) 2.4.1

#### EU legislation

Consolidated versions of the Treaty on the Functioning of the Europeans Union (TFEU) [2012] OJ L 129/35

#### International legislation

Convention relating to the Status of Refugees (Adopted 28 July 1951, entered into force 22 April 1954) 189 UNTS 137 (Refugee Convention)

#### Reports

'Cyclone Sidr in Bangladesh: Damage, Loss, and Needs Assessment for Disaster Recovery and Reconstruction' (Government of Bangladesh, Report, 2008)

https://reliefweb.int/sites/reliefweb.int/files/resources/F2FDFF067E F49C8DC12574DC00455142-Full Report.pdf accessed 15 June 2020

Paul Griffin, 'The Carbon Majors Database: CDP Carbon Majors Report 2017' (Carbon Disclosure Project, July 2017)

'Human Development Report 2011: Sustainability and Equity: A Better Future for All' (United Nations Development Programme, 2011) <a href="http://hdr.undp.org/sites/default/files/reports/271/hdr">http://hdr.undp.org/sites/default/files/reports/271/hdr</a> 2011 en complete.pdf accessed 29 June 2020

Internal Displacement Monitoring Centre, 'Grid 2018: Global Report on Internal Displacement' (IDMC, Norwegian Refugee Council, 2018) <a href="https://www.internal-displacement.org/global-report/grid2017/pdfs/2017-GRID-part-1.pdf">https://www.internal-displacement.org/global-report/grid2017/pdfs/2017-GRID-part-1.pdf</a> accessed 9 June 2020

Internal Displacement Monitoring Centre, 'Grid 2021: Global Report on Internal Displacement' (IDMC, Norwegian Refugee Council, 2021) <a href="https://www.internal-">https://www.internal-</a>

displacement.org/sites/default/files/publications/documents/grid202 1\_idmc.pdf accessed 27 August 2021

'Maldives Urban Development and Resilience Project (P163957) (The World Bank, Implementation Status & Results Report, 20 April 2020) <a href="http://documents1.worldbank.org/curated/en/964061587382929293/pdf/Disclosable-Version-of-the-ISR-Maldives-Urban-Development-and-Resilience-Project-P163957-Sequence-No-01.pdf">http://documents1.worldbank.org/curated/en/964061587382929293/pdf/Disclosable-Version-of-the-ISR-Maldives-Urban-Development-and-Resilience-Project-P163957-Sequence-No-01.pdf</a> accessed 13 July 2020

"The Nansen Initiative Global Consultation Conference Report" (The Nansen Initiative, 2015) <a href="https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT.pdf">https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT.pdf</a> accessed 10 July 2020

Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, opened for signature 12 December 2015 (entered into force 29 January 2016)

UNFCCC 'Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010', FCCC/CP/2010/7/Add.1

UNFCCC 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015', opened for signature 12 December 2015 (entered into force 29 January 2016)

USA: "You don't have any rights here", *Amnesty International* (Report, October 2018)

https://www.amnesty.org/en/latest/research/2018/10/usa-treatment-of-asylum-seekers-southern-border/ accessed 15 June 2020

Prof Zetter R, 'Protecting Environmentally Displaced People: Developing the Capacity of Legal and Normative Frameworks' (Research Report, University of Oxford and Refugee Studies Centre, February 2011)

#### Websites

Dauenhauer N J, 'On front line of climate change as Maldives fights rising seas' New Scientist (Web Page, 20 March 2017) <a href="https://www.newscientist.com/article/2125198-on-front-line-of-climate-change-as-maldives-fights-rising-seas/">https://www.newscientist.com/article/2125198-on-front-line-of-climate-change-as-maldives-fights-rising-seas/</a> accessed 13 July 2020

'Global Historical Greenhouse Gas Emissions' *Climate Watch* (Web Page) https://www.climatewatchdata.org/ghg-emissions accessed 13 July 2020

'Introduction to Climate Finance' *UNFCCC News* (Web Page) https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance accessed 6 June 2020

Ionesco D, 'Let's Talk about Climate Migrants, Not Climate Refugees' United Nations Sustainable Development Goals (Web Page, 6 June 2019) https://www.un.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees/ accessed 26 June 2020

McAdam J, 'Managing Displacement in the Era of Climate Change' Georgetown Journal of International Affairs (Article, 7 November 2019) https://www.georgetownjournalofinternationalaffairs.org/online-edition/2019/11/6/managing-displacement-in-the-era-of-climate-change accessed 9 June 2020

'UNHCR viewpoint: "Refugee" or "Migrant" – Which is Right?' *UNCHR UK* (Web Page, 11 July 2016) https://www.unhcr.org/news/latest/2016/7/55df0e556/unhcr-viewpoint-refugee-migrant-right.html accessed 26 June 2020

What is the Polluter Pays Principle?' *LSE and Grantham Research Institute on Climate Change and the Environment* (Web Page, 11 May 2018) <a href="https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-polluter-pays-principle/">https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-polluter-pays-principle/</a> accessed 9 June 2020